# Foresight America

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#### Introduction

This novel was prepared in November 2006 as part of the annual National Novel Writing Month. It is a sequel to Tony Williams' novel *The Foresight War*. In that book, Tony speculated on the a World War Two fought with Germany and Britain aided by time-travelers. This work simply expands on that theme.

His is a remarkable book. I appreciate it all the more after having banged away on this one. Despite having being exposed to thousands of sharpshooters on the Internet, I don't think a single important technical mistake has ever been found in it.

In addition to Tony, many other people on the internet contributed to this. They added fresh insights and technical knowledge far out of my reach. For example Luciano M. Trentadue proposed the idea of an Italian throwback and made many wise comments that have been a great help. As a result, I suspect this story may tread a fine line between collaborative effort and outright plagiarism. It was written as a harmless diversion and in no case should this story be reprinted for profit in any media.

If there is any good in this work it is entirely due to my collaborators. All of the mistakes and faults are mine alone.

### Chapter 1

The room was far too warm in the Washington summer. But the tall windows had been closed to prevent eavesdroppers; inside it was stifling. Charles Lindbergh stood near a window, his white linen suit rumpled by the humidity, holding a digital watch, watching as the seconds rushed by.

"No noise at all." He reported as he held the artifact to his ear.

"No moving parts," General Marshall replied, "we took it apart and couldn't make heads nor tails of it." His soft voice carried authority. "It was made in Japan, by the way."

Lindberg raised an eyebrow and shook the device gently. "This," he pointed to the timepiece, "means it is all true, every word of it."

Marshall stepped away "Yes, colonel, every word as far as we can tell. He is who he says he is and he as come from where he says he came."

"Or came from *when* he *will* come," Senator Taft corrected with a harrumph. "He is the genuine article, a throwback from the year 2000, a time traveler."

The crowd in the room was generating a low buzz. Groups had formed around the watch, the "laptop computer" and a copy of the *Washington Post* dated sixty-four years in the future.

Taft straightened himself and rapped on the polished table. "Let us reconvene," the men, they were all men, began to return to their seats.

"Can we agree, I presume, that the evidence is clear?" the senator from Ohio began. A gentle murmur of agreement went around the meeting.

"General, will you recap what we know?" Taft asked.

The heat did not seem to bother Marshall at all, "Gentlemen, in twenty years, the United States will be the world's leading power. We will have influence at least as wide as the British do now. Our industry will lead the world. Our people will be the richest and arguably the happiest; our culture will dominate. In fact the world at large will be at peace, democracy and free trade will be the rule. But," he paused to consider his next words, "between then and now is World War II."

"Why not just prevent the war? Or stay out of it?" a voice asked from the end of the table.

"Consider where we are," a State Department man replied, looking into his interlaced fingers, "It is 1935, Hitler and Stalin are already in power. The Japanese are already in Manchuria up to their necks. The reports from there are simply horrible, until now quite unbelievable. If we do nothing, if we avoid being drawn in, China will become a Japanese vassal, Russia and Germany will slug it out to see who can enslave Europe, we will be untouched and the only power left to confront the Japanese on one side, and either the Germans or Soviets on the other. We will be their only target and we will be alone."

"Further, gentlemen," Marshall spoke again, "the blueprint of the future we now have is delicate. Everything we do now will change it in a thousand unpredictable ways. If we arrange our affairs so that we stay out of the fight we can say with certainty that the postwar world that we now have projected will never come to be. With no free Europe or Asia to trade with we will be much, much poorer, much less influential, much more isolated. The world predicted by Doctor Frederick is very close to our ideal, but even a small misstep will change that future in unknowable ways, ways that will be less desirable to the United States."

"From what we have been told, the war will lead directly to end of this damn depression, or to say it another way, with no war, the world will remain in this economic," Taft waved his open hands vaguely, "funk. The war is, was, will be, the central event in recasting the world in our favor. With a major war, we know we are destined for a happy prosperous future, with no war we face an uncertain, and probably more dangerous fate." Oddly, it was the representative from the Treasury who then interrupted, "We cannot allow the world to go down the path it is now on. Germany and Russia must not be allowed to dominate the world, to dominate us."

"When can we meet this time-traveler?" asked a representative from the Agriculture Department

Taft spoke sternly to the entire group, "The President has decided to keep him under wraps. We have assigned a team of minders to this fellow. They will debrief him and pass his information to General Marshall, the President and myself. We will then pass selected gems to you at this table. You are to act at once, and strongly, but under no circumstances are you to give the slightest hint as to your source of inspiration."

Marshall spoke again, "Together, we form the Oversight Committee. Oversight is our highest secret."

### Chapter 2

Winston Frederick had been moved to a nice apartment on the grounds of The Old Soldiers' Home. It was as isolated and secure a place could be found in Washington. Rough-looking FBI men lounged around the building. Outside his door, in the hallway, another guard sat in a wooden chair he had propped against a wall. Winston Frederick, PhD., was a prisoner of the United States Government.

Still, it was a comfortable prison with high ceilings complete with electric fans that kept the rooms airy and comfortable. Perhaps it was a retirement apartment for some general, he thought. In the kitchen, the percolator bubbled happily. Somehow, the coffee here tasted better than it did in his own time.

A week had passed between his arrival, his meeting with General Marshal. Nobody would believe him at first of course, but first the watch, then the organizer, then the laptop had convinced them. And now, he was confronted by three uniformed men in his living room.

"Would you please join me?" he asked. The officers, two army, one navy took seats around the coffee table with its tray of cookies. "I am at your service," Winston had had a week to adjust to the idea of his mysterious transportation back two-thirds of a century. These men were still trying to accept the reality of the miracle who sat across from them.

"So how is the future?" the air corps lieutenant colonel, with the unlikely name of Tom Byrd, asked. He bent a cookie in his hand, examining its contents closely.

"You read my report to General Marshal? If all goes as it should, the future is a wonderful time, not without trouble, but safer and happier than today. But if we monkey with it too much, history could take a very different course."

The other army man, a full colonel named Larry Orbino with engineer castles on his lapels, nodded "Chaos theory, butterflies and all that, we discussed that already. We need to act slowly and with subtlety, but still, it has been decided that we will act."

The navy captain, Hereford, more formal than the rest, got down to business. "Furthermore, our political masters agree with your contention, the war cannot be avoided. Doctor Frederick," he continued, "our instructions are to pick your brain with the object of fighting this war in the most effective manner and to the best result possible. We will pass our, your, information and recommendations up to the highest level where they will decide exactly what to do. Still, your words do carry great weight, I can promise you that."

"So where shall we begin?" Winston asked.

"We drew lots," Commander Hereford replied, "The navy goes first."

"First off," the time traveler said, "This interservice rivalry has got to stop. This war is going to require very close cooperation between all the services." All three men were making notes. "On a more immediate level, we know that at the end of this war, battleships will have been surpassed in importance by aircraft carriers and submarines. We can take advantage of that."

Hereford looked up from his tablet. "We already knew that," he said defensively. "But, there is a difference between knowing," He indicated his head, "and really *knowing*." He pointed to his heart. "In any case, the shipbuilding program is being recast," he concluded.

"How so?" Winston asked.

"The oblivious things, new ships for the navy and the merchant marine will be in next year's budget. We presume that is earlier than last time around. The Washington Treaty is pretty liberal on submarines and carriers, so we will push that way. Still the battleships in the pipeline now are too far along to cancel. I imagine you can help us a bit with design?" "I am a generalist," Doctor Frederick replied, "still I have some ideas now and would bet you more ideas will come to mind as we get further into it."

"All we need are clues, the engineers can make them work. Even sketches will help."

Larry, the Army engineer agreed, "We have people who are advocating the sort of things you propose. But up to now they were just one set of voices competing for attention. Now they will get priority."

"So how can the Army benefit from my information?" Winston asked.

"Some weaponry of course, but mainly as Commander Hereford said, people in key places now really understand here," he indicated his chest "that the world is going to Hell in a handbasket."

"OK, so let's start with the big stuff, we will go into details later." Winston proposed. The three men nodded in unison. "Civil rights first of all." The professor began, leaning backing his chair.

"Is that a priority?" Byrd asked.

"This war is, will be for, American ideals. We cannot win it with one hand toed behind our back. Keeping a tenth of the population from contributing all they can will cost lives." Winston said as if lecturing a slow student.

"It could cost Roosevelt the White House." Orbino said.

"We have to have FDR, without him everything could spin in unpredictable ways." Frederick was firm.

"Don't you all worry about Franklin Roosevelt. He is a smart cookie and if anyone can pull this off he can. Besides, Senator Taft will want his anti-lynching law for his cooperation with us." Hereford exaggerated his drawl and pointed to the other two officers, "You boys underestimate us southerners, we know what we have to do, and we can certainly do better than we did in Doctor Frederick's time."

"I cannot believe the country is ready for Negro officers, doctors, politicians." Orbino maintained.

"Hell, Negro millionaires! It's all a matter of leadership. As long as the Negroes are gaining along with the white population, it can be managed." The navy man insisted.

"Not our problem, let's just send it up the chain." The army engineer retreated.

"What's next?"

"We had a thing in my time called the Goldwater-Nichols Act. The military hated it, but it was a very good idea." Winston changed the subject. "Every officer above a certain rank, say lieutenant colonel or colonel has to serve time with the other services. So a navy man has to go to Army War College, or a soldier has to serve on a naval staff."

"I can see why they hated it." Orbino murmured as he continued to write in his notebook.

"They got used to it, so will you. Think about it, in this fight we are going to have to land entire corps on hostile beaches. We will have thousands of aircraft supporting ground troops. We have to be 'joint' in our thinking and in our training." Winston was hitting his stride, just like lecturing over at Howard. "We started this war with a Joint Army/Navy Board and finished it with a Joint Chiefs of Staff, we might as well get it right from the get-go this time around. Also we will need an academic base, we can't just build a military for the last war. Now war will demand new technology, we need the world's best universities and thousands of scientists, technicians and people who can work with the latest stuff. "Then we need the industry to build all the stuff we can dream up. First step is to get the economy up and running."

The group talked far into the night.

The Army car met him at midnight. The FBI man had brought down the single suitcase with all of Doctor Frederick's processions and waited beside him. Apparently, an olive-drab Packard with huge white stars on its doors was considered to be the most discreet way to take him across town.

Tom got out of the back seat with a smile. "General Arnold sends his compliments," he waved at the car. As the luggage was tossed in the trunk, the Air Corps man solicitously opened the front passenger side door for his charge. The black driver in his wool uniform got back in and pulled away. He did not even glance at Frederick who was groping for a nonexistent seat belt.

The darkened city was familiar to Winston. The grid pattern of streets was of course the same as the city he had mysteriously left a month ago. The tracks down the middle of the street, some with lonesome trolley cars, were new. Tom was chatting amiably, but the time-traveler's mind was on the city that was passing by. Suddenly he asked, "Won't a black man in such a nice car attract attention?"

"That, sir" Tom replied with mock ceremony "is why you are in the front seat." The driver smiled discreetly.

He was able to recognize E Street and the Bureau of Printing and Engraving Building. The car pulled past a guard who saluted and dove down a ramp first into a basement, and then sub-basement, garage. The car crawled along a tall, but narrow corridor and reached a loading dock. Military policemen lounged in pools of light along its length.

Tom leaned forward and grasped the professor's shoulder, "Could you please open the door for me, doctor?" Tom led the way, and Winston followed across the loading dock and into the Presidential rail car, the Ferdinand Magellan.

The light inside the plush dining room was even worse than outside. It was all Winston could do to follow his escort down the corridor to a small bedroom.

"The President is asleep. He will meet you at breakfast. Everyone thought this was the most private venue. He's on his way to New York, so we'll have a couple of hours alone with him." With that, Tom left Winston to explore his cabin. It was small, not much more than a tiny berth and a built-in desk and chair. Still, it was quite well thought-out, with the desk concealing a small sink and the chair a functional commode. A porter brought his suitcase and hung his clothes in the miniature closet and explained the train would be leaving in a few hours. With that, Doctor Winston Frederick put on his cotton pajamas and laid out on the firm mattress. He did not even notice the gentle bump as the locomotive pulled the train out of its secret station.

The phone near his head buzzed gently, and a female voice said "Doctor Frederick, it is six o'clock. Breakfast will be served in forty-five minutes. The weather will be clear and cool in New York."

Dressing for breakfast posed no problem as he had remarkably few items. He put on his best dark suit with a crisp shirt and was pleasantly surprised to find his shoes had been shined overnight.

He need not to have bothered. Franklin Roosevelt sat at the head of the table in what seemed to be a conventional dining room chair dressed in pajamas and a worn blue bathrobe. He waved with a cigarette to the seat on his right. General Marshall was already seated on the President's left, Tom to his side. Both sat with stiff formality.

"A pleasure, Doctor Frederick," Roosevelt said with a wide but thin grin. His handshake was powerful. "Sit down and help yourself." He indicated an elaborate silver coffee service. "So, let me see here," the President said, pretending to glance at a typed page on the table, "born in Baltimore twenty years from now, graduated from Harvard summa cum laude forty years from now, appointed a full professor of history at Howard just fifty-five years from now. Is that about it?"

"Arrived here about a month ago, Mister President," replied Winston.

"Well, we may not know why you are here, but we would be fools not to take advantage of such a happenstance." The President passed a plate of pastries to his guest. "The remarkable thing is you provide little of your information that is new to us. We know about Hitler, we know about the Japanese, but until now," he again waved to his notes, "we did not really believe they would be so mad."

"Well, sir," everything looks clearer in hindsight," Winston said.

"Hindsight, exactly." The grin again, "Senator Taft and his little group were impressed with your information. They said that war is at this point inevitable. That being the case we need to arrange things so it will be as short as possible and put as few American lives at risk as we can." He stared out the window, Pennsylvania was passing by. "Obvious, really, if we handle this properly we can reach the postwar promised land with a minimum of wandering through the wilderness. Tell me about this Chaos Theory of yours."

Fortunately, Winston had finished his first bite of a croissant, "Not my theory sir, I don't know who came up with it. It says a little change now can make a big difference over time. A butterfly flapping his wings in Africa today can cause a hurricane in Florida next month."

"As long as the hurricane is blowing in our direction, Doctor. We can use your butterflies in our favor."

"Certainly, Mister President," it was Marshall's turn to speak, "but a small change now can have large and unpredictable consequences further down the road."

Roosevelt was fitting another cigarette to its holder, "Yes, yes, general, but in truth we are looking for large changes aren't we?"

"No, sir," Winston spoke with a suddenness and force that might have seemed rude, "the war as it is presently destined to happen worked out in our favor in many, many ways. Changing the broad outlines of the war would have unforeseen results. We could very easily make things worse for ourselves if we try to be too clever."

For the first time the President tilted his back with a jaunty cast to his cigarette holder. He looked just like one of those old photos in Winston's past. "Clever? Us? Why we are but poor victims of circumstance Doctor!"

An hour later, the President was lifted into an open car by a small crane mounted on a flatcar under Grand Central Station. While this was being done and the bags were unloaded; nobody noticed a colonel and his negro servant walking down the platform.

### **Chapter 4**

The Black Diamond was waiting for them around a bend in the tunnel. The same size as the Ferdinand Magellan, the Black Diamond was fitted out with a larger number of smaller rooms and its own baggage car with a kitchen and a number of offices. Inside, Winston was pleased to see his usual team of interrogators from the previous day. For a change, all were now in civilian attire.

"Do we have to leave? I wanted to see New York."

"You will get a chance later, right now we need to get you acclimatized to America in 1935." Hereford, the navy man said. "We," he indicated the other military men, "talked it over and we think this might be the best way. We can do our discussions here, travel a bit and not attract too much attention."

"Frankly," Tom continued without his usual grin, "we're afraid you might get yourself lynched." He nodded his head slowly.

"Why is that?" Winston asked. The line of conversation had caught him by surprise.

Colonel Orbino, the oldest of the group, sank heavily into a leather chair. "Basically, you attract attention to yourself. You don't mean to, but compared to other colored folk you stand out like a sore thumb. And that." he said, looking up, "is very, very bad if we want to keep your light under a bushel."

Frederick's look of confusion encouraged Tom to continue, "Winston, you just told off the President of the United States. That sort of thing is going to draw unwanted attention."

Orbino interjected, "So here, in this car, we can be ourselves, you can be yourself, you can see what life is like in the Year of Our Lord 1934. The car belongs to the Oglebay Company, they loaned it to the President, and he loaned it to us. The staff has been replaced by mess boys from the White House, everyone aboard knows at least a little about you."

Bob added in his best Southern drawl, "If anyone asks, I am Robert J. Asbury, a millionaire touring America, and you are my trusted confidential secretary." That sparked ripple of laughter.

"Where are we off to first?" Winston asked.

"Something simple, Santa Monica, we have to visit the Douglas plant and place some orders." Tom replied. "Mister Asbury" he indicated Hereford, "is investing in new transport airplanes. Charles Lindbergh is supposed to meet us there. It seems we are going to form a new airline."

All three officers pulled out notebooks.

"So let's talk about this DC-3 of yours." Larry said in an official tone.

Winston talked long into the night.

California was very different than the place Winston remembered. Fresh air and unfiltered sunlight washed over the Douglas airfield and its motley collection of sheds and hangars. In the center of one sat the first DC-3, surrounded by a little knot of mechanics working on the tail unit.

Lindbergh was already deep in conversation with Donald Douglas when the time traveler arrived. "Mister Asbury!" Lindberg shook Hereford's hand with vigor. "Don and I were just catching up on old times. Are you ready to see the new machine?"

Douglas led the way to the nearest wing describing the Twin Wasp engines as he walked. "This plane will be able to fly coast-to-coast with just one stop, it's going to change everything."

"Lindbergh talked to Smith at American Airlines and told me I had to get in on this." Bob played his tycoon as a crotchety old man. "When will it fly?"

Douglas never missed a beat as he went up the steps to the passenger door, "December, but in truth she is ready now."

"How many orders you got?" the navy man shot back.

"American is good for fifty as an initial batch, we expect more orders later." Douglas was taken aback by the mysterious millionaire. The group sat in the passenger seats.

"Last night the boys and I talked," he indicated to entourage, "we're ready to back Lindbergh's plan."

"You want to order? Today?" Now Douglas was clearly back on his heels.

"We'll need a dozen, of a cargo variant." Lindbergh was clearly enjoying this. "Double-sized cargo doors, strengthened floors, some other changes. I have a little list." He handed over a sheet of foolscap.

Already the group was taking turns peering into the cockpit. Led by Asbury they began to parade out the door. Their visit lasted had lasted only a few minutes.

"Can he do that?" Douglas asked in a horse whisper.

"You can have a check for the deposit tomorrow." Lindbergh replied with a smile.

Back in the railcar, Winston asked, "That was fun, but did it help?"

"Hard to say, the plane was ready to fly anyway. We just made sure they are thinking towards a transport and gave them a little encouragement in their good work," Tom replied.

"Lindbergh's going to have an airline?"

"I suspect that won't quite pan out and the aircraft with end up with the Air Corps pretty quickly," Tom said with satisfaction.

"With that, we encourage people to think about air transport, we start to train a cadre of officers and men. A little seed that will grow into something bigger." Larry added. "And speaking of bigger, tell us about that C-130 again." Notebooks came out around the table.

It was the next day before Winston even thought to ask where the train was going. The cars rushed by featureless plains, with the Rockies in the far distance.

"Next stop? Seattle, sir" the waiter told him at breakfast.

"The new Boeing bomber, the 299 flew a few months ago. We are going up to take a look." Tom said brightly.

"The 299?" Frederick asked.

"Your folks called it the B-17 Flying Fortress," the airman answered.

"With the contract will come at least some suggestions for improvements, I suppose."

"Why yes, do you have any ideas?"

Tom unrolled a large blueprint on the table and produced a folder of typewritten notes and photographs of the doomed prototype. Frederick shuffled through the pile and began to speak. "M' pleasure," the time traveler replied with mock formality. "first thing is to mind the gust-lock.

#### "What's that?"

"This prototype, or my prototype that is, crashed on a test flight because the pilot had the stabilizers locked. It almost wrecked the program. The B-17 was mostly used in Europe because it lacked the range for the war in the Pacific. While very advanced, it was later seen as a stopgap until the B-29 Super Fortress came along. The design philosophy was simply wrong. The B-17 was meant to fight through the enemy fighters unescorted. Even in large formations, that was pretty problematic. All the extra guns and armor made the B-17 slower and less capable than the British heavies. This time we need to develop the long-range fighter side-by-side the B-17. Both need to come into service together."

"Engines?" Hereford asked.

"The original models lacked superchargers, and of course were of some American design, Curtis maybe Pratts, I don't remember, since the Rolls Royces were not under license yet in my time. Now we have the chance to go for a faster, higher-flying plane with fewer defensive geegaws."

#### "Is that safe?"

"Really no, hundreds of these planes were, are going to be lost to enemy fighters, flack and so on, but long-range fighters plus a faster, higher bomber makes for the best possible combination. Alternately, we could adopt the British idea of night area bombing. Then we can even do without the fighters at all."

Tom was the expert in this area. "The Mustang is already in the early stages, very early. Our next pursuit plane will really be a proto-Mustang. I suppose we will try daylight bombing, and if that fails we can fall back on hammering cities."

"We talked about the NACA wing last night. I forgot to mention winglets." Frederick reached for a

scrap of paper and made a quick sketch. It is supposed to reduce turbulence at the wingtip and increase range. Oh. I saw an old movie late one night about B-17s, made during the war in fact. It mentioned the early models lacked a tail gun. A faster plane might only need a tail stinger. God bless the History Channel."

The men around the table did not even ask about the obscure reference.

"Also for the European war my Air Corps had to fit the nose with a lot of extra weapons, the German fighters found the nose to be the soft spot. Still I wonder," Frederick continued, "in my war, the Air Corps flew day missions at huge cost. The destruction on the ground was significant, but never lived up to expectations. The real prize was forcing the Luftwaffe to fight and then blasting it from the skies. If we go to night bombing, would the Germans retain enough air power to make landings in Europe impossible?"

"Dunno." Colonel Orbino answered.

"Same program this time, Doctor Frederick," Bob adjusted his black necktie in the mirror. "I play the rich eccentric, you are my secretary."

"The mysterious Mr. Asbury is going to buy bombers?"

"No, this time I am a government academic. It seems I have my finger on the pulse of government research and patents, or something like that. The main thing is for you to see the plane up close. Anything about it might stir a memory in you. Metallurgy, instruments, hell even training, anything at all."

Tom in his lieutenant colonel uniform provided introductions to the team from Boeing outside an aluminum hanger. The famous Washington state rain had paused. The collected engineers looked skeptical as the millionaire and his colored secretary climbed over their plane unescorted. The group clucked like chickens. Tom allayed their worries "Mr. Asbury has done some very interesting design work, we have a lot of confidence in his theoretical understanding."

"Never heard of him," one man scoffed.

"No reason why you should have, we have been keeping him in the background. He asked to be allowed to look at the prototype alone for a bit."

"He isn't alone," a pudgy man in overalls pointed out.

"He never goes anywhere without his secretary."

After over an hour, the two men gathered the Boeing people together around a collection of waist-high wooden crates.

"Great job, gentlemen. General Arnold has asked me to say how pleased he is in your work. Has it all over the Douglas plane. The Air Corps wants you to fly this one for contract evaluation. Let me assure you that is just a formality. But we will want some changes in the production aircraft."

"Such as?" one of the Boeing men asked.

"We will be sending you a telegram from the War Department in a few days outlining our concerns. But the main thing is this, you need to look beyond the few testing aircraft we will order. Think about large-scale production. Whatever you can do to lower production time and costs. Also we need to think about the next plane after the 299. I suspect we are going to need something high and fast as a counterpart to this," he waved at the aircraft. "My studies are showing we will need a new bomber that has extremely long range, high speed and extreme altitude."

"Your studies, Mr. Asbury?" an annoyed voice asked.

"My studies will be an Air Corps requirement document in a month or so. If you like, Boeing can build

the next machine. If you don't want the business, there are plenty of others. Thank you for your time."

Tom repeated his thanks to the knot of men and got into the car. He imagined they just got out with their lives.

"That went over like a lead balloon," Winston said as he entered the railcar.

"Well, heck with them if they can't take a joke. Besides, no way I am going to argue with half a dozen aeronautical engineers about things none of us understand in any detail." Hereford took off his overcoat and handed it to a valet.

"So now what?" Tom asked.

"We need to make up the type up my notes and get them to Washington," Frederick said, "then we need to have General Marshall send them back down to Boeing along with a contract, then we have to design us a B-29."

"Higher, faster, stronger?" Larry asked.

"Maybe even smarter," Winston took a mug of coffee off of the proffered tray. He sat down. "The B-29 was the first modern bomber. It featured a fully pressurized cabin, low-profile gun turrets mounting .50 cal guns remotely controlled by gunners in the fuselage. In the Pacific, even its range was marginal. We had to make landings on Tinian to get bases to hit Japan. We need to think about Pacific sorts of ranges now. While the B-17s flew in formations for protection, the B-29 was too fast and high for the Japanese fighters. I read somewhere they could have just left the gunners at home for all the good they did."

"What sort of bomb loads are we talking about?" Tom asked.

"I don't know, more than the B-17 for sure. More importantly, in my war we started with huge numbers of high-explosives, but once we started hitting the Japanese cities we discovered that fire was our most effective weapon."

"So incendiary bombs?"

"Of a very advanced type. Big bomb bodies released from altitude. Then the 'bus' breaks open and scatters hundreds of tubes made of aluminum of magnesium, something flammable. The tubes are heavy enough to break through a typical Japanese roof, then a black-powder charge in the center of the tube fires, shooting a glob of thickened gasoline out of at least one end. Makes a hell of a mess. When you use thousands of them at once most of a city will burn."

"How can you hit a port of factory like that, Winston." Bob suspected the answer.

"You can't. Japanese industry is scattered in little home workshops, they produce little widgets that are fitted together in the factories. Precision bombing didn't work in Germany due to bad weather and the Luftwaffe. It did not work in Japan because of how their industry is laid out."

Hereford closed his portfolio. "This is not how I was taught to make war. Killing women and children? That is simple barbarism."

"You want me to argue?" Frederick spread his hands wide. "This is a war where the Germans will try to exterminate entire nations of women and children. The Japanese in my time handed over their Chinese prisoners at the end of the war. You know how many? Less than 500 from over a decade of war."

"It is horror to fight like this, but it would be much worse if we let them win. End of sermonette."

"We can pass it up the chain and let others decide." Bob opened his notebook again, "but I am against it."

"Talk to me again after Pearl Harbor." Frederick said. "If we want to find our targets, in Europe or worse in the Pacific, we are going to need navigation aids. These grew out of blind-landing systems. If we can master that sort of thing, we can reduce collateral damage." Winston read Larry's notes upside down, "Oh, the incendiaries, that reminds me about Improved Conventional Munitions, ICMs. You see with a big bomb you spend a lot of energy blasting a small piece of real estate into smithereens. If you drop bomb body, a 'bus' full of grenades you spread the energy more effectively over a wider area. Simple idea, I don't know why it was never used in my war. Maybe I am missing something."

"We will have to get someone thinking about the proper size and mix of bombs against various types of targets." Tom replied as he scribbled.

"Also napalm, gasoline thickened with palm oil, soap or something. It makes a flame bomb much more effective."

"How about bomb sights?" Tom asked.

"The Norden sight was the most advanced in the world, it cost thousands of dollars and we had all sorts of ways to destroy it to keep it out of enemy hands. Postwar analysis showed that most bombardiers never really used it. They could not see their targets at night, or through clouds, they were part of a formation and just dropped when the leader dropped. No need to spend too much time on bomb sights." Winston waved off another cup of coffee. "Why are we so focused on planes anyway?" He asked. Night had fallen and the train was moving with unknown velocity.

The navy man replied. "We can retrofit ships with modern equipment, the Army stuff is mostly small and easy to make, but the planes we have to start first, they have the longest lead time, they are the hardest to get right."

"Still we need to talk about the software, the people issues." Frederick insisted.

"That will happen when we talk to Senator Taft."

"When? Where?"

"Akron, in a couple of days. Congress will be in recess and the Senator will be confined to his home with a bad cold."

#### Chapter 5

"Cincinnati?" Frederick asked, reading the name on station.

"Akron, Cincinnati, whatever, one northern town is pretty like another, same thing." Hereford grumbled. He sniffed at the air with disgust.

Winston searched the other man's face. "I never know when you are pulling my leg."

The three military men were in civilian clothes again, only the time traveler had a briefcase. A large sedan pulled up and a railcar porter led them across the maze of tracks and ditches to the open door of the limousine.

The Taft family had dominated Ohio politics for two decades, their house, estate, occupied half a block in a nice downtown section, it was set back from the road by a wide strip of garden and a brickwork fence. The garage was obviously a converted stable, open on one side. A cobbled path lead to the kitchen door.

Inside, Robert Alphonso Taft greeted all four with a politician's handshake and practiced smile. He wore a white shirt under a patterned vest, but oddly with no tie. To other people this was a mansion, to him it was simply home. He lead them past scurrying children up the stair and to a suite of two rooms that served as his office. An arched window overlooked the traffic on the street.

"You gentlemen are early," he said with an easy informality, just as well," he paused for effect, "I never

know what to wear when meeting a throwback in time anyway." He waved them to a motley collection of chairs. "What have you gentlemen been up to?" he began.

Larry recovered his notebook from an inside pocket, "We went to California to see the new DC-3, then up to Seattle pester Boeing. Some other things. We learned about small arms, dried blood plasma, some of the finer points of pizza."

"Pizza?" Taft asked distractedly. "They are taking good care of you, I hope, Doctor Frederick?"

"Excellent care, sir. Safe as in my mother's arms."

"Grand, call me Bob, everyone does, you are an important man you know. Let's talk about business, shall we? Tell me about ending this depression."

"I am no expert, uh, Bob, but in my time nobody else was either. FDR tried a couple of harebrained schemes, eventually it was the war that brought us back to full capacity. Still, at least he did something. He gained, will gain, a lot of support for that."

"Capacity, exactly the problem, Ohio has thousands of idle factories that can't hire people to make things people can't buy, because they don't have job because the factories aren't hiring and so on. Too much capacity."

"FDR started with relief efforts, then make-work programs, then the gear up for the war."

"How will we pay for that?"

"Massive deficit spending, at some point things got, or will get, so bad that there was no other choice. They called it 'priming the pump.' Not all the spending was wise, but it got money out there."

Taft clucked like a chicken. "Borrowing money from people who don't have money to give the money to people who owe you money. Again, it is circular. Still, if we accept that this overcapacity, this, collapse of prices, is much more than a temporary glitch we might have to borrow against the future, just like we did in the war." Winston noticed Taft was not taking notes. "What sort of make-work are we talking about? Public works are the old standbys." He yelled out the open door in the other room, "Horace, tell your mother we need coffee and cake for four."

"Yes sir, lots of farm-to-market roads, they helped a lot, the Saint Lawrence Seaway, port improvements, schools, silly things too, for us academic types they had a program of writing local guide books and histories. Filled up miles of library shelves in my time. There was even a Federal Theater Project."

"Got to keep the professors and the actors going too Winston. Still, if we know we have to fight we can do a bit better. Always better to know what your goal is. Then you can take steps."

An elderly servant brought in a tray with the coffee service and what seemed to be half a chocolate cake from last night's dinner. "Thank you, Charlie." Taft hacked at the cake in silence, passing plates around the table. "But that brings us to another matter. You, Charlie, the Negroes."

"We prefer to be called 'Black,' sir, Bob."

"Hell, I have been trying to get half the Senate to use the word Negro." He poured coffee with a look of concentration on his face. "What is to be done? What can be done?"

"In truth, this is a time of opportunity." Winston insisted. "Everyone is equal now, equally poor, now we can lift everyone at once."

"My, you are the optimist, aren't you? You are not grasping that in much of the South, where most Negroes live, they simply don't exist. Politically that is. In the northern cities, Chicago, Detroit, New York, they vote as a block for the Republicans, the Party of Lincoln. So we have a Solid South of Democrats, we Republicans need to carry all of the north and most of the west to carry anything in Congress. Further, the Democrat have all the committee chairs, Southern Democrats have all the chairs." Now the senator was talking as if to himself. "We need a program I can push as Civil Rights, that the Democrats can sell as economic recovery and at the same time gets us ready for a fight. Ideas?"

The three military men were clearly out of their depth. One of them stirred his coffee with a noisy spoon.

"Does Hoover know about you?"

"No sir, he is not in on it." Larry finally spoke.

"Shame, love to talk this over with Herbert, brilliant man." He walked to the window. A large truck was passing by. "Only one thing to do, public works for two parts, the Federal government programs will aim toward preparedness, then we will have local development program in the hands of the local politicos."

"How does that help?" Winston asked.

"Well you see, the unions are part of all this. You see the Wagner Act gave to much power to the unions." He paused and smiled. "Excuse me I was about to make my American Legion speech. In any case, I will insist 'that fool Roosevelt' enforce equal pay for equal work on Federal projects. Further I bet we can waste a lot of money in the South, too many hospitals, too many schools, libraries and all the rest of it. Lots of that waste could be in the wrong parts of town. Now, we Republicans will allow this crazy spending scheme, but we can monkey with some details that could make all the difference."

A woman in an old-fashioned flowered dress breezed into the room. "How many for lunch?"

A bright smile came across the senator's face. He kissed her, she straightened his vest. "Martha, let me introduce my friends." They all stood to shake hands. "Most especially, Winston Frederick, my guest of honor. We were talking about civil rights."

"A pleasure, Doctor."

"Sit down, my love." She took his seat at the head of the table. He leaned on the edge of the oversized desk. "We are thinking of ways to spend money foolishly. What can we do to help the fair sex?"

She smiled and looked down briefly. It was obvious she had expected the question.

"Have you noticed, in all the speeches, all the politicians say they value women and motherhood? But in truth we are last in line for education, for health care for everything. Women die younger than men. Most poor people are women. Women sit in homes across this nation, women with talent and ability and no way to express it."

"Half the nation dancing backwards," Her husband added.

"Gentlemen," she continued, "if I understand the purpose of today's meeting, the Republic is in danger. First from this depression that reintroduced actual starvation into our nation, and then from the rise of these, militarists, in Europe. I ask you, do you insist on fighting for your lives without the help of your wives, your sisters? I suppose by civil rights you mean the Negroes," she smiled at Winston. "Does the term not also apply to women? While we can vote, we are too often forgotten."

"Yes ma'am," Winston replied. She was the kind of woman who required an honorific.

"In truth the women of America do not speak with one voice, while many of us are well-off, others are locked in poverty, and not women alone, but also our children. Poverty is the one problem all women agree on. Unless women are allowed to earn the same wage as women for the same work, too many children will grow up poor and ill-fed. Further, we must look to the men who abandon us and their children. Many women are forced to take public charity for the simple reason that their husband refuses to do his duty as a father, a man."

A loud noise downstairs ended the interview, "Bill! What did you break? Excuse me gentlemen, lunch will be ready in half an hour." With that she left."

"You know gentlemen, people say she is the natural politician in the family. They don't know the half of it." Robert Taft smiled after she left. "What else gentlemen?"

"I am very concerned about Henry Ford." Winston offered.

"Why so?"

"He is, or is going to become, something between a pacifist and little Nazi himself. In my time he held a lot of production capacity out of the war effort. I heard Hitler had a photo of the man next to his desk. On the other hand, he won't make it to Pearl Harbor."

Taft shook his head, "Please don't tell me anything like that again. It is, it seems, unchristian to know something like that. In any case, Henry is an old friend, a cranky old friend. I think we can deal with him. What other crazed industrialists come to mind?"

"There was a famous picture of the boss of Sears being carried out of his office by soldiers over some sort of wartime obstructionism." Winston replied. "I really can't say what it was about."

"We can keep an eye on it. Still, that just means there will be trouble elsewhere. What else? Anything that falls outside of this damned war that is hanging over our heads?"

"Well, Bob, since we are waiting for lunch, maybe I should say something about the environment."

Taft lifted his eyebrows and looked up at Frederick.

"We have to do what we have to do to get production rolling, but a lot of the things we will do are not so smart in the long run. Lead in the air and water, even in house paint can be very dangerous, especially for children. Asbestos dust gets in the lungs and causes cancers. Not to mention cigarettes."

"As you say Doctor, we have to do what we have to do, let's keep our eye on the ball, but still we would be fools to hurt our own people needlessly. Can you give me a memorandum on that? I prefer to have technical matters on paper." He stood. "I do believe I am getting over my cold. Perhaps I can make some phone calls this afternoon. I call a recess, nothing like a nice mean to give the mind a chance to absorb new ideas. Also I smell chicken soup."

He led the group down the wide stairs towards the dining room, "You know what really worries me, Doctor? How many other people are there just like you? Where might they be?"

"I wouldn't worry about that Senator," Larry replied.

### **Chapter Six: Elsewhere**

The Aide-de-Camp to the Japanese Navy Minister found a note on his desk when he arrived. He read it and ordered an assistant to call the number indicated.

"It is done" assured the voice on the far end. The long-distance line was full of static.

"Very well. Under no circumstances must anyone know about that freak." The commander replied. "She would have had us bow down to the foreigners."

"She will not trouble us again." The other voice had a hard finality to it.

The Aide-de-Camp hung up the phone and began to review the two books of interrogation notes.

Stalin's office was shaped like the letter 'L.' overlooking a small snowy courtyard. His desk was covered with green baize that almost matched the olive of the walls. In front of the desk a brigadier general of the NKVD stood at a rigid position of attention.

"Speak frankly, comrade general, this is an odd situation and I must know all that you know." Stalin said.

The soldier slightly relaxed his position and brought a small notebook up to waist level. "His name is

Ivan Petrovitch Markov, he appears to be in his late fifties although he claims to have been born in Leningrad in the year 1958."

"A nice trick," Stalin muttered. He opened his leather tobacco pouch.

"Born in 1958, graduated from Moscow University with an advanced degree in history in 1982, gained a professorship there six years later. He claims he woke up in a steam bath near the river twenty-something years before he was born."

"Your opinion, general?"

"Certainly a madman, Comrade Stalin," he lied poorly.

"The cases of madmen do not come to this office. If he is just a madman, than so is Comrade Beria for bringing him, and you to my attention. Think again," there was no need to be threatening. The office itself did that.

The uniformed man shook his head and brought his open palms to each side of his chest. He was a picture of confusion. "There is no explanation, Comrade Stalin. When he was arrested he had certain technical devices, documentation, we cannot explain it. Even his clothing was like nothing we have ever seen before." He placed an Russian identity card on the desk and tried to regain his composure.

Stalin held the card in his stained hand, it was covered with some sort of waterproof coating, it included the man's name, date of birth and a color photograph. more alarming was the red-white-blue tricolor flag that served as some sort of watermark for the document. What did that mean? "Very well, so you questioned him closely did you?"

"Yes, comrade. Very closely."

"So what does he want? What can he tell us from his future?"

The Checkist braced to attention. "He simply wants to kill you and overthrow the Soviet state, Comrade. He has tried to explain his reasoning for this to each of his interrogators. He is an anti-Soviet agent, an instigator."

"I presume you are still loyal to the Soviet state?" Stalin smiled with his yellow teeth.

"Of course, sir, as are all my men."

"Relax general, you have served the people well, his crime is not yours. I want you to keep this man under your care, and treat him well. In a few days we will transfer him someplace more secure. You and your unit will go with him of course. You will prepare reports to be sent to Comrade Beria for my direct attention. Get everything you can from this man. This is a most important project. Very delicate. You and your men need not fear me, you have done all that I have asked and I will protect you from any repercussions." Stalin lied very well. "Comrade, before your leave Moscow, I will have delivered to you a more correct uniform for your new rank as a major general. You have certainly earned it."

"Thank you, Comrade Stalin, I serve the Soviet people."

"We all do, Comrade general, we all do."

Don Erlang was put up in a nice country estate somewhere in the Home Counties. Soldiers wearing bulky civilian overcoats patrolled the low brick wall making it an actual obstacle to anyone trying to get in. Or out for that matter. Inside his regular team of handlers, sort of official friends, had settled into a regular routine. Each afternoon they reviewed the day's newspapers, military journals and other documents in an attempt to learn all they could about his time.

Apparently the Royal Navy had their turn at Erlang this afternoon, and the objects at hand were a number of aerial photographs. David Helmsford handed them over one by one. "These were taken last week by an 'accidental' overflight of the yards at Kiel. Our fellows have already looked at them, but what do you make of it?"

"Lots of activity, every available slip has something being built in it. One, two three, about a half-dozen destroyers, a lot of U-boats." Don replied.

"Ah, but tell me what you don't see. What isn't there? The navy man teased. Then he answered his own question, I'll tell you what, no cruisers, no battlecruiers. I noticed that myself yesterday," there was an amused pride in his voice.

"The *Scharnhorst* and the *Gneisenau*? They were just wastes of resources. They never lived up to their billing, everyone knows that."

"Well not everyone knows that Don, we do, but only because you told us. How does Hitler know?"

"Butterflies?" Don suspected where this conversation was going. A knot began to form in his stomach.

"Maybe, but we have made only very subtle changes so far. Also, look at this." He handed over a series of photographs taken at ground level, a team of uniformed aviators posed with proud smiles in front of their plane. A red rectangle adorned with a swastika decorated the tail fin. "They call it the Heinkel He-177, this is the crew is celebrating its first test flight."

"A four-engine bomber? That is not right. The *Luftwaffe* is supposed to be focused on tactical support of the army. What do you think this adds up to?" Don knew the answer.

"The have someone just like you, Don. They have a visitor from the future too."

Konrad Herrman was a portly man, and sharing another evening tea party with Adolph Hitler did not help. That on the other hand was the least of his concerns. Hitler was in a well-made brown suit, his tie perfectly knotted, Herrman knew he would not adopt a uniform tunic until the war began.

"Tell me, Professor, all we have talked about, I have never learned where you were born."

"Dresden, Mein Fuhrer, about twenty something years from now." He could see the politician doing the math in his head.

"Of course I read your report on the terror-burning of Dresden. Rest assured my friend, your city will be safe this time. Horrid, first the Anglo-Saxons, then the Bolsheviks." He clapped his hand on Herrman's knee. "Things will be very different this time."

"I certainly hope so." Herrman replied.

"Already, I have a plan to restore whatever damage the British may do to our cities. We must use this as an opportunity, an opportunity to rebuild our towns on an altogether higher order. I have in mind a series of public parks for example."

Herrman settled in for another long evening.

The Chairman of the Fascist Council wore a pair of white linen trousers with a light-blue shirt, he had a straw hat on his head. He could be any grandfather in Italy. Benito Mussolini at home was somewhat unkempt. He sat on the veranda of his country home overlooking an olive grove. At his side sat Professor Manuel Álvarez-Rivera.

"Am I a madman yet?" Mussolini asked in an amused tone.

"No, not yet, still just eccentric," his advisor assured him.

"I do not intend to sink to the level of madman this time. Eccentric I can accept." He poured himself another glass of wine, emptying the bottle. "We together can save Italy from this insanity, this storm on our horizon."

"Then why are we in Spain at all?" Manuel asked.

"It is necessary. We must move Spain to the Fascist bloc. A Fascist Italy cannot survive alone. Nazi Germany is destined to be destroyed, all well and good, but we must have at least one friend in the world. Further, I can see friendly governments in Spanish-speaking America coming to our side. Then, even when this war is over our bloc will be secure from both the English and the Reds."

"Then I would see Madrid being the center of this Fascist empire."

"No, not really, Spain is a pauper state. They are, or soon will be, dependent upon us for their economy. Also I did not use the word 'empire,' you broke me of that. A community if you will, of the Fascist, Catholic world against the Protestant democracies and the Asian despots."

"Argue all you like Benito, Spain speaks Spanish." Manuel opened another bottle with a pocketknife.

"I like to argue. But in truth we cannot go far wrong as long as we stay out of Hitler's orbit. Then Italy can survive and worry about Peron looking to Rome or to Spain for inspiration. That is a side issue altogether. Let mad dogs kill each other I say." Mussolini wiped the sweat off his forehead.

"He will come for us at some point. His military is too strong for us."

"We have, we will have, a better military this time, we have the Alps, and most important of all, this time we have a Libyan treasure to fund our industry. It is a dangerous game, but one we can win."

The time traveler raised his glass. "Libyan treasure."

"To Libyan treasure."

"I feel a need to walk, come join me." Yet again Mussolini was a charming host. Despite all he knew of the man's nature, sometimes Manuel liked the man. A discreet guard followed them down a well-worn trail. A dog was barking in the distance. "The airplanes we spent so much money on are coming into service in Spain, I know our work is good, they are the equal of the Germans and outclass the Soviet shit."

"Still, we must improve them constantly, we must not be left behind," Manuel said. The birds began to settle for the night.

"The navy is at my throat, the air force thinks I am genius. But now it is time to improve the army. If war begins in 1939 we must be ready to protect our frontiers, our shores. Before your transportation, we paid the English for the plans of an advanced tank, the six-ton type from Vickers. I need you to go see one, lay your hands on it, tell me what we can do to improve it."

"I will make the arrangements with your office."

"Also I am not happy about the training program. More and more expensive equipment will be going to the army, we cannot have half-trained boys playing games with it."

Manuel observed, "I did my time in the army you know, I was drafted too."

"Excellent, you're just the man for the job."

#### Chapter 7

An early dusting of snow blew across the gray slate patio outside the conference room at the Greenbrier Hotel in rural West Virginia. The entire Oversight Committee had assembled for the second time ever a week before Christmas, 1936 when their absence could easily be explained. The room was already filling with smoke.

Winston Frederick had assumed the uniform of an Army master sergeant and sat against the wall behind George Marshall and William Leahy taking notes. Senator Taft was again chairing the meeting. "More than a year has passed, are we on schedule?"

The Treasury Department man replied first, "On or ahead of schedule, we're spending our way out of the Depression, not that you can tell yet, lots of money going into public works, university scholarships, whatnot."

"Hundreds of students have just finished their first term in programs in electronics and avionics." The Labor Department added.

"Will they have jobs when they get out?" Taft asked.

"If they don't they had better go out and make their own jobs." Came the reply. Several around the table snorted.

"Tell me about the public works." Taft ordered.

"The intercoastal waterway is being improved along the entire coast. The hydroelectric plants are underway. Also we have managed to finance a pipeline from the Texas oilfields to the two coasts. These have been billed as employment schemes, but will help when the time comes." The Labor Department man offered. "We have leaned on the railroads for improvements there, the states are working on farm-to-market roads. Again, make-work programs, but useful ones."

"No highways?" a voice at the end of the table asked.

"Let's not get too far ahead of ourselves." Taft looked up from his pad of paper. "Highways would be wonderful, but not yet, not without a huge additional investment in trucks and so on. One step at a time." Taft continued, "What about overseas?"

"We are developing Mexican oil as fast as we can, we might get a pipeline from down there to Texas in time." The Commerce Department representative continued. "We will have a new facility to produce 110 octane aviation gas next year. All in all, the oil situation looks good."

"What about overseas, Europe I mean." Senator Taft reached in his pocket for a cigarette case.

Now the State Department delegate took stage. "Things are proceeding as predicted. The Spanish Civil War is now in full swing with Stalin and Hitler destroying the place to see who can have whatever is left. The Italians are starting to lose their primacy as the first Fascist state to the Germans. What the Germans lack in materiel, they made up for in enthusiasm. Relations between Hitler and Mussolini are cooling a bit. That was to be expected."

"What about this Italian oil?" The Commerce man asked.

"We have granted licenses to a number of companies to provide oilfield equipment. We figure someone is going to do the work, might as well be our guys. They have been very cooperative in providing information we may find useful later. When we have to bomb those fields we will have extensive blueprints ready."

"That's in Libya?" Leahy asked.

"Yes admiral, a nice field in Libya."

Winston made a note to ask about that later.

"Stalin and Hitler both seem to be moving along the paths we were told to expect. The situation in Tokyo is harder to read of course, they are more secretive than the Soviets in many ways. We have our attaches collecting economic information all over Asia and Europe. Nothing that would attract attention, but we should have a better idea how the economy in those countries fit together. To sum up, we can say there has been no butterfly effect overseas as far as we can tell." The foreign service man closed his dossier.

"General Marshall, what is our military standing?" Taft turned the floor over to the Army general who spoke while seated to the Senator's left.

"At the moment, our military is not as impressive as, for example, the French. We do not have a single modern tank or new field artillery gun. Still that is to be expected, and a lot of the groundwork has been laid for a planned expansion. We have sent teams to the National Guard and now have a clear idea of where they stand and how we have to fix them. University students are being offered summer camp military training, and more than a few are taking us up on it. We have integrated our senior staffs and staff colleges with Navy men and even people from industry and have learned a lot from them. In the coming year, our budget will include a lot of new procurement and we will start to see changes at the unit level." Marshal returned to his seat.

"Admiral Leahy, the Navy, sir?" Taft signaled the man to his right.

"Our fleet is simply unchanged since our first meeting. Designing and building ships takes a lot of time. General Marshal has pointed out our improved teamwork with our friends in the Army. I appreciate all he has done to make it happen. Our new class of submarines will be the best in the world, the first one will be launched in a couple of months. Two new fleet carriers will come down the slips next year. With the lessons we learn from those ships we will build an even bigger class with the hulls now budgeted as battleships. Also we have taken a real interest in the Merchant Marine Commission's work, we hope to have the first fifty Liberty ships available by the end of the year, after we finalize the design we can open the taps on short notice. I suspect we may be able to do some amazing things with Liberty ship hulls, already we are looking at tankers, people are very creative. Next Christmastime we should see the beginnings of a change in the Navy."

Taft took a sheet of paper from his briefcase, "The President has asked me to thank you all for your hard work and discretion. He wants to stress that we are not preparing to start a war, but to win one that seems preordained." He looked up. "If there are no objections, gentlemen I have ordered a buffet dinner in the main dining room. I want you to have a good time and informally discuss the developments in your own spheres among yourselves. As the vice-president is so fond of saying, we need a bit of cross-pollinating. At tomorrow's secession we will have time to consider any sparks of inspiration that might emerge." He and the two senior officers stood up, ending the meeting.

The ballroom was large, a dance floor in front of an empty bandstand stood opposite a number of serving tables; a head waiter hustled the hotel staff out of the room as the secretive guests arrived. One of the delegates quickly appointed himself bartender and began mixing drinks others gamely took positions behind the tables and began to carve two large turkeys. General Marshall and Admiral Leahy sat side by side in overstuffed leather chairs in front of the only fireplace. Tom worked a soapstone to light the coal already in place.

"Hear anything odd, Sergeant Frederick?" Leahy asked with a forced smile.

"Libya is not supposed to have oil until after the war, after independence." The time traveler replied.

"Anything else?" Marshall asked.

"I'll tell you something else," the navy man said, "the Italian navy is going to hell. They seem to have scraped their modernization plan altogether. Have you seen that fool Mussolini prancing around like some sort of Roman emperor? Why would a man like that cut back naval construction just as his economy is taking a big leap?"

Winston observed, "Italy is supposed to be a loyal partner of the Germans in Spain. Why are they falling out?"

"Could be Mussolini just doesn't want to play second fiddle, his army is as good as the Germans, and with oil his economy should be recovering," the admiral offered.

"What do you make of that?" Marshall directed his question at Winston.

"Could be dumb luck, could be a butterfly. Still why is the Italian Army doing so well, in Spain? They were supposed to be pretty second-rate compared to the Germans. Like I said, it could be a butterfly, but it might be something worse," he replied.

"Like what?" the admiral asked.

"They could have a visitor from the future too," came the reply.

Both officers sipped their drinks silently. In the center of the room, the line at the serving tables dwindled and small groups began to introduce themselves to one another. A small parade formed as each representative came to the two uniformed officers in turn. A thickset man from the Treasury talked about plans to move the gold reserve to Kentucky for safety. A hawk-like delegate from the Post Office asked Marshall when planes would be available to take mail across the Atlantic.

"Years from now, I suppose. We are working on it." The general replied.

"The British say they will start a nonstop service from Nova Scotia to Ireland next year, in the spring in fact," the functionary pointed out. "How can they be ahead of us?"

"Sergeant Frederick, made a note to ask about that." Marshall ordered.

Winston made another note on his pad. "Yessir."

A Navy commander from the Office of Insular Affairs talked to Leahy quietly, when he saw the others were listening, the Navy Chief indicated he should speak up. "I was telling the admiral that we have drawn up plans to quickly fortify the Pacific processions," the flustered man said.

"This would be a violation of the Washington Treaty, so we have taken no actions yet." The admiral pointed out.

Marshall gestured with his hands, "No, not yet at least. We have a lot of thinking to do about a Pacific strategy."

Leahy agreed, "No need to build defenses if we decide to send the fleet elsewhere. Keep planning but take no action without word from me. Also any correspondence you send to me on this matter is to furnished simultaneously to General Marshall."

"Aye, sir," the man replied crestfallen.

Other members of the committee mentioned projects are far-ranging as new telephone cables to agricultural recovery. Winston knew the informal gathering was working, many of the speakers sparked a memory that he jotted down for follow-up.

Later in the evening, as the dinner *cum* meeting broke up, Senator Taft came to the fireplace. Both Marshall and his navy counterpart stood to speak to him. "Some good ideas, some bad ideas, but at least we are thinking." He offered.

"Everyone thinks his own sphere is the most critical, sir" Leahy replied.

Marshall waved "Sergeant Frederick" over. Winston carried his clipboard at the ready to maintain his cover as a confidential aide.

"I'm worried about a couple of things" Frederick said without preamble.

"Italian oil and what else?" The Senator from Ohio asked.

"First, what seems to be a sterling performance by the Italian Army in Spain. I know that was not supposed to happen. The Italian are supposed to have the least-developed European army. Also, Admiral Leahy pointed out that Rome is under investing in their navy. Then there are these transatlantic British airplanes. I don't know exactly when they were supposed to come in, but it seems much too early for regular scheduled flights like that."

"Perhaps we ought to arrange a small meeting with some minor British officials. It seems we have a lot in common with our friends in London. Who can we expect to be in the know over there?" Marshall asked.

"Let's try a backbencher named Winston Churchill." Doctor Frederick replied.

"I suspect we have some mutual friends," Taft volunteered.

#### Chapter 8: Newfoundland

Even in March, Halifax harbor was dark, cold and foggy. The two Americans came aboard the British cruiser unnoticed. The warmth and light of the officer's mess was in stark contrast to the gloom outside. The table was dominated by a figure at the far end. Winston Churchill in his navy uniform stood to welcome his visitors. His face was lit with a mischievous conspiracy, "Doctor Winston Frederick, I presume?" He asked.

"A pleasure, Mister Winston Churchill." The American replied with a grin.

"May I introduce our advisor, Doctor Don Erlang? I understand you two have much in common." Churchill indicated a tallish man to his right. Don's pleasure at meeting another throwback was obvious. "We are in a quite dangerous place, gentlemen." Churchill said. "Without your remarkable intervention, we were destined to win this oncoming war. But now we face a much more hazardous situation."

"Certainly we must be careful how we take full advantage of our foreknowledge," Captain Hereford replied, "but I do not see how we are in greater danger now than before." He was playing his cards close to the vest.

"I suspect you may not appreciate the situation." Erlang said. He glanced at Churchill who nodded. "You see, we are now quite certain the Germans also have a visitor from the future."

The room became very quiet.

"How do we know that?" Dr. Frederick asked.

"They are already testing an advanced U-Boat, no battlecruisers this time, it looks like the *Luftwaffe* will get their big bombers, but that is just the tip of a hidden iceberg." Churchill replied.

"If the Germans have an advisor, as do we two do, how many others are there out there?" Hereford asked.

"What can we do?" Churchill asked the room, "We must proceed from the assumption that all the nations involved are being provided with this miraculous information. And this of course means we are, as I said, in a very dangerous place."

"We are concerned about the Italians." Hereford admitted.

"What about them?" Churchill asked around a cigar.

Frederick was pleased to spring a surprise on his counterpart. "They have discovered oil in Libya a couple of decades too soon. They seem to be doing too well with the Spanish Civil War."

"So, one British, one American, one German, one Italian. As I said, we must presume a Russian, a Japanese, perhaps a Chinese visitor as well, perhaps many more" Churchill said.

"I cannot imagine what a German advisor would say to Hitler, or a Russian to Stalin even worse a Japanese with foreknowledge. The war was a complete disaster for all of them." Don said.

"Not having a war would seem to be the best option." Hereford said, "Maybe we can still avoid a fight."

"Tell Hitler to try to relax a little? I hope that cat has his life insurance paid up." Frederick sat down for the first time.

It was Hereford how made the next observation. "The Germans and the Italians are in Spain, this was or is the training ground for their troops. We have to presume the German and Italian throwbacks are not going to stop this war. Nothing we know of has derailed us on our way to war."

"It would be foolish to believe otherwise." Churchill said. "We are now set for a much different war than what we expected."

"Butterflies?" Erlang asked, an eyebrow arched.

"Lots of them." Frederick replied.

"I suppose the President ought to meet with your Prime Minister." Hereford proposed.

"Our system is much different from yours, politically." Churchill replied. "Our most senior civil servants are aware of our visitors," he indicated Winston and Don, "but our political leadership are not. Nor, should they be. I would propose liaison offices be established in each capital, outside the normal embassy rigmarole."

"What of higher strategy? How can we coordinate that?" Hereford protested.

"We cannot. In fact we should not too much. The situation facing us, which we will face, will be different from the one predicted. As long as we are agreed on the broadest possible outlines, an Anglo-American alliance, a Germany-first policy, and generous peace the rest can be decided on that foundation based upon the events as they present themselves."

Hereford was about to object again, but Doctor Frederick preempted him, "Pending the approval of the President, I think we can agree on your proposal." He reached out and shook the hand of the future Prime Minister.

"Done." Both Winstons said together.

"Perhaps some friendly corporation will be willing to set up some offices for our use," the American time-traveler said.

"If our version of this war is any indication, communications security will be critical." Don pointed out.

"I know of only one code that is both secure and fast enough. We, we Americans, will have to find some Navajo code-talkers." Winston answered.

Erlang's face brightened, "I read a book about them once."

A naval officer entered the room and handed Churchill a note. "Gentlemen, Captain Raleigh informs me we have passed the sea buoy and set a course for warmer waters. We now have a few days to talk together in complete security, it would be foolish to waste this chance" He pulled out a heavy ledger book and opened it to display a handwritten page. "My Oversight Committee has asked me to review these notes with you both; I hope Captain Hereford would be good enough to act as secretary for this most unusual meeting of minds." Churchill waved the two time travelers into chairs on either side and produced a silver bucket covered with a white linen napkin. Reaching under the covering he produced a bottle of champagne and with expert hands poured four glasses. "He is to plain speaking and clear understanding" he announced. "First order of business is aero engines." Churchill began.

"Our designs are more advanced, and more capable of improvement than yours." Don said undiplomatically.

"The Mustang would have been worthless without the Merlin engine: Frederick agreed. "We might as well begin licensed production in the US at once."

"Have you Americans begun work on the turbine engine?"

"I don't think so, how is Frank Whittle doing?"

"They tell me he has plenty of funding this time around."

"How about the famous British radars?"

"Not ready yet of course, but soon enough. We are already setting out an air-defense network based on ground observers, the radars will fit right into that in time. We also expect radio navigation devices to be fielded in fairly short order."

"We have used our airmail service to refine our blind-landing system, that will be expanded into a real night-flying or perhaps night bombing aid," the American said. "All I know about radars is something called a 'Cavity Micrometer."

"Yes, something like that. 'Cavity Magnetron' I think. We have one ready for you take with you I am told, Production examples will be coming your way in short order. I see a problem here."

"What's that?" Doctor Frederick asked as Churchill poured more wine.

"We seem to be developing two incompatible navigation aids, surely it would be better to have one system for radio, radar, whatever as much as we can."

Hereford interrupted, "Best not to be too darn clever. Two radars, codes, two whatever gives the bad guys a more complicated problem."

"Also it give us two tries to develop an ideal system," Churchill added. "Still, we will do what we can to coordinate our developments. Let us turn our attention to the shipyards, we are counting on miracles of production from the Americans."

Again Commander Hereford took the lead, "We are very proud of our merchant marine program. The Liberty ships are already coming off the slips in some numbers. We have designed them to have quite a bit of commonality with the LSTs Winston keeps harping on. The other amphips are too different come out of the civil program," he added.

"What else are you planning?" Don asked.

"We will have some number of landing ship docks, LSDs."

"A bit of clarification," Churchill demanded.

"Like a cargo ship, but with a well deck in the back. It can carry the landing craft across the open water to the area of the attack. That way we can avoid needing a nearby port. Also they will bring our amphibious tractors and tanks where they are needed." The American throwback said. "Anything new in your shipbuilding program?" He asked.

"The Royal Navy will be much more focused on antisubmarine missions. Our Royal Marines will also be equipped for larger-scale landings, nothing like yours of course." Don explained.

"And your carriers?" Doctor Frederick enquired.

"We have already built our first angled-deck type, others will be retrofitted. I guess you have done the same?"

Both Americans nodded.

"We will need some help with steam catapults and arresting gear. We simply have too little experience with that sort of thing to catch up in time."

"We will be pleased to provide blueprints and examples of whatever we have." Hereford spoke with authority. "Perhaps you could send us some officers for a long-term familiarization?"

"I suspect you will see them in less than a month." Churchill replied.

"How about submarines?" Don asked his American counterpart.

"More important to us in the Pacific than to you folks in the Atlantic. The ones coming into the fleet now have provisions for snorkels, we will fit them in plenty of time. Also everyone assures me I can stop harping on the torpedo reliability problem. You?"

"We are about to fit out one of our smallest subs with oversized batteries and electric motors; it is supposed to mimic the worst the Germans can do. A training target. You know it would be a shame not to have your lads take some shots at it." Churchill interrupted, "More, our escorts ought to train against your subs someplace away from prying eyes."

Don nodded in agreement, "We also seem to have quite a number of older S-Class boats on hand. Already outmoded. We are working on other uses for them. Training at least."

Don waved away another glass, Churchill poured anyway with an evil grin. "Have we mentioned the frigates?"

"You have missiles already?" Don was amazed.

"Just guns, we expect a lot of Japanese kamikazes, so we are designating some destroyers as anti-aircraft ships, calling them frigates. Each carrier will get two, then the others will be spread out where they can do the most good. Five inch guns plus a secondary battery and our best radars."

"We have designed, or redesigned, our Hunt class as a generalist for both anti-submarine and antiaircraft work. Differing design philosophy I suspect," Don answered. "We are calling them frigates too, just to add to the confusion," he grinned.

### **Chapter 9 Ships**

Frederick found the San Francisco shipyard to be a place of unsure footing, alarming noises and unpleasant smells. Cables, wooden crates and iron beams formed a maze between them and the hulk under construction. The foreman herded them through the confusion like a group of school children on an outing. They crossed onto the Liberty ship on a ramp so wide he did not notice the transition from ship to shore. Inside was more noise and confusion, along with the hash glare of work lights. They went up a narrow steel staircase and emerged on the deck, near the bow in an area quiet enough for conversation.

"Here she is, Ship Forty of a run of one hundred." The foreman sat on the steel railing, looking at the odd collection of military men, tycoons and a negro secretary. The shipyard spread out behind him like a panorama. "The sections are put together on each side, then moved on rails to the center where they meet up with the power plant and keel for final assembly." He gestured with his arms freely. "So far we have taken a month to build each one, but that will pick up now that we have the kinks out of the system."

"Mass production? So they are identical?" Admiral Hereford asked.

"Externally yes," the foreman conceded. "we will have variations by length. All of them are the same beam, but overall length will differ; to the eye, identical. There are a few internal differences. The reefers for fruit require additional wiring, the tankers are reinforced, this one has a Roll-on/Roll-off cargo deck. They leave here semi-finished and go across the river where fitters put on the final touches for the owners. We do the big stuff only. The Maritime Commission has specified one design and wants 100 by October. Each yard bid on as many as they think they can build. Next year the fastest yards will get even more contracts, so it is built into the system to reward speed."

"They look cheap," Admiral Fish was examining the painted deck underfoot. He was accustomed to Navy teak.

"Conventional design, mostly, with all the expensive bits cut out." The shipyard manager sympathized. "Almost no wood or brass anywhere. No decent staterooms, no cranes on board, small crew too, about twenty. Let me show you this." He walked aft toward the nearly finished superstructure. He stopped at what looked like a large orange pipe or oversized barrel laying lengthwise. "This is the new lifeboat." The foreman gave it a loud slap with his palm. There was an echo from inside. He opened the round hatch. "All steel construction, welded in fact." Winston got a good look inside while the foreman continued to talk. "Nothing but two benches with storage underneath. But that is not the interesting part."

"What is interesting?" someone asked.

"These are actually cheaper than the wooden lifeboats we usually use." The man smiled. He led the visitors to the bridge. "There are major changes up here. Part of the design was to reduce the number on each watch. With a conventional ship you would expect a crew of about forty, with a dozen on watch at a time. Depending on configuration this one will need about half that."

"How'd you manage that?"

"Lots of changes in work rules, no crane operators, so no cranes, the radios no longer require so much attention. Lots of the engine room stuff can be monitored up here. Once you cut a few watch-standers then you can get rid of the cooks and stewards who take care of them, it sort of feeds on itself. Even the galley is smaller than usual." He led them below decks to the unfinished cargo hold. Unable to talk near a crew driving rivets, he took them down the sloping deck to a quieter area. "Now as I said, this one will be a RO-RO, in a conventional design this would be a couple of cargo holds, you load them from the top. This one is laid out with two intertwined ramps, A and B. This way we can drop the cargo ramps, drive trucks from the dock onto the cargo deck, unload the truck right where the cargo belongs. It is supposed to be faster."

"Can it handle my tanks?" Larry in his green uniform asked.

"I guess so sir, the plans are all from the Maritime Commission.

"So like a parking deck inside, with ramps to unload, can it land on a beach?" Winston asked.

The shipbuilder replied, "No, the Liberty ships are only suited for improved ports. The ramps we use for unloading are on the sides, not in the bow. Still, the only require a dock, not full unloading facilities."

Admiral Hereford spoke in his official voice, "We will be visiting some amphips later in the day. Winston?" the admiral asked, "Come with me."

As the other members of the little troop remained with the manager, the time traveler and his supposed boss moved away.

"See anything of note?" Hereford asked.

"I don't really know much about ships; never been in a shipyard." Frederick replied.

"How does it look?" he asked.

"Primitive, simple, about what you would expect. You should ask about damage control and the use of welding in the hull, that was supposed to increase speed." Frederick made a show of writing in his leather portfolio.

"It'll do, I suppose," Hereford signaled to return to the group. "quantity will have a quality all of its own. We have other things to look at."

The Landing Ship, Tank was critical for all sorts of operations in the war that Winston remembered. He gave much attention to ensuring the Powers That Be understood that. LST-21 was the product of that effort. Lower and longer than the Liberty ship, it had two internal cargo decks. Inside, it was obviously designed to carry vehicles, the interior being about the same height as they had seen on the Liberty ship, but this time with level decks connected by a pair of overlarge cargo elevators. Bow doors covered a ramp suitable for assault landings.

"There is more to an LST than you might think," the new skipper of the craft was very proud of his new command. "Shallow draft of course, but we have trim tanks in the stern to let us bring the bow up for a beach landing. In addition, she is a sea-going vessel. We are able to transport an entire mechanized battalion from port to shore. That means we have to feed and take care of about a thousand soldiers for more than week. Half landing craft, half cruise ship, not half bad." Winston was already thinking ahead. He knew the Pershing was half again as long, wide, tall and heavy as the Sherman, so each Pershing would eat up part of the footprint of four of the smaller vehicles. Still a battalion of the smaller tanks he supposed. They went to the weather deck where the crew was painting white lines to guide the parking of vehicles. The ship boasted six double antiaircraft guns.

"The crew mans three, the troops will handle the other three. We don't have fire-direction radars, so we have to take our shooting orders from the radio."

"Where do these thousand soldiers bunk down?" General Orino asked.

"I said a cruise ship sir, but not a comfortable one. Our galley can feed everyone, but the passengers will have to sleep in on and around their vehicles. Still we can keep fleet speeds, so it will be an unpleasant but short experience. They'll be eager to get back on shore, I guarantee you."

Larry kept the commander of the ship busy as Hereford again took Winston aside. "Anything of note? It is too late to change anything much."

"These were very handy ships, in my time the supply of LSTs limited operations. Everybody wanted them. I remember that they were used to resupply battleships with shells. One could sit on each side and so loading went twice as fast as usual. Trust me, take however many are scheduled for production and double it. Also the major threat to these ships will be Japanese airpower. I don't know how many guns 'my' LSTs had, I hope six is enough."

"Ought to be, plus the skipper doesn't know he will soon be getting some smoke generators too."

"What's next?"

"A launch will take us on a little cruise out to see the new LSD."

The LSD was one size larger than the LST. It had a conventional bow, but an unusual stern. While the LST had a ramp to deliver vehicles onto the beach, the LSD was designed to set boats in the water. In the rear was a well deck. When ballast tanks were flooded the deck was underwater. When Winston and company arrived the deck sported a pair of tug boats.

"So you see, these tugs float off to clear the well deck and then we drive the amphibious vehicles down the parking deck into the water. So the LSD is ship full of boats." Hereford was in his element.

"Why would you want to put a boat on a boat." Winston was puzzled.

"These tugs are harbor craft. The same with landing craft, they can't handle the open sea. The LSD takes them from a safe port to the area where they are needed and then launches them. No muss, no fuss."

"So where is this stuff off to?"

"Alaska, with load of tugs, landing craft, amphibious tractors, fighters and a whole lot of whatnot."

"Fighters? They float?"

"Let me show you."

The weather deck of the ship was flat, with the superstructure at the stern, the layout reminded Winston of a tiny supertanker.

"So a boat full of boats and an aircraft carrier too?"

"Winston, this is a ship, a ship full of boats." Hereford feigned anger. "This is only a flying-off deck, aircraft can take off but not land. We have no hangar deck, very limited deck space. We are just transporting a half-dozen planes up north."

"Why not fly them up there? Are the Canadians causing trouble?"

"The planes could fly up there, but would have to stop a couple of times, we are simulating their deployment to a Pacific island and letting the crew and pilots train. Either that or no pilots were available, nobody told me." The admiral laughed.

Before they left, the visitors enjoyed lunch in the in the mess hall with the enlisted sailors. Winston noted a number of black faces, some wearing the insignia of petty officers in technical specialties. Another welcome change.

Instead of a launch to carry them back to shore, the inspectors were offered a ride in the back of a floating truck. The load bed was full of crates and they sat as best they could. Admiral Hereford stood for the entire trip in order to maintain the dignity expected of a flag officer.

"Army business," Larry offered with a grin, "these are very conventional five ton trucks, but the body has been replaced by floatation chambers. The LSD can carry these just like it can handle landing craft."

The strange hybrid was called a 'Duck' and like its namesake it waddled low in the water in a way that did inspire total confidence. Diesel smoke blew across the passengers who all welcomed their arrival back on shore. Tom looked particularly green.

"Let's not do that anymore."

"Agreed," the others answered at once.

# **Chapter 10 Tanks**

"So how was the cruise?" Larry asked the pair as they entered the railcar in Miami. Hereford was silent, reserving his professional judgment of the Royal Navy.

"Nice change of scenery, lousy food," Winston volunteered. "What's new here?"

"We got orders."

"To do what?" Winston felt something was up.

"Promotion orders." He handed a folded sheet to the navy commander.

A broad grin broke across his face. "I'm rear admiral, they skipped captain altogether!"

Hands were shaken all around, Larry now revealing himself as a freshly-minted brigadier, Tom having to accept being a mere colonel in the junior service.

"Drinks are called for all hands, I think, what will you have?" Larry rang for a porter.

"Anything but champagne," Winston said, "Churchill goes through the stuff like water."

The railcar became a behive of activity as a team of typists hammered out a long report of the mid-ocean meeting. Each point brought a pointed question from the White House or the affected agency. Still, slowly a consensus developed.

The President had made the group his long-term guests at his private retreat at Campabello in Nova Scotia. They converted a large salon into a shared office that was soon a confusion of maps, books and piles of yellow teletype messages. As the liaison office in New York became operational, the workload increased as Winston and his handlers had to field information, and questions, from their British counterparts. The Americans vowed to support the British and adopt a Germany-first policy. A pool of patents was agreed to in order to reduce the confusion of licenses to produce weapons and equipment. The Americans would enter the war on 1 January 1942, or sooner if Britain was in danger of defeat. The British relinquished control over their forces in and east of Singapore once America entered the war, agreed to share all wartime intelligence without exception. Both agreed to a single Manhattan Project with a joint decision required to use nuclear weapons.

These decisions took time, time that was marked by the collapse of the Republicans in Spain, the abdication of the British king, the slow recovery of the American economy.

It was a relief when Larry announced a field trip to Fort Leavenworth. Instead of the accustomed railcar, this time transportation was an Air Corps transport. Perhaps the most notable thing about the silver plane to Winston's mind was the fact an American military plane operated in Canada so matter-of-factly. "Things are changing," he thought.

Leavenworth was a hive of activity. New wooden buildings made formations, platoon barracks in a row headed by a company dayroom, overlooking a battalion command post on parade grounds dominated by a regimental headquarters. Soldiers were everywhere and the jeep ride from the airfield was slowed by heavy trucks and other vehicles on unknowable errands.

General Orbino was just one of a small crowd of dignitaries who waited around the tiny formation of armored vehicles. The Kansas wind blew through Winston's heavy woollen coat decorated with the insignia of an Army captain. Once again, he noted things seemed to be changing.

George Patton was made of stern stuff and did not seem to notice the weather. "Good morning gentlemen, I am pleased to show you what the Armor Board has been doing for the past two years. This, is the Sherman family of vehicles." He walked to the front of the tank, mounted it and continued his lecture looking down on his audience. "Here is a seventy-five millimeter main gun in a powered central turret. The gun is based on the old French design." He patted the weapon's snout. "The ninety can also be fitted. The driver, commander and loader all have thirty-caliber machine guns." The cavalryman waved is riding crop toward the guns.

"Tell me about the engine." General Castle asked, standing in front of Winston.

"An eight-cylinder intercooled diesel, basically a truck engine with some enhancements. The engine is mounted in the right front, next to the driver." He indicated some air inlets. "There are two inches of high quality steel armor over the entire vehicle, more at critical points," Patton explained. "In addition, they can be fitted with a grenade screen."

"Grenades are a problem to a tank?" someone asked.

"Antitank grenades, like our bazooka. The screen just is to detonate the warhead prematurely, it reduces their effect significantly." Climbing to the downward sloping rear deck of the machine, Patton led his listeners to the back of the vehicle. "The engine being in the front solves a lot of problems. We have the main magazine here, out of harm's way where it can be loaded by a rear door."

Winston poked his head through the elongated hatch and was confronted with a confusing array of racks, presumably to store shells.

Patton slithered down the side of the tank with practiced grace and walked to the next vehicle in line. "This is the Sherman personnel carrier. It shares the same chassis and mechanicals with the tank, but is lighter, since it lacks the turret." He walked around the vehicle, affectionately touching its slab sides. "In the rear we have an armored box that can hold a section of dragoons, they access their compartment by two doors."

This time Orbino poked his head through the opening and then invited Winston to enter. The armor was cold as ice, but the little room was sheltered from the howling wind. "Comfortable, captain?"

"Very nice, sir" Winston smiled back.

"No overhead cover?" Orbino asked Patton.

"No sir, he replied. "Still the design is very flexible. Detroit is producing some command posts, ambulances and even a fuel tanker. But the ones we have down in the units are being modified by the soldiers themselves. Very flexible, sir."

Patton moved to the next three vehicles, "Now these are more specialized than a modified armored personnel carrier. These have factory-built modifications to the suspension, electrical system, whatever." He began by describing the recovery vehicle, with a folding crane that could pull a damaged tank out of

the muck. The anti-aircraft gun sported a pair of 40mm guns in an open turret that was powered by very fast electrical motors in order to track aerial targets. The self-propelled artillery piece shared the family resemblance, but included a wide spade that held the vehicle in place when firing.

"What sort of gun?" Orbino stopped Patton in his tracks.

"This is the 105mm gun-howitzer, sir, but the cannon-cockers can put the 155 or the new 175mm barrel in the same chassis in less than an hour. Even the little 75mm can be fitted, but I don't know why you'd want to." Patton walked backwards, stewarding the group along. He came to the final vehicle in the display. It seemed very different. "And here gentlemen," Patton was addressing the general, "Is back where we started from, the Sherman tank, this time fitted with a swim kit." He hit the side of the contraption with the palm of his gloved hand to produce a hollow sound. All the Sherman family can be fitted with these steel floats for river crossings."

Each member of the group felt obligated to smack the side of the floats themselves. As he waited his turn, Winston noted the distinctive pill-shaped turret someplace in the center of the boat-like shape. "How do they move?" Winston asked.

Patton did not acknowledge the questioner, but replied to the general, "They can waddle with the track providing some propulsion, but we are working on an external motor to mount on the back. The tracks are enough for Army use, rivers, but of course we have to think about our friends in the Marine Corps too. Now, if you gentlemen would follow me inside," he came to a door of a large wooden warehouse, a pair of guards brought their rifles to the salute.

The large room was dark, but the still air was a welcome change. In the center was a very large model of a tank, Winston guessed it was made of wood at quarter scale.

"Here gentlemen is the final model of the new Pershing, the layout is the same as its little brother, but about fifty percent larger in every way." He produced a pointer and called attention to the gun. "All Pershings will mount with ninety millimeter gun, we may have a larger one available in a couple of years if need be. The turret is shaped like a boiled egg sliced lengthways, a very complex piece of casting I'm told."

"Is that the bottleneck?" Orbino asked.

"That sir, and the supply of high-capacity diesels. Also there is the simple shortage of assembly lines, starting the Pershing will require slowing the introduction of Sherman support vehicles."

Winston was fascinated by the detail in the model, "Will this also have an APC, and all the rest?"

Again Patton directed his answer to Orbino, "Yes sir, we can produce the whole family once we find capacity, still the tank has to come first.

"Would you give us a minute colonel, gentlemen? I need to make a few notes."

Patton replaced his pointer, "I will be outside sir. He led the rest of the group to the door."

"He's from Virginia, you know." Orbino observed.

"I could have guessed," Winston replied deadpan. "Why are we going with both a 75mm and 90mm gun for the Sherman, wouldn't the ninety be better?"

"There may be supply issues, the ninety is in demand. It is our standard antiaircraft gun. The navy is taking all they can get."

"Tanks of my time used nonflammable hydraulic fluid, apparently it makes a big difference. Sorry I didn't think of that before. Also both the Pershing and the ones outside are still in Olive Drab, haven't we talked about camouflage paint?"

"A two-hour job when the time comes. Let's not worry about paint. Also we will get rid of the white star insignia in combat and go for subdued colors."

"He said the Shermans had thirty-caliber machine guns, make sure they remember the thirty is a better

anti-personnel weapon than the fifty, it fires faster. This one should also have thirties. Also, the Sherman of my time was often cursed for getting stuck in the mud. I have no idea how wide the tracks were, but they should have been wider."

"We call that 'ground pressure' in the tank business." Larry nodded.

"Oh, I meant to mention that we need to look at some sort of night-firing capability. Some of our tanks used to mount a fixed mortar on the tank, you could pop a flare while still under armored cover and hope to get a shot off. Smoke generators and smoke grenades will be important if the Luftwaffe is going to make a game of it. But, tell me, what about supply of the armored support vehicles?"

"A matter of priorities, Winston. The powers that be have decided to field the tanks first and then switch over to APCs and all the rest."

"Without the whole shebang we will not get the full effect of the increased mobility. Units move at the speed of the slowest guy. I am worried about that very much. By the way, what happened to the armored bulldozer?"

"Got filed under 'too hard to do,' some sort of problem with the track design. Bulldozers and tank tracks look alike, but work differently. The engineers will used a pretty-standard APC for now."

"And also I do not see a large-gun tank destroyer. In my history we got the doctrine wrong, but the vehicles were worth having."

"Not this time around. All the tanks can handle a real antitank gun either the ninety or the 105 when it is ready. There is still some talk about using the seventy-five as an anti-personnel weapon, but I bet that argument will soon be settled. As for the tank destroyers, we will use a recoilless rifle mounted on the APC to stiffen the AT belt where needed."

"That reminds me, our most advanced tank at the time I left was the Abrams. It had something called a hunter-killer system. The commander had a wide-view periscope he could use to find targets, he could then swing the gun onto a rough bearing, the gunner would use his high-powered sight to hit the target while the commander was searching for the next target. I heard it increases effectiveness all to hell."

"One of those ideas that is obvious once you think of it. Too late for the Sherman, but maybe we can make it work on the Pershing."

"The open top on the APC is also a bad idea." Winston said.

"I was surprised by that. We will push to fix it. Benning doesn't like the idea of their infantrymen being trapped in a steel box. We have to talk to them again. In fact, Benning is our next stop."

"What is going on in Georgia?"

"Infantry school, they are handling the small-arms piece of it. The Chief of Ordnance was being a problem; Marshall took the rifles and stuff out his hands. So Benning is taking the lead."

"Breaking the old branch chiefs like that was necessary. How did it happen?" Winston asked.

"You know what they say, friction is heat, heat is light, he caused too much friction, he felt the heat, he has seen the light."

"Did you just make that up?" Winston chuckled.

"Read it someplace."

The Infantry School at Fort Benning, Georgia was housed in a pink building across from the officer's club with a statue of a three-legged dog between the two. The Commanding General greeted General Orbino warmly and talked about the training program, but being unable to break away from his office, asked his deputy to accompany the two to the firing range. The deputy was a Marine Corps brigadier. Once again, Winston noted the change.

They took a little convoy of a half-dozen jeeps to the range, on the way they passed the three four-armed towers used to give paratroopers their first jumps. Soldiers marched along the road, slowing their progress.

The weapons were laid out on a number of long tables facing man-shaped targets at perhaps fifty yards. Obviously, it would not do for the VIPs to miss the targets. The Marine officer addressed the little group, "What we have are two distinct families of weapons, gentlemen. The first is based around a thirty-caliber battle-rifle." He displayed what seemed to be an M-14 from Winston's memory. "The M-4 is an air-cooled, magazine-fed gas-operated rifle for infantry use. It leads a family that includes a squad support weapon, basically the M-4 with a heavier barrel and a bipod. This replaces the BAR."

"Automatic or semi?" Winston asked, forgetting his disguise as a mere captain.

"The general handed the weapon over to him, and indicated the safety switch. "The rifle is semi-automatic, but has a three-round burst feature. The support weapon can fire either semi- or fully-automatic. The M-4 is now replacing the M1903 unit by unit." The Marine moved to the next table, "Here we have a horse of a different color, the M-6 family. It is a more advanced design, using a very fast twenty-five caliber round, we call it an assault carbine. Then we also have the M-6 support weapon, like its big brother, the M-4 support weapon, it is fully automatic."

Winston and Larry handled the weapons. They were heavier than they looked, the M-6 family looking cruder, lacking the fine wooden stocks of the more traditional weapons.

"The small ones are the ones causing all the trouble?" Larry asked.

"There have been some technical issues, they can't used regular powder, they jam too much. We had to develop a true-smokeless, foul-less powder. More importantly the bigwigs simply did not want to go to the smaller caliber despite all the numbers. More than a little hidebound."

"What do the numbers say?" Larry asked.

"The smaller rounds let the soldiers carry more of them. The smaller weapon is more suited to the Filipino soldier. It is also a better match for mechanized troops and of course Marines. Common sense is that bigger is better, but in this case the faster bullet will do the job just fine. Still, try to explain that to some people, nearly impossible."

"What is the fielding plan?"

"Both systems are being produced in huge numbers, the M-4s are going to the Army, the M-6 to the Marines and Filipinos. Still, you will see lots of National Guard people with the '03 for some time to come."

With that, the little group formed a firing party that blasted away at the helpless targets for thirty minutes.

Dining at a quiet side table in the Club, Larry asked, "What do you think?"

"I am not expert, but they look very good. The M-4 could be an exact clone of we called the M-14 developed in the 1950s or 60s. The M-6 looks odd, but ought to get the job done. Will enough ammunition be ready in time?"

"That was a weak argument some people used. In truth we need so much ammo that the amount on hand is simply meaningless, a drop in the bucket."

"Any chance of getting a grenade launcher ready in time?"

"It is not ready yet, and I guess that means it is a nonstarter. We had people look at the problem but we couldn't figure how to solve the recoil problem. Instead, we are going with 'bullet trap' rifle grenades."

"What does that mean?"

"Bullet trap, they are fired with live bullets, not some sort of super blank cartridge. It is easier to use."

"The new pistol?"

"Vetoed. The brass hats simply love the .45. They hung onto it like a terrier with a bone in his teeth. We will produce lots of 9mm for the British pistols and machine pistols, but we are going to use the .45."

"Too late to argue I suppose."

"The clock is running down, no doubt about it."

"How will the President handle Pearl Harbor? He can't just let it happen"

"Thank God it is not up to me. I would just attack the Japs myself, but then I suspect FDR has something up his sleeve."

"I certainly hope so."

The roads at the Artillery school at Fort Sill, Oklahoma were as crowded as at every other base they visited. Here the congestion was made worse by the number of artillery guns being towed from place to place. Beside the paved road was a wide dirt track where self-propelled guns moved quickly and noisily at dangerous speed.

The Commandant put on a good show, a line of guns that increased in size from left to right. First came the 'French 75,' a holdover from the last war that could fire as fast as a pistol. The gun itself was a new-build to the proven design. The crew all of second lieutenants explained that it was used as a pack gun and antitank weapon using a new sabot round. Next was the 105, this one towed. The carriage featured a towing arm that split into three legs, allowing the gun to rotate in all directions quickly. This would be the gun, in its towed or self-propelled variant, attached to regiments.

Divisions would add the 155 for longer range and greater firepower. The 175 was in the tracked vehicle they saw at Leavenworth. The young officers explained the tracked carriage was in short supply, but more and more were supposedly coming available each month. Next came a surprise, a common six by six field truck with a rocket launcher in the cargo bed. At the sound of a whistle, a half-dozen student officers formed a fire brigade passing six-foot long rockets from a supply truck, loading two of them in each of the tubes. The evolution took less than ten minutes.

"Would you care to do the honors?" the Commandant asked Larry.

"Please feel free, Captain," he passed the control box to his aide who walked the device to the end of its cable. The Commandant made sure all his young officers were at a safe distance and nodded. Sixty rockets flew downrange toward some unseen target. Now Winston understood, the two rockets were placed head-to-toe in each tube. First one then the other flew out of each tube in turn. One of the young gunners pointed out the twelve-foot rockets filled the entire tube, but had twice the range. Behind the firing line was pair of tracked vehicles, one was the fire direction center in an armored personnel carrier. The other was also a modified APC, this one equipped with a chute that let it pass shells to the guns while still under armored cover.

"I thought the Sherman APCs didn't have roofs." Larry asked.

"We just fabricate them locally. We don't have proper armor steel to work with of course, but it keeps the rain off at least." The Commandant replied.

At Fort Hood in Texas Winston observed the Army's two antiaircraft guns. The ninety was mounted on a fairly traditional towed mount. When in place it had a striking resemblance to the old photos Winston remembered of the German 88 batteries. One difference was the advanced shells which featured a metal sabot. When fired the sabot fell away from the shell, allowing the smaller shell to use all the power of the oversized gun. "Darn clever," Winston observed, "like an antitank round."

"Came from Don and the British, those guys are going to take a pounding from the Germans and have done a lot of thinking about how to knock the bombers out of the sky."

The mobile gun was in fact a pair of 40mm barrels mounted in a Sherman tracked vehicle.

After the now-traditional firepower demonstration, Winston and his minders wandered among the guns. They came to an enclosed trailer with a number of antennas next to a loud generator.

"Radars?"

"Not for the tactical gun, that is all done by eye, but the Brits have shown us how to slave the 90s to a fire-direction set, like I said, they are leading the way on the anti-aircraft defense."

Several nondescript fuel trucks were parked nearby, each had a trailer carrying what looked like a tall garbage can. The crew gathered around the visitors in an unscripted moment. Apparently no visitor had ever inspected the smoke generators before.

"The air defenses control the smoke line." Larry explained, "these trucks will not be near the guns in the field, we let the wind position them."

"But the I read the reports," Winston objected, "the Germans are using blind bombing at night."

"Against cities, yes, but these will hide the units in the field. Our guns are radar-directed, but the bombers won't be."

Winston arched an eyebrow and nodded approvingly.

"The British again." Larry admitted. "Still we have some of our own tricks."

## **Chapter 11: More Airplanes**

A crane placed the tiny aircraft on its launcher atop an old flatcar. At a signal, some men gave the contraption a push and sent it rolling down the arid hill. The tiny engine reached operating speed and fired the drone into the air, clawing for its preset altitude. Several miles away it crossed a tarred road and entered the range proper. The first flight of circling fighters swept down from out of the sun. Both swept past their target, never firing a shot.

The next set did better. Coming in from the rear, the student pilots were able to loose long streams of tracers well behind the target before running out of ammunition.

A third pair sought vengeance against the obdurate device. Again approaching from the rear, they flew more slowly and allowed the stubby target to fill their sights. A rain of fire struck it repeatedly, forcing the target to releasing a white flare of surrender. The observers on the ground heard the instructor on the radio order his students to "Knock it off." The target crossed another road exiting the range. It pulled into a stall and released a parachute to return to the ground.

"What was that?" Winston asked, putting down his binoculars.

"I would call that a good start." Tom replied with a grin. They have an official designation of course, but the crews are calling them 'buzzards' from the sound."

"Pulse jet?"

"As close to a copy of your V-1 as we can make, as I said a start. We want to improve accuracy quite a bit more. We hope to get them rigged up with the blind-bombing system too."

"When will the real ones be ready?"

"These drones are already are coming out from Hughes in California. We are keeping the cameras off

of them as long as we can. The real thing is being prototyped, a couple dozen handmade ones for testing. Any thoughts?"

"Don't make them too good. The V-1 was a marvel of cheap design; I think it burned pure alcohol. I suspect the Germans just got lucky, but their version flew just fast enough to require front line fighters to be wasted on homeland defense. They flew low enough that the British had to man their light AA guns, and high enough that they also had to keep their heavy guns in service until the end of the war."

Tom replied, "Ours are sort of upside-down looking from the information you gave us, the wing on the top and the jet on the bottom, it is designed to hang under the wing of a bomber. That helps a lot with the range, but as I said we are not happy with accuracy yet. They will be able to carry a couple of different warheads."

"What about those fighter aircraft?" Winston indicated the aircraft still flying overhead.

"Well, that is more an advanced trainer more than a real fighter, we call it a Maverick. It is as close as we can get to the Mustang you described until Packard can supply enough Merlin engines. When the Merlins become available, and some other things mature we will have a cadre of pilots ready." The aviator was fumbling with his binocular case. "The Maverick is teaching us a lot. It is already fairly capable as a fighter, our first with electronic navigation, first with a new type of supercharger, first with oxygen for the pilot." Tom waved his charge to the jeep.

"I see we are still learning aerial gunnery too." The professor quipped.

"That too." Tom agreed.

The next stop was to the airfield, where several dozen Mavericks were lined up for inspection. They certainly looked like war machines to Winston.

"In truth, everyone thinks they are fighters. The Maverick is our front-line fighter now, it's in all the newsreels, the Mustang is proceeding more discreetly. So these men think they are flying a hot-shot fighter, when in fact they are just learning to fly the next generation." Tom stopped the vehicle. "Four fifty caliber machine guns, fully-enclosed cockpit, all-metal construction. The first ones used fabric on the control surfaces, but we had to change that." He climbed up on a wing. The cockpit was a confusion of gauges and instruments. "Not like when I learned to fly," Tom said. "See anything of interest, Winston?"

"Does this have the predictive sight we discussed?"

"We figured out what that meant, and yes, it reflects on the canopy here." Tom pointed at the gadget.

"How about an ejection seat?"

"No, no need for one at the low speeds this flies at. Still someone somewhere is thinking about ejection seats I wager."

Winston stroked the leather seat. "We will need to add a headrest up here, something to protect the neck in a hard landing. Fighters in my day had rear-view mirrors up here." He tapped the greenhouse. "When will we have the all-glass canopy?"

"The Mavericks coming off the line already have them, these are the older type."

The pair got out and walked around the airplane. A lone military policeman kept nonexistent curiosity seekers away.

"I don't know why, but modern planes in my day had a nose wheel. Something about that they are easier to handle on the ground like that."

Tom nodded silently.

"Down here, the Mustang is supposed to have a radiator array here," Winston indicated the belly of the aircraft under the wing.

"Is that important?" Tom asked.

"The radiators heated the air passing through a cowling, causing it to expand. It was sort of like an early jet assist, called the Meredith Effect."

"Was that on purpose?"

"No idea, but the radiator thing was important for another reason. It was the one weak spot on the armor, the pilots used to joke a kid with a rifle could shoot it down."

"Could they?"

I don't know, pilots like to make jokes."

"We will have to find Meredith and tell him how to invent his effect I suppose."

"Is the propeller adjustable?" Winston ran his hand over the airscrew.

"Right here, doctor." Tom pointed at the mechanism at the hub.

"I never claimed to be an aeronautical engineer you know."

"Don't worry, all we need are some clues, you are helping a lot." Tom assured him. He got back in the jeep's driver's seat.

Halfway across the airfield, Winston called a halt. He got out and stood on the bumper to get a good look. "You asked for my impressions, got your notebook?" he asked.

"Always."

"First off, the weather here is too nice. Our guys need to fly and fight, and maintain in nasty rainy cold conditions."

"Got it."

"Next, all these airplanes are in a row, a perfect target. When the shooting starts, they will need to be dispersed."

"This is a training field, Winston." Tom protested.

Visions of Pear Harbor came to Winston's mind. "So train to park the aircraft correctly. We will need revetments too. Also decoys."

"Target decoys like the drone?" Tom asked.

"No, dummy aircraft here on the ground, to draw attacking planes from the real ones on the flight line. Nothing elaborate, plywood, tin and cardboard mostly. We need to learn to make and use them now."

"Also I have always wondered why aircraft are silver. We need to use some sort of camouflaged paint scheme."

"Sky blue?"

He got back in the passenger seat. "No, runway gray. Did I tell you about sortie rates?"

"I don't think so." Tom's pencil was flying across the page.

"The Israelis first learned to do it in the 1960s. If we can speed up the rearming and refueling aircraft on the ground, we can get more flights each day from the same number of aircraft. The ground crews have to service the aircraft like the pit crew refuels a race car. The planes need to be designed for fast servicing."

"More airpower with the same number of aircraft?"

"Exactly."

"Israelites?"

"Israelis."

"Whatever. Now off to the other side of the field before we get landed on."

The jeep roared toward a second set of hangars in the distance. As they approached, Winston could see a pair of large cargo planes clustered around a number of vehicles. The local commander had arranged a demonstration of air mobility for his guests. The C-13 Hercules had a high wing and four engines, a narrow ramp acted as a rear hatch and on a signal the soldiers drove two jeeps each with a towed field gun into the belly of the aircraft. That done, the crew added power to the engines, taxied to the end of the runway and took off with an impressive roar. Winston thought it looked the C-130 he remembered, but smaller and simpler.

After an explanation of the features of the new aircraft, the colonel yielded to the mysterious VIP delegation who asked for a few minutes alone with the aircraft.

"Not half bad, eh?" Tom asked.

"Very nice, how does it compare to the DC-3?" Winston walked up the ramp into the cargo hold.

"Twice as many engines, faster, longer range and with more cargo. We used a lot of the features of the B-17 in this one. It can fly across to Britain with a light load."

"That can only get better as we improve the engines."

"We hope. This is it, our most advanced transport. The Maverick will be followed by the Mustang, but the Hercules is it; nothing else in the pipeline."

Winston sat in the cockpit, moving the controls gently, "I'm speechless, I can't think anything to add or change."

"Just as well, as I said we are pretty well stuck with it at this point."

The two men paused to watch a number of aircraft fly the pattern and land.

"What ever happened to Charles Lindberg, by the way?" Winston asked.

Tom smiled, "Well his attempt at an airline failed, so he became a bit embittered toward the US, he made some pacifist speeches, we made sure the German ambassador was there to hear him, and then he went on a tour of Europe in a Pan Am prototype.

"Why?"

"His plane has some very good, very discreet, cameras. We have him mapping everything he flies over."

"Can we trust him?"

"He knows your history made a monkey out of him. This time he is eager to do his bit. On the other hand, his wife insisted on coming along this time."

"She knows about his other, German, 'wife?"

"He told her."

### **Chapter 12 Poland**

The phone rang next to Winston's bed with at an alarming hour.

"Hitler's hit Poland," Larry was calling from the big office downstairs.

"Give me a few minutes." The long day ahead should begin with a shower, Winston presumed.

The lounge had been papered with maps, the Pacific on one side, the Atlantic and Europe on the other. A specially-made table in the center already held an unrolled map of Poland.

"What do we have from the British?" Winston asked.

"Not as much as you might think. They alerted us as soon as the Poles told them, but our British friends seem to have their hands full at the moment."

"Why? They haven't declared war, have they?"

"No, but the French will in a few hours I suppose. The Brits did not give a guarantee to Poland this time around. The French persisted. Still I suppose that the war finally starting has their full attention right now."

Winston went to the coffee pot nearest his desk. Percolated coffee would have to do. "Any word on where the Germans are attacking?"

"We have some stuff from the wire services. Bombing in Warsaw and other cities, several columns crossing the frontier, one from Danzig. We are not even plotting it on the map; it is all sort of academic after all, nothing we can do from here." Larry swept his hand across the pristine chart.

"The Poles don't stand a chance." Winston observed for the thousandth time.

"I would have liked to get some bazookas to them, it is tough to do nothing," Larry said morosely.

"Better than doing something dumb. "Anything from our embassy there?" Winston felt the need to change the subject a bit.

Larry passed him a thick manila folder. "Warsaw? A mixed bag. The aerial survey only got about half-done. The ambassador has managed to save a few trinkets. Nothing important really. Still we did get some Jews out." Drop in the bucket really."

"Yep." Winston opened the paperwork. "A couple of cryptographers, some musicians, some rabbis, less than a hundred all told."

"Also a copy of the Polish computer, the 'bombe.' I suppose that helps. Maybe we can get some more people out, issue them passports or whatever."

Melancholy closed in around them.

As a result of the invasion, the President went to Congress to authorize the nation's first peacetime draft. At Winston's urging, selected men from the Civilian Conservation Corps and other 'make-work' programs were taken into the Army and given the stripes to match their experience. The National Guard was mobilized state by state and their equipment brought up to modern standards.

Factories already making war material went to three shifts and other production lines still idle from the Depression were brought online. In months, shortages of engines, gun barrels and critical castings eased and then became a surplus. Almost unnoticed were the finishing touches on improvements to the Intercoastal Waterway on the East Coast, the Saint Lawrence Seaway in New England and the Alaskan Highway and Railroad in the West. Once considered huge projects, they were now dwarfed by hundreds of other programs all proceeding with breakneck speed. The highly secret Manhattan Project continued their secret race with the unknown, desperate to complete their bomb before the Germans. Winston ensured that Oak Ridge and Idaho were passed over in favor of Nevada this time in case his German counterpart remembered their significance.

"How about the linguists?" Winston asked.

"Nominally, the Marines are training the Navajo codetalkers, the Army has set up a school for Japanese, German and Italian. Remarkable how many second-generation people can't really speak the languages of their parents. When the time comes, the Marines will pass codetalkers to the Army, and the Army will provide translators to the Marine Corps." Larry said.

"How very 'Purple," Winston joked.

"We set it up that way; forcing the services to share resources to encourage cooperation."

"Are we passing up recent immigrants?"

"Not really passing them up, but I don't think we have a program to lasso them in. Let me send it up the chain for consideration."

"How are the British doing?"

"About the same as us. Building up. This time they did not guarantee Polish independence, so they are not yet at war, but the French are. We are now in the 'Phoney War' phase." Tom replied. "But they have announced they will fight to protect France or Scandinavia."

"What was their reasoning?"

"The couldn't help the Poles even if they wanted to. By not going to war now, they are under no obligation to send the BEF to France. They are keeping their army at home to maintain flexibility. If the Germans hit Norway, they will hit back, there are a lot of advantages to having Norway. When the Germans hit France, if they do, the BEF will be too late to arrive and so avoid another Dunkirk. They intend to drive west from Egypt and seize the Italian colonies once Rome goes into France."

"I wonder why the Italians gave Ethiopia a pass this time."

Hereford answered, "We don't really know, their army is pretty good this time, but perhaps the difficulty of transporting mechanized formations all that way made them think twice. More power, but with shorter legs, so to speak. They can make a real contribution in France when they go it."

Winston stroked his cheek, "So we trade metropolitan France for Norway and North Africa. I suppose the Brits will preempt Petain this time?"

"They have something cooked up, I'm sure. The idea will be to keep a Vichy French state from ever being formed."

This time Hitler and his advisor played it smart. German troops concealed in freighters and huddled on the decks of fast destroyers hit points all over Norway in a single night. Two days later, the armored formations crossed the frontier into France. The French panicked and began to collapse under the unceasing hammer blows of the German armor.

The British controlled the seas around Norway, and with their long-range fighter, the Glouster Reaper, soon dominated the skies as well. British aircraft dropped mines on Norwegian airfields soon after the Germans captured them. As a result, the Germans were unable to reinforce as quickly as their opponents.

Both sides used radio-guided bombs that sank the better part of the German surface fleet and several major British ships. Again, German attempts to bring in more force was thwarted.

In a sharp battle at Kvast, two British armored divisions smashed the Germans advancing north from Oslo and then their own began to drive south. While the victory was impressive on the maps that were hung in government ministries all over the world, the scale of the fighting was tiny compared to France. There the French command structure suffered a nervous breakdown, unable to react more quickly than the invaders. While the German spearheads destroyed many formations, others were bypassed relatively intact. Some of these were brought off the beach by the Royal Navy augmented by hundreds of civilian yachts and fishing boats.

From Egypt, British reconnaissance formations secretly crossed the border into Libya, advancing a considerable distance before they found Italian formations. Using powerful binoculars, they counted and sketched formations before returning the next night.

"Have the Italians crossed into France yet?" Winston asked.

"Not a sign of it, in fact they are welcoming French refugees."

"Message from the British." Tom called to bring other conversations in the office to a halt.

"They confirm Paris has fallen of course, but also report that one of their armored car patrols got mired in quicksand in Italian Tunisia."

"The British invaded Italian north Africa?" Winston was surprised.

Larry answered, "Just some aggressive patrolling. Nothing that would cause real trouble."

Tom returned to the yellow dispatch in his hand. "The next morning, I guess that means two days ago now, the Italians found and captured them."

"Then what?" Larry asked.

"The Italians called up a couple of tanks to pull them out, fed them a nice lunch and escorted them back to their own lines. The local Italian colonel explained his orders were to allow no provocation of the British in his sector."

"Think El Duce is going to sit this one out?" Winston asked.

"It would make more sense if everyone in the whole world sat this one out." Hereford replied gruffly.

"Will the British let them go on selling oil to the Germans?"

"Time will tell, I guess."

Cooperation with the British increased as the national mood became more militant. The Royal Navy beat back the early U-boats with ease, but not without casualties. Each American ship lost was played up in the American papers thanks to an elaborate public relations offensive by the British and the Hearst Organization. Roosevelt called the U-boats the "rattlesnakes of the sea" in one of his fireside chats. The western half of the Atlantic was declared to be a 'neutral zone,' protected by American air and sea power.

The American Army staged a mock amphibious landing on Iceland and Greenland to relieve the British garrisons there. Both exercises were disasters with critical supplies misplaced and interservice cooperation weak. Still, they staffs learned from the experience. When the British offered air bases in the Caribbean in exchange for fifty old but recently renovated American destroyers, they repeated the evolution, this time invading the British West Indies with better results. This time the Sherman tanks swam ashore next to the landing craft and personnel carriers. Mock barrages fell on supposed defenders and air strikes protected the landings. Not perfect, but improved. By the end of 1940, the eastern Atlantic was an American lake.

Long-range Liberators began to patrol the air, reporting icebergs, storms and U-boats alike as hazards to navigation. When the Germans objected with gunfire, the Americans learned to reply with depth charges and hedgehogs. A secret war was beginning at sea away from prying eyes.

At the Boston Navy Yard the United States Navy collected its obsolete S Class submarines. Workers there stripped out their torpedo tubes and removed the ancient guns. Then they renewed the lead-acid batteries that provide underwater power and the diesels used to recharge them. Finally each boat had a new hydrophone array placed along their hull.

The seventeen boats left the port as each was completed to take up positions near major shipping lines. There they dropped anchor, submerged and began listening.

Admiral Hereford plotted each position on the chart on the wall near his desk. "Passive sonar pickets, Winston."

"I thought I told you about our shore-based SONUS system. Sonar buoys linked by cable to a shore station."

"Good idea, but our electronics are not up to it. This way all the delicate parts are in easy reach when

something burns out. These guys will serve as training for our sonar crews, and a let us know if any U-boats come sniffing around."

"So they hear a U-boat, then what?"

"They use a directional antenna and burst transmit to shore, then we send out a plane. As I understand it, there is no way the pickets can be detected."

"Pretty darn clever."

"We're not cavemen you know."

The British Oversight Committee reported an increasing number of the new electroboats, an advanced form of submarine. Gradually the new threat reached the American zone and began to teach the antisubmarine forces new tricks.

In the Pacific, defenses were improved in both Hawaii and The Philippines with the goal of full readiness by 1 December, 1941. First the Marines and then the Army began to practice amphibious assaults in California, then on remote Alaskan islands that offered more privacy. With time, even these complex operations became routine.

Douglas Macarthur was reluctant to leave his sinecure in The Philippines, but after an unfriendly phone call from an investigative journalist he was happy to return to West Point and his old position as Superintendent. To replace him, Marshall selected the Army's best staff officer, Eisenhower who had grown to love the islands during his previous service there. He pinned on three stars as Commander-in-Chief of US Forces Far East.

In May, 1940, acting on secret orders passed to him by courier from the Secretary of the Navy, Admiral King launched a series of simultaneous unannounced mock air attacks on Pearl Harbor, Manila and the Panama Canal. The planes were able to score simulated hits on critical airfields, harbors and other facilities with ease. A scathing review of the exercise brought increased readiness to the defenses of American installations all over the world.

### Chapter 13, A Lull

The Germans held Europe from the French Atlantic coast to the eastern edge of dismembered Poland. The British were secure in Norway and had occupied Greenland and Iceland as air bases. At no point did British and German troops face each other. It seemed that the whole world was holding its breath.

"Sort of an elephant versus a whale sort of problem." Winston observed.

"Plenty of war in the Atlantic." Hereford replied. "The convoys form up in the East Coast ports, all they way up to Nova Scotia. We take them east halfway, then the British pick them up for the hard part."

"How are we doing?"

"Well, overall the Germans cannot sink them as fast as we can build them, but that seems a crude way of saying it. Our main defense is the convoys themselves. If the electroboats can't find them, we're OK. Sometimes a boat stumbles into a convoy, but not often. Once the ships get in range of the Luftwaffe's long-range patrols the submarines can mass, the merchant ships get hit pretty hard sometimes."

"How about the Royal Air Force?"

"The long-range fighters and the escort carriers try to knock down the Condors, the escorts try to kill the boats, the sweepers try to clear mines on the way into the ports. It is all in play, it can still go either way."

Tom, the Air Corps man, wandered over to the conversation. "If the British could take out the airfields in France, that would change everything."

"They can do it too," Larry advised, "but only once. They can land a couple of mechanized divisions wherever they like, but as long as the German Army is at full strength the landing force would be wiped out in short order. I'll hand it to Churchill, he has been able to restrain the Provisional French in Casablanca. If he let them, they would land in a heartbeat. Wouldn't stand a chance in Hell."

"So it all depends on Russia?" Winston's question was rhetorical.

"British intelligence says that the Germans are already preparing to go into the Soviet Union." Tom reached for a telegram. "Four thousand tanks in twenty armored divisions."

"The tanks are mostly the Panzer IV, that is say the ones we saw in France have been moved to the infantry units." Larry interrupted.

Tom continued, "over a hundred infantry divisions, all of them in various stages of mechanization. Perhaps a thousand four-engine bombers, they are in France and the Low Countries now, hitting the British ports, but fields in Poland are being made ready."

Larry picked up another pile of papers, "Our ambassador in Berlin is reporting a shortage of public transportation, even though truck factories have been going full blast for more than a year. Wool prices in Europe are skyrocketing as the Nazis buy up everything they can."

"So this German guy, this Professor Hermann, is doing all he can to help Hitler win this time?" Winston still could not understand that. What was he thinking?

"On the other hand, the Italians seem to have found a way to cop a walk," Hereford said, "that helps."

"Anything about a Japanese or Russian guy?" Tom asked. For some reason they had taken up the casual word.

This was Winston's special area of interest. "Some things, hard to be sure." The Japanese seem to be stockpiling critical materials, we just don't know if their effort is in advance of what they did in my timeline. In Moscow, nobody has seen Nikita Khrushchev for years. The Russians have purged their generals, but there are rumors they are not being killed. Again, we just don't know what that means exactly."

"We have done some clever stuff to help the Russians." Hereford offered, "We have a fellow in the War Department who is spying for Uncle Joe, we are feeding him all sorts of technical tidbits for him to pass along."

"Good plan," Winston said, "if we told them, they would never believe us."

The Red Army is a blunt instrument Zhukov thought. He was inspecting his troops facing the Japanese along the border between the Mongolias. In front of him a platoon of soldiers formed a pair of ragged lines, each man had pulled back his snow smock to show he was armed with the new SPK machine pistol. The weapon was well-suited to the army, so poorly made that the parts rattled, still the wide gaps between the parts ensured it would almost never jam.

"Where is your rocket launcher, Comrade Lieutenant?"

The young man barked out a command, two men ran to the front and snapped the two halves of the tube together. They fell into the snow and one raised a streamlined missile into the air in some sort of stylized drill from the practice range.

"That tree, the one that is leaning, shoot it!" The general shouted. Zhukov knew what he was looking for and it was not marksmanship. He stood beside the team and faced the platoon apparently in order to protect himself from the fiery launch. The subaltern knelt beside his crew and coached them through the firing procedure.

"Halt!"

The lieutenant instinctively knew he had been found somehow wanting and came to attention in front of

his Commanding General.

"Comrade lieutenant, I have some questions for you. One, what is the distance to that tree?"

"Two hundred meters, Comrade General."

"What is the range of this launcher?"

"One hundred meters, Comrade General."

"So why did you not tell me the target is out of range? Does the cat have your tongue? I rely on you and your scouts to provide me information, comrade. Finally turn around young man and tell me what you see."

The officer made an attempt at a parade ground maneuver in the snow and failed. "I see the Four Ninetieth Scout Platoon Comrade General."

Zhukov walked around to face the young man again. "I see the Four Ninetieth Scout Platoon standing in the back blast area of a rocket launcher. You did not move them. Worse, they did not think to move themselves."

"Listen to me, all of you. The Soviet State demands much of its soldiers, technical ability, courage and initiative. What sort of officer is too scared to report a target is out of range? What sort of soldier stands behind a rocket launcher? What sort of rocket team needs an officer to tell them how to use their weapon? This," he waved toward the Japanese four kilometers away, "is no game."

On his way to his staff car the general instructed the regimental commander that the unit was not to be punished. "It is critical that this lesson be spread as widely as possible. Let them tell the others." As the car pulled away the general was already reading a report on the next unit he would visit.

The new American special operations boat, Halibut raised a periscope for a close look at the volcanic peak. The captain adjusted the focus carefully to determine the range before the cone disappeared in the dusk. With both the bearing and the range to a known point, the navigator could determine his location to a fine point of accuracy. This he plotted on his chart. The boat then raised its antenna mast. Over half an hour passed as the electronics officer listened for stray Japanese broadcasts. He also plotted known commercial transmitters over the horizon, further pinpointing their location. That done, the skipper ordered the snorkel to the surface and fresh cold air flowed into the boat. With the officer of the deck manning the periscope, the skipper returned to his map table.

"Here, sir." The navigator was just a year out of university.

The captain grunted.

The intelligence officer pointed to a number of red marks on the Japanese shore, "These are known transmitters," he indicated new points, marked in pencil, "here are three more new ones operating on military frequencies."

"What do you think?"

"Probably an airfield, sir. The bearings we took yesterday crosses the ones today just here." He placed another mark a few miles inland. "Also we saw air traffic climbing out of that area yesterday. It all fits. An airfield."

"Okay, good. Once we finish this snort, we'll take her down to the bottom to update our chart, but we still have to find their shipping channel. We'll take her inshore tonight." The skipper felt a real need to sleep, but could not bring himself to lie down while his boat was so close to the surface. Still he had to try. "Call me at 0200." He walked to his cabin.

"Last one!" the foreman called. An open-sided truck pulled away from the boxcar and up the wide

ramp of the Liberty ship and stopped in front of a gang of stevedores. With practiced strength the men forced the heavy bales, crates and barrels into place on the sloping deck. The last three tons of this load joined the rest in a pile reaching to the ceiling like the jumble under a giant Christmas tree. A longshoreman, a different union, hooked a number of chains to a wench which pulled them taught as a marginal precaution against the load shifting in heavy seas. With that the Liberty California was ready for his first trip to Liverpool. The men moved slowly to the loading door and home. None stopped to watch the huge portal raise and close into the side of the gray ship.

"That's it, skipper." The first officer called from the wing of the bridge.

"High tide on thirty minutes, let's clear the dock. Cast off your lines."

The ship was docked with her bow seaward so leaving the pier was so straightforward that the skipper walked through the ship checking for unsecured hatches or any yet-undiscovered mistake from the shipyard.

"OK?" the first officer asked when he returned to his bridge.

"Lonely down there," came the reply, "do we have everybody?"

"Checked them in myself. Harbormaster has us going to anchor off Tom Island."

The ship handled well, even when laden. She pulled in next to the Liberty Kansas and settled in for the night.

"I have to meet with the Commodore tomorrow afternoon, they'll send a boat."

The first officer was skeptical. "Waste of time, we could be well to sea by then."

"New way of doing business, the British need this stuff and would rather wait a few days and make sure they get it."

"Being so close to so many other boats. Not how we are used to sailing. Old dogs, new tricks. Never a good combination." He had a point, except for three apprentices, the entire crew were over aged.

The captain agreed, "We have to keep a close lookout, we can take care of ourselves, but it is those other fools I worry about." He waved an arm toward to the gathering of miscellaneous shipping.

"I'd rather take my chances with the u-boats."

#### Chapter 14 Russia

The German spearheads came on relentlessly. Weeks of combat had earned the tankers hundreds of kilometers and dozens of victories. But beyond each kilometer they found thousands more; and after each clash was another battle. The Russian steppes stretched endlessly ahead.

A Russian colonel crouched in a drainage ditch alongside a major railroad leading east from Leningrad. A crew from the All-Union Railroad Ministry had removed the rails three days before. The plain looked featureless on a map or from the air, but in truth small depressions and elevations made for a complex local topography a defender could exploit. He hoped. But at present, the landscape simply prevented him from seeing a damn thing.

He heard a sharp crack off to his left, his southern flank. He turned to his signals officer "Anything from the 331<sup>s</sup>?"

The captain shook his head.

"Get them on the line then."

"Fascist scout cars are being engaged in south avenue of approach. The antitank guns have driven

them off."

"Order the guns to move to alternate positions now. No excuses." He turned to his map and checked the thick red lines of friendly forces for the thousandth time. He walked to the top of the embankment. Four plumes of smoke marked the first engagement.

"Artillery landing on the position, they got away, comrade colonel."

The division commander nodded. It was critical to preserve the slow-moving and hard-hitting guns.

The lead element of the panzer column had performed its duty; it found the Red defenses. The fact that its four armored cars were destroyed was secondary in the calculation. Now it was time to find the enemy strength. The regimental commander leaned over his map. He knew were his reconnaissance element had been, he drew a finger to the east. "Artillery here, now," he ordered. In seven minutes the mobile guns began a ragged reply. "Move up the third company, dismounted attack," it was a fool's game to send APCs in to attack antitank guns. "Swing the tank company to the south. Do not move in until I give the word." The commander opened the elongated hatch covering the rear of his armored command post. He waited until he heard the snap of automatic weapons in the middle distance. "Tell the tanks to go in."

The Russian infantry laid low in the now-empty gun positions. Most had already been in a dozen routs. This one would be different. Soon a fast German machine gun opened up, just as the incoming artillery began to zero in on their position. As expected the invaders came in on foot. They did not find the expected 100cm guns, but instead a mass of entrenched infantry.

The Russian guns had almost set up in their alternate pits when the panzers roared in from the south. Eleven Pz IVs marked the formation as the remnants of a tank company. The five guns fired as one, their blast igniting the tall grass to their front. The battery commander was killed almost at once trying to get the sixth gun into action, not that his death mattered. No central control would have been possible as the guns crews worked with demonic energy to save their guns and themselves. The last tank made it to less than a hundred meters from their position.

The division commander plotted the sharp regimental action and asked permission to sweep south of the rail line, to try to flank the defenders. Permission was granted and the entire corps shifted slightly to the south moving with considerable speed directly into an ambush.

"Now what?" Winston asked.

"The Soviets have made a stand. Radio Moscow is announcing a victory." Tom replied. He had been up all night and had collapsed in a leather chair. "Read it yourself."

"Where is this?"

"Center of the map, I marked it with a star."

Winston put down his coffee, "This is not anyplace I ever heard of. Well west of Moscow and Leningrad. What happened?"

Tom got back on his feet. "Seems they defended some rough patch to encourage the Germans to use a more open area and let them run into a series of fortified lines."

"Tanks?"

"Soviet ones? Not that they are crowing about anyway."

Larry Orbino came in from the kitchen, "People are telling me that a static defense doesn't have a chance against a blitz, maybe their wrong."

Winston shook his head, "This is just a bump in the road to Moscow, but look," he indicated the map

again, "this is the first real fight the Russians have put up in a month and a half. This must mean their frontier units still have some scrap left in them. We only have German reports they were routed. It seems to me they may have retreated in some sort of good order."

Stalin strode into the conference room above his little office. "Well?"

"Thirtieth Army has smashed at least one Fascist corps, Comrade Stalin. We estimate they will pause for at least a week to resume the attack."

"Plan on three days, if I know these bastards," Zhukov added from behind the briefing officer.

"Three days. What of Thirtieth Army?"

"Wrecked, Comrade Stalin."

"Withdrawal them to Leningrad to refit as a guards army. We will need some units with a little tenacity there. And your troops, Comrade Marshal?"

"Well behind, just north of the salient, Comrade Stalin, the vehicles are sheltered from observation in a network of deep stream banks. We are unobserved."

"Nothing can happen while these fucks have the air. I want the partisans in the Pripet Region to activate and destroy enemy technical bases and installations."

"They will be destroyed Comrade Stalin," a NKVD colonel warned.

"We must gain some sort of air parity, we will exchange the partisans for that. We must take the," he paused to find the word, "initiative in the northern sector. Now is the time to begin."

Orders went out from Moscow to secret places deep in the forests and swamps by radio to begin operations at once.

The corps commander was humbled by stumbling into a Soviet trap, strangely the High Command did not sack him, but instead gave him a fresh division to replace one especially badly hurt and brought the other units almost back up to full strength. Four days of rest allowed the mechanics to repair some of the wear and tear on the vehicles. All in all, the corps was stronger now than before and ready for revenge.

It weighted the main effort, the center of gravity to the southern end of the obdurate defenses and hit them with everything it had. The line cracked and the gray tracked vehicles turned north to roll up the hapless defenders.

Traffic regulation troops had marked the routes across the countryside with white tape. Periodically a lone soldier with a subtle flashlight waved the T-34s out of their hiding places and south into the empty flank of the German attackers. Suddenly when the troop commander looked up from his hatch he saw he was alone. For two hours his ten tanks had been part of a mighty stream, now they were in the lead of the entire attack and surrounded only by darkness. "Here we go lads," he called over his internal radio net. One had to say something in these situations after all. A nearby tank commander clasped one hand to his earpiece and waved with the other. His T-34 ran over a shallow embankment and fell out of sight.

"Machine gun fire on the left," a voice called. The caller did not use his identification, but the commander knew it was Rostov in tank six. He swung his tank toward the action, sweeping by two more of his vehicles on his way to see what was going on.

The three tanks saw a stream of German tracer fire reaching out to their left. "Gunner, shotgun, 200 meters, aim and fire." Three hundred ball bearings shattered the machinegun nest and scrambled the four defenders who never even saw their attacker. "Accelerate, don't let them draw a bead on us," the commander took a few moments to consult his map by the light of the early dawn and composed his

contact report. He was brought back to reality by a second loud crack from his main gun. He saw a truck explode in flames. They had reached the road already. "Right turn, keep moving."

The road was crammed with a convoy of trucks heading to the front. First a one then another and soon a dozen exploded in front of the powerful cannon. One tank commander seemed to tire of shooting at the helpless vehicles and drove onto the road itself and began pushing and crushing the Mercedes into scrap metal. That ended when three tons of ammunition exploded in his face.

As the element of surprise was lost, the defense stiffened. The tankers dropped deeper into their armor and closed the heavy hatches. Rifle and machine gun fire rattled off the heavy vehicles meaninglessly. A volley of panzerfaust rockets came from one location, only one finding a target. A special prize was some sort of command post, a jumble of tents and personnel carriers. A gray wraith fired a rocket and another vengeful Russian tank was destroyed.

It was heady, silly, like being drunk or in love for the first time. The Russians charged on, scattering the hated invaders like chickens running from a farmer's axe. Crewmen laughed as they fired machine guns into their fleeing enemies. They passed a burning village and followed the supply route into a shallow valley.

There they met a battalion of Panzer Vs who destroyed them in less than a minute.

"So in conclusion, mein Fuhrer, they managed to flank the northern corps of the Leningrad thrust, Army Group North. Casualty estimates are coming in, but they seem to have focused on our trains."

"Trains?" Hermann asked.

"Supply units," the colonel clarified, "Once our combat elements were in place, they were quickly defeated."

"You are not seeing the big picture here," Hitler began, "you are seeing too many details. The Reds managed to attack our supply lines along," he looked at the map, "three hundred kilometers. Airbases raided, formations ambushed, telephone lines cut. We cannot get to the Urals like this, we must have secure lines. As a combat action, this battle may be the bright burst from a light bulb just as it burns out. Their units seem to be shattered, but if we allow these bandits a free reign in our rear we will be in trouble."

Himmler offered his help, "This could not happen with the cooperation of the Slav population in these areas. The security elements have been on a short chain due to Professor Hermann's sensibilities. If we are now seeing the end of combat activities, perhaps it is time to enforce order in our new territories."

Hermann shivered, the man was reptilian.

"Very well, move your special operations units into place and commence operations at once. We must clear these areas now or later. Now is better as it serves both our military and other purposes." Hitler turned his attention to the fighting in the south.

Each of the ten partisans carried two landmines in cheap cloth knapsacks. After a night march through across the barren steppe, they holed up for the day near the top of a steep overgrown draw. Posting a solitary guard, the sergeant returned to his men and found them already asleep. He joined them in the soft, rich earth.

He was awakened by the faint sounds of gunfire in the distance. The sound was sharp and fast; they were not Soviet weapons. He grabbed his stubby machine pistol and returned to his lookout. "What?"

The soldier nodded silently, indicating the horizon. A village was on fire, the smoke blowing in their direction. It was too far off to see people. But it was easy to see the half-dozen German vehicles lined up on two sides of the hamlet. As partisans watched, the vehicles advanced on the buildings, the distant roar

of their engines punctuated by the ripping-cloth sound of the quick-firing German machine guns.

It was time for a lesson for the scared young lookout. "You hear that? That is the MG 42 machinegun, it sounds different from our stuff." They stood together for a few minutes.

"Where is the sound of the Soviet soldiers Comrade Sergeant?"

"There do not seem to be any Soviet soldiers down there," the sergeant said half to himself.

"What is that smell?"

"Go get your relief, wake up Goodonov. Go get some sleep." He would explain what burned flesh smelled like before they moved down in that direction tonight.

#### **Chapter 15 Pearl Harbor**

Nobody west of Washington knew of the planned attack on Pearl Harbor. The tension among the team grew as the calendar drew nearer to the 'Day of Infamy'. A more than a month before the planned attack, they moved as a group to Campobello, the Roosevelt estate in New Brunswick. In self-imposed isolation, they stewed and fretted over their decision.

"Let's review the overall situation" the newly-promoted Brigadier General Orbino spoke over the breakfast table.

"Again?" several of the group moaned as one.

"We are nearly at a war footing already," Hereford was speaking for 'his' navy. "The carriers are transporting the last air wings into Pearl and Manila now. The Marines are still on the mainland, we have time for them to move later. On Saturday the sixth we will have a major life-fire exercise that will get cancelled for obscure reasons and then we'll nail the Japanese first wave."

"The Air Corps is fully modernized. Our first-generation bomber, the B-17 is in full service and the B-29 has entered full production. In fact, the Liberator line is converting to B-29s now, so fielding should accelerate." Tom limited his reply to his service. "The only thing still pending is any sort of operational jet, but the Mustang and Lightening will hold us until them."

Larry answered his own question for the army, "The Shermans are out to all the units in required strength, but we are behind on the APCs and other tracked support vehicles. The Pershings are entering production, but production of those APCs and other variants won't even begin until the end of next year. Bazookas and small arms we all know about. Now what else?"

"The Codetalkers?" Winston asked.

"Now going out to the units, no longer a secret." Larry replied.

"Torpedoes, again?" the time traveler continued.

"Live-fire tested, again, as each new model has come out." Robert replied.

"Ship-building in general?" Winston rubbed his eyes, the past weeks have been very stressful. They knew that Pearl Harbor would be attacked in five week's time, but could not tell the soldiers and sailors in Hawaii. The moral consequences were overwhelming.

"No problem at all with the Liberty ships, we are now up to the third major upgrade, not that you can tell by looking at them. The last carrier just got its canted flight deck a couple of months ago, Our cruiser hulls still building have been changed to carriers, as has the USS Kentucky battleship. We have kept that under wraps. The frigates are all with the fleet. We will start moving ships from the Atlantic through the canal in the next few weeks." Robert was confident. "How are the British doing?" Winston asked.

"Well," Robert rubbed his amble belly, "very well. The Provisional French have retained all the colonies, the Germans could not even set up a Vichy state but have found lots of local supporters. The Brits have Norway and have the U-boats under control so far. Still the Luftwaffe is hitting their ports pretty hard."

"Are the hitting back?" Winston already knew the answer.

"Some," Tom replied, "but this time around Coastal Command has priority and Bomber Command is too small to do much until we get there."

"Anything unexpected, any loose ends?" Winston wanted to sum up. He found long walks in the nearby pines the best solution to thinking too much.

"Couple, we have not been able to break the Japanese codes as we should have been able to do. The Italians did not attack France; we suspect Hitler rubbed Mussolini the wrong way. Relations between the Italians and Berlin are pretty darn cool. The Germans seem to have stopped the Italians from going into Greece. Russia is moving along as you predicted, but Khrushchev is nowhere to be seen. The units that aren't falling back are being encircled. Huge war out there."

A waiter brought a telephone with a very long cord to Larry. "The President for you, sir, it is urgent."

Winston wondered if a call from the President could be anything but urgent.

"General Orbino, sir." He then took the receiver and held it at arm's length.

"I just got the news, did you hear?" Roosevelt's voice carried to all at the table. "The Japanese have just hit us at Pearl Harbor."

"More than a month early?" Larry asked into the mouthpiece.

"Get on down here, we have to see what the hell's going wrong with this."

The Imperial Japanese Navy had discreetly accelerated the construction of its newest carriers to make the strike on Pearl Harbor. The pilots were mostly combat veterans from China. It was this fleet of six carriers that was detected by a picket line of American submarines shortly after midnight. A burst transmission alerted Pearl Harbor that something was amiss. Across the archipelago, radar and air defense units went on alert.

The first aircraft took off well before dawn, gaining altitude as they began their long flight to their target. They navigated by compass, but some discovered that the local radio stations provided a sort of unintentional navigation beacon. Dance music competed with the drone of the engines. Approaching from the north, the raiding planes were picked up by first one then two more Army radar stations on the coast who passed their warnings to the Pearl Harbor Command Post by both telephone and radio. There, the Army and Navy duty officers read the warnings at their adjoining desks. Both concluded it was a repeat of the mock raid launched by the American carrier forces three months before. Standing orders required the commanders to be notified.

Admiral Husband Kimmel arrived at the bunker in less than ten minutes. He ordered a general alert, of all the units not already standing to. Sirens across the island's airfields brought Army and Navy pilots running to the flight lines. Already armed, the fighters struggled into the early dawn in pairs to orbit at preplanned points. Patrol planes with their larger crews were next off the tarmac. Finally the bombers took off and flew south to circle over sea until someone told them to fly home, hopefully before lunch. At the anchorage, boilers were fired, beginning the slow process that would give the capital ships motive power in an hour or so. Ammunition was lifted by hoists to the antiaircraft mounts and radars began probing the skies for targets.

Kimmel walked to the top of his command post to watch his fleet come to life. He could feel the

power of the battleships, cruisers and entire flotillas of destroyers and frigates. An impressive sight. He turned to his aide, "Have them make smoke." In less than fifteen minutes the entire roadhead was obscured in a haze.

He arrived back at his desk in time to see his Army counterpart give the order to confirm his antiaircraft batteries were at alert and order his smoke generators in the hills to "fire up."

"That ought to put a knot in their tails," Walter Short said.

The first flight of Mavericks met the Japanese formation as it crossed the shoreline. Swooping in out of the sun, the airmen executed a perfect ambush.

Unfortunately, expecting to encounter gray American Navy planes, they did not fire as the gray Japanese models entered their sights. Still the flight commander made the call that echoed through the command post.

"Air raid, Pearl Harbor, this is no drill."

Calls were passed from all over the net as other Air Corps formations encountered the Japanese formation.

"All units and stations engage with live fire, this is no drill." Short signaled his aide for a cup of coffee.

"If we're wrong?" Kimmel asked.

"See you on Capitol Hill, the investigation will last for years." Came the reply. Short had an evil, bloodthirsty look on his face.

"Damned is we do, damned if we don't." Kimmel told his duty officer to give the same order to the fleet.

Flying a heavily-laden plane low over unfamiliar terrain is always hazardous. Doing it in formation while people are shooting at you all the more so. The American attacks were uncoordinated and conducted by inexperienced pilots, still they took a toll. Flying over a ridgeline, a dozen planes braved a storm of 40mm fire to attack a huge oil tank that drained to the harbor below. Four planes were lost to ground fire, and another four to simple crashes into the rugged, obscured terrain. Still the tank was set alight, a smoky torch survivors would recall decades later.

The formation drove ahead, the dive bombers and torpedo planes ignored the fighters vying around them. The raider's compasses indicated the target was ahead of them, but an artificial haze obscured the harbor. The aircraft came lower, and the danger of collision and accident increased.

The radar-directed five-inch guns of the ships began to fire in a desperate attempt at self-defense. As the invaders neared, automatic 40mm batteries delivered inhuman amounts of fire into the stream of airplanes. Still, the determined attackers flew on, enraged by their losses and dedicated to revenge. The dive bombers were forced to release their loads so low that most missed. Still no bomb could truly miss everything in that mass of ships, men and naval stores. Fires raged all over the base and nearby airfield.

The torpedo bombers had worse luck. Stout nets guarded the ships from the Long Lances. The only two to strike home were still attached to their planes who flew into the sides of a pair of battleships on purpose or otherwise.

The attack ended in less than fifteen minutes. All that remained was the slaughter of the Japanese planes as they raced north for safety. That and the rescue and repair work.

The submarines, powered by diesel engines were able to leave the port first, they submerged and raised their snorkels to charge north. The destroyers were next, followed by the larger ships, each protected by a frigate. They never had a chance to catch the fleeing Japanese.

Short sent a message to Washington describing the attack even as it was underway. Kimmel made a more important transmission. A young man in a Marine uniform read the text in English and translated it in

his head to his indecipherable language, "Island of Pineapples to City of Rope, Yellow Falcon attack here, many warriors dead. War warning now. Expect Yellow Falcon and Fish attack on City of Rope and Islands by your dawn. Acknowledge and read this back to me."

There was a long pause punctuated by static. A familiar voice replied in Navajo "Horseshit, are you kidding me?" The codetalker in Hawaii made a note on the message form that that Manila reported the message understood.

It was already afternoon in Washington. The President's naval aid admitted, "Very sketchy information so far sir. One battleship was unable to get underway. One more damaged. The carriers are at sea, but mostly without planes as they just made deliveries to Wake and Manila. We lost some aircraft, mostly in the air, but the number is unclear just now."

"Send out a message in my name to all services. We are in the war. Begin unrestricted operations against Japanese and German units worldwide. Get Churchill on the phone."

# **Chapter 16 Philippines (I)**

The Japanese attacks came as a complete operational surprise. Tactically the Hawaii message ensured everyone had at least three hours of warning. Critical last–minute shipments of ammunition, supplies and even entire units en route to threatened points were out of place when the blow came early.

The American convoy to Manila, fourteen ships of various types, was more than a thousand miles east of The Philippines when the news came. Instead of sneaking in quietly, before the shooting started, their vital supplies might now have to be delivered by force. The US cruiser Pensacola, the commodore's flagship, dispatched the frigate Oliver Hazard Perry far ahead to listen for approaching threats on its sensitive electronic array.

When the Japanese flying boat appeared over the radar horizon, the frigate commander ordered full stop. The lookouts swung powerful stabilized binoculars to bear on the patrol craft.

On the airplane, observers searched the turquoise sea for the telltale wake of a moving ship. They saw nothing.

"I feel naked sitting still like this," the captain muttered to himself. "Have they seen us?"

The Electronic Warfare Officer replied, "No change of course, no significant transmissions. Range fifteen miles, closest point of approach is eight."

"Get Kevin up here."

Ensign Matsumoto climbed up to the bridge, blinking at the bright sunlight.

"What are they talking about, Kevin?" The Captain always called the translator by his first name when he was present. Perhaps because he looked so young and out of place aboard ship.

"The are calling home every thirty minutes or so. We got their call sign. They are reporting barometric pressure, but no sign they have seen us."

"OK, we know they cannot detect our radars, send a long, not a burst, transmission back to the convoy; use the wartime crystal set. Let's see if they can hear our new HF stuff, wait twenty minutes and try the SW, then we will hit them with the TBS." Both officers saluted and moved below decks.

The Japanese plane flew on myopically. After an hour it reached the end of its patrol sector, turned north and disappeared first from sight and then from the radar screens.

Aboard the Pensacola, the Commodore read the frigate's report with pleasure. He turned to his flag

plot. "OK, close up with the Perry now, top speed all night, then put the Perry twenty miles in front of us at dawn. Keep the other frigate near the troopships."

"Aye sir," his exec was already preparing the orders.

"Do not, I repeat, do not, break modified radio silence. Nobody sends but us. Keep the Perry's radars hot for now. I'll be in my ready room for the next twenty minutes. I need to write a signal to Pearl."

"Aye sir," came the preoccupied reply. It was more fun being a skipper the admiral reflected. Three days of sneaking around to get to Manila, hope the war isn't over by the time we get there.

The Commander in Chief Far East collected his major unit commanders at the Marsman Building in Manila two days into the war. Ike shook hands with the commander of the Philippine Corps and two of his three Filipino divisions and both American divisions, the Navy and Air Corps Wing commanders and Tom Hart, his equal at three-star rank, but subordinate as Naval Forces commander. Hart introduced the commanders of his cruisers *Houston, Marblehead* and *Boston*. The Metro Manila commander in the uniform of the Filipino National Constabulary rounded out the group.

Ike flashed a weary smile and sat, putting the officers at ease. He lit is second cigarette of the morning. "Thanks for coming, I know you are all busy. Chief, what's the latest?"

The Chief of Staff, a rear admiral, looked rumpled by all the recent events he approached a large map on the wall with a yardstick as a pointer.

"Once the Japs hit Pearl Harbor we moved everything we could out of the way. We had a five-hour warning, so while they caused a lot of damage to buildings, our units are all in good shape. The air battle certainly went against them. Our counter strikes on D and plus one closed down Taiwan as an airbase for some little while. Our ground units are untouched, but some suffered enough losses to cause confusion. That is all sorted out now. Some Scout units have been shooting at ghosts, lots of rumors in the cities. Naval forces are ready. The *Langely* took a couple of hits in the harbor. We will scuttle her once we get her machine tools ashore. Overall, we are in good shape." He sat down; Ike took his place.

"We are now under time pressure gentlemen, we can expect a Japanese landing on Northern Luzon in a day or two. I would not discount the possibility of subsidiary landings on Cebu. By the end of tomorrow I will need artillery batteries covering those beaches, they tell me the ammo is already up there. The 31<sup>st</sup> Filipino Division is our only unit up there and I doubt we will get another division to them in time. More important than stopping the landing is preserving our units. Retreat into the interior if need be, but do not lose those colors."

The corps commander nodded gravely.

"The Liberators are up this morning, "Ike nodded to the naval aviator, "and should detect the Japanese fleet today. I then want a maximal air effort to ensure their carriers are taken out. Once you do that, aim for the transports. Better to kill them, the infantry, in big bunches at sea then to let them land."

The two airmen looked up, the Air Corps man gave a thumbs up.

"Navy? First priority is to get the convoy in. It includes the 34<sup>th</sup> Infantry Regiment, we will need them as well as the 15,000 carbines in those ships. We will need them very badly. First we need to hold onto Luzon and the air bases, once that is done we can think about cutting off the Japanese from the Dutch East Indies. Questions?"

Admiral Hart stood, "We have been getting a lot of pressure to send our boats up to Formosa. I have told Pearl no dice."

Ike looked at a status report. "Looks to me that thirty boats makes ten wolf packs. We do need to disrupt the straits, send something, say two packs up that way. Keep the minelayers and special operation boats here on a short string. Whatever else needs to be off the Luzon coast as soon as we you

can make it happen." He looked up, "Not orders Tom, you make the call, just give some coverage to Taipei and make your main efforts the beaches."

The Air Corps Commander asked next, "Sir the Libs will be easy pickings if we take them in against carrier fighters."

"Coordinate for Mustang cover, do not take your patrol planes in until the Forts go at the same time. Still, maximum effort means that. Maximum, but smart. Also, between you two Airedales, keep Formosa under surveillance. We will divert our air strikes from their fleet to the island if it looks like they are recovering. No more surprises from up there, got it?"

The only Filipino at the table was the policeman, he spoke "How about militia sir?"

"General, you are our one commander for all emergency units. You raise them, train and equip them and pass them to the Scout divisions when they are ready. Lets start with moving them as platoons. If things get really exciting, we will have to go for individual replacements. I have ordered the military academy to send you the Corps of Cadets, do not deploy them as a group, spread them out as leavening with the civilian volunteers."

"American replacements?" the Corps commander asked.

"The 34<sup>th</sup> as I mentioned, nothing else for a while, maybe some more planes." Ike turned to the senior navy man, "Tom, see how many shipboard Marines and sailors you can get together give me a plan to use them to plug holes in the US regiments. The China Marine regiment will be my personal reserve."

Hart nodded.

"OK, that is it, last big meeting for a while. From now on just Navy, Air, Corps and Metro in the mornings. The rest of you to your units, I will visit you at your command posts."

The entire room stood and saluted.

An Army captain came into the room and quickly handed a note to the Chief of Staff.

"We have a plot on the Japanese fleet."

Ike looked up, "Let's take a look," and walked into his map room. A navy lieutenant was waiting for him.

"Two hours ago a Lib caught a stray transmission. We diverted them off their regular patrol line, they found the Japanese in two groups north of the Batanes." He indicated a red chip on the map.

"Two groups?"

"Naval forces in the front with perhaps six carriers, four cruisers or battleships, all the rest. Landing force of over forty ships a couple of destroyers riding herd on them bringing up the rear."

"Was the patrol plane spotted?"

"Yes, general. Some Zeros came up to shoo them away."

"Intentions?" Ike aimed his question at his intelligence chief.

"Washington says to expect a landing at Batan with two 'A's.' then the main effort at Valley Cove on Luzon. Call it a landing on Luzon in two more days, three at the outside."

Ike grinned "We reading their mail?"

"Don't know, nobody in Washington tells me anything."

The commander lit another cigarette, staring at the map, he motioned to the two airmen "Tell the air staff I want a coordinated attack on both groups today, before nightfall, give me a plan before lunch." He again turned to the intelligence chief, "Personally call the Navy and ensure they have this plotted on their boards."

Without another word, the Commander walked down the hallway to dictate a message to the Joint

Chiefs.

By a feat of poor planning, the aerial torpedoes were all stored at Clark Field. A handful of the large Air Corps bombers flew in at a time to arm, and then returned to their dispersal fields. This took over three hours. At the same time, the Navy called in their Liberator patrol planes to Subic where identical cylinders were attached to their wings. In the late afternoon, all across Luzon, thirty-seven B-17s and twenty Liberators took off and headed to the Bashi Channel. The faster Mustang escort lifted off later, in order to catch the lumbering bombers as they crossed the coast. The flight was uneventful, strings of clouds marked the updrafts rising from the eastern dorsal as small groups of bombers linked up to form a long loose line heading north.

The fighters were detected by Japanese radar first. All available interceptors rose into the sky from the carrier decks, meeting the Americans twenty miles south of their fleet. The Americans had the advantage of altitude to add to their heavier guns and armor. The Japanese were veterans, all their pilots had at least some experience in China. The Americans were complete novices and made many rookie mistakes. The confused dogfight engaged more and more aircraft and began to slowly drift lower to the sea below. The bombers ploughed ahead at a loftier altitude unmolested.

The Air Corps lieutenant colonel in the first B-17 ordered his aircraft to orbit between the two formations, the battle fleet to the south and the landing force already putting troops ashore at Batan on the north. As Raid Commander, he directed the higher-flying B-17s to attack the warships, and the slower, lower Liberators against the less-defended merchant shipping. His orders called for priority to go to sinking the carriers, but he knew that aiming with high altitude torpedoes was largely a waste of time. He would be happy for hits on anything at all.

Both bomber streams came in west of their targets, turned right and attacked with the marginal advantage of the setting sun being behind them. The bombardiers directed their pilots over the last few seconds of the approach and then pressed the 'volley' switch on their release controls. The heavy torpedoes dropped off the wings in pairs, deploying a drogue to assume a head-first attitude. After a few seconds, a larger parachute slowed the weapon's decent further. Once they hit the sea, the torpedoes activated their motors and began a series of wide circles. Each weapon swam blindly in a two-mile wide circuit, together all the torpedoes formed a swarm few ships could hope to evade.

The fish fell about a mile in front of the steaming warships. The fleet was making maximum speed and had no chance to turn or stop before charging into the area. As the warheads struck home, the high speed of the fleet added its destructive force to the wound.

The bombers were able to turn away before encountering the worst of the enemy's defensive fire. Most of the force managed to get away untouched.

Oddly, the transport fleet fared better. Anchored in shallow water many of the American torpedoes stuck in the mud, some struck the nearby island. The lower, slower Libs suffered from Japanese defensive fire, several crashing in spectacular burning arcs.

Night fell quickly as it does at that latitude, the Japanese flag staff spent the night counting their losses. Of six carriers, four took at least one torpedo hit and suffered varying infirmities to their speed or maneuverability. One was listing too badly to land or launch aircraft. One unlucky battleship absorbed three American warheads and would not survive the night. Five of the less-robust destroyers were sent to the bottom by the raid. Losses to the transport fleet were less severe. Only six ships suffered fatal hits and nearby landing craft were at hand to remove most of the crews and passengers. Still, the Army force suffered from the loss of almost ten percent of its equipment and found its units scheduled for Luzon landed on Batan adding to a confusion of mixed units. Despite the losses, the Fourteenth Army could continue their planned landings.

Ike pretended to play bridge with his aides and a couple of staff officers roped into keeping him away from the map room. "Enough of this," he threw down his cards and walked down a busy corridor. He met the Chief of Staff coming to find him.

"It is too dark to get a photo plane up, but we have been listening in on their tactical nets. They lost a battleship, a carrier is out of it with damage, so are a half-dozen minor ships. We sunk six transports, but the landing craft got most of the men off."

"But the supplies are on the bottom?" Ike asked.

"It seems we sunk most of their trucks and all of a field hospital. Most importantly, an ammo ship is burning and has been abandoned."

The general leaned back in his chair, a wide smile on his face. "What about our guys?"

"Four Boeings, and six Libs. Of the B-17s, two crashed on landing, so we may get them back in the air."

Eisenhower had just fought his first battle, his grin melted away.

"OK, let the submarines take a crack at them."

The first three American boats reached Valley Cove in the early hours of the night. The wolf pack was loosely commanded by the senior skipper, a lieutenant commander all of 23 years old. Submarine operations required the boldness found only in the young. Forming a line abreast the three boats dropped twenty mines each into the tropical water. It was almost dawn when they turned back out to the narrow sea and settled on the bottom to silently wait with almost twenty others.

The Japanese Admiral knew his fleet was damaged, but the distance he had to cover was less than two hundred miles. Leaving three transports unattended to finish the occupation of Batan, he moved the rest under the protection of his antiaircraft guns and set off at maximum speed to the south before dawn. They made smoke to provide cover from the bombers.

The channel between Luzon and Caminguin was the last deep water the fleet would have to cross. Beyond it the Philippine Sea was too shallow to provide much cover. Each commander poked personally manned his periscope hoping for a clear shot at the invading fleet.

Three navy Liberators kept and eye on their course from miles away, the thick smoke marking their progress and allowing a running commentary to navy headquarters in Manila. From there it flowed to the boats themselves. Like nervous wolves looking down on their prey, the submarines twitched slightly, moving a mile from one side or the other to the perfect position.

The Crab saw the plume of smoke as the Japanese approached. "Down scope, sonar, what is your bearing?"

"Bearing 285, distance is six miles and closing."

"Sing out changes in bearing"

"Aye" The tension on the little bridge was almost unbearable.

"Bearing 285 and steady."

"Up scope," the smoke from the approaching ships was wide, but not so wide that the fleet was crossing, they were coming right down his throat. "Down scope. Set bow and stern torpedoes to begin pattern at three thousand yards."

"Bearing steady, range now four miles, bearing steady," the sonarman repeated himself.

"Range two miles, bearing steady."

"Stand by all tubes."

"Range one mile"

"Fire front battery in sequence," every man aboard counted as six torpedoes left the tubes.

"All ahead on motors, make your course 285."

"Course 285"

"Fire stern battery in sequence. Make your depth 200 feet."

"Take her down to 200, sir."

The last weapons swam away, "Make your course 048."

The executive officer grinned, "Now comes the hard part, the waiting."

They did not wait long, the first sound of the first explosion reached them before the captain could reply.

The evening meeting in the basement of the Marsman Building was a navy affair. "We were unable to get bombers over them today. They kept up a very heavy combat patrol from dawn to dusk. The airfield in Batan is now operational and providing additional cover." Tom Hart reported. "We managed to get twenty submarines in place in time. It seems fifteen of those were able to take a shot."

"What's in the bag, Tom?" Ike could see the navy man wanted to grin.

"Our listening on the unencrypted TBS traffic says we got all their carriers, and two more capital ships. That is to say they were hit. Once carrier is still able to conduct flight ops, the aircraft on their CAP had to recover to Batan. We also put at least nine destroyers and a dozen or so merchantmen on the bottom."

"So what do they have left?"

A light cruiser is the largest thing untouched, they have transferred the flag to her. Twenty troop and supply ships are now off the landing beaches, and we cannot hit them there with subs of air torpedoes."

"Guided bombs?"

"Not as long as they keep the smoke up."

The Air Corps man interrupted, "We did nothing all day today with the bombers. We were hoping for a chance to finish them off, but it didn't happen. Now our recon is showing Formosa is coming up again. We can expect then to try to hit us tomorrow."

"Okay, the navy battle is over, they will land tonight or tomorrow. We'll try to put the rest of their ships on the bottom once they return to open water. Tomorrow I want bombers to plaster Taiwan. Close them down for good this time. We will keep fighter cover over our fields in case they get past us."

The operations officer objected, "That means they can land with our airpower elsewhere."

"Yep, what's left of them." Ike turned to the corps commander, "You're up next. Swing for the bleachers."

# **Chapter 17 Philippines II**

Ten hours later dawn came to the Philippines. With it came a wave of long-range aircraft headed for the American airfields on Luzon's southwest coast. Over one hundred aircraft decoys were blasted as they sat in neat lines on the fields. The Filipino fields were even more heavily protected by air defense batteries than Pearl Harbor. Dozens of the attacking aircraft were lost over their targets. As they turned for home, Air Corps Mustangs pulled out of their lazy holding patterns and pounced upon their prey. The melee became a classic confused 'furball' with the inexperienced Americans pounding the lightweight Zeros with their eight fifty caliber machine guns. The Japanese had a difficult time scoring each of their two dozen kills against the armored American machines.

After less than twenty minutes, the Japanese raid commander orders his forces to break off the combat, worried about his fuel status. The Americans pursued for over a hundred miles out to sea, keeping their opponent from throttling back their hungry engines. A few with punctured fuel tanks never reached their bases on Taiwan. The others returned home just a hour after the last B-17 had laid scatterable mines over the grass strips. It would be an awkward afternoon for the Japanese fliers. Less than half of the Japanese planes that took in the morning off would ever fly again.

Eisenhower left his bunker at Clark Field to survey the damage. The repair crews were filling the smaller craters with gravel. The larger ones were being marked with large yellow flags. His air commander was alongside.

"We will have this cleaned up in three or four hours, sir."

"OK, we need to move everything to the dispersal fields by tonight. See what you can do to get the decoys repaired. I expect a carrier attack from the north today or tomorrow." Ike returned the one-star's salute and motioned for his staff car. He had an invasion to sink.

Winston Frederick was met at Union Station by a White House car. He and his three keepers were ushered into the oval office by a butler who moved with quiet catlike grace. President Roosevelt was in an upbeat mood, he motioned his visitors to a coffee table.

"How bad was it, Mr. President?"

"Bad enough, but it could have been worse." The President moved to face the fireplace. "One battleship sunk, the Arizona, she can be raised, a number of smaller ships burned out beyond repair. Perhaps a thousand killed."

"How about enemy losses?"

"I am getting all sorts of reports, I take them all with a grain of salt. Their naval air has been savaged, I am certain of that. Still the their ships got away scot-free."

"And the base?" Frederick asked.

"The Japs hit the oil tank, but that is only about half of local storage now I understand. Just the fact that they did that points to you having a Japanese counterpart. Otherwise, we lost about half of our B-17s" he paused for the punch line "the decoys anyway."

"What now?" Admiral Hereford asked.

Roosevelt waved his hand dismissively. "The gloves come off of course. I will address Congress in a few hours and call for war with Japan and Germany. The country is in a foul mood. No need to wait for Germany to invite us in. Germany first of course, they are the only ones who can really hurt us, but we are on the verge of being able to hold The Philippines and I have told the commander out there to hang on for help."

"MacArthur?" Frederick asked.

"Back to West Point as Superintendent a few months ago. Ike is charge out there, he has a lot of experience in the region. I am expecting a good show. Mac? He may charge in here at any moment demanding a clipper ticket back out there. He won't get it."

"So Germany first?"

"Yes but let's try to do Japan at the same time if we can."

"A tall order."

"We will do what we can. The Navy will be mostly dedicated to the Pacific, the Army to Europe. Marshall does not want to lose Manila just to have to take it back later. He says he does not want to 'pay for the same land twice.' I like that."

"As long as we have Manila, they can't do a thing in the DEL." Tom said.

Frederick looked puzzled.

"Dutch East Indies, where the oil is," the President said curtly. "If the Japanese cannot get the Dutch oil, they will peter out pretty darn quickly. I am sure the Navy Department has some figures for us to look at. Now what I need from you, good Doctor," Roosevelt indicated the time traveler," is an informed opinion if the Japanese have an advisor from the future or not. The caught us with our pants down. As if they knew that we were focusing on the first week of December."

"Yes, Mister President." Winston answered.

With that the group was waved away and a military aide conducted them to a very secure office in the War Department across the street. On the table was a large pile of telex messages dealing with the Japanese attack and its results. The military men began to mull over their contents.

"Nearly simultaneous attacks on Singapore, Pearl and The Philippines," that is no change from the last time. Larry observed.

"Late October instead of early December is a huge change." Frederick countered. "In my time a couple of the carriers came straight from the yards to the attack. Why did they speed up the construction?

"Butterflies?"

"Maybe, maybe the Germans tipped them off, but I doubt it," Frederick continued, "Also they had enough sense to hit the oil storage at Pearl. In my time everyone said it was a mistake to pass that up. I still think they have someone like me."

"If they knew what would happen, why would they provoke us?" Larry asked.

"As I understand it, the Japanese leadership is simply stiff-necked. Also anyone showing 'weakness' is in danger of being cut down, literally cut down, by some subordinate. Groupthink raised to an art form."

"If you were advising them, what would you tell them to do?" Bob asked.

"More carriers, more subs, fewer battleships. Stockpiles of critical materials beforehand. All in all, the main change would have been to leave us alone and hit Stalin in the butt when Germans reach Moscow."

"One problem with that, Winston."

"What's that?"

"No oil in Siberia, and the Japanese navy needs oil." Bob replied.

"We will tell the President we think the Japs have a guest." Larry said, his voice indicating he spoke as the senior officer present.

"How does that impact our plan?" Winston asked.

"Except for what the President just told us, nobody has told me what the grand strategy is. I presume we will not do the same as last time, the Nips will be expecting it."

"You really need to stop calling the Japanese 'Nips,' you know." Frederick chided.

"They can be Japanese again once we are in Tokyo, until then they are Nips," Admiral Hereford said with certainty.

# **Chapter 18 Atlantic**

"So, all in all, we are ahead of your schedule in the Pacific?" FDR looked out over the Potomac River from the presidential yacht. Thanks to the casual atmosphere, Winston found himself able to unwind for the first time in the man's presence.

"The Pacific Fleet is still the biggest piece on the board. The British are OK in Singapore. The Japanese have lost fewer ships than we have, but as a percentage they are hurting more."

"Just looking at a map shows the Jap landings in the Dutch East Indies are, or soon will be, untenable. We just need to keep Luzon in working order. Without the oil fields they simply have no navy and no chance." Admiral Leahy observed.

"Hard days ahead, but the Japanese have largely shot their bolt? How about those other people?"

"Mister President, the Japanese don't seem to have told the Germans about their plans. While they were probably ready for something, the exact date and so on caught them unawares. So in the Atlantic they were not especially ready as far as we can tell," the navy man said.

"Further, I bet they hoped we would go after the Japanese and let them alone. Hitler was big for wishful thinking." Winston added.

"I caught hell for declaring war on the Hun, but after Pearl Harbor Congress would have declared war on Mexico if I asked them to. So how is it in the Atlantic?"

"The navy is ready," the admiral had pride in his voice, "We have extended our escorts from midway across all the way to the British ports. The Royal Navy has done the same and now they are able to refit in our ports. Our hunter-killer groups have less experience, but newer ships and more enthusiasm than the Brits, I'll bet."

"We'll see, we'll see," the President wheeled himself to the large coffee table that dominated the room. "General Marshall, what now?"

"As soon as the Navy is ready, we can dispatch troopships to the Mediterranean, but we really need to wait for the u-boats to be cleared. With luck, we will be able to launch Operation Torch in May or June."

"We need to get into the fight now, the people want to get into the grapple."

Marshall defended himself, "Mustang squadrons are already moving; they will be flying air defense with the British in a couple of weeks. We will make sure that gets into the papers. The delay will be getting spare parts and support people over there. A good chance to get some experience."

"Make sure our radar and radiomen get a chance, Churchill has been singing the praises of his people, and we will need to give some seasoning to both air and ground crew." Winston wondered where the President picked that tidbit up.

Roosevelt lit another cigarette, not bothering with his usual elegant holder. "Agreed then, the Air Corps in Britain as soon as possible, the Navy to clear the sea in the next six months, then the Army goes through to North Africa. Is that right?"

The three other men nodded.

The departure of ships has always been dictated by the unchanging tides. So the first American wartime convoy sailed from New York in broad daylight. Once out of the harbor, the destroyers began to single out ships and lead them to their proper place in the formation. Liberty California was in the second rank, a half mile behind a tanker, with a refrigerated fruit ship on one side and the broad ocean on

the other.

"At least we have sunlight on the port." The first officer observed.

"Not good news, the subs like to attack from the beam, so being at the end of a row is not the best." The captain replied, "Less than a dozen of us got that singular honor."

The first officer flipped open the thick black binder with the convoy's sailing instructions.

"Eighty-something ships in three and a half rows twenty-five ships abreast. Hell of a crowd. Like a herd of cattle."

"Moo," the skipper lit his pipe, "I want you to inspect the station-keeping lights. keep the port ones in place, but I want you make sure there are no bulbs in the ones to starboard."

"Aye."

"Also the Commodore is from White Star, he has been through this more than a few times, he says he wants everyone in a life jacket at all times. Makes sure your deck crew has them on."

"Aye."

"He says if he sees a crewman on deck with no vest he'll dock our danger money fifty dollars."

"The crew'll not like that one little bit."

"Our money, not the crew's money, the officer's money. See to it."

"Aye aye, sir." The first officer walked outside. He came back through the hatch, grabbed a yellow life vest and tied it around his waist. "Fifty dollars?"

The captain nodded gravely.

U-264 sat quietly on the bottom, a passive microphone on a long cable threaded through the rear torpedo tube trailed upward where conditions were ideal. The port of New York was alive with activity, making sense of it required patience and experience. The U-264 had both.

"Convoy passing," the lead sonarman reported.

"How many?"

"More than fifty, perhaps a hundred including escorts, a Jumbo."

"What time is it upstairs?" The submarine kept Berlin time.

"Dusk in four hours, sir."

"Prepare a sighting report. Bring her up to thirty meters and make a course to deep water."

More than five hours later the u-boat raised its snorkel and started its powerful diesels to recharge its batteries. That done, a battery-powered signal buoy was released, set to transmit after thirty minutes. Then the skipper began to quietly crawl his boat back into position outside the harbor.

"What is it?" the Coast Guard lieutenant asked.

"A burst transmission somewhere on this bearing," the seaman indicated his chart.

"When?"

"About twenty minutes ago, six hours after they left."

"Okay, call the officer of the watch, the convoy has been spotted."

Sailors will tell you that a life at sea is full of camaraderie and solitude. Keeping watch in the small hours of the morning, enjoying the stars, the sea, the air is a pleasure no landsman can understand. Being

in a convoy is different. The ungainly ships have difficulty in keeping their proper place relative to one another in the best of times. Turning as one to make the zigzags safety required is nearly impossible. Doing it at night is a prescription for disaster. Instead of divine isolation and freedom, the watch crew found themselves in the middle of a traffic jam.

"Mind the tanker!" the skipper said quietly.

"She turns like a scow," the first officer had taken the wheel himself. The quartermaster had retreated to the starboard wing as an additional lookout.

"Who has the watch?"

"I'm on duty for another twenty minutes then you come on."

"I'm too old for this nonsense. I have got to get some sleep." A loud noise came from somewhere in the mass of ships. Both men turned. "Now what?" the captain asked wearily. A siren sounded.

"Must have been a collision, no fire, no flare from the escorts. How can you hit another ship in the middle of the Atlantic?"

"Mind that tanker or you'll find out."

The German navy had set up its u-boat headquarters in a chalet in Brittany. Earlier in the war it had been elegant, but the treat of British air attacks required a huge concrete bunker to be built in the garden. It was a place of endless activity, cigarette smoke and static.

"The watch boat at New York reported them sailing two days ago. Presuming an average speed and course, we expect them to come into range shortly after daylight tomorrow," the navy captain briefed the admiral with great formality.

"What can you give us tomorrow?"

An officer in a grey uniform answered, "The Luftwaffe would prefer better targeting information, sir, but we will have fourteen Condors available for an attack if we cut back on patrols."

The admiral made his decision, "Launch your Condors for a mid-morning attack, that will shorten the range a bit and give your pilots more light to find the ships themselves. If you can't find them, then we will have risked little."

"Yes, sir."

"I want to hit the Americans hard, they finally admit to being in this war, we ought to welcome them to it. Simple courtesy really."

"Of course Herr Admiral," both men replied as one.

A dozen four-engine Condors took off from three French airfields and formed a long line abreast. The crews settled in for a long flight with hot tea and coffee from thermos bottles and waited for the sunlight to reach the sea below. The bomb aimers in the glazed nose then settled into endless scanning the blue for any enemy activity. The planes were able to sweep a bolt of ocean over a hundred miles wide at more than 300 miles per hour.

Well before their planned intercept, a plane on the far right reported a small group of warships steaming south. The raid commander deemed it a hunter-killer group not worthy of his attention. The English escort carrier was operating without her radar and was too late sending up a pair of fighters. The fast Condors had too much of a head start.

"So much for sneaking up on them." The squadron commander thought.

"Signal from the escorts," the first officer knocked on the captain's door.

"What do they want?"

"Air action stations, contact in one hour."

"I'll be up in a minute. Wake the crew who are not on watch. Make sure everyone gets some coffee and breakfast."

"Lunch."

"Lunch. I'll be right up."

The trip had taken a toll on the captain's face, he was weary and unshaven. He ran a hand over his stubble. "Well?"

"The crew is awake, the galley is making sandwiches to take to the duty stations. The escorts are taking up positions to the south, the carrier has been launching fighters for the last few minutes."

The Talk Between Ships radio was attacked to an overhead speaker, "Inbound bombers spotted, contact in fifteen minutes, make smoke."

The captain nodded to the quartermaster, "You heard the man, make smoke." The tanker ahead began to trail an inadequate black plume against the bright blue sky. In a few minutes, a solitary crewman pulled a cord to ignite the smoke generator strapped to the fantail. The attackers came into view, then their droning engines could be heard. Little knots of crewmen began to gather on the foredeck with nothing to do but watch.

"Muster everyone but the engine gang and the bridge watch to the stern, make the lifeboats ready. Have someone make sure again all the watertights are secured."

The big guns of the escorts began to fire, each sharp bark something felt in the chest as well as heard. The shells left long red traces reaching high into the sky.

"Carl, get yourself to the stern. Take charge if we get hit."

"Skip, I'd rather stay up here," the first officer's eyes were focused out the windows.

"Get yourself back there. We'll talk later," the captain's voice was firm.

"Anything last night?" Winston asked when he entered the group's office in Campabello.

"The Germans hit our first New York convoy this morning as soon as they crossed into air range." Admiral Hereford reported.

"How did it go?"

"Guided bombs, they hit six merchies, a near miss on the escort carrier, she'll need some time in dry dock."

Winston ruffled through the previous night's messages, "Six out of eighty something? That's bad."

"Can't keep that up for long." the navy man agreed. "Still we knocked down at least three condors, one more was trailing smoke, might not make it back."

"Maybe the worst is over for this convoy?" Winston hoped.

"Fat chance."

There was no night or day in the German bunker. The admiral read the report with weary red eyes.

"Show me the plot for this raid." A staff officer silently indicated a red marker on the blue chart. A string of black chips ran north south to the east of the convoy. "Make a transmission, the wolf pack is to assemble," he gauged distances and speeds with a practiced eye, "here."

The orders went out less than twenty minutes later and were picked up by the four nearest electroboats.

After the attack, the tension level on the Liberty California collapsed. By mutual agreement, everyone who was not on duty fell into their bunks and a peaceful sleep. Nightmares would come for some, but not until later. The captain looked better too. He had shaved and put on a clean uniform.

"Glass is dropping," he referred to the barometer's face.

"They told us a couple of hours ago to expect more clouds tonight. It might snow."

"That'll be trouble. The subs don't need to see to hunt, and we'll be sailing blind. How are the guys holding up?"

The first officer rubbed his neck, "Tense, tired, about what you'd expect I guess."

"You too. Let me go take a look at the engine room and grab something to eat. I'll relieve you in thirty minutes. You need a shower and a shave." The captain paused.

The first officer looked at him, "You expect me to argue? I smell like a goat and know it."

"You have been in that uniform for four days, some sort of good-luck charm?"

The first officer stepped outside to the port wing, he waved his friend beside him. Away from prying eyes he explained. "I've tried, but I can't bring myself to take off my clothes. I guess I'm scared we'll get sunk while I'm in the shower."

"Being scared is normal, but we have to look calm, even if we're shitless. I'll make it easy for you. I want you to report to me in a clean uniform at," he looked at his watch, "say an hour from now. I don't care if you sleep in it tonight, but fresh duds and clean behind the ears in an hour, got it?"

"Aye."

The submarines traveled by different routes to a box on their maps of a hundred miles on a side. 100,000 square kilometers for a convoy to hide in. They cruised quietly on electric power to allow their sonars to find their prey. Two got lucky and heard the sounds of the convoy almost at once. They switched to their high-speed diesels and raced to the interception points they had independently plotted thirty kilometers apart.

The first reached its ambush as the last light of the day ended on the surface. The captain was on his first cruise as a commander and was eager to make a big score. He ordered his periscope up and scanned the sky. Reassured by the gathering darkness and the lack of English aircraft he also brought up his antenna and snorkel to bring the boat's air supply back up to maximum. Judging his vessel to be safer with a sharp lookout than without, he kept the scope up and settled to wait. He took the time to walk through the boat to inspect and offer his presence to his crew. The radio operator tuned to the fleet's official channel and began the recorder used to catch burst transmissions from nearby friendly boats and aircraft.

A British Sutherland flying boat was returning to its Irish base after the end of a long patrol. A stiff wind was coming from the northeast, the sea was a froth of black accented with whitecaps.

"Contact, pulse bearing 047 degrees, strong" the electronics officer called out.

"Action stations, anything active?" the pilot asked.

"Just a pulse from a receiver. No active transmission. Bearing now 005 and strengthening."

"Activate the radar, be ready for a quick shot."

The radar set was already operating, the officer threw a switch connecting it to the antenna, the screen sprang to life at once.

"Contact 000 range two miles."

The radio room detected the British radar at once. "Alarm! Search radar!"

The captain slammed his palm on the intercom in the main torpedo room. "Emergency dive, make your depth fifty meters."

The crew responded with incredible speed. The bridge ordered the electric motors to full speed, the planes full down and flooded the ballast tanks. As water flooded into the tanks, air flowed out and up, making the sea boil.

The British pilot flipped the switch to activate the powerful searchlight about the snout of his plane. The air escaping from the u-boat's tanks the sea made a perfect target.

"Salvo now!" A dozen contact-fused squid bombs fell from each wing. The weapons fell into darkness giving the aircraft no way to sense their effect.

"Send a position report in the plain, standard long transmission. Warn the convoy."

The pilot had no way of knowing his enemy was already making a final dive.

"Course change to heading 095 in one minute," the sudden command from the TBS speaker took the watch crew by surprise.

"Like the man said, make ready to come to 095." The skipper came to his feet. "Mind that damn tanker."

The course change brought the convoy to within a mile north of the second attacker. It released six torpedoes at maximum range, all of them missed, but then they turned back into the for a second try, committed by their guidance systems to swim their pattern until they struck a target or ran out of fuel. One struck the fruit carrier to the right of the Liberty California. The force of the blast came through the water and into the steel plates of the ship with such force that the captain thought his ship had been struck. Only sudden unnatural light of a flare launched from a destroyer convinced him otherwise. He considered dropping a boat for survivors for half a minute that stretched forever. Only the realization that the reefer was well astern brought him back to the moment. He walked to the wing to shout to his crew. He could make out his first officer leading an effort to pull up a half-deployed lifeboat. "At least that will give them something to occupy themselves."

The second submarine had time to reload her tubes as the ships approached. The captain aimed for the center of the rapidly-approaching wall of steel and fired. Just as fountain of spray announced one of the pattern-runners had found a mark. "Make your depth seventy meters, silent routine, rig for damage control."

Taking out his binoculars, the captain began to sweep the open sea to his left looking for ... something. A minute later he heard two more explosions from the starboard edge of the formation.

"A total of eight sunk, two more damaged, give them credit for ten percent of the entire convoy." The harbormaster in the basement of the Liver Building kept an informal tally of each convoy arriving. Now he had to consider which wharfs were available and where he could assemble the next outbound flotilla.

A gentle tone from a speaker announced another German air raid on the city outside his bunker.

## **Chapter 19 Mediterranean II**

"We simply have their measure," the British admiral explained in a Washington conference room. "In '40 we faced the older u-boats and completely outclassed them, in fact they served to train our air-sea team in coordination. The electroboats gave us a tough time starting last year, but with you Yanks in the fight our antisubmarine capacity has practically doubled overnight, their ability to build boats and train crew has not. ."

His RAF college added, "Another factor is they are getting easier to kill as they are forced to use younger, less experienced crews. Our analysis shows Jerry simply cannot produce them as fast as we sink them. It is a slow process but our losses are trending downward and we can see the end of it."

The American delegation to the Combined Chiefs of Staff nodded.

"So now what?" the admiral's question was rhetorical. "In 1942 we begin to hit back. Winston has insisted that we must get help to the Russians this has become impossible now that the northern ports have fallen. We only have the Iran and Siberia routes."

General Arnold agreed, "Both of those routes require us to go around our elbow to get to our thumb."

"Exactly," the admiral approached a covered chart, "Operation Sledgehammer calls for a major landing on the North Cape in May or June. "He pulled back the shroud, showing the stylized map beneath. "This will force the Germans to divert forces from the Central Front and will allow us to open at least an air route to Moscow."

"Operations so far north are hazardous." Admiral Leahy objected.

"We have complete air and sea superiority up there, thanks to our bases in Norway. The navigation hazards can be mitigated. We have developed navigation aides based on those used by the Royal Air Force."

General Marshal interrupted, "We have been briefed on this of course, the advantage from the military point of view is that the Germans will be trying to deliver combat power along a single double-track rail line. That is very open to airpower and other attacks. The British ought to be able to generate much more power more quickly though the ports."

His Air Corps counterpart nodded, "The President has agreed with Mr. Churchill that we must take pressure off Moscow. Our air contribution will be using the RAF airfields on Crete to strike north into Germany proper as well as throughout the southern and central sectors of the Eastern Front. This is the job the B-29 was designed to do."

"Will we have enough B-29s?" The RAF man had not read up on this.

"In truth no, production has only recently switched into high gear with the Liberator line being switched over. We can start with two hundred ships, a mix of tankers and bombers; production will cover attrition and add about two dozen aircraft a month indefinitely. Our airfield engineers officers are already on Crete in small numbers helping the British engineers lengthen the fields."

Marshall took over the briefing, "The aircraft will come in via Brazil to French West Africa then to Egypt. We expect our first raids to begin in May. That clears the way for the main event. Admiral?"

Bill Leahy stood, "While the major naval effort will be in the Pacific, our first large landings will be in the Mediterranean. Looking at a D-Day of 1 May, Operation Anvil will take Corsica and then three

weeks later make a multi-corps landing on the Riviera."

For the first time the Chief of the Imperial General Staff spoke, "This worries me to no end. Is the American Army ready to expose itself to the full force of the Germans in the main theatre of operations?"

"War cannot be fought without risk." Marshall replied, "we are counting on the synergetic effect of an increased bombing campaign combined with the new threat on the North Cape to pull the Germans in three directions at once. The Soviets can be counted to launch a major attack on their national day, the first of May. In addition, our political leaders," he nodded at the British, "are trying to work some magic with the Italians."

Admiral Leahy supported his friend, "At some point we must land in Europe, if for no other reason than the Provisional French are demanding it. All in all, we can be certain that early May will be a very busy time.

"Amen," Hap Arnold added.

The B-29C rose up from Crete in an ungainly manner. She was lightly laden, with about twenty percent of her full fuel load. The winds were favorable and she gained altitude quickly until she reached her sister ship orbiting patiently south of the island. The reaching for altitude was dangerous in the A model, the engines tending to overheat when brought to full power.

"Thank goodness that's fixed." Paul Tibbets noted that his C was down to ten percent fuel as he lined up with the tanker's probe. "Just enough to get down safe," he thought. Lots of things could go wrong with air refueling. He checked his throttles and cut four back to half power. The fifth engine went back to zero, no need for that now. He made the hookup on his first attempt and began to replace the fuel he burned on lifted off. Then he topped off the tanks. After thirty nervous minutes, the two aircraft flew north together, the tanker sinking down to Crete, the Enola Gay gaining altitude as she headed into harm's way.

The navigation radar was not set up to detect German fighters, they saw the first pair of 109s over the coast of occupied Greece. The older fighters were no factor to the fast, high bomber. Reaching 30,000 feet, the pilot fired up the slave engine in the center of fuselage. Sucking in the thin outside air, it compressed it and passed it to the four Pratt & Whitney's on the wings. The slave gave a satisfying vibration through the airframe and into the seats in the cockpit. Engine temperatures dropped and the plane resumed its slow climb as more fuel burned off.

The clouds cleared over Yugoslavia. "Cameras on, start the photolog." Tibbets called on his intercom. Cruising at 41,000 feet did not make for good tourism with the naked eye. The plane handled poorly in the thin air, fortunately the mission required a nearly straight flight path. The radio operator brought up coffee.

"190s, six o'clock, very low," the tail gunner called.

Everyone sat up straight, "How low?"

"At least six thousand feet, maybe more, I just caught a reflection off a canopy. We're leaving them in the dust anyhow."

"They'll get used to it, they can't catch us and climb at the same time," the copilot said.

Forty minutes before Moscow, Tibbets walked back through his aircraft. He smiled and called each airman by name. The tail gunner seemed especially pleased to see another human. "Back in time for dinner," he promised.

Over the captured Russian capital, the huge aircraft made a wide turn and began to return along a route slightly to the west of the one they flew up. The winds aloft report was right and the Jet Stream gave them another 100 knots over the ground. A wide swath of the German rear area was photographed for later analysis.

That evening, dinner was roast beef with potatoes.

Dozens of American convoys arrived in the French African ports. Loaded to make the best use of their cargo space, the ships contained enough equipment for three mechanized divisions. French soldiers having already left their own equipment in Metropolitan France, they now turned in their British vehicles and began to learn about Fords and Chevys. Coca Cola was greeted with suspicion. Even more equipment began to pile up in huge dumps under the watchful guard of formations of the new twin-tailed Lockheed Lightning fighters.

Only then did the troopships arrive. Converted passenger liners for the lucky soldiers. Metal bunks stacked eight high in a Liberty Ship for the rest. Regiments came and formed into brigades, then divisions, then corps.

On April Fools Day, 1942 Omar Bradley declared American Third Army to be operational.

Along with the Army came the Twenty-First Tactical Air Force crowding the airfields already occupied by the large bombers of the Mighty Eighth.

The French President joked that Algeria had become an unsinkable aircraft carrier, one that just might sink under the weight of just one more P-39.

The island of Corsica was poorly-defended, a backwater for centuries its procession was meaningless to the larger war. But it was easy reach of North Africa and that was enough. The landings began on 4 May with an American and French corps going in side by side. The LSDs moved into place to discharge their Sherman tanks and APCs into the sea. LSTs ran directly onto the landing beaches bringing even more fighting vehicles.

A single German division defended the island. Honor required they fight and more than a few potshots were taken at the Allied troops with hand-held rocket launchers as they sped by. Casualties were few however as the invaders were under orders to speed inland and secure potential landing grounds for a counter-invasion. In three days the garrison was in a few demoralized pockets surrounded by Moroccan troops with oversized bayonets and a license for revenge. New airfields were already operating when the last German died.

Newsreels around the world recorded the drop of American paratroopers into the middle of the island. The airborne troops cheered the 'jump that never was' in the cinemas of Casablanca.

"Useless diversions, nothing more," Hitler said.

"Things are certainly very different this time around," Hermann agreed. "The Anglo-Americans have the Mediterranean as a lake. With airbases in Norway, and now Crete and Corsica we are open to air attack from all directions. The u-boat campaign has all but failed. Yet we are unable to grapple with main force of the English."

"Nor they with us," Hitler observed. "While we cannot bring force to bear on them, invasions of the North Cape and Corsica are meaningless. We have lost some of the initiative in the West, just at the moment we are about to achieve victory in the East. Churchill and Roosevelt desire a stalemate, they are seizing territory to use later at a bargaining table."

"In my time some scholars postulated that Stalin was a bigger danger than we were. They claimed it was better to let the Germans and Bolsheviks bleed each other white than to permit Stalin's thugs to remain in place. It was a minority view, but not without good arguments."

"What would they want? France? Perhaps, Poland? Poland is ours. In any case with the resources of Russia in our hands we can deal with an American Empire in twenty years or so."

A staff colonel handed Hitler a note on blue paper. "The Iron Man says that bombers are approaching. We should go downstairs." Hitler looked out the windows and saw it was already dark in the garden outside. Closer, he observed a pair of black-uniformed men already opening a pair of wide doors. "It seems the SS insists, Herr Doctor." The two strode out of the room together.

The airfields on Crete were able to launch attacks only slowly. A set of three American bombers could be seen by ground radars approaching the German capital from the southeast at an untouchable altitude. Even before the arrived, the next set appeared behind them on the same course.

Each aircraft was loaded with a half-dozen bombs of advanced design. After each left its plane it extended a long probe, simple weights on the ends of cables. The armor-piecing bombs used a very large shaped charge that needed to detonate above the ground for full effect. The others were heavier, being completely full of explosives, these detonated thirty feet above the city streets, shattering buildings without wasting energy digging deep holes into the ground.

The raid was uneven, some part of the city were untouched, others received more than a fair share of attention. The government district, presumably the main target took a number of hits. One destroyed a wing of the Agriculture and Food Ministry annex set up in the former British Embassy.

The Royal Air Force came too. One hundred and fifty Manchesters slamming the city with great intensity in the space of thirty minutes. The British ruined a large area; but it was the American raid that did the most psychological damage. One hundred planes, in sets of three arriving every half hour. The population was forced into the shelters for more than twenty hours. In fact, a second British night attack marked the end of the marathon. The last Americans dropped thousands of landmines across the city along with propaganda leaflets. "What you did to Warsaw, we will do to Berlin."

The city was exhausted physically and spiritually.

Hitler screamed. Goering and his Air Staff could offer no defense for themselves or for their city. While the British bombers were vulnerable to fighters and antiaircraft fire, the high-flying Americans were untouchable.

Two nights later the weather closed in over the city with low cloud cover and rain. The Americans came again, flying above the weather and using their radars for guidance, this time they scattered tens of thousands of three-kilo antipersonnel bombs. While no buildings were destroyed huge numbers were damaged. Fires started by the American thermite bomblets spread in some areas, until contained both by either the valiant firefighters or the high humidity.

Speer seemed to have some sort of special authority to speak the truth to Hitler, "It seems they can hit any of our cities at any time of day in any weather. My ministry cannot get anything done. In the past two weeks we have lost well over half of our man-hours, and I am speaking of my office workers, the factories might be worse."

"What of our new fighters?" Hitler asked?

"The 190s can deal with the British, but they were not designed to operate at the high altitude of the Americans. Their B-29 is the ultimate Schnell bomber."

"Can the 190 not be improved? These tricks the Americans have done with the engine, this is not gypsy magic."

"The 190 with the new Jumo 213 engine will reach them. But even the first of these will not fly for another week, and the Jumos are in short supply. I will be unable to deliver one hundred new high altitude planes for ninety days or more."

"So we are to pounded to bits for three months?" Hitler left the thought unfinished. A messenger came in and said something in his ear.

"The Americans have just invaded France."

The irregulars were a motley bunch. Some were recruited by the Communists in the Marseille longshoreman union and others came from elements of the local underworld, a half-dozen local policemen in uniform rounded out the team. They were led by three officers from the Provisional French government in Casablanca. Alerted by a British broadcast four hours ago, the group had assembled in a warehouse just outside the parameter of the port itself.

The twenty men were heavily armed with a collection of small arms, but much more important were the dozen or so crates shipped in from Italy. They had been mislabeled as canned goods. Inside each was a number of demolition charges. Already most had been laid in buildings surrounding the port. Each building had a trusted team of minders sitting by the detonators.

The assault element sat behind a makeshift wall of boxes, the captain, and engineer by training, muttered something under his breath and fired his charges. Before the dust had settled, he was leading his men into the next building.

The wall of the Harbormaster Office exploded with no warning. Crazed men, some wearing uniforms ran through the opening and began to kill everyone they saw. One team rushed to the only staircase and cut down four Germans responding to the commotion in their underpants.

"Go! Go! Go!" the captain knew the key was fast action. One team charged out the door on the left and across the street where more Germans awaited slaughter. Another group rushed up the stairs to destroy the radio room before a cry for help could be sent out. A third team used the door on the right and ran for the main pier. Already French commandos were flooding off a Spanish ship cutting wires connected to the demolition charges around the port.

Hearing the small-arms fire, the eight smaller teams fired their charges, collapsing buildings on their occupants as well as nearby German strong points and blocking all the roads into the port.

The captain was deafened. He screamed at his men to reach the squat command post at the junction two wharves. They reached it and killed the three men inside. He hit the floor and listened.

The gulls were complaining at their early wake-up. A horn sounded from a tugboat. Otherwise silence echoed from the brick walls of the harbor. He felt his heart in his chest. He started to laugh.

In a few minutes he gathered his men and took positions with the commandos defending the new roadblocks. He wondered how long the Americans would take to get there.

The French Rivera was defended. After the invasion of Corsica, a blow there was obvious. Berlin ordered four additional divisions to move from the hell of Russia to the beaches of the south of France. None made it to the region soon enough to stiffen the nine second-rate divisions already there.

The first wave came in well before dawn at low tide. Throughout the day the rising tide helped get the landing ships and craft off. The tanks did not have that trouble; leading the way they came ashore and released their floatation kits with the sound of a thousand gasoline cans smashing together.

The units opposing them were static divisions, lacking any but the most basic transport. These were the last units in the German military relying on horse carts. The Americans had a doctrine of shock, and tried to hold to it, charging off the beach even before it was fully secured. Some resistance nests fired at the American tanks as they passed by, then running out of ammunition surrendered.

For some units, the most time-consuming delay was shooing a celebrating population off the main roads.

At first light, an A-9 spotter autogiro lifted off the deck of a nameless LSD. It made a steep climb and a hard turn to the right to let the pilot and his spotter gain their bearings. The guns of the battleships Texas, Provence and Bretagne, were reaching for their preplanned targets far inland. They paused only long enough to fire blue and green flares far into the distance. These were the visual cues hundreds of aviators used as navigation aids. Putting one flare on his left and the other on his right, the pilot went off in search of the First Infantry Division.

The commander of the Big Red One had promised himself, and the Corps commander, he would make the deepest penetration on D-Day. He was six miles along National Route 6 on his way to Marseille when his lead regiment was ambushed by a some people who had barricaded themselves in a local police station.

"Red Six, this is Blackhawk Eight Seven, I am in position, over."

For the first time, the Major General reached for his Air-Ground radio, "Blackhawk Eight Seven, Red Six, I am on my route, look to your southeast about nine miles."

"Coming, how can we help this morning, Red Six?"

"Panzerfausts in a building three miles to my front on route, top of the column, I need them hit." The blades of the autogiro slapped at the air making a distinctive sound, but the Division commander could not see the aircraft.

A few minutes went by. "Red Six, I see them, blue tile roof. You need no rubble, correct?"

"Blackhawk eight seven, that is correct. Fast and clean, if you please."

The general told his aide to notify the unit in contact to be alert to incoming air. The spotter used his other radio to call for two pairs of Mustangs from the taxi rank. He explained the need for a clean kill. Before they arrived, the light aircraft dropped low and gained its maximum, but still modest speed. The pilot lined up the building in his crude site and fired a single white phosphorus rocket.

"Target marked in white, blue roof, whitewashed walls."

The autogiro was comic. The Mustangs were terrifying, each mounted eight fifty caliber machine guns, together the aircraft put almost three thousand rounds into the little building in well less than a minute. The defenders were laying behind sandbagged windows, from the ground they were protected. From above they were completely exposed. The last pilot found the target obscured by dust as a portion of the roof had collapsed, he fired into the rubble.

"That should do it, Red Six, I am ready for an immediate repeat if you request."

"Pass thanks to the fighters, Blackhawk." He consulted with his aid who shook his head, "Another strike is not required. Take a look at Bridge Seven for me and report back."

The Big Red One and Third Army continued to roll along.

"It is time," Mussolini said to his advisor, "come with me and see why I should have gone into the opera."

"I don't speak German, I won't understand anything," the time traveler replied.

The strongman adjusted a chrome helmet on his bald head, he wore an Alpini uniform with elaborate filigree work on the sleeves. "Trust me, you don't want to miss this."

The German ambassador dressed in soft gray tones, a perfect counterpoint to the Italian peacock. He indulged his host by speaking in German. "You summoned me, Excellency?"

"The situation has taken an alarming turn, His Majesty has become quite concerned." He waved the

diplomat to an armchair.

"Italy is now surrounded. The Americans are now on our left and right with powerful air forces. The English in Egypt are a dagger at our Libyan treasure house. My security apparatus is tracking Anglo-American spy networks in this very city." He spoke German. He waved his arms in Italian.

"We have no indications of a danger to Italy, Your Excellency. The Allies have a taste only for German blood."

"So far yes, but our oil is vital to the German economy. We are surrounded and our defense inadequate. An attack can come at any time. We appeal to our neighbors for fraternal fascist help."

"You are requesting troops? Here?"

"No, a single German uniform could be enough to provoke them. We must not give them an excuse. We require increased deliveries of arms to defend ourselves."

"Certainly, I understand, Excellency."

"The ministries have prepared a list of what we must have to protect our people and your oil." He placed a linen envelope on the coffee table. "It is our intent to pay for these purchases with our oil, for it is all we have to give." Mussolini swept his arms wide, palms to the sky as an expression of poverty.

"Of course, I shall communicate this to the appropriate officials in Berlin this afternoon."

"Thank you, the Italian people rely upon our German brothers for so much. But now I must address the Parliament and see to the mobilization of our military. As I have said, we fear an attack from any quarter with no warning."

"It is always a pleasure to meet with you Excellency." Both men shook hands, the ambassador bowed as he left, a sly smile on his face. Both men knew the custom was already archaic, but habits died hard.

The German delegation drove in an armored Mercedes back to the embassy. "What did he have to say?" the Chief of Mission asked.

"He cut off our credit."

### Chapter 20: Odds & Ends

"We did not build National Socialism for some garlic-smelling Wop to try to squeeze us for our last drop of blood." Hitler raged.

Speer seemed oddly unmoved. He held a handwritten report in his hand, "The have us in a bad spot, we are faced with a very nice problem indeed. The Italians are providing the vast majority of our oil. Without it we," he paused to find the words, "we have no wind in our sails. Motionless. Our reserves allow less than four months operations at our full tempo."

"What we need, we will take, and Russia is the key," Hitler had calmed a bit. "We must smash the Bolsheviks, with them out of the way we can deal with the Italians. The British and American incursions come after that. One, Two, Three." He waved his finger like a conductor of an orchestra. "If need be, we can offer negotiations to distract the English; to free our hands for the Italians. But first we must fulfill our historic destiny to pound the Communists into the dust."

Hermann could see this was the turning point, perhaps of the war, perhaps of history itself. "The Russian offensive has petered out short of Moscow, they are vulnerable to a counterattack. One more good push."

An Army general objected, "We can say the same for the situation on the North Cape or in the South of France. These incursions are not yet secure. A hard blow will puncture them."

Speer looked doubtful, "I can manage to reduce some oil consumption. We should also be able to increase production from Ploesti by some factor. We can hit one place or another."

Hitler nodded, he had made up his mind, "First is the attack on Russia, next is preparing for taking Italy, then air defense. Active operations against the Americans and English will have to wait for now. I expect the Foreign Ministry to help us on that front."

The Swiss Embassies in London, Washington and elsewhere around the world represented German interests in the enemy capitals. Rippentrop called for his Swiss ambassador and asked for the "use of the good offices of the Swiss" to deliver a message. The Swiss encoded the German message and transmitted it to be delivered as quickly as possible.

In Washington, this meant a visit by a minor Swiss official to the State Department duty officer at Foggy Bottom early on a Sunday morning. The functionaries exchanged carefully noncommittal niceties before parting.

The President was in Syracuse, New York presenting awards to local worthies. His voice carried around the room in Washington from the tiny telephone speaker, "He's on the ropes then. Playing for time. Does he really think we'll fall for this?"

"Probably he does, Mister President. He would jump at the chance if the situation were reversed. He cannot see it from our point of view," Winston replied.

"Does the other Winston know about this?"

"The British Oversight people notified us as soon as it came in."

"And the British position?"

"Churchill is ready to publicly announce, and renounce, the proposal in Parliament in a few hours, he wanted you to know."

"Notify the Russian Ambassador at once that the Allies together reject this attempt to separate us from our Soviet co-belligerents. Also tell him we do not ask for and will not accept any truce or terms that do not restore the status quo antebellum. This comes personally from me to Chairman Stalin. Personally, understand?"

"We will notify the Secretary Hull, Mister President."

"I'll call Hull. I'm canceling the rest of my junket; I need to address the nation. I guess if I can do that best from New York." The line went dead.

The four men looked at each other in silence.

"Why is everyone so dead set on making this public?" Winston asked.

"Not my area, but I suppose they figure Joe will hear about it anyway," Larry replied.

"Also, I can't imagine anything worse for German morale than the news Hitler is ready to talk," Tom added.

Bob was on the phone, he cupped his hand over the receiver, "This could be it."

The Commander of United Nations Forces Far East read the message with anger. "We have just about sunk the entire Jap fleet, we have them cut off from the oil in Sumatra, we have an entire Jap army ready for the killing blow and they do this?"

"King is taking his fleet north, priority is shifting up that away," the chief of staff extended his hands in despair.

"Okay, he's what we do," Ike pulled in deeply on a cigarette, "Move the attack on Formosa to the back burner. Far back burner. Get those units up north, at least we'll keep our eye on the ball, God knows what Washington is thinking."

At Dutch Harbor, Alaska, trains from Marine Corps bases all over the United States discharged fighting units and thousands of tons of equipment. Amongst the piles were huge amounts of perforated steel plating, the kind used to build and repair runways.

The Riviera Lodgment reached a rough equilibrium a week or so after the initial landings. The Germans were forced back toward their bases, while the Americans found their supply lines growing longer with each advance. The liberators were forced to pause to gather strength. The defenders were given a pause to improve their positions.

In the same way, the British forces in Murmansk went over to the defensive as more and more ships unloaded at the recaptured port.

Only in the sky did the Allies continue the war. The German airfields on the French Atlantic coast were neutralized, their aircraft evacuated or destroyed. With the last Condors left the final hopes of isolating Europe from the New World.

As autumn turned into winter, 1942, the maps in the newspapers seemed static, but the unending stream of convoys from America assured Allied strength was waxing as the Germans were waning. Slowly.

After four months, Omar Bradley was ready to strike again. He preferred a simple headquarters, in this case a caravan parked in an olive grove. He convened his three army commanders under a tarp away from the winter sun.

"We are going to go for Brest, Giant Two," he began. "With Brest we gain another Atlantic port, we close off the last threat to the Atlantic and improve our air link to London."

"What of Paris? What of Giant One?" The French commander was prohibited from smoking in front of Bradley, but the man reeked of tobacco.

"A political target. We cannot divert ourselves from the military realities to chase a political goal. Breast gives us more advantages, Paris gives us a million more mouths to feed."

"We object to leaving Paris in German hands during the winter months. People, French people will freeze."

The commander of the Allied Airborne Army, the only British representative around the table changed the subject. "We must go next week. Then we have the partial moon my units will need to make the jump. Three divisions laying a carpet the mechanized units can roll on all the way to the sea."

Bradley continued, "First French Army on the left, Patton will be on the right, Allied Airborne Army to the front. An operation built for speed. Another advantage of Giant Two is we will have only one open flank."

"A race for Brest!" Patton switched into his accented French. "I have one hundred francs that says I will meet your first units on the docks."

"I'll take it," the Frenchman replied.

The meeting broke up and the commanders walked to the motor park.

"This is unacceptable," the French commander said in his own language, "The Provisional Government insists on taking Paris as soon as possible."

"How can you insist?" Patton smelled conspiracy in the air.

"Watch and learn, subtly in the political arts is a French specialty."

"Okay, I will meet you under the tower then. With a glass in my hand."

"In your dreams."

In the East, the lines stabilized for the deep freeze. The Germans accommodated an entire corps in Moscow itself, along with the SS Special Action Groups that swept through the city time after identifying, capturing and disposing of 'destabilizing elements.'

Leningrad and Stalingrad remained in Soviet hands, both being secondary targets in the initial campaign. The Germans extended their railheads deeper into occupied Russia. Soviet partisans delayed the effort killing Polish slave workers and German troops alike. At the same time, the Soviets gathered their strength for a climatic battle.

Stalin had set up his government in the Crimea. He himself lived in a seaside villa built years before for some forgotten prince. Cynics observed the Politburo could escape to Turkey if the need arose. Wise cynics kept this observation to themselves.

"It has begun," the dictator looked up from a telegram to his war cabinet. "Attacks toward Stalingrad from the north and west, here and here."

"He is coming for us," Sukov said quietly, "it will go very badly for him this time."

Stalin nodded, giving him permission to explain the secret troop deployments..

The marshal addressed the other men in the Stavka. "At the direction of Comrade Stalin, we have gathered our mobile strength for a threat to the Nazi's oil at Ploesti. By coming to the south, the Hitlerites are bringing themselves into the reach of our most deadly formations. Further the defenses around Stalingrad are stout, the strongest in the world. This will be their final battle. Three shock guard armies are refreshed and rearmed and already two additional armies have arrived from the Far East. Now we need not defend, we can take the fight to them."

Stalin continued, addressing the other senior commanders, "He has been bled white. His plea for peace with the Imperialists has been rebuffed. Hitler's invaders are clearly on their last legs."

He turned to his son, now the commander of an air force that no longer existed, "Go to Murmansk, I want you to ensure the greatest possible support from the Allied bombers. With that we can ensure our victory."

The French Post Office maintained an independent network of telephone lines connecting its facilities throughout the capital. A radio operator used a codeword to activate the resistance cells across the city. Their orders were to ignite an uprising, something the Parisians had a long history of.

Franklin Roosevelt's voice did not boom across the scratchy transatlantic link. Still his tone was unmistakable. "I will not have those jackbooted thugs bringing Paris down around the ears of the Resistance. Do I make myself clear?"

"Certainly Mister President. We have a plan we can use to get there in less than a week."

"Wonderful, wonderful Omar, I knew you would understand the political realities of all this. History is watching us all you know."

Bradley called another meeting in the olive grove in less than an hour.

## **Chapter 21 Russia Again**

Late November 1943 the Russian mud had been replaced by hard frozen ground. Ideal for heavy vehicles. The German tanks moved slowly, really no faster than a man could walk, but relentlessly, not delayed by bad roads, streams or anything sort a major effort at defense. This they met at a nameless junction of cart-tracks optimistically marked on the maps as roads. The Battle of Stalingrad began well northeast of city.

The corps commander ordered his command vehicle, a *Panzerbefehlwagen*, to the top of a nearby hill. No spotter plane was available so he judged the situation by the sound of battle and the reports on his radios. No small-arms fire, instead the high-pitched whine of the panzers firing hypershot and the thicker roar of the Russians replying with their rockets and smooth-bore guns.

He ordered his lead division to take up battle formation and be prepared to rescue the reconnaissance element on the left front. His order to such experienced commanders took less than a dozen words, they had done it a thousand times before; maximum speed, flank the defenders on their right. They could do it in their sleep.

The gray machines were coated with brown dirt. As they rolled by the running gear made an annoying warble to contrast with the engine noise. Some younger soldiers stood and cheered their commander as they rode past. He returned the salutes with a smile, but was most impressed by the seasoned veterans who seemed to be nodding off in the back of their carriers before yet another battle.

The battle ahead took the expected form, the commander even felt himself begin to doze under the warm sun when another noise reached him. More tracked vehicles, but not German. With his binoculars he could see them, earth-brown T-37s, the best they had. A few boxy APCs followed on their heels. He reached for his radio to bring his other units into line of battle. Then he made a quick call to the Army commander who seemed unperturbed.

"Ivan is coming out of his damn holes, I am swinging fifty-seventh corps to pass through you when you break them. Keep moving."

The corps commander was experienced and confident, but the morning had certainly taken an unexpected turn. A motorized regiment rushed by him to plug the hole. Mounted infantry against marauding tanks was not the ideal solution, but would have to do. The unit raced to reach the protective defile offered by the low ridgeline, they crossed a footpath and began to hit the landmines.

The corps commander saw at least four vehicles explode as the counterattack fell into confusion. He ordered his vehicle to move back to the previous rise, there he got out and personally directed the next regiment to arrive into a hasty defensive position.

A single German tank did not show up on the navigation radar, even with the new ground-surveillance upgrade, but eight columns of armored vehicles converging on the middle of a near-featureless plain gave a distinct radar echo. The raid commander began to orbit, directing the incoming bombers with colorful flares to the targets eight miles below.

Each B-29 carried a mix of scatterable mines and bomblets. While it was impossible to see the enemy at such a height, hitting the few road junctions ensured the critical wheeled support vehicles, the fuel tankers, ammunition trucks and ambulances suffered decimation.

By the end of the fourth day, the Germans had fought the Soviet counterattack to a standstill, and had shattered two of their own corps doing so. Another Russian attack had already begun further to the

south.

Later Churchill would call Stalingrad "The Hinge of Fate." The Soviets fought like savages, the Germans for the final victory they had sought for two years. The result was the biggest armored clash in history. The Germans, rebuffed by artillery rockets that blackened the sun outside the city itself threw a bridge across the Volga to the south. Hitler ordered his last reserves to cut off the city. Unknowingly, their path carried within a hundred kilometers of Stalin's secret headquarters.

"Then what happened?" Winston asked.

Bob was laconic, "We don't know for sure. It seems Beria tried a coup. He may have even pulled it off, but then someone took a shot at him and now nobody seems to be in control."

"So the Soviets are out of it? Have we lost?" Tom's voice was full of weary disbelief.

"Hard to say. I would never count out the Russians, darn hard people, insanely patriotic." Winston replied. "A whole new ballgame though."

Professor Hermann arrived back at his Berlin apartment surprised to find a hole in his closet's floor. A ladder led up from the apartment below, and on the ladder was a smiling colonel in a black SS uniform. "Good evening Herr Doctor, I hope you will excuse the intrusion. The door to your flat is always under observation."

The time traveler let the officer help him down the ladder where in an apartment just like his sat a half-dozen men in shades of gray and black.

After pro forma introductions, Field Marshal von Witzleben sat back down, "In truth, I suspect you know who we are, or at least you know the sort of people we represent. It is time to end this, and it seems only fair for you to play your part."

An intelligence officer named Oster continued, "They are trumpeting about a victory in the East, but in truth we do not have the oil we need to continue the fight for even another two months. The Luftwaffe is all but grounded, the Army is shattered. We have indications of coordinated British attacks in the north and American ones in the south. We cannot meet them with any hope of success."

Hermann nodded, "I knew it would come to this point; now the Russians are destroyed and we ourselves must cut the head off the our own beast here. There is one thing I never told anyone about."

## **Chapter 22 Two Different Things**

The Eighty-second Airborne Division was older than its twin, the One-oh-First. To it went the honor of taking the furthest landing zone, Charlie, less than thirty kilometers from Paris itself. The British First Airborne drew the closest to the line of departure, Alfa. The Screaming Eagles went into dropped onto edge of the Central Mastiff at a place marked Bravo.

The C-13 cargo planes took off with their ramps removed. The paratroopers enjoyed a wide view of the wintry landscape. The master navigator was really a bomber crewman dragooned into the Air Transport Service. He watched the delicate equipment that kept his plane on an invisible radio beam. He fired a yellow flare.

"Three minutes!" The jumpmasters yelled. The men were attached to an overhead wire by a static line. The overloaded soldiers used their other hand to keep their balance. In the distance German antiaircraft fire was blasting away at decoys making lazy circle over a nearby town. The light turned green. The stick of thirty paratroopers waddled to and the through the opening in the back of the transport. After the noise and confinement of the aircraft, being free of it in the open sky was a relief. Patches of snow reflected the gentle moonlight. Just like a Christmas card, Robinson thought as he took one very long step. His chute opened with a crack he felt as much as heard.

Robinson hit hard. Like a sack of coal. He popped the release of the confining harness and stretched. Even with the belts fully extended, it was slightly too small for comfort.

"Com'on!" a voice whispered. It seemed like good advice. Robinson followed a shadow in camouflage to a stone wall along what must have been a dirt road.

"Who's here?" the lieutenant sounded scared.

The men replied by name. "OK, Sergeant McDonald snapped an ankle. Robbie, you take over."

"Yes sir." Robinson whispered. The sharp crack of automatic weapons fire came from the other far away, on the other side of the low wall.

The officer continued, "Checkpoint Three is that a-way, so we go this a-way, besides someone shooting at someone. Follow me."

Robinson waited for the platoon to form a loose line and fell in as the last man, the Platoon Sergeant's spot.

More planes came overhead. The gliders were especially startling, fast silent shapes that seemed to pass inches over their helmets. The soldiers moved south through the woods at a quiet dogtrot. They passed what must have been a village, a lightless jumble of sheds and stables. Before they got to the next habitation the sound of ripping linen came from their right. A stream of tracers from a German MG42 ripped through the air. The bullets arced off away from them. The little formation stopped.

"OK, that up there is Objective Six, I think," the lieutenant sounded calmer. "We need to get closer and take out that machine gun and secure the town square. We need to keep Route Green open. Form up as skirmishers and kept quiet."

The twenty men advanced at a walk in a line abreast, Robinson was on the right and a few steps behind. His men appeared and disappeared in the shadows of the trees. They came to the end of the forest and took cover. The machine gun opened up again, this time in their general direction.

"Can you see it?" the Lieutenant was suddenly beside the new platoon sergeant.

"In the top of that barn. There's a window or something on the long side, about in the center."

"OK, here's what we'll do. You collect a couple of SAWs and take them to the left. First squad is there. Fire them up and distract them. I'll move the rest down the slope on the right, try to keep on their blind side. When we get in range we'll hit them with rifle grenades. You open up for real and we'll enter the building."

"Sounds like a plan." Robinson moved to the left, picking up two of the automatic weapons teams to add to the one from first squad. He placed the six men just inside the tree line and pointed out the target. He stared at the structure to his front, he estimated the range to be a hundred or so yards. Calling out instructions in a loud voice, he had the guns open up one by one. The return fire smacked into the dirt ahead of him which kicked up dirt and rocks. A second burst went high and threw leaves and branches down on them. Without orders all three guns opened up at once. Someone screamed to his left.

"So much for short, controlled bursts," Robinson thought. The German gun went silent. He rolled to the wounded man. No idea who it was. Blood coming from the meaty part of his arm. The platoon sergeant pulled off the bandage sewn inside the man's battle tunic and applied it. No need for morphine. He looked up as the grenades splattered on and around the barn. Daylight was starting.

"Open up, fry the barrels," He screamed. He took his place next to the nearest gun and began to pass ammo to the gunner. "Sweep the attic." The building began to burn. In the distance a whistle sounded. The guns ceased fire. In the gathering light he could see the green-and-brown coats of the platoon as the began to exit the barn and collect themselves on the short side.

"Watch the other buildings. When I give the word we'll cross the open area by teams." Robison wished he had a cigarette.

Moving across Berlin had become a gamble. The chance of an American flying bomb striking you were quite low. It was a long-odds game played for very high stakes. Someone described the effect of the Anglo-American bombing as being like the long all-day headache from a hangover. The city looked shabby with boarded-over windows and collapsed buildings spread randomly.

The Party limousine carried Hermann to an estate on the Tiergarten, the government buildings downtown were too much of a target for a major conference.

He knew the higher-ranking marshals of course, but the rest of the crowd was mass of senior generals who seemed as common as captains in such august company. White-uniformed waiters moved from one knot of celebrants to the other dispensing French champagne on silver platters. A one-armed general in an Army uniform was assigned to keep the professor company. He did not know exactly what to do in such a situation, but common sense dictated he keep the man sober and away from those not involved. They walked into the garden and ended up by the lake.

"I was born in Dresden, more than twenty years from now."

His companion let him talk, "It was destroyed in the war, in my war. Allied bombers dumped tons on incendiaries on the city, it went up like a tinderbox. Two of my grandparents died in the basements of Dresden."

"Dresden is fine this time around. I was there two nights ago," the general shut up. Let him talk.

"The British wanted to impress the Russians. They came a few weeks later. My mother, well my mother she was raped. Even as a child I could tell she always seemed sad. The Russians set up a puppet government, split Germany in two. They built a wall. When I was forty years old, in the 1990s, my son could no longer stand living in the cage of a Communist Germany. He tried to escape and died in prison."

"Is that why you have done this?"

Hermann shrugged, "For the first few months I tried to convince myself I was in a dream," he swept his arm to a bloodred banner with a swastika on a security boat, "in a nightmare. Then I thought I had simply gone mad. Only later did I have a plan. I set out to ensure these things would not happen again."

"So you helped Hitler?"

"No, Hitler was inevitable. He is the product of too many forces of history. He could not be stopped. But ideally he could be used to stamp out Stalin and prevent Dresden and all the rest."

There was a change in the sound of the crowd, a mummer of excited anticipation. "It is time, I think," the general said.

"The one thing I never told him about was this," he patted the belt under his coat, "I always knew it would come to this." The men turned and walked back up to the house.

The back of the house had been extended with a low stage, perhaps a hundred chairs on it faced a raised dais that held less than a dozen chairs and a simple podium decorated with a gold eagle clasping a swastika. Hermann worked his way up to the steps like a sleepwalker. He noticed his vision had become narrower, as if he was looking though a paper tube. The crowd sound became muted.

A drunken Luftwaffe general slapped Hermann on the back, his escort moved him away. Hermann climbed the steps.

Himmler walked up beside him, already his SS officers had formed cliques away from the men in grey

uniforms. "A great day, Herr Doctor."

"Much remains to be done," Hermann felt oddly calm and gave a thin smile. The higher-ranking officers merited seats on the stage closer to the podium. At some unspoken signal, the crowd began to arrange itself.

"First the Italians, it will be just like France. Then we return to the British and Americans. This is not the end, but it is the beginning of the end."

Goering, in a pale-blue uniform, Speer and all the rest pulled themselves from their admirers and joined them up on the stage. A roar went up from the front of the house. Hitler had arrived. Hermann noticed for the first time two newsreel cameras on raised platforms in the sea of standlings.

Hitler came through the house, his perfectly-tailored pale grey uniform in sharp contrast to his red armband. He wore the ribbon of the iron cross, third class.

Hermann stood in front of his chair between Speer and Himmler and assumed something like a civilian position of attention. Hitler came down the line one by one shaking hands with a practiced motion.

"Doctor, you look like you have seen a ghost!" Hitler leaned a little too close to Hermann's face. He sniffed, checking for excess drinking.

"An exciting day, mien Fuher."

Hitler finished his greetings, turned on his heel and took his position to Herrman's right front. With formality he grasped both sides of the podium.

"I am pleased to announce the Russian Provisional Committee has accepted our demands for a truce. The fighting in the East shall stop at midnight tonight, Berlin time," the crowd roared its approval. Stalin and his henchmen are dead! The stain of the Bolsheviks is finally expunged from the Earth. The people of the world owe us a great debt."

Again, the crowd broke into thunderous applause. Hermann clapped his hands with all the rest. They felt tingly, as if they were shot full of some painkiller.

Hitler basked in the sound of the crowd, he let it sweep over him like the waves of an ocean. He looked serene and very pleased. His life's work was done. "There is still work ahead," he began again.

Hermann reached into his pants pocket and closed the contact that detonated his bomb.

## Chapter 23

"How can we be sure?" Winston asked.

"We can't be sure, not for a few days at least." Roosevelt replied. "The situation is very confused. I still think one of our bombs got him."

"In the long run, it doesn't matter. The Germans are portraying it as a coup attempt by the SS. The Army has a firm hand on the radio stations and all the rest," Tom replied.

"A done deal," Winston agreed, "but now what?"

"A peace conference I suppose. The Germans will have to disgorge what they have taken. Free elections in the occupied territories, return to prewar frontiers." FDR was still in his pajamas, "in any case, it is almost done in Europe, thank God."

"The Pacific remains wide open." Larry said quietly, "Ike has Japs up to hip level on Luzon."

The President waved with a smile to the navy man. Bob explained, "The Japs are goners. Their fleet is mostly rusting on the bottom and they cannot build another. The home islands are cut off from all trade,

that is a nice way to say they are staring starvation in the face. Besides, the Olympic invasion is scheduled to go in two weeks from now."

"It is only a matter of time for the Japanese now. We just have to find a way to get to them with minimal loss of life."

It was a typical military operation, a mass of confusion and inefficiency. First Marine Division embarked on a little fleet of landing ships accompanied by a half-dozen LSDs. Then they waited in the harbor for three days while Second Division loaded into their flotilla. The port facilities at Juno and Dutch Harbor combined Alaska simply could not accommodate all the ships at once.

That done, the landing forces left port to meet with the convoy of supply ships already waiting there. When the bombardment group arrived, over two hundred ships turned west and headed due west to the Kuril Islands.

In the predawn hours of 6 July, 1943 one division each came ashore on Inturup and Kunshir, the northern and southernmost of the island chain. Both islands were undefended, almost uninhabited. Within three days, the Seabees had set up primitive landing strips for the fighters flying in from advanced bases in Alaska.

"The Home Islands have been violated." The Army Minister said with disgust. "No amount of talk will change it."

The Navy Minister replied, "We cannot protect every island. The Combined Fleet was severely damaged in the southern campaign."

The Prime Minister was an Army General, "And how badly damaged admiral, your reports have been too detailed for an old man like me to understand."

"One carrier is still operational, but in truth we lack the pilots we need for her. We have retained several cruisers for the defense of the main islands."

"Cruisers? What of our line of battle?"

"On the bottom gentlemen, they along with most of the rest of our fleet. Our merchant navy has fared no better. We can not supply our troops in Malaya, the Philippines or elsewhere. Only in the Inland Sea can we move supplies freely." The admiral hung his head in an exaggerated display of shame.

"Can the shipyards, can they replace our losses?"

"I advanced the construction of major fleet units to attack the Americans. Now are yards are mostly empty. We also lack trained sailors to man new ships."

The Army Minister spoke again, "Also we lack the oil to sail any new ships, or for any other purpose, is that correct?"

"In truth no. The Admiralty stockpiled a good supply of bunker fuel before the war. This was to supply the fleet. Since the fleet no longer requires the fuel it is available for other uses."

The Prime Minster spoke in a voice full of kindness, "You have done all that was required of you. No blame can be attached to you for these events. Others made policy, you simply did your best to implement it. If anything, your actions have spared us from even further harm." His tone was so polite as to be a condescending insult. When the meeting broke up the Minister returned to his office and ended his shame forever.

Four cruisers, one of them not quite whole from an American bomb taken north of Luzon sailed from various ports and headed toward the Kurils. They gathered an escort of destroyers from each harbor

they passed. Sailing at night and at full speed, they were halfway to their targets by daylight. Opposing them was the American Pacific Fleet. Not that that mattered directly.

By stacking the B-17s nose-to-tail on the taxiways, the Americans were able to put ninety of the aircraft up in sort order. They circled an imaginary point south of their bases, forming three huge self-defending box formations.

"Last one," the raid commander said on the intercom, "Let's go."

His pilot made a slight turn to port and watched his compass spin. "Off to see the wizard."

Already the first twin-tailed Lightning were coming up from their rear to overtake them. In an hour a swam of the huge fighters would be well above and ahead of them. An hour after that they would be over the Japanese fleet and well within range of the enemy's land-based fighters.

The raid commander selected his frequency for the entire formation. "Circle here," he released a single green flare. His modified bomber lumbered on at 30,000 feet. Less than twenty minutes later he saw the flickering blip on his sea-scanning radar. Then he sighted the little fleet itself with his binoculars.

"Four heavies, twenty tin cans." He looked through the nearly-clear skies and made his decision, "Snipers in pairs, now." He listened for the acknowledgement and waited for their arrival.

The first pair of bombers arrived at about the same time as the Zeros. The B-17s released their huge guided bombs, the bombardiers tacking the bright flare in the tail as they guided the warheads in. Both planes flew straight and level.

"Bring me some fighter cover back over the target," the commander spoke quietly as one of the huge aircraft began to spiral into the sea. He could also see one of the cruisers make a quick turn to starboard. Perhaps a hit on her steering gear.

He ordered the next set of bombers to stay close, his own ship went in with them, a violation of doctrine. His guns contributed to the defense of the two snipers. On paper the Zero was much inferior to the American fighters, but he discovered the speed of the Japanese plane was frightening when seen close up. Black bursts of flack began to blossom around him.

"Call it two hits," they are making smoke, "give me another pair." All the cruisers seemed disabled when the last set of guided bombs struck home. The Lightings arrived. The targets were being obscured, but at least the pesky fighters had been driven off. Low and to his north he saw a number of two-engined "Betty" bombers flying north. No concern to him.

"Okay, ready for the fish, all at once."

Almost eighty bombers drove in. Unable to see individual ships, they simply released two torpedoes each into the haze defacing the blue sea below. More than 150 fish began their slow interlocking circuits, it was impossible for any ship to avoid at least one hit.

"Bring in the recon, everyone else home." The raid had lasted a bit more than thirty minutes. The commander felt suddenly cold. He realized perspiration had stained both armpits of his flight suit.

In the Pacific, a Mustang was considered a short-ranged fighter. As the Japanese bombers were spotted on radar, the planes were launched from both the carriers and the airfields. The task force commander was concerned.

"Hell of a mess if the B-17s try to land when the Japs are bombing us or the airfields." He looked at map. "Plot an intercept here. Kill them at a distance. Keep the antiair batteries ashore on 'hold.' I do not need anyone shooting up the Air Corps. Have the fleet and the shore batteries make smoke starting now."

"Aye sir, the raid commander reports he cannot hold in a pattern, his guys are short on fuel." The

operations officer reported.

"Let them come right in. With any luck, they won't even know anything is happening at all."

Three dozen Mustangs made the intercept and swooped down on the unarmed bombers like eagles. The Japanese responded by flying lower and lower, making each high-speed fighter approach a dangerous dive into the sea. Well over half the raiders were knocked out of the sky, two blowing up midair in spectacular fashion. Thirty managed to leave the ambush zone and continue on into the area reserved for the for the air defense gunners.

The Mustangs regained altitude and prepare to attack the bombers again when they left their targets.

Chief Petty Officer Jesse Black won his rating, as antiaircraft gunner by the simple expedient of graduating first in his class at Fort Bliss, Texas. As far as he knew, he was the only Negro to hold the Best Job in the Navy. He manned one of the four forty millimeter auto cannons on the frigate USS Perry K. Stevenson.

He sat at his station, a comfortable chair under a bubble canopy. He adjusted the powerful flow of air from the compressors to keep the perplex clear. With one foot he rang an alarm to clear part of the deck before he swung the weapon left, right, up and down to its limits. "Ready," he said into his microphone.

"Looks like fifty inbound, bearing 260, very low. They will try to gain altitude to bomb."

Jesse mostly ignored him. His fire controller believed the radar reports he received, he was always more pessimistic. The sun began to bother him, he lowered the tinted visor on his helmet.

The ninety millimeter guns from the ship's main turret made a sharp transonic crack as they began to engage. Jesse tracked his gun across the horizon, scanning each degree of arc himself before seeing the dark planes right where the controller predicted.

"He's still an asshole." Jesse thought. He thumbed a switch on his control and the gun barrels began to spin at half-speed. A friendly green light on his instruments promised all chambers were loaded. A loader smacked the canopy, a traditional wish of good luck. It was the last thought Jesse had not related to the approaching planes.

The big guns were firing quicker now. Eight of them each putting out a dozen huge rounds a minutes. He lined up the nearest plane and elevated above it. A second green light brightened on the edge of his field of view. He depressed his trigger.

Red tracers reached out at the slow rate of four per second. He saw them arc above the bomber, and then fall below it. He increased the speed of the spinning Gatling gun and applied more elevation. He saw an engine fall away and the place break apart. By then he was already slowed his gun and was waking his fire onto the next attacker.

The ones coming in head-on were easy. It was the ones passing to either sides that had apparent velocity that were a challenge. The shooting was complicated by the red tracers streaming from lesser guns on lesser ships.

A tone accompanied an amber light. One of his magazines was low. He ignored it and kept firing and the light went out as a crewman dumped more shells into the hopper. He lined up a green plane in his sight, but it gained speed as it rushed from his left to right. It smacked into a destroyer ahead of his frigate.

"Shit."

"They're ramming ships, they are not bombing," his controller told him. "Swing to port."

Jesse already had the inbound in his sights, and easy one that seemed to hover in front of him as it grew in size. There was a silent flash of yellow-orange and the bomber pitched up and hit the water with its tail less than two hundred yards away.

Now it was the smoke from burning ships and exploding shells that cluttered up the sky. The gunner leaned back and brought his gun to the center of his sector, he forced himself to move his head and scan the filthy sky.

A last blunt aircraft swept passed him from his right at an impossibly close range he swung the gun around in vain as it crashed close enough to splash seawater over his bubble.

"Good shooting!" the controller was overly excited.

"Asshole," Jesse thought silently.

In the weeks that followed the Boeings began to range as far as Tokyo itself. Flying in small formations, they avoided flying over the islands themselves and used their bombing radars to drop hundreds then thousands of mines into the Japanese harbors. The Army fighters attempted to find the raiders, and inflicted some casualties. More of the Japanese planes fell. Without imported raw materials they could not be replaced.

The Chiefs of the Imperial General Staff along with the Prime Minister had regular conferences at the Imperial Palace. Protocol had the Navy representatives hit on the Emperor's right. The Army men sat cross-legged on a traditional mat across from them at low table. The Prime Minster sat opposite the Emperor at the foot of the table.

"The war has not progressed favorably," the Prime Minister began. The Emperor nodded silently. "While our navy has inflicted a heavy blow on the American and British fleets, we have been

hampered by our own losses. Especially grievous has been the loss of so many brave naval fliers."

The new Navy Minister continued while looking down at the table, "The officers and men have made superhuman efforts but our losses have been significant."

Silently, the Emperor nodded waved a hand to indicate the men in olive green.

The Army Minister kept his eyes down, "The Army has continued to push back the Chinese at all points. Since we last met several hundred square kilometers and important towns have come under our control. Our units continue to fight in Singapore and Luzon. We hope for great things from these units."

It was a pantomime show. The Prime Minister had the next line, "If we gain Manila and Singapore, then we can gain the materials from the Southern Resource Region?"

The navy man was forced to admit, "No, we are unable to gain those resources even if our armies are successful."

"Can the air forces of the Army strike at the Americans?"

The Army Minister shook his head, "Many of our best fliers have died defending the homeland already."

The Prime Minster said, "Then we must strengthen the Army in our main home islands. We will force them to come to us where the superiority of their weapons will be less and of our superior spirit more."

With that the Emperor stood and ended the meeting.

The death ride of the Japanese Navy went almost unnoticed on the two islands. Navy Construction Battalions scraped at the volcanic soil making rude landing fields. Even before they were done, the Air Corps engineers were laying thousands of tons of steel matting to bear the weight of their heavy bombers. Then came fuel and ammunition dumps, huge stores of spare parts, repair shops and a thousand other buildings. The number of B-17s at the six airfields reached four hundred as the spring of 1944 arrived. Enough to strike the cities.

"Is this really necessary?" Winston asked. The time traveler, his advisors and the Chiefs of staff had been summoned to the Oval Office. Winston thought the building looked somehow shabby. So did the President.

"The Japanese do seem to insist," Admiral Leahy replied, "do you have another way?"

"If we invade, we play into the Japanese strengths. Look at our losses on Formosa." Marshall was ticking off a mental list, "If we use gas we will be accused of being just like the Nazis. If we use firebombs much the same. But if we let them starve, well, that will take years and that is the best thing I can say about it."

"Those people had no business starting this thing. It has been like a puppy getting hit by a truck." Tom said.

"Don't forget, and it is easy for us to ignore, what the Japanese have been doing in China for years away from the newsreels and AP reporters," Winston seemed to be screwing up his courage. "They are real people and are being slaughtered every day. How will history judge us if we allow that to go on for another year or two?"

Marshall replied, "The greatest war crime we could commit now would be to let this thing continue. We must end this war now."

Roosevelt never let his opinion be known until he heard them all out.

"Send in the bombers. Start with Tokyo, we might get lucky."

T'is Done. I am somewhere between sick of it and proud of it. I hope you enjoyed it, I certainly did.

Having reached the required 50,000 words, and having run out of time, it stops here. I note that it lacks several things, so it's really a work in progress:

1. An ending.

- 2. Rocket launchers in action. Only mentioned in passing.
- 3. Same for bazookas.
- 4. I really mean for the Japanese on Luzon to get hit with AC-47 or AC-13 gunships.
- 5. Jamming and electronic warfare.
- 6. More on the Special Operations submarines.
- 7. Something about China.
- 8. More on Black Americans. This was the height of the Harlem Renaissance after all.
- 9. More on the twin-tailed Lockheed Lightning.
- 10. The partisans in Russia were fun. We need more of them.
- 11. What about French partisans?
- 12. The second-generation Pershing tanks never made it to service.
- 13. A clear explanation of the situation in Russia. Moscow fell, but not Stalingrad or Leningrad.
- 14. More on the invasion of Formosa.

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