

CARROLL ANDERSON *

"BLACK SUNDAY"

To the best of my knowledge, no one has put down on paper in detail the true story which follows. To those fliers and crewmen who participated in this eventful flight, the day will live forever. Most disasters unfortunately live on in history, and this particular day and event must qualify for the somewhat dubious honor of this classification.

To me, what makes this story interesting is the fact that today's navigational aids have improved to the point where any pilot lost within the confines of the continental United States in an aircraft equipped with radio and the basic blind flying instruments can be brought in to a safe landing. Fifteen years ago with the finest aircraft, radios, and blind flying equipment, a pilot lost in bad weather trusted to luck and hoped his ETA would run out over his home base.

The advances made in navigational aids within the past years are amazing, and it is with these great strides in mind I write this story as a reminder to those who have forgotten what it used to be like in years gone by.

To the ground crews and pilots of the Fifth Air Force in New Guinea, Easter Sunday 1944 dawned just as dozens of other days in the months past. It was noticeably hot before the sun rose over the jungle covered Finisterre Mountain Range to the East, and long before its rays touched the arid Markham Valley crewchiefs were at work on the A-20's, B-25's, B-24's, P-40's and P-38's. The rumble of preflighted engines filled the air. The staccato bark of the Wright-powered "Mitchells" contrasted with the softer growl of the warming Allison engines of the P-38's.

The aerial campaign against the Japanese-held base of Hollandia, Dutch

*Carroll Anderson, otherwise known as Bob, is an A.A.H.S. member, and was during the War Lt. Anderson of the 433rd Fighter Squadron (P-38's) of the 475th Fighter Group. He was first assigned to a P-39 outfit, later re-assigned to the 433rd and joined them at Dododura, New Guinea in January, 1944.

New Guinea was tapering off for the pilots of the Fifth Air Force. The initial strikes had brought forth a horde of Japanese fighter aircraft. On the 30th of March, ten Japanese fighters were shot down with seven probables. On the 31st of March, the Fifth Air Force returned to Hollandia, and the Japanese lost fourteen planes and probably eight more. One P-38 was lost.

By April 3rd, the destruction of the airdromes at Hollandia was almost complete, and of the thirty fighters which climbed into the blue to attack the fighters and bombers of the Fifth, twenty-four were shot down by the P-38's. The bombers bagged two. One P-38 failed to return. Finally on the 12th of April, the Fifth returned once again and met its last aerial opposition in which eight Japanese fighters were shot down with the loss of one B-24 bomber.

From the twelfth to the fifteenth of April, the missions into Hollandia, Tadjil and Hansa Bay Areas brought forth no fighter opposition, and intelligence indicated there would be no further interception forthcoming unless the Japanese ferried aircraft into the Hollandia location from Biak Island or the Halamahera Islands. This hardly seemed likely in view of the heavy losses the Imperial Japanese Air Force had suffered both in the air and on the ground.

This story of Easter Sunday, 1944 concerns itself primarily with the pilots of the 433rd Fighter Squadron of the 475th Fighter Group and their bizarre experiences on that day. Neither the passage of time nor the introduction of new flying experience into their lives would erase the harrowing memories of the mission about to begin.

After preflighting, the "Mitchell" bombers stood silently awaiting the crews for the mission to Hollandia. Finally, the engines roared into life again, and they roared down the metal strip, lifted off, formed up, and sped down the Markham Valley on course to the target. The home base of Nadzab quickly fell behind. Somewhat later, after a thorough briefing covering all aspects of the mission, the pilots of the 433rd Fighter Squadron (Radio Call sign: "Possum.") began their takeoff runs.

As Red Leader Richard Kimball banked his P-38 into a shallow turn, he looked back and watched the rest of the squadron roll down the runway. He was followed by Jack Daly, Pierre Schoener, Bob Tomber, Joe Price, Stan Northrup, Calvin C. Wire, Louis L. Longman, Lewis Yarbrough, Austin Neely, Al Pomplun, LeRoy Ross, Howard Stiles, C. J. Rieman and a fairly new pilot, and myself.

The bombers were well on the way to the target, at ten thousand feet, when the 433rd joined them and started a fighter weave above and behind. Elsewhere in the area fighters and bombers were striking up and down the New Guinea coast in what was for the Fifth Air Force a maximum effort. More than 225 aircraft were in the air to put the finishing touches on the

Hollandia, Tadjil and Aitape campaign, fifty-eight B-24's, 46 B-25's, 118 A-20's, and the 14 P-38's of the 433rd plus F-5's and F-7's.

The "Mitchells" made a steady run over the target. The ack-ack was not especially heavy because the "Liberators" had gone into the target previous to the arrival of the B-25's and P-38's and had plastered the gun emplacements. Fires were burning in several places on the jungle floor as the "Mitchells" made a perfect bomb run.

"Bombs Away."

"Let's go home."

Carefully mothered by the P-38's, the B-25's turned and started homeward.

No fighter opposition had developed, so as the planes left Hollandia behind, Dick Kimball led the P-38's into a "rat-race" in and around the bombers. With each pass the tail gunners and waist gunners could be seen smiling and waving to the fighter pilots as they sped by. Later, external belly tanks began to run dry, and here and there a P-38 would lag momentarily as an engine stopped and windmilled until the pilot could direct new fuel into it. Then the engine would belch black smoke, sputter, take hold and pull the aircraft back into formation. The P-38's of the 433rd were beginning to run low on fuel. The innocent "rat-race" had caused excessive fuel consumption in the planes of the rear flights as each pilot had attempted to hold his position by the use of high manifold pressure and RPM's.

No one realized the complete chaos which would develop within the next hour and a half, and certainly no one was aware of how important that used fuel would become in the immediate future.

As the fighters of the 433rd, low on fuel, neared the narrow mouth of the Markham Valley, the radio began to foretell the danger which lay ahead. Lts. Wire and Ross had turned back earlier because of a malfunction in Ross' airplane, and now they could be heard talking back and forth. In addition, conversation was drifting through the air between B-24 bomber pilots.

"Let's try over here."

"No, it doesn't look too good there."

Then another somewhat nervous conversation.

"Let's head out to the coast at Bogajim and see if we can get under it. Maybe we can get into Saidor or Finschafen."

These conversations were the tipoff to trouble. The ever dangerous New Guinea weather had "socked in" the mouth of the Markham Valley sealing it as neatly as a black and white block of cement. Nowhere was there an opening through it. Lts. Ross and Wire were moving out to the northern coast, and already various planes were breaking away from their squadrons and striking out for the coast. Still other pilots were making the first calls to Gusap for directional homing.

Into this beginning of chaos steadily moved "Possum" squadron, the 433rd, and the "Mitchell" bombers. At first from a distance the appearance of the weather front did not appear too threatening; however, as they flew closer every pilot knew he was affectively sealed off from home. Fighters and bombers were flying in and out of the black stratus hunting for a passageway into the Markham Valley. The radio waves gradually filled with urgent commands.

"Close up. Keep together."

"Keep it in close. We'll try to go through together."

With that command from Kimball, I reached forward over the control yoke and uncoupled the artificial horizon and gyro compass, then checked the fuel gauges and leaned back the mixture control of each engine as much as possible. The P-38 was still using fuel from its external belly tanks, but they were very low, and I knew it. As I looked at the weather front again, it appeared even more alarming.

The front towered up into the sunshine to thirty thousand feet. It was white and silver and fascinating to see, but at the base of it where it wisped into the heavy foliage of the jungle, it was black and mean looking. It stretched from the mountains to the South, and to the North as far as we could see. Within minutes every pilot of the 433rd knew he would have to fly on instruments to reach home. Carefully, Dick Kimball led the fourteen fighters into an apparent opening in the weather. Just as carefully, he turned and gently eased the squadron back out.

The squadron was tucked in so tightly it was difficult to avoid collisions, but somehow the turns were made without the flights coming together. The precision formation flying, which "Possum" squadron had constantly practiced was paying off. Another gradual turn into the weather, and the first serious trouble developed. Flight Leader Tomberg's flight became separated from the rest of the aircraft, and wishing to avoid the possibility of mid-air collision, he made his choice and led his flight away from the possible course of the squadron. Blue Flight, consisting of Tomberg, Anderson, Schoener, and Price, was on its own.

Gradually the flight began a steadily steepening spiral to the left. Unknown to the rest of the flight, Tomberg's radio and instruments had failed.

"Hello Tomberg. This is Anderson. You are in a spiral to the left. Pick up your left wing."

No answer. As the airspeed moved up to close to three hundred miles per hour, the balance of the flight stayed in formation. Suddenly the flight swept out into the open in a deep canyon which was completely enshrouded with cloud cover. Schoener grinned wryly, waved his hand in a goodbye gesture and peeled off to try it alone. Tomberg looked back at me and my wingman, Joe Price, shrugged his shoulders and started back into the weather again.

Tomberg really had little choice. The jungle below was impassable.

In addition it very probably was enemy-occupied. His choice was either to try to fly by the seat of his pants or die in the jungle below. Obviously, we could only fly on. Price and I followed Tomberg with grim confidence in his ability as a seasoned pilot, but completely unaware of the true circumstances of his so-called instrument flying.

A few minutes later in a tight climbing turn, Joe Price's P-38 stalled out, and he spiraled away. As he did so, I began calling Tomberg.

"Hello Tommy. This is Andy. You are stalling me out. You are turning to the left and stalling me."

No answer. Just before a complete stall Tomberg's aircraft leveled nosed downward into another spiral to the left. Once again the P-38's were proving it was "Lockheed for Leadership." The airspeed built up to three hundred and seventy five miles an hour and was still going up when the green jungle flashed into view. Instinctively both pilots hauled back on the yoke. Still in tight formation, the P-38's zoomed away from the side of the mountain down which they were flying and zoomed back up into the overcast leaving dozens of stunned parrots and cockatoos in their wakes.

At this point, I stalled completely and fell away into a spiral. Carefully I brought the plane under control. Gradually I began the delicate operation of flying a fighter plane on instruments. At the very moment I stalled away, Tomberg released his canopy and bailed out. Japanese or no Japanese, jungle or no jungle, he decided it would be better to get out and walk rather than risk the presence of another cool, green mountain. As he swayed downward through the rain and fog, he could hear the steady droning of the lost aircraft above him. Seconds later, he fell with a crash into a huge jungle tree, severely wrenching his knee. He wedged himself into the tree, then started the laborious process of working his way to the ground. The rain was falling steadily, and he was very cold.

In the meantime the other pilots were finding it increasingly difficult to listen to their radios. Every second was crowded with sometimes firm, sometimes panicky, calls for homing from either Nadzab, Gusap, or Saidor.

"Hello Backwards. This is Possum 176. I need a homing. Over."

"Hello Possum 176. This is Backwards. Give us a long count. Over."

"Hello Backwards. This is Possum 176. One, two, three, four, five, six, seven, eight, nine, then.... Ten, nine, eight, seven, six, five, four, three, two, one.. Over."

"Hello Possum 176. Fly 148. Do you understand?"

"This is Possum 176. Roger. I understand. Out."

Possum 176 struck out blindly through the murk on his compass course hoping that when he arrived over Nadzab the weather would be clear and he would be able to let down safely.

As the pilots of the 433rd Fighter Squadron slipped away from each other to try to get through alone Lts. Neely, Longman and Yarbrough rolled away in tight spirals never to be seen again. C. C. Wire and Leroy

Ross became separated, as did Lt. Stiles, from their leader. In the resulting confusion Ross and Stiles found each other in some manner and began letting down through the black of the weather. Almost as if by a miracle, they missed the mountains and found a hole in the gray murk. As the wheels of Stiles' P-38 rolled down the mat at Lae of the Huon Gulf both engines coughed to a stop, completely out of fuel.

Pierre Schoener was now making his way into Nadzab mostly by instinct if such a thing was possible.

Joe Price was in trouble on the Northern Coast of New Guinea and asking for homing from Saidor. After an hour of instrument flying he was being guided into the strip at Saidor. He lined up on the runway, dropped his gear, and cracked his flaps. Halfway down the final approach, an engine ran dry and stopped. At that instant, the Saidor Tower frantically called to advise him that an A-20 was on its final approach immediately beneath his staggering P-38.

With one engine dead, the other ready to die at any moment, gear down, and full flaps, Joe knew he couldn't go around. He yanked the gear, and gave his remaining engine everything it could take. The landing gear was still retracting as the P-38 started to roll over on its back, but Joe chopped the throttle, rolled the plane out, and with a crash of flying mud, sticks, stones and miscellaneous debris bellied in next to the flight strip. An excited officer ran up to the wreck advising Price to evacuate the premises before the plane exploded, but Joe was beyond advice. Proceeding deliberately, he removed his canteen and map from the plane. He stood up on the wing very calmly, then fell on his face in the mud unconscious.

Saidor was near confusion. A B-24 began its final approach with two engines feathered. The tower called for it to go around. The "Liberator" ignored the call. The tower operators fired red flares at the bomber in desperation. The co-pilot fired red flares back at the tower, and the B-24 landed. Bombers and fighters found their way into Saidor and then found it almost impossible to land because of the traffic jam. Fighters cut in front of "Mitchells" which had cut in front of "Liberators." The men on the ground wept in frustration as they watched the planes crash or fight for position in the traffic pattern which was running both ways on the strip. Planes were even trying to land on the taxi strips.

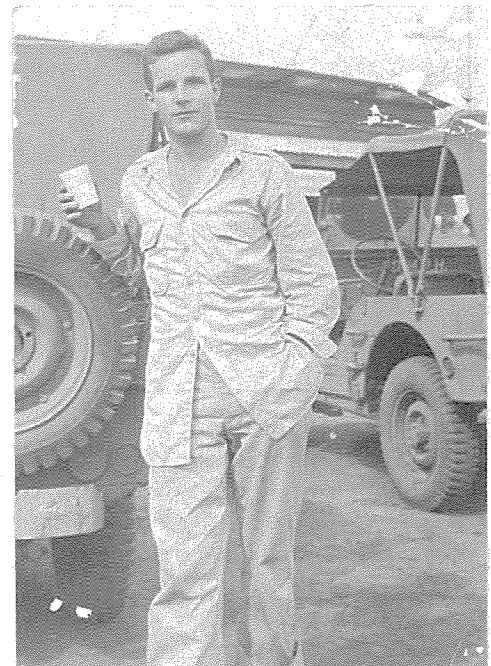
Lt. Wire was over the Bismarck Sea trying to reach Saidor. The P-38 was skimming low over the water when he noticed swells at each wingtip. The plane struck the water and shot almost straight up. The plane stalled, then crashed back into the water. In spite of his shoulder harness, Wire felt the impact of the gunsight on his nose in that fraction of a second before unconsciousness. Seconds later, with his nose smashed and broken he became aware of the fact that he was under water. He inflated his Mae West



In the above photograph are shown four of the pilots who took part in the "Black Sunday" raid. They are, l. to r., Capt. Robert M. Tomberg, still in the USAF in 1959, Lt. Austin K. Neely, Capt. Herbert W. Cochran, now living in Decatur, Ill., Lt. Louis J. Longman, Capt. William J. Grady of Seattle, Wash., and Lt. Clarence J. Reiman, now of Union City, New Jersey. Neely and Longman were never seen again after the flight split up, soon after entering the weather front. The picture was taken at Nadzab. Cochran was on leave in Australia at the time of the raid, and Grady was not assigned.



Anderson's P-38, aluminum, blue & white, the "Virginia Marie"



Flight Ldr., Capt. Richard D. Kimball, now Major, USAF.

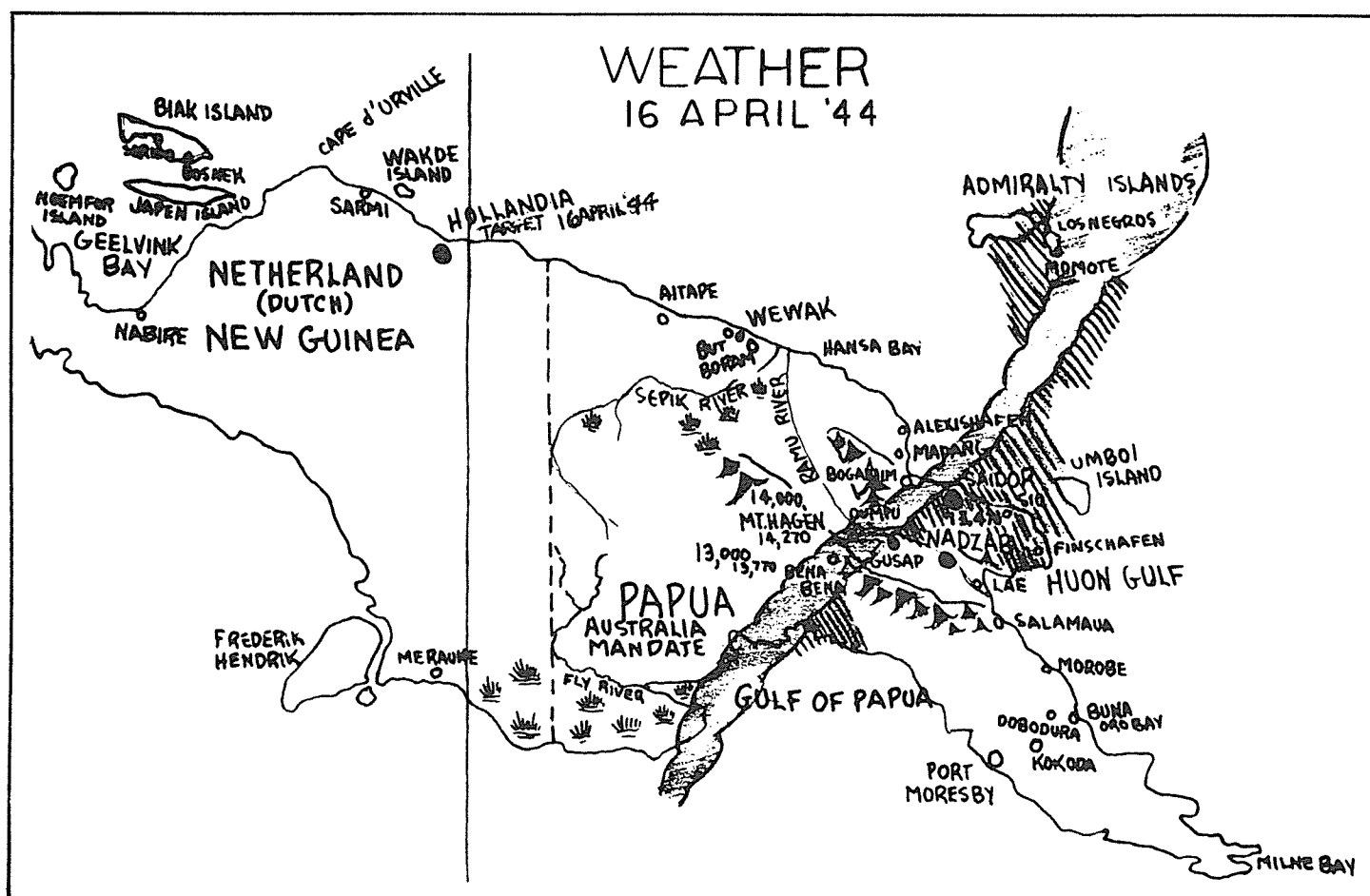


The author, Lt. Carroll Anderson, of Tracy, Cal.



Lt. Rieman's "Little Judge III"

"BLACK SUNDAY"



On the 16th of April 1944, a large group of planes of the Fifth Air Force took off on a raid to Japanese-held New Guinea. There were 58 B-24's, 46 B-25's, 118 A-20's and assorted F-5's and F-7's besides the P-38's of the 433rd Fighter Squadron, of whom this account concerns. On the return journey the Air Forces ran into a solid wall of clouds extending from sea level to nearly 30,000 feet, over an area indicated above by the shaded portion. Capt. Richard D. Kimball led 14 P-38's to the target and toward home base. The weather front, which formed very rapidly, obscured the landing fields of all the various squadrons engaged, and in the ensuing confusion many of the planes crashed or were never seen again. In all, thirty-one planes and thirty-two crew members were lost, including four from the 433rd Sq. This was later called the most disastrous day for the Fifth Air Force.



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The 433rd Fighter Squadron, whose insignia is shown at left, was formed on 14 May 1943 as part of the 475th Fighter Group by order of Gen. George C. Kenney. With two other Squadrons, the 431st and 432nd, the Group became known as "Satan's Angels". Brig. Gen. Paul B. Wurtsmith was the C.G. of the Fifth Fighter Command, and at the time of the "Black Sunday" raid, the Group was under Col. Charles H. MacDonald. The Squadron was led by Maj. Warren R. Lewis. In the period from May 1943 to December 1944 the Group shot down 522 enemy aircraft.

and slipped through the shattered canopy to the surface. In such a dazed condition it was difficult for him to inflate the life raft, but somehow he managed it and climbed in. Shortly thereafter, he heard the chugging sound of a motor boat searching for him. Ashore, in spite of the pandemonium someone had heard his plane crash and was out looking for him. He was picked up a few hundred yards off the coast at Saidor within seconds of landing.

Although the weather continued bad, some form of order was appearing as more planes were able to get on the ground. Less planes in the air at Saidor meant more control over traffic. Pierre Schoener had successfully made it into his home base. Jack Daly had found a momentary opening at Dumpu. He sneaked through and came home to Nadzab. Pomplun was in at Nadzab, but Dick Kimball had joined another aircraft in the weather, and he was still flying blind.

Meanwhile, I was descending at five hundred feet per minute. The outboard wing tanks of my ship were empty. The mains were empty. The reserve tanks were half gone. I had decided to let down to ten thousand feet. If no hole had appeared by then, I was going to bail out. The break in the weather occurred between Lae and Nadzab. I dove down through it and flew into home base. On the peeloff a belly tank, which I presumed had dropped clear earlier, flew off and exploded near the tower with a resounding roar.

As the afternoon waned, the remnants of the planes of the fifth Air Force mission to Hollandia straggled in. The 433rd Fighter Squadron had four pilots unaccounted and seven airplanes wrecked or missing. That night searchlights burned straight up into the overcast at Nadzab as homing beacons for any craft still in the air or for any crewmen down in the jungle. Seventy airplanes were missing on the night of Black Sunday. Later when all tabulating had been completed, it was found that thirty-one airplanes failed to return and thirty-two pilots and crewmen were dead.

So ended Easter Sunday, 1944. Black Sunday was the greatest disaster the Fifth Air Force ever suffered, and the irony of it was the fact that the Japanese had not downed one of our planes. General Kenny said in his book, General Kenny Reports, "It was the worst blow I took in the whole war."

As a further note I joined the 433rd Fighter Squadron at Dobodura, New Guinea January 1st, 1944, and by the time April 16th, Black Sunday, had occurred I had flown 43 missions with a total of approximately 140 hours of combat in P38 G's, H's, and J's. I find, in checking my flight forms, that I participated in four missions to Hollandia and one to Tadjik prior to April 16th, 1944.

All of these missions were in P-38 J's which incorporated outboard internal wing tanks which greatly extended our operating range. General

Kenny had anxiously awaited these aircraft, because of their extended range. He issued orders that none of them were to be flown beyond a certain distance over enemy territory, since it was his intentions to equip as many squadrons as possible with the aircraft and then send them all in against the Japanese at Hollandia in a series of massive attacks. Surprise was of extreme importance, because up to the time the Japanese were hit with these aircraft they were unaware that the Fifth Air Force had anything in fighters which could fly that far. The Japanese were allowed to build up their Air Force at Hollandia until hundreds of planes were on the ground. Kenny then struck, and the rest is Air Force history.

In particular, as the day Black Sunday came to an end and my squadron mates landed, we quite naturally compared notes as to what had happened to each of us individually. These narratives were jotted down by myself after my return from overseas and were filed with various military records. These notes, and memory, have supplied the material for this article. In 1949 I was fortunate enough to visit Tomberg at McChord Field, Washington. We once again covered Black Sunday in detail and in particular his specific actions on that part of the mission where I had flown formation in spirals and stalls with him. He stated later, in a letter dated 17 April 1959:

"The return trip, at the beginning, appeared that it would be pleasant. However, the weather had moved in, almost on a north-south line east of Madang. We tried to go through at 25,000 feet and again on the deck, but turned around each time. The third time, we entered the front at approximately 12,000 feet. I hadn't been on instruments very long before my electrical system went out. I tried to engage my artificial horizon, but pulled the knob off without engaging the instrument. I went into a gentle spiral and after barely missing a mountain peak at 9,000 feet, I decided to bail out. I started a steep climb, pulled the canopy, disconnected my oxygen and safety belt, and stood up in the cockpit.

"The next thing I knew, I was falling. I reached on the wrong side to pull my ripcord, discovered my mistake, corrected it, and waited for the parachute to open. It did, and I dropped my ripcord. I landed in some trees and spent the night by a near-by stream. Two days later, I was found by some natives who took me to their village, which was about 2/3 of the way up the northern side of the Finisterre Range. These natives escorted me to Saidor, where I turned them over to the Australian-New Guinea Authorities who paid them their reward for bringing me in. I proceeded, by plane, to my home base, and arrived there on the 23rd of April 1944."

Lts. Joe Price, C. C. Wire, Pierre Schoener, Northrup, Leroy Ross, Stiles, and Captain Richard Kimball as well as Jack Daly and the others all recited their parts of the mission. Dick Kimball explained how on becoming separated from the squadron he had found himself out of control and apparently in a spiral. At least, he assumed he was in a spiral, because he passed another P-38, at close quarters, which was not performing as his ship was and since the pilot seemed to know what he was doing, Kimball righted his air-

craft, tucked in on the other P-38 and eventually was able to reach home.

C. J. Reiman recalled, in May 1959: "As I remember it, Black Sunday began as a gloomy, overcast day with the day's mission called off because of weather. Lou Longman, Austin K. Neeley, Bob Tomberg and I, in a rare burst of ambition, decided to screen in our tent. We were still working on the project later in the morning when the mission to Hollandia was suddenly on again and we agreed to fly. A good excuse to get out of work, I guess.

"When we took off on the mission the sun was shining, but there were still plenty of clouds around. I was flying Element with a fairly new boy on my wing. About twenty minutes out from the target my wing man lost his hydraulics system and had to turn back. We never let one plane fly alone so I turned back with him. As we approached the North entrance of the Markham Valley I saw a huge gray wall of clouds, fortunately for us we saw an opening down on the deck and entered the valley about fifty feet. The rest of the valley was clear, and we had an uneventful flight back to Nadzab.

"After landing we just hung around and waited. An hour went by. The planes should have started returning, but there were none in sight. Everyone in operations was becoming uneasy, as with no means of communications we had no idea as to what had happened. Half an hour later single planes started coming in. The pilots gave us bits of information as to the seriousness of the situation. Rumor had it that there were as many as 25 to 30 crack ups on Saidor, an auxiliary field. As you know, one of the pilots, Wire (after being rescued), said he woke up twenty-five feet under water and came out with only a broken nose....

"As I mentioned before, I was the only pilot in my tent. Man! It was lonely. A week later Tomberg came back, but Neeley and Longman never returned. The next day Bud Lampert who was just assigned to our squadron came into the tent and asked if he could bunk with me, and I replied, (Take any one what's the difference? They're all gone.) He said he never saw any one so dejected.

"You have asked about our squadrons markings. Initially all of the aircraft in the 433rd Fighter Squadron and the other two squadrons of the group, the 432nd and 431st were painted the conventional military olive drab with gray underbellies and wings. The spinners, wingtips, and vertical stabilizers were banded with solid colors, i.e., vertical stabilizer tips top and bottom. In the case of the 433rd Fighter Squadron, its colors were blue. The 432nd and 431st were red and orange....

"Later, as the newer P-38 J's came into the group and as the older H models were junked or transferred to Combat Replacement Training Center at Port Moresby, the aircraft retained the normal aluminum color. The bandings and markings remained the same as before, except that by the

time we had reached Biak Island our aircraft identification numbers had been transferred from the cockpit nacelle noses to the outside engine nose nacelles. If my memory serves me correctly, we had those same identification numbers on the vertical stabilizers and rudders at all times, except when a new plane was brought into the squadron. Actually, as I look back I recall that the planes in my squadron often were not uniformly marked and banded. This was true because we only had one squadron painter, badly overworked, who served on KP and any other duty to which he was assigned. Also blue dope was rather scarce.

"At one time, our squadron was headed for a very fancy paint job, but it came to naught. Colonel Charles MacDonald was granted a thirty-day leave in the United States. During that absence, our Commanding Officer, Major Warren E. Lewis and Warrant Officer Hans Wagner, our Line Chief, decided to revamp the 433rd's color scheme. This was done to some of the planes, but only one ever received the full treatment and that plane was mine. When it was completed it was really distinctive. It had solid blue spinners. The engine nacelle intake was edged in blue. A solid white band ran the length of the leading edge of the wing. A blue band, edged in white ran diagonally across each wing just outside the engine nacelles towards each wingtip. The wingtips were blue, banded with white, and the vertical stabilizers were blue tipped and banded in white.

"Our group CO, MacDonald, came back from leave, took one look, and banned any further painting. Later I had to modify my spinners so that two bands of blue were in evidence instead of the one solid color."

References

1. "Satan's Angels - 475th Fighter Group" Prepared by the officers and men of the 475th in 1945, published 1946 by Angus and Robertson, Ltd. Australia.
2. Letter: Joseph D. Angell, AF Historical Liaison Office, to GH Neff AAHS, 25 May 1959.
3. "Army Air Forces in WWII" - Vol. IV, Page 596, by W. F. Craven and J. L. Cate.

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Large Scale Maps for World War I Buffs:

For the "buffs" who would like to obtain large scale maps of France, Belgium, Luxemburg and Germany, the Michelin Maps are very appropriate. The battlefield areas of both World Wars can be accurately established on these maps which are to the scale of 2 km. = 1 cm. (1 inch = 3.15 miles). The maps are available from the Library of France, Rockefeller Center, New York City, at 75 cents each. Maps nos. 2, 51, 52, 53, 56, 57 and 62 (\$5.25) are required to cover the World War I battle area from Ostend, Belgium to Switzerland. Ask for "Michelin Road Maps."