THE CREW OF THE

REAMATROID

A B-29 Superfortress

6th Bomb Group

Grand Island, Nebraska, 1944
Tinian Island, 1945

This story of Crew 3909, of the 39th Squadron of the 6th Bom Group, 313th Wing of the Twentieth (20th) Air Force, during World Wa II, was compiled in 1985-88 by its navigator, Donald W. Kearney. It wa written from notes and diaries made by him at the time, and fro subsequent reflections of various members of the crew, and confirmed b publications issued subsequent to the war.

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The Crew of the Reamatroid

by

Donald W. Kearney

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Foreword

The story told here is true. The participants are real. The events depicted actually took place as described.

The intention was to have this be a chronicle of the experiences of our crew as a whole. It is, but not in the way initially envisioned. The original approach threatened to turn it into a dry and impersonal tabulation of dates and targets. But the story of the crew has equally a personal side--thoughts and feelings as well as events. However, in trying to tell about those, I found that there were too many instances when I was not sure I could speak for the whole crew. Many of the thoughts and observations were mine alone. So, I had to write this basically as a personal account. Even so, there still are many times when I do presume to speak for the whole crew. Thus, in the narrative, "we" usually means our crew--although sometimes a larger "we": the Squadron, the Group, all B-29s, etc. Nevertheless, even though the story is told from one person's point of view, I think it accomplishes the original objective--to relate the adventures, and misadventures, of Crew 3909.

The story will be most meaningful if read in the context of 1945, when it took place, and 1946, when basic parts of it were written. As one small example, reference is made to the navigator's "computer." Of course, the computer as we know it today did not exist then. The navigator's computer was an instrument about the size of a salad plate. It actually was a circular slide rule with a grid for plotting vectors (wind vectors when used by a navigator).

Similarly, the use of the term "Empire" sounds strange today. I don't know how the term came about. We used it to mean (only) the home islands of Japan. It seems that it might make more sense if it meant all except the home islands. Be that as it may, calling the home islands the "Empire" was the way we talked in 1945, and it served a purpose then. The point is that the many intervening years have clouded an appreciation of that purpose, which can be fully understood only in the context of the conditions of 1945--when it seemed wholly natural to think of Japan as spread over an area much larger than one would think of today.

Touching on another aspect of terminology, a crew was identified by its pilot, so the name of the pilot became a collective noun, resulting in sentences like this: "Kelly had to ditch when they ran out of fuel." The antecedent of the plural pronoun "they" was "Kelly"--sloppy grammar, perhaps, but sensible to us.

It may be difficult to recall how advanced the B-29 was in that pre-nuclear, pre-jet age. For many people, I think, films of B-17s over Europe represent the WW II bombing campaign. But a B-29 was not simply an enlarged B-17. The two were quite different. Think of the difference made

by the B-29's power-driven remote gun turrets linked together in a centralized fire control system having mechanized calculation of trajectories. And by the B-29's pressurized cabin. And flaps designed to be lowered in stages so that they alternately augmented lift and drag. And individual radar and Loran. And many smaller features, such as pneumatic bomb bay doors. But most of all, a bomb-carrying capacity and range much exceeding that of B-17s (or B-24s).

It is well to keep in mind the great distances in the Pacific. Any long flight passed over vast stretches of ocean. Hours on end went by without a thing in sight except water. Normally, those hours were uneventful, even monotonous, so that reading a description of a flight fails to give a true picture: The hours that actually made up the bulk of the flight in terms of time are skipped over with hardly a mention. In terms of comparable distance, a bombing mission to Tokyo was like using Atlanta as a base to attack the shores of Hudson Bay, with the intervening space almost all water except for a few square miles at about the position of Detroit, which would correspond to Iwo Jima.

In that regard, one may get the impression that a plane in trouble over Japan needed only to get off the coast to find haven at Iwo Jima. Not so. After getting away from Japan, one still had to fly 700 some miles--about like developing trouble over Minneapolis with the nearest landing site being Memphis.

Time, date, and distance were vital to the work of a navigator. (In my original notes, some of the times are recorded to the half-minute.) So, I feel confident of my information in that regard. Yet, I know other information differs, especially as to date. But remember that much of the time we were living in a different day than the people in the U.S.--as well as being several hours apart. The Monday morning papers in the States, for example, might have had the news of a raid we completed Monday afternoon our time. Of course, I may have made mistakes, but I think that the times and dates given herein are correct for local Tinian time. (If there are errors in dates, they are more likely to be in the early part of the narrative, because I began making notes in a rather sketchy way and got more precise and detailed later.)

Nothing of consequence from my notes has been omitted from the story, but the amount of detail varies because I recorded more at some times than at others. Also, though, the amount of detail varies with the date the final narrative was composed. A good bit was written soon after the War. Recollection was good--and reliable; so, details not in the notes could be included. However, some narrative was composed 40 years later. In that case, since memory just might be faulty, I generally chose to record only that which I felt certain about, rather than fill in with a little guesswork. I decided to sacrifice completeness rather than run the risk of introducing error.

I want to be clear about the relationship of hear-say and the accuracy of this account. Where the story says that we heard some information or rumor, it is reported faithfully--that's what we heard. That's not to say that the information itself was true. In only a few instances have I included a note about the historical truth. The story is true with regard to what we believed at the time, whether or not that

information subsequently turned out to be true, partly true, or entirely false.

On the other hand, every episode about ourselves is true. Nothing basic to the story has been invented for effect, or for any other reason. Even my attempts at humor are limited mostly to my thoughts, real or fanciful, or what I imagined someone thought or said or might have said--all, I think, sufficiently recognizable to the reader (although maybe not recognizable as humor)--but the events that gave rise to the thoughts and comments are themselves all true. I have tampered a bit with the chronological juxtaposition of events, but not with the content of events--and only with secondary events, not our combat mission record.

Except for a few minor attempts at humor, the conversations reported actually took place; some of them, I'm sure, are given almost verbatim because I recorded them at the time or shortly thereafter. In other cases, of course, I made up the words--but not as pure fiction--that is, the conversations took place or at least are representative of real incidents and true to character for the real people involved.

Perhaps it will help set the appropriate tone for the story to relate an observation recently made to me personally by a former senior officer in Sixth Bomb Group headquarters: "I guess if you had to go through the War, the best place to be was the 39th Squadron. They were all crazy!"

Finally, it is fitting to end on a serious note because no one forgot that the War was a deadly serious venture. Apparently, it is not obvious to all of the present generation that we really believed that what was at stake was more important than life itself. At a recent memorial service for those killed in 1945, Chaplain Murphy pointed out that "they didn't lose their lives, they gave them."

Notes I made at the time (in 1945) served as the basis for the story. They were supplemented by recollections--mine and others'--when we were confident that our memories were reliable. Letters written home from Tinian were also used, but generally only for corroboration because the notes were more extensive, detailed, and explicit. Mostly, any use of other sources is documented, the principal ones being:

A Short History of the Sixth Bomb Group, an undated eight-page mimeographed booklet published by the Sixth Group S-2 Section. The last date listed in the booklet is July 29, 1945, so it is by no means complete. It seems that the booklet was produced for crews that completed their missions and were returning to the U.S.

Pirate's Log, A Historical Record of the Sixth Bombardment Group, a 72-page booklet obviously published by the Sixth Group, although it does not specifically so state. Date of publication is not given, but date of printing is listed as April 1946. In several instances, the dates of our missions as given in the Pirate's Log are one day later than the dates in my record. The difference can be explained in some cases when a mission departed one day and returned the next;

but in other cases I cannot account for the discrepancy. (The difference would be in the other direction if it were simply a matter of the Pirate's Log using continental U.S. time.)

The Campaigns of the Pacific War, United States Strategic Bombing Survey (Pacific), Naval Analysis Division, GPO, Washington, 1946.

Air Campaigns of the Pacific War, United States Strategic Bombing Survey, Military Analysis Division, GPO, Washington, July 1947.

(Major) Carl W. Hoffman, The Seizure of Tinian, U.S. Marine Corps, Historical Division, GPO, Washington, 1951.

Guy Murchie, *Song of the Sky*; Houghton Mifflin Co., Boston, 1954.

The following two rather recent books are of interest because they tell of some of the same events. Most of my story was composed before they were available, but I have inserted references to them in a few places where they provide parallel or supporting material.

Chester Marshall, Sky Giants over Japan, a diary of a B-29 combat crew in WW II; no publisher given, n.p., n.d. (c. 1984).

Chester Marshall (ed.), The Global Twentieth, an anthology of the 20th AF in WW II; Apollo Books, Winona, Minn., n.d. (c. 1985).

Wesley Frank Craven and James Lea Cate (eds.), The Army Air Forces in World War II, Vol. 5: The Pacific: Matterhorn to Nagasaki; University of Chicago Press, 1953.

This huge volume, prepared by the USAF Historical Division, is the official history. Nothing else is comparable, certainly not in comprehensiveness. The book is indispensible for any serious study of the B-29 campaign. Nevertheless, I did not use it as a source. The basic story of our combat experiences was composed before it was published, but the more important reason relates to the completely different purposes--the experiences, thoughts, and feelings of one person or one air crew in contrast to the scholarly research and retrospective judgments of professional historians. My purpose is to tell how we perceived the events at the time--without modifications based on information available to us only later. In those few instances where I have cited this official history, it is simply to tell of a source for more complete information than we knew about at the time. It is interesting, although perhaps not too surprising, that our experiences and on-site information show that reality was not always quite what official Air Force records indicate. However, the differences are minor.

Chapter I

Preparation

During the summer and autumn of 1944, the 313th Bombardment Wing (VH) went through intensive training at four airfields in Nebraska under direction of the Second Air Force. The Sixth Bomb Group (VH), which had been reactivated at Dalhart, Texas, was moved to the Grand Island Army Air Field in May 1944 to become one of the four groups in the Wing. The Sixth Group was composed of three squadrons, the 24th, 39th, and 40th. ("VH," standing for "Very Heavy," designated B-29 organizations.)

The first B-29 provided to the Sixth Group for training landed at Grand Island on June 13, 1944. (1) Most of the men of the Group had not until then even seen one. Ground crews and flight crews alike went overseas with much of our training having been simulated or from manuals.

(1) Pirate's Log, p. 21

When I arrived in Grand Island in August--by train from the Lincoln, Nebraska, AAB--I was assigned to the 39th Squadron. In general, we navigators were the last crew members to arrive, so the Squadron lost no time in assigning me to a crew. The pilot was First Lt. Readhimer; and, by a miraculous coincidence, the top gunner on the same crew was Don Kline, who was a home-town buddy of mine.

Most flight crews had already begun that part of the training that did not "require" a navigator--but how much of the training that was, I soon discovered, was a matter in considerable dispute. The typical pilot was hard-pressed to think of any need at all for a navigator, whereas we navigators felt sure that the pilots couldn't have found their way from one end of the Holland Tunnel to the other without a navigator to give directions. It was the beginning of a beautiful relationship--provided you admire the relationship between a mongoose and a cobra.

That first assignment did not last long. Our crew was split up. There were more crews on hand than were supposed to compose a group during its combat operations. The group and squadron commanders selected the crew members they wanted to keep; the rest were sent to other bases to form the nuclei of B-29 units that were to follow us overseas. There were not many excess navigators, though, so most of us were kept at Grand Island. The others of my original crew were sent to Pyote, Texas--poor fellows. I stayed and was assigned as navigator on another crew.

I was angry--thoroughly disgusted with the heartless officialdom that would split up an air crew. This crew, in the short time we had been together, already felt like a working team. I didn't realize that it was minor compared with the sense of unity that a crew has later--after it has flown together through months of combat.

And I did not know then that the crew I was about to join was to become the best crew the Army Air Forces ever put together. Of course, some thousands of other former AAF crew members, no doubt, will dispute the claim that we were "best"--but, then, all of those other guys are prejudiced. Besides, you notice I didn't say "best" at what.

Still, I was angry at the time. I remember that, when our squadron navigator, Lt. Charlie Enneking, introduced me to my new pilot, I shook hands, turned, and sulkingly stomped off. What a great first impression I must have made on him!

Our crew, like all regular B-29 crews, was composed of eleven men. In any other AAF organization at that time the two pilots were designated first pilot and co-pilot (or second pilot). It had to be different for the B-29s. I always assumed that some staff officer who was impressed with titles and who had little else to do dreamed up the B-29 pilot designations: airplane commander and pilot instead of pilot and co-pilot. The term Airplane Commander, or Aircraft Commander, usually just "AC" even when written, became widely used in B-29 outfits, but co-pilot persisted as the name for the second pilot.

First Lt. Edwin F. Russell, of Miami, was our Airplane Commander. Pilots who knew him from earlier assignments generally called him "Coot." It was not a particularly flattering nickname, but I guess it wasn't intended to be. Russ had been a B-17 flight instructor. Since there were not many B-29s available for training at Grand Island, we did most of our flying there in 17s, which Russ could haul around the sky like a kid playing with a Cracker-Jack toy.

Lt. Jay K. Anderson, of Kansas City, Kan., was the pilot--that is, the co-pilot. Andy had spent more than two years as an instructor in the Training Command. He received a promotion to first lieutenant while we were in Grand Island.

I was the navigator: Donald W. Kearney, Ida Grove, Iowa, a green second lieutenant.

The bombardier was Second Lt. Charles E. Hall, of Princeton, Ind.

The flight engineer was Cpl. William T. Doland, of Norwalk, Conn.

Cpl. William S. Jefferson, Pekin, Ill., was the radio operator.

Cpl. Joseph B. Hudson, Jr., Culpeper, Va., was the radar operator, at various times also called radar gunner, special instruments operator, electronic instruments operator, "mickey" (slang that originated with the British, I believe), and a few other designations. Joe arrived in Grand Island as a gunner but had a speed course in radar-set operation while there. I had received radar training at Boca Raton, Florida, before going to Grand Island. I used the radar in my work, but Joe did all of the operation of the set itself. He and Charlie and I formed the team that did the radar bombing, which, as it turned out, we did more often than we

did visual bombing. Of course, the pilots had a role in a radar bomb run, but Charlie, Joe, and I always claimed that they merely were chauffeurs.

The guns on a B-29 were remote-controlled--not actually in the Plexiglas "blisters" occupied by the gunners at all. Cpl. John J. Heuer (pronounced Hoi-yer), Ames, Iowa, was central fire control gunner, which meant that he had control of the remote firing system. He occupied the top blister. The right blister gunner was Cpl. Edward T. Allgor, of Brooklyn. The left gunner was Cpl. Adrian E. Bee, of Farina, Ill. The bombardier manned a gunnery post in the nose, and Cpl. Donald J. Gleacher, Fairfield, Conn., held the lonely outpost in the tail.

The right and left gunners were also called "scanners." Part of their job was to keep an eye on the flaps and the rear part of the engines, because, in a B-29, the pilots sat so far forward they could see only the leading edge of the wings and the front of the engines. Really, not all of the pilots were dim-witted; some of them would have detected that something was wrong if an engine fell off--without having someone in the back call up on the intercom to tell them.

We had a designation: Crew 3909. Most of the time, though, crews were referred to by the name of the AC. If Operations said, "Russell will fly tomorrow," it didn't mean Russ was going off alone; it meant his crew would fly.

The Group's ground echelon, which was to travel to our overseas destination by sea, shipped out of Grand Island on Nov. 18. (2) The training of flight crews then was speeded up, although I had thought we were going at top speed before.

(2) Pirate's Log, p. 24.

We flew B-17s and B-29s; we flew "transition"; we flew cross-country; we flew around and around the bombing range; we practiced landings, take-offs, bombing, navigating, gunnery, and everything else; we attended ground school; and we put in tedious hours on the so-called "synthetic" trainers. At times, it seemed that we were doing two or three of those simultaneously. I hated the CNT (celestial navigation trainer), partly because it seemed always that I would be scheduled for a few hours in the CNT when the rest of the crew had free time. On the other hand, the most fun, other than flying, was riding the simulated bombing rig with Charlie; we put chalk marks in the heart of Berlin with a frequency that would have been the envy of the Eighth Air Force. Unfortunately, the real war wasn't being fought with chalk.

With such intensive training, we soon learned the most important things about flying, such as not to carry a fountain pen aloft. The quick learners among us reached that conclusion after about three ink-stained shirt pockets; the others never remembered to carry a pen anyway, so they were better off. We also learned about winter flying--how to put on four or five layers of clothing while keeping the lower zippers aligned from layer to layer.

When the weather turned comparatively poor in November and December,

the crews were sent to Cuba and Puerto Rico to complete flight training. The weather wasn't the only reason--having lots of water to fly over was thought to be useful experience for us. That didn't give away any secret; we knew that we were destined to fly combat in the Pacific Theater. In the interim, the Caribbean was a surrogate Pacific.

One of the flights in a B-17 out of Cuba provided an interesting navigational exercise. The navigator had to sit in the back where he couldn't see any instrument and also couldn't see outside the plane (so that he wouldn't know the direction of the sun) while the pilots flew in random zigzag directions out over open water for about 45 minutes. Then the navigator, not knowing the plane's position and being able to see nothing but water and forbidden to use radio bearings, had to get the plane to Grand Cayman, an isolated island about nine miles across. Navigators will recognize it as a "landfall" problem. Really, it wasn't difficult--on a clear sunny day.

I suspect that the biggest benefit of that assignment for us navigators was not the realistic practice, but the opportunity to demonstrate to dubious pilots that navigators just might possibly know something after all. If so, it may have worked in our case, for after a while, much to the pilots' surprise, Grand Cayman suddenly appeared straight ahead.

One morning flying a B-29 from Borinquen Field, Puerto Rico, we were to practice radar bombing and then meet the other planes from our Squadron for a formation and camera gunnery exercise. Everyone else was in place when we approached the formation, but the fighters that were to pose as enemy planes were nowhere to be seen.

Russ wanted to wheel our plane around like a fighter to give the others a chance to practice--using as an excuse the fact that we had been the last to join the formation and the rationale that the formation flight should not be wasted. So, Russ and Andy swung that 60-ton chunk of aluminum all over the sky. We actually made passes, of a sort, at the formation so that the gunners of the other planes could shoot their film-loaded guns at us. Some fun--as long as the wings stayed on.

I think that most bomber pilots were frustrated fighter pilots anyway. Navigators and bombardiers were not really any different--except doubly frustrated.

That flight lasted 7-1/2 hours. We landed, climbed out of the plane and were met on the ramp by a guy who was one of the Wheels from Operations. "Get back in," he said. "As soon as you are refueled you are to start your 3,000-mile navigational flight."

Before training was completed, each crew was to complete a flight of approximately 3,000 miles, taking nearly 15 hours, presumably comparable in air hours to what we would have to do on a combat mission. We told the guy it was a good joke but that we knew no one could expect us to take off on a 15-hour flight immediately following 7-1/2 hours in the air.

"The hell we can't," he answered. It was no joke. Finally we talked him into letting us go to the barracks for a half-hour to shower and get

some chow. We had to rush even to get that done, and it had to serve as a substitute for sleep. Any further complaint from us was met with a simple response from Operations: "T.S."

So, just before dark, a little more than an hour after landing, we were airborne again. We were to fly a triangular route from Puerto Rico to Bermuda, from there to Nassau in the Bahamas, and then return--about 2,800 miles.

The first leg was the longest, 5 or 5-1/2 hours, and, I thought, my best chance to nap. We were supposed to radio a position report back to base each hour. So, after getting us on the right course, I computed where we should be when we were out one hour, and I told Jeff that when the hour was up to send those coordinates in as our position. I then made arrangements with Jeff for him to call me after two hours, and I crawled into the tunnel and was soon dead to the world.

Feeling a little more alert after the rest, I shot a couple of celestial fixes and corrected course for Bermuda. I also gave Jeff another position report; by then we had gone nearly three hours since the first and only one we had sent in.

Some of the crew, I believe, did not wake up even to see Bermuda, and before long everyone, except possibly Jeff, had surpassed me in time slept since take-off, and I know that later I had to awaken Jeff on two or three occasions when position report time rolled around.

I could have tried, just for practice, to hit Bermuda using celestial navigation only; but, as long a day as it had been, I didn't feel like doing that. So, about 100 miles out, I had Hudson turn on the radar set, and Bermuda, with its unique shape, showed up immediately. We flew over it--an odd-appearing concentration of lights in the vast, empty darkness--and turned toward Nassau.

The Bahamas, some hours later, were partly cloud-covered. Again I awoke Hudson and we used radar. Over Nassau, without seeing a sign of it except on the radar scope, we finally turned onto the last lap back to base. I got a check on ground speed and computed an ETA (estimated time of arrival). We flew on and on. Those long, dark hours in the middle of the night seemed interminable. Some time later--maybe having something to do with the effect of the sun coming up--I could not keep my eyes open any longer, and I fell asleep at my table.

What happened after that I hardly remember. I knew the gunners had some ammunition they were to shoot up. I forget the purpose, but I suppose they were to pick a target among the rocks somewhere and practice air-to-ground firing. Anyway, I was jolted awake later when the guns went off. I hadn't even heard the intercom conversation that must have preceded the shooting.

We were flying along some coastline--where, I did not know. I wondered if we could have reached Puerto Rico. I remember thinking that the pilots would not know which way to go after the gunners forced the rocks to surrender and that I just had to shake off the sleep and find out where we were. I could not do it. Shaking the grogginess by stepping

outside for some fresh air was not an appealing option. A brain pickled in alcohol would have been more active than mine was at that moment.

I was so sleepy that, despite the gun fire and the conviction that we might be lost if I did not do some navigating, I fell asleep again. I awoke several times, scared to death about where we might be and determined to stay awake and work, but nodded off again.

At last I awoke to find that we were getting ready to land. Some way we got to the barracks and all collapsed into our sacks. Just what had happened I never did find out, but I guess the course had been good enough to get us to Puerto Rico (which soothed my guilt feelings somewhat). The period of practice gunnery really had not been as long as it seemed to me, struggling to stay awake. The pilots, who always did say they believed in G.D. (general direction) navigating, brought us home after my navigation stopped.

Hours later, when we were up again, a radio man on the line told us, quite seriously, that Operations was concerned when we were not heard from during that early three-hour stretch. I said nothing, but I did wonder what they expected, sending us off on that flight immediately after a full day's training flight. And I recall thinking to myself that they were concerned about the wrong problem--the first few hours instead of the last few hours. But I also never forgot the terrible feeling that came from losing a fight to stay awake.

Near the end of the year we knew we did not have much time remaining at Grand Island. Each crew was given a 10-day leave. POM (Preparation for Overseas Movement) inspections were conducted. Farewell parties were held--almost every night. Our crew had its own little farewell party one evening at Driesbach's, a dinner club in Grand Island that served delicious fried chicken. The only ones there to say farewell to were guys who were going with us, but what the heck, any excuse to have a party.

The navigator on the POM team that inspected our Group had been on one of the B-25s in Jimmy Doolittle's raid on Tokyo and, like many of the crew men on that raid, had bailed out over China in the dark. We neophyte navigators succeeded in getting the POM formalities cut short so that we could get him talking about his experience--and then we stayed overtime to listen.

By the first of the new year, 1945, our Group was ready to move out of Grand Island.

The first step was a transfer to Kearney Army Air Base not far from Grand Island. That was our staging base, where we were to be assigned a plane of our own and from where we were to start the long trip to our overseas destination. Note that it was not named Russell Field or Anderson AAB; I thought it was fitting that our last Stateside base be named for the navigator.

We went through a little processing, played a little basketball and a lot of poker, read some (everyone read my copy of Forever Amber), and waited for orders. We were at Kearney almost three weeks altogether. Some

crew members got so bored with the inactivity that they even imbibed in a teeny bit of alcoholic stimulation.

Getting our own plane was quite a thrill. We had done more than half of our OTU training in B-17s, and now our crew had a so-called "big white bird" all to ourselves. We tried to act blasé about it--you know, too sophisticated to be impressed now that we were so worldly, being two or three years out of high school.

Our plane had been assembled at the plant in Wichita, Kan. We were glad we didn't get a Renton model; the 29s made at the plant in Renton, Wash., carried a bit less fuel than others. A third model then being provided to new crews was from the Marietta, Ga., factory. A slip of paper something like a factory invoice in our plane informed us that the cost was $1,071,000. We figured we'd better be careful with this piece of equipment because we certainly couldn't afford to sign a Statement of Charges for it.

To my not-too-enthusiastic delight, our plane had a B-3 driftmeter, which I considered to be superior to the B-5. At least that's what I had thought when using the B-5. Later, using the B-3, I wanted a B-5 again. "The grass is always greener," etc.

The plane had an APQ-13 radar set, the model with which I was more or less familiar. Its scope was a PPI (planned position indicator), which was very useful for navigation. In fact, it was practically ideal for navigation, but it had some definite drawbacks for bombing, primarily because of the three-degree beam width; but later we often had to depend on it for bombing while we nearly always could have got along without it for navigation. The full designation was AN/APQ-13, meaning it was ordered for both the Army and Navy, was airborne equipment, was electronic, was developed as a search set, and was model 13.

There was also a Loran set, designated AN/APN-7. The second "N" meant that it was navigational. Loran came from the words LOng RAnge Navigation. It was an ingenious electronic system for establishing a plane's position. It required at least two pairs of transmitting stations located not too close together on the ground and specially prepared Loran charts for the use of the navigator in the air. I had operated Loran only in a training lab.

A unique piece of equipment at the navigator's station was the box with knobs for setting certain instrument readings (outside air temperature, altitude, and airspeed) that the CFC system used for its mechanized calculation of trajectories--so that the gunners could aim directly without trying to make a judgment--always inexact--as to how much to lead an enemy plane because of its motion and our motion. The CFC system as a whole did much more; its computation for aiming was supposed to adjust automatically for distance, air density, windage, range, speed, and gravity. (3)

(3) See Flight, London, 4 April 1952, p. 399.

Our aircraft also had pneumatic bomb bay doors. Some of the planes had electric doors, which would grind open slowly as an electric motor

whirled. We preferred the air doors because they popped open almost instantaneously and closed the same way. That made them something of a danger when someone was working around the plane on the ground. It required the use of down-locks so that they could not close accidentally. But in combat it meant saving a lot of time opening and closing doors.

Of course, there was one of the automatic radio transponders called an IFF (Identification: Friend or Foe), which we hoped would keep us from being shot at by our own planes, surface vessels, and anti-aircraft batteries. The IFF was a good device to have aboard; however, we intended also to employ an even better tactic to avoid being shot at by "friends"--turn around and head the other way--fast.

Each plane had a "fifth" engine. B-29 crews called it the "put-put." It was small but a real gasoline engine, located inside the plane way in the back, its function being to generate power and feed it into the electrical system until the big engines and their generators were going. It usually was Gleacher's job to get the put-put running the first thing when he got aboard.

Ever since the days of Archimedes and his lever, some men had realized that the simplest equipment was often the most useful--and so it was with the small rubber tube with a funnel-shaped top that was located in each bomb bay just inside the bulkhead door.

An unusual design feature of B-29s was the tunnel, a cylindric passageway connecting the forward and rear pressurized compartments. It was a couple of feet in diameter and fully padded. The B-29's tunnel became so famous, or infamous, that Jane's directory surely must have rated it as the best place for sleeping in any of the world's combat aircraft.

Our first reaction to getting a plane of our own, naturally, was that we were going to go to great lengths to take good care of it, even pamper it. So what happened? On our first test hop, Russ peeled her over into a dive and the airspeed "slipped" up about 50 mph above the red line. (The aircraft in the series we were getting were red-lined at an indicated airspeed of 310 mph.) Yeh, some pampering!

On top of that, we were floating lazily over the plains of Nebraska one clear cold winter day when Russ decided to surprise the crew with a drill for sudden decompression--to see if we could get our oxygen masks on quickly and adjust to the sudden drop in pressure and temperature. He never found out. When he reached to pull the emergency air pressure release handle, he pulled the emergency bomb salvo handle instead! Each plane heading overseas had a spare engine and other extra gear stowed in the two bomb bays on wooden racks, which, of course, were not supposed to let go if someone hit the salvo switch; but no one was certain then that all such things as the wiring on the salvo switch had yet been taken care of properly in this new plane.

The doors obediently snapped open. Russ's heart must have skipped a beat. The racks quivered, but did not fall--luckily, or some little hamlet out there in Nebraska would have had Air Force equipment strung

all along main street. And Private Russell would have cleaned latrines through the next two or three wars.

Altogether, we were well-pleased with our new Bee-Two-Niner.

We now had to think about a name for the plane. In the tradition we had already started building, it seemed unlikely that any name less than something original and off-beat would do. We mulled over possibilities as we proceeded with the preparations for the big flight.

We thought we were to be limited in the weight of personal possessions we could carry with us on board the plane. As it turned out, no one ever checked. But, at one stage in the processing at Kearney, footlockers were made available to us and we were told we could fill them for shipment by boat. Even though we had shipped a locker full of personal items from Grand Island, most of us had more to send now. But Russ didn't.

Looking at the footlockers allotted, one for each of us, he said, "I'd better send one anyway. We might need it overseas."

"I don't know what for. You already sent two footlockers from Grand Island," I said.

"The enlisted men might be able to use it while we are over there," he replied.

"Well, maybe so, but how are you going to explain shipping a footlocker weighing practically nothing?"

"I'll tell them it's full of ping pong balls," he answered quickly. "I can say I expect to play a lot of ping pong."

He stenciled proper markings on it and turned it in for shipment. No questions were asked, and later overseas the empty footlocker was duly delivered to him.

At the base at Kearney, a crew chief was assigned to us. (In view of his experience, I think it was more a matter of us being assigned to him.) He was Everett M. Smith. Smitty was an old Regular Army master sergeant. We understood, from what we could draw out of him, that he had been a B-17 crew chief in the Philippines when the War broke out. He was evacuated to Australia with what was left of the 17s, served in that area for a while, came back, and was now going over again with 29s. He didn't seem overly thrilled about it.

The remainder of the ground crew, of course, had gone ahead with the ground echelon, but Smitty was to fly over with us. We all liked Smitty right away. He seemed to be a bit of a maverick, thus fitting in well with our crew. And he knew airplanes. Even we could not break something that he couldn't fix.

Smitty was a big man; I would guess that he weighed about 250 pounds. So you know where he sat in the plane when he was flying with us. No, not exactly wherever he damned well pleased--that might unbalance the plane.

The addition of Smitty brought our crew for the trip overseas to 12, plus a spare engine--and some authorities let us know that they thought the spare engine was the most important one of the 13.

During training, three crews of the 39th Squadron--Sams' crew, Ralph's crew, and Russell's crew--had spontaneously formed sort of an informal grouping based on the fact that Lt. William W. Sams, whom we usually called "Red Dog," Lt. John D. Ralph, Jr., called Johnny or J.D., and Russ were three of the few first lieutenant aircraft commanders in the 39th. (Most of the 16 ACs were captains; one was a major.)

Naturally, when unpleasant or routine chores were passed out to crews, the lieutenants drew more than their share. So we called ourselves "The Three Volunteers," the word "volunteers" being used in the sense that it was applied in the Army: "Three crews will draw special detail today." Who? "Sams, Ralph, and Russell." "Three crews will attend ground school tomorrow: Sams, Ralph, and Russell." Who was it who waited around for hours as stand-by crews? Sams, Ralph, and Russell.

Of course, I suppose there was another side to it. Who got the flight instructions fouled up? Sams, Ralph, and Russell. Who showed up in the chow line at a time when they were not supposed to eat? Yep--Sams, Ralph, and Russell. Who mistook some Nebraska farmer's hen house for the practice gunnery target? Well, for heaven's sake, certainly not us.

Chapter II

Racing Overseas

The big day came on January 23. We had orders to be up early and report to briefing ready to go. Briefing did not amount to much. We received further orders, were issued .45-caliber automatics, and were told to fly the civil airways to Mather Field, Calif., which was to be our POAE (port of aerial embarkation).

For a few minutes I had pleasant visions of taking it easy on this flight. Russ and Andy could follow the radio beam, and I would have no work to do. But, no, Russ wanted me to navigate. I think mostly he just did not want to be bothered with flying by radio. It didn't occur to me that he thought I needed the practice--of course not. Poor ol' navigators never get a break--that's what I muttered to myself.

Briefing over, we filed out into the cold air just at dawn. Planes along the ramp began warming up. Men bustled around with .45s strapped to them. The sound of dozens of 2,200-hp. engines starting, one after another, was impressive. I had a feeling of big and important operations going on and of being part of them. I thought I could sense the magnitude of global war from the panorama, in miniature, that we witnessed that morning. We were off to become a small, but significant, part of what we thought of as the most potent military striking force ever fashioned: the United States combat air forces.

Russ had made some kind of bet with Sams that we would beat them off the ground, so props were "pulled through" in a hurry; we cranked up, revved up the engines, checked magnetos quickly, and started taxiing.

But Sams pulled a fast one. We had started our engines first, but he taxied without checking his mags, pulling out right in front of us. We thought we still had him beat, though. He would have to check his engines before take-off and we would pull past him, get cleared and be gone. But, to check his engines, the old son-of-a-gun stopped squarely in the middle of the taxi strip, blocking our way. Visions of the grin that must have been on his face served only to antagonize us all the more as we sat and waited. He took his time, too.

We got off the ground a few minutes behind him, determined to avenge the humiliation. Beating him to Mather Field and each subsequent destination became our goal.

Within a few minutes, we were all alone, no one else in sight. The sky was perfectly clear as we cruised over the rough snow-covered terrain of Wyoming. Right there began a habit that became Crew 3909 SOP (standard

operating procedure) for long flights: Just about everyone went to sleep. That's a slight exaggeration. I was usually awake--well, most of the time. Whichever pilot was watching things was awake. One or two of the guys in the rear compartment may have been awake--maybe. Doland wasn't really awake or asleep either one; what I mean is that he sort of dozed with one eye open watching the fuel gauges. And Jeff--well, I don't know what he was doing. Ostensibly, he was awake, but I often wondered if he hadn't attained a state of transcendental animation--his fingers trained to keep tapping on that transmitter key while he slept.

Leaving Wyoming behind, we seemed to sweep down out of the mountains, flash across the middle of Great Salt Lake, race over the stretches of Nevada, and head into California. A few minutes after contacting Reno radio we were letting down into Mather. We landed less than five hours after leaving the snow of central Nebraska.

Making a quick visual survey, we gathered that we had beaten Sams and his crew. We had each flown briefed power settings, so we had not exactly raced, but that made it all the more galling to them as we ribbed them later about "that slow clunker you guys have." I guess we boasted a little that we would beat them, and Ralph too, to Hawaii and to our ultimate destination, wherever that was.

For some time we had assumed that we were going to the Marianas Islands. We could read the newspapers. U.S. forces had captured Saipan and Tinian and recaptured Guam that summer and fall, and we knew that B-29s already were flying out of Saipan. Interestingly, at Grand Island there actually had not been a whole lot of speculation about our overseas destination. There was some talk, but little compared with the way rumors abounded while we were overseas. In any case, as we headed west, we more or less knew that we were going to the Marianas, but we did not have any fixed notion in mind as to which island.

The weather at Mather was quite pleasant after the Nebraska cold. The day following our arrival, Jan. 24, we "processed." The final check was made on clothing and equipment and to see that everyone had received the required "shots." We needed protection against such exotic diseases as yellow fever, cholera, filariasis, and malaria. The Army had not yet developed the shot that we needed most--a vaccine to alleviate fear while being shot at.

The next day there were special instructions about Pacific flying. We were told to land at John Rodgers Field upon arrival in Hawaii. It was right next to Hickam Field, which was older and better known.

During the day we received word that most of the 29s that had come in when we did were to leave that night. We were eager to go, an odd attitude perhaps, rushing to a life we knew we were not particularly going to enjoy, but we wanted to beat Sams and Ralph, or at least keep pace with them. All three of us were scheduled to go that night.

Take-offs commenced at dark and continued until 11 p.m. Anyone not making it by 2300 hours was held over until the next evening. We almost didn't make it; we got cleared just before the deadline and, in fact,

took off right at 2300 PWT. We did not know what time Ralph and Sams got off, or even if they did.

We headed out over 'Frisco Bay with all noses to the windows for what was presumed to be a last look at the good old U.S.A. for a long time. It would have been interesting to know each crew member's feelings just then. I had no particularly eloquent or grandiose thoughts, as I had when we left Kearney AAB, nor did I feel sad. Just reflective. I did wonder if it would be my last sight of U.S. soil--ever. There was no answer to that. I could only shrug it off, saying to myself that I must not think such things, or, with a wave of melancholy, what great difference would it make anyway? We simply were flying off into the night and that was that.

The bay area was a maze of lights: big, little; bright, dim; glaring, diffused; white, amber, red, yellow, and green. Blackouts along the Pacific coast were a thing of the past, and we could see the Golden Gate Bridge easily. It, as much as anything, symbolized departure from the U.S. and the beginning of the vast reaches of the broad Pacific.

We "departed" over Golden Gate at 2330, Jan. 25.

"Departure" in that sense refers to the usage given it in aerial navigation. The navigator duly records take-off time, but it isn't worthwhile trying to calculate an average speed or direction for the turning climb away from the airfield; so, usually, after the plane has a little altitude, he takes his starting time and position from some known nearby landmark. In this case, we took off from Mather Field, but my navigation started from the Golden Gate at 2330 hours and at so many thousand feet. I forget our altitude, probably then about 5,000 feet, but we soon climbed to our flight altitude, also forgotten but around 10,000 feet.

The sky was clear. The only noise was the steady engine roar, which diminished into an unnoticed hum as time went by. It was dark inside with only the glow of the pilots' and engineer's instrument panels and the isolated, dim lights above the navigator's and radio operator's tables. Sleep caught up with most of the crew.

I was not particularly enthusiastic about having to do celestial navigation, but at the time I did not know any other way to check our position. Alternate destinations were not exactly plentiful, so I wanted to make certain that we did not stray far from our course. I checked compass deviation, made sure I was applying variation correctly, and waited.

Before leaving Mather, we had been given a sealed brown envelope and were told to open it after we got two hours out. So, when the time had elapsed, the six of us up front watched expectantly while Russ clawed the flap open. Inside were orders stamped "secret." The orders were issued by the Air Transport Command controlling the movement of aircraft over the

Pacific. They did not tell us a great deal. We were directed to fly to the "MARIANAS ISLANDS delivering acft and personnel to control of CG, XXI BOMBER COMMAND."(1)

(1) Op O 22, ATC, Pacific Division, West Coast Wing, dated 24 Jan 45.

I did not shoot a celestial fix until we were out about three hours. Then I corrected to parallel course, figuring it would be useless to compute an average wind over a three-hour period. We were only slightly off course anyway, maybe a couple of miles. Being that close after three hours, I thought to myself, must mean that "metro" was fairly good.

"Metro" (pronounced with a long "e") is short for meteorology; we used it as a synonym for the weather forecast given by the meteorology section, or, as in this case, especially the predicted wind directions and velocities. The forecast might be accurate, or it might not be. A navigator, of course, had to compute the direction and speed of the wind from his own navigational information just to find out.

We droned on into the silence.

Somewhere out there on the water was a ship stationed so as to provide an aid to navigation. We had been given its position. It was to be fully lighted for our use as a check point. I began looking for it quite some time before it was due according to my calculations. A seven-tenths undercast obscured vision, but I thought I would spot that bright a light in all that darkness anyway. We flew on and on. Only three or four of us were awake and no one spoke. I never did see that ship.

On and on and on, the engines boring ahead into the vast, silent darkness.

The pilots took turns sleeping; the engineer roused himself periodically to check instruments and to calculate fuel consumption; the gunners, radar operator, and bombardier slept en masse; and I reluctantly resigned myself to shooting another celestial fix.

Another ship placed as a navigational aid slid by somewhere in the night unnoticed. To heck with it, I thought; we could hardly miss all of Hawaii, and when we got close we could pick up Honolulu radio. Unlike some navigators, I was not fond of using radio as a navigational aid. For one thing, I distrusted its accuracy; for another, I just never got into the habit of using it and didn't give it a thought when there was no problem navigating in other ways. But this time we had been told at our briefing to have the pilots fly in on the radio beam from a good distance out, so that suited me fine.

Dawn came. Just water: water ahead, behind, to the right, to the left, and straight down; a world of water and one lonely airplane. Shortly after that, the time came to let the pilots know that they were to take over. We picked up the beam with no trouble.

A ship was spotted below. I had no idea what it was. I wished then that I had had an opportunity to study more naval recognition. Of course, the ship was a long ways down, but I didn't know if it was a cruiser,

destroyer, transport, freighter, or perhaps "only" some escort vessel. All I knew about ocean vessels was that a schooner was the one that held the beer.

Presently, land was discernible out to the left. That would be the island of Hawaii itself. Coming into view ahead was Oahu Island.

We began to let down. More of the Navy was now visible below, several ships, large and small. Of course, everything that floated was "Navy" to us, whether it was a battleship or a rowboat.

We were at low altitude now. The jut of land ahead must be Diamond Head. It was, but as to impressiveness, it was a disappointment.

The tower at John Rodgers Field was contacted and landing instructions received. We swung out over the bay near the entrance to Pearl Harbor, dropped gear, lowered flaps to 25 degrees, and turned onto the final approach.

All kinds of naval vessels whisked by underneath. The only ones I was fairly sure I identified correctly were several surfaced submarines. I was surprised to see that the differences in size of various ships seemed to be mostly in width. The subs were narrower and, in proportion, longer than I had imagined. I wondered if a dachshund was simply a beagle that had been taken aboard a submarine as a pup.

Full flaps, nose down, leveling off, a shudder through the plane and we were on the ground. Russ was good at landings, sometimes just as slick as a whistle, like sliding in on ice. Only once do I remember a real bounce, and that was one night when he leveled the plane off right above what he took to be the Grand Island runway but what turned out to be the top of a 15-foot layer of ground fog. That time there was a real jolt.

A "follow-me" jeep met us at the end of the runway, demonstrating what navigators already thought--that pilots needed help to find their way any place. We looked about, and whataya know? Sams and Ralph were not in yet. It was eleven hours and 20 minutes since we had left Mather, now some 2,200 nautical miles (2,500 statute miles) behind us.

The air was nice and warm. The balmy weather felt good. Of course, it was the morning of the next day, Jan. 26. After being awake most of the night, I was ready to hit the sack for a long snooze.

We had to unload every bit of our personal equipment, because, we were told, no guards were available for the aircraft. For everyone except me that meant only some clothes, oxygen mask, and a few similar items. But I had to haul around a bunch of maps, a brief case stuffed with navigation equipment such as computer, plotter, dividers, pencils, chronometer, and books and books of celestial tables, and, above all, a big A-14 sextant in its bulky padded case.

The A-14 was my choice for a sextant (actually an octant), but it had its disadvantages, of which number one was size. I had chosen it as the least of several evils because it timed each shot and automatically calculated an average "reading." Nevertheless, every time I had to carry

it out to a plane and back I threatened to trade it in for a smaller type. I just never got around to carrying out the threat; but, on more than one occasion, if Supply had been closer to where I was lugging that blame thing, I would have had myself a new sextant.

Carrying equipment to and from the plane always did rank high on my list of gripes, and my list was long. The remainder of the crew, with maybe one armload of stuff, and often not that, would go off at a merry clip while I trudged behind, with both hands full and impedimenta under my arms and jammed into all pockets. From my point of view, I never could see why flying equipment should not be left in the plane. There surely would not be enough pilferage to matter (at a military installation!). Besides, a person would be nuts to want to steal HO-218 (a book of celestial data). Ironically, many fields posted guards over the planes but made a person take his equipment with him anyway.

We checked in at Operations and were assigned to bunks in one of several familiar Army-type two-story wooden barracks where we left our equipment--unguarded!--and headed for chow.

After flying all night and taking time to eat, we were ready to hit the sack about noon California time. But Hawaii was 2-1/2 hours behind coast time, so it was still mid-morning there.

Russ, Andy, and Charlie woke me just in time for me to go to evening chow with them. They had been up for some time, out looking around John Rodgers and Hickam Fields.

I was thankful that they got me up. However, I paid for the favor. They weren't known for missing opportunities to needle someone, and I caught a ribbing about being a sack hound because they were up long before I was. I thought I had a defense: they logged sack time in the air, while I stayed awake. On a long flight, they got an hour or two of sleep, often more. I got little. But Aristotle didn't have a vote, so logic didn't help me--I lost the argument anyway.

Oh well, I could take solace in Fred Noonan's beatitude: "Blessed are they who navigate for they shall know where it was they intended to go."

Ralph and his crew had arrived. Of course, we gloated about getting to Hawaii ahead of them even though we had been about the last plane to leave Mather the previous night. We asked them if they had decided at the last minute to take a boat. Sams did not show up at all; we assumed Kitty Hawk had issued a recall on that Rube Goldberg contraption he was trying to fly.

Coming in to Hawaii I had experienced some difficulty with my sextant, so I now got it out to check it. I could get no bubble to form. None at all. There was nothing to do but take it to Supply. I had to have a sextant. If the fellows at Supply did not know what was wrong with it, I would have to try to get a new one.

I did not know if Supply at John Rodgers would have sextants. Even if they did, I half anticipated some problem, red tape at least, in

getting one. But they even had a choice of types for me, and I had no trouble. Supply personnel in the States should have taken lessons from those guys.

After a minute's thought about getting a lighter-weight model, I decided I had better stick to the kind I had been using most of the time in training. In fact, I had used this very instrument all through OTU. Now I had to take a new one and check it until I was satisfied that it was all right. I didn't spend much time at it. Since checking it was a nuisance, when the first few shots I took fell fairly close to John Rodgers with only a small error, I was willing to conclude that there was nothing wrong with the sextant--something wrong with the operator, no doubt, but I already knew that: I did the celestial navigation calculations easily enough, but as far as being agile with a sextant is concerned, I was probably about in the same league as Quasimoto repairing a wrist watch.

I was aware that our survival in some future predicament might depend on that sextant. I could have gone on repeating the tests, but I was unlikely to find any problem that hadn't turned up after three or four test shots. I didn't think I was being incautious--which makes this a good time to say a few words about our attitude toward risks.

There was a duality in our attitude. First was a rather fatalistic approach that produced some carefree acceptance of risks in some regards. Concurrent with that was a concern to be careful in other regards. There really was an inconsistency.

We knew the risks of flying (different then than now). And combat was still ahead--in a war that might last no one knew how long. On that level, there was a certain nonchalance about danger. There almost had to be--there were so many hazards beyond our control. Unquestionably, we took risks we wouldn't have taken under other circumstances. That was quite evident when the War ended. Then, realizing that we actually might survive our escapades--if we now didn't do something silly--suddenly we turned conservative and cautious, relatively speaking.

"When your number comes up, you can't do anything about it; and, until it does, it doesn't matter much what you do." That expressed the feeling part of the time. But there was always this too: "With so many unavoidable risks, it would be stupid to be a victim of your own carelessness." We had a firm belief that, by each crewman doing his job with proficiency, we could beat the odds of war. That was a common outlook among those in combat: If only one crew (of the Squadron, for example) were to survive . . . . well, it was too bad about all those friends of ours.

The next day, Jan. 27, we were told to be ready to leave early the following morning. Our next leg, apparently, was to be a daytime hop, which is not always so good from a navigational point of view. Those stars up there in the sky are very friendly guys--to a navigator.

We told Ralph's crew that we were willing to give them an hour head start to make the race even. We added that we thought they would probably make better time paddling their crate on the water than they would trying

to fly it. That didn't exactly cool off the competition. In fact, I think it caused J.D. to reorder his view of American war aims--defeating the Axis was moved down to No. 2.

That evening was spent mostly at the "beverage section" of a small nearby PX. After all, how did we know how long it might be until we would get such a chance again? I took the opportunity to stock up on my favorite brand of cigarets, buying a half dozen cartons at the overseas price of 50c a carton.

We made it to breakfast the next morning with our eyes still half shut, downed bacon and eggs, our last for quite some time, and a good quantity of coffee, and we were ready to race Ralph anywhere.

Our next stop, we were told at briefing, was Kwajalein. We were to fly a course that was a slight dog-leg, with the first leg covering most of the distance. Part way along the first leg lay Johnston Island, a regular stop for ATC and many other planes but a stop for us only if trouble developed. At the end of the first leg was a small uninhabited island. Over it we were to turn a few degrees to the left, to a more southerly direction, and go on into "Kwaj."

The reason for the dog-leg, according to the briefing officer, was that a direct course from Oahu to Kwajalein went over Wotje, a small by-passed island still held by the Japs.

Some of us navigators had asked about Loran charts at Mather before leaving the States, but the briefing officials there said they did not have any to give us; in fact, they seemed none too well acquainted with the situation with regard to Loran. So, here at John Rodgers, before briefing ended, we asked again.

While I cannot say I was completely familiar with the operation of the Loran set, I supposedly had been "checked out," and I thought I could make it work, with, maybe, a little trial and error. Later on it was entirely different: I felt on very intimate terms with Loran, using it on our missions almost to the exclusion of other navigational aids. Of course, the most common of all navigational aids, pilotage (determining ones position by looking out the window), was not of much value when all one could see was a vast featureless stretch of ocean.

At any rate, we received Loran charts in Hawaii. Navigating was never the same again.

There was another interesting exchange during the navigators' briefing. As the briefing officer was finishing, one of the navigators spoke up:

"Here we are already out in the Pacific and we don't yet know our destination. Could you tell us?"

"You mean no one has told you where you're going?" He looked truly amazed.

"No, not officially." That was right; no one had told us. And it was

about time we knew.

"What unit are you?"

"Sixth Group."

Apparently he knew without looking at his papers. "The Sixth Group is going to Tinian," he said.

That's all there was to that. Of course, there might have been more if it had been a surprise, but it wasn't. I still don't know who was supposed to have told us or when.

When briefing finished, we rushed to the plane. Smitty and the gunners had the props pulled through when those of us who attended briefing arrived. We were off the ground in a few minutes, ahead of Ralph. The last view we had of his crew was right after briefing; they were tearing across the ramp in the opposite direction, headed for their plane.

We took off to the northeast, headed directly for some high peaks behind Honolulu. We banked sharply to the right, passed over the city, and climbed to the southwest.

Nothing can quite describe a long over-water flight. Except for those rare instances when a boat or an island is in sight, or when there is mechanical difficulty, the plane drones on and on with complete monotony--without even Burma Shave signs to read along the way.

The flight might not be entirely boring: I had my navigation. Doland took a periodic check on fuel consumption. One of the pilots kept a watchful eye on the flight instruments. Jeff stayed holed up in his dark little corner with his earphones clamped to his head, either writing seemingly meaningless groups of letters on a sheet of paper or resting his fingers lightly on the transmitting key. He could have been exchanging words with a buddy then flying over the Mediterranean for all we knew, although occasionally he burst into the intercom silence with a report on weather at our destination or some such useful information. The two scanners took a look once in a while to see if our engines were still attached to the plane and to see that we were not losing all of our oil--if the fish needed lubricating, we felt the Navy should do it.

As to the tedium of flying the plane, the pilots were perfectly willing "to let George do it." On a ten-hour flight, George may have had actual control of the plane for nine hours. George, of course, was the automatic pilot.

At times someone produced a book and read some. A card game could have been played but seldom was. The remainder was mostly monotony, with sleep as the primary relief. Never were all crew members supposed to be asleep at the same time, naturally, but the soporific drone of the engines made it difficult to avoid a glassy-eyed stupor, especially when everyone else or almost everyone else was asleep.

It was still morning when Johnston Island came into view out to the left, small and far below. It served as a good check on my navigation.

We flew on and later I reluctantly took some sun shots. The sun was getting far enough along so that an LOP (line of position) from it was no longer a good course line, but neither was it yet a good speed line. The water was far below and glassy, making it impossible to read drift.

It was one of those times when the shroud of irresistible drowsiness engulfed everyone.

Our turning point was Mejit Island, a tiny speck about one-quarter of a mile in diameter. Visibility was unlimited, so I felt certain we would see the island even if I missed it a ways. Nonetheless, vague doubts existed, for these long over-water hops were still quite new to us. (And I could recall the Amelia Earhart disappearance very well.) Locating Mejit was not the same as heading for the Hawaiian Islands, which formed a string several hundred miles long. So I decided to see what I could make of a Loran reading. I got a position, and it checked almost exactly with my dead reckoning. My confidence increased, and I relaxed.

I alerted the pilots to look for Mejit well ahead of my ETA, just in case. Then, about ten minutes before the ETA, I told them that we should be close enough for them to see it at any time. I climbed up to the flight deck to have a look for myself. Within seconds someone announced: "There it is, dead ahead." We couldn't have been on a better course if we had been riding a train. Russ glanced at me with a how'd-you-do-that look. But I kept a straight face--just a routine day at the office, wasn't it?

I went back to my figures and called Russ on the intercom with the heading for the second leg of the journey.

"Fly over the island and then turn to 236 degrees," I said.

"Oh no," he shot back. "No navi-gol-darn-gator is going to get me to fly over that place and maybe get us all shot up before we even get into combat."

Seldom was I simply a navigator to Russ. Sometimes I was a "navi-by-gawd-gator," sometimes I was "the kid with a pencil for a brain," and at other times I was . . . . uh . . . well, never mind.

I grinned to myself. He had been impressed by the briefing officer's remarks about Wotje. Mejit appeared to be just a shrub-covered rock.

"How do we know there's no one there, and I don't care if they're only armed with slingshots, I'm not flying over that place," he said quite emphatically.

So I told him to make the turn right where we were. I could plot our new course from a spot near the island just as well, and we wouldn't risk being the first U.S. military plane in history to be downed by a slingshot. I didn't tell him that turning short of Mejit to a

straight-line course to Kwajalein would take us a bit closer to Wotje than we would otherwise be.

A couple of hours later we began letting down and soon entered the Kwajalein traffic pattern.

For the first time we set foot on land that had previously been Japanese, and what a sight it was. U.S. forces had landed at Kwajalein on Jan. 31, 1944, one year earlier almost to the day. The airstrip was on the major chunk of land in Kwajalein atoll, but even at that the whole island was hardly as large as the airbase at Grand Island. And the looks of the place! Devastated is the word that came to mind first. One runway extended the length of the island, from shore to shore, and there were the appurtenances incident to the airstrip, all constructed since the invasion. Beyond that, there was nothing, not a tree, not a blade of grass, not even a weed. And no place on the island appeared to be more than three feet above sea level. If we had been heading for the end of the earth, I would have said we had arrived.

Looking at the condition of the island made us forget momentarily about our race with Sams and Ralph. Ralph was not there when we landed, and did not arrive. We were to see nothing of him for several days. So now we were alone in the lead in the three-plane race.

Our flight had lasted 10-1/2 hours and covered about 2,150 nautical miles. By the time we landed at Kwaj, darkness was overtaking Hawaii, but we had raced westward with the sun and still had about an hour of daylight. Local time at Kwaj was 2-1/2 hours earlier than Hawaiian time, but the International Date Line is between the two, so it was the next day. We had left Hawaii about 0900 on Jan. 28, and when we landed at Kwajalein, it was about 1700 of Jan. 29. That was the fastest I had ever used up 1-1/2 days.

Operations told us to be ready for briefing early the following morning. At the briefing, we were directed to fly the relatively short 1,350 miles to North Field, Tinian, west-northwest from Kwajalein.

Chapter III

Tinian

The flight from Kwajalein was without incident. At the expected time, an island rose up out of the water ahead. We approached at low altitude. Even before reaching the near shoreline, we had landing instructions from Lotus Tower, the VHF radio call name for the control tower at North Field. We crossed the center of the island on the down-wind leg of the right-hand traffic pattern, turned onto the base leg, and then onto the final approach, heading due east. The flight had taken 6-1/2 hours, and we gained another two hours crossing time zones.

(New York was 14 hours earlier than Tinian. That is, when it was noon on Tinian, it was 10 p.m. of the previous day in New York, which was on what was called Eastern War Time. When it was noon in New York, it was already 2 a.m. of the next day on Tinian.)

As we flew over the island before landing, we looked down with considerable curiosity; this was to be our home for an unknown length of time. The island was green, a marked contrast to the brown of Kwajalein. And Tinian was much larger.

The sight of North Field left one a bit speechless. The size of the place was wholly unexpected, and the amount of activity would have put a busy ant hill to shame. The complex pattern of work made it impossible to tell with one look just what all was going on. There were two long parallel runways, and we sat down easily on one of them. We seemed to land in the midst of hundreds of bulldozers and scurrying earth-movers. The Seabees operating all that equipment didn't even glance at us, as though they were accustomed to planes coming down almost on top of their heads.

The tower directed us along a zig-zag taxiway to a parking place at a vacant hardstand. We were met by a Sixth Bomb Group weapons carrier with two Squadron Operations men and "Ding Ding" Enneking, squadron navigator.

The crew, except for me, piled quickly from the plane and into the truck. We were to unload everything except the cargo on the bomb bay racks. With all my navigation equipment, I had more than I could handle in one load. The others could easily carry all they were required to take along with them, so when they berated me for delaying them but never once offered to help me unload, I was distinctly bitter.

At that moment I may have been the second most bitter guy in the Air Corps; I could never be first, because Andy was the undisputed champion in that regard.

The truck followed a course that meant nothing to us in that maze of roadways. It was obvious, though, that we were not to be located at the edge of the field. We drove about ten miles by the circuitous route then necessary before we pulled into the Sixth Group's area. We disembarked in front of a line of large tents. This was home.

Russ, Andy, Charlie, and I shared one of the tents with four members of Scotty Treeman's crew. At least half of the crews were already there, having left Nebraska before we did, and we quickly fell into the already partially routinized life. Our first undertaking, of course, was to pump from the others every bit of information they had accumulated in being on Tinian a few days before us.

The Marianas extend north and south across 440 miles of the western Pacific. The four principal islands are all in the southern third of the string. Guam, the farthest south, is the largest. Northeast of Guam 88 miles is the southern tip of Tinian, and Saipan lies across three miles of water northeast of Tinian. Between Guam and Tinian is Rota, the fourth major island, but one that was still in Jap hands, although supposedly "neutralized" by the time we arrived on Tinian. The only minor island among the southern-most five is Aguijan, five miles off the southern coast of Tinian. North of Saipan to Pajoros, the northern-most of the Marianas, lie some ten other islands and two or three reefs protruding from the water.

The northern islands are all small; only two or three had ever been inhabited, but one of them (Pagan) supposedly once had a Jap airfield. Guam, of course, had been American prior to December 1941. The other Marianas were mandated to Japan after World War I.

The Marianas were not coral atolls, as were many of the islands that figured early in the central Pacific campaign. The Marianas were the tops of mountains, largely volcanic. Even so, coral overlaid a good bit of the rock and formed reefs near the water's edge. So, we had plenty of coral, especially since some was blasted loose, crushed, and used, along with quarried limestone, to build airfields, roads, and living areas.

American forces had landed on Saipan on June 15, 1944, and on Guam five weeks later, July 21. The landing on Tinian was made July 24, six months before our arrival, in what Admiral Raymond A. Spruance termed "probably the most brilliantly conceived and executed amphibious operation in World War II." (1)

(1) Quoted in The Seizure of Tinian, p. iii.

Tinian is almost diamond-shaped, like a boy's kite pulled slightly askew. It is 12 miles long and 5-1/2 miles across at the widest point. It was composed mostly of flat sugar cane fields, making it quite unlike its mountainous neighbors. Saipan, Rota, and Guam have elevations that nearly treble the Tinian heights, and tiny Anatahan and Agrihan in the northern Marianas rise five and six times as high as Tinian. Even so, Tinian is almost entirely encircled by cliffs rising directly from the sea. (2)

(2) Seizure of Tinian, pp. 3-4.

The canefields covered about 90% of Tinian before U.S. engineers and contruction battalions went to work. Originally, the roads and straight rows of trees separating the rectangular fields gave the island a checkerboard appearance, but soon after we arrived the many housing areas and construction projects, especially airfields, dominated the view from the air. The use of crushed stone and coral in construction created large white patches in the green.

Tinian did not have a tropical look. It was too regularly cultivated, and the trees were not palms but short trees, mostly a variety of evergreen. We found two kinds of weather: rainy and rainier. Summer is called the rainy season with nearly a foot of rainfall per month from July to October, but there really was not much seasonal variation at all, and periodic showers characterized the weather the year around. (3)

(3) Seizure of Tinian, p. 6.

It was hot in the daytime, warm at night, and humid all the time. There was no use having extra shoes; any pair not worn every day was quickly covered with mildew.

After a time we gave no thought to being caught in a downpour. We didn't bother to try to take cover because in a few minutes the sun would come out and steam the dampness out of our clothes, at which time another shower would start the cycle all over again. And that was during the mis-named dry season!

The only real settlement on the island prior to the American landing was Tinian Town, located along the southwestern shore. The harbor there was the best to be found on Tinian, and it was not good.

Almost all of the native Chamorros of the Marianas Islands had been removed from Tinian by the Japanese during their occupation. (4) When the Americans took control, there were some 13,000 civilians, almost entirely Japanese. (5) We were told that, even though they were considered to be Japanese, most of them were originally of Korean extraction. By the time we arrived, they had been herded together and lived in a wire-enclosed camp near the center of the island. The men at times were used for labor in the various military living areas, and some of the women did laundry work. One such laundry, operated by perhaps a dozen native women, was located just south of the Sixth Group's living area. We trudged over there periodically with a barracks bag full of clothes. No ironing service was available. Our laundry was always returned in a wrinkled mass, but it was clean. The dirt was beaten out with mallets and stones after the application of water and G.I. soap.

(4) Seizure of Tinian, p. 7. (5) Seizure of Tinian, p. 140.

The Japs had taken advantage of Tinian's flat terrain to build four airfields. The principal one was Ushi Point Airfield near the northern tip of the island with a hard-surfaced runway of 4,750 feet, which was more than 1,000 feet longer than the more-publicized Aslito Airfield on Saipan. By the time we arrived, Ushi Point Airfield was almost completely

obliterated by the construction of North Field. Jap airfield No. 2 on the central western part of Tinian had been made over into a Navy airstrip. (6)

(6) Seizure of Tinian, pp. 4-5.

The 21st Bomber Command had been created to command the B-29s in the Marianas. Airfields for 29s were started on Saipan, Tinian, and Guam as soon as the Jap defenders were pushed beyond the chosen sites. In fact, as we learned, those crazy Seabees and engineers tended to rush in and start work before an area was cleared, saying, in effect: "Get your war out of our way--we're building an airfield."

The airfield on Saipan was for the 73rd Wing. The second wing of the 21st Bomber Command to enter combat was ours, the 313th on Tinian, to be followed closely by the 314th Wing, based at Guam.

B-29s began operating from Saipan on Oct. 15. The first raid on the Empire--that is, the Japanese home islands--by the 73rd Wing was staged Nov. 24, 1944. (7)

(7) Air Campaigns of the Pacific War, p. 46; Pirate's Log, p. 28; Seizure of Tinian, pp. 82-83, 149.

The first 313th Wing planes on Tinian arrived on Dec. 30. They were flown by crews of the 505th Group. Next came the 504th, then the Ninth, and then us, the Sixth. (8)

(8) Seizure of Tinian, p. 149.

The first combat mission by Sixth Group aircraft, three planes from the 40th Squadron, was Feb. 3, a navigational escort for P-38s strafing Iwo Jima. (9) The first major raid for the Sixth Group came on Feb. 25--and we participated.

(9) Pirate's Log, p. 29.

As soon as the 313th got operating, construction was started on another B-29 airfield on Tinian. It was for the 58th Wing, which had started the B-29 campaign from bases in China and India. The 58th was to be moved to Tinian because of the horrendous logistics in supporting operations out of China. Guam was also getting a second B-29 base, being built for the 315th Wing, which was to follow the 314th to the Marianas.

North Field was a tremendous place, really unbelievable. I could remember--well, almost remember--the cow pasture days of flying when an 800-foot level stretch of grass was considered a commodious runway. The alphalted runways here were eight THOUSAND five hundred feet long. That was more than 1-1/2 miles. Even so, the time soon came when we thought that was not long enough.

The runways extended most of the way across the island near the northern tip. Furthermore, two more identical runways were under construction. North Field was to have four parallel runways, one for each group in our Wing. Taxi strips zig-zagged along beside the runways, and

hardstands one after another lined each side of the taxi strips. There must have been more than 150 B-29s on the field when we arrived. A look across North Field presented a truly imposing view.

By mid-March a newspaper correspondent's account, which we saw, said that Tinian was then probably the largest aerodrome in the world. Somewhere we also read that "in 60 days more cargo was unloaded in the Marianas than was put down on the San Francisco docks in the entire year of 1940." We were always eager readers of any item that said we were a part of the biggest or best or newest of anything.

We moved into our tent with something less than enthusiasm. We were given cots of canvas and wood, with two blankets and a mattress cover apiece but no other bedding. Not having a mattress, just what we were to do with the mattress cover was unclear. We used it as a sheet. For a pillow we folded some clothing, generally a pair of little-used heavy flying pants. The cots rested on uneven rocky crushed coral. The crushed rock often shifted under the weight of a cot's legs, and when it did, the cot moved too.

Later we were each given mosquito netting, with poles to support it over the cot. No one used the netting. The island had been sprayed from the air with DDT and there were virtually no mosquitoes or flies. We used the poles to hang our rain-soaked garments on until morning, when we put the clothing back on just about as damp as ever.

The DDT had killed insects, but rats and spiders survived. The rats mostly stayed near the mess halls, but once in a while one came near the living quarters. From time to time someone would succumb to a whim and shoot his .45 at one. I don't recall of any rat ever being hit, but the noise may have scared some to death.

The spiders' natural enemies must have been eradicated, letting the spiders thrive. Fortunately, they were quite harmless. They seemed to be largely nocturnal. At night they spun threads of webs across the path to the showers and the latrine. In walking along the path in the dark, a person snapped one after another of the threads, and got a few bites, causing a little swelling but not really any pain.

We slept with loaded .45s nearby, all the while about as afraid of the use, or misuse, of a gun by a neighboring crew man as a night infiltration by Japs.

Our line of tents was about 50 yards east of a north-south road that formed a boundary to the area inhabited by Americans. West of the road to the cliffs at the shoreline was a stretch of about 300 or 400 yards of tangled growth. In that area, we were given to believe, the Japs occasionally moved furtively at night in search of food, better hiding places, or whatever the remnants of the Japanese garrison looked for.

There was no reason to suppose that a suicide banzai charge might not some night be made on our area from that "no man's land." Guards patrolled the road and shooting was frequent at night, but we were told, and readily believed, that the guards fired at every sound to the west without waiting to find out if anything living was there. As a result,

the amount of firing, happily, was no gauge of Jap activity in the wilderness. We were told that searches in the morning did on occasion, but not frequently, turn up the body of a Jap killed by the night's shooting.

Russ had a realistic plan to deal with any surprise Japanese charge. Like the rest of us, he had his .45 where he could grab it quickly. But he knew exactly what he was going to do with his: He was going to throw it at any Jap coming his way. He said there was a much better chance that he would hit someone that way than if he fired it.

Andy had perhaps an even better plan. "None of that time-consuming stuff for me," he explained; "while you're taking time to throw your gun, I'll be half way across the Group area, running like a scalded dog."

"In that case," replied Russ, "all that the rest of us have to do is follow the brown streak you leave behind."

The night before we arrived several tons of TNT had exploded near the center of Tinian, jarring the whole island and awakening everyone who was asleep. Several Marines were killed in the explosion, believed to have been the work of Jap soldiers still at large. (10)

(10) Pirate's Log, p. 29.

Drinking water was available from a portable tank-on-wheels parked behind the shower building and not far from our tents. Our canteens became one of our most-used utensils; soon no one could understand how he had ever managed to survive Army life in the States without a canteen of water constantly near his bunk. However, brushing teeth using a canteen that sat wobbly on a pile of sandbags was not the ultimate in modern conveniences--about on a par with a cot that lurched sideways once in a while.

The shower building definitely was appreciated. Water flowed from a wooden tank built on a framework beside and above the building. A water shortage that occasionally limited showers to certain hours of the day was the only handicap, provided you didn't expect the water to have any real force behind it--and provided you didn't expect to have a dry towel to use afterwards. The drying rate was next to zero, so a towel, once it got damp, stayed that way forever.

The latrine was new when we arrived; even so, when we walked in, we were met with the usual message on the wall: "Kilroy was here."

We dressed in the latest fashion--the mid-Pacific fashions of 1945, that is. The most common apparel consisted of a pair of G.I. shoes and white or olive underwear shorts--and that's all. Wearing shoes was not a concession to civilized life; they were needed because of the sharp coral underfoot. There were four necessities for a trip to the latrine at night: shoes, shorts, flashlight, and a .45. It wasn't long until we felt safe enough to go around, at least in our own area, without the gun. So, in truth, there were only two necessities: shoes and flashlight.

Eventually, each squadron was to have its own mess hall. At the time

we arrived, one was sufficiently completed to be in use, and the whole Group used it--in shifts. We ate a lot of C-rations those first days. At least they were better hot than cold. Before long, we had meat regularly, but we got mighty tired of eating goat meat, as we called it--it was mutton shipped to us from our Aussie allies (actually New Zealand). We even had juice quite often; we had a choice: pineapple juice or more pineapple juice or lots more pineapple juice. One might get the impression that Hawaii was the source of supply.

Ineluctably, our erstwhile racing rivals caught up with us. Red Dog Sams and his crew reached Tinian one day after we did. They had not made it off the ground that night we left Mather, and so they were held over to the following evening. At Hawaii they found Johnny Ralph with an engine being changed. Sams went on to Kwajalein, where he too had engine trouble. However, he lost no time there as the Kwaj Maintenance crew completed an engine change for him in the time the crew slept--quite a feat. Ralph arrived on Tinian two days later.

A new kind of life now awaited us.

Chapter IV

Combat

We flew twice in the week following our arrival on Tinian. We had calibrated the airspeed meters when we first got the plane back in Nebraska, but Operations advised us to do it again because of the very different climatic conditions in the western Pacific, which should make no difference but, nevertheless, might. Then, as a training exercise, we made a practice bombing run.

The training flight was the first of many. Rota, between Guam and Tinian, and the islands of the northern Marianas made convenient targets for practicing--convenient for us, not so convenient for the residents; Rota and two or three of the northern islands had some inhabitants--mostly Japanese military personnel, but not entirely. Maug, near the northern end of the island chain, was a favorite practice target.

On Feb. 6, Operations notified crews that the first combat bombing mission for the Sixth Group would be the next day. Most of the planes in readiness were scheduled, including ours. It was to be a daylight formation attack on an airfield at Moen Island, one of the atolls in the Truk group. We were to carry 500-pound GP (general purpose) bombs.

Lt. Paul Harton, RCM (radar countermeasures) officer, was to fly with us. Paul became a sometimes-member of our crew because the monitoring equipment he operated in flight could be used in our plane. His job as yet did not involve taking active countermeasures. Instead, he analyzed Jap radar with his bank of electronic devices. As I understood it, the key to the radar battle was to determine the frequency (or frequencies) the enemy used for transmitting, while keeping ones own frequencies secret. Paul was able to detect various Jap radar transmissions and even to distinguish gun-control (or searchlight-control) radar from the early-warning stuff.

Because of the RCM equipment, a small antenna that other planes didn't have was installed on our plane. Russ didn't have any say in the matter (this was the Army, you know), but he wasn't too keen on having that antenna: When we flew over Japan, he didn't want anything that would make our plane look different from all of the others--nothing that might attract the attention of a Jap fighter group leader: "Aah-so, velly special antenna on one Amelican! Honorable No. 2 wingman please to shoot down--else to join honorable ancestors."

Take-off and assembly on the following day proceeded as planned. The 30 Sixth Group planes made up two formations. We were the outside plane

of the right-hand element in one of them. Captain Koser was leading that element.

Since we were flying in formation, there wasn't much for me to do--just maintain a general idea of where we were. But I couldn't move around, weighted down as I was with a C-1 survival vest, a "Mae West" life preserver, a parachute harness, and a flak suit. I could hardly do so much as turn in my chair. I just gazed out the window most of the time.

When we got to Truk we found a lot of undercast, five- or six-tenths. We could see only some of the islands in the group.

Approaching the target, we saw our first flak bursts, little black clusters here and there in the sky, mostly below us. Even as inexperienced as we were, we knew this was light stuff. There seemed to be no pattern to it. Since I couldn't move anyway, I just sat in the navigator's place and looked at it.

As we bore down on the aiming point, the hole in the clouds closed and the lead bombardier lost sight of the target. No bombs were dropped. The formation began a wide circle to the left to come in on the target again.

I wondered if this was what combat was going to be like. Making two runs on the target was not the way I had pictured it, and I did not particularly relish the idea, no matter how light and scattered the flak.

It takes a long time to turn a whole formation. It was probably 20 minutes before we were over the target again. In the meantime we had been pulling power like mad to hang on to the outside of the turn--like being at the end of the line when playing "crack the whip" on the school playground.

This time we got the bombs away, toggling when the lead plane dropped its bombs. Same scattered flak, no fighters.

I didn't see the bombs hit, but Russ commented later that some school of fish learned a lesson--that it wasn't safe for them to hold class in the waters near Truk. So I surmised that we might as well have released the bombs on the first pass.

Then, as we began a turn to the right to head home, our real troubles started. Russ and Andy had a devil of a time holding our position in the formation. Koser's plane seemed to be lurching ahead by jerks as well as continually dipping and rising. Russ and Andy were straining as hard as they could. One item at a time, they shed their clothing until they were almost stripped, and still they were dripping wet with perspiration. But I spent little time observing the condition of the pilots. I was looking out the window and holding my breath, scared nearly stiff. When we left the target area I had discarded my heavy equipment and climbed forward to the flight deck over the nose wheel well. When I saw what was going on, I went back and got my parachute.

We were flying in prop wash, trying to stay in echelon with a plane

that stood still one moment and zoomed ahead the next and trying to avoid the plane on our left that kept drifting over toward us, all the while cutting short on a turn to the right.

We would find ourselves, all of a sudden, closing rapidly on Koser. Russ would cut power completely and still we gained. Just when I thought our props were going to start chewing Koser's tail, he would spurt ahead and Russ would have to shove the throttles forward. Then a wave of prop wash would throw us up on our left wing and the plane to our left up on its right wing and the two would start sliding toward each other. Russ would chop the throttles again and he and Andy would put all their might into turning the wheel to the right and pushing on the right rudder pedal. Andy, who had a physical build like a broom handle, would have both feet on the right pedal, pushing so hard he appeared to lose contact with the seat under him, looking like a rigid pole wedged between the rudder pedal and the back of the seat. Still we continued to skid to the left. Finally the two planes would drift apart, but then the whole process would start all over again.

Oh God, why couldn't Orv and Wilbur have been content to stay on the ground like reasonable human beings?

I was fully prepared to bail out. How we ever avoided a mid-air collision I will never know. I kept thinking, "For Chris'sake, Russ, get us out of this damned formation; it's not worth our lives to try to maintain an impossible position." I visualized the aftermath in terms of a newspaper story:

> Head: "B-29's Attack Truk."
> Subhead: "Two Planes Lost in Mid-Air Collision."
> Story: "The Army today released the names of 22 men presumed lost when . . . ."

Doland was also near panic--for a somewhat different reason. He was having a fit about the way the engines were being treated--mistreated, according to him. At one point, when Russ had the throttles pushed to the firewall for a sustained period, Doland turned and solemnly proclaimed: "I won't be responsible for the engines; you've exceeded the limits."

At the moment, I didn't much care who was responsible for the engines--only who was responsible for the lives of the crew. I would never be able to guess how long the agony went on. Russ and Andy stayed with it, though, and somehow we came through unscathed.

And then, after all that trouble, we soon dropped out of the formation anyway. At the end of the bomb run (or, rather, the bomb runs), our bomb bay doors hadn't latched properly. When, after a bit, they still wouldn't latch, Russ radioed the leader that we were leaving the formation. With a little tinkering, Charlie soon got the doors fixed, and Russ asked for a heading home--if it is permissible to think of Tinian as home. I was ready and gave him the heading, but a minute later he called again: "How come the formation is going that way, and we're going this way?"

Oh my, I thought, our very first combat mission and I'm in trouble

already. I went up front and looked, and, sure enough, the formation up ahead was heading some--not a lot, but some--further to the left than we were. I went back and checked everything and got the same answer as before. I don't remember exactly what I said at that point, but Russ recalled later that I said, "I don't know about them, but if you want to go to Tinian, this is the way."

"Okay, if that's what you think," said Russ, "but just remember, if you're wrong, there won't be any room for you in the life raft." Russell had an effective employee incentive program for his crew.

I wondered if it would be acceptable for a navigator to say, "I sort of think that maybe this is approximately the right heading, more or less."

Anyway, in due course (due to the course I had us fly, that is) we came straight in to Tinian. We landed and parked before the planes from the formation showed up. They had flown out of their way, unintentionally, because the lead navigator had applied the correction for variation backwards. The earth's magnetic variation wasn't great in that part of the world--four to five degrees near Truk--but applying it in reverse in that prevailing easterly wind produced a heading error of ten or so degrees. It's an easy mistake for a navigator to make--but so easy that, ever since Lesson One in navigation school, we were warned again and again about it. So, it was something any navigator should check and re-check and re-re-check.

In any case, I was greatly relieved. It's a good feeling to be right when the whole formation is wrong--but, I'll tell you, it takes a whole potful of those times to make up for one time of being wrong when everyone else is right. Believe me, I know.

I usually tried to defend whatever other navigators did. Nevertheless, I was forced to confess later to Russ that I couldn't offer an excuse for the lead navigator. Russ only shrugged, saying, "That's the way it goes--you buy 'em books 'n' buy 'em books . . . ," leaving the conclusion unspoken as he clomped off to the showers in standard garb--a pair of G.I. shoes and a damp towel over his shoulder.

The worst of it was that my Grand Long-Range Design--to convince Russ and Andy that navigators were worth something--was probably back to Square One just because of a silly mistake by someone else.

On that Truk mission we reached within about seven degrees and 15 minutes (435 nautical miles) of the equator, the closest we ever came. The whole mission required but seven hours flying time.

That one mission, a rather poor indoctrination into combat, was our only tune-up for the "big time." The impression I had after our baptism of fire was that enemy opposition was no more than a nuisance, but beware of your own planes.

It was later that it occurred to me that the Wheels didn't really care about that airfield on Truk--they had us go there as an introduction

to combat. It probably should have been called advanced training instead. They could have listed it in the graduate course curriculum as "Aerial Warfare 405, instructive field trip."

And it was instructive; it certainly taught me something: Be sure you have confidence in your parachute and know how to use it. It might spoil your whole day if you pulled the rip cord and then watched the 'chute go floating off without you. Also, neglecting to have the leg straps snug was a particularly regrettable mistake, according to what I heard from "Fatty," the former air crewman with the soprano voice.

We got back to the supposed safety of our Group area only to be informed that the island had been alerted for a suicide attack. The alert wasn't a part of any training curriculum--it was for real. We were told that Intelligence suspected that the Japs would stage a raid within five days, probably not hoping to recover their forces, but planned in an attempt to cripple the B-29 effort against the Empire. Some officials thought suicide paratroopers were a possibility. (1)

(1) That the use of suicide paratroopers perhaps was considered by the Japanese at that time, or at least that the warning against them was a good guess by U.S. Intelligence, is demonstrated by this quotation from The Campaigns of the Pacific War, p. 339: "Of particular interest was the [U.S. Navy] strike on the HokKaido-Northern Honshu area on 9-10 August, which wiped out a force of aircraft being assembled by the Japanese for suicide attacks on the B-29 bases in the Marianas. These attacks were to consist of large-scale landings by airborne suicide troops in an operation similar to that conducted with some success at Yontan airfield on OKinawa on 24 May 1945."

Two days later, Feb. 9, we were back to practicing. We swung the compasses again, this time with bombs aboard to try to determine if they affected the magnetism of the plane. Then we flew up to the northern Marianas and used Maug as a target for practice bombing. The 73rd Wing had been around for three months and Maug was still there in the same place, so now we were trying to see what we could do about it.

While in the air, we noted with more than passing interest the large number of naval vessels in Tanapag Harbor at Saipan. It looked like dozens of LCTs and LCIs at anchor.

Back on the ground, the squadron bombardier wanted to know if having bombs in the plane affected the compasses.

"Only if they explode," said Charlie, who sometimes sounded a lot like Ish Kabibble.

One of the first tasks we should have taken care of after getting settled in our new quarters was to select a name for our plane. We had already given it some thought, and an idea hatched back in Grand Island seemed fated for adoption. I think we had postponed the decision primarily because of the disbelief with which we anticipated it would be greeted by others, and we knew it was hopeless to try to explain it rationally.

Nevertheless, we took the fateful step a few days after the Truk mission, and Russ informed Operations that on the side of 672 we wanted painted the name "Reamatroid"!

The name can be explained only this way: A reamatroid is a contrivance of ethereal dimensions and chameleonic function such that the name can be expediently slipped into a technical dialogue by a crew member who has been crowded into a syllogistic corner and who defensively resorts to a "snow job" to cover either his lack of knowledge, his lack of assurance in his knowledge, or his inability to transmit his knowledge to an interrogator. In case it will help--although it won't--it could be explained that a reamatroid is a device of the same general class as a thermathrockle. Either one or both may at times be the completely unchallengeable explanation of a particularly elusive mechanical malfunction.

Now that that's cleared up, ...

Members of our crew always understood the somewhat abstruse theory of the snow job, at least after the first few training missions at Grand Island when each one was trying to trap others with unanswerable but deceptively plausible questions while avoiding having to provide answers himself. However, I think some of the other crews, even some closely associated with us, never quite grasped the nature of the theory nor the untold uses that could be made of a well-disguised snow job. There was one notable exception: Sams. Perhaps not his whole crew, but he and his engineer, Lt. Robert Volin, understood all too well the intricate nuances of a snow job, and I cannot say but what, with them, we at times were the ones who were the snowees.

The masters of the snow job on our crew were Russ and Doland, with Charlie and Hudson following closely behind. Actually, I was an apprentice, and no neophyte ever had better mentors. However, the level of skepticism was such that many times my sincere effort to convey information on which I actually was competent, because of its esoteric nature to a pilot--a "mere" sky jockey--was taken as a snow job. My reputation for snowing may not have been high, but I deserved even less.

To tell the truth, our ground crew was not happy with the choice of a name. When the painter first appeared and told them the name he had been instructed to put on the nose of the plane, they ran him off the hardstand and threatened mayhem if he returned.

Also, Russ said he was told that Colonel Gibson (Col. Kenneth H. Gibson, group C.O.) was undecided for a time whether he would permit such a name. In other words, he didn't understand it either.

Finally, Colonel Osborn (Lt. Col. John W. Osborn, our squadron commander) asked Russ to go down to the field and appease the ground crew. They, like many others, could not see how anyone could care for a name like Reamatroid, but Russ persuaded them to accept it. And I think that after a time they developed a certain pride in the name. Many men of other units who later remembered no other plane of the 39th Squadron said they remembered that unusual name, Reamatroid.

Our plane, in addition to the AAF serial number, 44-69672, was assigned a Group call designation, 33V ("33 Victor" when spoken), but to us it was forever after simply but affectionately the Reamatroid.

Colonel Gibson had decreed that a pirate's head, the Sixth Bomb Group insignia, would be painted on the nose of each plane in the Group. The plane's name was to be painted in a white area looking like the tail of a comet trailing the pirate's head. Some crews didn't like the Colonel's order because it precluded original art on the nose; they were thinking of the almost-lascivious paintings of voluptuous females that 58th Wing planes had. But anyone on our crew who had such a thought chose to keep his preference to himself rather than make a clean breast of it.

Each group in the Bomber Command had a different marking for its planes--painted on the sides of the vertical stabilizers. The planes of the Sixth Group had an "L" above a triangle. The markings made it possible to distinguish in flight which group a plane was from, but they were not as prominent as the larger markings that were adopted a few weeks later. Then a large circle was painted on the tail of every 313th Wing plane; an "R" in the circle designated the Sixth Group.

On Feb. 11, crews from the Sixth Group, including us, were scheduled for a radar search mission. The Navy had requested the 21st Bomber Command to find out how much Jap shipping there was between the Marianas and the Empire.

A Navy officer was to fly with us as an observer. His presence might contribute some realism to the observations--because, if our crew saw so much as two tug boats on the horizon, we just might report that we had spotted a flotilla of battleships.

Anyway, he was standing with us on the hardstand as we prepared the plane for the flight. Allgor was preflighting the lower rear turret. Suddenly, BANG! One of the .50-caliber guns fired! That was decidedly not part of the preflight check. Luckily, the bullet went straight down into the ground, almost between Allgor's feet. It was nearly fatal anyway because it almost scared him to death. He also felt cheap about it. First he paled, and then, after a tremor of fright passed, his face turned nearly crimson with embarrassment.

No doubt, everyone's first thought was, "For God's sake, be careful." Russ started to say something to Allgor, but he saw the color drain from the Navy guy's face, and then he looked at Allgor, who was quaking--and turning the color of a beet--and Russ started laughing instead. He had to turn his back to regain a straight face.

So, the incident was not mentioned thereafter. I do suppose, though, that any indigenous gophers quickly took up residence under someone else's hardstand.

There was no delay in getting everyone aboard. I guess they figured it was safer inside the plane than out on the ground.

We had taxied out and were in a long line of 29s, each waiting its turn to take off, when a heavy downpour hit. Take-offs were halted until

the rain let up. All planes sat as they were for a while, but finally, one by one, the pilots began cutting their engines, and so did we. The shower stopped after about 40 minutes and take-offs resumed. However, we had developed an oil lock in No. 2 engine and were forced to move out of the way and, when the others had passed, to return to our hardstand. No mission for us. We were disappointed. I can't speak for the Navy fellow--he probably was relieved.

The following morning we awoke to find dozens of naval vessels dotting the waters off the west coast of Tinian. They were all ours, not the ones we were going to search for the previous day--thank goodness. From our spot on a slope facing west, we could see about 15 large ships and numerous smaller ones, some of them scooting to and fro among the larger ones. A number of carriers were visible out in the distance. Some ships were right on the horizon, so we were not sure but what there were more over the horizon. Someone said there were six battleships off the east coast.

Seeing so much sea power was impressive and thrilling--all the more so because the ships had arrived in the dark so that the whole armada was before our eyes all at once.

We speculated that the Navy was preparing for an invasion of Iwo Jima. It was not an especially shrewd deduction: There was not much land remaining between us and the Empire, and Iwo had been prominent in our talk ever since our arrival on Tinian because B-29 crews had a vital interest in it as a place to land when damaged or low on fuel.

We heard that some Wheels had estimated that we would have fighter escort to the Empire in a month, with the fighters based at Iwo, of course. I recall thinking that if we could survive until fighters could go with us--whatever length of time it turned out to be--then prospects should be brighter. We valued fighter escort highly.

A B-29 mission that went out that day, we were told, had first been scheduled to bomb Iwo. Then it had been changed to another search mission. Some planes from the Sixth flew on the search, but not us.

Late in the day came the saddening news of our first loss, the first crew of the Sixth Group to die in action, and they were from our Squadron. We felt we had known them quite well. Lt. Bernard Casaurang was the AC. They had gone on the search mission. Their plane was seen to catch fire about 45 minutes after take-off and plunge into the water, exploding when it hit. There were no survivors.

We felt bad about the loss, but, as I remember it, it was no great shock to us. That the first loss was not because of enemy action also was not surprising. Flying was like that. Nearly every one of us at some time during training had gone through the experience of having buddies fail to return from a flight.

We were fascinated the following day, Feb. 13, watching naval maneuvers off our coast. There were more vessels even than the day before, and now they were active. We interpreted the maneuvers to be practice for an amphibious assault. The ships disembarked no troops, but

beginning some distance out at a line of fairly large ships, smaller craft would speed directly toward the shore. They churned right toward us until they were maybe 50 yards offshore, when they turned about. The exercise was repeated several times.

Ships we took to be destroyers steamed in to a point so close I think we could have hit them by throwing rocks at them. Battleships also seemed to be exceedingly close to us. I had not dreamed that ships like that operated so near to shore. They would certainly have been a factor in a land battle extending quite some distance inland. Of course, I wouldn't know if this was normal; perhaps water depths off our coast were unusual.

Someone dug out a naval recognition manual he had used in training, and we felt sure we identified battleships of the New Mexico, Nevada, Texas, and Arkansas classes not far offshore. Two heavy cruisers, one of the Pensacola class and one of the New Orleans class, were also close to shore. Fletcher class destroyers were all over the place, along with a few Mahan class DDs. Carriers and other heavy ships were outlined against the horizon. I determined, with the help of the recognition manual, that the most easily distinguishable carrier was of either the Charger or Sangamon class.

Someone claimed that he unmistakably saw the battleship Iowa off on the horizon. Vessels of the Iowa class were the newest and most powerful in the fleet. I was proud that the new class of battleships was named for my home state, but I don't know why the Navy picked that name--Iowa is so unnautical that most of my fellow Iowans didn't even understand that a Rear Admiral is the one in charge of that part of a fleet sailing along behind the part commanded by a Forward Admiral.

If, perhaps, you think that there isn't any such thing as a Forward Admiral, it must be that you've never talked to the girls in the flag officers' steno pool back at Pearl.

Later, a rumor with the ring of authenticity purported to explain all that naval activity. Task Force 58 was off to the east of Tinian, we were told. (I think the rumor was a little tardy; the task force seemed already to be around us.) It was to swing north, with its carrier planes hitting Tokyo on the 16th and points south of Tokyo the following day. Then on the 19th the task force would meet the convoy that had been near us the previous two days and support it in landings on Iwo Jima.

The next day, Feb. 14, a third radar search mission went out. We were not scheduled. Also, planes from the 504th and 505th Groups joined the 73rd Wing in a bombing mission against Nagoya. We heard that the weather was bad and that most planes picked a "target of opportunity" to bomb. It was not to be the last time that a raid on Nagoya did not go as planned. We also heard that one B-29 ditched, the only loss on the mission, compared with eight planes lost on the previous raid.

We had been told soon after our arrival overseas that weather was a primary factor in limiting operations against the Empire. Most weather over Japan moves down from the permanent high pressure center in Siberia. That meant that the U.S. had no observer stations where reports could be

made of the weather approaching Japan. Consequently, missions were sent out without even moderately accurate forecasts of weather over the target--not a desirable way to run a war.

In actuality, it turned out much worse than that suggests, for the conditions encountered at high altitude over Japan came as a real shock. In the first place, the weather was unexpectedly bad during winter months, with layer after layer of cloud formations often piled one on top of another to 30,000 feet or higher. But it was the wind velocities that really astounded the experts. When B-29s began flying high-altitude missions over Japan, Air Force meteorologists realized that the winds aloft were quite unlike anything known before.

The B-29 was designed for high-altitude precision bombing, which required going over a target at 15,000 to 30,000 feet. The wind speeds encountered over Japan at the higher bombing altitudes were regularly 100 to 250 miles an hour and were found on occasion to be more than 300 miles an hour. That meant either going downwind at such a terrific ground speed that precision might be sacrificed--the bombardier would hardly have time to make any corrections after finding the target in the bomb sight--or going upwind and being practically a sitting duck for flak.

We were told that, on one of the first missions flown by the 73rd Wing, the planes swung out east of Japan and then west or northwest toward the target in Tokyo while still climbing to bombing altitude. They were headed more or less directly into the wind, which kept increasing in velocity as they gained altitude. The coastline appeared on the radar scope, inched slowly toward them, hung still for a moment, and then gradually receded. They literally had a negative ground speed. True airspeed at their altitude must have been at least 250 miles an hour and probably 300, but the wind speed was greater. (2)

(2) The story was authentic. See Song of the Sky, pp. 157-161. Remember, in 1945 man had not yet explored altitudes like 30,000 feet. It was, in fact, the bombing of Japan that first brought the existence of a high-altitude "jet stream" to notice. What we were hearing were the first ruminations about this new phenomenon that had been discovered. Cf. Matterhorn to Nagasaki, pp. 575-576: "With wind velocities reaching 200 knots and more, drift was difficult to correct and bomb runs had to be charted directly upwind or downwind. Attacking Japan's best-defended cities directly in[to] the teeth of a 200-knot wind was unthinkable; going downwind[,] the B-29's reached ground speeds in excess of 500 miles per hour, in which case neither bombsights nor bombardiers could funtion properly."

Before long, Bomber Command was sending weather flights to the Empire almost all the time. Observations made by those flights were the primary source for the all-important forecasts of weather at the targets. It was interesting that those flights--a B-29 flying all by itself over Japan--were rarely attacked by the Japs. (3)

(3) See Sky Giants, pp. 150-151.

On Feb. 16, we heard from WXLD, the station that the Armed Forces Radio Service operated on Saipan, that Navy carrier planes that day had attacked Tokyo, as we had heard several days earlier they would. It was the first carrier plane raid on the Empire. (4)

(4) Air Campaigns of the Pacific War, p. 47; The Campaigns of the Pacific War, p. 320.

After its Tokyo raid, the Navy officially sent its thanks to the 21st Bomber Command, saying that the Tokyo carrier strike would not have been possible without the B-29 search missions to locate all picket boats right at the doorstep of the Empire. I would have liked to have seen what happened to those that were in the Navy's way. Imagine a little picket boat suddenly finding all of Task Force 58 steaming toward it. Out there in the ocean there was no place to hide--much the same as Joe Louis had pointed out with regard to a boxing ring.

The Sixth Group flew another mission to Truk on the 18th. We were not slated to go. The men said after their return that the formation was not too bad. Almost everyone now had gone to Truk as an introduction to combat, so we figured that meant an Empire mission for the Group at any time.

We continued to talk about the impending landing on Iwo, a piece of land of extreme importance to us. Rumor still held that the landing was to be made on the following day. It was. We heard only the public announcement over the radio, but it confirmed the report we had heard some time earlier that Feb. 19 would be D-day.

As is probably clear by now, life seemingly consisted of one rumor after another. Later, when we were busier, there were fewer. Naturally, we were interested in any rumor about our activities or prospective activities, and we listened to those that didn't involve us directly for any clue they gave to the progress of the War.

Rumors had, in general, been remarkably accurate, with the noteworthy exception of rumors about numerical quantities. Hear-say numbers usually were inflated. For instance, on the 16th, when the Navy first struck at Tokyo, we had heard that several thousand carrier planes were used. A rumor circulating on the 19th had cut the size of the force to 1,900 planes, and, as far as I can tell now from histories compiled several years later, that was still about four times the actual number. (5) Rumor had the number of carriers exaggerated in like manner, and we sometimes heard exaggerated--or understated--reports of our own losses, as well as of our accomplishments.

(5) Air Campaigns of the Pacific War, p. 47; The Campaigns of the Pacific War, p. 322.

It was interesting, too, that, when information reached us by rumor, the enlisted men often heard it first. The officers got a lot of information on higher-echelon matters via the enlisted men.

The landing at Iwo prompted talk of grand stategy, replete with strange-sounding names of Japanese islands. There was Nansei Shoto

(Ryukyu Islands) between Japan and Formosa. Closer to us was Nampo Shoto, composed of three island groups: (a) a string of barren rocks near the Empire with the strange name of Izu Shichito, but, understandably, usually nameless to us; (b) the Bonin Islands, or Ogasawara-gunto, which were, principally, the Chichi Jima and Haha Jima groups; (c) a southern group consisting of two small rocks plus a larger rock covered with volcanic ash named Iwo Jima, those three sometimes considered a part of the Bonin Islands but properly called Kazan Retto or Volcano Islands.

According to the stories going around, plans first called for a campaign against Formosa, followed by a landing on mainland China. The landing on Iwo was supposed to mean that those early plans had been abandoned in favor of the more direct approach--Nampo Shoto first and then over to Nansei Shoto, cutting off Formosa. This direct alternative, it was thought, was possible because the War situation was better than the planners had been able to count on some time earlier.

The whole business sounded good to us, and we permitted ourselves the luxury of a few thoughts contemplating that, perhaps, the War would not last too awfully much longer.

(Those stories we heard about strategy at the highest levels apparently were quite accurate, according to the accounts given by historians writing some years after the War. How we at the lowest levels--and off on an island--could have been informed correctly and so promptly, I do not know. It is rather amazing, especially considering that the historians had volumes of official records to use as sources, while my source often was the guy who happened to sit next to me in the latrine.)

That same day (D-day, Feb. 19) we attended a lecture on what to expect and what to do if captured by the enemy. The whole tone of it was that capture probably would not be as dreadful an ordeal as it was usually painted--not necessarily fatal. At one time, when B-29s first attacked the home islands, the Japs had announced that all captured fliers would be beheaded. I don't remember any rejoicing as a result of the supposedly consoling thought that, if some of us were to be beheaded, at least a number of our buddies would probably escape that fate. Nevertheless, after that lecture, we felt somewhat better.

On Feb. 20, we practiced formation flying and bombing (again!). We led the Group's formation during most of the flight. The bombs, as usual, were aimed at one of the northern Marianas. We learned that it was not good for morale to use one of the reefs for a target; we felt better when the target was something we could hit--like one of the large islands.

Three planes of the 40th Squadron had gone on an Empire mission the day before with the 504th and 505th Groups. It was the first Empire mission for planes from the Sixth Group. By the time we returned from our practice flight, the story of their experience had made the rounds. It was a typical high-altitude bombing raid, with a target in Tokyo. We heard the disquieting report that there were more than 400 fighter

attacks on the formation. (6) Most of the planes on the mission received battle damage, but the only one lost was one that ditched. A radio operator on one of the 40th Squadron crews was wounded by a piece of flak.

(6) See Pirate's Log, p. 29.

One plane from the 504th came all the way back on three engines. It was not the first time a 29 had lost use of an engine over the target and returned safely to the Marianas, but it was significant enough to us to be worth talking about whenever it happened. Of course, not all planes trying to return on three engines made it; some ended up in the water. But, demonstrably, it could be done. The B-29 could fly on three engines all right. The worry was running out of fuel.

Fuel consumption, perhaps not even second to enemy opposition, had been a major consideration in the B-29 bombing campaign from the beginning. By February, more 29s had ditched than had been lost over the target. Most of the ditchings were a result of insufficient fuel to return to Saipan or Tinian.

An Empire mission was a flight (round-trip) of about 3,000 miles, varying some to different targets. Climbing consumed a great deal of fuel. The 29s flew most of the way to Japan at low level--about 1,000 feet, sometimes lower--so as to use up fuel before calling upon those engines to lift the remaining weight up to higher levels.

Our tanks held 6,800 gallons of 100-octane gasoline. However, we also had four 18-cyclinder 2,200-horsepower R-3350 (3,350-cubic-inch displacement) engines gulping that stuff as though they had a direct hook-up to Spindletop.

On missions flown prior to March--all of them high-altitude attacks--it was necessary to carry extra fuel in bomb bay tanks, which meant a bomb load of less than capacity. Fuel requirements were calculated carefully. For safety, a little extra fuel was allowed as a "cushion." Nevertheless, quite commonly something happened to cause a plane to use up the extra allowance and more. A crew may have found it expedient to use more power than briefed to do, for greater speed or higher altitude or maybe because of damage to the plane. Almost any deviation from routine probably meant consuming more fuel. Such occurrences were common, and we were anxious to know what could happen, such as losing an engine, and still leave enough fuel to return to base.

On Feb. 21, we noted an unusual number of P-47s and P-51s flying in the area. At any particular moment there seemed to be two or three of the P-shooters overhead, and at times more than that. We assumed they were brought in to be flown to Iwo as soon as a landing strip could be made available there to handle them.

We were glad to see the fighters in such numbers: the more, the better. If we were running the War, there would be several fighters escorting each B-29 over enemy territory. Why shouldn't there be--after all, Al Capone had several bodyguards, didn't he? Not that there was a

meaningful analogy there, although I think it was true that I hadn't paid any income tax the year before.

During the two weeks following our Feb. 7 Truk mission, most of the crews had little to do. We all read a lot. One day some of us read too much: We drew duty ("volunteered") as mail censors for the Squadron. I never would have guessed what some lunkheads thought they could get past the censors. The simplest of codes would have worked, because we didn't have the time nor the expertise to detect any half-intelligent deception. But they blatantly divulged every sort of obviously-classified military information--and got their letters chopped up with a razor blade as a consequence. Either some of those guys were awfully stupid or else they weren't very smart. It gave me a headache by the time we had spent several hours reading handwriting of all degrees of legibility.

We had quite frequent poker games. Those who played often in our little game included Sams, flight engineer Volin, Gary Lipton (Sams's navigator), Ralph, Robert R. Joslin (Ralph's co-pilot), Lester Schwartz (Ralph's navigator), Victor A. Steinmetz (Ralph's engineer), Russ, Charlie, and me. Our games were strictly recreational; any resemblance to "real" poker was purely superficial. No one ever lost much, nor won a great deal either. Clearly, no one of our gang was ever mistaken for a champion poker player.

A few fellows had personal radios. Sometimes we turned from the Armed Forces Radio Service to a Japanese station just for the novelty of it. Occasionally there was a message in English--the broadcasts of Tokyo Rose, for instance--but mostly there was music. We just didn't appreciate that high-pitched twangy Oriental music. On the other hand, they probably never learned to like "Moonlight Serenade"--or something soothing and sensible like "Flat-Foot Floogie with a Floy Floy."

A small PX was opened, but it wasn't anything like the PX's we were used to in the States. After a while, the PX did occsionally have some beer.

While typical rumors traveled at the speed of sound, that was slow compared with news of the arrival of beer at the PX, which caused a time warp that even Einstein's Unified Field Theory wouldn't explain: First, the line began to form outside the door. Second, the PX clerk went to the door and asked, "Whatta you guys doin' here?" Third, they answered, "We're in line for beer." Fourth, the clerk said, "But we haven't had any notice from the dock . . . ." Fifth, the telephone rang.

Even the beer cans were an Army olive color. The ration, when there was any at all, was two cans per man. I never did see Russ come back with his ration: Oh, he always picked it up--he just never had any left by the time he got back to our tent.

Some guys complained that the beer was so "green" that it must have been brewed aboard ship--maybe not until Tinian harbor was in sight. Andy had a few thousand choice words to say about the beer, and "green" was the mildest of them. I suppose Charlie griped about it too, but his griping covered so many subjects that I'm not sure if he got around to

mentioning beer: In mid-February he hardly would have finished yet with his list of January complaints.

I seldom fought the line at the PX for beer. When I did, I brought it back to the tent and gave it to Russ. You see, I did learn something from my lifetime subscription to the Sycophants Journal.

Another activity in those days was to borrow a Jeep and go around the island sight-seeing, which may not be the way to express it since there was hardly a tourist attraction to be found. However, near the remains of Tinian Town were the ruins of some ancient stone monuments that were interesting--and puzzling because no one knew their origin or significance. (7) Other than that, there wasn't much. The only pre-invasion village on the island was Tinian Town, which was not much to begin with and was less when we saw it, having been demolished by shelling. It was located on what passed for a harbor near the south end of the island. No one had lived there since the bombardment for the good reason that there was no place left to live in.

(7) The Seizure of Tinian, p. 5.

Russ found out that one had to be careful about borrowing a Jeep. One time he borrowed one from a different squadron's Operations office. Major Berry, our Operations Officer, didn't like that. We didn't learn what happened until the next morning when Russ got up all stiff and sore. He said he'd never before had a reaming out like that and that he had slept all night at attention.

Once in a while when feeling especially venturesome, we would take our .45s and walk through the weeds and shrubs to the shoreline--but only in the daytime, of course. By being careful to aim and fire in a westward direction, we could hit the Pacific Ocean. That was an important accomplishment because it meant that we avoided shooting each other.

On Feb. 22, we flew a test hop. Yes, again. "Test hop" was a multi-purpose term that included flight testing of the plane--checking anything from engines to pressurization seals--as well as practice exercises of various kinds: take-offs and landings, formation flying, bombing, navigating, gunnery, maybe even that most difficult of all maneuvers for a B-29 crewman--exiting from the tunnel head-first.

When we got back we heard that an Empire mission--to include the whole Sixth Group for the first time--was planned for the following day. A short time later it was postponed. Weather planes returning from the Empire had reported atrocious flying and bombing conditions.

The 23rd passed and there was still no break in the weather.

On the 24th, orders came through to proceed with preparations for the mission. The target was to be Tokyo.

Chapter V

Empire Mission

We rolled out of the sack at 0300 hours on Feb. 25, ate, and then went to briefing. We were instructed to assemble the formation at Bayonnaise Rocks. That was the name of a group of craggy peaks sticking up above the water in the string of barren, rocky islands stretching south from Tokyo Wan (Tokyo Bay). They were about 230 miles south of Tokyo and 175 miles straight south of Chiba Peninsula.

After assemblying, we were to head for the coast southwest of Tokyo, climbing in loose formation to a bombing altitude of 27,000 feet. The I.P. (initial point) was straight west of Tokyo. We were to zip across Tokyo downwind, continue east to the coast, turn south, and return to the Marianas individually. The aiming point for the bomb run was in the north central section of Tokyo. We were given directions for aiming by radar in case we could not bomb visually. We were also instructed, as we were consistently throughout the War, to try to avoid hitting the Emperor's palace.

Bomber Command was using fewer high explosive bombs and had begun using more incendiaries and aiming for the center of highly congested areas in Japan's inflammable cities. On this mission we were to have eleven 500-pound incendiaries and one 500-pound GP bomb. We had to carry a bomb bay tank of fuel. The B-29 was designed to carry 40 500-pound bombs. That was the number that could be loaded, but bomb bay fuel tanks and altitude and distance to be flown limited the bomb load for a particular mission.

We clambered into 6x6 trucks for the trip to the flight line. Take-offs were scheduled to begin at 0700.

We got off at 0715 on Runway B heading east. At that time the traffic pattern was to turn south, away from the airfield at Saipan, circle around the southern tip of Tinian and head north-northwest along the western coasts of Tinian and Saipan.

We had to fly more than 1,000 miles before we even got to Bayonnaise Rocks. On the way we passed Iwo, out to our left. We were too far from it to see much. It looked like a grayish hump sticking out of the water, but Mt. Suribachi was easy to spot. Smoke was rising from somewhere on the island.

No one, I suppose, could help but be apprehensive about our first Empire mission, but the flight was without incident to the assembly point. Before assembling, we donned all of our personal combat gear: a C-1 survival vest over the flight suit, a .45 in a shoulder-chest holster, then a Mae West, then parachute harness, and over it all, a

bulky armored flak suit, topped with a heavy flak helmet. If I had tilted my head to one side, I probably would have toppled off my chair.

The heavy equipment severely limited mobility, so we seldom disregarded the fulminations of the venerable Prophet of Old: "Woe be to he who ignores the liquidity factor in Nature before encasing himself in raiment of heavy steel."

Near Bayonnaise Rocks we began seeing 29s all over the sky, most of them with markings that were strange to us. At the assembly point, planes were milling about everywhere, many of them flying in circles trying to get lined up in the proper formations. At intervals a colored flare arched over certain of the planes, marking them as formation leaders. They had also lowered their gear to help identify themselves and to slow themselves down. Other planes scooted across the sky from one nascent formation to another looking for the one in which they belonged. After only a few minutes of this whirling about we found our formation, and soon, with a little flying in tighter circles than the formation, we were in position.

Shortly thereafter, the formation began climbing, heading northwest toward our landfall. We had gone only a short distance when rather suddenly all the other planes disappeared from view in a swirl of clouds!

Formation flying is not exactly what one likes to do in a cloud bank. Besides, insurance companies frown on it. Rain beat on the windows and static crackled on VHF, but word was quickly passed to fan out and reassemble on top.

When everything disappeared from sight and the formation broke up, I suddenly had to start navigating again. It was principally a matter of continually correcting to the left for the increased velocity of the wind at higher altitude. For my calculations, I had only "metro" wind, which I did not expect to be especially good, but Hudson switched on the radar and in just a few minutes the coastline of the Empire showed on the scope. This was it at last, Japan, our objective for so many months, but only Hudson and I could see it.

We climbed past 10,000 feet, 15,000 feet--still solid clouds--20,000 feet, 25,000 feet. We made landfall at 1530 near Hamamatsu and reached our bombing altitude still in the soup. Above 28,000 feet we finally broke out. A number of 29s were scattered here and there and others were emerging from the white mass below. The formation never all got back together again. Planes were gathering in small groups of three to six and proceeding toward the target.

We turned onto the bomb run as the left wingman in a three-ship element. Booth (Capt. Roscoe Booth) joined the formation, flying on our left. Other small groups ahead and behind us were also bearing down on the target. A white sea of clouds extended in every direction as far as one could see. We were flying at 28,500 feet and were just above the wavy tops of the cloud bank.

We saw no planes except 29s, but flak bursts began to appear around us. The only flak they could reach us with was heavy caliber stuff, and

it had to be equipped with radar sighting to aim at us on this particular day. Consequently, there was not a great deal of it. The bursts, although scattered, were big and black and looked terribly menacing.

I was watching the scope part of the time and looking out my window part of the time. I happened to be peering out the window, seeing nothing but Booth flying along beside us, when a big black puff blossomed open perhaps 100 yards directly behind Booth's plane. About four seconds later, as I gazed somehow fascinated at that flak burst drifting lazily behind us now, another one popped open, this time about 40 to 50 yards directly behind Booth. By the time my mind had grasped the portent of all that and raced ahead to consider the logical outcome, a third burst appeared about 20 yards behind Booth.

I was utterly horrified. My limbs froze, but my mind raced. I discovered that a person can do a lot of thinking in three or four seconds. I felt a compulsion to shout a warning to Booth, although I knew he could not hear me. I wanted Russ to yell at him on VHF, and I wondered why Booth's tail gunner was not sounding an alarm. What folly, I thought, to hold still and let flak walk right up to you.

Then came the next burst, surely not more than 10 yards directly behind and dead level with the plane. I prayed that, in his remaining seconds, he would peel off in a steep bank or do something to move out of the way. Two other thoughts galloped through my mind: What if the same thing were creeping up on us; I could not see directly behind and would not know. And, even if not, when Booth blew up, would not the explosion take us too?

I gritted my teeth, clenched my fists and held my breath, figuratively at least, for I have not the slightest idea what I actually did--probably just gawked out the window with open mouth. But I know that, mentally, I steeled myself for the inevitable. I waited . . . . and waited . . . . and waited. It dawned on me slowly that the time for the next burst had passed. My thoughts slowed to a trot. I was limp.

The remainder of the bomb run was anticlimatic. Our lead plane was going to bomb by radar, of course. The returns on our scope were excellent. The picture looked just like the map. We were going east directly over northern Tokyo. We were to release our bombs at a certain slant range short of the nearest branch of the two-pronged river flowing through the city from the north.

Charlie and Russ kept their eyes on the lead ship, which I could not see. When his bomb bay doors popped open, we opened ours. Hudson was taking scope pictures, and I watched the scope and my watch, trying to note the exact position of the release. Bombs tumbled from the lead plane and Charlie toggled ours.

"Bombs away."

Those may have been the only words Charlie spoke during the entire flight.

The doors snapped shut. We continued on in a straight line. There

was still scattered flak for a short time, but nothing close. After the coastline passed behind us on the scope, we turned south and started the long trip home.

The planes began drifting apart. Russ heard Rodenhouse call on VHF that he could not get his bomb bay doors closed. We spotted a plane nearby with its doors part way open, so Russ called Rodenhouse and told him we had him in sight and would "buddy" him--that is, stick with him. We pulled over closer to his plane. His doors would pull shut but would not latch; they would droop half-way open again.

From the timings I had noted while watching the scope during the bomb run, I calculated that our ground speed over the target had been 440 knots, slightly more than 500 miles an hour. Our true air speed had been a little more than 300 miles an hour, meaning that we had been boosted along by a tail wind in excess of 175 miles an hour.

Rodenhouse called and said his crew had wired his doors shut and that he would be all right. We gradually drifted away from him. Except when accompanying someone in trouble, the planes always returned from any raid individually to conserve fuel.

We opened the in-flight lunch and relaxed. We were now combat veterans. The Truk raid hardly counted; we now had bombed the enemy's capital. But Hudson and I still were the only ones who had seen Japan, and we had seen it only as a two-dimensional image on a screen.

There was always food on the plane for those long missions, thank goodness. Each B-29 had two food warmers, one for the forward compartment and one for the rear section. For each of us there was a small metal tray of food, actually edible if a person got hungry enough, plus two kinds of liquid--coffee and, usually, a brothy soup. Each warmer had a place for six of those three-part servings. The coffee and the soup, I think, were consumed more than the food. We joked about the quality of the food, but such complaining was SOP--and unfair. The meals weren't great, but they were much appreciated, especially when trying to relax after getting away from a target. And we could depend on the food being aboard. Somebody prepared those meals for us and saw that they were put on the plane without, as far as I know, ever getting a thank-you from us.

In a short time we began a long descent, extending it over hundreds of miles with a low airspeed, thereby saving fuel. We got the rpm down to about 1800 and even 1750, where it seemed the props were barely windmilling.

The day faded into a hazy, gray twilight and then to darkness. Unbeknown to us, the most hectic, if not actually the most dangerous, part of the mission still lay ahead.

We approached Tinian and Saipan from just to the west of north, and immediately we were aware of the trouble in store. Thousands of 29s--it seemed--were converging on two airfields about five miles apart. The airfields were on separate islands, but that didn't make any difference to the approaching traffic in the air.

Ahead of us was a profusion of lights, attesting to the traffic congestion we would find near the airfields. Light beams were criss-crossing in every imaginable direction and at every altitude as planes nearing home turned on their landing lights.

All of the aircraft were low on fuel to some degree. All were returning from what under the best of circumstances would have been a long, grueling flight. No one wanted to "go 'round" (that is, pass over the airfield without landing and fly completely around the traffic pattern for a second attempt). Everyone had but one objective--to get on the ground as quickly as possible. Each plane needed a mile of straight-in approach and also about a mile of runway. And the planes could not stand in line to await their turn; each one had to keep moving nearly 200 miles an hour while jockeying into position.

The only thing of which I am aware that remotely resembles that sight that night is what a motorist sees as he enters a strange highway complex of clover-leaves and traffic circles at night in heavy, speeding traffic. But in our situation there were no roads; a plane might shoot directly in front of another at right angles. Furthermore, there was another dimension; a plane might descend onto the top of another or pull up into another from underneath. And all at high speed. Also, whereas automobiles usually are headed for various destinations and disperse from a traffic complex in different directions, all of the 29s were heading for nearly the same spot.

The pilots had been briefed on landing procedure, but battling for a position in line was pretty much every man for himself. A couple of searchlights were set out, pointed almost parallel with the ground and forming a path we were to follow in lining up for the final approach. The trouble was that all of the planes returning at one time could not crowd into the path at once. And, flying in a searchlight beam, we were partially blinded and could not see if we were about to be rammed by another plane, which really seemed to be an imminent danger.

In addition, prop wash rippled through the whole area and was especially severe on the final approach; the pilots were never sure they were in control of the plane's flight path.

We threaded our way through the traffic. We had completed about half of the final approach before the plane ahead of us touched down, and the plane ahead of it was hardly halfway down the runway, and the one ahead of it just turning off at the far end. As our wheels hit, a plane that had been right behind us went roaring a few feet overhead, pulling up its gear and pouring on the coal. The plane behind it sat down--about 200 feet behind us, it seemed--maybe 2,000 feet actually. Two or three planes on each runway at one time was normal. I recalled the lesson of the Truk mission: the enemy is no more than a nuisance, but beware of your own planes.

We landed at 2230, 15 hours and 15 minutes after take-off. We turned off the runway and rolled past the waiting ambulances and fire trucks, fully manned and ready to go into action from their position just off the taxi strip. At our hardstand, Smitty was waiting, flashlight in hand, to

guide us to a stop. A truck picked us up and took us back to our living area.

As we filed into the mess hall, Doc Doering (Capt. Andrew A. Doering, flight surgeon) was on hand, trying to disguise his purpose but quite obviously checking to see if anyone had cracked mentally. Doc made a note in his little black book. He probably wrote, "Russell's crew: How is one to tell?"

The Doc may have noted, among other things, that this was the crew with a co-pilot who was wearing sun glasses when he came into the mess hall at midnight. He probably didn't understand that Andy always wore sun glasses. To walk to the showers he stripped down to two items--a towel wrapped around his middle (a towel that went around me once would go around him twice) and sun glasses.

We heard that the 73rd Wing, the 313th, and one group of the 314th from Guam, a total of more than 200 planes, had taken part, the first time that that many B-29s had been on one raid. Interrogation did not take long since we had seen little except clouds.

It was hard to realize, but the day just completed was a Sunday.

The next morning Group Intelligence called Russ, Andy, Charlie, and me to one side and confided that our plane had taken the best scope pictures in the whole Wing. It was really Hudson's doing, and I'm sure he was proud of it--and would do it again if he could figure out at what point he had gone astray and done something right.

Intelligence reported to all crews on the mission. Bombing results, it seemed, could be called "fair," with the qualification that not much more could be expected when bombs had to be released from near 30,000 feet through an undercast using radar and with not much more of a specific aiming point than just the urban area of Tokyo.

We were told that efforts to jam the Jap gun-laying radar were intentionally being withheld for the time being. From that we surmised that the Navy was planning big things for the area and wanted to save the jamming for a more critical time. I guessed, from the rumors and other such talk more than from any direct evidence, that it really wouldn't be too long until American forces would land on one of the Japanese home islands. I put my guess at October. (1)

(1) It was not until several years later that I read of plans actually under way at that time for a landing on one of the main islands in November. The Campaigns of the Pacific War, p. 339; Air Campaigns of the Pacific War, p. 52. Lt. Harton, "our" RCM officer, related later (after the War) that the order to withhold jamming was reversed after B-29 losses proved to be closely correlated to Jap trasmissions analyzed by the RCM monitoring endeavor. As far as I know, our regular crew was not aware of that change at the time; perhaps we would have been except for our training assignment that began in June.

We found out that Navy fighters from Task Force 58 had struck at Tokyo about the same time we did. The huge cloud bank we had climbed through was dumping snow on Tokyo at the time. We bombed from above it; the Navy boys, of course, flew in under it. I was surprised to learn that Task Force 58 was still hanging around the Tokyo vicinity.

We kept hearing stories of the fighting on Iwo. Each report sounded more grim than the previous one. It was exceedingly rough going for the American troops. We heard, for instance, that the average life expectancy for a Marine second lieutenant on the beachhead was two hours. It must have been terrible.

We had been told that it was the Fifth Amphibious Corps that made the assault on Iwo. One of my high school classmates was in that corps, and I couldn't help but wonder if he was still alive.

Despite everything, reports circulating in our Group still maintained that we would have fighter escort soon--within three weeks now. Our boys on Iwo kept making progress--and kept paying the price.

We were told to expect to make another mission to Truk in about a week and then back to the Empire several days after that.

Damage assessment figures posted Feb. 28 and based on reconnaissance photos showed that an area of 39 million square feet was destroyed or severely damaged by fire as a result of our raid on the 25th. We converted the figure into meaningful area, got something close to 250 square city blocks, which we thought that was really good. We spent some time recounting to ourselves our high level of accomplishment.

Three days later we flew another practice mission to Maug. The professed objective was to give us practice in formation flying and to study the bomb-impact pattern produced by formation bombing. Intelligence seemed to presume that Maug was uninhabited, but I don't think they really knew. If there was anyone there, it surely would have been a good place to open an otology clinic.

If I had ever taken pilot training, I would have wanted Russ as an instructor. When we came back from that flight, Russ was having Andy handle the landing. As usual, I was sitting on the gyro cover almost between them. We lined up and settled toward the runway just right. Then the left wing dipped. The left gear hit the runway, but the right one didn't. I looked out at that left wing; the wing tip was just barely off the ground. My hair stood straight up on end and my eyes bulged about an inch out of my head. If that wing touched, we would go cartwheeling off across no man's land--at 160 miles an hour.

If I had been able to emit any sound at all, it would have been a shriek. But in as calm a voice as you can imagine, Russ said to Andy, "Here's what you do when that happens."

With an almost dainty motion, Russ took hold of the left-most throttle with his thumb and forefinger and eased it forward. I suppose he did something with the rudder pedals too, to keep us from turning--I didn't know because my gaze was riveted out the left window. There was no

abrupt movement, no jerk or lurch. The left wing rose nice and easy. We didn't turn, only straightened up. The right gear touched down--no jolt; it just came down softly on the runway. Russ eased back on that left throttle, and we rolled straight on down the runway.

After that, the word "skill" had a new meaning to me, not something one would ever understand from reading a dictionary definition.

When we got back to the Group area, we heard that an Empire mission had been scheduled for the following day for those crews that hadn't been on the first raid. The target was the Nakajima aircraft plant at Musashino. Lacking visual bombing conditions, they were to strike Tokyo, using radar to aim. Take-offs were set for 1 a.m.

During the day, Intelligence said that a strike report had been received and that the Sixth had bombed the primary target by radar with "fair" results. We guessed that the designation of the target should have been "primary radar target," which actually was the secondary target.

All of our 39th Squadron planes returned, two of them with flak holes. Major Layson's radio operator was wounded seriously. A piece of flak went clear through one of his legs at the knee. It had ripped a hole in the bottom of the plane and whizzed right between Daschbach's legs before hitting the radio operator. Dasch was the navigator. Layson's crew was the one we had gone to Cuba with while we were in training at Grand Island.

We heard that a couple of 29s ditched. In addition, it was being said that the bombing results were not good.

A disproportionately large percentage of the casualties we knew about personally in our first few weeks involved radio operators. It was just a coincidence. But try to tell that to Jeff! Bee stepped in to help relieve--or perhaps to aggravate--Jeff's anxiety, taking advantage of the fact that Jeff's hair was, and always had been, nearly white:

"Jeff," Bee asked whenever someone new came around, "what color was your hair when you came overseas?"

"Coal black," Jeff replied without hesitation.

On March 6, we flew for 45 minutes, checking the Rematroid after the performance of routine 100-hour maintenance. We then found out that an Empire mission planned for the next day had been cancelled, with yet another training flight substituted.

That was also the day that the first replacement crews arrived from the States. We always called them replacement crews, but that was a misnomer. They actually were additional crews. New crews kept arriving--whether or not we had any losses or transfers.

We flew the scheduled training mission, practicing radar bombing. We were instructed to use Pajoros and Guguan as the practice targets. Maybe Maug had surrendered--or else the Wheels had decided to give it a rest;

after all, it already was likely to be the world's foremost source of scrap iron in the postwar years.

On that day, March 7, an ammo dump on Tinian blew up, killing 20 and injuring many others.

We always listened attentively to any report of progress in constructing an airfield on Iwo. In early March, according to reports, transport planes could land. By March 8, Iwo reportedly was handling Seventh Air Force fighter planes. At about the same time, we heard that a B-29 made an emergency landing--and even was able to take off again to return to the Marianas. That was the news we had been waiting for.

Unknown to us, it seems that General LeMay was also waiting for that news--with an idea in mind that was to change dramatically and irrevocably the nature of the air war against Japan.

Chapter VI

The 'Blitz'

Early in March we began practicing to drop mines for the Navy. We were told that one group would be pulled from the regular bombing campaign for one month to do the mining.

Very quickly, though, the mining campaign was pushed from our thoughts.

On March 8 we were called together and told that the 21st Bomber Command was going to embark on a "maximum effort" bombing campaign with a radical switch in tactics. The aircraft were to be stripped and then loaded heavily with incendiary bombs. We were to fly over a target individually at low level at night, bombing by radar. The targets were to be congested urban areas--concentrations of population and industry, not individual installations.

That was stunning news.

Not having to climb to high altitude would permit larger bomb loads than had been carried up to then. Stripping the planes--throwing out anything of significant weight--would also contribute to a bigger bomb load, but, I think, was intended more to permit greater speed over the target. The idea was to rely on speed and the dark of night instead of the defensive capabilities provided by guns and ammunition.

But details were subordinated to the concept as a whole: area bombing by radar from low altitude at night instead of daytime visual precision bombing from high altitude while flying in formation. There could hardly have been a more complete reversal. Such heterodoxy really was a shock.

Truthfully, we didn't know what to think of this revolutionary change in tactics. Low level? No ammo? It sounded as though we might be very vulnerable. Over the target individually in the dark? That sounded like one big traffic jam with a high potential for colliding.

At the same time, we realized that, clearly, the results so far of traditional high-altitude bombing had not been at all good. And the weather was so terrible that prospects for much improvement seemed slim.

Not knowing how others might feel, I kept my inner thoughts and feelings to myself, but I remember some of them very well. However, it's not easy to express them. First, on a rational level, there was considerable doubt: Trying to use the B-29 in a way so contrary to its designed purpose could be a terrible mistake, with calamitous results. Concern, however, was swept aside by a surge of emotion. I don't know

what it was. Patriotism partly. Dedication. Determination. Duty. All of those and others--whatever it is that causes a person to put devotion to country ahead of personal consequences. In a reflective moment, I thought about the boys at the bottom of Pearl Harbor, and no risk seemed too great. So, if this was the way to contribute to winning the war, we had to do it. I was ready.

I never did understand fully what created that feeling with its subordination of personal risk and fear, but I will always remember being surprised that my true feeling was not more cowardly.

In any case, we didn't have a lot time to mull it over: There was a briefing set for the next day. Every plane and crew that could go on the mission was scheduled.

Briefing was held during the day of March 9. The target was the Tokyo urban area. All bomb bay tanks and ammunition had been removed from the planes and each one loaded with 32 500-pound incendiary clusters. We were not going to be quite as low as we had pictured--no tree-top-level stuff. We would go over Tokyo at 6,800 feet. The Brains hoped that that would be too high for small-caliber guns to reach us and too low for the big guns--or at least that the heavy stuff would be set for a higher altitude and would be slow to adjust. But we were going to go up-wind and directly over Tokyo harbor, which figured to be heavily defended. Couldn't we at least go across Tokyo from west to east?

As we walked out of the briefing hall, most of us in a serious and pensive mood, one of the pilots was chanting his version of a post-raid news communique: "The Army announced that American aircraft attacked Tokyo. . . . One of our air forces is missing." A cheerful fellow, that guy. The trouble was that we weren't so sure but what that actually would be the result: Flying low over Tokyo unarmed might be an easy skeet shoot for them. Maybe this unconventional tactic really would incur an 80% or 90% loss.

I thought I heard someone on the other side of him say, "Don't worry, everything will be all right."

"Who said that?" someone asked.

"Not me," the voice replied. "I was quoting. Those were the words of the captain as the Hindenburg neared Lakehurst."

It was late in the afternoon when the trucks lined up for us. We got down to the field and took a suspicious look at the Reamatroid as if it were about to betray us sitting there without any armament.

We took off at 1855. The whole flight, almost, was going to be in darkness. En route we passed near Haha Jima, seeing some hot fires burning there. We readied ourselves for we knew not what.

I couldn't see out front, but for those who could, the coast of Japan came into view as a string of fires. Obviously, some planes, for whatever reasons, had dropped their bombs on various coastal towns southwest of Tokyo. I watched the coastline appear on the radar scope.

We made landfall near the point of Chiba Peninsula at 0130. The I.P. was a jut of land on the eastern side of the peninsula. It wasn't going to be easy to pinpoint the spot because, when we got close, the image of it on the screen would merge indistinguishably with the "ground clutter" at the center of the scope. So, to figure the turn, I used the sweeping beam of the radar to get a bearing from a point over on Tokyo harbor.

We then headed across the bay toward the center of Tokyo. The power setting was changed. The engines labored harder and the ride began to get rough.

As immune as I was to distractions, I nevertheless realized after a minute that there was an unusual odor: I could smell smoke. I didn't know it at the time, being fully occupied with the radar, but the guys up front said later that, soon after the I.P., we disappeared into a big column of very black smoke. No one had anticipated that, and anything unexpected immediately seemed threatening. However, it may have been the most fortunate thing that could have happened. The Jap searchlights couldn't find us in the smoke, and, similarly, their gunners couldn't aim at us. Luckily, it didn't affect our radar, and Hudson kept a distinct picture of Tokyo on the scope.

The plane was shaking. I became conscious that I had grasped the table tightly with both hands when I had to let go with one to steady the hood that shielded the radar scope.

As was typical of a radar-bombing run, the actual target area was not our radar aiming point. The target was not necessarily a feature that would show distinctly on radar; and, even if it were, it would be too close to the "ground clutter" at release time. Consequently, we had a bombing procedure that involved catching the exact moment that an identifiable feature was at a certain slant range (distance) on the radar scope, and timing the release from there, using a stop-watch. Hudson and I monitored the radar to apply the procedure, and Charlie prepared to release the bombs on a signal from me, the pilots working all the while to maintain the prescribed heading and speed, which were critical for a timed release.

We steeled ourselves and headed toward the aiming point. Strong vibrations shook the scope--and shook everything else too--but the picture stayed clear. The wings creaked and groaned as the plane bounced up and down.

I ventured a peek out the window. Dark. Very dark. A few flashes of diffused light.

I tried to concentrate on the radar scope. Hurry, hurry more, I thought, let's get this over with. But time almost stood still. However, the plane didn't. Although I was trying to think only about the radar, I couldn't keep out some extraneous thoughts--such as wondering how much shaking the plane could take without falling apart.

The plane bounced around some more. It seemed that we had been on this bomb run all day. The scope showed that the drop point was still a

million miles ahead--and coming toward us so very, very slowly. Just wait ... just wait, I kept telling myself.

In this frightening situation, I had one real lucid thought: If we dropped the bombs right now and turned and fled, who would ever know the difference? With my map in front of me, I was the only one who really knew where we were--that the target was still several miles ahead. All of my instincts said, "Drop the bombs and get the hell out of here." I wondered how many crews would take the easy way out and do just that. Never having been in such a mortally threatening situation before, I didn't know myself what I might do, so it was sort of a surprise to me when I rejected the temptation to drop the bombs short of the target.

We were scared, but the bomb release went beautifully. We seemed to have exactly the right course, and we timed the drop precisely as prescribed.

Now we had to get ourselves away from there, and that turned out to be the worst part. The bombs had fallen only a minute or so after we emerged from the pillar of smoke. The smoke had hidden us on the bomb run, but it didn't do so now. We were bumping along smack dab over the middle of a huge bonfire. Searchlight beams--dozens, maybe hundreds, of them--were swinging every which way. Tracers arched over, under, and around everything. It looked as though we were in the middle of a carnival on the Fourth of July just after the fireworks booth had caught fire. We had made the bomb run at an indicated air speed of 235 mph, in accordance with the radar-bombing procedure, but the needle hit 270 on the break-away.

The vibration was constant. That alone was enough to worry me. I felt sure that the plane wasn't made to shake THAT much.

I ventured a peek out the window. Bright. Very bright.

It was exactly like someone suddenly turning on a flashlight right in your face. I had looked just as a searchlight had caught us, one of several such times. I pulled back quickly, as though the guy down there operating that light might see my face.

We couldn't see the fire or anything else below when a searchlight had us directly in its beam; it was blinding. When we could see, it looked as though the tops of the flames were just barely below us.

Surely, the flames and searchlights made us clearly visible to every gunner on the ground. We were like the little picket boat out in the ocean--there was no place for us to hide.

The searchlights that picked us up, fortunately, didn't hold us for long. The engines roared and huffed and puffed and the plane jerked up and down and forward and sideways some more. Twice there were banging and rattling noises like someone shaking a china closet. The plane shuddered. It was uncertain which was trembling more--the aircraft or me.

When we finally got away from the target area, it was as though we had escaped the clutches of those dreadful bright beams seeking to hold

us in their grasp. What a relief! We had survived! That had not by any means been a foregone conclusion.

For a long time after we left the coast, the gunners in the rear said they could still see the glow of the fire.

Daylight came long before we got back. Nearing home we again found ourselves among many returning 29s converging on Saipan and Tinian, but the traffic was no problem. That was one advantage of a night mission--it was light by the time we had to deal with the congestion at home.

We landed at 0950. When we pulled to a stop we got out to look for the holes in the plane. There weren't any. We could hardly believe it.

Breakfast that morning back in our mess hall tasted especially good. Interestingly, Doc Doering came in and sat down with our crew.

Almost everyone hit the sack as soon as possible. But not me. I was too keyed up. I soon regretted that because the word was passed that we were going back--right away. I didn't expect that. I sort of thought we had done enough for one war.

By afternoon (still March 10) we began to hear reports on the raid. Of first importance, all of the planes of our Group returned. Altogether, some 300 planes had taken part. We figured conservatively that 1,600 tons(!) of bombs were dropped on the primary target--Tokyo. Crewmen were all talking about the turbulence over the target created by the heat of the huge fire.

Sure enough, we started the next day, March 11, with briefings and other preparations for another mission, this time to Nagoya. We were to bomb visually if possible, even though it would be at night. We would carry ammunition for the tail gun, but the other guns were to be removed altogether. As on the Tokyo mission, we were to fly right over the city's harbor en route to the A.P. (aiming point). Major Berry (Erskine G. Berry, squadron operations officer) was to ride with us.

In addition to our bomb load, we would be carrying boxes of "window" or "rope," which were alternate names given to strips of tinfoil that were to be dropped in an attempt to draw off enemy gun-laying radar. If it worked, the Jap radar would lock onto and follow the tinfoil for a while before the gun crewmen realized that they weren't aiming at an airplane.

Dispensing "rope" was another development related to the switch to low-level night attacks. Darkness left the Jap gunners more dependent on radar for aiming. And below 10,000 feet we were not pressurized and, hence, could open a window or a hatch, which we couldn't do on high-altitude missions.

On many subsequent missions, "rope" was thrown out--a fistful at a time or reeled out hand-over-hand. Allgor or Bee would drop it out the camera door, or Gleacher would throw it out the left (his right) side window of the tail compartment. For this particular mission, because

Gleach had ammunition for his guns and the others didn't, it would be up to Allgor or Bee to toss out the "rope."

In the midst of getting ready for another mission, we took time to look at the reports of the results of our Tokyo raid. Reconnaissance planes must have flown over shortly after we left. Pictures were posted on the bulletin board not much more than 24 hours after our return. The official assessment was that our raid burned out 422,500,000 square feet, or approximately 15 square miles. It was being said that top brass had proclaimed it the most devastating raid the AAF had ever carried out.

We agreed; it certainly was devastating. But it turned out that they were talking about the target, not the air crews.

The raid was a great stimulant to the U.S. pulp-paper industry: Most of the aerial warfare textbooks at the Command and Staff School had to be discarded and new ones printed.

We spent some time exulting over our achievement. We constructed, verbally, a parody of the results of the raid as we pictured it: a city in flames with the residents dropping their plates of fish-heads and rice and fleeing in all directions, running as fast as their short little legs would carry them out of the city and up the 60-degree slope of some imagined near-by mountain, shouting "Hoing-Toing." We didn't know what Hoing-Toing was, but it sounded Japanese.

The success of the raid contributed materially to the confidence of those of us who formed the radar-bombing teams--just so long as we didn't have to drop our bombs down that pickle barrel that bombardiers were always talking about. In fact, bombardiers took something of a ribbing, being told that we did better with a one-dollar stop-watch than they did with their super-secret, super-high-technology, super-expensive Norden bomb sights.

The needling of bombardiers was unjustified, but that didn't deter anyone. Our camaraderie was a strange thing: If called upon to do so, we would die for our buddies, but darned if we were going to be considerate or show respect or affection of any kind.

Nagoya had become a thorn in the side to the 21st Bomber Command. A large aircraft plant at the northern edge was a prime target. But every time the 29s tried to get it, it seemed things went wrong, and damage was minimal. Well, if we couldn't knock out the plant, we would see if, instead, we could burn the city.

We took off at 1833. All the way to the target, we seemed to overtake other 29s one after another. We grew more fond of that Reamatroid all the time. Russ and Andy would get it "on the step," props synchronized, and then we outdistanced almost everyone else who had taken off at about the time we did. So far, we always had been one of the first planes of our Group to return. A precedence was evolving. We had won the three-plane race overseas, hadn't we? That was a start.

Despite that, there always were some fires going when we reached an incendiary target. It took about two hours to get all planes airborne for

a big raid. So, there (almost) always were some planes somewhere ahead of us, and there always were others somewhere behind us.

We made landfall as prescribed, but a look at the flak just ahead convinced us to fly around the I.P. It was 0238 when we got back on course over Ise Wan, the bay leading to Nagoya. Since our Group was among the first ones over the city, the fires hadn't spread yet, but they seemed to have a good start.

The weather was good. The night was clear, except for flak bursts and searchlights. So, as instructed, we made a visual bomb run.

With Charlie doing the aiming, I didn't have to concentrate on the radar scope. I mustered my courage and glanced out the window. I quickly discovered that looking at the radar was preferable: All that a look outside did was scare a person. However, there was a sort of masochistic attraction, akin, I suppose, to refusing a blindfold in front of a firing squad.

The view was dominated by a profusion of searchlights. They were so frightening and compelling that for some time nothing else got my attention. It wasn't only that they were so bright but also that they represented everything we were trying to avoid. Although we couldn't see the AA guns or gunners, the searchlights were evidence--brilliant and irrefutable evidence--that the men with the guns were looking for us.

The usually-dark corner behind the turret to my right, where Jeff played at being Samuel Morse, was almost as bright as day, lit by the searchlights shining through the crack between the bomb bay doors--and the doors were still shut!

The flight deck up front was brighter yet, if that was possible. A searchlight--unbelievably, more than a mile away--flooded the flight deck with light. The fellows could wear goggles to keep from being blinded, but even so one could have read the small print in the vest-pocket edition of "War and Peace"--that title offering a choice we wished we had.

The searchlights themselves had become "the enemy." If we could avoid those intensely bright lights, we felt relatively safe. In a searchlight beam, we felt vulnerable--and just about helpless.

Eventually, I realized that there was more to see than searchlights. It was more of a panoramic view of a target city than we were to have on almost any later night mission.

We could see individual bomb loads hit the ground. Suddenly a patch of red sparkles--like a string of miniature Christmas-tree lights--would appear. Each bomb load landed in a long slender rectangular pattern with uneven luminosity, giving the appearance of a small red ladder being unrolled along the ground. Within seconds, the ladder-like outline coalesced into an oval patch of more uniform color, but a duller red.

Being able to distinguish separate sticks of bombs hitting was not typical. On this raid, though, we were over the target early; later, in a

more general conflagration, individual bomb drops would not be distinguishable. Also, Nagoya didn't seem as combustible as other cities, so a widespread fire that would mask a view of individual fires was retarded here. But the main reason, although somewhat a derivative of those first two, was that there wasn't as much smoke as we usually encountered. On some raids, the smoke was so dense that we could hardly see anything. It was unusual to be flying in clear air right over an incendiary target. But this time we were.

Except for the various fires, the ground was all dark; and, except for the searchlights, the sky was also dark. We didn't see other planes or hear bombs explode. The sparkling red rectangles just appeared in random places at random times. It was eerie, as though one were not a part of what was taking place. However, that feeling of detachment didn't last long--only until one of those menacing lights picked us up. There was absolutely nothing abstract or theoretical about our brightly shining aluminum plane being a conspicuous target.

At one time on the bomb run, searchlights held us continuously for a good two minutes. That was terrifying--if a battery of lights "locks onto" you and holds you in its beams, can the flak be far behind? But we didn't seem to get hit.

Maybe the "rope" had helped, although we couldn't be sure. If the searchlights were controlled by radar, the "rope" should have been as effective in drawing them away as in diverting the aim of the gun crews.

We dropped the bombs at 0249 while indicating 270 mph. In addition to 32 incendiaries, we were carrying two 60-pound photo flash bombs with altimeter detonators. Boy, when they went off, they really lit up a broad expanse of landscape. Somebody ought to have had some good pictures to look at.

It didn't seem to be nearly as perilous a run as the one over Tokyo.

Navigating home was easier on those night flights than on day missions. At night, weather permitting--and it usually did because we could go above most clouds--there were plenty of stars a navigator could use to get a position "fix." But I didn't mess with that celestial stuff if I didn't have to, and I didn't have to as long as Loran was working. Loran signals could not be received at a great distance in the daytime, and our Loran base stations were way back in the Marianas. So, in the daytime, we had to get about half-way home before Loran was of much help--and, of course, that was when stars, being invisible, also were of no help. But at night, I usually could use Loran soon after leaving the coast of Japan. Watching those dancing pips drift across the CRT (cathode ray tube) screen was one of my main preoccupations as a navigator.

Sometimes, as in this instance, the most difficult aspect of navigating home was staying awake, especially when it was obvious that most of the crew had nodded off. Sleeping en route, which once was a privilege, had become a fundamental human right. That FDR and Churchill omitted it from the Atlantic Charter must have been an oversight. Bee could pontificate at length on the subject, but it was Jeff--with that

name, who else?--who could be expected to say, "We hold these truths to be self-evident, that all men are created equal with respect to their inalienable right to nap in flight."

We landed at 0944 (March 12). We were on the ground only about half an hour when Ordnance started loading the plane with more bombs. We assumed that meant another raid the following night, which was hardly a brilliant deduction.

Not a single plane from the 313th Wing got a scratch on it. That was great news. However, we realized that the opposition put up by Nagoya was not what it had been at Tokyo. Somebody had losses, though, for two crews reported during interrogation that they each had seen a B-29 go down.

After interrogation we learned that we were assigned to go to a school to be held at Wing headquarters the following morning and not to go on the raid that night. Sharp's crew was scheduled to fly the Reamatroid. In the afternoon I wrote in my notes: "I sure wish we were going tomorrow." Maybe that was a strange attitude, but it was the way most of us felt. We preferred to go, especially at any time the Reamatroid was in operation; we didn't want anyone fiddling with that plane--we had it just the way we wanted it.

Treeman's co-pilot, was made AC of a replacement crew. Naturally, the co-pilots liked the opportunity to become a "first" pilot, but I didn't like the idea of splitting up crews. I was attached to crew assignments as they were.

The previous night while we were gone the island had been alerted for a suicide raid. The Japs were supposed to send over Emilys and Bettys (our names for two types of Jap planes), with suicide paratroopers again expected. The alert was still on for this night. The last two of the previous air raid alarms hadn't turned out to be anything. That was true again this night. Furthermore, I doubt that the threat kept any B-29 people from sleeping. That included not only combat crews but also Operations people, Maintenance, Ordnance, Intelligence, ambulance drivers, armorers, motor pool mechanics, meterologists, etc. After two Empire missions in three days, exhaustion was sufficient to leave defense of the island to someone else. The only Bettys I saw that night were in my dreams--one was named Grable and the other was named Hutton.

On the morning of March 13, we went to the schooling at Wing. It was some work in mine laying; all crews were going to have to go.

During the morning we were told we might go that night after all, but in another plane. At noon we still weren't sure of going, but Sharp definitely was to take the Reamatroid. It wasn't until briefing rolled around at 1545 that it became certain that we were going--in a new plane just in from the States. Since we definitely were going, I don't know why we couldn't have switched planes.

Sentimentality may have been the main factor in preferring ones own plane, but there were good enough objective reasons too. We had become accustomed to the Reamatroid. Any slight edge in performance from familiarity with ones plane might sometime be the difference between

surviving and perishing. In an emergency, wouldn't you prefer to be driving your own car rather than an unfamiliar one? A part of it was that we had calibrated the Reamatroid's instruments ourselves. In another plane, we really didn't know how reliable the instruments might be. Flying over hundreds of miles of water was no place to have to rely on an erroneously-calibrated compass or altimeter or anything else. We could say, if you'll excuse the salty language, that we preferred not to end up in the ocean.

The target was Osaka, same type of raid and same bomb load as Tokyo and Nagoya plus tail turret ammo as on the previous raid. Our Group had been one of the first over the target at Nagoya. This time we were to be among the last. Our assigned altitude was only 5,000 feet. I didn't care for that combination--late and low.

Major Speers, group intelligence officer, was going to ride with us. Not many of the ground-pounders seized an opportunity to fly in combat.

At briefing, Jaekels was wearing a vest that looked like one of those that woodsmen and hunters wear. As we gathered around the waiting trucks, Russ asked him what he had in the vest pockets.

"A tooth brush and an extra pair of sox," Jake explained.

"Now, I never would have thought of that," Russ admitted.

The biggest excitement of that mission came while we were still taxiing. Another plane had started its take-off when we saw its No. 1 engine (left outboard) catch fire. About two-thirds of the way down the runway the whole plane burst into flames. It was one big solid blaze about 50 feet high, with intermittent explosions. It gave off a lot of black smoke.

The tower switched take-offs to another runway and we went on with little delay. It wasn't a very encouraging sight for the start of a mission. It never entered our minds but what we had seen eleven men killed right there, but coming back we got a message from the Group C.O. that the whole crew had got out of the plane safely. They had run when the engine first caught fire and got away before the fuel tanks and bombs exploded.

With an impending explosion as incentive, I'll bet they did run: For 50 or 100 yards, even Jesse Owens might have trailed 10 of the 11 from that crew--and it would have been 11 of 11 except that the navigator probably was made to carry his equipment with him.

We lifted off at 1920. A few hours later we were near Iwo; we could see sporadic flares and other flashes of light, but we couldn't see nearly enough to tell what was going on--not from our distance, and we didn't intend to get any closer.

We got to the coast of Japan about 0250, a little to the right of the plotted landfall. We swung around west and came in downwind over Osaka indicating 265 mph. There was a strange thin layer of clouds underneath us all the way. We were thankful because it probably shielded

us some. Nevertheless, there were searchlights that pierced it, catching us in their beams for a while on the bomb run. But we saw only a little light flak. We released the bombs by radar at 0338 doing 300 mph ground speed. The fire, although obscured slightly by the cloud layer, seemed to be burning well. Turbulence was bad, especially near the end of the run.

Left the coast at 0358. Long haul home. Landed at 1124 (March 14).

Back in our Group area we caught up with reports of our raid on Nagoya. The extent of damage at Nagoya wasn't nearly what it had been at Tokyo. We had burned out "only" 38 million square feet, according to the assessment as of then, but the total was incomplete because some areas were still obscured by smoke when the recon planes went over.

At the same time, we were talking of two notable results of the just-completed raid on Osaka. Again, no planes in our Group were lost. (We wanted to knock on wood.) A plane in one of the other squadrons was flipped over on its back in the turbulence over the target, but its crew got it back to Tinian safely. We were impressed. Boeing hadn't intended that B-29s fly upside down--but one of them did. Boeing once designed and built a fighter plane, but only the old-timers in our Squadron--the guys over 25--could remember that. Maybe some of the designers of that plane were still at work in Seattle.

The low-level raids, which had seemed so risky, were turning out to be relatively easy. The feeling was that the change in tactics had caught the Japs by surprise. When they recovered and adjusted, these missions might not be easy at all. We felt strongly that it was no time to be over-confident--which might be like the complacency of a buck spider toward the end of the mating season.

During the day it sounded as though we were going back again the following night--to Kobe, probably. We were to fly the Reamatroid, as we wanted to do. Our Group was to form the initial attack wave, so three crews from the 39th Squadron--Richards, Jaekels, and us--were to be pathfinders--that is, go over the target ahead of the main force and try to set fires that others could use for guidance when they came after us. We didn't know if it meant carrying different bombs, but the idea would be to drop something that would ignite quickly and burn brightly. But more than anything else, it meant dropping them accurately--a pathfinder wasn't supposed to lead the others to the wrong spot.

I heard two of the ACs talking it over. Russ was seriously concerned for the safety of the other crew: "Jake," he said, "I hope you make it back, because, as long as you do, I'm not the ugliest man around here."

Planes in distress were by then landing regularly at Iwo. Stories from Iwo were gruesome. We heard that the Americans had the Nips in a small pocket on the northern coast. The Marines were putting down a minefield in front of the Japs, planning then to move around to the side and push them out over the minefield.

A quite different story going around was that crews would get a rest (Hawaii or Australia for a week or 10 days) after 10 or 12 missions. That was not completely good news. It probably meant more total missions for a

tour--that is, until rotation back to the States. We were always concerned about the number of missions we would be required to fly. Well, anyway, we now had five successful ones.

In the meantime, two replacement crews had arrived in our Squadron.

During the next day, March 15, the mission for that night was postponed for 24 hours. We had the target study, though. It was Kobe all right. The Brains seemed to be losing patience with the repeated efforts to bomb visually. Now they didn't even say to try.

We navigators didn't know it, but someone was spot-checking our logs after each mission. Tony, my best friend among the navigators of the Group, got called into headquarters after he had turned in a log that showed only two entries for a 7-hour period--the whole return trip. That wasn't quite the way they had taught us in navigation school back at Ellington Field. I could imagine the colonel asking him, "Who do you think you are, a bombardier?"

On March 16, as we prepared for the Kobe mission, we were told that we would be the first plane on the whole island to take off that night. Captain Lewis, squadron bombardier, was to ride with us.

In the time we had before briefing, Russ was scouting around for a vest he could wear. He had already laid out the items he was going to put in the vest pockets: a toothbrush, a pair of dry sox, and a small pamphlet titled "Distilling Alcohol from Rice, Self-Taught."

Briefing was at 1600, chow at 1700, and departure from our area at 1800. Take-off for us was set for 2010--somewhat later than usual, even though we were to be first. We carried 30 500-pound gasoline gel incendiary bombs, weighing the most we ever had: 135,000 pounds, according to Doland's calculations.

I was beginning to be apprehensive about those take-offs, and I doubt that I was alone. At a weight like that, there probably was not a ghost of a chance if an engine failed on take-off. (1) The pilots of our Group favored letting the airplane fly itself off the end of the runway. Others seemed to want to pull up when nearing the end, as though the pilot could lift the plane into the air. That, our guys thought, simply invited a stall. If I had had a vote, I would have voted for our guys.

(1) Cf. General Hansell's statement, Global Twentieth, p. 20.

Speed was the key. It was essential for the lift needed to stay airborne. The pilots always had a close decision to make--between closing cowl flaps to gain speed at the risk of overheating the engines, which those Wright Cyclone engines had a tendency to do anyway, or leaving the cowl flaps open to cool the engines at the risk of "mushing" along off the end of the runway with insufficient lift and control.

Either way, it was a time to cross ones fingers. When the plane flew straight off the runway, it invariably seemed to settle some while the gear and flaps were coming up. In fact, when the pilots felt safe in doing so, they intentionally nosed down a bit--anything to gain a little

speed to sustain the lift for all that weight. There was not much clearance between us and the water--about 50 feet. We used about half of it when all went well, so there wasn't much leeway for any time when all didn't go well.

A stiff head wind would have been appreciated on take-off. Unfortunately, the air always seemed almost calm as we lumbered down the runway with those heavy loads. CAA safety officials would have turned prematurely gray watching the take-offs for one of our missions--unless they happened to have experience with Howard Hughes trying to coax the Spruce Goose into the air.

We went by Iwo again; we saw three or four red lights, but that was all. We made landfall at the same point as last time. Between landfall and the target there were seven or eight planes flying around us with lights on. We were suspicious, but we thought they were 29s. We found out later that they must have been Jap night fighters--mostly Nicks, Tojos, and Tonys, it was said.

As we were starting on the bomb run, suddenly there was a plane coming straight toward us. He flashed his lights--presumably so that we would see him. Andy was busy with something else, but Russ flashed our landing lights--to show that we saw him. When Russ went to turn the lights off, it didn't feel to him as though the switch acted right, although the light on his side of the plane went out. So, he yelled across to the other seat, "Andy, look out and see if the right landing light is on."

Andy didn't have any patience with such a stupid question to be asking almost over the target and snapped back, "Now, what would that light be doing on?" Then he looked: "By God, it is on!"

There was a flurry of activity on the flight deck trying to get to the fuses--and moving Captain Lewis off the jump seat in order to do so--while also being sure to miss the oncoming plane. Imagine sailing down a bomb run with lights on! I'm sure we must have impressed the squadron bombardier riding with us. If he had wanted to learn something, he had picked the right crew: Surely no one else could have provided such an instructive demonstration--of how NOT to start a bomb run.

No one had planned that planes approach the target three abreast, but it happened. As we started across the city, we saw a B-29 to our left shining brilliantly at the point of convergence of several searchlight beams. Over to the right, the same thing--that is, another 29 over there had attracted all of the searchlights in that area. We slipped down the middle without any light on us, like Cousy driving the lane after the defense had been drawn to the left and right. It was nice for us--not so nice for those other two planes.

I thought it was the most intense flak since Tokyo. We saw some automatic stuff that looked to be rather heavy. However, the gunners down there on the ground didn't seem to do much shooting at us, presumably because we weren't lit up.

We went down Kobe lengthwise and bombed by radar from 7,400 feet. Bombs were released at 0412. They hit quite accurately, according to what I could determine. Because we were near the lead, there were not any raging fires below, but there seemed to be several hot ones started. Our gunners said they could still see the glow in the otherwise-dark sky when we were 200 miles away.

When a whole city burns, the sheer size of the fire is difficult to comprehend. It was no wonder the fires could be seen from so far away. Even so, on a typical night incendiary raid, our first and again our last view--before and after the fire itself could be seen--was the rosy glow reflected off the clouds above the city. That glowing reddish blotch that became visible as we approached Japan was a sight crew members will remember forever.

From our earliest missions, I had formed a habit of going forward to the flight deck over the nose wheel well as soon as calm was restored and everyone relaxed. Usually, we then opened the in-flight lunch and had at least some soup, maybe more, but I stayed there even after eating.

Of course, once in a while I had to go back to the navigator's table to do some figuring, or get a Loran fix, or some minor essential like that; but, in between, it was a matter of watching instruments, and I could do that up front. In fact, I could watch lots of instruments--some that I didn't understand at all. There seemed to be an instrument for everything. I suspect that, if I only knew, some obscure gauge down in a corner registered the snoring decibels in the tunnel. Anyway, I didn't want to be stuck back in the navigator's seat, where I could see out to only one side. So, I stayed up front where I felt more on top of what was going on. What I literally felt on top of was the gyro, because I normally sat on the gyro cover.

Then whenever one of the pilots would leave his seat, I would jump in. The plane would be flying on automatic pilot, of course. He (George the C-1, that is) had a turn-control knob; so, if we needed a course correction, I would make it. Pretty soon, I began turning off the individual control-surface switches to see if I could fly that thing manually--probably giving the pilot in the other seat heart palpitations. But neither one ever objected. They probably thought, "Might as well let the kid have his fun now because, obviously, no one is ever going to make a pilot out of him."

I could turn the plane quite well, even keeping the ball and needle close to where they were supposed to be. And I could climb and descend. What I couldn't do was fly straight and level. When the plane wandered, up or down, left or right, I could correct the deviation--except that I usually overcorrected. As a result, when I had the controls, our path through the air resembled an elongated corkscrew. I tried again and again. After a while, I had quite a few hours at the controls. But I never did learn to fly straight.

We landed back on Tinian at 1112 (March 17). When we got to our mess hall, we had steak and french fries, a real treat.

The 313th Wing lost two planes, one from the Ninth Group and one

from the 504th. No one knew where they went down, but speculation was that they were fighter prey. Rodenhouse's tail gunner got a night fighter confirmed--a Tojo--and a probable--a Tony. Frank's crew said that two of the Jap fighters followed them 200 miles out to sea.

Our Squadron, the 39th, now had flown more than 1,100 combat hours without an accident or a loss. We were happy about that, but not the least bit smug, not with our minds--and nerves--ineradicably imprinted with the vulnerable feeling one gets when being shot at.

We heard that there was to be another mission the next night too, but we didn't know where. The report was that Bomber Command was running out of bombs. The 500-pound M-69s we had carried on most missions actually were clusters, but each cluster loaded in the bomb bay and released as one bomb. It was a new type of bomb that had not been in use long. The cluster was held together with metal bands, with a device that burst the bands before the bomb reached the ground. So each cluster scattered little incendiaries over an area of about one square block.

Few of those clusters were left anywhere in the Marianas. So, our load this time was to be 144 100-pound incendiaries. Even after wiring a bundle of them to each shackle, it was a wonder Ordnance could fit enough shackles in our bomb bays for that many bombs. It seemed that the bombing campaign would keep going--just so we didn't run out of wire.

Intelligence kept revising the figures for the damage at Nagoya; it was now more than 50 million square feet. But that still was barely more than 10% of the area burned in Tokyo.

Information I got as a radar-navigator-bombardier suggested that we probably would be getting some new radar sets, mostly APQ-7s and maybe some APQ-5s. Those were of a different type than ours and would provide crews with a different capability. The APQ-7 particularly, with its narrower beam width, should enhance the prospects for success when we tried precison bombing, whereas the APQ-13 we had couldn't be used with confidence except for area bombing. I gathered that the bombardier, instead of the navigator, would use the new radar.

On March 18 we heard that the battle of Iwo Jima was over. I didn't need to listen to the radio news; I knew Gabriel Heatter would say, "Aaah, there's good news tonight," which he would have said even if the bubonic plague had broken out. I understood that we were going to start flying over Iwo--directly over it, that is--on our missions.

In addition, we could see more invasion practice taking place off our western shore. A big convoy had been there from the previous day. What's next? Speculation favored Okinawa over in the Nansei Shoto group.

News reports from the States said we destroyed 24 square miles in our first three raids. That was a bit of an exaggeration: 15 in Tokyo, 1.8 (the revised figure) in Nagoya, and about 4 in Osaka. Kobe was better; at last report, an area of 12 square miles was burned--a very successful raid. Naturally it was--look who the pathfinders were.

We found out that we were going back to Nagoya that night. It wasn't planned that way originally, but Nagoya was still proving to be a difficult target.

Chow was at 1630; briefing at 1715. The information in the morning had been that we would carry 144 100-pound gasoline gel bombs. But somehow they stuffed 184 of those things in the plane. That required even more shackles, or at least more wire. Although they were called "100-pound bombs," they actually weighed 76 pounds apiece. That was enough. We weighed just about 136,000 pounds. Pretty good for a plane with the permissible maximum officially listed as 120,000 pounds.

Doland: "I figure 136,000 pounds."

Russ: "Eight tons overweight?"

Doland: "Yes, sir."

Russ: "Eight tons?"

Doland: "Aaaa-uhh, yes, sir."

Russ: "Y'all think this little ol' airplane can fly with all that extra weight?"

Doland: "No, sir, but General LeMay apparently thinks so."

Russ: "Oh. Yes. Well, okay, let's go."

Russ: "Pilot to crew, the proper uniform for take-off will be swim trunks and Mae Wests."

We took off at 2050, sort of staggering uncertainly into the air, with the pilots anxiously watching the air speed meters and cylinder-head temperature gauges until the gear was up and locked.

The flight to Japan went as planned, but just before we made landfall on the coast of Honshu, a regulator burned out. That blew fuses all over the plane. The lights went out. The intercom went out. Turret power for the CFC system went off. It burned out the turbo amplifiers and blew out the torque amplifier on the APQ-13. The flux-gate, the radio, and all other electrical equipment went inoperative. After fiddling with it a while, we got about half of the equipment, including the interphone and turret power, working. We still didn't have turbos and couldn't pull more than 30 inches of power (manifold pressure). Nevertheless, we decided to go on in, but not at the assigned altitude.

We went up to 9,000 feet and proceeded to make the bomb run. There did not seem to be much opposition--perhaps because the shooting was directed at the altitude where most of the planes were, sparing us. However, we did think we saw the enemy try to use some phosphorous bombs against other 29s.

Bombs away at 0456. There were some fires below, but Nagoya just didn't seem to burn like other places. We began to feel like an unhappy arsonist doggedly trying to set fire to an asbestos plant.

Leaving the coast, we heard Happy-30 (some plane's code designation) with a distress message on VHF. He said he had only 1-1/2 engines and wanted help. We saw him shoot a flare and headed for him. But before we got to him a plane of his own group found him. Later we heard them talking and "30" said he got another engine going and was holding his altitude and thought he could make it--at least to Iwo.

We landed at 1125 (March 19). This, we heard, was the last in the series of "maximum effort" missions. A big party would be held the next day. After that, we assumed, we would start laying mines. The incendiary campaign had to be slowed down anyway for lack of bombs. And also because of air crew fatigue, I might add.

The crew was fatigued, but the ol' Reamatroid had been going along in great shape--except for that electrical problem, which was an exception. We had changed crew chiefs. Smitty was moved up to be in charge of several ground crews, and Dennis LaChance became our crew chief. The ground crew continued to do a fine job; on many days they worked long hours, but they always had the Reamer ready to go when it was needed.

Fox, Layson's co-pilot, got his own crew. It looked as though Andy should be next.

There on Tinian two Marines had been killed the previous day. Officers of Island Command estimated that there still were more than a thousand Japs lurking about in various Tinian caves--with, maybe, some of them in the stubby jungle-like growth across the road from us!

Some of the Jap survivors were more resourceful than others. We were told a story, perhaps apocryphal, of one who tucked his identifying cap in his tunic and went and stood in a G.I. chow line. Supposedly, he went through the line on three or four consecutive days. His masquerade collapsed when an officer approached--and he saluted!

The five maximum-effort missions in eleven days, just completed, came to be called The Blitz. A celebration, termed a "Field Day," was held on March 20. As some of the guys put it, a drunk front moved in. It was said that there would be a break of three days, maybe more, and then another mission.

There was a rumor about medals being awarded. I hadn't thought about that. Supposedly, requests had been forwarded for a bunch of DFCs and Air Medals.

We saw that some planes from the 58th Wing were starting to arrive on Tinian. I wondered about a home-town boyhood friend of mine who was with the 58th; maybe I would be able to see him.

One evening we had to attend a training film on flak--a little late to be showing us that, we thought.

Chapter VII

Mining

One might say that the Blitz had been a blazing success. "One" might say that, but heaven forbid that I should. Anyway, the Big Gamble on low-level (actually medium-level) incendiary raids had succeeded beyond what anyone had dared to hope. We felt doubly or triply good about it: We had carried out a difficult assignment; we thought it had served to shorten the War; and we felt that, for the first time, mission results were commensurate with the potential of the B-29 as a superb offensive weapon.

In view of the success of the March Blitz, it was difficult later to appreciate what a big gamble it really was--and to understand how important Iwo was in assessing the risks. The capture of Iwo made feasible one of the key tactical decisions of the Pacific War.

We knew that we were one of not too many crews that had flown all five of the Blitz missions. But, other than the official "Field Day," we did not celebrate. Besides not having the requisite ingredients, I think we were too tired; we had found that "maximum effort" was not simply a public relations label. Instead, we began to prepare in earnest for mine-laying duties.

Mines were equivalent in weight to large bombs. A B-29 could carry only about a dozen of them at a time, and fewer than that of the larger ones. However, the mines were not like bombs in the way they fell--their trajectory. They were large cylinders, without the aerodynamic design of bombs. Furthermore, each had a small parachute attached to ease its fall or, more precisely, to ease its entry into the water when it hit. All of the mines were to be dropped by radar--and, presumably, all at night. So, we had to go to school to learn the techniques of this new endeavor. We had started before the Blitz commanded all of our time and attention. Now we picked up where we left off.

On March 22, we practiced mine-laying using Rota as a target. We didn't have mines, using practice bombs instead, so we couldn't tell much from the results, but the procedures seemed good. Other crews were to do their practicing the next day, and I had to report to briefing at 0545--just me, not the crew--to provide instruction. I was to explain the procedures since the navigator's role was central to a mine drop, just as it was when releasing bombs by radar.

Wheel for a day! That's what I thought I was on March 23 as I went about telling one and all what to do--and trying my best to remain humble while wielding all that new-found power. I figured it must have been obvious to the fellows that I had a natural talent for making command

decisions. I flew twice, checking out the crews of Captains Johns and Miller plus a navigator from the 40th Squadron (Captain Frank's crew).

Interestingly, in the morning, the pilots claimed they saw flak from Rota, two bursts about two thousand feet below our altitude. I really didn't think even so much as a cap pistol was surviving on Rota, to say nothing of a supply of ammunition. Was it really flak? Would those scrawny starving survivors on Rota, after being pelted for months with practice bombs, actually fire some rusting hulk of a gun at a B-29, surely knowing that their target was way out of range? I don't know.

A mission was put on the board for the following night--not a mining mission and not an incendiary raid but an "old-fashioned" precision bombing raid. The target was the Mitsubishi plant in northern Nagoya. Here we go again--back to Nagoya. It was to be individual attacks, with Operations counting on crews being able to bomb visually at night. Our crew was not listed to go.

According to the radio news, the Navy had been shelling and bombing islands in the vicinity of Okinawa, with carrier planes ranging as far as Kyushu, the nearest of the main islands.

We heard that the 314th Wing was going to go to Clark Field. I thought about that with a little envy. (1)

(1) At one time the plan was to send two wings to the Philippines. See Matterhorn to Nagasaki, pp. 519-524.

Eight planes from our Squadron were supposed to go on the Mitsubishi raid, but only five reached the target. The three who turned back included Sharp in the Reamatroid. The next day it was determined that the Reamatroid blew a cylinder. As a consequence, it had to have an engine change. That would take about two days.

There were numerous memorable events during the American occupation of Tinian, but few as strange as the incident of the night of March 25. There was a rumor that the War in Europe had ended. The place erupted. Everyone, perhaps unfortunately, had a gun of some kind. Half of the ammunition on the island must have been shot into the air within 30 minutes. At least we hoped that it was shot into the air. In the midst of the melee, Scotty came running through the tent waving his .45; even the most sedate of fellows was caught up in the delerium. Quite a few guys--those who had them available--used tracers or fired flares. It was a wild spectacular display for a time. The mood changed quickly as the truth caught up with the rumor. Too bad it wasn't true. (2)

(2) I thought it was strictly a rumor, but according to the Pirate's Log, p. 35, it began when "a false announcement of the German surrender was made over the public address system."

The big Mitsubishi plant still stands! The results of the 313th Wing's raid on Nagoya were not good (contrary to an AAF news release we heard broadcast over the radio). Reconnaissance photos of March 26 showed the plant missing only 3% of its roof area--otherwise intact. Nagoya still seemed to be a jinx. Five planes were lost on the mission (again at

odds with the public news announcement). Two of them were from our Wing--one from the Ninth Group and one from the 505th. The 73rd Wing flew the same mission but had a different target--and, we heard, had better results with its objective.

That day a mine-laying mission was finally scheduled--set for the following night. Our status was uncertain because of the work being done on the Reamatroid. The object of the mission was to mine the areas around both ends of the straits at Shimonoseki. That was the most important, strategically, of the three entrances to the Inland Sea. The planes were to fly to a point near Tokuyama on the southern shore of Honshu, then to Shimonoseki Straits, and then swing past Yawata and over Kyushu to head home. It was to be the farthest west the 313th Wing had yet flown.

By this time, quite a few 58th Wing planes, with their crews, had arrived from China-India. They were being assimilated right into our groups, at least temporarily. In our Squadron, Richmond, Jaekel's co-pilot, got a crew of his own. We had thought Andy was next in line, but now he surely would be.

When March 27 came, we knew we weren't going on the mission that night--the Reamatroid wouldn't be ready. Take-offs were to start earlier than usual, about 1630. Planes were carrying either twelve 1,000-pound mines or six 2,000-pound mines. We heard that the 73rd Wing hit airfields and "centers of resistance" along the route late in the afternoon. We didn't know exactly what that meant, but it sounded good--certainly better than if they had attacked the "peripheries of resistance."

"Mine-laying" has an innocent, unthreatening sound to it. And some of the missions were easy. But not that first one to Shimonoseki. In the morning we began hearing the stories, and there were many. As we were to discover, early reports could be quite inaccurate. However, it clearly had been a punishing mission.

Our first concern centered on four crews of the Sixth Group that didn't return. Grounds and Hunter, both of the 40th Squadron, were missing and presumably lost. Two others, Steele and Booth, didn't get back to Tinian. Operations thought Steele ditched, but they obviously weren't real sure. Booth landed at Iwo, and, according to reports, tore a wing off in doing so.

A few hours later Operations received a message saying that Hunter had landed at Iwo and was okay. And Booth was certainly at Iwo. Steele was still missing, but the Navy had reported picking up some survivors, and Operations thought they may have been part of Steele's crew. That left Grounds and his crew unaccounted for altogether. He was never heard from after he took off. In my diary I wrote "Poor Les!" Lt. William Leslie, Grounds's navigator, had been a friend of mine since before Grand Island. (3)

(3) Years later I found out that Grounds and all of his crew were rescued from a Japanese prison camp after the War ended. Pirate's Log, p. 35; Global Twentieth, pp. 158-159.

In the afternoon, we test-hopped the ol' Reamatroid. The engine just installed was okay, but that electrical system, which had first caused us so much trouble on our second Nagoya mission, was still messed up. Andy explained to me that we had burned out another turbo amplifier, and I nodded knowingly, just as though I actually knew what a turbo amplifier was.

The next day the talk still was hardly about anything except the Shimonoseki mission.

The flak encountered around Shimonoseki had been brutal. We heard that some of the returning crews reported seeing as many as four 29s go down in flames. At one time, we heard that the 504th Group had seven planes missing. That was staggering. However, it also was untrue, demonstrating how confused the early information could be, because by the following day we knew better--the 504th lost one plane.

The Sixth Group sent some crews out on a search mission, but they didn't find anyone. They saw some wreckage, though, and it was reported that a crew from another group had spotted some rafts.

Booth reported from Iwo that two of his men had been wounded. One was okay, and the other would be after some time on crutches. In the landing, he smashed up General LeMay's B-24, which was parked there. I almost took some kind of perverse pleasure in hearing that. In my notes I wrote "Tough." The misfortune of a general wasn't about to get any sympathy from me.

General Davies, our wing commander, had ridden with Rodenhouse. They came back with 20 flak holes. I hoped the General was suitably impressed.

It was fitting, of course, that we should hear something from the Navy. The first story going around was that the Navy had said that 150 well-placed mines would have done the job around Shimonoseki. We dropped about 1,000. Maybe Bomber Command figured on blowing up all of East Asia!

Since I heard that story about the Navy's comment in the usual word-of-mouth way, I didn't know if it was authentic or not. Even if it was, I didn't know, and never have figured out, how it was intended:

> Either (1) "Gee, that's great; you did much more than was expected of you, dropping 1,000 instead of 150."
>
> Or (2) "Good gosh, 150, if well-placed, would have been sufficient. Were you really so unsure of your aim that you sprinkled 1,000 of them around the area to try to get the job done?"

Two days after the mission was completed we heard that the Navy had called our mining job "excellent." Maybe that was sincere, maybe not. In any case, we thought that the area should be well-mined after that raid. We certainly hoped so. It wasn't a target we wanted to go back to.

There was not going to be any pause just because of distressing losses on one mission. On the following night, we were going to mine the

area west and southwest of Kure, near the entrance to one of the largest Nip naval bases. After the target study, our hopeful assessment was that it should be easier than the previous mission--easier on us, that is, not necessarily easier mining.

Although we were preparing for only the second mining mission, we were hearing that this would be the last for some time. That seemed odd in view of the avowed purpose of the mining campaign and the effort put into special training, but the rumor was that, for a while, there wouldn't be any more mines available for us to use. Maybe no one realized that we were going to use up the stockpile a thousand at a time.

On March 30, briefing was at 1400, chow at 1630, trucks at 1700. When we got to the flight line, before getting in the plane, I went and peeked into one of the bomb bays. Those 2,000-pound mines hanging there looked huge. They were huge.

We took off at 1835, flew to Iwo and then northwesterly toward western Shikoku. On the long monotonous leg from Iwo to the Empire, we almost disappeared altogether from this War--although Russ didn't confess the whole story to the rest of us until later.

On any part of a flight that was quiet and routine, the pilots commonly took turns resting--and dozing--in their seats. So, at some point out in the dark middle of nowhere, Russ had said, "Okay, Andy, your turn to snooze; I'll watch things."

The darkness and the tranquilizing drone of the engines was too much for Russ. Inevitably, eyelids got heavy. Avoiding a sleepy trance was more than could be done. Russ was not really aware that he was half-way to dreamland.

After a while, reflexively, he shifted his weight, and his eyes half opened, with his gaze just happening to be directed across the plane toward Andy's instrument panel. "Strange," he thought, "but Andy's artificial horizon is not level." The eyes closed again, but then slowly reopened as a disturbing thought crawled grudgingly through his half-consciousness: "Yes, that artificial horizon really is tipped."

Once again his eyes closed. For about two seconds. Then the mental alarm went off. Suddenly he was wide awake, sitting straight up. His own artifical horizon indicated the same thing!

He peered out the window. He might as well have looked into a barrel of oil at midnight; he couldn't see a thing. He reached down and flipped off the automatic pilot, and the left wing came up to its normal trim position. Yes, the plane had gone into a 20- to 30-degree bank to the left. We had already lost almost half of our altitude, which was only about a thousand feet to begin with. If the controls had been left unattended, the curving skid down to the left probably would have become steeper and steeper.

The rest of us knew who wouldn't have had a place in the life raft that time.

Without having to break out the oars, we reached Shikoku. A long, very narrow strip of land stuck out on the west end of the island. The extreme western tip, according to our maps, was called Sada Misaki Point. That was a charming name, and we were to make it a regular part of our lexicon as we became more familiar with that location on subsequent missions. It sounded like a place Bill Mauldin would have had Joe and Willie stationed--if they had been Japanese.

From Sada Misaki Point we headed north, in the direction of Hiroshima. Outside, everything was quiet, clear, and calm. It was dark, really dark. There wasn't a thing to be seen, not a light of any kind anywhere. It seemed that water and land, alternately, slid by underneath. Actually, I think it was mostly imagination, for the surface below was barely discernible. One almost had the feeling of being all alone in the whole universe.

There is a big difference between alone and lonely. On a combat mission over enemy territory, being alone was welcome. Darkness was also welcome--so unlike our experience with fires and searchlights. We were glad to be alone and were not the least bit lonely. Enemy opposition was absent, no doubt, because we were not mining at the naval base itself, but in one of the several channels among the islands between the base and the open sea.

We dropped our six 2,000-pound mines in one of the waterways southwest of Kure at 0142-1/2. Approximately, that is. We were heading north-northeast on the bomb run (or mine run). We turned right, taking care to steer clear of Kure itself. It was still dark and quiet. It was a swindle to claim combat time for that mission.

Taking confidence, perhaps, from the easy mission, I thought it was a good time to test an idea that had been rattling around inside my skull. It had to do with (a) the wind velocity and (b) the way altitude affects fuel consumption. That made it a complex cerebral exercise for me, since a two-part idea was about the maximum holding capacity of my top-side nodule.

I had been thinking about those terrific wind velocities at higher altitudes over Japan, and I thought I saw a way to use that wind to our advantage. If we could climb up to those altitudes and get a huge tail wind, I thought maybe we could reverse the usual altitude-fuel relationship, if we did it just right. Furthermore, I had an ulterior motive, so I did a little scheming.

Early B-29 missions had paid a penalty in fuel by climbing to bombing altitude. But that was a climb before reaching Japan, while still more or less fully loaded. Climbing after leaving the target would be considerably different. Not only would a few tons of bombs (or mines) have been dropped but also more fuel would have been used up, further lightening the plane.

Altitude would pay off in two ways: True airspeed increases with altitude (the air is thinner), thus shortening the flight and saving some fuel. Also, instead of leveling off at the top of the climb, we could immediately start a long, slow descent. I had been impressed by our

descent from 28,000 feet on our first Empire mission. We had cut rpm to a minimum and were able to coast downhill, so to speak, for a long way on very little fuel.

If the descent covered, say, 200 or 300 miles, making up for the fuel used in climbing would be problematical. But we had nearly 1,500 miles over which to aggregate savings. That was more than one-twentieth of the way around the earth! So, I reasoned that, as long as we didn't weigh too much when we climbed and if we could gauge the rate of descent to extend it the full distance, we could more than make up for the extra fuel used in a post-target climb.

The wind factor also deserves some explaining, because the high-altitude winds were predominantly westerlies, and we weren't going to be heading east, of course. But ground speed is the triangular sum of two directional vectors, wind and airspeed. If the wind was from our right rear by only a few degrees, we would benefit from part of the large wind component. And the wind might be northwesterly--the more nearly so, the greater its effect on our speed. As to wind direction, we could only hope. The rest depended on how much east of straight south we could head. That was one reason this was such a good oppportunity. From Tokyo home was only a bit east of south, but from Kure home was south-southeast.

Each of those elements alone might be worth something, but it was putting them together, I was convinced, that would make a really noticeable difference in fuel and time. So, I cooked up a plan--just in my head, no calculations or anything in writing. Then I had to convince Russ and Andy to try it.

To be truthful, I really wasn't interested in saving fuel. That was only an excuse to do what I wanted to do, which was to find a way to beat everyone else back to base. After all, we had a reputation to uphold. The idea was to win approval for a trial by stressing the potential for saving fuel and to treat the saving of time as though it were incidental, whereas it was actually the other way around with me.

First I consulted with Doland to be sure we had enough fuel to try something that just might not work out as hoped. The always-skeptical Doland no doubt suspected a trick, especially when I told him that, if we still weighed too much, we could jettison the bombardier since we didn't have any more use for him on this trip. I don't think I convinced Doland of a thing; nevertheless, he had to concede that we had enough fuel, and he didn't object to my use of "we" when I explained to the pilots that "we" wanted to climb higher, considerably higher, than the flight plan called for.

I'm not sure what Russ and Andy thought, for they really didn't say much at all--just kept the plane climbing. I imagine that they too were enticed by the prospect of beating everyone else home. After all, Russ had started it all by making a bet with Sams.

I don't remember our altitude when we dropped the mines (probably four to six thousand feet), but we climbed all the way to 25,000 feet--on the sensible premise that half-way measures might gain nothing at all.

Then, probably unknown to anyone except me, we headed initially more to the east (left) than a direct line home. That was meant to make the greatest possible use of the wind vector at the time that it was of such large magnitude. I planned to turn a bit to the right in stages as we proceeded until we had compensated for heading too far left to begin with. It would not have been called a dog-leg course. Rather, it was a long convex line, bulging out to the left side of a straight-line course, but, considering the distance to go, not bulging much. I think I started out initially with an offset of 10 degrees left of straight. Whoever said that the shortest distance between two points is a straight line was not a navigator--at least not a conniving one.

I also figured a rate of descent calculated to permit us to "coast" for nearly 1,500 miles--all the way home. However, as with the heading, it was not to be a constant. I wanted to start with a rate less than the average--to prolong the time we would be aided by the high-altitude wind and by greater true airspeed. During the latter part of the return trip, of course, the rate would have to be correspondingly greater.

In practice, we didn't exactly do that. Fine adjustments, especially in the rate of descent, were just too much to achieve. But we did approximate the plan--and the plan wasn't very exact anyway. I got busy with the Loran set, checking position frequently in order to fly more or less along the slightly convex curve I envisioned--and also to beat sun-up, at which time the useful range of Loran contracted greatly.

The flight itself went smoothly. When we landed at 0745, there was not another returning plane to be seen. We were the first ones back--by a wide margin. We had made the return trip in almost exactly one hour less time than the flight to the target.

In fact, even when we left the flight line later, we still were the only plane that had returned. The sky over North Field was empty. Where were those other guys? Had they stopped for lunch or something?

We anticipated that, when the others finally got back to the area, we would already have showered and would be lounging about with a drink. (The drink would have to be water--fortunately or unfortunately, as the case may be.) But, actually, I think we were asleep.

Even though we needled other crews about being so slow, to the best of my knowledge no one ever asked us if we had followed the briefed flight plan. We logged only 13 hours, 10 minutes for the whole flight. That was a <u>full 50 minutes less</u> than the time taken by the crew in our Squadron that made the second fastest trip!

Our experiment with altitude and wind was quite convincing, although I think Doland still suspected shenanigans, and, of course, he was right in a way. And strangely--or not so strangely--I do not recall ever finding out how we did on fuel consumption, which supposedly was the main purpose of the whole endeavor. It probably didn't matter anyway; if we had saved much fuel, oil lobbyists (slippery fellows, no doubt) simply would have induced Congress to increase the depletion allowance subsidy.

In the meantime, there were other things going on. We heard that

American forces were to land on Okinawa the very next day. At the time, I felt it was "only" a rumor and didn't put much credence in it. It turned out to be true, though. I realized I hadn't been keeping up with developments very well.

"Keeping up" meant listening to the radio news and then, to find out what really was happening, plugging into the local rumor network, which was better informed than any professional news service.

We also heard that there was another mission scheduled for the next night, this time with each B-29 carrying 26 500-pound GPs. The next day, however, the mission was cancelled. They said bad weather. It had looked okay, relatively speaking, when we were up there. The feeling was that a big raid would be coming up in a day or two.

On the following day, the mission was back on the schedule--for the next night. We were led to believe we would be an alternate crew. We pretty much doubted, therefore, that we would go.

On the second day after the mining mission at Kure, we were given an opportunity to see the scope pictures taken by our crew--that is, by Hudson. We were told in confidence that an analysis of pictures showed that we had the best placement in the Wing. That is, our release was the most accurate--and that was mostly the navigator's job! But that wasn't all. We also took the best pictures.

We thought of ourselves as a triple-threat crew--we did the best bombing (i.e., mining), we took the best pictures, and we did it faster than anyone else--the Sammy Baugh of aerial mining.

I didn't think about it until later, but I thanked my lucky stars that we got those pictures; otherwise, someone might think that we actually hadn't gone all the way to the target--we really were that early in returning. "Lucky stars," of course, was not simply an abstraction to a navigator. The ones I thanked were Betelgeux, Bellatrix, and Rigel.

Chapter VIII

Medals and Missions

On April 2, for the first time in I don't know how long, maybe since Cadets, I stood at attention in military formation. But it was for a worthy cause--a ceremony for the presentation of medals.

I had always thought medals were awarded for some unique personal act; I didn't know that the Army gave them out in bushel baskets full. A whole bunch of us--aircrew members plus others--had been awarded medals for those first five maximum-effort low-level incendiary attacks--the Blitz. Most of us each got an Air Medal "for meritorious achievement," etc., etc. Probably especially the et ceteras.

We joked about medals, trying to act indifferent: "Just mail mine to me; I don't have time to go get it right now." "A DFC and a nickel will get you a cup of coffee--but only at a PX; otherwise it takes a dime." "The hock shop back home has more of those than this whole squadron has."

I doubt, though, that anyone was as nonchalant as pretended. I cared enough to feel indignant that the ACs were singled out for a higher award, the DFC, whereas the rest of us aircrew members got the Air Medal. I thought it was unfair; we went to the same places in the same planes, didn't we? Military rank was the recognition of responsibility, so what were medals for that we didn't share equally? Now, if they had been giving medals for sleeping in the tunnel, well then I could have understood it. You could say that I perceived it as a rank injustice (pun fully intended).

Early the next morning some news from the flight line aroused our concern. We heard that "some colonel" had been playing around with our airplane. As a result, the Reamatroid had to have a cylinder change or some such seemingly silly thing. Because of that, we were assigned to use Captain Frank's plane on the mission the next night. My dislike for switching planes made me resentful of whatever was happening; I was prepared to dislike that colonel without even seeing him.

However, an explanation later in the day cast a different light on it. It seemed that the colonel was a specialist from Wright Field, and the word that reached us was that he really knew what he was doing. Dennis, our crew chief, said the colonel got the mixture set so that he could idle the engines at about 450 rpm without fouling the plugs. That was amazing. Then he was able to hear a faint whistle if a cylinder was leaking. He found two on the Reamatroid.

So, we still were to take Frank's plane if we were to go. And, by the next day, when we found out we were first alternate, we figured that

the probabilities favored going. The target was the Nakajima-Koizumi aircraft plant at Ota about 40 miles northwest of Tokyo.

Because there still was uncertainty about our going, we prepared rather perfunctorily. We attended briefing at 1400, ate with the crews at 1630, and got on the trucks leaving the area at 1715. We readied our equipment leisurely and then sat idly and waited. Being in limbo really was worse than either going for sure or not going for sure.

Our Squadron was to go first. Engines were started up and down the line beginning soon after 1900. At 1925 Treeman began to taxi. Others followed, and everything seemed to be going well. But Ramsey, one of the last planes in the Group, had trouble. It wasn't clear right away whether or not it could be fixed in time for him to get off. Then the Ninth Group started taking off. About that time Operations decided we had better go, so we rushed around and took off at 2040.

That uncertain and sort of disorganized beginning epitomized the whole mission. Right off, the weather was terrible. We went through some bad thunderstorms and were in the soup most of the way to Japan. We passed close to Haha Jima and Chichi Jima, but we couldn't see them except on the radar scope because of the weather. It was extra turbulent the whole time.

Navigating was not a fun job in turbulence. Each time the plane lurched up or down, loose equipment--as well as ones own body--went the other way. If I was about to make an entry in my log, the plane would suddenly jump upward, pushing me down in my seat and flattening my arms on the table--unable even to pick up a pencil, let alone write anything. About the time I recovered and got the notation made, the plane would just as suddenly drop 30 or 40 feet. Then I floated about an inch above the seat. And the table literally dropped out from under the implements. Suddenly pencil, plotter, dividers, clip board, maps, Air Almanac--everything--would be suspended in mid-air. Naturally, when they came back down, they either missed the table or bounced off it. By the time I gathered everything up from the floor, the process would start over again.

Soon a navigator got adept at grabbing pencil, plotter, and such things out of the air--so he wouldn't have to pick them up off the floor. Even less fun was to take a sextant, climb up to the astrodome, and try to shoot a star. Generally, of course, turbulence occurred in weather that made celestial navigation impossible anyway, but once in a while there was a surprising amount of turbulence in clear air.

After a while I devised my own well-reasoned solution to navigating in turbulence: Give up. Just sit there and open a K-ration to eat. It might take five minutes to work the hands enough to get the wrapper off, but by that time--after such aggravation--it tasted pretty good--if ones stomach was still functioning after all those ups and downs.

We had been told during briefing to bomb visually. No provision had been made to use radar, except to say that the secondary target was the port and urban area of Tokyo. With the weather as bad as it was, we knew very well that the chance of making a visual bomb run was slim. On the

other hand, we were less than thrilled at the thought of switching and flying over Tokyo. So, on the way to Japan Charlie and I worked out our own radar bombing run. That was fine with Russ and Andy, who didn't have any more affinity for Tokyo than Jack Benny had for Fred Allen.

Honshu appeared on the radar at 0230. We flew north along Chiba Peninsula with Tokyo showing on the left side of the scope. We reached the lake that was the I.P. and turned on the bomb run. The ground was still not visible, so we used the radar-release procedure we had devised and were glad we had it ready. We dropped our 26 500-pound GPs at 0316 through a complete undercast.

Judging by the way we had prepared the radar release, I expected distance to be good, but course could easily have been off a degree or so, and that might be a few thousand feet, which would mean missing a target this size altogether.

We didn't see any flak or searchlights in the target area. But we knew that searchlights were operating in Tokyo because we could see a diffused glow in the clouds to the south. This time we were above the clouds, looking down. Instead of the reflected glow we saw so often, this was direct light, dimmed by clouds between us. Moving dots of light brighter than the general glow indicated the movement of searchlights.

As we made a U-turn to the right to leave, someone on the intercom reported seeing a twin-engine plane, presumably a Jap night fighter. It was behind us, its heading unknown. Visibility was limited, and it was soon lost to sight. We just kept climbing, going up through layer after layer of clouds.

We climbed and climbed and climbed. Being so late taking off, we probably couldn't beat many back to base, but we intended to beat somebody. We were off the coast and heading south. We went higher and higher--far above all clouds. We seemed to be soaring up and up. We got way up where we were in sunlight even though it would be quite a while until dawn arrived at the surface. It produced a feeling of being "out of this world." It almost was.

But then, at about 33,000 feet, two of the engines began acting up. The manifold pressure in Nos. 1 and 4 started surging back and forth, back and forth. It was a little scary. I heard Russ ask, "Doland, how come <u>your</u> engines are acting funny?" I guess the engines belonged to Doland whenever someone had to answer for the way they ran.

Very quickly, we dropped down to a lower level--a comfortable margin below the point at which the surges stopped. We leveled off at 24,000 feet and stayed there. Apparently, we were trying to have too much of a good thing. We wouldn't go that high again, even in the Reamatroid.

Promptly upon getting on a steady course and altitude with the plane on autopilot, Russ had headed for the tunnel to get his beauty sleep--which, by the way, didn't stand a ghost of a chance of achieving such a monumental objective, but that's another story. Charlie then was sitting in Russ's seat and I was sitting on the gyro cover, and Andy was p'ing and moaning about things in general and almost everything in

particular, especially the inequitable distribution of intial use of the tunnel and inequality in total time in the tunnel. It sounded as though the route to Valhalla went through our tunnel.

So Charlie and I urged Andy to go ahead and take a nap--we'd watch things. Nothing unusual was happening anyway. What in the world Charlie and I would do with all those knobs and switches and levers and wheels if something did happen, we didn't say--or even contemplate. Our overwhelming confidence was exceeded only by our underwhelming amount of good sense.

In the mood Andy was in, he wasn't inclined to examine such an enticing suggestion with great analytical objectivity. Even so, he feigned reluctance for a time before succumbing to the superior logic in the dialectic Charlie and I put forth, such as, "Aw, go ahead, Andy--what could possibly go wrong?"

I took Andy's seat, and Charlie and I sat there like lords of the manor, with the whole Pacific Ocean as our fiefdom.

In short order, we found out that all was not serene in the tunnel. Russ explained later that he was in the midst of a nice peaceful dream when someone nudged his feet and said, "Move down."

Hoping that the dream would resume after intermission, he dutifully wriggled some distance down the tunnel. But the curtain had barely gone up for Act II of the dream when a realization intruded: "Hey, wait a minute," he thought, "that sounded like Andy's voice."

The co-regency of le Charles and le Donald was soon le mort. Russ came charging up to the flight deck demanding to know, "Who's flying this thing?"

"We are," Charlie and I said. But that didn't turn out to be a very good answer.

"Precisely the point I was going to make," said Russ.

Good gosh, one would think that my six hours in a Piper Cub would count for something. Besides, Charlie and I felt that mitigating evidence limited our culpability: Andy was the one who had made the paramount mistake--by saying "move down" to the wrong person.

We landed at 0935 (April 4). That was 12 hours and 55 minutes for the flight. We found that Jake's crew had made it in 12 hours and 45 minutes. Well, we thought, just give us back the Reamatroid and a short run like this one and we'll break that record.

Back home talking to the other crews, we discovered to our surprise that a few of the first ones to reach Ota had actually been able to bomb visually. Most bombed by radar, just as we did. How good a radar-release procedure they had, I didn't know. I think it showed a substantial respect for the defenses at Tokyo more than anything about the use of radar. In our Squadron, only one chose to go down to Tokyo.

Someday, I thought, the Wheels will realize that no mission should be sent to Japan without having a radar bombing procedure available just in case. As fate would have it, having none ready was almost a guarantee that one would be needed.

Having a procedure for bombing by radar was not enough when the target was as small as this one was--because with radar we needed a target about the size of the whole of Tokyo prefecture--but, I hasten to add, preferably not Tokyo--some other place, like maybe Maug prefecture.

In the meantime, Russ had broken out with hives.

"Nerves," we said.

"It isn't nerves," Russ insisted; "what's there to be nervous about--just because my life is in the hands of ten kids selected on the basis of their ability to answer stupid questions about a page covered with a bunch of colored dots."

He didn't want to go see the Flight Surgeon, as he was advised to do by his friends--both of them. "It's no use," Russ alibied, "the saw-bones has only one treatment for everything. He'll say, `Oh, it's combat fatigue; take these three little pills.'"

But Russ finally went to the dispensary. Without looking up from his golf magazine, Doc said, "Oh, it's combat fatigue; take these three little pills."

So much for the miracles of modern medicine. The pills weren't even sugar-coated. "I thanked him," Russ explained, "and told him he could fly with our crew any time. I didn't mention that his seat would be attached to a shackle in the bomb bays!"

The next day the planes were loaded up with ammunition--750 rounds per gun. We didn't know what Operations had in mind, but it sounded ominous: Were they going to send us into a hornet's nest of enemy fighters? Maybe. Just as likely, though, judging by experience with the Wheels in our Group, the ammo might be for a gunnery training flight they planned. One would think that the northern Marianas had been shot up enough already, but the Wheels were relentless in their determination to subdue all such major Axis strongholds as Maug, Agrihan, and Guguan.

All of the ACs were invited to a party that night at Wing headquarters, informally called a "Wing Ding." I figured it would be nothing but a boring bunch of babbling boozers. That was sour grapes--unfermented ones at that. I really didn't care to go, but I would have liked all crew members to have been invited. All of the perks seemed to go to the ACs. For them, G.I. shorts and clogs were replaced as the uniform of the day by clean khakis--all wrinkled, but clean.

Anyway, Russ must have had a good time. At least, one would presume so from the way some of his buddies folded him over and stuffed him into his sack in the middle of the night.

Information from Intelligence on the Ota mission was slow in coming

through. Because of the weather, there were no recon pictures right away. On April 6, Major Speers told the crews that "scattered hits" were reported. Another 3% deal, I supposed, thinking of the Mitsubishi plant in Nagoya.

Speaking of Nagoya, the hints were that we would try there again next. We heard that the raid would be in daylight, more than likely because of poor results at Ota at night. But, I was afraid it would be the same thing again, even in daylight. That is, if the Brains counted on visual bombing, it would turn out that we would have a complete undercast. Supposedly, we were to bomb at medium altitude--about 15,000 feet, although we did hear even lower levels mentioned--and in formation, with us on Koser's wing, which didn't sound good to me at all.

But the biggest news--just a rumor at first--was that we were to have P-51s with us. The promise of fighter escort was always welcome; those crushed-hat hot-shots were our favorite allies. Nonetheless, I remember thinking that, since we had become accustomed to night bombing and it was going well, I would just as soon stick with night missions. At one time I would have traded almost anything to have our own fighters accompanying us. Strange how views change.

We heard over the radio that Russia had renounced her nonaggression pact with Japan. We took that as encouraging news.

We also heard that Navy planes had been attacking the Jap navy, which supposedly was bottled up in the Inland Sea by our mines--at least that was the way it was being told among AAF people. We were led to believe that henceforth only "maintenance" mining missions--small and infrequent--would be required.

A new crew arrived. I figured Andy would get it. There were several exchanges of officer assignments--Booth, for example, was made operations officer and Major Wagner got Booth's crew. According to prevalent gossip, the purpose was to get promotions for certain people. At the same time, we began to hear rumors about some crews--maybe one, maybe two from our Group--getting to go back to the States for a brief time. Some of the rumor purveyors thought Treeman's crew would be selected. We had no idea at the time how significant that embryonic rumor was to be to us.

By the afternoon of April 6, we discovered that we had better get some sack time right away because we were told to report for briefing shortly after midnight. Russ needed more than a little sack time--something like an ice bag and a gallon of black coffee. But I had confidence in Russ. He was renowned for his unusual accomplishments as a pilot. Single-handedly he had knocked out two bridges and a power station smoke stack. That was when the authorities decided to send him overseas.

An 0430 take-off was planned. As was thought, we were going after the Mitsubishi plant (the 3% one) in northern Nagoya again. We were to go over the target in formation, flying at 18,000 feet on a course of 90 degrees (straight east). We were to have an extra fuel tank in the rear bomb bay, thus limiting the bomb load to 16 500-pound GPs.

That didn't sound so great, especially the formation part, but two

final bits of information helped: We were to have 23 P-51 Mustangs as escort. And this time provision had been made for a radar bomb release to be used if necessary. The full load of ammunition wasn't because of the threat from Maug or Agrihan after all; it was provided because this was a daylight raid.

The 314th Wing would be bombing plant #2 while we bombed plant #1. The 73rd Wing was to bomb near Tokyo--probably one of the engine plants--and they were to have most of the fighters. (1)

(1) For a counterpart to our experience with that Mitsubishi plant in Nagoya, see Sky Giants, esp. pp. 75-77, 88-89, 122, 137, 163-164, and 169, telling how the 73rd Wing repeatedly attacked the Musashino aircraft plant in west Tokyo and regularly missed it. Indeed, our result of 3% might be considered better than par--the 73rd got 1% on its first try. Cf. Global Twentieth, p. 20, and Matterhorn to Nagasaki, pp. 559, 608, 647-648.

With all of that information detailing what supposedly was to happen on our mission to Nagoya, little did we suspect that reality would be so different.

We sacked out for a while--if we could. (Some could fall asleep easily at almost any time while others, like me, couldn't.) We were up again at 0100--not much of a night's sleep. I wondered if the NLRB would approve of working conditions like that; they'd better not--not after the labor vote had gone to FDR four straight times. But it didn't take a college degree to know how little the Army cared what the NLRB thought.

We were eating by 0130 and at briefing by 0145. Operations announced at the briefing that it was decided at the last minute to send all of the P-51s to Tokyo, so we weren't to have any escort after all. Too bad. Well, anyway, we thought, they can't accuse us of shooting down our own fighters. Besides, we conceded that anyone going to Tokyo deserved to have the escort. We found it interesting that the 313th was the only one of the three wings that would have bomb bay tanks. Apparently, Bomber Command wanted to be sure that there were at least a few planes that didn't land at Iwo.

The bombs were all loaded in the forward bay. That put the C.G. (center of gravity) so far forward that all of us except AC, co-pilot, and engineer had to ride in the unpressurized compartment on take-off. Charlie and I wondered if the pilots would know what to do without the two of us up on the flight deck to supervise, but somehow they managed without our help.

We lifted off at 0505 and, right at that critical time, the rear bomb bay doors dropped open. On take-off, of all times! We got airborne all right--a little nervous about it but we made it--and on course and then struggled for a while with the doors, thinking about returning to base because of them. But someone was able to pull them up with the cable. When they seemed to be staying closed, we decided to go on.

Despite the soiree of the previous night, Russ was all right--well, nearly all right. I think he inhaled some pure oxygen from the plane's

oxygen system. All veteran fliers knew that breathing oxygen was the best antidote for a hang-over. Having it available was one of the important benefits of the Air Corps. And it was a good thing, because there were some pilots whose dog tags must have read: "Blood type: O. Proof: 90."

We went over Iwo at 6,700 feet. It was daylight and the weather was clear, so we got a good look. What a place! To think of all the men who died there for that dusty, barren rock.

Once past Iwo we had tail winds where Metro had predicted head winds. That led to all manner of confusion. Our ETA for the assembly point was about 45 minutes ahead of the time that had been specified during briefing. Of course, others were in the same boat--different airplanes but the same boat, if you can picture that--but not all did the same thing about their prospective early arrival. Some took the view that adherence to plan was paramount; most of them flew a big dog-leg course so as not to arrive early. Others, including us, bulled right ahead, figuring, I suppose, that everyone would adjust the schedule to fit the actual conditions.

As one might guess, it was mostly the formation leaders who purposely delayed. So, of course, we got there to find planes scattered all over, but no formation taking shape. It may not have mattered, for the weather made it questionable whether our formation could have assembled as briefed anyway.

We were supposed to gather into formations at 19,000 feet, but at that altitude over the assembly point everything was hazy and visibility was terrible. We found a formation of 10 ships once, but we lost the whole formation in the soup. Believe it or not, there we were with nine other planes around us--when suddenly we couldn't see a single one of them! That's eerie. Then we flew around for a while with Captain Fortune's crew, both of us trying to decide what to do.

After about 45 minutes of inconclusive meandering, Fortune made his decision: He dropped his bombs on a coastal village. We imagined that wasn't good enough for us, forgetting about discretion being the better part of something. We figured we didn't carry four tons of bombs all that way just to scare the daylights out of a few Jap fishermen.

We had been instructed not to go over the target in formations of fewer than three planes--and now we were alone. As far as we were concerned, there was a reason more compelling than briefing instructions for not going over Nagoya alone--it's called survival. Besides, there were plenty of potential "targets of opportunity" below. It remained only for us to pick one.

So, we dropped down below the haze to look for a more inviting target. We practically held a committee meeting on the flight deck, looking at a map and out the window and having a lively discussion--a convenient euphemism for argument. It was about 15 minutes before Chairman Russell invoked cloture. The committee meeting would have adjourned much sooner, and by instantaneous unanimous decision, if we had known that we were simply providing time for the Japs to prepare a welcoming ceremony at our altitude, with us as guests of honor.

We had been nosing around near Uji-Yamada, which was 40 or so miles south of Nagoya, sort of guarding the entrance to Ise-Wan (Nagoya's bay). The decision was to bomb an airfield near there. It was a big fighter base that we knew a little about, having been told about it one time at an Intelligence briefing. We swung around and lined up for a bomb run that would take us over the airfield but not over the city itself. We were flying at about 17,000 feet.

For an hour we had been cruising near the coast of Honshu much as though we were on the Broken Bow bombing range in Nebraska. But it was like the proverbial calm before the storm. As we started the bomb run, everything seemed to happen at once: flak, fighters, engine trouble. Leapin' Lizards, Sandy, what did we get ourselves into?

"Fools rush in . . . ." I loved hearing Ray Eberle sing it, but I didn't like acting it out.

First, we started getting flak. It was heavy stuff and disconcertingly close. We also could see a lot of flak a couple of miles to our left over the city of Uji-Yamada itself.

Then fighters arrived--several of them. All of that argument--ah, er, I mean all of that profound analysis--about picking a worthwhile target would go for naught if we now disrupted the bomb run, so we had to hold straight and level even though that made us a nice steady target for the fighters. One came in from 1 o'clock high. We saw two guns on his cowl--20 mm. guns, we figured. He spit little tongues of fire at us. Heuer got six of our guns trained on him and cut loose. That was enough to make me jump, sitting as I was right beside a turret. First was the metallic whirling as the guns moved. That wasn't much. But then the guns fired, and the casings clattered down inside the turret. That WAS much.

We thought Heuer's shooting should have put a few holes in that guy, but we weren't sure. He probably thought he hit us, and he didn't, so maybe it was the same the other way around.

Suddenly I thought about the CFC box at my left elbow: When did I last check the settings? I couldn't remember. With all that had happened, the regular routine had been abandoned. I made sure the settings were correct for current conditions and hoped that I hadn't neglected to keep the dials set properly such as to cause our shooting to be off target.

Jeff had acquired a long extension for his earphone cord--a little midnight requisitioning, I suspect--so that he could sit in the end of the tunnel and poke his head up in the astrodome--without risk of missing an important radio message from our base. He couldn't see anything directly below the plane from there, but he, like Heuer, had a 360-degree field of vision--one of the best views of anything at our altitude or higher. This time, though, when one of the fighters came so close that we could see red muzzle blasts stabbing at us, Jeff abandoned his grandstand seat post-haste. In short order, he was back at his table furiously scribbling five-character groups from messages he suddenly decided were

very important for us to know--like the cargo manifest for the ferry from Long Beach to Catalina.

That may have calmed Jeff's nerves, but we were still getting flak. Just as the bombs were being released, a shell burst right below our nose--with Charlie looking through the bomb sight, which had a magnifying lens. He sat bolt upright, sure that the red and black flash was right in his lap. With flak that close and fighters still buzzing around, not a person on the crew looked to see where our bombs hit. And after we peeled Charlie off the ceiling, he said he couldn't remember if he had punched the camera button.

Right after the bomb bay doors closed, an Oscar came at us from 11 o'clock low. The fighter was almost standing on its tail, waffing near a stall, as it sprayed shots toward us. To me it looked for all the world as though the Jap pilot was aiming right for the navigator's window. Suddenly, global war was transformed into a much-too-personalized encounter between me and the guy shooting at me. "Oh, please aim somewhere else," I thought as I tried to roll myself up into the smallest ball possible.

Russ, also sitting on the left side, didn't like the Oscar's aim either. He quickly called to the back: "Bee, take that guy--and hurry."

But the wing blocked Bee's view. That was a smart Jap--he seemed to know where the "blind spots" might be. Charlie could have seen him, but right at that moment Charlie wasn't seeing anything except red splotches.

"I can't see him," Bee yelled. "The wing's in the way."

Russ immediately rolled the plane to the right, lifting the left wing. Bee drew a bead and blazed away--and kept shooting. The guns were supposed to be fired in short bursts; otherwise they got too hot. Bee didn't care if the barrels melted--there was a more immediate threat that had his attention--and at that moment he had the whole-hearted approval of ten other guys.

The Oscar came so close I would swear I could see the pilot's Marco Polo Bridge campaign ribbon. He got in his burst at us and broke away to his right, almost straight down. And still Bee was firing--until Russ spoke up: "Hey, let up--let the guns cool."

The whole Oscar incident had lasted less than a minute--only a number of seconds. But Bee had used about a quarter of his ammunition on that one pass. To be candid, we doubted that Bee got the fighter. But he might have, for no one saw him pull out of his dive. But no one saw him crash either. We were too busy watching other things, such as more fighters coming menacingly close.

While all of that was going on, Russ and Andy suddenly had to deal with balking engines. No. 3 began throwing oil, and No. 1 started "kicking back." Russ turned and yelled at Doland: "Can I have 32 inches on No. 2?"

Not that Doland was eager to get away from there, but his answer

was, "32, hell--take 42!" Engine problems or not, we hightailed it out of there as fast as we could go. And that was about 270 mph indicated airspeed. But not with 42 inches of manifold pressure, which probably would have blown the cylinder heads clear off that engine.

The fighters that were still with us seemed to be trying to maneuver for head-on attacks. They didn't succeed at the speed we had then. And they evidently didn't want to come in on us from the side or tail. So, there were no more attacks, and we soon left the fighters behind--whereupon Doland regained his composure and started his usual litany insinuating that unconscionable pilots were maltreating those poor fragile engines.

Finally, after cruising calmly around the enemy coastline for more than an hour, followed by some 10 minutes of frenzied activity, normalcy returned. We climbed to 24,000 feet and headed home. Ten of us were all right; Charlie was still sitting in his seat cross-eyed and teeth chattering. Or so it seemed. So we granted him the privilege of being first to get a nap in the tunnel, which effected a miracle cure.

Some of us had a problem not cured so easily. Having become accustomed to low-level missions, we had forgotten to use the bomb bay relief facility before pressurizing. To make matters worse, we then had spent an unexpected amount of time trying to get into a formation and picking a target. So now, according to the story I heard later, Hudson crawled forward and tapped Allgor on the shoulder and said, "Ed, you gotta dry pocket?" Allgor looked sheepish and said, "I did until about five minutes ago."

Listening on VHF, we heard one plane tell another that one of his (the other plane's) engines was afire and that he should "get out." We had no idea who that was or where they were. We hoped, of course, that the crew of the burning plane bailed out in time.

With all the crazy goings-on, there was concern about the amount of fuel remaining. We decided we could make it back to Tinian without landing at Iwo--but only because of the bomb bay tank we had on this mission. Nevertheless, we made sure we went very near to Iwo on our return "just in case." We had a good view of the island again as we went by and realized that, with a little less luck, we might have been struggling just to get that far. We landed back at Tinian at 1800. Surprisingly, we were the first plane in the Group to get back. We even beat Fortune.

On the truck riding back to our area, I thanked Bee for driving off the fighter that was aiming directly at me. "Oh, I didn't know he was aiming at you," Bee said; "next time I'll take that into consideration before firing."

We found out that most of the crews did about what we did. A few managed to get to the primary target and were able to bomb visually. Furthermore, they said they had excellent results. They also were met with flak and fighters. Ramsey landed at Iwo with a couple of his crewmen injured. Treeman had his nose and right blister shattered--no serious wounds, though, thank goodness.

(There was absolutely nothing wrong with Scotty Treeman's face; but that was the vernacular we used, and we all understood that the disfigured nose belonged to the plane, not to the pilot.)

Reflecting on it, I realized we never would be able to tell about that mission back in the States. Taking off with a pilot still nursing a hang-over. Struggling with bomb bay doors that wanted to pop open at inopportune times. Trying to assemble a formation in hazy visibility and ending up swarming like a bunch of bees. Wheeling around almost casually over Japan for nearly an hour and a half, exposed to whatever they wanted to shoot at us. Spending 15 minutes deciding on a target and then not looking to see what our bombs did. Almost melting the barrels of our guns. Giving full throttle to an engine that was dripping oil and another that was backfiring. No one would believe it. Can you imagine a Jap plane circling over the coast of California for an hour--and getting away safely? Any sensible Statesider would think that we were extremely courageous, which we weren't, or that we were plain crazy, which ... which ... which ... well, I guess I never should have started that sentence.

It hadn't exactly been the type of mission that would become part of the curriculum at the War College, but, nevertheless, it marked a milestone of sorts for us: We had finished 10 missions, six good ones (five Blitz raids plus Kure) and four that probably should have been classified as on-the-job training.

There were times when I almost felt sorry for some of the Japanese villages and smaller cities along the southern coast, such as Uji-Yamada. Hamamatsu was another. It was as though they suffered disproportionately as more-or-less innocent bystanders. Every time there was a raid on a major city, there were planes that couldn't go over the primary target for some reason. So, as we had done on this mission, those planes picked a "target of opportunity." Naturally, that often turned out to be the nearest town. On the coast, of course.

The coastal towns were like blameless victims punished for no reason other than their location. I wondered if that thought ever occurred to the residents--and if they felt any resentment toward the large cities whose proximity was the reason for their discomfort.

I could imagine the mayor of Hamamatsu at a Japanese Diet budget hearing defending his request for funds for a larger fire department by saying, "It's only an interim expenditure until the Americans become more proficient."

After a few missions, I had compiled my own personal check-list. It was invaluable. Forgetting to take something or forgetting to check some piece of equipment could have been calamitous. I might have been able to get along without my books of celestial tables or sextant or log forms, but I never would have survived without essentials like canteen,

flashlight, small screw driver, and chocolate bar. I used the list for each mission.

The check-list, of course, was re-done several times. The last version, except that it was hand-written, looked exactly like this:

Check-List

Quonset

1. Fill canteen
2. Fluid in lighter
3. Clip board & paper
4. Sun glasses
5. Pencils
6. Screw driver
7. Master watch
8. Logs
9. Flashlight
10. Cigarets & matches
11. Leave personal possessions
12. Gloves
13. Camera
14. Loran booklet

Briefing

1. Flimsy
2. Hack
3. Maps

Personal equipment

1. Parachute
2. Mae West
3. Sextant
4. C-1 vest
5. Oxygen mask
6. Stop watch
7. Insert
8. Almanac
9. H.O. 218 books
10. Flashlight

Before take-off

1. Flak suit & curtain
2. Astro-compass
3. Flux-gate compass
4. Altimeter

After take-off

1. Driftmeter
2. APQ-13
3. APN-4
4. Air-sea rescue

Before Landing

1. Driftmeter
2. APQ-13
3. APN-4
4. Flimsies

Leaving Plane

1. Parachute
2. Mae West
3. C-1 vest
4. Canteen
5. Clip board
6. Flimsies
7. Maps
8. Insert
9. Watches
10. Oxygen mask
11. Sun glasses
12. Cigarets
13. Flashlight
14. Sextant
15. Books
16. Gloves
17. Camera

Chapter IX

Support for Okinawa and from Iwo

Upon returning from Uji-Yamada, we found that each wing was to send 10 planes to southern Kyushu the next day, each formation having a separate airfield to hit--fields from which Jap planes had been attacking U.S. forces at Okinawa. Navy planes had raided airfields on Kyushu, but photos showed that there was more to be done. We thought it was likely to be a rough mission, figuring that the Jap air force would throw everything into the defense of its own bases, as ours no doubt would.

Crew 3909 wasn't scheduled for the airfield mission--maybe the Wheels had heard about our Uji-Yamada escapade!

I understood that the priority given to Okinawa was the reason why we had received no mail for some time. The space was being used to ship stuff to the guys up there. I put my griping about mail into neutral temporarily; the needs of the fellows at Okinawa took precedence over my need to gripe. Besides, the Army always provided plenty of subjects worthy of my--or anyone's--griping.

The next day (April 8) the planes from our Wing sent back a strike report saying that a 10-plane formation bombed by radar. Too bad, because we were probably going to have to try there again. Metro had predicted a 4/10ths cloud cover. Airfields did not make good radar targets--about point-five on a scale of 1 to 10.

Our Group lost a crew before the mission was hardly under way. Preston of the 24th Squadron crashed just after take-off. Five crew members got out, but one of them died right away and the other four were hospitalized. Because of some problem, they had tried to salvo their bombs, but only the rear bomb bay let go, throwing the C.G. forward so suddenly that they nosed right into the water. The navigator was the one who got out but didn't live. One crew of our Group (Smith) landed at Iwo.

Another mission was already scheduled for the next night--to sink some more mines near Yawata. It was at near-by Shimonoseki where our planes had run into such devastating anti-aircraft fire before. Operations had the Reamatroid on the list of planes ready to go, so Roscoe (Captain Booth) gave us first chance--since it was our plane. Now they're using their heads a little, I had to admit. Russ accepted, of course--if our plane was going, we wanted to go. I wouldn't ever have said so out loud, but frequently I thanked the Lord I was on Russell's crew.

On the same day, Roscoe asked Russ when we wanted to go to Australia. Russ said at about 14 missions, give or take a couple. That would be soon.

We took off at 1805 on April 9. Again we couldn't latch the rear bomb bay doors. We also had trouble with engine No. 1; it was overheating and throwing oil. We finally got the doors closed by disconnecting the emergency release, which was not exactly SOP. Then No. 1 seemed to settle down. So we went on. We hadn't aborted on a combat mission yet, and we hated to start now. (That is, we hadn't aborted if you don't count the Feb. 11 search when we had to return to our hardstand before we ever got out to the runway. Of course, the Reamatroid's reliability was more a testimonial to the ground crew than to us.)

Usually the rear section was quiet en route to Japan, and many of the crew members slept some, but not this time. Allgor was sitting in his seat looking out at nothing except maybe the glow of the engine exhausts when, for no known reason, the rubber dinghy under him suddenly inflated. Allgor hadn't expected to rise in the ranks so quickly.

The dinghies were folded in packs, each pack serving as part of the seat cushion of a gunner. Upon ditching, the pack was supposed to be taken out or thrown out. The dinghy wasn't supposed to be inflated in the plane. But neither was it supposed to inflate accidentally.

Allgor didn't have a procedure for getting an already-inflated dinghy into the water, so he fussed and worried for the rest of the flight about what he would do if we ditched. All other crew members offered suggestions, none of which helped--nor were they meant to.

"Don't you fret," someone told him; "ten men rescued out of a crew of eleven is a pretty good survival rate." Strangely, Allgor couldn't see the joke in that. Come to think of it, I'm not sure there is one.

If there was a joke, it wasn't clear who the joke was on because Allgor's agitation kept everyone in the rear section from getting the nap he was accustomed to and felt entitled to.

The Empire came on the scope about 0050. We went between Shikoku and Kyushu, almost over Sada Misaki Point again, from there northwest to the I.P., and then turned west. Again we were lucky: There was an almost-complete undercast--not really clouds, more like a pervasive haze. That was great since we were to aim by radar anyway.

We didn't see a thing on the run to the target. We released our six one-ton mines at 0140 just west of Honshu, a couple of miles northwest of Shimonoseki Straits. Right then we were actually on the "other" (that is, the northwest) side of Honshu--flying over Tsushima Straits between Japan and Korea. It was the farthest from Tinian we had been.

Wild horses wouldn't have got us to turn left--toward Yawata. We turned right, crossed over Honshu again while climbing to 10,000 feet, and went back out the way we came in, all without seeing a thing. We climbed on up to 25,000 feet and headed home.

Going over Sada Misaki Point again on our way out of the Inland Sea, we imagined that a small dim light way down there was the sergeant in charge of guarding the Point, using a lantern to find the trigger on his

gun. Apparently, he fumbled too long, for no shot was fired at us, so we demoted him to corporal.

With the bumbling corporal behind us, I felt so confident that I didn't wait to get out over open ocean to shed my flak suit, parachute harness, Mae West, and survival vest--but not before extracting the K-ration from the vest. I tried to take an extra K-ration or two on each mission. It was basically a chocolate bar, with something added to keep it from melting. Someone observed that eating a K-ration was like gnawing on a crayon--but that didn't dissuade an incorrigible chocolaholic like me.

About an hour off the coast I tried to get a short nap. That wasn't very smart: well-deserved, of course, but not very smart. I slept longer than intended--about 75 minutes. When I woke up I found that the C-1 had precessed and that we were headed far to the right of our intended course. Figuring that this wasn't an ideal time to visit the Phillipines, I got us turned back toward the Marianas.

Because of that little course deviation, I supposed I was sort of out of the running for the crew monthly merit award. Again.

The Crew 3909 merit program had been adopted by our Trickle-Down Economics Council. The vote had been three (Andy, Charlie, and me) against it and one (Russ) in favor, which Chairman Russell proclaimed to be overwhelming support for his proposal. It was inspiring to experience democracy-in-action that way.

That little detour may have been a factor in the special landing we made. We knew we were a bit low on fuel but thought we had at least a half-hour reserve. The final approach seemed routine. We crossed over the end of the runway, just ready for touch-down, when Doland calmly announced, "No. 2 and No. 3 just quit running" and followed that immediately with "No. 4 quit." That sent a little chill down the spine. Thankfully, we were only a few feet above the asphalt, and Russ made what amounted to a dead-stick landing.

We weren't quite as low on gas, though, as that would indicate. It seems that in approaching, because of the nose-down attitude, the gas runs to the front of the tanks, making about 160 gallons in each tank that can't get to the engines. About the same time that the tires screeched on the runway--because the plane now was level--the engines all started running again on their own. But it was good for a thrill for a second there.

It had indeed been a long mission--everyone else also had run low on fuel; in fact, three planes of our Group landed at Iwo.

Once again, we were the first plane from the Sixth Group to get back. It was getting so that the biggest challenge of a mission wasn't the enemy but who would get back first--and we usually did.

Among the items I unloaded from the plane was the collection of ground crewmen's canteens. We had always taken our own canteens on missions. A guy couldn't go all those hours without water. And we knew

that the place to put a canteen was on the metal floor, because the water soon was nice and cold.

Considering the number of people on an island the size of Tinian, the Army did a good job of producing a supply of fresh water. But it was always tepid, never cool. Cold--really cold--drinking water was a treat. I often offered any that was left in my canteen to the ground crew. Before long, I had myself a regular job. As we were loading up for a mission, some of the ground crewmen would give me their canteens. All I did was put them on the floor and then distribute them when we got back.

Of course, sending canteens with us on a combat mission risked not getting them back. I thought of the canteens sort of as hostages: If the day ever came when a mechanic who had worked on the plane suspiciously declined to send his canteen aboard--hmmm, I don't think I would want to fly on that plane.

After the drastic change in tactics the first part of March, almost anything became believable. So, we didn't scoff, as we might have earlier, when we heard that Bomber Command planned to experiment with different types of attack. Rumor had it that we would be trying some raids at extremely low levels: three-plane elements at 100 feet in the daytime and singly at 500 feet at night. Oh-oh, we said, another Ploesti! The self-styled comedians (that really didn't exclude anyone) engaged in a little hyperbole, going around saying, "We're on the bomb run; raise the periscope so I can see the target."

Anyone with flying in his blood loved to buzz around on the deck. (Once during navigation training, we had to pull up to clear a tree stump--literally. But, you see, some dummy had cut the tree off about four feet above ground level, so that was understandable, right?) Hedge-hopping was fun, but not necessarily in combat. I had thought 7,000 feet was too low. At 100 feet I'd feel like a gopher. More to the point, I'd feel like a gopher having a life expectancy measured in minutes. Or seconds. It occurred to me that this was just the right time for us to go on that rest leave that was being talked about.

Major Berry was made group operations officer, an assignment that I approved of--not that it made any difference whether I approved or not.

The next day Andy was assigned as AC of the new crew that had arrived. By this time, I had become reconciled to losing Andy. I didn't expect that anyone would really replace him; I hoped only that we got someone who fit in with the temperament of our crew. Anyone who could pass the Rorschach test wouldn't even be considered.

We traded two gunners with Andy's crew. He took Bee and Gleacher, and we got two from the crew he took over--Al Lounsbury as left gunner-scanner and Joe (sometimes going by the middle name of Ed) Costello as tail gunner. But that still left us without a co-pilot. Until we got one, we would have to miss some missions.

A daylight raid was planned for the next day. It was an attack on a

high-test-gasoline refinery at Koriyama about 100 miles north of Tokyo. Once again, Operations was counting on the planes being able to bomb visually. They were to go in at about 8,000 feet, which would be all right if Intelligence was correct in saying that they wouldn't meet any flak at the target. "If" was an important word in combat, such as:

> "If you don't get shot down, you may come back, if you don't run out of fuel--if you get off the ground in the first place."

Koser was taking the Reamatroid on the mission. Naturally, we didn't like to have anyone take our plane, but when I said something to that effect, Russ, with the kind of constructive attitude that marks a true leader, said, "Oh well, he'll probably abort."

We were told that our mining was having the desired results. Our sources claimed that it was mining that had precipitated the naval battle a few days previously off southern Shikoku in which 300 Jap planes were shot down and their super battleship was sunk. As we heard it, the Jap force, trying to return to base in the Inland Sea, couldn't go through Shimonoseki Straits because of mines and was trying to slip around southern Kyushu without being seen, but U.S. patrols spotted them. (1)

(1) The Japanese battleship Yamato was sunk near Kyushu on April 7. However, the rest of the story, typically, seems to have been an amalgam of events of several different dates involving several different ships, but all grounded in some truth. Specifically, the Yamato was not caught trying to reach the Inland Sea, as we heard, but some other vessels were. The Yamato, on the other hand, came the other way--out of the Inland Sea to join the battle around Okinawa.

It now was certain that the 58th Wing would get the other big field on Tinian, by then being called West Field. That was what we had understood from the beginning, but after that there were rumors that the 315th Wing would be there. The 315th no doubt would be based on Guam. (2) It revived my hopes of seeing my home-town buddy who was with the 58th.

(2) See Matterhorn to Nagasaki, p. 524, regarding the shift in airfield assignments.

There was a rumor that Japan had asked for a negotiated peace and wanted a 48-hour armistice to discuss it. We heard that the mission for the next day was almost called off as a result. We never heard any more, but, after a bit, preparations for the mission were resumed. We knew, of course, that our top officials--the Really Big Wheels--were insisting on unconditional surrender, not a negotiated settlement. Nonetheless, any rumor of peace awakened the usually-suppressed hopes for an end to the War.

The War was far from ending on Iwo. The last time one of our planes called in for clearance to land, the tower there replied, "We are having a raid; can you go 'round?" Banzai attacks like that one were still killing Americans. It was a needless question for the tower to ask. Of course the crew would "go around"--and probably move the traffic pattern up to 10,000 feet in the process.

Anyway, the mission of April 12 went on as planned. A strike report came back during the day saying that the nine planes of the Sixth Group actually had been able to bomb the refinery visually--with excellent results. The Reamatroid returned okay.

The next mission--for the following night--reportedly would be an incendiary raid again. Our crew was scheduled only tentatively because we had no co-pilot, but Major Berry had agreed to ride shotgun with us.

We didn't like to miss out on missions, so Russ had gone to Major Berry and, in his usual delicate manner, said to him, "Major, let's go kill some people."

With no notion of what Russ had in mind, Major Berry's first thought must have been, "Well, I should have known that this guy's gyro would topple sooner or later. He runs a quart or two low all the time anyway."

During the next morning, the news of President Roosevelt's death spread quickly. For the most part, the guys turned thoughtful and quiet upon hearing it. One discordant note came from a fellow who openly expressed joy, which didn't make him very popular, but he never would have been a candidate to win the John L. Lewis congeniality award in any case.

Friday the 13th and we were going to Tokyo that night! I wasn't superstitious about it, but maybe I should have been. It clearly marked the low point, professionally, in my career as a navigator.

We were to bomb the northwest section of Tokyo where, Intelligence said, there were scores of armories, gun powder plants, and other such installations. The result, as Intelligence told it, should look like a thousand roman candles going off. Possibly, Intelligence was hoping that the prospect of such a spectacular fire would counterbalance the rest of the information they had for us.

Occasionally on recent night missions some crews had reported seeing unidentified bright objects in the sky near them. These had come to be called "balls of fire." Intelligence now told us that the balls-of-fire that had been observed were suicide planes. It was thought that they were like a rocket bomb with wings, with only some steering capability. Supposedly, they were carried aloft by Bettys (Japanese bombers) and released while pointed toward a B-29, which they were expected to ram. It was a counterpart to the suicide attacks made on naval vessels near Okinawa--except that most of those were regular fighter planes while these were small rocket-propelled "flying bombs."

This posed a new threat of imponderable implications. Dealing with enemy fighter planes was frightening enough. No one knew if there was a defense when the enemy pilot was determined to commit hari-kari.

We took off at 1858 weighing 138,000 pounds--the most yet--with Major Berry as co-pilot and Harton riding as "observer" again--checking on Jap radar. "Observer" was formal AAF nomenclature, not a literal description of Paul's function; I think it was an AAF code word

signifying that "This guy is too intelligent to let himself get assigned as a regular air crew member--but not so intelligent as to arrange to stay on the ground altogether."

We were carrying 36 500-pound incendiaries, one 500-pound GP, and one photo flash bomb. The incendiaries were those clusters that would break apart in the air, spreading the fire. The GP would help splatter the fire around and also create a little rubble that might ignite more quickly than a standing building. It was an interesting bomb load.

We flew north, headed for the eastern edge of Honshu. When we came in for landfall, there wasn't any. No land, that is.

Well, that's correct, but only technically. When Hudson got Honshu on the scope, we were to the right of the intended position--that is, out to sea. We weren't far off, but we did have to correct course slightly. We turned left toward Tato-saki (Cape), the same point of land that had been our I.P. on the very first Blitz mission.

Just then engine No. 2 started torching. It was so bad it lit up the whole left wing. Our first thought, naturally, concerned the danger posed by the malfunctioning engine. An engine problem certainly increased the risks over the target. We would have preferred to have an additional engine or two or three, not one less. Besides that, we really didn't want to help Jap gunners locate us by lighting up our wing ourselves.

We (being principally Russ and Major Berry, I presume, since I don't recall any referendum) didn't want to turn back after coming all that way, so Russ throttled back on No. 2 and kept going. We were getting brave (or foolhardy) going over the target with one engine not pulling full power--but then we'd done it once before.

The I.P. was at Goi on the inner side of the neck of Chiba Peninsula. From there to the A.P. there seemed to be thousands of searchlights. Again, however, as on our first low-level raid on Tokyo, we went right through a towering cloud of smoke. Boy, it's black in there. Also mighty bumpy. We broke out of the black cloud and still had a ways to go.

Although searchlights were all over the place, there didn't appear to be much flak. We had been warned that there might be searchlights working in conjunction with the balls-of-fire, several lights and a suicide plane with its mother ship forming a team. We thought that that was what was happening. Where the balls-of-fire were, though, we didn't know. I didn't see any. The gunners in the back reported seeing only one--and they thought it was chasing some other 29.

As silly as it might have looked in saner circumstances, while we were bearing down on the target, one of the gunners was tossing out metal confetti as though he were at a ticker-tape parade. Jeff in the astrodome was substituting as a look-out.

We couldn't judge from our own experience if the "rope" would help, but we thought it would, and it was exactly the kind of mission when it should. Because of the smoke, the searchlight crews and the gun crews

both would have to have radar assistance. It was an ideal time to try to confound their efforts by leaving a trail of reflective metal.

We were picked up by lights several times, but nothing hit us.

We dropped our 38 bombs by radar at 0151 from 8,600 feet. Everything was so smoke-obscured that we couldn't distinguish anything below us--it was just a rosy glow. But I had seen the bomb run develop on radar, and it looked to me as though we had just about a perfect flight path and bomb release. My part in the bomb run may have been the only thing I did right on the whole mission; but, if there was to be only one, that was the best one to have it be.

We turned away and climbed to 15,000 feet. Gee, I thought, this was easier than last time in all ways: less flak, not so much turbulence in the thermals, little vibration, a more certain radar procedure. Or else we were just getting used to it.

Soon we were back over the ocean and headed home. While I was thinking of getting even more altitude, Russ and Doland and Major Berry were conferring, and climbing was the last thing they were thinking about. We were running short on fuel. The consumption rate had been above the predicted level all of the way going up to Honshu, so we already had used more fuel than planned. And now No. 2 was creating an additional drag. So they talked of stopping at Iwo.

Shortly thereafter, engine No. 1 kicked back a couple of times. That decided it: "Navigator! Give us a heading for Iwo."

Unhappily, I was day-dreaming out in left field right at that time. I couldn't comply. Not right away. I stammered something to cover my dereliction, said I'd figure it out, and went to work--feverishly. Don't misunderstand: I wasn't totally lost. I knew we were somewhere over the Pacific Ocean.

There was an explanation, although it might take a fellow navigator to have sympathy with it. A navigator does not calculate or plot exactly where the plane is every minute--nor, necessarily, every hour--especially if there is no new information, such as a wind shift, that might prompt a navigational change. The situation resembles that of a motorist starting on an all-day trip; early in the day he doesn't bother to check off each small town he passes. Of course, the motorist can tell when he's much off course--by counting the number of fence posts and mail boxes he has knocked down. We didn't have such an indicator, so I had that second dimension to be uncertain about.

In short, I knew I could get us to Tinian even though I didn't know exactly where we were at that moment. But I should have known. I knew the weather was worsening. I knew there was some engine trouble. In those circumstances, I should have kept current with my work "just in case."

The weather had looked all right over Tokyo. But south of there it wasn't good and was getting worse. It still wasn't bad at our altitude, but the clouds below were 10/10ths. We had been keeping to the east to be sure to miss Chichi Jima and Haha Jima. Therein lay the problem. I

couldn't have us turn to the right in the direction of Iwo without knowing exactly what I was doing, for that risked getting too close to the Japanese islands. And, in that weather, we couldn't rely on a visual sighting to miss them; it had to be accomplished navigationally.

We had to descend blindly through the clouds, without knowing if we would break out underneath at a couple of thousand feet--or a couple of dozen feet. So, we not only wanted to be a safe distance from Chichi and Haha Jima, but we also didn't want to be too close to Iwo. If we still were flying with almost no visibility, there always was some real possibility of ramming right into the side of Mt. Suribachi.

It all worked out, helped immensely by radar. We got below the clouds--finally--at about 200 feet altitude. Soon, Iwo appeared out of the mist ahead. We were right on the deck as we approached.

What a rock! We looked down at the most insane conglomeration imaginable. The pattern of activity must have been designed by a committee of addled baboons.

Nothing, absolutely nothing, was arranged in any orderly way. No doubt about it, this was the world's messiest fighter-plane base intermixed with the world's most chaotic aircraft maintenance facility, all located in the world's biggest sulfuric mud puddle--either that or else it was a huge aircraft junk yard--which, quite honestly, is exactly what it looked like from the air. It would have been a delight to anyone arriving directly from the booby hatch.

I believe there were enough 29s there to start a group of their own. Also a few Black Widows, a bunch of B-25s, and a slug of P-51s. The B-25s were equipped with radar and rockets; we were told later that the night before they had snuck up to Tokyo Bay in the dark and had sunk several ships almost within sight of port.

We swung to the far (west) side of Iwo and banked to the left to land on a northeast heading. Flaps 25 degrees. Gear down and locked. Prop pitch changed, something like downshifting to second gear. On the approach, we had to lift a wing to get over a freighter standing offshore. We eased in for a landing on Field No. 1. There was no fancy traffic pattern at that place; we just cut it short and sat down on a stretch of mud that, with a great deal of imagination, was called a runway.

It was terribly slippery. Soon after touching down, we started sliding at an angle toward a cliff to the right. It was a helpless feeling. We finally got some traction and straightened out, but we saw that two others hadn't. One 29 had slipped sideways off the bank to the right. Another 29 had slid off the end of the runway. We sort of skidded to a standstill. When we stopped moving, engine No. 2 quit running. It just died right there on the spot.

Using three engines, we taxied back along the runway--there were no taxi-strips there yet. Coming in right behind us was a 29 trying to land with only two engines. Because we hadn't had time to get off the runway yet, the tower told him to "go 'round." Russ had a hunch that he wasn't

going to do that--not with two engines out--so Russ, on the same radio frequency, broke in on their exchange and said, "No, come on in; we'll pull out of the way." He did, and we did--but we almost got mired down in the mud in doing so.

A number of other 29s were also trying to land, so we couldn't get back out onto the runway, but we found a place out of the way and parked. There were no hardstands, just a leveled area covered with a paste of rain water and volcanic ash.

It was about 7 o'clock in the morning--after daybreak--but not very light because of the weather. There was an almost-steady drizzle. It was miserably cold and damp. With that 200-foot ceiling, it was one of those days when we used to say that no self-respecting duck would be caught out without an umbrella. And, sure enough, I didn't see any ducks going around outside without umbrellas. But there were 12 men from the Reamatroid without umbrellas--or raincoats. We shivered.

The wretched weather didn't hinder the efforts of those people on Iwo. No one seemed to pay much attention to rank; everyone pitched in and did what he could. I think some of those maintenance people hadn't slept for a week or two. We got some K-rations to eat. And we tried, mostly unsuccessfully, to get some warmth from a fire that had been set in an empty oil drum.

We assumed that we needed an engine change. Iwo Maintenance told us that there were 21 ahead of us waiting for engine changes and that they had only six engines on hand. So we started working on No. 2 ourselves--not me because I didn't know anything about engines, but Doland and the pilots, who did know something, or at least let on that they did. First they changed the plugs. That didn't help. No. 2 still barely ran on the right mag and quit altogether on the left one.

Late in the afternoon, after some more fruitless tinkering with the engine, we figured we might as well leave. We were afraid we could stay there a couple of weeks and not be any better off. Being cold and wet influenced us more, I guess, than a minor matter like an engine that wouldn't run.

First, we had to round up the crew because several of the adventurous ones had gone off somewhere to look for souvenirs. That was probably more dangerous than our missions. They were lucky they didn't end up getting ambushed in some muddy gully. A few Japs still lurked about, and they would have been glad to supply a souvenir to the unwary: "Look, fellows, here's a souvenir--a grenade without any pin in it."

We got the crew together, climbed aboard, cranked up, and started to taxi, the wheels squishing through the mud. Near the end of the runway, we stopped to run up the engines. I don't know why we bothered. Habit, I guess. We checked No. 1. It wasn't bad. We didn't even try No. 2, knowing it wouldn't check out. No. 3 was okay. No. 4 dropped 150 rpm on one mag and 100 on the other. But we were disgusted and poured on the coal anyway--pretty much expecting to ditch right off the end of the runway.

But we made it. When we got a little altitude and had turned south,

Russ rolled his eyes toward the ceiling and muttered, "Okay, Lord, I'll take it from here." Major Berry looked quizzical. That he never rode with us again was just happenstance, I'm sure.

Anyway, we made it back home. It took a little more than three hours. Amazingly, the engines ran fine.

I brought back a bunch of weather information for Sully, our meterologist. I thought that observations made between Iwo and Tinian would be of value because he wouldn't have any other reports for that late in the day. But Sully had closed up shop. He must have known what the weather was like at Iwo--which may be exactly why he didn't think it was worth waiting for us. Or maybe someone told him which crew was coming in late.

While we were making that neighborly call on Iwo, a reconnaissance plane was returning from Tokyo, having flown over the burning city a few hours after our attack. It had to go to 21,000 feet to escape the smoke and couldn't get any pictures because of it.

It had been something like a 35-hour day for us. But, before homing in on the sack, we heard that our planes were going back the next night to get southern Tokyo! There shouldn't be much left up in that neighborhood before long. We guessed that our crew wouldn't go--getting back as late as we did and having our plane out of commission; besides, I think our interim co-pilot had resigned from that position at his first opportunity.

The next day we were told that the Reamatroid was to have two engines changed--Nos. 1 and 3. That was crazy. No. 2 was the first one we would have changed, and No. 3 was the only one that hadn't given us any trouble. Maintenance must have figured that something was wrong with No. 3 or it wouldn't have run so smoothly. That was the only way to explain it. Well, this was the Army; why should anything start making sense now?

The mission that night started the usual conflagration, according to the accounts given by the returning crews the next day. They said they ran into some rough stuff. Going into southern Tokyo, they passed near Yokohama and the Tokyo dock area. Apparently, ships in the docks were just a mite sensitive to the intrusion directly overhead and took a notion to open fire. We heard that six 29s were shot down, but none was from our Group.

On the following morning, a few planes, each carrying 40 260-pound frags (fragmentation bombs), went up to bomb airfields on Kyushu to try to interdict the movement of Jap planes to Okinawa. That night we went down to the line to meet the crews of our Group as they returned. They said they had hit the airfield perfectly, bombing visually in formation from 18,000 feet.

However, celebrating proved to be premature. An examination of the strike photos the next day showed that the bombs hit the airfield all right but that all of the Jap planes were in revetments south of the field. It seemed to me that some of the bombardiers might have seen the

planes and aimed a few bombs at them. Being in formation makes a deviation by individual planes or any last-minute change difficult, but this time it wasn't a lack of procedure--the problem seemed to be that the flight crews didn't see the Jap planes.

Evidently, planes from Kyushu were stirring up a lot of trouble for the boys at Okinawa because a similar mission was getting ready to leave at about the same time that the crews we met got back.

The smoke of the two Tokyo raids had cleared some. Reconnaissance photos showed 10.7 square miles of damage, with some areas still partially obscured.

We continued to hear about the battle at Okinawa. The Navy had suffered quite a bit of damage--much of it from attacks by suicide planes. We heard that the battleships Nevada and New York were both damaged but that the news hadn't yet been released. The 21st Bomber Command supposedly was assigned the job of wiping out the airfields. Obviously, there still was work for us to do.

We finally were a complete crew again when Warren R. Higgins was assigned as co-pilot. What the authorities had against him we didn't know, and didn't ask.

One thing about having Hig on the crew: It didn't make any worse our problem of take-off weight; he and Andy together were hardly the equivalent of one bean pole. Hig sat on the right side, and I sat on the left side, but it took only a moderate amount of trim to bring the aircraft back to level.

We often had been amused by Andy's idiosyncrasies. Hig was a different sort. Andy was as likely as not to show up in the cockpit wearing shorts, whereas Hig was inclined to wear a flak suit and helmet just to attend briefing.

On April 20 we took the Reamatroid with its new engines for a test hop but had all kinds of trouble. We feathered No. 4 and came right back.

That night yet another mission was dispatched against airfields on Kyushu. This time the crews came back thoroughly disgusted with the formation situation. I could understand that--thinking of our experience at Truk. Richards, flying Ralph's ship, got a flak hole right under the pilot's seat. No one hurt, though. Another raid was going that night.

The campaign against airfields was getting to be like a shuttle, a few planes at a time but some mission almost every day or every other day. And we hadn't been on any of them. It wasn't by choice; we would have liked to go, partly because we felt that, in general, they were easier--meeting less intense opposition--than the industry or urban-area missions. We guessed that, with our usual luck, by the time we were scheduled again, an urban mission would be next up.

The following day we took the Reamatroid up again. The engines were

all right, but the radar wasn't working properly. The antenna wouldn't respond when the tilt control was turned to "up."

While giving the Reamatroid its work-out, we spotted three B-24s flying along in formation. Russ maneuvered us around behind and above them, got up speed by dipping down a bit, and came up on their right side. Just before drawing even, he feathered both engines nearest them (Nos. 1 and 2), propped his feet up on the instrument panel, and gave a big, cheery, but clearly condescending, wave as we sailed by. It wasn't exactly an exercise from the Dale Carnegie school of intraservice good will.

Fox was to fly the Reamatroid that night. We thought he probably would get along okay despite the problem with the radar because, as we recollected, the crews had been able to bomb visually on all of the airfield missions except one. However, the first thing we heard the next day was that the Reamatroid was at Iwo again. Fox had had bomb-bay-door trouble with her. So what's new? They flew back during the day, apparently with no serious problem. So we thought that, finally, we might go on the next mission.

Treeman's CFC gunner and radio operator received orders for their return to the States. That was puzzling. We had heard that the whole crew was going as a unit, but maybe not.

Down at the line, radar expert Junior Shank, the Group's RCM officer, complained to Russ that a build-up of yellow crystals on the Reamatroid's radar dome threatened a degredation of quality of the radar set's performance. The radar dome was a small black hemisphere on the underside of the plane between the two bomb bays. Unfortunately, any liquid streaming out of the crack between the forward bomb bay doors was splattered by the wind against the front of the radar dome. We thought that, actually, it was a healthy sign because the crystals might have been brown from the large amount of coffee we drank before a mission.

There was a hurricane alert for the night of April 22. The brunt of the storm missed us, but there was still a strong wind the next day when we had to have, of all things, a parade. We stood out in the sun and blowing dirt for several hours to have General Davies pin Air Medals on us. This time I really did wish they could have mailed them to us.

Chapter X

Ditto

On April 23, a full-scale mission was set up for the following day. The target was the Hitachi aircraft engine plant near Tachikawa 15 or 20 miles west of Tokyo. We were to go over the target in formation at 14,000 feet. Fighter protection was doubtful--that is, fighter protection for us was doubtful; fighter protection for the engine plant was quite certain.

A fuel tank was to be installed in one of the bomb bays--because of our bombing altitude and, perhaps even more so, because of the demands of formation flying. Consequently, the bomb load was limited to 16 500-pound GPs per plane. Our crew was listed to go, but we were to fly a 58th Wing plane, not the Reamatroid.

It was a small target; that would be okay for visual bombing, but not for radar. As so often, there was no provision for an alternate in case visual bombing was impossible. The voice of experience within me expressed its own prognostication: soup, fouled up formation, enemy fighters, haze, confusion--and probably 3% damage to the target. Oh well, I sighed, as long as the Wheels think they know what they're doing--which was an expression of resignation that one soon learned as a way to maintain some degree of sanity in the Army.

Briefing began at 2230. We took off at 0215 (April 24). At 0640, we arrived at Nishino Shima, not far north of Iwo, where there was supposed to be a preliminary assembly of our Squadron. We puttered around a while, not seeing anyone assembling, but we did see many planes going on singly, so we did too. At Bayonnaise Rocks, the Wing assembly point, we found clusters of 10 to 20 planes all over the place. We jockeyed back and forth looking at several, but we couldn't find the Sixth Group. When the time came that we were afraid we might not get into any formation, we latched onto the left side of a formation of nine other planes--mostly from the 505th Group. Although we didn't know it then, the Sixth was late and was actually still behind us.

We headed for the coast in a procession, small formations of 29s one after another; we could see several ahead and more following us. Over a big bay south of Mt. Fujiyama, we turned northeast. There was a bunch of flak out to our left and a much heavier concentration straight ahead where the water of the bay met the land. When we got there, it must have been coffee break time because there was hardly any firing at us, although, as we learned later, some groups, including the Sixth, took a battering at that place.

Then we were over Honshu, flying along with Fujiyama out to our left, its 12,400-foot top not much lower than our altitude. Since I had a window on the left side, I could sit and soak up the view. And the view

was majestic. Fuji was beautiful in that crystal-clear morning air: the conic shape, the snow-capped peak, and the near-perfect over-all symmetry--exactly as it appears in pictures.

The terrain of the mountain slopes looked so serene. I reflected on the inconsonance of the peaceful landscape and our decidedly unpeaceful purpose. It was a strange moment. A scant 14,000 feet separated us from the enemy below. The enmity was immense. Yet, we sat there savoring the beauty of the scene and the tranquility of the moment. If I had known a philosopher who made house calls, I would have had him come and make some sense out of that, because I didn't see any.

Then the target came up. The sky was loaded with thick black puffs. Many of them were old--just smoke drifting away--but I did see some new bursts blossom forth uncomfortably close to us. However, right at that moment we stopped worrying about flak. All it took was one word over the intercom: "Fighters!" Flak can be plenty threatening, but it never quite has the attention-getting urgency of a fighter headed toward you.

There was a short skirmish with the fighters. Then, strangely, there was a momentary lull over the target--no fighter attacks and not much flak--as though it were staged to give us time to aim. We released our bombs with the formation at 0953.

We turned left to swing back to the far side of Mt. Fuji before heading for the coast, the longer route having been chosen, sensibly enough, to avoid passing over Tokyo. There is always the same experience upon leaving a target: You intend to make a quick dash for the coast. But it feels like a slow crawl. You pedal as hard as you can, but you just can't get the plane going any faster.

The formation was besieged by fighters for some 45 minutes, the attacks coming in quick succession for the first 15 minutes after the bomb release and sporadically thereafter. Almost half of the fighters were twin-engined Nicks--night fighters painted all black. The rest were Tojos and Tonys--silver and as pretty as could be.

With the unlimited visibility, we could see everything going on over a vast expanse of sky. If one could take a detached view, it provided a spectacular show: several B-29 formations, with about 35 fighters weaving in and out here and there. It was an enthralling circus to watch from our ring-side seats. Of course, whenever Jap fighters made passes at our formation, we didn't feel at all detached, and the show didn't seem at all enthralling.

The enemy's attention was divided among several B-29 formations. Otherwise, we would have had more attacks than we did. Our formation had fended off maybe 10 attacks, seemingly with no great harm done to either side, when, near the coast southwest of Fuji, a Tojo came right at us from 11 o'clock high. Very high. Apparently he dove almost straight down because no one in the whole formation saw him in time to get a shot at him. It was as though nothing was there, and then suddenly he was there--firing at us. Us! Crew 3909.

No warning. Just a sudden exclamation over the intercom. My involuntary response was to look up. There was this fighter right upon us, looking as big as a house. I was just in time to see him roll over and break away down to our left. He had already raked us over good--it all happened that fast.

He came so close we almost could have seen the whites of his eyes--just as Israel Putnam advocated--had not he turned the belly of his plane toward us.

A moment of incomprehensible jabber on the intercom testified that we had troubles. Fearful thoughts rushed to mind. Right away, though, each crew member in turn reported that he was not hit. What a huge relief that was! Really huge--the collective sigh may have been enough to upset the cabin pressure sensors.

Quickly, a survey of conditions was made. The tail guns were knocked out. Heuer's gun-sight was wrecked. The gunnery system had locked for a moment, reminding us how vulnerable a sophisticated system such as that was to small damage if it occurred at a vital spot.

One slug had gone completely through the ring sight--in one side of the blister and out the other--passing behind Heuer's head, not missing him by more than an inch or two. If he had seen the plane coming and had been facing it, he probably would have been hit. A projectile of that caliber just about would have taken his head off. We didn't like to think about it. In fact, one more or less had to refuse to think about it if he was going to continue flying combat missions.

Two other shots penetrated the tail gunner's cubby-hole, just missing Costello. For a few moments, a spent bullet had ricocheted around inside his compartment. It wasn't easy to imagine anything loose in there with him because there was barely room enough for a gunner to squeeze in alone. But Costello let us know that, for him, it didn't take any imagination--not when those bullets made holes he could stick a finger into.

The nerves of steel we were supposed to have were at that moment more like nerves of jelly. We knew that right there we had just about been retired to bluer pastures and that we were exceedingly lucky. We were forced to face the fact that "Yes, it can happen to you," which we preferred not to think about. It was unsettling, to say the least.

Shortly thereafter, despite still-jangling nerves, we were able to enjoy the antics of another B-29 crew. One of the night fighters was lolling about some distance away at about 9 o'clock level. I have no idea if he was some kind of spotter coordinating attacks or if he simply was reluctant to join the fray. A 29 over on the right took a dislike to his stand-offishness. The 29 pulled up above the formation and shot across above us, headed for the Jap. The Nick turned and fled. The 29 gave chase, but only briefly, then turned back and rejoined the formation. That was one B-29 crew that didn't believe in fighting this War by the book. That Jap didn't have any business being up there anyway; he should have stuck to night-fightering.

There were a few more attacks on the formation, but not right at us. Some fighters, in making passes at 29s near us, came close enough for our gunners to fire. More than once we saw the shooting from some 29 damage a Jap fighter--actually knocking pieces loose--without bringing it down. Those Jap planes were sturdier than Hollywood's xenophobic war-time movies would lead one to believe.

In the end, we couldn't say for sure if we had downed any of the fighters or not. A couple of them were seen to smoke some after we fired, but there had been too much going on for us to keep watching to see if any actually crashed. We could not be much concerned about any fighter after it passed to the rear. When the evidence was sifted later by Intelligence, Lounsbury was credited with two "probables," and Charlie with one damaged.

Only a short distance off the coast we saw a 29 out to our left that had a fire in its No. 4 engine. We watched, feeling rather helpless. The pilot feathered the engine, and the fire went out, or seemed to. But the props came unfeathered for some reason, and the fire blazed up again. Flames extended 10 to 20 feet back beyond the trailing edge of the wing. He tried diving, and that appeared to blow the fire out. There still was a long string of smoke trailing behind, but when we last saw him the fire seemed to be out. He had a buddy from his own outfit following along with him. Our gunners said that three of his crew bailed out as he lost altitude. That was too bad, because, according to what we heard later, he made it to Iwo Jima.

A plane's radio could pick up all kinds of transmissions. We could, and often did, listen to commercial broadcasts from such widely separated places as Tokyo, Honolulu, and San Francisco. This time we heard a San Francisco news broadcast tell about our raid while we were still not far off the coast of Japan--something like five hours before we landed back at Tinian! Gee, it would save everyone some bother if they would simply link the intercom with the Associated Press news wire. Maybe the next war.

For this return trip we couldn't go to a higher altitude because to pressurize might blow out the weakened top blister. So we flew back as we were--and, everything considered, felt very fortunate to be able to do that. It was one time we didn't care who got back first.

We landed at 1642 hours. We got out and examined the damage with more than academic curiosity. A chunk of the rudder was missing. Someone counted 27 holes altogether. We thought the plane should be rechristened: "Swiss Cheese" would be a good name.

According to other crews, the Sixth Group's formation had been hit worse by flak than by fighters. Treeman had two engines shot out over the I.P. and limped back to Iwo. Every plane from the Sixth got holes in it on that mission, but every one of them returned. These new king-sized American planes were sturdy too. Having only primitive plumbing, but sturdy.

Although nothing was said to us officially, we thought we knew why so many B-29s had been used against that small target: It must have been

making engines for the Kamikaze planes being used in the suicide attacks that were giving U.S. forces around Okinawa so much trouble. On the other side of the coin, we thought that the use of night fighters against us in the daytime was significant. The Japs surely were short on fighters--in the Honshu area anyway.

A radio news broadcast the next day said that there were 80 Jap fighters up against us and that 31 were shot down or damaged. Both figures sounded a little high; but, of course, we couldn't have seen the whole extravaganza. Besides, "31 shot down or damaged" could be one shot down and 30 slightly scratched. (See, I didn't study statistics for nothing.)

In retrospect it was evident that the assembly and the formation flying on that mission were better than they had been before. Good weather and the consequent good visibility surely could be given part of the credit; but, also, maybe we were finally learning something. And, too, it's amazing how the presence of fighters contributes materially to the compactness of a formation.

The analysis of damage at the Hitachi plant reportedly showed that the Sixth and Ninth Groups did the best jobs of bombing. Of course, the 505th Group had an excuse: "It wasn't a fair comparison--we had Russell's crew with us."

After that raid, we and Andy re-exchanged gunners. Bee and Gleacher came back to us. Probably, everyone was happier with the gunners all back with their original crews.

Two days after our Swiss Cheese affair, four ships of the Squadron went on a mission to an airfield on northwest Shikoku that supposedly was a stopping place for Jap aircraft en route from factory to the operational fields of Kyushu. The mission didn't go well. The clouds were solid from about 8,000 feet to 27,000 feet. The planes bombed a secondary target. The Japs may not have realized it, but their best ally was the weather, not that paper-hanger over in Europe.

A couple of days later a few more planes went on another airfield mission--with better results. They were able to bomb visually.

The Reamatroid had been turned over to PLM (production line maintenance) for a 300-hour inspection. We wanted to go on those airfield missions, even in some other plane, but we didn't get to. PLM had worked on Ralph's plane and, according to J.D., messed it up; we hoped they did better with the Reamatroid.

The grapevine was working overtime with stories about Okinawa. The Navy had lost quite a few ships there. The figure of U.S. losses grew larger every time I heard it. That, I thought, probably was the result of hearing stories by word of mouth. On the other hand, there was the frightful possibility that casualties actually were escalating that way. We heard that the Japs hit a U.S. carrier--I understood it to be the USS Franklin--with 800 killed. In a few days, though, the tenor changed and the stories carried a rather hopeful tone. It was being said then that

there hadn't been a Jap raid on Okinawa since April 16--nearly two weeks earlier. Maybe our bombing of airfields was helping. We hoped so. (1)

(1) It was true that there were more than 800 casualties when the USS Franklin was hit, but that was on March 18. Probably, what we heard in late April was a mixture of that information and the news of damage to the carrier Intrepid by a Kamikaze attack on April 16--or perhaps damage to one of the several other vessels hit by Kamikaze attacks in early April.

Back in the States there was a false report that Germany had surrendered. It was on the radio as an unconfirmed report from the Associated Press. But then President Truman denied the story. Anyway, we had beaten them to it: We had that rumor a month earlier--back on March 25 when we almost shot up our own island in celebration.

Right on the heels of the previous airfield mission, there was yet another. Again, we weren't going. This time there were so many abortions that the whole Group had only one or two planes over the target.

Sams drew a nice assignment--providing navigational escort for a group of P-51s. He flew to Iwo. The next day, like a mother hen, he was to take the P-51s to a point on the coast of the Empire, where they were to rendezvous with some 29s on a bombing mission. The 51s were to accompany the 29s over the target while Sams waited off the coast. Then, gathering the brood under his wing, he was to shepherd them back to Iwo. However, when he got back to Tinian, we found out that it didn't go just that way. He swore he got the 51s to the right place, but for some reason they didn't find the 29s. Well, as Robert Burns said to a distraught field mouse . . . . something about gangly glee, wasn't it?

Every few days a new crew arrived, but I took particular note when one came in having a navigator who was a captain--the ranking officer on that crew. Obviously, the Army was getting smarter all the time.

In two days the Reamatroid was out of PLM and ready for slo-timing, which is what Operations called the flight testing. When we took it up the next day, it didn't check out quite as we would have liked. Nevertheless, there didn't seem to be anything wrong that was serious enough to keep us from going on an Empire mission. While we were in the air, we also recalibrated the airspeed meters.

On May 1 we were alerted for a mission two days later. The purpose was to mine an area northwest of Sada Misaki Point. I wondered if there was any significance in being notified so far ahead of time. Anyway, finally, we were scheduled. But then for a while it looked as though the mission would be called off. Sully said that, for one thing, the weather around the Empire was not good.

Colonel Gibson took the opportunity to get the men together so that he could throw a dash of official news into the bubbling pot of rumor. First, he said, the T/O had been changed. All ACs could be made captains; and flight leaders, majors. Maybe we were supposed to be thrilled, but I

didn't hear any applause from the back of the bus where the navigators and bombardiers sat.

He said that it looked as though a minimum of 30 missions and a maximum of 35 would be required for a tour of combat duty. That was what we figured all along. You could bet that the Three Volunteers would never get away with doing the minimum. More likely, after 29, they'd lose our records and start us over.

The Colonel also said that prospects for getting to a rest camp had dimmed. Some crews had been going to Oahu and sitting around Hickam Field about half of their time before getting into a camp. Pencil-pushers were still trying to get us to Australia or New Zealand, but that looked rather doubtful; the War Department would have to make arrangements with those countries through the State Department--a lot of red tape. A rest camp was being built on Guam, but everyone I knew would rather stay on duty and get his missions completed.

On May 3, we had target study at 0830 and briefing at 1500. The briefing officer said that we could land at Okinawa if necessary, but only in case of extreme emergency. Heavens, we didn't know we were supposed to distinguish different degrees of emergencies. But we knew how to do it: Any emergency that involved us was ipso facto "extreme"--very extreme.

Harton was going with us again. The last time he flew with us we had provided him with an unrequested indoctrination into life on Iwo Jima. By now I guess he had forgiven us, or else the intervening three weeks had dimmed his memory. I half expected that, when he met us at the flight line, he would say, "Oh, I remember you guys," and promptly pack up his gear and defect to the 505th.

Chow at 1600, trucks at 1630. We got off at 1833. Darkness came soon thereafter. We went over Sada Misaki Point, probably without awakening the corporal because we didn't see anything there. Near the target, we saw the lights of a few aircraft but didn't know if they were ours or theirs. We weren't overly curious as long as they didn't come toward us, and they didn't.

As was usual for those mining missions, it seemed that everything took place in almost complete darkness. For some reason, it always seemed darker on the bomb run itself than any place else--even darker than when we were flying alone over hundreds of miles of ocean. It was nice to make a bomb run away from lights, especially searchlights.

We dropped our six 2,000-pound mines at 0214. The radar run looked good; I thought we placed the mines right where they were supposed to be--within the margin of error intrinsic to aiming by radar.

We turned around and, wishing to keep everything as quiet and uneventful as it had been, tip-toed, so to speak, out of the Inland Sea area. I think, unconsciously, we kept our voices down. It seemed to work--the corporal apparently was still asleep.

We landed at 0900. All in all, an unexceptional mission: we chalked it up on the milk run side of the ledger.

Some distance west of Iwo is a tiny island. You might not think of it as an island because it is only a barren rock, but it does protrude above the water. On an earlier mission, when we also were returning from the western part of the Empire and therefore a considerable distance west of Iwo, I had seen that rock. It had puzzled me then because I hadn't thought we were so near to it. I had filed the sighting away in gray cell No. 63 under "U" for unexplained anomalies.

On our return from this mission, I saw that rock again. And again, something was clearly out of place--us or it. I had to promote that rock from anomalous up to perplexing. So, I did my navigating back to Tinian carefully, which confirmed my calculations and Loran readings. Then it was easy to conclude what was wrong: The map-makers had plotted that island on our charts exactly one degree too far west. (One degree would be 60 nautical miles at the equator; at this latitude, it was about 55.) It surely was one of the least significant islands in the world, hardly big enough for a gooney bird to build a nest. But certainly big enough to rip open some unwary naval craft that might ram into it in the night.

So now, back home, I reported my findings to Charlie Enneking, our squadron navigator. He said he would forward the information. I found it interesting that here in the middle of the twentieth century some features of the earth, however insignificant, were not yet shown accurately on official U.S. charts. I thought I actually contributed something to making world maps accurate. I felt a kinship to one of my illustrious predecessor navigators who had to go tell Ferdinand and Isabella, "Hey you guys, China and India aren't at the right place on your maps."

That mission had been part of a new large-scale mining endeavor. It replaced mines that had been set off by Jap ships plus mines that the Japs had succeeded in sweeping--and also mined new areas. The mining campaign was turning out to be a big success--much more so, for example, than the campaign against airfields.

Photos showed many damaged ships beached near the minefields--obvious mine casualties. Recon planes actually were able to get pictures of some mine-sweepers blowing up while trying to sweep up the mines. Clever Navy people had arranged that, using several sneaky ploys. They had, for instance, fused some of the mines to go off the first time a ship passed over; others didn't detonate until the second, third, or fourth encounter. That was to foil the Jap effort to clear shipping lanes by sending suicide ships ahead of the regular cargo vessels.

Rumor held that Japanese shipping tonnage had been cut to about 25% of that needed to sustain their war effort. (2)

(2) See Matterhorn to Nagasaki, pp. 664, 669-674.

In contrast, we were aware of an increase in sea-going activity in our own area. In the previous week there had been several large convoys in Garapan harbor. We saw one carrier and knew there were others nearby

from the number of Navy P-shooters we saw and heard flying around. Navy fighters in the air had a distinctive sound; we thought they were powered by old washing machine engines--they sounded like it. But their engines ran fine--on both cylinders.

Promotions for a few of the second lieutenants came through. All of the commissioned engineers who had been in grade a considerable time were included--deservingly. Well, everyone who was promoted deserved it, I thought, but there were some others who deserved a promotion just as much. The Army promotion system was not renowned for being equitable. I figured they were holding mine so that General LeMay could present it personally. I knew he'd want to do that.

In two days, another mining mission was going out. Most of us who had gone two days earlier were not going this time. The Sixth was again going to mine southeast of Kure, near where we had been twice already. The 504th was going to drop mines in Tokyo Bay right near Yokosuka Naval Base. Next, we thought, they'll have us mining the moat around the Imperial Palace. The Wheels would never listen to me, of course, but my idea was to get some alligator eggs and drop them in that moat.

The mining mission was to be followed the next day with another airfield raid. The target was the Kanoya seaplane base in the far southern part of Kyushu. Again, for the umpteenth time, we didn't get to go. The Wheels obviously were trying hard to find a way to make the airfield bombing raids more effective. For this mission, each plane was to carry six 2,000-pound GPs. Man, those one-ton bombs were big! Six of those babies would do more than damage an airfield--they'd scatter it over three counties. If our crews could hit the target, that is.

On May 6 we went to Guam to bring back an F-13A, which was a B-29 outfitted for photo reconnaissance. Alger took us down in the early afternoon. We landed at Depot Field, renamed Harmon Field just that week. Guam seemed more like a tropical island than Tinian did--mostly because of the palm trees. It looked something like Batista Field and Borinquen Field, our two stops in the Caribbean. Having become accustomed to Tinian, we were impressed with how big Guam was. There certainly were a lot of men on that island--and, even more impressive, some women too.

As soon as we got there, Charlie and I took off to look up some friends. I tried to find Sgt. Donald Kline, the one who was on the same crew with me at first back in Grand Island and who was now in the 314th Wing. I found where he lived, but he wasn't there. I did see the rest of the old crew, though. It was good to talk with them; we all enjoyed exchanging verbal exaggerations and fabrications.

The 315th Wing was already arriving there. And we were told that the Third Marines were there filling their ranks with replacements, preparing for another action, we supposed.

We brought the photo plane back about five o'clock.

That night we went down to the line and "flagged off" the crews going on the airfield mission. Lemme didn't get off. And poor Andy had to abort. His No. 2 engine kicked back on him several times; he salvoed his

bombs and returned. We waited for him. He was in a sour mood--that is to say, he was his usual self. "Fiddlesticks," he said--or words to that effect.

When the crews returned the next day, they reported good bombing results--except for one flight. When the leader of that flight opened his bomb bay doors, some malfunction caused one bomb to fall out--and, seeing their leader drop a bomb, the rest of the flight toggled right there. Their bombs missed the target, of course. But those 2,000-pounders must have put one hell of a hole in some rice paddy down below. That may have idled some saki distillery for a whole month.

The crews also said they had been attacked by fighters. We didn't lose anyone, but Sams had one engine shot out and another engine's oil tank punctured; he had to land at Iwo. The 505th lost three planes--two over the target and one that ditched off-shore. A submarine picked up 10 men only 30 miles from the coast of the Empire. A plane from the 504th went into OKinawa; obviously, that crew knew an extreme emergency when they saw it.

We heard that, on a mission a few days earlier, the 73rd Wing was attacked by fighters at its assembly point off the coast. What a melee that must have been. If the Japs wanted to get us to shoot down our own planes, that was the way to do it--dart in and out during the confusion of assembling. That was probably our second most vulnerable time. It was a wonder the Japs hadn't discovered that tactic sooner, and we hoped it wasn't repeated; as chaotic as our assemblies had been, it was likely to be highly successful--for them.

Back on our island, construction of Runway D was finished. That just about completed North Field: four parallel runways each 8,500 feet long, plus all the taxi strips, hardstands, and maintenance aprons. And miles and miles of roadways, most importantly those for ambulances and fire trucks. In any case, for combat missions from then on, planes would be getting off the ground four at a time. And that was just at North Field. By then, the 58th Wing field had almost as many planes as North Field.

The next afternoon we had to test-hop the Reamatroid to see if it was ready to go on the mission scheduled, tentatively, for that night.

Our plane was ready, but the mission was called off. Predictably, that spawned various rumors about peace prospects. We had already heard that a British Lancaster carrying six Jap envoys had stopped over at some base near us. Supposedly they were en route to the States to discuss peace. I didn't believe that story; it seemed a bit too incredible. Anyway, the grapevine used the cancellation to extend the rumor: It was now being said that there was a 72-hour cease-fire order while peace was talked over with those Jap envoys. Sully said the weather was bad, which he thought was why the mission was scrubbed--and which was a lot more believable.

At 2300 on May 8 (our time) we listened on the radio to President Truman officially announce the end of the War in Europe. There was talk that, with Germany beaten, we would try to run a raid a day on the

Empire. The idea was to impress the Japs--to try to make them realize that their situation was hopeless.

The next morning we were sent up on another training flight. We were beginning to think that the Wheels might--but only just might--finally consider us trained by the time World War IV rolled around. Well, it was something to look forward to. Or was it?

As so often, Charlie and I found ourselves in total agreement in our disagreement with the Army. This time, I got my gripe registered first:

"There was no reason under the sun why `they' had to make us get up at 6 a.m. for that flight."

The ubiquitous generic "they" meant the Wheels in general and specifically the unknown ones responsible for whatever we didn't like at the moment. With my nyctophiliac proclivities, it was that early hour of the morning that I objected to most, but Charlie was perfectly willing to complain about any hour.

"There was no good reason for that useless flight at all."

"Practice, practice, practice. I think they are congenitally unable to let us have a day of rest."

"Who'll get the blame if the planes get worn out with so many training flights?"

"And we don't accomplish anything either. They have us practice visual bombing--and then send us to a target hidden by clouds."

"With no radar-bombing alternative."

"Yeh, isn't that stupid? Every mission should be planned with a radar alternative."

"Every moron knows that. We all know that."

"They give us H.E. bombs for practice and then little `goup' bombs for a mission. Real smart."

"Those amoeba-brains wouldn't know the difference; they don't know which end of a bomb falls first."

"And why practice formation flying when we do better going over a target individually at night?"

"The only one benefiting from these training flights is the scrap metal dealer on Rota."

Russ must have been impressed with our discerning critique: "Obviously," he said, "you're eminently qualified to run the whole Army, having had a paper route in high school."

With such high praise as that, you can see why Charlie and I felt destined to fulfill the dream of every soldier--to write the definitive post-war exposé of the stupidity of the Army.

If a mission went that night, Operations said, the same crews as on the training flight would go. I didn't much like the idea of flying in the morning and then taking off later on a combat mission. Memories of a similar experience back at Borinquen Field, Puerto Rico, remained. However, I didn't worry about it because I had a good hunch that there wouldn't be any mission that night. I knew the weather still was bad because Sams wasn't back from Iwo. It had been two days, and ol' Red Dog wouldn't have stayed on that dismal rock that long if the weather had permitted his return.

Late in the day, we were told the mission was "on." Shows you what kind of hunches I have. Furthermore, I honestly did not feel well.

The raid was to be a big one. Those stubborn airfields must have been generating migraines at headquarters. We just couldn't seem to finish them off and get on with other things. So, no more piddlin' stuff, no more raids of a few planes--hit 'em with everything we've got. Airfields all over Kyushu, Shikoku, and southwestern Honshu were to be attacked as part of one mission.

The Sixth Group was to take off about midnight and strike at Usa airfield on northern Kyushu in the morning. We were to lead C flight.

There was a story about the name Usa--a strange story but, no kidding, supposedly true. It seemed that back in the 1920s and 1930s that town was where the Japs made a lot of trinkets to sell in America. Japanese products did not have a good reputation, especially as to quality. For that and other reasons, there was considerable discrimination against Japanese goods. Whereupon, the Japanese named the town Usa. Then they could stamp the products "Made in USA." And, in answer to any protest, they could say "So solly, please. No can change. That the light name."

Of more concern to us, it was also the place where the 505th lost three planes a few days earlier.

For our raid, each plane was to carry five 2,000-pounders--those big babies. There were two with instantaneous fuses, two with a 2-hour delay, and one with a 6-hour delay. Those with a delay had "booby-trap" fuses--that is, after they were armed, almost any tampering--as little as 1/64th of a turn to remove the fuse--would set the thing off.

In our minds, we could picture the sergeant in charge of the Jap airfield clean-up crew:

"Well, it's been an hour and 50 minutes since the raid; I'll send honorable No. 1 crew out to start work."

Vrooom!

"Aa-ha, that crew pleased to die for Emperor. I'll wait another four hours and send out honorable substitute crew."

Vrooom!

"Oh well, I may like the work camp in Manchukuo."

We ate at 2100 and went to briefing at 2130. General Davies brought four admirals to observe. That was nice. We hoped they could tell that we were fighting the same war they were--at least part of the time we were--and when they reported back to someone who mattered--some chief petty officer, presumably--perhaps they wouldn't mention that we didn't know any more about how to run a war than they did.

Having no choice, I took my headache with me aboard the truck going to the flight line. About three-fourths of the way there the driver got a little careless and actually missed one of the bumps in the road.

We got off the ground at 0023 (May 10). In hopes it would help the way I felt, I had Charlie navigate to Iwo. I slept a little, and breathed some of the plane's oxygen, but mostly just rested my eyes--except for the one I kept open to watch the compass. It wasn't that I didn't trust Charlie to navigate--it was just that I wasn't sure he knew which instrument the compass was.

That first leg of the flight normally was routine, so the time tends to be compressed in ones memory. But it was three-some hours. Plenty of time for a good rest. That elapsed time illustrated one of the principal characteristics of our missions--their length. We would sit and stare at the green glow of instruments for three long, uneventful hours. Then someone who had dozed off would stir and ask, "Are we nearing the target?" But the answer would be, "No, we're only at Iwo; this is just the beginning."

On those long flights, it was Gleacher who got the shortest end of the stick (or shorter end, depending on how many ends you think a stick can have). The early part of a mission wasn't so bad for him because we wouldn't be pressurized, and he didn't have to trek back to his tail compartment until we started to climb. Still, he spent many long hours in the tail. Even on the low-altitude attacks, we would invariably pressurize for a climb too soon after departing from the target for him to leave his post.

The time he spent in the tail compartment was an existence well-nigh unimaginable to the rest of us. He was the only one of us who could, and did, wonder about the sanity of the Boeing engineers. It seemed to him that they designed the B-29 from the nose back--and ran out of intelligence and certainly out of compassion by the time they got to the tail. When the pressure-sealed door was closed, he really couldn't do anything but sit--for hour after hour with nothing at all to do for most of that time.

I never checked the AAF personnel manual myself, but Gleach claimed

that the foremost qualification for a tail gunner was a strong bladder--or, more precisely, inactive kidneys. Maybe so, but the talent that puzzled me most was the oxymoronic ability to face life backwards.

On this mission, when Hudson turned on the radar to pick up Iwo, the set wouldn't work. Nuts! I depended a lot on that radar. Yes, I used it to make my job easier. But not having it posed more of a problem than simply having to work a little harder. After several hours over the ocean, even excellent navigation might leave us several miles "off"--left or right, ahead or behind. I used the radar as confirmation of my navigation--and to make any necessary final adjustment. With an undercast, or on a moonless night, the radar was virtually indispensable. And its navigational use was only part of the story: Without the radar, we really couldn't have bombed at all on many of our missions.

We arrived at the assembly point at about the right time, but we couldn't find our formation. That had become all too familiar an experience. Nevertheless, we thought it could have gone right this time except for the way it was planned. The designated assembly point was just an invisible spot out in the ocean, defined navigationally in terms of coordinates without reference to any surface feature. Charlie was ready with his usual evaluation: "Whoever planned this had his head up and locked."

After circling a while, we found a couple of others from our Squadron, including Andy, but we still couldn't find our "fearless leader," as Russ called him. We learned later that he had joined the Group's other squadron and had gone on to the target with them instead of trying to get his own formation together. Of such stuff generals are made.

After a time, we decided we'd better do something. We had four aircraft: Andy, Comerford, Ruland, and us, with us in the lead. We were still out over the ocean. Intelligence had told us to expect tough opposition, so we hesitated about going in to the target with only four planes. However, Russ could hear Parsons talking on VHF. Parsons was the leader of our other squadron and was ahead of us, nearing the target. So Russ called him and asked him if he would advise a four-ship element to go in. He responded right away that they had some fighters--something like eight Irvings and a couple of Tojos. Then there was a noticeable hesitation, but finally he said, "Yeh, come on in."

It wasn't the most enthusiastic endorsement in the world. But on we went. I was confident that Russell's luck would see us through; I think Russ had his own direct VHF channel to the patron saint of combat crews, whoever that was--St. Elmo perhaps.

The I.P. again was Sada Misaki Point. The corporal must have called on his brother from the Navy to help him because three naval ships were sitting in a cove near the point. The ships fired at us, but their shooting was very inaccurate--only a little better than the corporal's.

We turned and headed for the target across an arm of the Inland Sea. Right away we spotted fighters--two Irvings. They slipped around to nine o'clock, a little high and way out. They just sat there and flew along

with us. We didn't know why they were doing that, but a lot of eyes watched them suspiciously.

A minute or two later, a couple of Tonys came diving almost straight down toward us. As far as we could tell, they didn't fire. We didn't know why. Perhaps they had intended to dive through the formation with guns blazing--but couldn't. We were too tight; nothing was getting through that formation of ours. The pilots were flying the rivets off those planes. The wing boys were tucked in so close that their flapping wing tips seemed about to scrape the side blisters off our plane--making Bee and Allgor as jumpy as water bugs in a pond of bullfrogs.

The Tonys flashed past, just to the rear of the formation. Every tail gunner opened fire. The Tonys' speed and angle made for the toughest possible shot--and, in a fully vertical dive, they were within range for only about three seconds. Nevertheless, it looked as though one of them was hit--some smoke trailed out behind him as he plunged earthward. We never knew if he pulled out of his dive or not.

Then the two Irvings out to the left, flying side by side and still heading the same way we were, started drifting in over the top of us--quite high above us. The only reason we could think of was that maybe they were going to try to drop something on us; we knew that air-to-air bombing--using phosphorous bombs--had been tried occasionally.

Every top gun in the formation cut loose. Tracers streamed toward the two Jap planes. It appeared that a couple of chunks of the first plane--parts of a cowl, for instance--were knocked off, whereupon the pilot dipped his left wing as if to turn back, but the second one wouldn't turn. It was as though he nudged the first one to keep going. So they quickened their pace and together they whisked across over the top of us pretty fast.

When they were almost straight above us, something came falling down. Whether they intentionally dropped something aimed at us or whether the B-29 firing had shot off another part of one of the fighters, we didn't know.

When the Irvings got over to our right side, out at fairly long range, the hasty firing subsided, and Heuer took careful aim, calmly and methodically shooting down first one and then the other. They plunked into the water within about 300 yards of each other. One pilot tried to bail out, but his 'chute caught in the tail of his plane, which went into a spin, and he and the plane plunged into the Inland Sea together. Score: Heuer 2, Irving 0.

We went on with the bomb run. Bombs away at 0906. "Shack!" Charlie hit the target perfectly. Score: Charlie 1, Usa 0.

So far we were pitching shut-outs.

We turned to the right, back over the Inland Sea, and swung around over the corporal again. They--he and his brother--threw up some more inaccurate stuff. Maybe the Usa toy factory was their defense contractor.

When we got back over the ocean, we could see dozens and dozens of 29s still assembling. It was the largest raid yet--more than 400 planes. There must have been nearly a dozen different targets.

Russ seized the opportunity to use our experience on that bomb run to provide some tutoring for his new co-pilot. He turned to Hig and, in his seldom-used didactic voice, said, "When you're leading a compact formation like that, you have to have your wits about you."

"Oh, but I did," replied Hig, "you on one side, Charlie in front, and Doland right behind me."

"Cut that out," Russ retorted; "on this crew, I have the exclusive franchise on that Mortimer Snerd bit."

"I knew that," said Hig, "but I thought it pertained only to looks."

There were no more tutorial sessions; Hig had proved that he deserved this crew--or vice versa.

Shortly after that I heard Russ ask, "Yeh, Doland, how come your engines have used so much of my fuel?" Once again, the engines belonged to Doland. Of course, it wasn't the performance of the engines that had caused excessive fuel consumption--we had used too much gas flying around so long before heading for the target. And now No. 1 had started backfiring. Russ had to feather it. So, we counted on landing at Iwo. It turned out that all four who had been in our formation had to stop at Iwo--as did many others.

We got there at 1240, but there was so much traffic we had to circle for half an hour on our three engines before we could get cleared to land. The gas station there was doing a booming business--even though they didn't do windshields!

While winging around above Iwo awaiting our turn to land, we saw a 29 come into Walnut Field and undershoot. He sheared his gear off on the rise of land at the beginning of the runway, slid about 50 feet, and burst into flames. It looked as though the center wing tank exploded. Black, black smoke billowed forth for about 30 minutes. Only the tail was left when the fire finally burned out. Two hours after the crash, the runway was all cleared off and fully operational again. After we landed we found out that all of the crew escaped safely--thank God. It was a 314th Wing administration plane, whatever that was. It probably shouldn't have been trying to get into Iwo at the same time that 400 crews were returning from a combat mission--but if it had made good sense, it wouldn't have been the Army.

We landed at Maple Field. Andy followed us in and slid to a stop right behind us. Our wheels had hardly stopped rolling when a Red Cross Jeep came up with hot coffee, cigarets, soup, and snacks we wouldn't have expected any place west of the Sausalito marker beacon. And those Red Cross guys kept apologizing because they didn't have more to offer to us!

Our formation buddies didn't need any maintenance work--just that 100-octane stuff. So our crew decided to split up and return with Andy

and Comerford, leaving the Reamatroid there for some engine work. We transferred our equipment and were off again. We landed back on Tinian about 1800.

Interrogations ran late because many crews had refueled at Iwo on the way back. Upon hearing everyone's story, Intelligence concluded that the objects falling from the Irvings when they were directly over us definitely were phosphorous bombs. Getting hit by a phosphorous bomb wasn't nearly as likely as getting hit by flak, but, in a way, we dreaded it more: We might survive several holes in the plane--as many as 27, to be exact--but a fire on board was quite a different story:

". . . We live in fame
Or go down in flame--
Nothing'll stop the Army Air Corps."

Stirring music perhaps, but the non sequitur speaks for itself. Going down in flames was one of the several "nothings" that would stop us--permanently.

When we thought of that mission later, one of the most vivid and persisting images in the kaleidoscope of events was of the Jap pilot whose parachute got caught on his plane, taking him to his death. Even though he was the enemy, a common aviators' interest might have made us feel sorry for him. But perhaps it was Amelia's revenge; she too was an aviator, a pretty terrific one.

Jeff had a different vivid and persisting image of the Irvings--having to do with rivets! He had been looking up through the astrodome when the fighters went over the top of us. His recollection entered into an ensuing argument about how near to us they were.

"Close," said Jeff. "They were so close I could count the rivets."

"Oh, really? And how many were there?" asked Joe as though he had just sprung a trap.

"Well," Jeff answered, "I don't know exactly because I didn't get them all counted. But I could have."

"You're faking," said Bee, unable to stay out of the argument any longer. "If you had wanted to count higher than ten, you could have taken your shoes off."

Ed, practical as always, objected to that: "No, don't tell him to take his shoes off; why do you think we put him down in the far corner of the quonset by himself?"

"Forget the toes," Joe interjected, "it's your leg you should be thinking about--the one that's being pulled."

Ignoring both of them, Bee continued with a suggestion: "Someone should do us a favor and strap Jeff in his seat so he can't see out."

"Jeff, how could you see anyway?" Gleach asked, and proceeded to answer his own question: "Were you sitting there again with your head up your astrodome?"

"Hey," Jeff replied with all the indignation he could muster, "don't let your voice trail off at the end of your sentence!"

Doland, using an uncharacteristically imperious tone, tried to set things straight: "Look, you guys, I've heard enough nonsense. Those planes are made of bamboo--they don't have rivets."

"Well, I could see the rivets," Jeff insisted once again.

"They weren't that close anyway," said John in what amounted to a dissertation by him since he seldom said anything, with the consequence that those five words from him ended the discusssion. Or, maybe the fact that it was chow time had more effect than anything taciturn John said.

Sams had come home from Iwo while we were on the mission. He had some interesting tales to tell about his experiences. Some of the stories may even have been true. His observations on the generosity of the Red Cross on Iwo agreed with our experience. He said that anything they had they would give you--cigarets, coffee any time you wanted it, candy when they had it. Whatever you wanted, just ask. That made me wonder . . . . but, no, I decided, there wouldn't be any girls on Iwo.

There was one story--a true one--that Sams could hardly tell because he was spittin' mad about it. I had mixed feelings because I thought I had to identify with Gary, his navigator, but Sams felt like taking a ball bat and beating him senseless. Come to think of it, that might have worked out--because then he could have been turned into a bombardier.

It seemed that, on their return trip, Gary thought his compass wasn't working right. So he went down to the line the next day and took it apart, intending to fix it. However, he couldn't figure out how to put it back together. But, with admirable resourcefulness, he reckoned that he could see how the parts fit with each other by dismantling the pilot's compass. Needless to say, he then found that he couldn't get either one back together. Sams could hardly finish the story without overloading his anger-diffuser circuit. I had to sympathize with Gary--he deserved better than being condemned to the stupor of a bombardier's life.

When the William W. Sams Entertainment Hour signed off, I thought it should be my turn to tell about my experiences. I had hardly reached the exciting part--how I cleverly used the Air Almanac to look up the sidereal hour angle of the sun--when an odd yawning malady gripped the other guys. Even Gary didn't stay awake to the end of my story.

Before sacking out, I reflected on the date--May 10. I recalled so well that date five years earlier when Germany invaded the Low Countries and Britain put Churchill in as prime minister.

The very next day another airfield mission went out--a smaller raid of necessity because, after the previous day, there weren't many

crews available to go. It was just as well because they had to bomb the secondary target by radar.

In two days the Reamatroid supposedly was repaired. Someone had flown it from Iwo down to Saipan, and Russ, Sams, and Higgins went over to get it. But it turned out that they almost didn't make it back. Three engines were acting up. It was only on the third attempt that they got it off the ground. It would have been easier if they had taken Hig's suggestion and paddled it across the water to Tinian. So our plane was home, but it might be a while until it was ready for a combat mission.

When they got back, Russ was called to Group headquarters. The puzzled and slightly anxious look he had when he left had turned to a smirk when he returned. Naturally, we were curious:

"Well, did we `volunteer' for a suicide mission, or did we draw latrine duty for a month, or what?"

"Nothing like that," Russ answered. "I think Group caught hell from someone higher up and had to find someone to chew out."

"Why you?"

"That's what I asked them," Russ said. "What made them think I was the guilty one?"

"Guilty of what?" we asked, still not understanding.

"Oh, it really wasn't much. They were upset about some pilot's misuse of one of the VHF channels."

"My gosh. What happened?"

Russ hesitated and got a strange look in his eyes, but he finally said, "Someone had used VHF while over the Empire to express his personal feelings about Japan and the War."

He seemed disinclined to continue, but we kept pressing: "Oh? In what way?"

"Well," said Russ, "it wasn't clear whether the Wheels objected to the message or the manner in which it was expressed--because it really was a rather indelicate allusion to the Jap Premier's diet."

He paused, but finally said, "Okay, if you must know, what had been broadcast over the air was `Tojo eats shit.'"

Stories going around about the Okinawa campaign finally sounded wholly optimistic. A gaggle of P-47s there in the Marianas, we heard, was en route to Okinawa. We were told that the earlier rumor about Jap envoys had originated in Okinawa--that is, supposedly Okinawa was the stop-over where they were seen by GIs. Maybe there was a little too much battle fatigue up there. It would be understandable if those guys saw Japs every time they closed their eyes. Too much combat can do that. The rest of us had ordinary hallucinations; when we closed our eyes, we saw perfectly

normal images, like Rita Hayworth or Veronica Lake or, if your luck runs like mine, Zasu Pitts.

An unusually large contingent of the Navy was still bobbing up and down in the water near Tinian and Saipan, as we had first noticed about a week earlier. We guessed that some of the ships had been in rear areas for repair of damage received near Okinawa and now were returning to the battle zone. Anyway, the general feeling was that the Navy, after some difficult weeks, had the situation at Okinawa under control. What it meant to us, we thought, was that we could soon redirect our primary effort from airfields to something else. We expected to get back to urban and industrial targets soon.

Chapter XI

Back to the Cities

We didn't have long to wait. The Wheels had not forgotten our old nemesis. We were going after Nagoya again. And it was to be another incendiary raid. That was expected. What we didn't expect, though, was that we were to bomb in formation from 18,000 feet in the daytime.

We were a bit dubious about that plan. We had done so well with the night incendiary raids--why change? Hadn't West Point or Randolph Field taught those would-be military geniuses not to abandon a successful tactic? The principal reason for a daylight raid was to gain precision in bombing. But that wasn't much of an advantage for an incendiary attack because the target necessarily was an area, not a single spot. Besides, incendiary bombs did not fall precisely even when aimed visually by bomb sight.

Once again it was perfectly clear to us that we'd get this War over with a lot sooner if they'd just let us run the bombing campaign. And in our spare time we'd draw up a plan for permanent world peace.

Anyway, you know whose opinion prevailed. Preparations proceeded for a maximum-effort mission. The four wings were to provide about 500 planes, each carrying 29 500-pound E-46 incendiary bombs. According to Bomber Command's calculations, that would deliver the same tonnage of bombs as was dropped on Berlin by one of the 3,000-plane raids.

The planned routes had our wing going smack over the Nagoya castle. We thought that meant flying through the heaviest concentration of flak--and, being in a formation, unable to take any evasive action.

Nagoya seemed to be a jinx anyway, and I didn't like the sound of this mission. I didn't know why, but now after 15 missions, instead of the imperturbability, or at least the calm resignation, of a veteran, I seemed to be getting a case of the jitters more easily than ever. Maybe earlier I just didn't know enough to be suitably scared.

Perhaps part of the apprehension stemmed from the fact that we were assigned to fly a Renton plane. I really didn't know anything wrong with Renton models other than the smaller fuel capacity, but anxieties fed on each other. I figured the odds were 10 to 1 that we would have to land at Iwo for gas on the way back. Actually, I hoped that we did--because that sounded better than the alternative that came to mind.

The confident tone of the briefing officer didn't make me feel any better: I pictured him as a nephew of the White Star Lines official who had given unqualified assurances to John Jacob Astor--as he boarded the Titanic.

"Iwo Willie" Sams (someone put the "Iwo Willie" tag on him because he had tarried at Iwo) was going to be a Superdumbo for the raid. Again, he was to fly to Iwo first and return there after the mission.

A Dumbo was a U.S. submarine, surfaced and on station for the Air-Sea Rescue Service. For each mission there were several posted not far off the coast of Japan. A B-29, called a Superdumbo, circled above each sub. Everything possible was done to locate and rescue any crew that ended up in the drink.

Never during the War was I afraid once we got away from a target and crossed the coastline. Then, within reason (except for the possibility of fire and explosion, which I conveniently ignored), about the worst that could happen would be to lose all power out in the middle of the ocean, and I had confidence in Russ being able to "pancake" in for a successful ditching and confidence in Air-Sea Rescue to find us.

The magnitude of the air-sea rescue endeavor was a clear indication that U.S. commanders didn't think in terms of writing off anyone as expendable. It was a rather subtle morale factor but, I believe, one of greater significance than generally appreciated.

We told our buddy Iwo Willie, just before he left again for Iwo, that his role in the War had become obvious to us--he was sent out to be den mother for some fighters and then to be the upstairs eyes for a submarine because he couldn't make a decent bomb run. That remark aimed at someone else might have cut to the quick, but I don't think Sams had any quick. However, he did convene his crew's Dastardly Deeds Committee to plot retaliation. So, we had to be wary--sort of like Trotsky watching to see if any of his friends was carrying an axe.

Our briefing was at 2130 and chow at 2230. The trucks transporting us to the flight line left at 2300. We took off at 0140 on May 14.

We arrived a little early at the assembly point--and, wow, Jap fighters were out there to meet us. We had been afraid of that. It was like hitting the other fellow while he was getting his gloves laced up. But it was evident that the Japs were as confused as anyone else. They'd go in to attack one 29 and a couple of other 29s off to the side would fire at them. Several of the fighters made passes at us, but none hit us. On the other hand, we thought that we damaged one of them. And, miraculously, the 29s avoided shooting each other. So, it turned out that having the Japs at our assembly didn't have the dire consequences we were afraid it would. If anything, it speeded up our assembling.

It seemed strange to leave the assembly area on time--and in the proper formation. We weren't used to that.

Maybe, if the fighters had followed us inland, they would have kept us on course. As it was, on the way to the I.P., our formation leader took us too far north and west. Watching out the window, I could tell exactly what was going to happen--but, being in formation, couldn't do anything about it. Sure enough, our turn at the I.P. took the whole

formation right over the city of Kyoto--a little like flying over the middle of Philadelphia to line up for a run at Baltimore.

We drew flak from Kyoto, naturally, but it was mostly low. Well, those Kyoto gunners didn't have much practice. Throughout the War, B-29s never did bomb Kyoto--intentionally. It was Japan's "shrine city," having a special religious significance. Our High Command had judged that bombing Kyoto would stir up resentment and stiffen resistance more than it would be worth. There was hardly a military target there anyway.

Nevertheless, we weren't thrilled about giving those Kyoto gunners a free shot at us--and for no reason other than that our formation leader seemingly couldn't have navigated the Toonerville Trolley, and it ran on rails.

Upon seeing the Kyoto flak, Russ quickly got on the intercom: "I thought you said we weren't to Nagoya yet."

"We aren't," I told him, "but the formation made too wide a turn and we're flying over Kyoto."

I didn't hear his response to that, but I could guess what he said because the wires at my earphone junction box began to melt.

We went on across Nagoya west to east and toggled our bombs at 0938 from 16,500 feet. Some of the flak was quite accurate, but it was not as intense or concentrated as I had feared. Just the same, Ezell got shot up pretty bad, and he was flying right behind us. (He got back okay.)

As soon as we disgorged our bombs, we headed toward the coast, where the formation broke up. We returned home individually. I flew the plane for 2-1/2 hours on the way back. We corkscrewed through the air for the whole 2-1/2 hours.

We didn't have to land at Iwo for fuel after all. We had more than 500 gallons left when we got back--mostly, no doubt, because of the alacrity with which the formation assembled. If the Japs had kept sending fighters out to our assembly areas, the War Production Board could have cut back on the building of tankers. We landed back at Tinian at 1615.

It was fortunate that we didn't need Iwo, for the weather there was terrible. Getting planes onto the ground in the heavy weather was slow-going. Two crews waiting to land decided they didn't have enough fuel to circle any longer and bailed out over the island, letting their unmanned planes head out over open sea.

That illustrated one of the several problems confronting the Brains in planning missions: They had to consider not only the weather forecast for the target but also the forecast for Iwo and for the Marianas later. No matter how good the weather was for take-off and over Japan, it might be costly to send out a mission if the weather was likely to be bad at Iwo or at home half a day later. What goes up must come down. At least aviators hope so.

There were more than 500 planes in the raid, according to the radio

news, which said we dropped 3,500 tons of bombs. However, we didn't know whether to believe the radio, for it said that two planes were lost, whereas, according to our on-the-spot information, there actually were 10. The radio also said that the fires set by the incendiaries could be seen from 60 miles away. In the daytime? We thought maybe they were reading from an old script prepared after one of our night raids. So much for the integrity of the newscasts.

By late evening, Sams had not yet returned from Iwo. Someone, with a considerable tinge of envy, ventured the view: "That guy is spending too much time at Iwo and getting too many easy missions--escorting fighters and flying Superdumbo."

"Y'all mean ol' Super Dumb-Dumb?" someone asked.

But someone else replied, "Dumb like a fox, I'd say. He's getting mission credit for those milk runs."

"Hell's bells, by now he'd probably consider a flight over Rota a rough mission."

About that time I expressed my opinion: "Yeh," I said, thus upholding my reputation for brilliant conversation.

Someone chimed in: "He's gone so much I sometimes think of him as missing in action."

To which someone added, "I do too. You know, we might as well ship his stuff home."

One could almost see the lights click on in one guy's head after another. So, a bunch of the boys determined upon some mischief. Not including me, of course--I repeatedly denied complicity--right up to the time of the perjury trial. Anyway, we--I mean they--took his clothing and other belongings and packed them for shipment to his wife in Daykin, Nebraska, and then turned his bedding in to Supply and folded his cot against the wall--all as was done when a crew member was missing in action.

Sams returned in the middle of the night while most of us were asleep. According to the testimony of one of the fellows who was only pretending to be asleep, Sams came in tip-toeing, trying to be considerate of his sleeping buddies--until he saw a vacant space where his cot and foot locker had been. The beam of his flashlight swung to the folded cot and then to his belongings packed and tagged for shipment.

But there wasn't a sound. His flashlight went off, and he walked to the end of the quonset. He went around to the side of the first cot, took hold with both hands, and tipped the guy off onto the floor.

Now there was an uproar, but he went to the second cot, and likewise dumped that guy on the floor. The next and the next right down the line.

At Russell's cot, Russ protested, "Hey, I'm innocent."

"Too bad I'm not gullible, we'd make a matching pair," said Sams as he turned the cot over with a particularly vicious jerk.

He proceeded to the end of the quonset, overturning every cot. Somewhere along the way, there really may have been someone who actually was innocent. Maybe.

Well, live by the practical joke, die by the practical joke.

There were no preparations for a mission the next day, presumably because there was a big cold front sitting over the Empire. It may have been a good thing, because someone, inexcusably, had disrupted our sleep the previous night.

Maintenance was changing engines Nos. 1, 2, and 3 on the Reamatroid. Russ was going to try to get them to change No. 4 while they were at it--a small price for insurance, we figured. Of course, they weren't running the War for us or we'd have had four brand-new engines for each mission. But the next day Maintenance did agree to change No. 4 too.

Sams got a new plane. Now, we told him, he'd have to fly "real" combat with the rest of us instead of drawing cushiony assignments. Gary said it had an APN-9 Loran set, which was news that interested me.

On May 16, it was back to Nagoya again. Our crew wasn't scheduled because of the engine changes on the Reamatroid. The planes were to go over the target individually at night at 17,000 feet. We wondered if the previous mission had convinced the Wheels to revert to night raids, as many of us had favored in the first place. For one thing, if we were on our own, you certainly wouldn't find us going over Kyoto on the way to Nagoya--not this crew; we may have been crazy, but we weren't stupid . . . or was it the other way around?

It was an unusually high altitude for a night raid. Headquarters clearly had become schizophrenic about the B-29's combat role--day or night, high-level or low-level, high explosives or incendiaries, precision aiming or area saturation--the Wheels were getting them all mixed up. When they got around to combining low-level with daytime, they could include me out.

Our crew members were to serve as "flagmen" for the take-offs that night, and that turned out to provide more excitement than we cared to have.

Flagmen signaled to each plane (pilot) when to start the actual take-off. For each runway, there were two sets of flagmen. The "starter" crew stood at the beginning of the runway with what was called a "biscuit gun"--a battery-powered lattern operated by a trigger.

As each plane surged forward, the next one in line pulled into position and waited for a green light from the starter crew. Normally, a plane would be sent on its way as soon as the previous one was about three-fourths of the way down the runway--because by then it was

committed: It was too late for it to stop so it was going to be out of the way one way or another--in the air or in the water.

But the runways were long and not perfectly level (the far end was actually out of sight of the starter). The starter could not tell when the accelerating plane way down the runway passed the point-of-no-return. So, a second flag crew stood about two-thirds of the way down to signal when the runway was clear (actually, when it was about to become clear) so that the starter at the beginning would know when to give a green light to the next plane.

Lemme's men were to serve as the starter crew for runway C, and we were to be the crew toward the end of the runway. Half of our Group was to take off on C, the other half on D. We had to stand on the south side of the runway because Seabees had dynamite strung all over the north side where they were going to do some blasting the next morning.

It was shortly after dark, some minutes before the 2110 scheduled start time, when we parked our Jeep off to the side and took our position. Just about then Higgins thought he saw something fall to earth off to the west. He didn't know what it was, but some of us guessed that it might be someone salvoing his bombs.

Although we didn't associate the two events right away, it was only a few minutes later that we saw a plane flying low over the northeast end of the island--weaving and dipping some but headed more or less toward North Field (and us), completely out of any traffic pattern. Something was wrong--terribly wrong. We watched it come around toward us with left wing drooping:

"He'd better get away from there; he'll hit somebody."

His left wing came up some, but the plane was losing altitude. Rather quickly, it seemed much more ominous. No one said so, but each of us must have realized that a crash was possible. We naturally assumed that someone was struggling to gain control.

"What's the matter with him?"

"If he doesn't pull up, he's going to crash."

"His No. 3 engine sure is torching."

"He IS going to crash!"

"Pull up, for God's sake, pull up!"

A person's mind races but still can't always grasp the implications of events as fast as they happen. By then we all realized that we might be watching a runaway plane--unmanned and out of control. I'm sure it entered each of our thoughts that it might end up heading right for us--I know I thought of it. There was no use running--whatever direction one chose, the plane might lurch that way next. But then it started curving away toward the north. Lower and lower.

"Pull up, pull up!"

"Look out."

"There he goes."

As we held our breath, the plane smashed into the ground about a mile from us. Immediately, brilliant flames shot up--not in one place, but extending for about a quarter of a mile as the wreckage skidded along the ground. All very fast. The whole quarter-mile of flame erupted almost all at once--Whoooosh! Suddenly, everything around us was as bright as day.

At first it appeared to us that the wayward plane had hit in the 505th Group's area, probably tearing up 10 or 20 parked aircraft. Then we could see that it was behind the tower, and we suspected that it had flattened the base depot. But, as we watched the flames, we finally realized that the crash was farther away--north of the field, perhaps (shudder) in some living area.

For several seconds anyone within three miles could have read a newspaper by the light. It was brilliant--not a red blaze, but a long sheet of white flame as magnesium incendiaries burned--white hot the way they're supposed to burn. A curtain of black smoke, illuminated by the fire, rose--and kept rising. Every five seconds or so there was another white flash as something else exploded--another incendiary, presumably. The bombs made the bright white flames; the oil and gasoline made most of the smoke.

Seeing a fiery plane crash is no everyday experience. Fatalities, injuries, damage. The mind cannot comprehend it all at once. We were mesmerized; we simply stood and gaped.

But then it was time for our take-offs and we had to pay attention to business. Down they came--Jaekels, Sharp, Bunting, Andy, Sams, and others from our Squadron, then some from other squadrons. Red light. Green light. Red light. Green light. We were doing our job. One after another the planes went thundering by. Take-offs were almost finished--we were getting near the end of the line.

Then, oh-oh! The next plane was speeding along about half-way down the runway--not to us yet--when I heard a squeak I thought was brakes. In the next instant I decided I was mistaken; the pilot seemed still to have power on. The wind played with sounds so that several times it had seemed that someone had cut his power when he actually hadn't.

But in a moment we all knew that this one really was trying to stop. Trying desperately. I still didn't think he had his power cut off completely, but it was hard to tell. Anyway, he was applying brakes. Hard. Real hard.

One cannot readily comprehend what it takes to stop a plane weighing more than 65 tons after it has reached 80 or 90 miles an hour--and in the short distance of half a runway. Brakes alone can hardly do it.

"Take hold, brakes, take hold!" We all were saying that, aloud or to ourselves, as though our verbal entreaties might help.

"Give Lemme the red light."

We flashed the red light down the runway so no more planes would start their take-offs. The plane sped by us with brakes screaching and steaming. We could smell the brakes as they got hotter and hotter--an unwelcome odor. Soon they would literally melt.

"Oh-oh, he isn't going to make it."

"Yes, he is. The end is still way down there--farther than it looks."

"He still isn't going to make it."

"Yes, he is."

"Keep that red light on!"

For the second time that night, we held our breath and our hearts pounded.

He was slowing down rapidly; but to have any chance, he certainly had to. He reached the crossing taxiway at the end--slowed a great deal but still moving right along. Obviously, he wasn't going to stop before the drop-off at the end. So he tried to turn off the runway to the left--maybe, maybe not, going too fast to make the turn. He got the plane turned about 45 degrees and almost dead stopped. Then it teetered on the edge--and plunged over!

Oh, damn it, he had just about made it.

We could hear the fuselage strain, glass shatter, braces snap. Then it just sat there. All quiet. We hardly dared think it, but--but, yes--it might not catch fire. I crossed my fingers. We exhaled the breath we had been holding: "Whew."

Someone dared to speak: "It might not burn."

"Hot damn! I don't believe it's going to."

"How 'bout that?"

Only a short time had passed. Twenty or thirty seconds, perhaps. Maybe a minute. But it seemed like an eternity. We now thought that the plane actually wasn't going to burn.

Then WHOOM!

Up it went. One big deafening explosion. Billowing clouds of black smoke rolled out of huge reddish flames. Around the base of the fire, 50-caliber shells spit and sputtered, the tracers arching off in all different directions. Every few seconds an incendiary ignited--making a

big white flash and a rumbling, roaring sound. In the flames we could see the tail still sticking up above the cliff.

We didn't know what to do--whether to go toward it or away from it.

We kept the biscuit gun flashing red until we saw Lemme signal us that there were no more planes waiting; if there had been any, they had been diverted to another runway.

Then we hopped into our Jeep, bounced out onto the runway, and drove hesitantly toward the flaming crash. We got to within about 50 yards and stopped. That turned out not to be a good idea. Flaming debris that looked like huge sparks rained down very near us. Flares went up like roman candles, and .50s were shooting out in crazy directions. A glowing object whizzed by us like a Bob Feller pitch--fast, but wide. We stayed there only a few seconds--no use adding our names to the list of casualties. We wheeled the Jeep around and retreated to about 75 yards. But the shower of fire and shell seemed to get worse and again we backed away.

With so much ammunition going off, we thought the plane must have toppled onto some stored ammunition--or at least an anti-aircraft gun emplacement. Several missiles whistled overhead, and one very large flaming chunk of airplane went flying up and out about 100 yards to the south.

That again was too much for us. We drove back farther, swerved off the runway to the north, and bumped along to an uneasy stop. There we got out of the Jeep and scrambled up a low ridge where we were going to lie down in some furrows and watch. As we clambered up the incline, someone behind us started yelling. We couldn't understand what he said and mostly ignored him. But the next time he yelled, we understood him all too well. In the confusion and noise we caught the words "dynamite up there." It took me three seconds to cover the 60 yards back to the Jeep--and I came in last! We had completely forgotten about the dynamite planted there.

Finally, we concluded that it was best to clear out altogether before we got ourselves in more trouble. We drove back to the west end of the field and around to Base Operations to return the biscuit gun. On the way, we were stopped by a guard who pointed out to us that another plane must have crashed over at the 58th Wing field. We hadn't noticed it, but now we saw that something was sure enough burning over there. Bright white light reflected off the clouds over the hill to the south.

At Base Operations we learned that the first crash was a plane from the 58th Wing. Operations thought everyone had bailed out. At least the pilot had and was safe because, about two minutes after the crash, he had walked into Operations, dragging his 'chute behind him. Hearing what had happened, we concluded that the parachutes must have been what Hig saw floating to earth shortly before the pilotless plane cracked up.

From Operations we drove over to the first crash scene, which wasn't far away. The plane had been ripped apart. Fairly large twisted chunks of it were scattered all along the edge of a wide hole where the Seabees had quarried rock. The plane had just missed a Seabee camp. Most of the

pieces of wreckage were still burning. The engines being the heaviest parts traveled the farthest from the point of intial impact. One engine was still mostly in one piece, but mangled and fire-blackened and all covered with a paste of dirt and oil.

We saw a nurse there--not on duty, just a curious spectator, the same as we were. It was the closest we had been to an American woman in four months.

Then we drove around to the east side of the field to the burning hulk below the end of runway C. We still couldn't get close to it, but some spectators told us that everyone got out all right. That was hard to believe. We knew there had been a short interval between the time the plane toppled off the embankment and the explosion, but was it really enough time for the crew--all of them--to get out and away from the plane? Thinking of it that way, there really hadn't been much time at all. Anyway, it was great news. We looked for wood to knock on, but not finding any at hand, we drove on.

Before we headed home, we stopped at the 39th Squadron's flight line to have a look at the Reamatroid. Nos. 1, 2, and 3 were "hung"--that is, the new engines were on the plane. But, as expected, the Reamer had no No. 4 engine at the moment.

While there we saw a plane coming in for a landing on runway A, evidently aborting the mission. As it passed through a patch of light, we thought we could see a red cowl. If so, it was one of ours. Someone said what several of us were thinking:

"Oh, if that's Andy . . . . Let's wait and see."

A few minutes later Andy came taxiing up. Naturally, he was disgusted no end. He seemed to be having the worst luck getting a mission completed. This time, he had had an oil leak in No. 4 and had to come back. Poor Andy.

We saw that he got some transportation, and then we drove back to our area. We stopped in the mess hall to see if they had some coffee. They did. Straws would have been useful--our hands were still trembling too much to pick up a full cup without spilling. Except for Russ: after he finished shoveling sugar in, he really had mocha syrup, for which he needed a spoon, not a straw.

Doc Doering came in and told us what he knew. It was Reed's plane that had toppled off the end of the runway. The impact jammed the escape hatches. The crew got out only because some Marine came up before the fire started and kicked in the engineer's hatch. As it was, the crew was all okay. For Reed's crew, one quick-thinking Marine was the difference between being alive and well and being incinerated. I hoped that someone knew the identity of that Marine and gave him the Silver Star--or, better yet, an extra beer ration.

The 58th Wing lost two planes--the one that we saw crash, from which everyone had bailed out and was safe, and a second one off the end of one of their runways. Some of the crew of that plane were killed when it

exploded, according to Doering. Also, the 73rd Wing lost a plane in the water off the end of one of Saipan's runways. Quite a night.

Our 39th Squadron people down at the line had their own strange experience with the 58th Wing crew that bailed out. The plane had a fire in No. 3. We remembered thinking it was torching. It was doing more than that. It was a real fire. The fellows said that when the plane went across the field the flames trailing behind were longer than the plane. They were afraid it was going to explode right there--right above them. Queer we didn't see that.

Some of the crew members who hit the silk drifted down right where our planes were just starting engines. That certainly startled our men sitting there in their planes. Sams and a few others cut the engines that were already running for fear the men would drift into the whirling props. We never did find out why that crew couldn't get the plane headed out over the ocean.

Finally we found our way back to our quonset and the fellows who hadn't been scheduled for the mission. When they asked about our experiences of the evening, we summed it all up in one succinct sentence: "We saw a nurse!"

The next day we were told that the light we saw over the hill--the one the guard had pointed out to us--wasn't a plane burning, but bombs that someone salvoed as soon as he was off the ground. However, the 58th Wing did lose two planes. One that was coming in for an emergency landing piled up just before reaching the runway; all of the officers were killed, while all of the enlisted men got out safely.

Reed--the one who had gone off the end of the runway--had had electrical trouble. Immediately after he poured on the power, he found that his turbos wouldn't work, so he tried to stop. His bomb load consisted of incendiaries, each with an anti-personnel charge in it. It was those charges exploding that gave us the impression that his plane must have dropped down on top of an ammunition dump or something like that.

The mission itself was a milk run. But remember one of the three "ifs": "if you can get off the ground in the first place . . . . " As Bogey and Ingrid kept hearing, "the fundamental things apply . . . . (as time goes by)."

Several crews on the mission, including Sams, thought there was a Jap fighter, or perhaps a "ball of fire," after them when Venus came up very bright in the early dawn. They grew more apprehensive as it stayed right with them as they twisted and turned to evade it!

What a laugh. But, of course, it wasn't funny to them at the time. And, actually, it was not as silly as it sounds. In the first place, up in the air there is no perception of distance at all (if you cannot gauge the size of an object). Second, immediately after rising, Venus can be brilliant. If you're safely on the ground, you may marvel at it, but passively, because you don't feel threatened, and, my, what a difference that makes. Third, if you're edgy anyway (and who wouldn't be when flying

over enemy territory?), it is natural to perceive danger in any apparition--something like being startled by your own shadow. It had to be a normal reflex because it happened a number of times, even to crews who had heard of it happening to others. (1)

(1) See Sky Giants, pp. 184-185, which gives a more extensive account in relating the reactions of crews from a different wing. The story there must be over-dramatized a bit, though not necessarily exaggerated in content, because it says that the denouement came in mid-July, but we knew two months before that. On the other hand, it adds something to the explanation, reporting that Venus "is extremely brilliant in this region of the world [especially at that time of year]."

We tried to go one up on Sams by razzing him about his furious aerial duel with Venus, but Sams knew too well that the best defense is a good offense, and he was adept at turning the tables:

"I suppose," he observed, "that the selection of you guys to be flagmen was the direct result of superior crew leadership."

"Oh, abso-gol-durn-lutely," replied Russ, pretending that he didn't catch the sarcasm in Sams's voice.

"And so admirably modest about it, too," Sams added.

We never did find out how his crew escaped unscathed from its encounter with Venus, but I think that, at least, we managed a draw in the intra-quonset verbal olympics, which was better than we sometimes did.

A mission went to Tachikawa west of Tokyo the next night. Practically everyone was scheduled. Even we were listed to fly--in the Reamatroid. But it wasn't ready. We had our choice of flying another plane or staying home and test-hopping the Reamatroid ourselves and then getting to go on the next two or three missions in a row. Russell chose the latter.

The choice probably was a wise one because many crews had trouble with their planes--not a good time to be flying an unfamiliar one. Ralph, Koser, Ezell, Smith, and Clay all aborted. But, surprise, not Andy! By morning we could count 12 abortions in the Sixth Group alone. We wondered if there were enough planes up there for a formation.

Anyway, we were happy for Andy. He was getting to complete a mission, which was all the more gratifying because so many did have to come back without getting to the target. If he had had to return early again, I think he would have resigned from this War and taken up hermiting for a living.

There had been a growing number of mechanical problems. The planes were showing the effects of intensive use--if it wasn't one thing going wrong, it was two others. There was a great deal of pressure to keep the planes flying. For every mission, it seemed, Operations scheduled every plane that had its wings still attached. The ground crews were doing one

whale of a job keeping planes operational, but there was a limit. Ground crews wear out too.

In those circumstances, senseless impediments to our main task were especially infuriating. And we had two extreme examples the next day when we were supposed to test-hop the Reamatroid.

LaChance, our crew chief, was as hard a worker and as dedicated as anyone. He had worked on the Reamatroid until three o'clock the previous night--that is, three o'clock in the morning. Four hours later--at 7 a.m.--the first sergeant woke him and told him he had to get up and clean up his area for inspection! My God, whose side was that guy on? It seemed so stupid. It upset me terribly. I thought Dennis deserved a medal for his extra efforts. But look what he got instead. Where was Martin Dies and his committee when we needed them?

And that wasn't all. Down at the line that morning someone had moved the Reamatroid because there was some blasting going on nearby. Naturally, there were parts scattered all over our hardstand where the ground crew had been working feverishly to complete the quadruple engine change. Along came some lieutenant colonel and said that the hardstand would have to be cleaned up. Dennis explained that it would take about half a day and that he was trying to rush to get the Reamatroid ready to fly. But NO, that hardstand had to be neat and tidy! We seemed to be having an epidemic of acute cerebral deficiency. In the Army, that was classified as a contagious disease.

So, we didn't fly the Reamatroid that day.

The next day Generals Jimmy Doolittle and Barney Giles toured the 313th Wing. Their visit may have been the reason some "light colonel" insisted that the hardstand be cleaned. But the generals surely were bright enough to understand that work must go on--and that this place wouldn't look like the West Point parade ground. A colonel didn't see it that way, which actually was an insult to the generals' intelligence.

One more day of work and LaChance had the Reamatroid ready, despite generals and colonels and first sergeants, and that afternoon we made a test flight. It was okay. However, there was no mission, no doubt because of the weather over the Empire. Surely, there would be one the following night, and now we were ready.

Promotions came through for all of the second lieutenants who were on the original crews. General LeMay didn't show up to present mine. I supposed he was sort of busy. Probably tried to call me to apologize. Probably forgot we didn't have telephones. Probably--well, the most probable of all was that he probably didn't know I existed.

That night the Ninth Group lost a plane on take-off--with more than the usual commotion.

For most of the month, while the rest of the Bomber Command went after airfields and cities, the Ninth had been doing nothing but mining, going out every other night. They were putting those mines everywhere, some of them way over west and northwest of the Empire.

We weren't sure what happened to the plane that didn't get off the ground, but we heard that its gear collapsed. Anyway, it blew up on the runway. And when you're carrying 2,000-pound mines, that's an explosion that even the Seabees could have admired. We heard that the blast killed 70 men! Maybe that was exaggerated, but it still was one terrific explosion. Four planes that were nearby were wrecked. Needless to say, a runway was out of service until one big hole could be filled in.

No personal mail was coming through. The last time it was held up was during the invasion of Okinawa. We were hearing stories of a huge convoy in the area. Reportedly, the crew of a plane that came in from Hawaii said they flew over a convoy that covered 600 square miles of ocean. There was a rumor that American forces would land on Kyushu on June 5. I don't know how that story originated, but that was one time the rumor purveyors were cruising at 20,000 feet without their oxygen masks.

Another day went by--still no mission.

The Colonel said that two more big raids would knock the urban area of Tokyo out of the War. I don't know if he meant to try to give us encouragement, or if he was trying to give us a little warning of what was coming.

One day I went swimming. If one went over to the east coast of Tinian and climbed down some crevices in the rocks, there actually was a sandy, but postage-stamp-size, beach. Some of the fellows had already been there several times. I guess they liked sun-bathing. Oh, the swimming was all right--the water was really delightful--but when you stopped swimming and put a foot down, you might slice it open on some sharp coral.

Still no mail.

We began getting the feeling that the next mission would be a particularly big one. After the weather delay, the Wheels would want to make up for lost time. On May 22 we were told that a pre-briefing target study would be held at 1100 the next day. We hardly needed to attend because very soon everyone on the island knew that a major effort against Tokyo was going out the next night.

Chapter XII

Finishing Tokyo

By May 23, as we learned more about the mission, we knew it was to be something special. The target was southern Tokyo, right next to Kawasaki, which probably was the first or second most concentrated industrial area in Japan--and probably also had the most concentrated flak anywhere in Japan. Maybe the AA gunners up there didn't have any first sergeants or lieutenant colonels because they certainly knew which side they were on--and it wasn't ours.

We were to come at the target from the west. That was down-wind, which helped. But not much. It looked mighty ominous. I know I had some twinges of nervousness I hadn't felt about any other recent mission. Others, I supposed, felt the same way--just a bit tense or apprehensive. There was, for example, less joking than usual as we made preparations. While getting ready, I wrote sort of a special letter home--just in case. I had never done that before.

Briefing was at 1430. We were going to carry 32 500-pound E-46 incendiary clusters and were to bomb by radar from 9,500 feet. That altitude sounded like an indecisive compromise--certainly not high-level bombing, but also not as low as we were for the Blitz in March. Maybe Intelligence knew something we didn't, but it might be a bad compromise--high enough for the heavy stuff to get a crack at us but low enough for automatic weapons fire to reach us too. Going by our experience to then, if I had been allowed to pick a bombing altitude, it would have been either 40,000 feet or 400 feet, which provides a good indication of how I felt about those middle levels.

We ate at 1700 and met the trucks at 1800. We took off at 2016 on runway C. Maybe we were a little nervous about planes cracking up on take-off, but we thought we saw a plane burning at the end of runway A or B. We weren't sure because we didn't get a good look, being rather busy ourselves, although we got off all right. Just beyond the runway we saw some fire in the water. It was reddish, which we thought was not the right color for bombs (regular incendiaries burned with a white flame), but there didn't seem to be enough flotsam to be a plane either.

The flight to Japan went routinely. Harton was with us again on this mission--monitoring Jap radar, as usual. North of Iwo he told us he was getting returns from Haha Jima and Chichi Jima. So the Japs knew well ahead of time that we were coming, as I guess they always did. Soon their radar plots would reveal our flight track, and they would warn the city we seemed to be headed for--plus, presuming they had learned from experience, Hamamatsu, Shizuoka, Tateyama, and all other towns and villages up and down the coast.

We made landfall at 0305 (May 24) at Omaesaki, which is a cape way down southwest of Mt. Fujiyama. From there we took a 40-degree course across Suruga Bay, which brought us inland just a little to the right of Fujiyama. Russ, and no doubt the others too, worried about Fuji because it was more than 12,000 feet high, and there we were flying along in the dark at 9,500 feet. I knew that the elevations given on our charts were not entirely reliable. Even so, we were in no danger where we were. I could see the relevant land features on radar and knew that we were missing Fuji by a good enough margin. But I had to keep reassuring Russ:

"Where's that mountain?"

"It's about 15 miles ahead and to the left."

"You sure it's to the left?"

"Yes, I'm sure."

Thirty seconds later: "Are you real sure we're not flying into the side of that mountain?"

"Yes, Russ, I'm real sure."

And twenty seconds after that: "It looks awfully black out here; are you positive there isn't a mountain ahead?"

"Yes, Russ, I'm positive--because I can see the mountain on the radar and our left wing is going to miss it by at least six feet."

I didn't actually say that. Even if I had thought of it then, I probably wouldn't have said it, because it was no time for frivolity.

At 0325 over open country we made a radar-controlled turn to a course of 85 degrees, as briefed, using the radar reflection from Hachioji to gauge the turn. In no time we could see searchlights ahead. There was no more worrying about Fujiyama.

There were other things to worry about, and one of them was the radar, which chose that instant to stop functioning. We kept going down the axis of attack. That's about all we could do. Charlie said he could see below us well enough to release the bombs with the bomb sight, so we were okay.

We could see that already there were quite a few fires to our right and some to our left. Not so many directly ahead--but we intended to remedy that. We knew from what was said during briefing that we were in one of the early waves, so we could project that the hoped-for conflagration would be going before this raid was over.

Searchlights were more--much more--of a worry than our radar. They were all over the place--seemingly hundreds and hundreds of them. Our earlier raids had cleared out a lot of spaces, and the Japs seemed to have filled them with lights. Supposedly, Japanese industrial production had suffered--so, where in the world did they get all those searchlights?

We were headed right into that mass of lights--and into range for the AA guns that we knew were there too.

We were on the bomb run itself, with Charlie tracking the target in the bomb sight, when a number of lights--eight, as a guess--all got us in their beams at the same time. Wow! That's bright. And frightening. We felt exposed. But we had to hold steady--it was the bomb run. Soon after the lights got us, Charlie opened the bomb bay doors. The interior of the bays suddenly was lighter than day. Now we felt completely naked.

With a ground speed of 255 mph, the bomb run wouldn't last long, but those seconds were ticking off so very, very slowly. You just know--your prickly skin tells you--that you are so lit up that every gunner in southeastern Honshu has you in his sights.

There was no escape. Getting hit now seemed inevitable.

THIS IS IT, I thought. This is THE END. Right here! Right now! I really expected to feel the blast of an explosion any moment. Every brain cell was concentrated solely on one line of thought--which part of the plane was going to be hit first--and how soon--and what would I do when it happened. Not IF it happened, but WHEN. Any moment now!

Any moment now. . . . Any moment now. . . .

My mind refused to function except for one dire question: "When the plane breaks apart . . . What then?" I was unable to formulate thoughts about the prospects--or any coherent thoughts at all.

We had to hold straight and level in that cone of light for 20 or 30 seconds more, which seemed forever. But they didn't get us before we got rid of that explosive in the bomb bays. At 0333, with the lights still on us, the bombs finally slid out of the bays.

Unconsciously, I had glanced back toward the bomb bays. What I saw was Jeff, sort of transfixed as he looked through the glass in the bomb bay access door. With the bomb bay doors open, we could see whatever was under the plane. It was an unbelievable Alice-in-Wonderland sight--or maybe, more accurately, something out of Dante. There were lights, lots of lights: shafts of white lights swinging through the air, pulsing crimson patches below, winking green lights suspended somewhere, intermittent flashes too brief to distinguish a color--like Armageddon at the fireworks factory.

At our altitude too, all hell was breaking loose. As we had feared, we were high enough for the heavy stuff, and they certainly were using it. It was banging and popping all around us. We could also see automatic weapons fire, but mostly below us. It was the big shell bursts--those ugly black ones that were frighteningly close--that we wanted so desperately to get away from.

The plane was being bounced around violently one way then another, tossed up on one wing and then up on the other. All I wanted to do was hang onto something--anything. My heart was pounding. What it was pumping was probably pure adrenalin.

Any moment now. . . . Any moment now. . . .

They say a coward dies a thousand deaths. But I was already working on my third thousand. What a contrast to the near-cockiness we had on some missions--flying over the corporal of Sada Misaki, for instance.

From the target, we were supposed to fly a course of 89 degrees--almost straight east--across Tokyo Bay and the Chiba Peninsula. But we didn't go straight anything. We certainly tried not to. We turned, we twisted, we climbed, we dove, we speeded up, we slowed down. And we turned, twisted, climbed, dove, speeded up, and slowed down some more. Actually, I guess we didn't slow down--understandably--but that was about the only thing we didn't do. Russ would have tried a chandelle if he had thought it would have helped. That plane was bobbing around like a cork going down the rapids--some of the bouncing being the result of our own evasive tactics, some resulting from thermals that varied in severity every hundred feet or so, and some being the buffeting of AA shells bursting near us.

But those menacing black bursts were with us all the way. We could hear the stuff pop and rattle. It sounded as though someone were throwing handfuls of gravel on a tin roof. It certainly seemed as though it hit us, but we had heard that before when nothing hit us, so we weren't sure.

Usually at night one doesn't see the black puffs of shells from heavy guns, but we could see lots of them now--they were so close and, heavens knows, there was plenty of light to see anything. Normally, a flak burst is some distance away and, if you can see the smoke at all, it appears to drift to the rear. Not this time. The bursts flashed around us so close that the black smoke whisked back past us right outside the window. We were dodging around in the middle of dozens of those bursts. They were on all sides of us--there was no getting away from them. We kept full power and pressed on. Again and again the bright lights held us. Again and again red and black flak bursts enveloped us.

Any moment now. . . . Any moment now. . . .

Through it all was the sweetest sound you ever heard: four engines firing on all cylinders without missing a beat. At that moment, that ol' Reamatroid was the best, most faithful friend we had in the world.

We were supposed to go up to 10,000 feet and then, by the time we reached the coast, 12,000 feet. But climbing might require giving up some speed. Russ said he didn't want to climb yet. I said "okay." Russ wasn't going to climb whether I agreed or not; but, at that time, I would have agreed to anything that would help get us out of there. Surviving came first; we would think about such unimportant things as the prescribed flight altitude later--that is, if "later" came and we were still flying.

It seemed like hours before we got out of the lights and the concentration of flak. I didn't have the radar to look at, but I figured that by then we must be across Tokyo Bay. At last, the mind could once again entertain hopes for escape--and survival. My pulse rate slowed to something around 200.

Whew! That was by far the worst flak barrage we had ever run through. And I do mean run--like a kid going past the town cemetery at night after seeing a Boris Karloff movie.

My first calm thought, after the tension and fear finally subsided, proved that things were back to normal--because, even before trying to figure out where we were, I was thinking about making up some time by going higher than planned--up over 20,000 feet. First things first, you know.

But then voices crackled on the intercom--the gunners in the back were telling us that there was a ball-of-fire out at 5 o'clock, and anxiety rose to a peak all over again. The dreaded rocket bomb was behind us, still over Tokyo Bay. Again Russ put the plane through all the evasive maneuvers he could. I double-checked my CFC box to be sure the settings were correct. The ball-of-fire was still out of our range when the guys in the back saw tracers streaming toward it--but they couldn't see the B-29 firing them. The ball-of-fire seemed to draw closer and closer to the source of the tracers, and then there was a big explosion. We figured it hit the 29.

Right away the gunners spotted another ball-of-fire. They said it was a good distance behind us, still back in the target area, but coming our way fast. Then there was a flash and it seemed to spin in. Our guess was that it went down--shot down or blew up on its own--before it could hit a 29.

At long last we were off the coast. The gunners had turned off the gunnery system activation switch when one of them caught a glimpse of what might be a night fighter. You can bet that "gunfire" came back on awfully fast. But soon the moving shadow was gone and we were okay and on the way home. A bit of blood once again was mixed with the adrenalin in my arteries.

All along, from the time we got out of the lights, we watched Venus low in the east. It really was incredibly bright about then, and we didn't want to mistake it for an enemy--as far as we knew, Venus was maintaining neutrality in this War.

We landed at 1013. And were we ever glad to be back--speaking of understatements.

A walk around the plane revealed six flak holes that could be seen from the ground. There were fair-sized holes in the rudder and in engine No. 4 and small ones elsewhere. One was in the radar room near Hudson and Harton. On the way back, Russ and Hig hadn't been able to get full manifold pressure on No. 4; the hole in it explained that. But the holes hadn't kept the ol' Reamatroid from doing her job. We knew she would do her best for us when we needed her most. But that poor engine out there was wounded.

Everyone on the crew would have volunteered to give blood--but that wasn't what the Reamatroid needed. An oil transfusion perhaps, a few splints maybe, but mostly a lot of skin grafts plus an array of new

internal "organs." Call the Smithsonian and reserve a little space--about 15,000 square feet will do--because this plane deserves dignified retirement in its old age--right along side the Winnie Mae and the Spirit of St. Louis.

Interrogation was noisy, with several returning crews reporting simultaneously. Crewmen animatedly related what they had seen, and there was plenty to tell about. When crews described the horrors of the flak, it unquestionably was the worst part of the mission. Until they told about the threat from the balls-of-fire; then that was the worst. Unless they got to talking about night fighters; then that was the worst part.

It was the "roughest" mission the crews had flown, and there wasn't much comfort in the realization that Japanese air defenses were getting tougher. If the Empire was weakening after a few years of war and six months of pounding by B-29s, it was manifest in strange ways.

It was generally agreed that the flak was fired in a pattern called predicted concentration. That was the conclusion of those who thought they were flak experts, which was an expertise I didn't ever want to acquire, at least not first-hand. Predicted concentration meant that a group of guns operated as a coordinated unit instead of each one aiming at an individual plane. With pre-determined settings, they fired in unison so as to saturate a designated block of air space. It was a good tactic. Certainly, we were ready to testify that it was effective. We hoped that they didn't choose to do it again.

As far as our crew knew, no fighters had fired at us, but many crews reported attacks. It was the Japs' greatest night-fighter effort to date. Some crews thought that the fighter attacks had been well-coordinated with searchlights. Smith, for instance, had quite a few shots put into his plane and his crew hardly saw the fighters at all. It was chilling to think of being a well-lit target for fighters that stayed out in the darkness and took pot shots at you.

We found out that the fire we had seen burning off the end of our runway when we were taking off--seemingly so very long ago now--was made just by bombs, despite the reddish color. Patterson's electrical system had failed on take-off, so he had salvoed his bombs as soon as he got a bit of altitude. Startled a few fish, I suppose, but that's all.

From general interrogation, I dutifully trudged over to navigators' interrogation. While I was there, someone reported that Andy and T.K. hadn't been heard from yet. Oh my!

I quickly rejoined the other members of the crew. Despite all the talk of intense opposition, we weren't prepared for such shocking news. "T.K." was T. K. Catts, who had been Sams's co-pilot, as Andy had been ours. Among our crew, very little was said. Words didn't come, not even profanity, for words seemed so inadequately expressive. The way we looked at each other said more than words would have said anyway.

An hour had gone by. Two hours. We usually enjoyed eating after a mission, but not this time; when we finished about 1230, there still had been no report from them. It was the most subdued I had ever seen this

crew. Some other crews had heard Andy give a distress message over VHF. They figured he probably had ditched, and I guess actually we were afraid he had--that or worse--although we wouldn't admit it to ourselves. But it didn't look good--two hours going by with no report seemed terribly, terribly ominous. Boynton and Schneider of the 24th Squadron hadn't been heard from either.

Then a report came in that Andy was at Iwo, and we felt a lot better. Catts had also landed at Iwo and, as far as Operations knew, was all right. Andy had been flying Sams's new plane; we heard that the plane was all shot up. Of course, we didn't care about the plane--maybe especially since it was Sams's--except that its condition was an indication of the crew's travail.

After a short time, we heard a more complete story. Some of Andy's crew had bailed out over the target! Their plane had been hit by flak, which set engine No. 1 afire. It was burning and the wing was damaged. In the confusion, No. 2 got feathered, throwing the plane abruptly into a tight spiral down to the left. Andy immediately told his crew to stand by to bail out.

They were dropping fast, but Andy fought it all the way. He got No. 2 unfeathered. He wrestled with the plane until he finally had it under control. How he managed to raise that left wing with No. 1 producing drag instead of power and lift, I will never know. When he pulled out of the spin, they were at only 2,000 feet--right over the target area.

Then he discovered that all of the men in the back and F/O Mitchell, the navigator, had bailed out. Apparently, they had misunderstood the order to "stand by" to bail out or something else said subsequently--and jumped. John Creek, the radio operator, would have gone too except that the bomb bay doors snapped shut just as he was ready to leap into the forward bay. But he did see Mitchell's parachute open.

Andy hardly knew what to do next--understandably. He didn't know exactly where he was, which way to head, whether to abandon the plane or try to fly it, whether to ditch while he still had some control and before it blew up, or whether to try to get as far away as possible--where, if he then had to ditch, Air-Sea Rescue might never find them. And No. 1 was still burning. Right then, four more searchlights picked him up, whereupon the Japs below began hosing small arms fire at him. That wasn't any one of the several alternatives he had in mind. He maneuvered as best he could and, still flying at low altitude, managed to get out of the lights and headed in a generally southerly direction.

And still No. 1 kept burning. The possibility of explosion was ever-present.

Andy and Creek, who had returned to his position after the doors shut in his face, started giving distress calls. Creek was able to contact someone who told them where they were, more or less, and what heading to take to get to Iwo. Iwo was not right over the horizon; it was about 700 miles away. That was a long, long distance--and a lot farther

than usual when every mile and every minute they weren't sure of making even one more mile.

No. 1 kept burning about half way to Iwo. They discovered later that the fire had burned to a point only about four inches from the gas tank when it finally went out.

Iwo was having bad weather; it couldn't have come at a worse time. Getting the cripples down was taking longer than usual, so there were planes circling all over waiting to get in. When Andy got there, he barged right in to the middle of the traffic, called the tower and said, "Maple Tower, I'm coming in for an emergency landing. I'm turning on final, and I'm NOT going around!" And he meant it--he didn't care if Hap Arnold himself was in the tower. Another plane ahead of him got out of the way and he landed. By the time he got on the ground, he told us later, engine No. 1 was actually drooping out there on the wing with its internal parts hanging out. He didn't see how it had stayed attached to the plane at all.

It must have been five badly shaken men who climbed out of that plane. They could be thankful for Andy's grit and skill.

They rode back to Tinian with someone, arriving about 1900. We talked to Andy for a few seconds, but he didn't look good. Doc gave him something to put him to sleep.

We hoped that the crew members who jumped were picked up by military officials. We understood that ones fate was uncertain at best if he fell into the hands of provincial police--or, worse yet, vengeful civilians. Those who bailed out, of course, included Costello and Lounsbury, who had been a part of our crew for two missions.

Schneider and Boynton still hadn't been heard from and were assumed to have gone down over the target. According to the information available to us, 590 planes had been scheduled for the mission, of which 550 purportedly got to the target. The latest report at that time was that 18 were lost over the target--20 planes lost counting those that ditched. The 73rd Wing lost seven; the 58th Wing, five; the 313th Wing, three (the 505th Group lost one, the 504th none, the Ninth didn't go, having its special mining job to do, and the Sixth lost two). By deduction, I guess the 314th Wing lost three planes.

In addition to that, there were many crews that made it to Iwo whose planes would never fly again, and there were a number of men killed or injured in planes that got back. In the Sixth, Parks's co-pilot was killed when a 20-mm. shell tore into the cabin, blowing one of his arms off. Two gunners on Maki's crew were killed.

One B-29 that landed at Iwo had hit another 29--the other one going down; one whole side was caved in on the one that made it back. Another 29 miraculously made it to Iwo after having been rammed between Nos. 1 and 2 by a Jap fighter. The airworthiness of 29s could not be in doubt.

It was generally assumed that we were going back the next night.

We talked with Andy the next morning. He seemed so morose; I thought he was blaming himself for half of the crew having bailed out. Instead, he should have been thankful that he had been able to save the other half; but, of course, he hadn't recovered enough to look at it that way. He said he didn't want another crew. That was understandable. I was sympathetic, thinking that there's no use crowding ones luck. We believed that the colonel would be pulling for him and would try to get him a ground job--for a month or so anyway.

He told us that he thought maybe he had completely used up the muscles of his right leg, as though, maybe, his leg was now empty inside. The damage to the plane had, among other things, frozen the trim tab controls so that they wouldn't move. The pilots had to counter all of the left-wing drag manually, holding pressure on the rudder steadily for the entire distance to Iwo. A fraction of that time would have been enough to tire out ones leg in normal circumstances.

Andy said he had been told that he might be recommended for a Silver Star. We thought he certainly deserved it--sticking with a crippled plane that was still on fire in a spin like that. Creek might get a medal too. It didn't stir them much--they wanted their crew back together and alive, not medals.

Anyway, right at that time we had some immediate concerns of our own.

The mission plan for that night was almost a carbon copy of the one two nights earlier. Saved some ground-pounder having to make up a whole new field operations order, I supposed--cynically. Each plane was being loaded with 32 500-pound M-17 incendiaries. We were to approach the target in almost exactly the same way as last time, but the aiming points were a little different. The MPI (mean point of impact) assigned to the Sixth was the most perilous in the Bomber Command--about 1,700 yards from the Imperial Palace and between it and the docks. There was no place the Japs would defend more tenaciously than that. We were to bomb by radar from 9,900 feet--almost the same altitude as last time. Jap guns would be all set--no adjustments necessary.

Early in the day, though, we were told that the Reamatroid might not be repaired in time. There was that wounded engine to take care of, besides the radar to fix and a few holes to patch up.

I couldn't help but hope that the plane wouldn't be ready. It was the first time I had felt that way. Throughout the day we took particular interest in the maintenance status board. Right up until briefing time we thought we weren't going.

At noon, as we were leaving the mess hall, Russ stopped at Colonel Osborn's table and, with more than a little impertinence, said something like, "Ha-ha, you can't send us up there again tonight--our plane isn't ready."

Taunting the C.O. was not really a brilliant move. When briefing time came around, we were told we were going to fly 31V.

Briefing was at 1430. We didn't get a chance to eat afterwards, but we didn't feel much like it anyway. I don't mind admitting that I was scared--plenty.

We got off the ground at 1732. Take-off went fine. Then we found that the inverter for the Loran set was out. Trouble, always trouble. The radar didn't work on beacon but seemed to function properly for the purposes for which we needed it. Other than that, the plane seemed all right. I'm not sure I could say the same for the crew.

Darkness came a short time after departure. We went by Iwo, seen on radar, and hit some rough weather just north of it--a portent of trouble for anyone who needed Iwo on the way back.

Going on up to the Empire, we passed close to several Japanese islands--about half-intentionally because that provided a good check on our course. We flew within visual distance--but, carefully, not within shooting distance--of Hachijo Jima. You wouldn't have known that this was the same crew that wouldn't fly over uninhabited Mejit. A few months of combat changes people.

Shortly before our landfall, we heard Birddog 1 (a destroyer) talk to 4V705 (a Superdumbo) about lights. We hoped it wasn't searchlights they were talking about or we were in deep trouble--if a ship at sea could see them. They probably were trying to determine if there was a plane in the water.

We reached Honshu at Cape Omaesaki at 2355. It was the same path we had followed the night before last. We turned up past the east side of Fuji again. Our schedule had us going in about three hours earlier this time--about midnight instead of 3 a.m. At this hour, there still was moonlight, and Fuji was easily visible out the window, a giant snow-capped cone poking its top up higher than we were. I'm sure Russ felt better about that mountain this time--being able to see it himself.

Out front Charlie saw a bright red light falling earthward. At first he thought it was a ball-of-fire, but then he decided that it must have been a B-29 going down. Already! We weren't even to the I.P. yet.

We made our radar-controlled turn on Hachioji at 0016. As we rolled out of the turn, we ran into our first opposition--still 15 to 20 miles west of Tokyo and 25 miles from our drop point. A B-29 out to our left had 20 light on it and was catching hell--still way out at the I.P.! Within a minute we also were in the thick of it. Something like a dozen searchlights picked us up and the gunners on the ground began pelting us with flak. With such a long time yet to go! My God, was there any chance?

I checked the heading after the turn and then looked out the window. Just as I peered out there was a big white flash below, visible despite the brilliance of the lights. It was a muzzle blast down on the ground, but it didn't look to be more than 100 yards away. I pulled back awfully fast and tried to keep my attention on the radar scope, but for some reason I didn't pull my flak curtain higher as I usually did.

Our bombing procedure called for a release based on forward slant

range (on the radar), so it wasn't so important to hold the course, speed, and altitude until we got closer; and, under the circumstances, we certainly didn't feel like doing so. I don't know as it made much difference though. A voice over the intercom would report, "Flak at 9 o'clock low and 7 o'clock level." So, we would turn abruptly to the right and pull up, and immediately hear, "Flak, 1 o'clock high and 3 o'clock level." Right where we were headed. Quick, turn the other way. Then, "Flak ahead, level." "Flak above." "Flak below." Everywhere we turned--there it was. We just couldn't get away from it--nor out of the lights.

". . . storm'd at with shot and shell, . . ." You might have thought Tennyson was up there with us.

From then on, we never had fewer than 10 to 15 lights on us at any time. Shells kept exploding all around us. We could see the bursts and could see smoke curl back past us swiftly. We zig-zagged onward.

Gleacher was throwing "rope" out from his tail position. But he soon reported that it wasn't working real well--a few of the lights would follow the rope back a couple of seconds but immediately swing back to us. The Japs somehow had learned not to be much misled by it. However, Russ's instructions were terse: "Keep throwing it out anyway." Any help, however small, was welcome.

This was worse than night before last: There were more lights, and we were certainly under fire longer--hours it seemed. Flak rattled all around us. Efforts to describe in words what it felt like, and sounded like, to fly through that fusilade are hopeless, but someone later remarked that "it sounded like hail on a tin roof." Hail--or maybe hell; either one fit.

The river we were to use for our slant-range aiming point wasn't showing up very well on the scope, but I could see the indentation that represented the river's mouth, so I imagined a line north from it and aimed for that. I watched on the radar scope as the bomb-release pip crept toward the imaginary drop point. It hardly seemed to move. I kept telling the radar over and over: "Come on, get out there; get to the river. Move faster!" But the radar wasn't listening to me.

I was sure that it took an hour for each minute to go by. My mind was screaming, "Drop the damned things and let's get the hell out of here." But it wasn't time yet. I was quite conscious that, through force of more will power than I knew I had, I was painfully suppressing the natural urge to yell "Now . . . now!"

Ever so slowly we drew closer to the release point. Because of the evasive action, we weren't quite on the right heading, and I kept requesting corrections this way and that--always fearful that I would turn us right into some flak.

This plane had electrical doors, so I had to alert Charlie to open them earlier than usual, gauging the time by making mental calculations while watching the image move on the scope.

Finally the time came and I called out, "Drop 'em." Looking at the next sweep of the beam on the scope, I thought maybe I had been a couple of seconds early. As it turned out, though, that may have been just about perfect, because Charlie hit the release switch, and nothing happened!

Charlie on the intercom: "Are those bombs going?"

"No, they aren't!" That from one of the guys in the back looking in the bomb bays.

Oh, Good Lord, what now? But it took about three milliseconds to hit the salvo switch. I think three guys hit it simultaneously.

"Bombs away." I was never so glad to hear those words. I glanced at my watch and noted 1221 on my log, not actually conscious of what I wrote--obviously, because I should have written 0021.

This time, instead of heading straight east, we were to angle to the left. I gave Russ the heading, but I don't know if he was paying much attention to me; we were continually angling this way or that anyway. My seat belt kept me from being bounced all around inside of the plane. Even so, I was hanging on with both hands.

We were still catching hell and continued to do so on and on and on. And on and on. No end. Lights and lights and more lights. And the flak was still banging all around: high, low, and level, in front, and behind, to the left, and to the right--and some in between. It sounded just like corn popping in an old-fashioned noisy popper. I would have sworn that we got two dozen holes right under me somewhere. One shell went off with a particularly loud bang and rattle right under the left wing--my side of the plane. The wing should have been in shreds, but, when I got the courage to look out the window, it was still there. The rivets were still holding. Rosie had done a good job.

Finally, way up at Three-Fingered Lake northeast of Tokyo we saw our last searchlights--three out to our left. We reached the coast north of Choshi at 0035, but continued going east for several minutes before turning southeast. Even off the coast, the gunners reported several times that they saw something that could be a ball-of-fire, but usually not close to us--luckily. In fact, the sightings may have been planes on fire; we couldn't tell from a distance. At 0050, what might be a ball-of-fire was spotted real close to us. That gave us a start, but whatever it was broke apart and fell to earth.

When we thought we were away safely, the gunners started telling about the holes in the back of the plane, but I turned from intercom to VHF to see if I could hear anything important, especially any message from someone in our Squadron or Group. The talk on VHF during a big raid was like a world unto itself--a frantic, pathetic, terrible world.

At 0054, Blackjack 51 was calling a boxkite. Blackjack 53 joined in the call. They had seen a B-29 explode at "95 Halter Post 30." I checked quickly and found the location given was about 35 miles west-southwest of where we were at that moment. That was probably too far for us to see

anything--and we didn't. BlackJack 13 and 33 called to see if they could help. They couldn't, not now.

"Mayday, Mayday!" At 0100 a plane was in trouble in the target area and was desperately trying to get away from there. He was low and three lights were trying to pick him up, much as had happened to Andy. Presently, he said he thought he could make it.

At 0103 I heard a fragment of a message: " . . . just bailed out." Boxkite 413, a sub, called Boxkite 3, the Superdumbo above it, to see if he had seen a flare.

Shortly thereafter someone reported: "Dreamboat 65 Colonel Hooper 85." "Dreamboat" was the code word for a B-29 that was down. "Colonel Hooper" was another location code, but we hadn't been told about it, so I didn't know where that was. The caller contacted a boxkite, but told him he didn't think it was worthwhile even to go look for survivors.

You couldn't listen to the calls for help without realizing that, probably more than once, you were hearing the last words spoken on this earth by someone. Some of the pleas one heard were as pathetically brave, and about as futile, as Haile Selassie at Geneva.

Later we heard a position report of 31-35, 141-00, which was ahead of us and a bit to the right, but we didn't know what was wrong and never saw anything near that location.

About then Jeff picked up a message from Clay in which he said he had the props on both inboard engines feathered and was heading for Iwo with two injured men on board.

It was now about 0130. Was it really only an hour and a half since we first came over Honshu on the way in? It seemed like a lifetime. Any life one had prior to the last couple of hours seemed trivial--the dim, distant, and insignificant past.

I finally turned from VHF back to intercom and got the information from the gunners about the holes in the rear compartment.

A piece of flak had sliced through Allgor's blister, missed his head a few inches, and shattered his oxygen regulator.

One large metal chunk had pierced the bottom of the plane and hit the flak curtain under Gleacher. It gave him quite some jolt, lifting him several inches into the air--to the accompaniment of the noise of metal ripping apart. After a moment, he decided that the harp music he heard was premature. But I guess he had to feel around the seat of his pants to find out if he was missing any of his parts--and then look over his shoulder to see if the tail section was still a part of the plane. He found out that he was still attached to the rest of us, but he wasn't sure how well because the door to his tail compartment had been blown loose. Thank goodness we hadn't been pressurized when that happened.

There were sizeable holes in the left flap and wing. Also a hole in the left side of the rear bomb bay. A big fragment had come through the

side of the plane by the lower aft turret and gone out a little higher up. I went back to take a look.

Again we were lucky enough not to have any injuries from the fragments that penetrated the plane. And fortunate indeed that we had not taken any direct hit. But still, the plane, when--or if--it got us home, was going to have to go stand in the line where large-size Band-Aids were dispensed. It was the second plane in three days that had been turned into a sieve while we were inside.

Fear had a way of making ones mouth dry. On some missions, we sipped from our canteens frequently. The quantity of water used was a gauge of ones anxiety. This time, as soon as we were back over the ocean, Russ began asking around to see if anyone had any water he could "borrow" because he had run out already--even though he had brought an extra canteen along for this mission!

When we got our flak suits off, we became aware that our clothing was damp. The excessive perspiring had gone unnoticed at the time--except by Jeff. He had been in the tunnel with his head in the astrodome. That he broke out in a sweat wasn't surprising--the frightening view he had would have activated the sweat glands of Tutankhamen the mummy. Jeff said later that he was well aware that a river of perspiration was running from his neck and shoulders down his back to his trousers. That's what he said. What better way to explain ones pants being wet?

No wonder two canteens of water wouldn't replace the body fluid one lost over the target.

The pilots soon discovered that No. 2 was leaking oil. Iwo reported a terrific traffic jam and, again, bad weather for landings. After a little figuring and some consulting between Doland and me, we felt confident we could make it to Tinian. Russ asked us what we thought, pondered our solemn advice, then flipped a coin and made a decision. We steered clear of Iwo. About an hour before getting back, Russ had to feather No. 2 because of lack of oil.

We landed at 0735 (May 26).

Getting out and looking the plane over, we found several flak holes besides those we already knew about: There was one in No. 2, which was why we lost the oil. There was one in No. 3, one in the vertical stabilizer, and one in the horizontal stabilizer. The large piece that had hit under Gleacher's seat had gone smack through the tail skid, which was a heavy metal brace, and then through the floor of his compartment. Gleacher almost ended up sitting on it, like a hen incubating an egg. He brought it with him when he crawled out of the plane. It was the nose ring of a shell, part of the fuse. It was disk-shaped and looked suspiciously like the drain from a sink. Last time we had said they threw everything but the kitchen sink at us; this time, apparently, they threw it too.

Colonel Gibson came around in his Jeep to see if everything was okay. The answer, of course, was "Hell no"; how could everything be all right when we'd just survived the most frentic, frantic, and traumatic

experience of our lives? But he wasn't asking about wounds to our psyche, so we told him, yeh, we were unscratched.

He said that that finished Tokyo. I kept quiet, only because I wasn't in the habit of sounding off to a colonel--I left that to Russ. But under my breath I mumbled, "That damned well better finish Tokyo, because, if it doesn't, someone else can finish it as far as I'm concerned."

At interrogation and chow everyone was talking instead of listening (except maybe Heuer, who talked about as frequently as Harpo Marx). But finally someone paid enough attention to learn that Fox and Cooney hadn't returned, and that the last that had been heard from Clay, he was circling Iwo, which was socked in! The weather at Iwo was worse even than two days earlier.

When we walked out of the mess hall, we saw Andy. He came up to us with a big grin on his face. "Boy, am I glad to see you," he said. He truly seemed as relieved to see us as we were to be there. And, you know, in 18 combat missions, I think that was the first time anyone had ever said that to us upon our return. It was kind of nice to have someone admit that he cared.

Already there was a rumor that another mission was due right away--to Yokohama. Man, they believe in running the rough ones all at once. It was looked at as the third raid in this "maximum effort" series, Tokyo and Yokohama being contiguous. They were also next to each other.

Well, maybe we'll miss this one.

Walking back to the quonset, we saw Cooney ride up. He was all right--just late getting back. Later, Fox still hadn't been heard from and was listed as missing in action. Clay's crew all bailed out over Iwo. As of that time, seven of them had been picked up--all okay. Our sources said that 20 or 21 planes were lost over the target, 25 altogether. The 58th Wing alone lost 14! Again, approximately 550 planes took part.

Ralph, who didn't go on the bombing mission, left early the next morning, along with about 20 others from our Wing, on a search mission. When he got back late that night, he said that as far as he knew none of the search planes found anyone. Visibility was very poor. They saw a raft and circled it for two hours, but saw no people. The 58th Wing was searching closest to the Empire and ran into fire from Jap fighters and picket boats. Any B-29 crewmen who had ended up in the water near Honshu probably had already been picked up by the Japs.

It wasn't a part of the same search endeavor, but the Navy had found a guy in a one-man life raft up by Maug in the northern Marianas. He was so weak he couldn't talk so they didn't know yet what outfit he was from nor how long he had been drifting. I wondered if, maybe, he was a navigator who had applied the correction for variation in reverse.

When our minds could once again focus on ordinary life--if there was such a thing--we noted that there still was not much mail coming through. We thought that indicated that a lot of transportation was being used for

something else, which, we presumed, meant that another major naval or amphibious operation was immiment. Returning from the first of those two Tokyo missions, we had seen two convoys heading northwest. They weren't big--not invasion flotillas by themselves--but one included about 30 landing ships.

We heard that Andy's experience was made front-page news back in the States, without using his name, however. He was going to make a recording describing what happened to him for the Army Hour. I was somewhat surprised that he agreed to do that. He might do the recording in Hawaii because he was being sent there to spend 10 days at a so-called rest camp. We hoped it did give him a chance to rebuild his spirits because he really was depressed.

We always had time to speculate about the prospects for being rotated back to the States. Right then the chances seemed more remote than ever. We heard that the 73rd Wing's quota of missions had been raised to 35. (1) Some crews over in the 58th Wing, having started in China while we were still in Nebraska, were already over 30, and there was no indication that they were going anywhere, except north by northwest. The future looked dismal for us with our 18 missions! The rumor was that we might be put off indefinitely, with the number of missions required for rotation being increased each time crews approached it. Not a hopeful or pleasant prognostication. General LeMay supposedly had asked Washington for 900 new crews and was turned down. As we heard it, Washington told him "T.S."--although I doubt that those were Washington's exact words. Still and all, we were told that just the other day a crew from the 73rd Wing had been sent home after 31 missions; however, we heard that they had ditched, so their departure was not a precedence.

(1) See Sky Giants, pp. 176, 177, 180, 188-189.

In any event, we had a short respite to look forward to. Each crew in turn was to get a "three-day pass." Ours was to start June 3 or 4. Terrific. What does one do with a three-day pass when the nearest city is 1,400 miles away--and mostly burned to the ground anyway? It would have been nice to be stationed at one of those places where the native girls were "drinking rum and Coca-Cola . . . . working for the Yawnkee dolla'." Well, I was hoping to get to go to Guam.

The follow-up mission to Yokohoma was postponed for 24 hours and then scheduled to leave the night of May 28 because, for unexplained reasons, the Brains had decided to make it a daylight incendiary affair. This time, at last, we really weren't scheduled to go--as long as we could keep Russell from wising off to the C.O. Ralph was taking the Reamatroid; we made sure he understood that he had better bring that plane back or we might never speak to him again.

The crews got back around 6 o'clock on May 29. Lemme was late, arousing concern, but he came in okay.

The mission as a whole was judged a success, but our Group's crews didn't fare well. They had formation trouble--which, after mission No. 1 to Truk, never surprised me. They had joined up okay. Then, going in,

Besore's No. 2 engine backfired a couple of times. In retrospect, he should have given up the lead right then, but he didn't. Furthermore, his course was off to the left a bit. Just as he opened his bomb bay doors, he had to feather No. 2. With those two things happening together, his airspeed dropped so much so quickly that everyone started overshooting him. Frank tried to take over the lead and turned off to the right toward the target. But the others didn't seem to know what he was doing and didn't follow. Instead, the formation split apart like a covey of quail being flushed. All in all, it wasn't good.

The crews said that flak had been intense. Of course it was; it didn't come in any other size up in that vicinity. A number of planes were damaged, but the Sixth didn't lose anyone.

Much of the talk, though, was about our favorite allies, P-51s, which had been up there supporting the raid. Catts said he happened to be looking at one Jap plane just at the moment that a 51 knocked it out of the air. The 51s were great protection; any attempt by a Jap plane to get near the bomber formations was nipped in the bud--that is, the Nip got nipped. Those Mustangs weren't horsing around.

In the meantime, Clay got back from Iwo. I thought he actually looked better than before he left. When they couldn't make an emergency landing because of the weather, they had swung around for a pass over the island to let everyone, including the two injured men, bail out, Clay going last. All but Clay came down on dry land. Amazing. I didn't think Iwo was that big. The 10 were picked up right away, and Clay was fished out of the drink a short time later. The two injured men were in the hospital but will be okay.

Recon flights finally got pictures of Tokyo following our two raids. Intelligence said that the burned-out areas now totaled almost 55 square miles--46% of the city--which for all practical purposes finished Tokyo as an industrial and transportation center. Colonel Gibson had already told us that--sort of pre-judging the reconnaissance results, I think: just showing confidence in his crews, of course. Going by the early reports on the just-completed raid on Yokohama plus the damage done in earlier raids there, perhaps Yokohama now also was "folded, stapled, and mutilated."

After listening to rumors at the rate of about a dozen a day for four months, there came one that really stunned us. And it hit like the proverbial bolt out of the blue. On May 30, when the grapevine rang, we answered and heard that our crew was to be sent back to the States for training as a lead crew, like Treeman's crew.

What? Say that again! They had to be kidding; good things like that just didn't happen to ordinary stumble-bums like us. We could more easily have believed that Tinian had surrendered to Rota. We were told that the rumor came from a reliable source, but it still was hardly believable. If true, it would be the biggest news since rubber bands were attached to propellers.

The story was that we would leave Tinian about June 12, have a few days at home, and then report for training in California. After a month

there, we would be back over here--flying God only knows how many missions, because, if they invested that special training in us, they surely would insist on a good return on the investment. But at the moment that seemed like the unfathomable future. Our attention wasn't focused there, nor on the training, but on those few intervening days: at home!

Part of the incredibility was the absurdity: Even at places like Jefferson Barracks, Santa Ana, and Ellington Field, one could only barely entertain hopes for leave to go home. Then we go 7,000 miles away, from where getting home becomes the height of illogicality--and it happens.

But, of course, it hadn't happened yet. A rumor was still only a rumor, even if the source was authoritative. Oh, God, what if this was one that turned out to be untrue?

I wanted it to be true so bad, I didn't know what to do. To hedge against the devastating disappointment should it not be true, I kept telling myself, "Don't believe it, don't believe it." But, of course, that didn't work. I crossed all of my fingers, and about a dozen of my toes. That didn't work either; besides, it made praying more difficult, and I did a lot of that too. But one thing I definitely did not do was write home about it; I thought that would jinx it for sure.

Chapter XIII

Maritime Interlude

Some of us had ideas of our own about what we might do when there was a "free" day between missions. But the Wheels of our Group were monomaniacal about it: At every opportunity, they sent us on a training flight. I don't know where they got the idea that we still needed so much training--unless maybe they observed our performance in combat. However, it seemed to us that we often had the combat first and the training afterwards--such as the film on flak after the Blitz.

Anyway, someone now got conerned about ditching. Accordingly, we were assigned to have dinghy drill. There wasn't much drilling one could do--it didn't take much practice to learn to sit in an inflatable rubber dinghy while it floated up and down with the waves. Mostly, it was a chance to cavort in the water. So this was one training exercise that we anticipated with pleasure.

On May 29, we put on our swim trunks, loaded the crew in an Army vehicle, and went tearing off to the south end of the island. We were to launch our frolic from a barge in the Navy harbor.

Everything was going swimmingly (sorry about that), but it was rather dull--no challenge except trying to keep salt out of ones eyes. I liked the thrill of a high dive--as long as no fancy stuff was expected. But the barge was only a foot or two out of the water. However, there was a freighter anchored near us. It was the Cape St. George. On deck, a couple of seamen were leaning on the rail watching us, presumably because they couldn't find anything interesting to do. At the stern of the ship a long chain ladder hung from the deck way up above us clear down into the water. And that gave me an idea.

Several others were having the same brainstorm at about the same time. We thought they wouldn't care if we climbed a ways up the ladder and pushed off for a dive of 15 to 20 feet. So we tried it. If that was fun, more of it ought to be more fun. So, we repeated it several times, going higher each time, getting up high enough to have that bottomless-stomach feeling of free-fall before plunging into the water. In due course, naturally, we were climbing all the way to the deck. I guess we figured they wouldn't shoot us if we climbed aboard. If they didn't want us, they shouldn't have left that ladder there: an "attractive nuisance," lawyers would call it.

So, Hudson, Heuer, Allgor, and I went aboard--uninvited and unattended. We started looking about without wandering too far away from the top of the ladder. Actually, the ship's crew members near us didn't seem to pay much attention to us at all, as though maybe they were used

to swim-trunk-clad strangers being on deck. And everything there looked intriguing to us landlubbers.

Then an officer came up. We expected to be reprimanded in a stern voice (since we were near the back end of the ship). We were all ready to plead guilty on the spot and to offer to leave Heuer in their brig as security for any fine. (As you might guess, Heuer was the smallest of the quartet.) But, it wasn't that way at all. Trying to be properly deferential, we explained who we were and said we hoped he didn't object to having us look about. Object? Not at all; to the contrary, hospitality oozed out all over.

He said we could go wherever we wanted--the galley, the lounge, the engine rooms--anywhere. I can only guess why he thought that the galley might be our first interest, but he told us we could go down and get something to eat if the cook had anything. In fact, he took us below deck himself. With our wet feet, we padded along behind him, our swim suits dripping water on their spotless floors (or should I call them decks?). The cook said he didn't have anything but coffee, and I really think he was embarrassed that he didn't. But then he found some baked apples, and we ate them with the coffee. And not so incidentally, it was the best coffee we'd had since leaving the States.

It was amazing how nice it was below deck and still so compact. And, my, was it ever clean. If their example of scrubbing the floors ever caught on in the households of America, it would put President Hoover out of the vacuum cleaner business.

In the lounge where we were eating, Heuer and I (the two Iowans on our crew) started talking to a couple of the ship's crew, only to discover, surprisingly, that they both had spent time in Iowa. One once lived in Boone and the other had been at Iowa State (Ames) with the Navy training program there. To find some nautical link to Iowa was about as expected as a surprise attack by the Swiss Navy.

Naturally, the conversation turned to food--at least it seemed natural to us to make food a preeminent topic of conversation. When they described their typical meals, our envy no doubt was obvious. So, the cook and the officer invited us to stay for dinner--in our dripping swim suits, yet. As much as we would have liked to, we couldn't do that. So, they asked us to come back for dinner on Sunday. They were going to have chicken. That might be the first day of our three-day leave, so we allowed as how we just might do that.

Then we remembered our seven buddies we had left in the water below. We certainly hadn't been considerate of them--leaving them to guess about our disappearance. By then they may have been mounting a prisoner-rescue operation. Anyway, we explained to our hosts that we were four of a crew of eleven. That didn't dent their hospitality at all: Bring the whole crew, they said. That was the most tempting offer since the last opportunity to apply for a Section 8. Ignoring the fact that we didn't have authority to make a commitment, we accepted.

We looked around the ship a little longer, but soon had to leave. I hoped we were half as gracious in departing as they had been as hosts. I

kept expecting them to call one of us Chester; surely, they had mistaken us for Admiral Nimitz and his staff.

Of course, we intended to keep the dinner date. But Russ was hesitant. We had a difficult time convincing him that, yes, the invitation was sincere and we were expected. It ended up that only part of our crew went.

What to wear posed a problem. The best we could do was put on clean khakis--with a million wrinkles. But surely they understood that we wouldn't have dress uniforms. Furthermore, when we inquired around, we couldn't find anyone who had a can of shoe polish. Boy, some military organization!

On Sunday, June 3, we showed up at the dock, and there was a seaman in a lighter ready to ferry us out to the ship. We could hardly remember what a banquet was like, but this seemed like one to us. Meat and vegetables. Wow. Milk. Wow. A table cloth. Wow. China dishes. Wow. Proper table manners. Wow. Ice cream and cake. Double wow. They were great hosts. If graciousness would win the War, the Cape St. George would have had it won already.

Quite properly, they didn't tell much that might be classified information, but they did mention that they had come from Ulithi, which they described as an anchorage that served as a staging base for much of the western Pacific. Ulithi (near Yap) was one of those atolls unknown to most Americans until the history of Naval operations began to emerge after the War. That day in Tinian harbor was the first I had heard of it.

One of our crew recalls being told that their cargo consisted of fruit cocktail, lots of it. Well, it takes more than guns and ammunition--and incendiary bombs and wire--to fight a war. It requires food too.

I hoped only that we were suitably proper guests. They were so good to us that I really felt rather bad that there wasn't a way for us to express our appreciation adequately. Later, we were able to take a couple of their crewmen up with us one time when we were on a short local flight. I'm not sure that that was recompense, though, for they were either scared or air sick, or both.

A fascinating tour of the ship followed. Then we had to leave. I hope that, after the War, the Cape St. George was enshrined in some Merchant Marine museum as the paragon of courtesy.

Chapter XIV

Waiting Out a Rumor--or Here Today, Still Here Tomorrow

A combat mission planned for the last day of May was cancelled and a training flight substituted. Not surprisingly, we found out that the Three Volunteers had "volunteered" again. This time, though, we couldn't bring ourselves to complain about having yet another training flight. We were reeling from the thought that we might be home in a week or two. Home! Think of that! "Oh, Auntie Em, there's no place like home."

I felt sure that soon I would wake up and find that it was a dream. Worse yet, I would find that it wasn't a dream but that some hitch had developed so that we didn't get to go. It was still only a rumor. Besides, we were warned that there were various screening tests--a check ride by someone from Bomber Command being one--and that we were to appear before a review board. It had been so long since we had done things "by the book" that I wondered if we remembered how. Spike Jones might as well try to play a Rachmaninov concerto. Oh well, Russ and Doland would give them old Thermathrockle story #4; that would befuddle anyone enough that our improvised ways of doing things would not seem irregular at all.

We were designated deputy leader for the training flight. While the formation was still assembling, Jaekels aborted the lead and we took over, but just then the field called and said to salvo the bombs and come home. Gladly. They had received notice of a mission the next morning.

It was just as well that the training was cancelled: The U.S. clearly was winning the strategic bombing campaign designed to neutralize the threat posed by Maug. You will note that, after WW II, Maug never was considered a major world power. In fact, if you look at a current map of the northern Marianas, you will find that modern mapmakers show Maug as two islands.

The crews going on the combat mission, and that included us, had to scurry around to make it to target study, which was at 1730. The objective was Osaka. Take-offs were to be about 3 o'clock in the morning--a daylight raid, but an incendiary attack nonetheless. Perhaps daylight was being chosen more often to take advantage of the availability of P-51 escort. It was true that Jap fighters seldom posed a threat to us when the 51s were around. Briefing was at 2300. The trucks left our area at midnight.

On one earlier mission we had carried 184 of the little 100-pound incendiaries. The bomb load this time was similar, but the difference was significant. We had 179 of the incendiaries. Each plane also carried one 400-pound frag cluster with a fuse having some sort of delay. The idea of the frag was to provide a surprise greeting for anyone who came poking

around trying to extinguish the fires started by the incendiaries. Obviously, someone in Ordnance had a fiendish streak in him--the same guy, probably, who put the booby-trapped time-delay fuses in the bombs used on airfields. We admired that guy's thinking; we certainly were glad he was on our side in this War--and also his cousin in the Navy who designed the fuses for the mines we dropped.

When we started engines shortly before 0300, we discovered that there was a bad exhaust stack in No. 4. But that wasn't sufficient reason to get us off the mission. Maintenance went crazy trying to fix it so we could still go. Major Baum, who was in charge of Maintenance, supervised the work personally, and three colonels supervised his supervision. And they did get the work done in a hurry. They were rushing us so much that they had us get in the plane and prepare to take off while Colonels Gibson, Tucker, and Osborn pulled the props through; that was a distinction we surely didn't share with many other crews. Changing the stack delayed us an hour; we left the ground at 0405 (June 1).

There was to be an initial assembly at Nishino Shima, with a final assembly just off Shikoku. Clearly, we weren't going to make it to the first one on time, so we sped directly toward the reassembly point.

The Sixth Group wasn't supposed to leave there until 1044. We got there at 1038, but couldn't find them. We didn't want to spend much time looking because we had used a lot of fuel getting up there so fast. On no earlier daylight mission would we have considered flying over the target alone. It was an indication of something--but maybe nothing more than brains turning spongy--that we considered it now. In fact, we were just about to do that when a formation of 505th Group planes squared away and started in. So we hooked on. The 505th had been encumbered by us before. We thought it might all work better in the future if we simply attended briefings over at the 505th.

We learned later that our Group had left ahead of its scheduled time, which was not necessarily commendable in carrying out a coordinated plan. Maybe the formation leader didn't know we were coming, or maybe the explanation was that he did know.

The formation we were in actually was not very good. Our four-ship element over Usa hadn't taken up much more air space than each plane did here. But we held our place in the formation and sailed on in.

We drew a few bursts of flak between Shikoku and Awaji Islands. As we approached Osaka, we saw a tall white column--of something. It looked like a towering cumulo-nimbus cloud. We were at 19,500 feet and its top was at least a thousand feet higher than that. At first, I couldn't believe it was smoke, as some said. But there were no clouds around. They were right; it really was smoke. I couldn't imagine what kind of fire there must have been down there to pour out smoke that rose over 20,000 feet in one long string. Whatever kind of fire it was, it showed that there was almost no wind at any level for nearly four miles up; that was unusual.

There wasn't a lot of flak over the target, not nearly like Tokyo. But there was some. A couple of bursts were close enough to scare me all

right. However, a good bit of the AA fire was wildly inaccurate. Maybe some of the Osaka gunners had attended a training course at Sada Misaki.

We dropped our bombs with the formation at 1125.

When a B-29 releases more than 100 bombs--in this case, 180 of them--it looks exactly as though the bottom suddenly fell out of a box of jack straws. The bombs don't just fall. They wiggle. They waggle. They tumble. Spinning. Wobbling. Twirling. Fluttering. Head over heels. Every which way. They don't follow any predictable trajectory. Not at all a classic precision bomb drop such as the B-29 was designed for.

Actually, it was a wonder the little bombs fell as well as they did. Even so, it was potluck as to what might happen. As they fell out, they banged against the racks and against the bomb bay doors, and all the way down they bumped each other. Their fall was totally erratic after their stabilizing fins were bent or their flight paths altered by a few bumps. According to Russ, on a practice drop one time, a string of bombs actually walked backwards from the point of initial impact.

Anyway, those small bombs were a headache--to the fire brigades on the ground, we certainly hoped, but also to Ordnance, ground crews, bombardiers, and such people who had to contend with the shackles and release mechanism for so many bombs. And sure enough, some hung up in each bay--eleven in front and four in the rear.

After the bombs were toggled, we dropped out of the formation because it seemed to be heading directly into the column of smoke, and we didn't feel like going into those thermals. We remembered that Osaka was the place where, on an earlier mission, the thermals had flipped a B-29 over onto its back. We skirted around the right side of the spire of smoke. Soon, we picked up a fighter. He came in on us from 11 o'clock, rolled over, and broke away down toward 7 o'clock. However, he didn't come really close, so probably we each only wasted some ammunition.

No sooner was the fighter gone than Allgor called on the intercom in such an excited voice that it took a few moments to comprehend him; he said that the four bombs in the rear bay were lying on the doors--and the arming vanes on one of them were sp-sp-sp-spinning!

And the bomb bay doors wouldn't open. Holy Toledo, we were a flying time-bomb!

The bombs had jarred loose and fallen on the doors. The impact had sprung the doors, and now they were stuck shut. Air coming through the twisted doors had started the vanes of one bomb twirling, which is what arms a bomb. Even when armed, it wasn't supposed to detonate until the concussion of striking the ground--or something else, like maybe a bulkhead in the bomb bay. It was decidedly uncomfortable trusting that an armed bomb would not hit against something that would set it off. Even phlegmatic Charlie allowed as how maybe something should be done.

Russ also thought something should be done. Furthermore, he had a

firm view about who should do it: "Charlie," Russ shouted, "go back there and get your bombs out of my plane."

I recalled that, after a successful raid, Russ would say that "our bombs hit the target." But those that were loose in the bomb bay, of course, were Charlie's. I also recalled that particularly troublesome malfunctions always occurred to "LaChance's plane." And, in flight, the engines were "Doland's engines" when they weren't performing perfectly. Aah, yes, possessiveness was a matter of perspective.

There was a small door opening into each bomb bay. It was hardly big enough to get through with a parachute on. Even if you squeezed through the door--or had a 'chute handed to you after getting through--you couldn't have accomplished anything. To get anything done, you had to squirm along a narrow catwalk between structural girders and the side of the plane--and that was only eight or nine inches wide. Removing ones 'chute and crawling out into one of the bays was not everyone's favorite pastime. But, in case one was getting bored, it certainly was guaranteed to break the monotony.

First, we had to get everybody on oxygen so we could depressurize. Then Charlie took his parachute harness off and, carrying a clumsy oxygen bottle, crawled into the rear bay to get the doors open. That was no place for him to have a touch of vertigo, especially after he succeeded in cranking the doors open. One misstep and the next stopping place was 3-1/2 miles straight down.

The bombs in the rear bay fell out without mishap, which was a relief. While he was at it, Charlie tried to dislodge the 11 bombs in the front bay too, but they wouldn't go, so he had to give up and let them hang there.

There were some benefits to be gained from depressurizing. For one, Gleacher could crawl forward and spend the rest of the flight in the roomier radar room or scanners' compartment.

Also, when depressurized, we could use the funnel-and-tube facility emptying to the wide wonderful outside world. When pressurized, we had to use the inside relief facility, but it was used only *in extremis* because the rule--common to all crews, I think--was that the first crew member to use it had to empty and clean it after the plane was back on the ground. Most of us would rather burst a bladder than be first to use "the bucket."

We saw a few more Jap fighters before we got completely away from the coast, but all they did was give short bursts at us from rather long range and then peel away. Those guys must have flunked out of their hari-kari training course.

With our fast run up to the Empire, plus such things as damaged bomb bay doors, we knew we had little if any fuel reserve left. We thought we would probably have to land at Iwo; to find out for sure, Doland and I got our heads together--on the algebraic premise, I suppose, that two half-wits equals a whole wit. We calculated that we could make it to Tinian, but it would be close. Russ postponed the final decision until we

reached the vicinity of Iwo. If we made Iwo by 1400, we would go on without stopping there.

We passed about 40 miles west of Iwo at 1415. That just proved that it was indeed going to be a close call, but we decided to go on.

About a half-hour out of Tinian there was a big thud and then some banging noise--something like Fibber McGee opening his closet. Higgins immediately pulled his 'chute on. Most of us sort of looked at each other as though saying, "Did you hear someone knocking at the door?" Everybody thought of something different. It entered my mind that we might have clipped another plane--since we were weaving around clouds and descending at the same time. But, of course, it was the bombs--the ones in the forward bay this time. They had worked loose and fallen on the doors. This time, though, they didn't warp the doors. Charlie didn't want to hear any more about those pesky bombs; saying, "I'll show you how to drop the subject," he simply opened the doors.

We landed at 1740. Three of the four bomb bay doors were really battered. Needless to say, they would have to be changed.

Colonel Gibson had come around before we took off and told us that Yokohama was almost completely eliminated from the War, that last mission administering the *coup de grace*. As soon as I found a dictionary, I figured out that that was good news. And we thought that this raid must have charred new areas to add to the previous damage in Osaka.

It took a good bit to get us to admit to any sympathy for Sams--as often as the old flimflammer had bamboozled us--but after that mission, we almost did. Ol' Iwo Willie had got to within 150 or 200 miles of the coast of Japan when a fire broke out in one of his engines. He had to turn back, of course. He got home all right, but he didn't get credit for a mission, whereas we did even though we had only one hour more flying time. We tried to console him by assuring him that some people were mighty appreciative of his efforts--all the residents of Osaka.

Ralph also didn't hit the assigned target. He bombed a "target of opportunity" in a peculiar sequence of events. He claimed that he went over the primary target as briefed. However, when he went to release his bombs, they didn't fall. So he bombed a town on the coast. He didn't explain how come the law of gravity had suddenly been reinstated. J.D. wasn't as likely as Sams to lead us on with a fanciful tale, but that was one of the best stories we'd heard given as a reason for blowing up some defenseless fishing village. We told him that at least we'd give him an "A" for literary creativity.

Our favorite allies had had serious problems of their own. We hadn't seen any of the P-51s, but they had been there--somewhere around Osaka. Fighters so often seemed to have navigational difficulties, and this was one of those times, disastrously so. The weather between Osaka and Iwo had turned bad. Many of the 51s got lost or disoriented in the heavy weather and never made it back to Iwo.

I suppose there was some good reason why navigation was frequently a problem for the single-engine boys. I knew that some navigation was

taught during their training back in the States. Fighter pilots were always admonished: "Do your own navigating; don't get lazy and try to follow a railroad track to your destination--because you're likely to run smack into a Navy plane headed the other way."

We had noticed that, again, a large number of ships had collected in Garapan Harbor. We heard that American forces were preparing to land on Amami Oshima, between OKinawa and Kyushu.

Nothing had happened to alter our hopes for getting home. We still understood that we would leave the Marianas about the 12th and report for training in California the first of July. We would be permitted to go home in between. But, thinking of the overburdened public transportation in the States, we didn't know as that would give us many days at home.

We were a bit troubled about our scheduled three-day pass, especially when it was referred to grandiloquently as "rest leave." It didn't make sense to go ahead with that for a crew about to return to the States. Yet, the leave wasn't cancelled. Well, oKay, that's fine--unless that was a hint that the trip to the States wasn't as certain as we had heard.

Another mission was scheduled right away. Between the weather and our pending three-day leave, we were on and off it more often than we could keep track of. It was to go the night after our return from OsaKa. First, we weren't listed to go. Then we were put on the mission. Then the mission was postponed for 24 hours. Sometime later, it was downgraded to tentative, and we were taken off because of our leave starting the next day. Then the mission was postponed a second time. Some weather hops were sent up to the Empire, presumably to help judge when in heck the mission could get off.

The day following the OsaKa mission, Charlie and I had requested approval to go to Guam during our rest leave. It was more or less a formality. We planned to go Monday if the leave orders arrived early enough in the day. Of course, they didn't.

According to reports we heard, the battle for OKinawa was just about over. Thank goodness. Speculation turned to the use that would be made of the island. There would, of course, be more planes there than Carter has pills. Just in "very heavy" bombers alone, we heard, there were to be five full wings. Some of them would be B-32s, but mostly B-29s. It would certainly be a huge Air Force base, surpassing Tinian as the biggest aerodrome in the world when built.

As we understood it, the Eighth Air Force was to be redeployed from Europe to OKinawa--much the same, we thought, as getting called up from the minor leagues for the parent team's pennant drive. Strange to say, but Eighth Air Force veterans didn't see it that way. LucKily for us, probably none of them would ever hear us say that--because, according to what we heard, the Eighth would be reconstituted with new planes (B-29s) and many new crews before transferring its domiciliary to OKinawa.

Our hooK-up to the grapevine told us that the formal request for us to go back to the States had been submitted. That is, our names had now

been put on paper officially at the level at which the Big Wheels spin. We were still supposed to appear before a review board and have one or more check rides by someone from Bomber Command--tests of suitability that we heard were quite stringent. Not time to uncross the fingers yet.

The on-again, off-again mission was on again, with Kobe as the target. The crews left early on June 5.

Later that morning Charlie and I went down to the Navy strip and caught a ride in a PB4Y-2 down to Guam. We landed at a Navy field miles from where we wanted to go. We hitch-hiked up past Harmon Field to the Marine camp, a base of the Forward Echelon of the Fleet Marine Force. We found Charlie's friend, Lt. M. U. Graham, who was with an M.P. battalion, but Lt. Harlan McKay, the fellow I was looking for, wasn't there. We were told that he was in the 46th Replacement Draft and that he probably was on his way to Okinawa.

We ate in the Marine mess that evening and stayed overnight with our friends there in the Marine camp.

Interestingly, the Marines didn't know anything about the naval or amphibious operation we had heard would take place within a few days or weeks, so we supposed that our rumors were without foundation. One of the Marines said there were two operations pending, one in July or August and the other about three months later--the first one north of Okinawa and the later one up north of the Empire, in the Kuriles no doubt. The fellows there expected to be in on the next operation, wherever it was. Charlie and I didn't have any trouble concealing our envy, because we didn't have any.

The following morning--the first anniversary of D-day in Normandy--we went over to Harmon Field to get a ride back. We had just missed two rides when we got there and had to wait until 1300 when we rode back to Tinian in a C-46 with a Lieutenant Stone.

We landed at North Field. LaChance was the first one we saw to talk to. The mission to Kobe that was flown while we were gone had turned out to be a tough one, although all crews got back. Catts's radar operator had been killed by a flak burst.

Disosway had flown the Reamatroid. According to LaChance, a shell had exploded right in front of the plane; the blast broke the glass in front, and a piece of shrapnel caught the bombardier in the face, tearing his nose off. There was also a sizeable hole in the leading edge of the Reamatroid's right wing.

The planes were being loaded to go out again that night. Disosway was to fly the Reamatroid again--if the plane got bandaged up in time.

Back in our living area, we were told that our planes had had a good formation over Kobe and that the bombing supposedly was excellent. There wasn't much flak, but what there was had been unusually accurate, as evidenced. Also, rather surprisingly, there were a lot of Jap fighters up. They gave plenty of trouble too. Sometimes it seemed that the missions were getting more difficult instead of easier. However, in our

thinking, after those two Tokyo raids, they really couldn't get any worse.

The radio news broadcast reported that 11 planes had been downed on the Kobe raid, so I thought that meant that at least 15 were lost. I always did think that, aside from Tokyo and Yawata, Kobe had the toughest air defense we encountered.

The mission that night--for the planes we had seen being loaded--was going to Osaka again. It looked as though Bomber Command was determined to keep after the major cities until, one by one, along with Tokyo and Yokohama, they assumed the geometric characteristics of a pancake. The planes were carrying those crazy little 100-pound gel bombs again. That was what we had used on the last Osaka mission; maybe a different type of bomb or mix of types should be tried.

We were still on leave, officially. They'd better not put us on the mission or we'd complain to our union steward--as if that would have done any good. It probably would have got us assigned to the next suicide mission. We wouldn't have found one anyway--a union steward in the Army was about as likely as an ACLU lawyer at one of Stalin's purge trials.

Andy and Koser were in Hawaii at rest camp. So, even though the mission wasn't any "maximum effort," in our Squadron, all available crews but one had to go.

Not that going home was much on our minds, but almost every other sentence in my diary was about it. When Charlie and I got back from Guam, I noted that the magic number was now down to less than one week--figuring the 12th as departure day, which is what we had been told.

The next day when Catts got back from Iwo we heard more about his experience. He lost two men. They had just dropped their bombs when an AA shell (105-mm., they thought) exploded in the plane's rear bomb bay. As bad as it was, it was a good thing the bombs were gone. Raymond Merritt, the radar operator, was checking the bays. The blast blew one leg off and cut him all up. Charles Magnuson, the right gunner, was hit so bad that his right arm was almost severed at the shoulder. The CFC gunner and the left blister gunner were injured slightly.

Most of the plane's controls were shot out. Catts immediately put it on C-1 (the autopilot), which was a good quick-thinking move because it gave him some measure of control. Catts did well to get the plane back to Iwo and to land it with control being impaired that way.

Merritt lived about 45 minutes. The crew said he was conscious, but couldn't feel any pain, nor could he talk. One eye had been blown loose and was just dangling down over his face.

They laid Magnuson down in the radar room, gave him plasma and morphine and did all they could for him--naturally. His arm was just barely held to his body. Of course, he couldn't move it; so, when one of the other crew members came toward him, he would say, "Be careful, don't step on the arm." He kept worrying about having to lose it. When they landed at Iwo, the docs gave him something like 11 pints of whole blood

before taking him to surgery. Then they removed the arm, but found that he also had hemorrhaging in the chest caused by the concussion. He died about 9 o'clock that night. The Iwo medical people said the crew had done a good job of taking care of him--that there wasn't anything more anyone could have done.

They both were buried at Iwo. Catts felt terrible about it, of course. He had pictures of their graves to send home with their personal effects.

No one disputed General Sherman's timeless characterization of war.

The next day, Ralph's crew came walking in, having returned from the Osaka mission, but they were almost alone. We hadn't lost any planes, but almost everyone else had landed at Iwo.

On the following day, with complete predictability, a training flight was scheduled, even though there were only about three crews that could go. However, it soon was called off, so we guessed there would be a combat mission that night. It was listed as tentative because so many crews and planes were still at Iwo, not leaving many available for the mission. But we were now available. From what I heard, I thought we were going to Tachikawa.

Nope, we were not going to Tachikawa. We found out a little later that we were going to AKashi to install a little natural ventilation at the Kawasaki aircraft plant there. It had been bombed once before--back about January--but Intelligence believed that the damage had been mostly repaired since then. But it wasn't my choice for a target anyway: To heck with those aircraft plants--let's go get the factories that make searchlights!

The bomb load was fascinating. We had been impressed when we carried 2,000-pound bombs or 2,000-pound mines. We thought they were huge, and they were. But, all at one time, "huge" was being doubled. For this mission, we were taking 4,000-pound bombs. We felt sure those things would really shake up something. They ought to; good gosh, they were big--each one about as long as one of our bomb bays. They were so big that each plane could carry only three of them. What a contrast to the time we carried 184 bombs. The Mutt and Jeff of bomb loads.

It seemed a good way to resume delivery of the scrap iron that the U.S. had embargoed in 1940, which had sort of made inevitable the whole shootin' match--shooting match being more than a figure of speech in this case. After dropping a load of those 4,000-pounders, we might have to make a new map, showing Honshu East and Honshu West.

We briefed at 1015. After we got down to the plane, everything was postponed an hour. We took off at 0237 (June 9). Nos. 1 and 2 each backfired some in getting us off the ground, but they ran okay once we were in the air. We passed Iwo and climbed to altitude. My figures showed that we were going to reach the assembly point about 10 minutes early, so we circled around a bit in order to be right on time. It worked. Everyone arrived at much the same time. I thought it was the best assembly our Group had ever made. And the formation left there at just about the right

time. Gee, a few more like that and the crews might get excused from some of those incessant training flights.

Sams and Ralph didn't show up, which, of course, was unrelated to the good assembly, although that certainly wasn't what we intended to tell them. We'd say we went on without them because we didn't know of any fishing villages that needed blowing up.

Passing over the northern coast of Shikoku, suddenly we spotted a big fat aircraft carrier sitting in a cove. Our immediate thought was, "Look out! It may be able to put up some very accurate flak." Our next thought was that we wished we could drop out of the formation and bomb it. We thought we owed it to Billy Mitchell. And we had the perfect bomb load. If we had been carrying those dinky 100-pound globs of gelatin, we couldn't have done much to it. But with these 4,000-pound jobbies, man, oh man, we could have splattered that thing from Shimonoseki to Kawasaki. We would have, too. Oh, was it ever tempting.

Somewhat uncharacteristically, we decided we had better maintain discipline, so we stayed in the formation. After all, a modicum of exemplary behavior was expected of someone going to Lead-Crew school. It was time we started practicing restraint and moderation, because we didn't have much experience with those virtues.

The carrier didn't shoot at the formation, which rather surprised us. Actually, we didn't see any activity on or around it at all, so maybe it was beached and abandoned. But it was a long way below us, so we really couldn't tell.

The formation went on, flying at 16,000 feet, turned at the I.P., and started on the bomb run--without seeing any flak or any fighters. There were a lot of clouds, but there were holes in them, and we assumed that the lead crew was bombing visually.

Bomb bay doors open. Eyes on lead crew. Suddenly the lead plane hopped straight up in the air as a bomb fell out. Then every other plane jumped too, flattening everyone in his seat for a second. Second bomb, another bounce upwards. Third bomb, same thing. Never before had we felt such a surge upwards when a bomb dropped, but then never before had we unshackled two tons at once.

About a minute later the plane received a jolt--three of them: thud, thud, thud. "Oh-oh, look out," we said, "heavy flak!"

That was everyone's immediate Pavlovian reaction. But it wasn't flak. It was the bombs exploding. Three miles below and yet the concussion gave the plane a noticeable bump. Unbelievable. Good gosh, we thought, if we felt that, imagine what had happened down below. There must have been nothing left of that plant but a hole in the ground. The concussion alone surely flattened everything for some distance around. We hoped we were permitted to carry those two-tonners more often.

The bombs had been released at 1052, right on schedule. We turned and lit out across Osaka Wan and out of the Inland Sea area between Honshu and Skikoku. We hadn't seen a burst of flak or a fighter. We

suspected that the Japs had thought we were heading for Kobe, which was only a few miles beyond Akashi, and were all set to plaster us there. But this time they were fooled.

Again we had trouble with bomb bay doors. The right door in the rear bay wouldn't latch. There wasn't much we could do about it right then, except pull some extra power and wait until we were away from the coast. After about 30 minutes, we depressurized, and Doland and Charlie both removed their parachutes and climbed into the rear bomb bay. That job wasn't among their favorite pastimes, ranking only slightly ahead of doing tonsillectomies at the Lincoln Park Zoo's reptile house. So, they weren't about to dally in that less-than-charming spot; they got the door closed in short order. Meador had buddied us along until we got it fixed.

We knew we were going to run low on gas again, but we came on back without stopping at Iwo.

While Russ was getting his allotted time in the tunnel and I was sitting on the gyro, I watched Hig draw pictures of the cloud formations along our flight path--a different picture about every degree or two of latitude. Hig was a real artist. Not only were the drawings beautiful but also they were meterologically accurate. No more did I need to report weather observations to Sully; Hig's pictures would tell him more than I could have done if I had talked for an hour. As they say, a picture's worth a thousand words--or probably four or five thousand of my words.

We landed at 1744, taxied to our hardstand, cut engines, yelled out to LaChance that we hadn't scratched his airplane this time, and wearily lowered ourselves to the ground. Two minutes later, the fatigue suddenly disappeared, because Roscoe came riding up and said: "You have tomorrow off; then start packing. You leave about the 12th." That finally made it something more than a mere rumor.

We hardly needed a truck to get us back to our area--we could have floated there. An announcement that we were going to Lead-Crew school had been posted on the bulletin board. We almost felt as though we could start uncrossing our fingers. Only three more days to sweat it out--or so we imagined. Only one week from that day and we might be home. What a thought!

The training was to be at Muroc AAB in the California desert. At the moment, we wouldn't have cared if it was in Death Valley, which it almost was--all we cared about were the days at home before going there.

One of the Group's 29s (the one designated 8V) had to be returned to the States. I didn't know why and I don't think I asked. In any case, we hoped that we would get to fly it back. It seemed logical, since we needed transportation to the States anyway.

Time dragged by the next day. We were alert for more news about going home, but there wasn't any.

In the meantime, we learned--to our surprise and chagrin--that our "fearless leader" had used a radar bomb drop at Akashi. Bee had seen the bombs hit, but couldn't tell what it was they hit. Very funny--because

all that really told us was that the bombs fell downward instead of upward, and somehow I think we might have guessed that.

On the following day, we found out that our Group's bombs had landed about 3,000 feet long--that is, beyond the target. All of those beautiful big two-ton bombs. All of that effort. All of that well-executed assembly and timely arrival at the target. And probably all we did was smash the workers' jinrikshaws in the parking lot. Holy cow, if the workers couldn't get home, they probably just stayed at work and doubled the plant's production; wouldn't that have been an ironic turn of events after such high expectations for those big bombs? Actually, we may have missed the parking lot too--after all, 3,000 feet is more than half a mile.

As a matter of fact, we did miss the parking lot. An examination of the recon pictures showed that we actually had plunked those two-tonners down in the middle of the town. Maybe, for that mission, a corner drug store should be painted on the nose of each plane. If we credited Japanese civilians with a normal learning curve, when an air raid siren sounded, presumably they ran to a near-by industrial plant and huddled against a wall. Demonstrably, that was the safest place, wasn't it?

Damn, we should have gone after that carrier. See, discipline and restraint aren't always such great virtues.

I may have missed a page in our bible, but overshooting a target by half a mile surely was not what the author, Alexander P. de Seversky, had in mind as the way for us to achieve the victory he promised. We hoped that the 8th and 15th Air Forces didn't hear about this; we were embarrassed enough as it was.

In exaggerated form it illustrated the problem of bombing by radar. It was great for area bombing, like the night incendiary raids, but it simply wasn't good enough for single-installation bombing. In our experience, though, this particular miss at Akashi was not typical, because it seemed that we usually could be fairly accurate as to distance--if there was good teamwork among the bombardier, radar operator, and navigator. However, the course (left or right instead of over or under) was much more of a problem. That was mostly because of the three-degree beam width on the APQ-13's PPI (the radar scope).

On June 11 we still thought it was possible that we might depart the next day, but we hadn't heard any more. Nor had we heard anything at all about check rides and review boards; everyone seemed to have forgotten that part of the agenda, which was fine with us.

The squadron commanders flipped a coin to see which crew would take 8V home. Our C.O. lost. So, we were going as passengers on ATC (Air Transport Command). All we were waiting for were the official departure and transportation orders from Wing and an OK from Group.

June 12 came. The Big Day we'd been looking forward to. It turned out, however, to be pretty much a Little Day. Nothing happened.

That day, though, while the prospects of going home had most of our

attention, we still were quite interested in stories from the flight line that three "different" B-29s were there.

For some time we had been hearing about a new B-29 model, a modified version that was supposed to arrive from the States. Rumors were flying, as they say. You can believe that if you want to, and, if you do, there's this bridge back in Brooklyn I have for sale. Anyway, the stories varied some as to specifics. One prominent version was that the plane was modified to carry an 11-ton bomb by having one long bomb bay, instead of dual bays as our planes had. Supposedly, it had no turrets or blisters--tail guns only--which, it was said--probably with the usual rumor-inflation factor--added about 40 mph to its speed.

A member of another crew who was a real kill-joy--and perhaps the only guy in the Group who was more of a pessimist that I was--said that, in modifying the planes to carry a big bomb, the tunnel had been eliminated. If that had been true, it would have ruined the whole War for many crews.

Another story was that the principal feature of the modified plane was a new radar set with a much narrower beam width than that of our APQ-13s. Personally, I thought that made the most sense--for two reasons: First, the beam width was the principal handicap in the efforts to improve the precision of radar bombing, and, second, it seemed to me to be the technological improvement that would be most plausible to expect. Of course, that story may have been speculation arising from the quite-obvious need, rather than any real information.

Anyway, whatever the new planes were, they were to form a new group, the 509th, which was to be a fifth group in our own Wing--the 313th.

As to the three "different" 29s that had actually arrived, it was said that they looked "strange" because they didn't have turrets or blisters. They didn't exactly fit any of the earlier stories, though, for these planes had double bomb bays, just as ours did.

At the same time, we heard that General Arnold was on Tinian. There may have been a connection between his visit and the arrival of the "funny-looking" 29s. Or maybe he came over to see how crews that flew training missions at every opportunity could, nevertheless, miss a target by 3,000 feet. Some of us who had taken part wondered too.

June 13 came and there still were no orders for us. We heard that Wilson of the 40th Squadron got his orders, and that he and his co-pilot left, but that transportation hadn't been arranged for the rest of us yet.

We also heard a disquieting report about a crew on Guam. As the story was being told, that crew had 19 missions and, like us, was scheduled to go back to Lead-Crew school. Then, just before they were to leave, Bomber Command came out with a directive saying that any crew selected for the training must have no fewer than five and no more than 10 missions! That was perturbing to say the least. Certainly perturbing to that crew on Guam, which had its hopes dashed so precipitously.

That raised the awful specter that even at this late date we still might not go. If Bomber Command did that to us, the Pacific edition of "Stars and Stripes" would carry the story:

> "Five hundred Superforts bombed Tokyo yesterday, but one B-29 that took off from Tinian flew the other direction and dropped its bomb load on AAF headquarters on Guam. There was no loss, though, as the only casualties were Twentieth Air Force staff officers."

Staff officers at any headquarters were some of those generic Wheels who, to us, could be about as popular as the Supreme Court that declared the NRA unconstitutional. The remedy we advocated was to assign all staff officers to combat duty; FDR might have succeeded if he had proposed that instead of trying to pack the Court.

Nevertheless, one could understand what the Wheels had in the back of their minds, presuming that their minds were big enough to have both a front and a back. It seemed a reasonable condition, and probably some such rule would be used in the future. We had hope, though, that we would slip through before it was applied to us--since, for us, the wheels were already turning--because the Wheels had already turned.

The next day the emotional roller-coaster went from that dip to a new peak when we heard the latest "hot" rumor: Alger got his orders, and we were on them! Someone couldn't wait to tell us, before we ever saw the orders, that they definitely said we were to leave "by the first available aircraft on or about 12 June." Now, since it was already the 13th, if Group would only turn us loose, we'd hop in a plane and head down the yellow brick road. We were told that there were six C-46s down at the line that same day. That only made us more edgy: The transportation was available--let's get going!

Of course, it was not the time in California that was going to suffer; training would start on July 1 regardless, so each day of delay was a day cut off the time we might be home. Damn!

For the poor souls who weren't going home, there had been a mission scheduled and postponed. Now it was postponed another 24 hours. The target supposedly was Yawata, so nobody really was eager to go. If the scuttlebut we heard had any truth to it, planning this mission provided an ironic twist to the whole B-29 experience, because this time the Brains were waiting for bad weather so that the planes could bomb by radar. Everybody wanted an undercast at Yawata. Ever since the losses near Yawata on the first mining mission, March 27-28, combat crews in our Group dreaded going there, probably second only to Tokyo.

On June 15 we finally were told to pack up and turn in "excess" equipment: .45s, mosquito netting, mess kits, gas masks, Eddie Rickenbacker picture frames, etc. First, we had to dig in the lump of mildew under our cots to find a bag to pack in. Then we had to decide what to take; we couldn't take everything, and we didn't know what to leave. There seemed a good possibility that anything we left behind we would never see again. For one thing, it might be only a worthless residue of mildew by the time we returned. If not that, it might get

thrown out, accidentally or on purpose. Who was going to guard our stuff while we were gone? No one. Not that it would be swept out--that someone would clean the quonset was about the least likely development. Also, although we didn't speak much of it, it was conceivable--unlikely but conceivable--that, for one reason or another, we might not come back.

Another day. Still waiting for transportation. Russ, Charlie, Hig, and I played a lot of bridge to pass the time. Hig and Charlie owed Russ and me 18 cents. Yeh, 18 cents--high rollers, that's us.

On June 17, we were told that we were supposed to leave the next day. Where had we heard that before? It began to sound like a broken record, but this time it really did seem a little more definite than usual. Well, as we told anyone who would listen, "we're sittin' on ready." Five or six days we'd sat there that we might as well have spent at home. Damn again!

Each day--and now each hour--we still held our breath. Even on Monday, June 18, they kept us on pins and needles most of the day. But about four o'clock in the afternoon, despite all the little holes in our skin, we were taken down to the line.

We were going to go all the way to Hamilton Field (California) in a C-54--one of the Green Hornet planes that were transports for the 509th Group. It turned out that Russell knew the pilot--not well, but they had met some place once. Besides, the pilot was a First John, so I imagined we would get along fine. We were thankful that we were not going in an ATC plane. Even so, we would have to fly under ATC regulations: All of the Pacific air traffic was controlled by ATC. We had flown the Reamatroid out under ATC regs. No problem; let's just get going.

At last, six days after our original hoped-for departure date, we took off. There was to be a short stop on Saipan, and then we would be headed homeward.

Chapter XV

Stateside Interlude

The night flight to Kwajalein was bumpy. It felt as though all of the cumulo-nimbus clouds in the whole central Pacific were lined up in our path. It was too dark outside to see to avoid them even if there had been a way.

That C-54 had what was called bucket seats (fabric webbing held by a metal framework) along each side, with open cargo space in the middle. Russ, Hig, Charlie, and I got down on the floor to continue our long-running bridge game. Tragedy had struck: My 18-cent gain had shrunk to about a dime, so I was looking to recoup. I thought I was pretty good at the game; actually, I was terrible, as I found out later. However, we did discover a unique duty for the dummy. There were some air pockets in those thunder-heads that must have dropped the plane at least 50 feet. With each drop, all of dummy's cards were suddenly floating a foot or two up in the air. So, the dummy had the job of retrieving his cards and getting them arranged properly back on the floor.

We landed at Kwajalein in the morning, but didn't stay long, thank goodness. The plane blew a tire on landing, but Kwaj Maintenance had it changed in not much more time than it took us to eat. Just as Sams had found out six months earlier, Kwaj Maintenance knew whose side they were on.

We reached Johnston Island a little after dark. We had crossed the Date Line, so it was June 18 again. By the time we had eaten, the plane had been refueled, so we were ready to go on. I think every engine backfired when the throttles were advanced for mag check, but they worked perfectly on take-off; I was told that that was characteristic of PW engines.

We landed at Hickam at 0300; it was just then June 19 again after jumping back to the 18th there for a few hours. We were to stay there in Hawaii 24 hours so that the pilots could get some sleep. They didn't need it, of course; the long over-water flights had provided plenty of time for napping. But it wouldn't look good, now would it, if the pilots said they were well-rested. If Congress heard that, they might take away our flight pay.

We had to wait for Customs, so we went in to eat, but it turned into a milk-drinking spree since we were so glad to see milk again. It was powdered, but it tasted good to us. If there was a contest, though, Russell won it easily, earning the Glutton-of-the-Month Award. We took our bags through Customs, which was an onerous task, and then went over to hit the sack--with a real mattress! And hot water in the showers!

At Hamilton, we were given a priority to fly a commercial airline home and back to California. I think it was the lowest priority, but it was something; some of us might not have made it home otherwise. Well, everyone would have made it home someway--you can bet the farm on that--but some might not have made it back to California on time.

We reconvened at Muroc AAB on June 30. It might seem surprising, considering the magnitude of the temptations, but everyone on our crew showed up. Actually, the problem wasn't the size of the temptations because they were rather slender--and shapely.

At Muroc, the officer in charge of introductory processing for the trainee crews was no dummy--he knew what we were thinking: that maybe someway we could avoid being sent back to combat. So he began by declaring emphatically that there would be no way out: "Make no mistake about it, we are going to send you back to your combat units. No matter how poor or how well you do here, you're going back over there. If you go AWOL, we'll catch you and send you back over there for trial. If you are sick, we'll send you back over there for treatment. And if you die, we'll ship your body back over there."

If I had had the courage, I would have stood up and said, "Could you be a little more specific?"

The shy combat veteran who didn't want to talk about his experiences was, as far as we knew, a fictional character (played by Gary Cooper, no doubt). We were glad to have an opportunity to tell anyone how the outcome of the Pacific War was determined when we out-fought and, of course, out-witted the Red Baron. Conveniently, we neglected to mention that our Red Baron was an inept corporal who lived at Sada Misaki Point.

Sometimes, though, there was serious talk of the War. One time I heard a civilian ask Russ if he had been scared in combat:

"Scared?" Russ repeated in an incredulous tone. "Oh, hell no," he said, and after a pause, "Petrified, yes, but never anything as minor as scared."

That summed it up quite well.

The training was almost wholly about radar-bombing techniques. The planes had APQ-23 radar sets, which were more sensitive to finer tuning. Adjusting the "gain" and other controls on the set to get better definition of small reflections (targets) was one part. A new procedure for navigator-bombardier communications was another part. The navigator still had to advise the pilot on the course. But for distance, the navigator used the radar scope to determine range, or angle, which the bombardier could use to adjust the bomb sight much as though he himself were tracking the target. The sight itself, coupled with the intervalometer, triggered the actual release, just as it would have done for a visual drop.

When we turned on a bomb run, Hudson and Charlie and I went to work as a team. Hudson manipulated the picture so that I could determine what was called "slant range" to the target. I read the figures--a series of

them--and Charlie cranked them into the bomb sight, something like this: "Coming up on 45 degrees .... wait .... not yet .... turn left two degrees .... get ready .... ready .... Mark. . . . . Coming up next .... " Etc.

The training Wheels had decided it might not be good public relations to drop bombs on American cities, so our practice bomb runs were recorded on film. We camera-bombed various targets around San Francisco and Los Angeles and even as far away as Seattle. At other times, we bombed the hell out of the surrounding desert. When we finished, it was flat as a pancake. Of course, the desert was flat to begin with, but who's to say it wasn't our superbly-aimed bombs that kept it that way?

The procedure required harmony among the bombardier, navigator, and radar operator nearly as good as that of Patty, Maxene, and LaVerne, but it could be fairly effective, considering that it was radar bombing. I thought we got quite good at it. That's what we needed for what I had in mind--dropping those alligator eggs in the Emperor's moat.

The planes we flew at Muroc had engines with fuel injection. Russ, of course, had to see just what they would do. He found out: The first time he shoved the throttles all the way forward, it almost toppled everyone over backwards.

Even fuel injection wasn't enough to keep up with a phantasmagoric specter having no visible means of support. One day we were flying along behaving ourselves (for a change), minding our own business (for a change), and not accomplishing anything (well, everything couldn't be different) when some unidentified flying object came up alongside and then spurted on ahead.

More than a bit startled, Hig said, "What was <u>that</u>?"

"What was what?" Russ asked.

"That . . . ah . . . thing . . . that thing that went by us."

"You mean that thing that looked like a small airplane?" asked Russ.

"Yeh, that thing."

"You mean that thing that obviously wasn't an airplane because it didn't have any propeller?"

"Yes."

"I didn't see it."

"Ah, com'on," said Hig, "whataya doing, bucking for a Section 8?"

"<u>You're</u> the one who'll get the Section 8 if we go back to the base and you tell them that some airplane that had lost its propeller was going faster than we were."

"Hmm," replied Hig, mulling it over. "Come to think of it, I didn't see it either."

"And," added Russ, "you'd better not tell anyone what it was you didn't see."

It was our first encounter with a jet fighter. At the other end of Muroc Dry Lake from our base was an AAF flight test facility. Test pilots there were flying the forerunner of the F-80. It was so early in the development of jets that one of them could carry enough fuel to stay aloft only about 30 minutes at a time.

Even more nerve-wracking were our encounters with P-51s being flown around Muroc by pilots who had returned from combat in Europe. Their idea of a jolly good joke, old chap, was to turn upside down and then come screaming at us head-on--at a closing speed around 600 mph--and veer off only after we thought it was too late to avoid a collision. All good fun, I guess, seeing as how they always missed us by a good two or three feet! Still, I could imagine a news release by the Public Relations Office:

> "AAF officials confirmed that there were no survivors of yesterday's crash of a B-29 in the Mojave Desert and said that the cause of the crash has not been determined. Authorities admitted to being puzzled by the autopsies, which indicated that all eleven crew members died of heart attacks a few minutes before the big plane dug a 4,000-foot-long furrow in the desert floor."

At the end of the month, we had a few days off, which most of us used to visit Los Angeles and Hollywood. At the Hollywood Palladium, when Wee Bonnie Baker sang "Oh, Johnny, oh, Johnny . . . (how you can love)," Gleach and I thought she was saying, "Oh, Donny." Fantasies are great stuff--while they last; we should have more of them.

Then we had to start back. We were sent to Hamilton Field by train. It took no time at all for us to revive the Stateside habit of complaining long and loud about inconveniences that, on Tinian, we thought we would be glad to endure if we could only get back to the States, starting when the train was six hours late leaving Muroc. Such a slow, dirty, inconvenient train I never had seen. If that train had been on the Chattanooga run, Tex, Marion, and the Modernaires would have had to find themselves a different song.

We arrived at Hamilton late in the day on Aug. 5 and were put on the waiting list for an ATC flight westward.

The next day, as we were walking into the mess hall, we passed a newspaper rack. I dropped behind in order to buy a paper--because the banner head had caught my attention. That's what banner heads are for (a bit of Journalism 101 thrown in here at no extra charge). I wanted to see what that story was--something about Japan and an atom bomb, whatever that was.

I remember catching up with the other guys at a table in the crowded mess hall, putting the newspaper down, and saying, "Hey, look at this

story." Each one said the same thing: "The 509th! So that's what they've been up to."

We spent that night in San Francisco. It was a disappointment (in my opinion). On the following day, we were told to be ready to leave that night.

After a night flight in a C-54, we arrived at Hickam Field, where we were assigned bunks in a big dormitory-type room. Some time later, a fellow from one of the other returning crews woke us to tell us that Russia had declared war on Japan. We thought that was great news. Our reasoning was pure simplicity: Anything that gave hope of shortening the War was good news. Geopolitical sophisticates we were not.

The following night--at 0200--we were roused out of bed and told to hurry and get dressed and ready for immediate departure. So we hurried--and then waited, of course. After about four hours, we got going. The plane stayed at Johnston Island only an hour.

Again, we lost a day on the way to Kwajalein. During our wait there, after eating--which, of course, took precedence--Jeff and I went over to Operations and listened to the news on the radio. We heard about the bomb dropped on Nagasaki. We told each other, misapplying Robert Michels' proposition, that the "Iron Law of Irony" surely would dictate that we would have to wait until we got to Saipan to hear of the War ending.

We landed at Saipan at 15 minutes after midnight (Aug. 11, barely). Every plane had to be sprayed before any doors were opened: Island Command didn't want any insects brought in accidentally. So our plane stopped on an outer taxi-way without anyone getting out. After a short wait, the door was opened. An officer came in, the expected aerosol can in hand. However, he paused and said, "We're very jubilant here tonight. In case you haven't heard, Japan has offered to surrender!"

Amid the cheers, Jeff and I looked at each other: Yep, that's why the Law of Irony is an Iron Law. But Jeff and I had been joking. None of us yet understood much about that thing the news services called an atom bomb. Its use had been good news, but we didn't REALLY expect the end to come so suddenly. We had merely been expressing our conviction that the perversity of fate would ensure our return to the Marianas.

We were told that a combat mission getting ready to leave Saipan at 0400 was already cancelled. It all sounded so hopeful.

If there had been a telegraph office nearby, we would have sent a wire to Tokyo: "Crew 3909 accepts your offer!"

But the Big Wigs in Washington, apparently not knowing that some of us had already accepted, wanted to fuss a while over details. Or, to coin an old saying, don't count your chickens if your arithmetic is no good.

We were put up for the night--that is, the half of the night that remained--in what passed for transient crew quarters. We got up at 0630. The other guys went immediately to Operations and got on the 7 o'clock

plane. I couldn't see any reason for hurrying, so I went to breakfast, missing that flight.

When I reached Operations, there was a whole crowd waiting to go to Tinian, so the Operations people said they were going to put on a couple of special flights for us. I got my name on the list for the first one, but it wasn't scheduled to leave until 10 o'clock. Again, hurry up and wait. We didn't take off until 1350--and then landed way down at the Navy strip at 1400. I had to call the Sixth Bomb Group to send some transportation for me. I hinted that a staff car would be just fine, although I really expected only a jeep. A truck came.

It wasn't any great welcome-back reception our crew got in our old Group. To begin with, they didn't even have a place for all of us to sleep. Four of us crowded into our old quonset. Charlie and I slept on the cots of two fellows who were at Iwo, and Russ and Hig put up temporary cots, blocking an aisle.

We couldn't help but speculate--longingly but quite uselessly--what might have happened if we could have stayed in the States just a few more days. Was it possible we might not have had to come back? Realistically, probably not; the Big Wheels probably would have assigned us to go apologize to Anatahan, Guguan, Maug, et al, for using them for target practice. Can you imagine an Anatahanian emerging from his shelter and saying, "Oh, that's all right, fellows; we didn't mind"? Sure you can.

Of course we were overjoyed about the War ending. But how come we had made that long trip back here to the Marianas? Was this the way Doug Corrigan felt when he stepped out of his plane in Ireland?

Chapter XVI

A Slow Ending--or Here Today, Still Here Tomorrow

Getting back didn't seem "right" at all. Of course, there were fellows we were glad to see again, although a few of the crews, including Sams, were gone for good--already rotated to the States. So, partly, it didn't feel like home because there were so many strangers around. "Replacements" had flooded in. In most instances, they didn't actually replace anyone; they constituted additional manpower.

And our Group area! It was no longer crude and primitive. It was pure luxury compared with the conditions we had endured some months earlier--but not so luxurious that we were tempted to volunteer to stay. No one else was eager to stay there either. Every day, almost the only topic of conversation was whether or not the War was actually ending.

It may be difficult to understand how there could have been so much uncertainty about such a fundamental matter: Was the War over or wasn't it? For us, of course, life itself might depend on the answer. So, no doubt, the uncertainty was felt more acutely by us in that circumstance. Others could hardly remember later that there had been a period of uncertainty, but it monopolized our thoughts at the time.

Japan had offered to surrender, and Crew 3909 had already accepted--so what was the delay about anyway?

Sams and his crew had completed the required number of missions. He had an opportunity to get back to the States in a hurry with the program to return so-called "war weary" planes, and he took it. We were happy for him--but sorry for us; his absence certainly took a lot of the fun out of fighting the War--and fighting the War didn't have any tremendous amount of fun in it in the first place.

One of the few bits of good news there in our Group was that Andy had been awarded the Silver Star. We also were told about the 509th Group dropping the two atomic bombs, which we already had surmised. The bombs had been checked and loaded onto the planes over at the northwest corner of our field.

Everybody was happy about the Japanese offer to surrender. At the moment, our favorite song from back in the States was "I'll be seeing you . . . (in all the old familiar places)." The radio played it over and over, alternating Bing's and Frank's recordings.

Then the news came that opinion polls back in the States showed that a majority of the feather-merchants didn't want to accept the Japanese surrender offer. That was as stunning as a slap in the face. It touched off a round of quite bitter words: "If those profiteering war workers

don't want the War to end, send them out here and let us go home and make those high wages and live with all those Stateside conveniences."

Conveniences? Yeh, like telephones and toasters and Victrolas and Frigidaires and cream-top milk delivered to your door and hot water faucets and street cars and barber shops and indoor plumbing and beds with springs and mattresses. And corn-on-the-cob from your own garden. And a garage for the family Hupmobile. And "bank night" at the movies or a pool hall with Falstaff on tap. Mostly, though, what we really had in mind was the "convenience" of going to work in the morning with a reasonable assurance of still being alive at the end of the day.

The next day we were assigned a plane: 41V. Joslin had been flying the Reamatroid while we were gone, and he was to keep it. It was close to being "war weary" by then anyway, and 41V was a new plane. We intended to name it "Thermathrockle."

A combat mission had been scheduled for that day, Aug. 12, but it was called off: This was truly THE END, wasn't it?

We hoped so--oh, how we hoped. But we weren't real confident. We were still afraid it was too good to be true. We wouldn't believe that it really was all over until there was a sign on the door to Ordnance headquarters: "Closed. Gone home. Submit your bomb orders for the next war directly to the Rock Island Arsenal."

We listened to the radio every hour on the hour all day, but there was nothing new. However, there were local rumors aplenty. Group received a TWX directing it to put a baggage rack and a bomb bay tank in 12 planes of each squadron, but then that order was rescinded and, instead, racks were to be readied to be installed on a moment's notice.

If one wondered what that was all about, all he had to do was tune his antenna to the rumor frequency: First we heard that we were going to ferry occupying troops up to the Empire. Then somebody said that the primary reason was to bring American prisoners out of Japan. Any idiot could figure out that both could be true. So I asked one of them to explain it to me. But the cancellation, or modification, of the order sounded ominous--were the Big Wheels, who ought to know something of what was going on, becoming less certain of the War ending?

However, we also heard a rumor that high-ranking U.S. officials were already on a battleship on their way to Japan. That was rumor; the official news was that, to accept Japan's "offer," our Government only wanted assurance that the offer was unconditional--and that that was the only reason for the hesitation in Washington.

We were happy about that, taking it to mean that our Government was not listening to the feather merchants who had been polled--and whom we quite bitterly castigated as 4-Fs and money-hungry deferred "essential" war workers. But the inveterate pessimists among us, like me, were still afraid that something would yet go wrong.

That night I went over to the 58th Wing and located Jim Shirk, the high school buddy I had been thinking about ever since we first knew that

the 58th Wing was coming to Tinian. Reaching his squadron area, I could hear him before I could see him--singing the same song he always was singing in high school: "I Don't Want To Set the World on Fire . . . (I just want to start a flame in your heart)." I mentioned to him later that, for a guy who didn't want to set the world on fire, he surely got himself in the wrong part of the Army. He said that the 20th AF didn't object once they discovered that he was always off key. One of the cooks in his squadron, seeing our reunion, provided us with a drink to celebrate; we really didn't care for more pineapple juice, but it was the thought that counted, wasn't it?

The next day Washington said that no answer had been received from the Japanese government: Was their offer unconditional or wasn't it? President Truman gave them 24 hours to decide.

Right after that, the radio carried a report that the Japs had sunk an American naval vessel. That was soon clarified--the American ship wasn't sunk, only damaged. But "only damaged" was enough--fighting continued. Maybe it all was a sham after all. Maybe it was a stalling tactic by the Japs designed to give them a respite--some time to recuperate. Maybe it was a trial balloon to see if the U.S. would negotiate. Maybe they would hedge on that "unconditional" business and maybe our Government wouldn't have it any other way--and the War would continue. A true pessimist can always find reasons to justify his fears.

Get the Suribachi detail of Marines ready; they may yet have to raise the flag on Fujiyama. Our high hopes didn't evaporate, but they did shrink--to low hopes, you might say.

Well, in that case, our Bomber Command wasn't through fighting yet either: A mission was ordered for that night. It was to be a formation attack the next day on some railroad marshaling yards. Our crew was to fly #4 in C flight at first, but that was changed to the lead of C flight. Colonel Osborn was going to ride with us. And also 27 500-pound bombs. Of course, the bombs were going to ride only one way. Colonel Osborn, presumably, would stay with us for the whole trip--if he didn't observe our performance too closely.

The target was the Marifu railroad complex near Iwakuni, which was on the west side of Hiroshima Bay.

We thought that the target selection itself was a hopeful sign. It looked to us like a token raid, designed, we thought, to demonstrate to the Japs that they couldn't expect a respite from the bombing campaign by stalling--but, at the same time, to inflict damage that wouldn't be so critical that it would disrupt the Jap cogitation--or whatever it was they were doing.

And whatever it was they were doing, we wished they'd hurry: C'mon, you Nips, flip a yen and decide something.

One of the brighter sky jockeys--a pilot from "Joisey"--remarked that it was no wonder "dem guys was havin' trouble" reaching a decision--seeing as how they were discussing it in a very difficult

language. I wondered what he thought when he discovered that the Japs weren't using English.

The mission was tentative from the start, and, during target study, Captain Mattison said that the final word would come down at midnight when the full briefing was to start.

"To go or not to go, that is The Question"--to paraphrase some old bloke from the European theater.

With the usual propensity to overstate everything, we called the wait "the biggest sweat job of the War." We desperately wanted the mission to be cancelled. The concern was real--the same fear haunted everyone: After surviving 20 or so combat missions, on this one, the whole formation draws only one burst of flak, but it happens to hit your plane; and, as you and your plane plummet earthward at 600 mph, your radio picks up a news bulletin saying that Washington and Tokyo have agreed to an immediate cease-fire. Being the last battle casualty of World War II was an honor no one coveted.

Even though briefing was at midnight, everyone assuredly was wide awake--alert for any announcement, even a hint, that the mission was a bluff or a feint and that we wouldn't face flak and fighters ever again. No such luck. It certainly sounded as though the mission was going to go.

The Wheels didn't have a time schedule, so they kept us in the briefing hall until they got one. And then take-offs weren't to start until 0530, so they told us to go back to the sack for a while. Most of us stayed up and listened to WXLD, the station on Saipan. The disk jockey was playing "Maria Elena . . . (you're the answer to a prayer)." Even so, we hoped he would interrupt Bob Eberly's singing because a news bulletin might be an answer to our prayer.

The Japs had broadcast that they hadn't recieved the American note on time, accounting for the delay, but when they decided on a reply, they would broadcast it immediately to short-cut the time it would take to go through diplomatic channels. That raised our hopes again.

But hope is hope, not certainty; we still were going on the mission. A cancellation call was arranged. If the mission was called off while we were en route, the word "Utah" would be transmitted over the radio. Then we were to turn around and come back. All radio operators were cautioned against taking their head sets off even for a couple of seconds "unless absolutely necessary." Jeff could forget that "unless absolutely necessary" stuff because we intended to run a relief tube extension over to his chair.

We got off in our new plane at 0533 (Aug. 14) and turned north. As soon as the gear and flaps were up, we made sure Jeff had the trailing wire antenna out full length. There was no Utah message--yet--but, before we gained some altitude, Jeff thought maybe he had hooked a marlin.

We flew through quite a bit of bad weather; still no Utah. We reached Iwo and headed northwest; still no Utah.

For most of the trip, Colonel Osborn had been sitting on the door above the nose wheel well with his back leaning against the forward turret. North of Iwo somewhere the gunners would, as usual, fire a few bursts to test their guns. But Russ, who had been turning once in a while and stealing a glance at Osborn, called Heuer on intercom and told him to hold up the test firing. Still no Utah. Finally, the book the colonel had been reading slipped from his grasp, his eyes closed, and his chin rested on his chest. Russ waited a few minutes more and then, speaking softly, called Heuer: "Okay, test your guns, and be sure to fire those in the forward turret first."

Blam, blam, blam, blam, clatter, clatter, clatter.

And an amazing thing happened. Rather, an amazing thing didn't happen. Colonel Osborn didn't bat an eye or move a muscle. Talk about being as cool as a cucumber; this man was like Sam McGee at his cremation. Some people have ice water in their veins; this guy must have had Freon.

There are those best-laid plans going gangly glee again. Not getting a reaction from Osborn spoiled the whole day for Russ.

Still no Utah.

We reached our assembly point between Shikoku and Kyushu. Still no Utah. The Group gathered into formation just as briefed--for a wonder. Still no Utah.

The formation was heading for Sada Misaki Point. We looked forward with pleasure to a reunion, as it had been more than two months since we had jousted with the denizen of Sada Misaki. Someone--Bee, I think it was--kept us posted on the latest information in our continuing saga with the corporal. It seemed that, during our absence, he had been busted to private for not properly conserving the war materiel allotted to him: He had used up all of the corks for his pop gun. To make matters worse, he also had lost his disemboweling sword.

Still no Utah.

Going on to the north, there were a few scattered clouds but generally near-perfect weather for an afternoon excursion to watch the trains come and go--but you'd have to look quickly if you wanted to see them while they were still on the tracks. Still no Utah.

I had turned my junction box to VHF, as I sometimes did when we weren't bombing by radar. There was some rather faint chatter, garbled by the static, when, suddenly, a loud clear voice announced to the world: "This raid comes to you through the courtesy of `the See-gar': Iron-Ass LeMay."

I looked up front in time to hear Russ say with admiration, "I wish I'd thought of that." But someone was risking a court-martial because, as we understood it, General LeMay liked to think in terms of steel, not iron.

We reached the I.P. Still no Utah. The railroad way down there looked smaller even than HO gauge. Without meeting any opposition, we dropped our bombs at 1258--and still no Utah, although now it really didn't matter.

As soon as we left the target, I tore off my flak suit and parachute and stumbled and tripped over to the other side of the plane to look at Hiroshima. But we couldn't see Hiroshima--which was impressive, because we could see where it had been. There was no city there any more. The several channels forming the river delta stood out in bold relief. There used to be trees and foliage so that the river was obscured to any overhead observer as it flowed through the center of the city. Now it looked like the delta of the Nile--in the desert. I couldn't see well enough to tell how far out from the flattened center the destruction extended.

The planes skirted Hiroshima and Kure, recrossed the Inland Sea, went over the narrow waist of central Shikoku, and out again over the Pacific. There the formation broke up, and we headed home individually.

About half-way home, somewhere in the vicinity of Iwo, we heard over the radio that Japan had accepted the American terms. This must be our last mission! Even Hig removed his flak helmet for the rest of the flight home. And, in a bit of absent-minded compassion, the crew agreed, by a majority vote, to remove the padlock that had fastened Jeff to his table.

Just think of the uncertainty, plus a combat mission, that could have been avoided if only Crew 3909 had sent that telegram from Saipan three days earlier.

Gee, we were never going to see the private nee corporal of Sada Misaki again. Maybe for him the War was ending just in time; if he had screwed up one more time, he might have been busted to a civilian. Oh, final ignominy! We thought maybe we should try to get him some Lend-Lease aid--maybe a sharp sword at least. That showed how good we felt about everything--even Japs--because a few months earlier we would have offered him only a rusty sword.

Several hundred happy B-29s converged on Tinian and Saipan. Long gone were the days when, one by one, you counted the battered planes returning from a mission. Now there were swarms and swarms of B-29s. If we hadn't shot, bombed, and mined the Japs into submission, I think we would have suffocated them by cutting off the sunlight.

It was dark as we reached the Marianas. Getting back on the ground at night had been a nerve-wracking experience even when there were only one-fourth as many planes. While we were in the States, an elaborate procedure, including an instrument let-down, had been instituted to get all of the planes down safely. At 30 miles west of Anatahan we called "Room Service," which was the radio designation for traffic control, then proceeded on into the pattern.

Boy, was the air ever crowded. Landing lights were everywhere. We practically flew night formation right onto the runway. It was reminiscent of the return at night from our first Empire mission, except

that there were many more planes now. To deal with it, landing procedures now were considerably more complex. The tower was doing a good job, though--very few planes had to "go 'round," even though they were landing dangerously close to each other. We didn't hear of any accidents.

In war movies--usually of airfields in England--planes straggled in several minutes apart; never did the movies show 20 planes trying to turn onto the final approach at the same time. But we realized that movies were not true to life--in fact, I myself knew several air crew members who did not look like Robert Taylor. On the other hand, all of the Army nurses I knew did look like Lana Turner. Of course, I didn't actually know any Army nurses. However, I did know some medical orderlies, but they didn't look like Lana Turner at all; as a matter of fact, most of them resembled William Bendix.

We landed about 2000. We were soaked through with sweat. We got interrogation over with as quickly as possible--it seemed a useless formality now anyway--ate, and got back to the quonset. We were in a hurry to start packing for the trip home. It turned out, of course, that we had lots and lots of time to do our packing.

By 9 o'clock in the morning, Aug. 15, it was official. The Japs had agreed, and the War was over. It then was just a matter of signing. Bomb bay tanks and luggage racks were being readied again.

During the day, a new notice written in large red print was posted on the bulletin board. It looked like this:

Capt Russell
Lt Higgins
Lt Kearney
Lt Hall

Report to
Sgt Steele
Group S-1
15 Aug 45

Re: Transfer 8th AF

What a revolting development that would have been--just as we were preparing for the Crew 3909 ticker-tape parade down Broadway, which we felt sure Fiorello would insist on when we got back to the States.

Anyway, it was a good try. If we hadn't known the clowns in our Squadron so well, we might have taken it seriously, at least for a short

time. But we were well acquainted with practical jokes. If they had REALLY wanted us to see Sgt. Steele, they would have put up a sign saying: "Crew 3909 is forbidden to go near Sgt. Steele's office."

As the first step in concluding armistice terms, the Japs were supposed to send a delegation to OKinawa--and, if some of the stories were correct, on to Manila--to make arrangements for more formal surrender ceremonies.

A day and a half passed. We waited--but not patiently. The most important word-of-mouth news was that the Jap peace delegation hadn't shown up. We could imagine the Emperor pointing to the premier and saying "You go," whereupon the premier shakes his head and says, "No, you go."

Nevertheless, again we fretted: Maybe it was just a play for time after all. The most disturbing news, especially to us, was that American planes were still being attacked up there over Japan. We were much concerned about how long it would take a cease-fire order to reach Jap fighter squadrons and AA batteries spread over all of the islands. Too bad the Japanese weren't better at making radios.

There were many rumors about going home, everything from one extreme to the other. If you didn't like what you were hearing, just wait a few minutes and you'd hear a different story. "Squeaky" (our interim C.O.) said it was his personal opinion that all of the old crews of the Group would go home within a month. Most estimates were less optimistic, usually around 120 days. But, according to some stories, there was more than that to contemplate. We heard that the Sixth Group would be used either as part of the occupation force in Japan or to carry supplies to POWs or to carry POWs out of Japan, one or the other or all three. At any rate, we were warned to expect to be busy for several months.

That gave us some mixed feelings. Although, naturally, our first thoughts had to do with getting ourselves home--pronto--we felt some sort of special loyalty to American POWs. It was a case of, "There but for the grace of God . . . ."

The Wheels had a plan aimed at getting military personnel returned to the States in an equitable manner by giving priority to those with the greatest number of points, with points being assigned for such things as time in the Army, time overseas, campaigns participated in, etc. The PX quickly ran out of abacuses.

How many points did it take to get a priority for return to the States? If you had to ask, you didn't have enough.

On Aug. 18, two crews of each squadron--Lemme and us in the 39th--were alerted for a special mission the next day. We guessed that we would fly supplies up to some point in Japan--but how they would be delivered when we got there, we didn't know. Nor was it very clear who was to get the supplies--Americans going in to rescue our POWs maybe.

We hoped no one had in mind having us land at a Jap airfield. We could land at Okinawa, and we speculated some about going on over to

Russian territory to land. But that talk didn't get far because no one could suggest how that would help to deliver supplies.

Later, the affair was called off; we didn't know if it was cancelled or only postponed, and we still didn't know what the purpose had been.

We then heard that Jap envoys "definitely" were to leave for Manila the next day. However, we had found that, in this confused period of uncertainty, "definitely" had come to mean "maybe," while "maybe" meant "your guess is as good as mine."

The next day we heard that, yes, the Jap armistice delegation actually was on its way. It stopped on the island of Ie Shima (a suburb of OKinawa), and, supposedly, arrived in Manila that evening.

At the same time, we heard that "a bunch" of B-29s from Guam had flown to Manchuria the previous day. What for, we didn't know. (1)

(1) See Global Twentieth, p. 350 ff., which tells about one, not "a bunch."

During this time, there really was hardly anything for us to do--except help spread rumors and sit around being nervous. We started experiencing what became the chief characteristic of the rest of our stay on Tinian: boredom.

There was a limit to how much reading a guy could do to avoid boredom. Besides, Special Services didn't have enough books and magazines to go around. When I asked for a book to read, they had only one--a self-instruction pamphlet for which there had been absolutely no demand; it was titled "How To Repack Your Parachute So It Will Work Next Time."

Each group had its own theater--an outdoor theater, of course. A different movie was shown each night. Many fellows, for some relief from the monotony, went every night--even if it rained the whole time. The Sixth Group's theater was to the west, down toward the ocean, in the area where Jap stragglers roamed when we first arrived on Tinian.

Our quarters actually were closer to the Ninth Group's theater. On the porch we had built on the north end of our quonset, we could see, and just almost hear, the Ninth Group movies--except that we were looking at the screen at about a 60-degree angle, making Mickey Rooney appear six feet tall. It didn't matter--Judy appeared to be six feet tall too.

After every Ninth Group movie, night after night after night, when the bright lights came on, the volume on the speaker was turned up, and the operator played Les Brown's recording of "Sentimental Journey" with Doris Day singing. It seemed appropriate for us, waiting to get back to the States: "Gonna take a sentimental journey. Gonna set my heart at ease. Gonna take a sentimental journey to renew old mem-o-ries. . . ."

Two weeks went by waiting for something to happen. On Aug. 30, the Group was assigned to fly a mission billed as "support" for the occupation. Two or three days earlier American forces had started the actual occupation of important locations in and around Tokyo. We weren't

going to carry any bombs, of course, but we would have .50-caliber ammunition. The Wheels apparently felt the same way we did--it wasn't time yet to risk flying around Japan without ammunition.

We flew to the Tokyo area and circled around there for nearly three hours. Our first point of interest was Tokyo Bay. We just wanted to be sure: And there they were--American warships in Tokyo Bay. Man, that looked good.

Atsugi Airfield south of Tokyo and west of Yokohama had been designated as the landing point for American forces arriving by air. From high above, we could see a steady stream of C-54s landing and taking off there. The whole area looked very busy. Numerous small craft were ferrying troops from the warships to the western shore of Tokyo Bay.

Naturally, we wanted to see Tokyo and the results of our handiwork, as we thought of it. We flew right over the center of the city. Imagine flying over Tokyo voluntarily! We were nearly two miles high, so we didn't get a close look, but it appeared to us to be thoroughly demolished--except for the green patch around the Emperor's palace. We figured we had done just as good a job as Mrs. O'Leary's cow could have done. We suspected that the scene was similar to what Scarlet saw looking at Atlanta after Sherman moved on.

Upon returning, we reported to Operations: "Everything's under control up there, so you won't be needing us any more. We'll be ready to depart for the States the first thing in the morning." Operations thanked us for our assessment of General MacArthur's progress in getting the occupation under way, but suggested that we stick around until we had a little thing called formal orders.

"Oh, that's all right," we said, "we aren't much for formalities. We'll go on, and when you get the orders ready, you can mail them to us. Here are our eleven home addresses."

"Thank you for the list," the Operations officer said. "Now we'll know the next of kin to notify of the court-martial sentences."

Operations bungled that opportunity to rid itself of a nuisance, so we were still around three days later when we had a chance for a better look at Tokyo. Sept. 2 had been designated V-J Day. It seemed that all of the aircraft north of Henderson Field were going to fly over Tokyo Bay as a "display of power" before, during, and after the formal surrender ceremony.

The first announcement had been that the ceremony would take place on the battleship Iowa, because the Navy called its most powerful battleships "the Iowa class." However, a sister ship, the Missouri, was chosen instead in deference to the President. I resented the fact that Iowa sort of got cheated out of its place in history.

We flew to our rendevous point north of Tokyo, where we were to meet the other planes of our squadron, but we were a half-hour early, so we dropped down to the deck and embarked on our own sight-seeing excursion.

We flew along the water's edge at an altitude of no more than 50 feet. Jap fishermen were deploying large nets. Some of them let go forthwith and scurried for cover. Others, although they stopped work, just stood and gawked at us as we roared overhead. Truthfully, we only wanted to look--we weren't really trying to scare them. And it was a good thing, because many of them didn't scare worth a damn.

Then we turned inland, climbing to a higher altitude--maybe 90 feet--to clear the tree tops. At intervals there were clearings where several homes were clustered together. I don't know what kind of rural area we were over, but the houses were nothing more than huts with thatched roofs. When we popped into sight, chickens scattered in all directions. People came running out into the open and stared. They also seemed more curious than scared; their cousins in Tokyo must not have told them what one little incendiary would do on a grass roof. (It probably would fall through and land in a bucket of water.)

We were sort of disappointed--it seemed that the only ones properly respectful of the throbbing power of our four engines were the chickens. Those Japs would be sorry--when they found out that their hens laid only infertile eggs for several days.

At the assigned time, we found our squadron, just one of many rendevousing in the vicinity. We were to lead one of the formations at low level over the American armada in Tokyo Bay. Going south toward Tokyo, there was some low scud (clouds), so the formation had to drop to an even lower level. Suddenly, near the northern edge of Tokyo, the pilots spotted a very tall radio tower sticking up dead ahead. The abrupt action to avoid it ended all orderliness in that formation. We went over the warships looking like a platoon of Keystone Kops. If the Japanese officials on the Missouri had looked up, they might have had second thoughts: "Let's don't sign yet; there's still hope."

We had gone over the eastern part of Tokyo much lower than we had been three days earlier. It reminded one of western movies where the Indians left the settlers' cabins in ashes, with only the stone chimneys standing among the smoldering ruins. This was a much-magnified version. Except for a few brick chimneys and masonry buildings, it looked like one vast stretch of cinders. In a few places, a building with a steel framework had burned, leaving only the metal, often twisted and looking like some gigantic animal cage.

In those western movies, the Indians who set the fires were the bad guys. Maybe we needed to rethink that.

Going over the bay, we thought we could identify the battleships Iowa and Missouri--the Missouri was the one with a deckful of extra corncob pipes. Landing craft, or barges, or transports--we really wouldn't know the difference--were churning up the bay--even during the formal surrender ceremony. American flags, some oversized, were prominent. They all seemed to be headed toward the same pier, which, one would presume, was the pier nearest to the Geisha house district--nothing slow-witted about those GIs, gobs, and Gyrines; they had heard that to the victor belonged the spoils. Or goils. Same thing.

The view from the air perhaps gave a perspective ground observers didn't have. For example, just inland from the Yokohama docks was an oil storage tank farm. All of the big circular tanks were sitting there, seemingly intact. But we could see from the air that they were all gutted inside--only the shell of each tank standing.

A week later we finally were assigned a mission that we had been talking about for three weeks--to supply American POWs that the rescue teams had not yet been able to reach. That's what the bomb bay racks had been for. We would be carrying 9,000 pounds of food and medical supplies to be dropped by parachute.

I was surprised that Intelligence seemed to know the location of so many POW camps on the Japanese home islands.

We speculated, only half-facetiously, that the falling bomb bay racks--plus a few crates whose parachutes wouldn't open--would maim more POWs than the supplies would save. We really did wonder how we were going to manage the drop without conking someone on the head.

We were to find a POW camp that Intelligence said was near Sasebo, which is on Kyushu about as far west as you can get in Japan without acquiring a taste for egg foo-young.

We flew to the specified spot, then had to scout around, but in about 10 minutes found the camp. "P.O.W." had been painted in large letters on the roofs of the barracks-type buildings. I suppose that somewhere in Japan an enterprising Japanese rations officer painted the roofs in his camp--and thereby succeeded in augmenting the Japanese Army rations with some American supplies.

In order not to scatter the supplies over too wide an area, we made two passes over the camp at 500 feet, dropping half of our load each time, which is what we had been instructed to do.

The supplies in the rear bay were dropped first. Ordnance men had experience with bombs and mines but not with supply bundles, and apparently they miscalculated something. After the drop, the static lines (which had opened the parachutes) were still hanging out the bottom of the plane, even after the bomb bay doors were closed. On the end of each line was a metal buckle. As the slipstream whipped the lines about, the buckles banged against the fuselage, denting it and sometimes making a hole. Some Japs who had fired at us hadn't done that much damage.

Bee, without even campaigning for such a high office--500 feet high--got himself elected (by a vote of 10 to 1) to take a knife and climb into the rear bay and cut the lines. So he called up front with an impassioned plea: "Be SURE you don't open the bomb bay doors while I'm in there. DON'T FORGET, because I won't have a parachute on or much of anything to hang onto."

Maybe that was too much to expect of this crew--highly-trained, experienced and, oh, so compassionate. Bee was still in the rear bay when we started the second pass over the POW camp. The bomb bay doors popped

open, the wind whipped in, and Bee hung on for dear life--with, it seemed to him, the tops of the trees tickling the bottoms of his feet.

After the flight, we took a count and got eleven, so we figured he survived. I don't know how, because his heart had stopped beating for about 20 minutes, and his knuckles were still white two days later.

As far as I was concerned, there was no question about what we were going to do after the supply drop--because Nagasaki was only a short distance down the coast. On those post-war "tours," because I wanted time to look too, my navigation was much like Russ's G.D. flying--just head in the general direction.

It was that way going to Nagasaki. We simply flew along the coast until we were at the entrance to Nagasaki Bay, which was a narrow sliver of water. Then we followed the bay inland. Low clouds hung over the bay; we flew in under them so that we could see.

We were gawking at Nagasaki when we suddenly realized that we had run out of bay to follow. At the end of the bay, beyond Nagasaki, the mountains stuck up into that cloud layer we had been flying under. We had painted ourselves into a corner--flying so far up that cul-de-sac that there really wasn't room to turn around.

It was time to hit the panic button: Full power--quickly. Maximum climb rate--but keep above stalling speed. Pulling up, we disappeared into the clouds really and truly not knowing if our frantic efforts would get us over those mountain tops.

I feverishly searched my charts for the course most likely to get us through between peaks. From the elevations given on the maps, I thought, hopefully, that we actually had several hundred feet to spare, but we knew that our maps of Japan might not be reliable in that regard.

I had a vision of looking out the window to see a solid wall of rock suddenly materialize out of the clouds. I didn't like that thought, so I didn't look out the window. But I was extremely tense for a few minutes--and the guys up in the nose, probably even more so. We never told the fellows in the back of the plane--no use alarming them when there wasn't enough altitude to use a parachute anyway. Russ rationalized it this way: "What they don't know won't hurt them, especially if it kills them first."

The guys in the back weren't fooled--not when they could see three bird nests caught in the underside of the engine nacelles.

Needless to say, we made it. We would have been terribly disappointed if we hadn't. The official Army Register of Necrology would have said:

> "Experienced crew survives 20-some fearful combat missions only to splatter itself against a mountain side while on damage-assessment tour." Or maybe some scrupulously honest

registrar would have worded the announcement differently: "An experienced but stupid crew . . . ."

Undaunted, we did some more sightseeing, then headed home. We stopped at Iwo to pay our last respects to that island paradise and to pick up some fuel, then flew back to Tinian.

Back on the ground, Bee had a few ill-chosen words to express his feelings. He threatened to fight the next war on a different crew--until he realized how dull that would be.

To have seen Hiroshima and Nagasaki so soon after the A-bombs had been used turned out to be among our most unforgettable experiences--but not as memorable for me as the time an attacking fighter seemed to be aiming right at the navigator's window. For all of us, of course, the actual most memorable experiences were the several times we ran the gauntlet over Tokyo.

During the month that followed, we had an opportunity several times to talk with our buddies who had been POWs. It was an unexpected pleasure. I wouldn't have guessed that they would be permitted a stop on Tinian to visit us on their way back to the States. Truthfully, I hadn't had hope that so many had survived. Much longer, though, and they might not have. Most of them had been beaten repeatedly, nearly starved, and mistreated in other ways.

We flew to Japan once more as a crew, dropping more supplies at another POW camp and then taking an aerial tour of Osaka and environs. After that, the AAF split up Crew 3909, probably in the interests of maintaining some military discipline in the peace-time Army. Everyone by some means or other made it back to the States and, probably to the great relief of General Arnold, returned to civilian life.

There will never be another crew like that one. Japanese and Americans alike can be thankful for that.
