Elias Kimmel Notes on His Tour of Duty, 1944

1. Routine Before a Mission.

About $1\frac{1}{2}$ hours before the briefing, someone from squadron operations would come into our hut, switch on a light and read off the names of those in our hut going on the mission. He would end by calling out the briefing time.

We usually were alerted or "stood down" the night before, but no one set any alarm clocks because we never knew whether the mission would be scrubbed or the actual time it was to come off, although takeoff was usually shortly before dawn...especially during the winter when days were short.

We would drag ourselves out of bed, wash and shave (a necessity for wearing an oxygen mask). We put on something very warm because we were usually chilled as a result of the early morning dampness (fog more often than not), the lack of sleep and the prospect of a grueling day. We would then hop on a truck which periodically left for the mess hall. Here we were offered (and usually partook of) *fresh* eggs, bacon, coffee, etc.

After eating, we headed for squadron operations to shoot the bull awhile or headed directly for the briefing room, depending on the time and our mood. They were fairly close together and the trucks from the mess hall dropped us off in the area of both of them.

As we entered the briefing room, the navigators picked up their mapand-target folders. From the target pictures and maps we found out the primary and secondary targets. Sometimes our routes were already marked off on a huge composite map at the front of the room when we walked in; sometimes it was marked off while we waited around and commented on everything we knew about the mission and target until then. During the waiting period, the room was as noisy as hell, everyone nervously chattering, laughing or wise-cracking about something pertaining to the day's mission. We would note the plane assigned to us (usually our own) and our position in the formation (drawn on a black board) during this time.

At a designated time, an S-2 officer would start the briefing, telling us of the importance of the target and attempts made in the past to bomb it out of operation. He would tell us about the other targets being bombed by the 8th and 9th [Air Forces] and of the overall strategy, if any, of the day's bombing. We were told what fighter support we could expect, "start engine time", "taxi time" and take-off time. Sometimes, one of the wheels would give us some sort of pep talk, or warning about our formations, etc.

After this general briefing, which only the officers attended, the meeting broke up into specialized briefings for the pilots, navigators and bombardiers. We (navigators) were given exact flight plans, winds, meteorological information, formation rendezvous points and times, fighter

rendezvous points and times, etc. During this same time, the radio operators received their own briefing; occasionally the gunners did too.

The gunners were responsible for making certain that all the guns were brought out to the plane. If they were particularly inspired and they had the time, they installed the four nose guns as well as their own before we got to the plane. Usually, though, I installed mine, myself.

("Janie" was a B-17G model. The "G" model introduced a chin turret below the front nose to overcome the now-obvious weakness that no guns pointed forward! The Luftwaffe thus attacked directly head-on (The "twelve o'clock") with devastating effect. The "G" model's chin turret solved this problem. This turret had twin .50 cal machine guns, and was operated by the bombardier. The navigator had one machine gun on each side of the plane about halfway back from the plexiglass nose to the inboard propellers [engines numbers 2 and 3].

After the briefings there was usually about 30 to 45 minutes before "start engine" time. I would walk past the operations shack, down a very short street, past, and behind the armaments shack, through a very, very small forest to the dressing room where we all had lockers and change into our flying outfits, and then caught a truck out to our plane.

I was usually the last one out to the plane because my briefing was the longest. I threw my stuff in through the forward escape hatch and climbed in after it. Usually walked back to see how the gunners were doing and to give them a very short briefing...if Mac or Buzz hadn't already done so. On the was through the bomb bay would note what our bomb load was.

I would then install my guns and make sure that the ammunition rode easily in the guide chute and that the chain of ammunition wasn't tangled in the box. (For safety reasons, the guns weren't charged until we were airborne and weren't test-fired until we were over the water.) After (sometimes before) this I would check my oxygen pressure and equipment, my electrically heated suit and shoes and my intercom connections. The warmth of the (electric) suit usually felt wonderful because everything in the plane felt so cold at this time of day.

I would now start plotting our course on my maps. Usually while I was doing this, Mac and Buzz would start up the engines, one by one, while the crew chief stood by with a fire extinguisher. We would then taxi over to the edge of the perimeter and wait for "taxi" time. A few minutes later, the pilots were given the order to taxi, and one by one, each of us rolled onto the perimeter, in proper sequence, and joined the procession of racing engines and squealing brakes.

(The racket of 96 to 180 engines and 24 – 45 pairs of brakes could be heard miles away in the quiet of early morning.)

After a few minutes of engine testing and waiting , and exactly at "takeoff" time, the group leader would start pulling down rolling down the runway. A minute later, as the group lead plane barely left the ground and cleared the red warning lights at the end of the runway a mile away, the right wingman of the lead element revved his engines and started rolling down the runway... and so on, as each of us rolled up to and onto the runway, behind and to one side of the plane we were to follow (2 or 3 planes sat at the end of the runway during the entire period, the waiting ones moving up and one rolling in from the perimeter when the most forward plane started his take-off roll), and then took off a minute after the preceding plane.

2, We never wished one another luck before a mission. (Maybe we should have.) The most we would say to one another as we jumped off the truck in front of our plane was "see you later" or something of the sort.

3. Men from each squadron or, sometimes from group (usually operations officers, squadron commanders, men from operations shack, etc.) would stand by the portable "tower" alongside the take-off runway, and wave goodbye to us as each of us started rolling down the runway for take-off.

4. On very rare occasions of extremely clear weather during daylight hours, we sometimes formed our formations at low altitude. Usually, however, we took off at one minute intervals and climbed through the cloud individually at 300 ft./min rate of climb. Our rendezvous was usually at about 20,000 feet. We formed our groups, wings and divisions at different rendezvous point on our way to the English coast, crossing each point and the coast at prescribed times on the prescribed heading and in the proper sequence. The British people were quite awed by the spectacle of colored flares which we used for identification during the hour or two necessary for our forming. Many would watch the show in the early morning as one would watch a fireworks display.

5. **Routine After a Mission.**

Immediately after leaving the enemy coast, on the way back, the tension would suddenly fall off, and everyone started kidding around on the intercom, sometimes a little too soon for comfort. Harry, or I, would call off the altitude as we descended, and everyone was quite happy. The air gradually became warmer, the formation looser, while we crossed the North Sea. It was a struggle to keep the enlisted men from pulling out their guns before we reached England. We wanted to leave the guns in until we landed because, on very rare occasions, bandits sneaked across the coast undetected by British radar (in the confusion of our thousand planes crossing at the same time) and shot down our planes while they were landing. In spite of this, by the time we landed, only the nose guns were still in.

After we crossed the English coast, the groups separated, each heading for its individual base. As we neared our base, about 30 miles from the coast, crippled planes and those carrying wounded broke formation and made a bee-line for home, the latter shooting off red flares as they approached the field so that an ambulance would be waiting at the end of the runway to treat the wounded men as quickly as possible. The rest of the group reformed with the squadron in echelon; the high squadron was still stacked to the right and above the lead squadron, but the low squadron above and to the right of the high squadron. With the lead squadron at 500 feet, we flew down (over) the landing runway. At the end of it the lead plane peeled off sharply to the left, followed, one by one, by the rest of the lead squadron. The high and low squadrons did a 360, and this time , the high squadron peeled off, went into the traffic pattern and landed. The low squadron did another 360 before repeating the peeling off and landing procedure. Tail-end Charlie usually landed 10 - 15 minutes after the group lead.

If it was at all foggy or dark (and it often was) I had to guide Buzz or Mac up to the runway because the forward downward visibility from the nose was much better than from the cockpit (which the nose preceded and obstructed).

While circling over the field, I got all my things together and into my briefcase and parachute bag. As soon as the plane pulled into the chocks the engines were turned off. In this wonderful quiet I pulled my guns out in just a few minutes and carefully wrapped them in clean rags before putting them in their proper canvas sacks. (The armament men removed the guns and put them in their proper place in the armament shack as soon as we left the plane.) Would then throw my things out of the escape hatch and let myself down after them.

While we were waiting for everyone to get out of the plane and get everything into the truck (which was usually waiting) we went through the ritual of looking over the plane for flak and bullet holes.

The truck took us to our lockers where we changed, and I dumped off everything but my log sheet and target folder. We then made it over to the briefing room (which was now the interrogation room) as fast as possible. There were now about six tables with benches about them in the room. While we were waiting for the rest of the crew or for a vacant table, we went into the navigators' briefing room. The Red Cross had set up a long table with hot coffee, hot chocolate, sandwiches, donuts, cigarettes, etc., while we were away on the mission. I usually grabbed a sandwich and hot chocolate before going back into the interrogation room.

When a table was available, we all sat down around it munching or drinking something. (We hadn't eaten any real food for 7 – 14 hours.) An S-2 officer conducted the interrogation. Among the bits of information requested was: time of bomb release; position, number and marking of enemy fighters encountered; position, intensity and accuracy of all flak encountered; position of our bombers shot down and number of men seen bailing out; unusual occurrences, etc. I usually supplied most of the information because I recorded on my log what the others reported, but everyone else filled in any necessary details which I hadn't recorded. Claims for enemy fighters damaged or shot were made during the interrogation, too. During the questioning, which usually lasted 10 or 15 minutes, a tray with ten shots of whisky was brought over. About half of all drinks remained at the end of the interrogation; I seldom had one because I was too tired and seedy to enjoy it.

After the interrogation I went over to the mess hall (which was opened whatever time we returned). Sometime during the "day" I went over to the armament shack to clean and oil my guns. If I wasn't too tired I would go for a shower. If I was dead tired I sometimes went over for a soak in a hot bath.

On returning to our hut (#27...Hangover Heaven), I obediently burned up my log sheet. This stupidity cost me some terrific souvenirs.

6. All of us could hardly wait to reach 12 or 10,000 feet on the way down. Harry or I would call out the altitude as we descended. (Usually after reaching the North Sea or the English Channel.) At 10 or 12 thousand we would take off our oxygen masks and helmets (which were necessary while wearing the masks). At this time I put on my overseas cap and headset, and polished off my candy rations. Most of the others, including Harry, would first light up a cigarette. The smell of smoke used to give me the creeps.

Before *"Janey"*, temperature conditions in the waist were especially bad. There were o waist windows, and the 200 mph breeze blowing through the large waist cutouts was brutal. McAleer and Sawtelle smeared Vaseline all over their faces and wore Coast Guard masks, but still looked like hell after a mission.

"Janey" had large Plexiglas windows in the waist, and ball joints in the windows for the guns (like the nose) and ended all that. The plain, ordinary cold, -30F to -50F was enough to cope with.

7a. Clothing.

Before and during my 9th mission I wore a forest green shirt with observer's wings and collar insignia (U.S. and wings) under a pair of onepiece dungarees. Under this outfit I wore a one piece bright blue electrically heated suit. Wore electrically heated shoes under British flying boots (higher, tighter, lighter and less cumbersome than ours). I carried a pair of G.I. shoes, which I planned to grab if I had to bail out. These were necessary because flying boots usually popped off when the parachute opened.

(The 9th mission was the February 24, 1944 mission in which the plane [and people] were shot up.)

After my 9th mission, wore the same shirt (on all missions) with same insignia. Over this and underwear I wore a new two-piece electrically heated suit. It looked like a baggy forest green pants and battle jacket. Wore electrically heated shoes under size 12 British civilian shoes because I realized that I wouldn't have the presence of mind to grab my spare shoes in case of emergency; on February 24, the last thing I (we) thought of grabbing any of the things we prepared for just such an emergency. I was the only one in the crew who carried side arms (shoulder harness) on missions. Wore fur-lined ski goggles during most of the missions. Didn't wear any glasses first few mission, but on days when there was an undercast and no overcast I wound up with terrible headaches from staring down through the glary undercast. Wore British goggles at first; they were much better than ours...not as tight and had less of a blind spot at the sides. Wore sunglasses when we were hit on February 24 (were only at 12,000 feet and weren't wearing helmets) and never wore them again. (Buzz never wore flying boots again after this mission.) Finally turned to ski goggles for comfort and because they didn't fog as readily as other goggles.

Wore chest 'chute first 26 missions, back 'chute on all the rest... increasing fear of falling out of the plane without a 'chute.

I didn't wear electrically heated gloves. I was constantly removing my gloves in order to write, use my dividers or E6B, etc. and it was a nuisance to keep connecting and disconnecting electrically heated gloves. [The E6B was a manual navigation device that was used to plot courses, determine headings, etc. It was flat, about 4" wide, and about 18" long, and was placed on maps.]

First nine missions I wore a double glove affair with a soft undergauntlet type outer glove. I lost it sometime during the 9th mission on February 24 and don't remember what I replaced it with. With or without a glove, I spent a lot of time keeping my hands warm by sitting on them or tucking them under my armpits or the family jewels.

7b. Sidearms.

Harry, Buzz, Mac, and I were issued .45s and the enlisted men were issued .30 M1 Carbines in Kearney, Nebraska just before we left the States. As far as I know, I was the only one who carried one on a mission. Except for a brief time just before D-Day when there was a possible threat of a German paratroop drop on our air bases, and guns were distributed to all the men on the base, everyone else on the crew turned his gun in.

After a short while, when the fear of the paratroopers subsided, everyone returned their guns. Buzz was in the process of doing so when his lack of knowledge of his guns' functioning did him in.

I'm not quite sure why I carried a gun, but there were increasing incidents of our airmen being lynched by German civilians, and that might have had something to do with it. Having an "H" on my dog tags also gave me some extra incentive for avoiding capture if possible.

If captured, the Germans accepted an airman carrying a loaded weapon as a POW. However, they promised to shoot anyone carrying any extra ball. [Standard .45 cal ammunition was referred to as "ball ammunition."] 8. Used a box of .50 cal machine gun cartridges for a chair...better flak protection against most dangerous flak which came from underneath the plane. *"Janey"* still had a swing-out navigator's seat when it was assigned to us. I had the seat yanked before my first mission in it. Besides the lack of protection, it kept you from moving about and snagged headset wires, oxygen hose and heater wires.

9. **German Fighters.**

The most dreaded was the Me-109, a single (in-line) engine plane. It was a sleek, low wing job with a small, rounded rudder and large propeller spinner. I had the unusual characteristic (for a heavy fighter plane) of flying with its nose down, tail high, at high speeds, i.e., during an attack. It carried at least four (.30 or .50 cal) [7.92 mm was standard, no .50 cal] which were used mainly for lining us up, and three or four 20 mm cannon (armor-piercing and explosive shells) which did the heavy duty work. The FW-190 was also an excellent fighter, carrying about the same armament as the Me-109, but we didn't run into as many of them. It had a radial engine and very angular air foils; it looked very much like our AT-6.

The only other fighters encountered were twin-engine. The most commonly encountered were the Ju-88, Me-110, and Me-210. The first two were also the heaviest bombers Germany put to use but were rarely used for this purpose anymore in 1944. All three doubled as night fighters against the R.A.F. They all carried crews of several men.

The Me-110 was a twin-rudder plane with very angular air foils. The other two were single-rudder jobs. All of them were rather slow and inefficient during the daytime. The He-111 was a single-rudder plane in the above category, but I never saw one; in fact hardly anyone ever did. In mid-1944 they were employed mainly as mother ships for buzz bombs (V-1). They flew these to some point over the North Sea and released them aiming in the general area of the 8th Air Force bases. The intention, I guess, was to disturb our sleep, which they did too well.

{A good reference for specifics about German fighters is <u>The Complete Book</u> <u>of Fighters</u>, William Green and Gordon Swanborough, ISBN 0-8317-3939-8.]

10. A fighter attack.

For an idea of the briefness of a fighter attack from 12 o'clock: closing speed of bandits and our plane was approximately 600 miles mph (245-250 ours, 350 theirs) or ten miles/minute or one mile every six seconds, or about 300 yards per second. Since we wouldn't even dream of firing at a plane more than 1,000 yards away, the longest we could fire at a plane (and vice versa) was about 3 seconds or about 35 rounds per gun. Most, if not almost all effective shooting, however, occurred from a distance of less than 400 yards, cutting the time to less than 1 $\frac{1}{2}$ seconds for effective shooting. The most

deadly attacks came from 12 o'clock because the bandits had to close to "0" yards and go through our formation...they had no time to peel off.

In an attack from 6 o'clock we and the fighter had about five times as long to fire, but the fighter had to peel off. Since he would do little more than take moving pictures of us firing at him if he didn't close to less than 400 yards, his survival instinct more often than not...fortunately...prompted him to peel off slightly sooner than he should have. As soon as he peeled off, he was no longer firing at us, but we could still fire at him. On rare occasions, they pulled off very effective attacks from six o'clock by coming through our formation instead of peeling off, but lost more planes than they were usually willing to lose.

GAF pilots generally were aggressive (sometimes not), single-engine pilots more so than twin-engine pilots, whose machines were slower and clumsier than single-engine planes.

Fortunately, most GAF pilots were interested in surviving, making most of them fearful of our firepower and less effective than a fearless pilot would have been. Also, made them anxious to avoid ramming whenever possible... possible exception April 18th, when at least one plane was rammed. Unintentional ramming was always a distinct possibility if a pilot was killed or disabled during a head-on attack.

Effectiveness (experience, training) of GAF pilots fell off noticeably after February-March-April when most of their experienced men were killed opposing our large scale attacks on their homeland.

No known instances of GAF pilots firing at Americans hanging from parachutes. [Lamentably, not so. Also reported were cases of German victims.]

One instance of Me-109 pilot waggling wings on cutting off an unsuccessful "dog fight" with a B-17. Rourke, 95th (Square "B"), on April 18th.

11. German Air Force Point System (credit for aircraft shot down).

1 point: Destruction of a single fighter or final destruction of a damaged (crippled) 4 engine bomber no longer in formation.

2 points: Destruction of two fighters or damageing and separating 4 engine bomber from formation (us on February 24).

3 points: Three fighters or destroy a 4 engine bomber in formation.

[This well-known system for awarding decorations on the Western Front may be found in greater detail in any of several reference books. Toliver's <u>Fighter Aces of the Luftwaffe</u> is a good example.]

12. Mission observations. (a)

Flew all our missions during the day time. During the very short winter days, we usually took off about half an hour to one hour before daybreak and climbed to altitude in the dark. (We took alternate west and east headings, keeping between Bury St. Edmonds and Newmarket. When we were above the clouds, it strange heading into pitch darkness on the west heading and daylight on the east heading). We often landed during twilight so that the entire day (approx 6 - 7 hours) was spent in the air, sometimes above the clouds so that we didn't see the ground for a whole day. RAF and RCAF flew all (except ground support) missions at night.

Difference in time for missions reflected in our armament. B-17s were bristling with .50 cal machine guns pointed in every possible direction. British bombers had little armament except for one 4-gun .30 cal machine gun turret pointed to the rear. They wanted a concentration of gunfire towards the rear because no fighter would approach from any other direction in the dark. They chose .30s [.303 or 7.70mm] because they fired twice as rapidly as the .50s, and they didn't need the longer range of the .50s because they couldn't see far enough at night to utilize this extra range. Four .30s fired almost 5,000 rounds a minute. [For more precise information on British armament and aircraft the reader should consult any of the standard references.]

"Janey" carried 13 .50s: a 2-gun chin turret manned by the bombardier; a single gun on each side of the nose manned (one at a time) by the navigator; a 2-gun top turret (behind the cockpit) usually manned by the engineer, but on our plane by Ford because Sawtelle, our engineer, couldn't hit the side of a barn if he were inside it. There was a single gun in the radio room pointed up and to the rear; a 2-gun ball turret under the plane behind the radio room; a single gun on each side of the waist about halfway between the radio room and tail; and a two-gun battery at the very tip of the tail, behind the rudder.

Only the top and ball turrets could fire through a 360 degree range, front and back.

13. Mission observations. (b)

Although thirty five missions were completed, at least as many others were started on. Some were scrubbed at briefing, some while we were sitting in the plane on the ground, and some even well after we were airborne. There was also a fair number of aborts due to battle damage defects in our plane which were not detected until after we were airborne.

We probably had one or two returns because we were unneeded "spares", but I don't remember any. [See March 15 reference in "Missions"]]

14. Altitude.

Bombing altitude was determined by the need to get as high over the flak as possible and by the limitations of the B-17. Flak was devastating at 10 to 12,000 feet, pretty bad at 20,000 feet and tolerable (usually) at 25,000 to 30,000 feet. At and over 30,000 feet, flying characteristics of a loaded B-17 with the bomb bay doors was marginal for good formation flying.

Most times, bombing runs were carried out between 23,000 and 28,000 feet. With the Wing leader at 25,000 feet, we could be 1,000 feet (or more) higher or lower depending on our position in the formation.

We bombed at 12,000 feet when no flak was expected.

Buzz once bombed from 6,000 feet...the fortress at Brest, a pocket holding out long after most of France had been reclaimed.

En route altitude was usually 10,000 - 20,000 feet, depending on the weather, length of trip, expected flak en route, etc. On long trips, 10 to 12,000 feet was common because flying was more comfortable at the warmer temperatures without oxygen masks. (We had only about 4 to 6 hours of oxygen on board.)

Although it was safer to fly over "enemy territory" at 20,000 feet in case we strayed over a flak area, we sometimes ran the risk of running out of oxygen. We never used oxygen at 10,000 feet or less. At 12,000 feet we usually didn't wear oxygen masks, but sometimes put them on (especially on the way "in") for a few seconds if we felt the need.

15. Temperature.

Temperature at altitude (20,000 feet) was usually in the range of minus 30 to minus 40 degrees F. The coldest was on the "first" (March 6) Berlin raid when the arrow of our dial thermometer leaned on the peg at -50C (-58F). Naturally that was the day we lost the electricity for our electrically heated suits in the nose.

16, Speed.

Indicated Air Speed. IAS was almost always 150 mph at cruising. Under duress we went as high as 165 mph. A stripped down B-17 could cruise at about 180 mph.

<u>True Air Speed</u>. TAS at altitude usually ran in the range of 220 to 240 mph (with 150 mph IAS).

<u>Ground Speed</u>. Winds were usually about 40 to 50 knots (46 – 58 mph) at altitude, giving us a GS range of about160 to 300 mph. The strongest wind

encountered was 98 knots (113 mph) which cut our GS to little more than 100 mph.

Our take-off speed, loaded, was about 90 – 100 mph IAS.

The air speed indicator was red-lined at 220 mph.

17. Bomb Load.

Usually a 5,000 pound total bomb load was carried. On one or two short trips, 1,000 pounds were added at the expense of some of the gasoline load.

500 lb heavy explosive bombs was the most common load occasionally we carried 1,000 pounders, the heaviest we carried. We could only carry 38 to 42 100 pounders because we ran out of ranks (hooks) for them...seldom dropped them. Most high explosive bombs were standard TNT bombs, but once in a while RDX, which was more brisant [having a greater shattering effect] and shock sensitive was the explosive used.

Carried incendiaries about half a dozen times. Usually these were jellied gasoline bombs weighing less than 100 pounds...carried a maximum of 38 to 42 because of rack limitation. Once or twice we carried ten large (500 lb?) clusters of magnesium bombs.

On July carried guns and ammo for *Maquis* in long metal cans.

18. Bombing.

On leaving the IP (bomb bay doors open) we kept a steady watch above and below the plane until "bomb away." Glidewell would make sure we didn't slide over anyone below us, while Duck and Ford would make sure that no one slid over us. We lost two crews, including Mundy's, while I was with the 94th, because bombs were dropped on them.

19. Seven crews reported to the 94th, as replacements, at about the same time we did...January 10, 1944.

Manning's crew, our hut-mates was transferred to the 15th Air Force in Italy early in their tour. [*Probably means R. E. Menning.*]

McCallum's crew wound up in Switzerland although McCallum himself escaped and worked his way back to England just before I left (October, 1944). [Robert A. McCallum, 24 April 44, A/C 42-98138, ten interned in Switzerland]

Kocher was shot down on the way to Augsburg in March 18. [Alwin B. Kocher, A/C 42-31546, 8 POW, 2 KIA....Kocher POW.]

Mundy was still around when I left but his crew, flying with another pilot, went down over Munich on March 16 when a plane dropped a string of

incendiaries on the wing of their plane over the target. [Incorrect information, see notes for mission of March 16 in Part I of this document]

McMeekin [John R.] (Christianson, bombardier) [must be Robert D. Christensen, navigator]; and Pomerantz [Irwin L.], (Artick [Edward F.], navigator) were shot down on what started to out to be a bomb run into Berlin on April 18. [There were 8 KIA on the McMeekin crew...including McMeekin...2 POW... including Crhistianson. The Pomerantz crew had better luck...all ten men aboard survived as POWs.].

Ours was the only crew to "graduate" a full crew of 10 men, although it took from July 28 (me) to October 14 (Buzz) for all of us to complete our tour of 35 missions.

Tours were calculated to give us a 20% chance of completion. At some point in the tour it might have been comforting to know this.

20. On some missions we carried bales of chaff with us. This chaff consisted of long, thin strips of paper or plastic, coated with aluminum on one side. If the target was cloud-covered, the gunners were instructed to throw out this chaff at a pre-determined time and rate prior to reaching the target (and flak area). The object was to confuse the radar altitude and range finders employed by the German flak batteries; probably by creating the illusion of another group of planes or by creating enough "noise" to make their reception worthless. The use of this chaff wasn't always successful, but the few occasions when it did work, it was really wonderful to see the flak bursting one or two thousand feet below us.

21. Three types of food were at a premium in England in 1944: salad vegetables, dairy products, and eggs. Tomatoes, lettuce, etc. were non-existent on our base. So were fresh milk and cheeses. Except for rare occasions, we had fresh eggs only mornings before we went on missions. More than any other food, eggs became a sort of prize food.

We found a tea shop about five miles from our base (outside Great Ashfield) which we often cycled to and where we could get fried eggs served on toast, grilled cheese on toast, lettuce with salad dressing, besides the usual cookies, etc. This place grew or raised its own foods. They were very inexpensive, too. (At least for our pocketbooks.) The proprietor preferred to sell to Americans and very seldom sold then to Englishmen.

We could buy duck eggs in half dozens or dozens. Occasionally we could even get chicken eggs to take out. If we made a haul, we would graciously hand them out to various members of our crew or barracks. We would ask the cook to fry them alongside of our lunch or dinner...sometimes for breakfast. Mac and I were usually the only one to go on these escapades. Harry occasionally went too. On some fighter bases, eggs were handled by the armament section and checked out by the pilots, two per sortie. I had one glass of fresh milk during all the time we were in England. The best I could usually manage was a mixture of evaporated milk and powdered milk for my cereal. It wasn't too bad.

22. Popular songs in 1944: *I Walk Alone, Long Ago and Far Away, I'll Be Seeing you, and Marzy Doats.*

23. Took one flight in a fighter, a P-38 "Dropsnoot." Buzz's friend, a squadron commander in a P-47 group, ferried both of us home after a visit in April. He took us, one at a time, from his field near Cambridge in the plane which was being used as the lead plane on fighter-bomber missions, and which was at the disposal of the "wheels" in the group. It was a wonderful sensation and it would have been even nicer if I could have found the intercom connections. Not being able to communicate with me in the isolated nose, the pilot...Buzz's friend...didn't know if I was OK or not, and I had no way of contacting him. He had to cut the trip short and, along with it, some great maneuvering which we were not accustomed to in a B-17. It was really a great experience, though.

24, <u>Communication</u> within the plane was an absolute necessity. It was impossible to function properly unless we were in constant communication with one another. At altitude it could be a matter of life or death because survival without oxygen was measured in minutes, and we had continuous oxygen checks, usually conducted by Harry or myself. We never let more than a few minutes go by without hearing from every member of the crew. I would check the pilots visually if they were tied up on the Command set.

We needed soft helmets for attaching our oxygen masks, and each of us had a headset fitted into i. When not wearing a helmet, we each had a standard headset to substitute for it. The headset also made the engine noise more tolerable; at times when our interphone was shot out (and the headset wasn't needed for communication) we kept wearing the headset as a muffler against the noise which could be excruciating in the nose.

We all use throat microphones which were strapped around our necks. The quality of transmission from these was terrible, but with experience we usually understood what a message was about. Pressing the two pads (on either side and just above the Adam's apple) against the windpipe improved the transmission, but this was not always possible..

During a fighter attack, we could hear the noise of our machine guns in our headset...transmitted, I guess, through the frame of the plane.

The cockpit and radio room had the use of additional VHF equipment for communicating with other aircraft in our formation, with fighters or with our base in England as the need arose. So as to give the Germans as little specific information regarding our intentions as possible, this was usually used only in emergency, especially before the "bombs away" and bombing results transmissions.

I think the navigator's jackbox could also switch into this "command set," but I don't remember ever needing to do so.

25. <u>Nature's Call.</u> Under the best of conditions toilet facilities in the B-17 were crude, and not designed to encourage frequent use. There was a metal "potty" somewhere in the back near the tail wheel area. The prospect of having to clean it up after a trip was enough to constipate anyone. Under combat conditions using it would have been almost impossible, and I never knew anyone to use it or even think of using it. Thank God we weren't in a theater where dysentery was a problem.

There was a "relief" tube in the bomb bay. On non-combat trips, below oxygen altitudes, taking a leak through the tube while standing on the narrow, metal walkway was tolerable. Under combat conditions, having to take off your flak suit, disconnect your wires and oxygen hose, connect up a portable oxygen bottle and then make your way from your station to the bomb bay was not tolerable, nor would it have been tolerated.

The procedure followed by those whose bladder would not hold for six to twelve hours under stressful conditions, was to urinate into a rubber condom, tie a knot in the top, and then discard the frozen package after landing. This worked fine when using G.I. condoms, which also could double as a raincoat for a 90 mm field piece. It could present a problem when using a fancier, closer-fitting civilian model, such as a skin-tight, etc., but only the first time. Since there was an understandable tendency to postpone the event, the first time, until the dam almost broke, and then consuming many precious seconds grappling (hunting?) under the flak suit, electric suit, etc., there was no way to stop once started.

If your receptacle would stretch to a capacity of only about 4 ounces, you were in terrible trouble. I was lucky enough to have a G.I. "receptacle" my first time. I think on my second mission Harry was not. After all these years, I still have visions of the desperate grabbing, tearing of clothes, wrappers, and the lemonade icicles forming and hanging from the bombsight, the Plexiglas , and everything else within about a foot or two of the source.

After landing, we would throw these frozen packages into the field surrounding our plane's hardstand. After the war, the people going through these fields must have thought we were perverted sex maniac.

26. <u>Decorations</u>. As events usually went, the first medal was the Air Medal, awarded after 20% of your tour was completed. You then received a bronze

Oak Leaf Cluster for the Air Medal after completing each additional 20%. Instead of the final Oak Leaf Cluster, you were awarded the Distinguished Flying Cross on completion of your tour.

Because of the fact that my tour was constantly being extended, I received an OLC after #10, #15, #20, and #26. After I received my DFC, I applied for and was awarded the one I should have received after #33. This enabled me to wear a silver OLC instead of the former bronze, which really cluttered up the ribbon.

Shooting down an enemy aircraft qualified for an additional OLC for the Air Medal. Ford received two, Gliderwell one, and Jones, our interim bombardier one.

Purple Hearts were awarded for being wounded...usually. I didn't realize that I should have received one for February 24 until I saw Buzz wearing his ribbon some time later. Apparently, not staying overnight at a hospital led to this oversight. I guess I would have received one had I applied for it, but it didn't seem important at the time.

Depending on events, etc., additional DFCs and Silver Stars were awarded. The awarding of these decorations was not always consistent with the courage and "above and beyond the normal call of duty" required. Silver Stars were often awarded to pilots who undoubtedly had much courage, but were really not doing much else but saving themselves while they flew their battered selves and aircraft home.

Others who undoubtedly helped or saved others while accepting additional risk for themselves, often went unrewarded; e. g. spending an additional 15 minutes at the "scene" of a devastating fighter attack making 360s in order to form up survivors and lead them home...Buzz on April 18. He was probably as much at risk from his own crew as from the dozens of Me-109s still in the neighborhood

The Crew

Pilot: Co-Pilot: Navigator: Bombardier:	Lowell H. "Buzz" Myers Arthur F. "Mac" McGrandle, Jr. Elias "Kim" Kimmel Harold R. Levant	Colorado Englewood, N.J. Astoria, Queens Chicago
Radio:	James D. Duck	Florida
Top Turret:	George K. Ford	Texas
Ball Turret:	Will B. Gliderwell	Mid-Atlantic
	Shown as Glidewell in orders.	
Waist Gunner:	Francis E. McAleer	New York, N.Y.
Waist Gunner:	Derwood P. Sawtelle	Maine
Tail Gunner:	Robert Gonzáles	New York, N.Y.

We all completed our tours...I was the first...never in the hospital or off- duty. Buzz Myers was the last to complete his tour...on the day Harry and I left base for Bromwich in preparation for departure to the U.S. on the USS West Point (nee SS America) about October 20, 1944.

I extended about 2 $\frac{1}{2}$ months after completing my tour, as an assistant squadron S-2 officer in order to spell another ex-combat navigator who wanted to go home to the U.S. on leave.

Mac, who completed his tour sometime in August or September stayed over an additional several months piloting a radio-relay ship after completing his tour. He should have stayed over longer. In 1957, I visited Harry in Chicago and found out that he (Mac) returned to the U.S. early in 1945, became an instructor and was killed during a training flight. That explained why I didn't receive an answer to my letters in early 1945.

Mac and I had volunteered to fly Mosquito photo-reconnaissance flights after we completed our tours, but were turned down because the waiting list was already very long.

[The information concerning Mac's death was in error. Actually, he died a natural death in 1993. Sadly, Mac and Eli lived within fifty miles of each other on Long Island, N.Y., but never knew it.]