

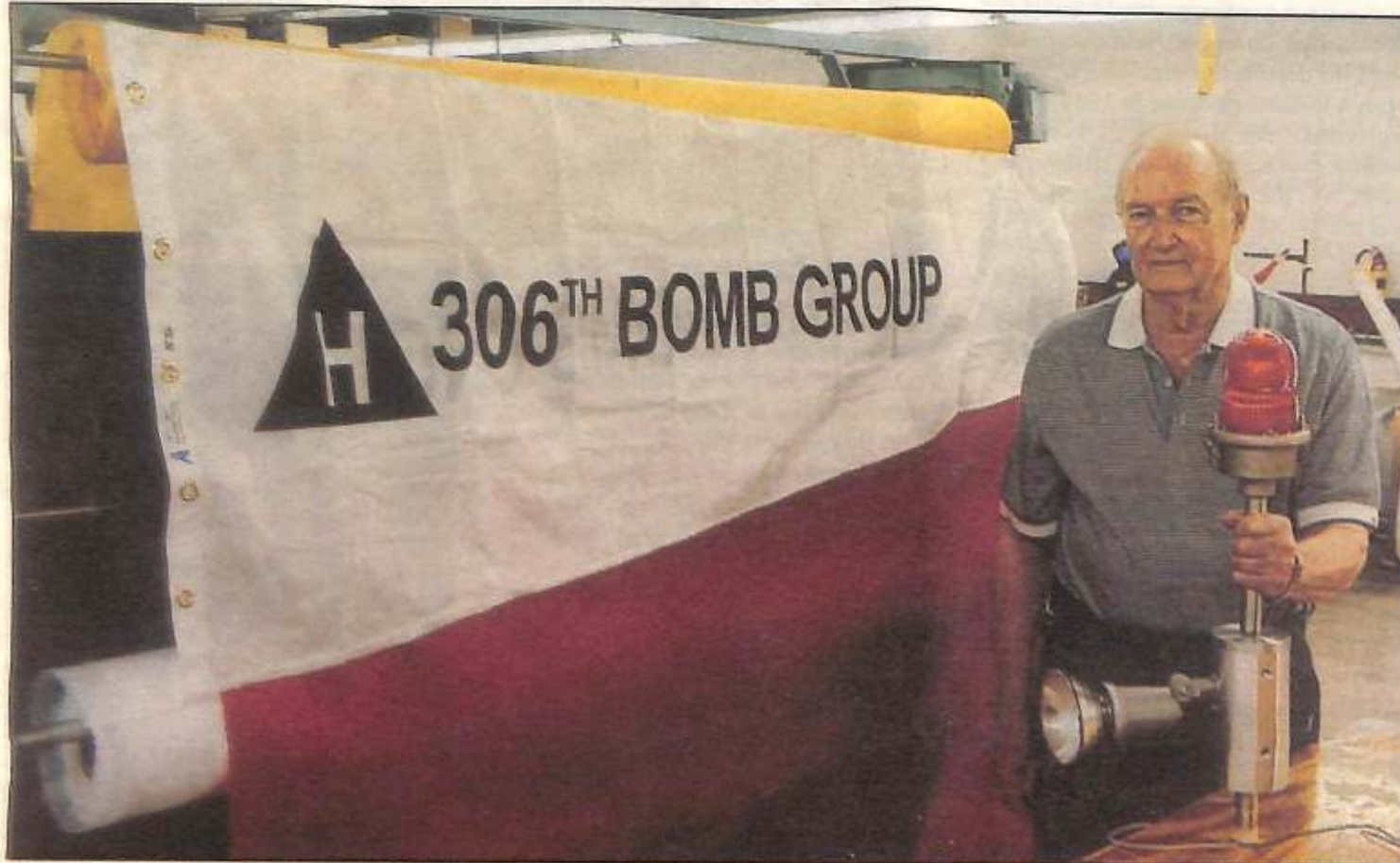
306th Echoes

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New Banner to Float Over Thurleigh

If not already in the sky over the 306th Museum at Thurleigh, a gonfalon identifying our site to all visitors will soon be in place. Shown above, the pennant was made for us by a friend of Royce Hopkins, at right, in Houston. Royce, a 367th pilot late in the war and beyond, through this development has helped greatly in the identification of our edifice on our old airfield. On your next visit there we hope that this will be waving in the breeze and beckoning you and others inside the building.

Skills Needed for Long Over Water Flights

Good Metro Winds & 'Dumb Irish Luck'

By John Gallagher
Formerly of 423rd Bb. Sq., 306 Bb. Gp.

Crewing Up

It's been a long time since the events that follow took place. I feel fairly confident that some of them are correct because I still have a batch of faded and dusty files containing orders shipping me here, there, and yon. For the rest it's just memory slightly warped by the passage of time and probably also bent by my own tendency to make my role in things turn out well. Well, it was 59 years ago when all of this took place.

I graduated as a 2nd Lieutenant from the US Army Air Corps Navigation School at Selman Field, Monroe, LA on January 15, 1944. When I graduated I was still 18. I would be 19 on March 22. My assignment was to report to 3rd Air Force Replacement Depot, Plant Park, Tampa, Florida. I was allowed a delay en route and scheduled to report to Plant Park on Jan. 29. The delay en route was terrific. I hitchhiked home by air and made it to Concord, MA in two days. It was great seeing my folks at home, sporting my new uniform around town to see old friends. And particularly to see Connie O'Neill, my high school girl friend. I also went down to the high school to see a teacher I was fond of and found that my showing up as a 2nd lieutenant just 9 months after leaving my senior class created a considerable stir. I think that a couple of the male teachers that I talked to exhibited either anger or jealousy. I enjoyed myself enormously but was also very anxious to get on with my journey to the war. I left in what I thought was plenty of time to get to Plant Park before Jan. 29 but found the waiting lists at military airfields jammed with troops of all sorts. I made it, but just about an hour before

I would have been AWOL.

Plant Park was a replacement depot that moved people to other Air Corps bases that specialized in assigning qualified crew members to combat crews for combat in a variety of different theatres of war. It seemed highly disorganized to me. It was located in what appeared to be a large athletic field with stadium and other ancillary buildings. It was quite difficult to find such odds and ends of information as: to whom you reported, where you were to sleep, where toilet and bathing facilities were located, etc. It was impossible to find anyone who knew how long you would be there, or where you were likely to be sent. As it turned out, it didn't matter. In less than a week I received orders sending me

President Lee Dies 2 October

Leland J. Kessler, elected president of the 306th at our last reunion, in Covington, KY, died 2 October in Canton, OH.

He had been hospitalized, but had returned home a week before following prostate surgery and additional surgery to reconnect his heart monitor.

Lee was an original member of the Group, and flew to England aboard Curtis Melton's plane, which had ditched off the North coast of Ireland with all of the crew saved. He later was on Maxwell Judas' crew when it was shot down by the Luftwaffe 21 May 43, and Lee became a POW.

More in the Jan. 04 issue of Echoes.

to Drew Field, also in Tampa, FL, reporting Feb. 4.

How to Speed up Combat

After 10 days at Drew field, I was no closer to being placed on a crew. Most of the potential crewmembers I met were ambivalent about getting crewed up in a hurry. It was well known that England was filled to the brim with GI's waiting for the invasion of Europe. Many thought the war would end very quickly once an invasion took place and were not anxious to just arrive overseas as the war ended and have their service time extended in order to be part of an occupying force. It was felt that once the end was in sight, those of us in the States would all receive discharges and head home it was, of course, also true that I might not be sent to Europe but to the Pacific Theatre instead. Somehow I tended to discount that possibility. I decided it might help if someone in the business of making assignments knew I was anxious to get over before the war ended. I located and visited the office charged with assignments to crews and told them I was very anxious to get crewed up and sent overseas. They said they would keep me in mind. In two days I had my assignment. I was assigned to a crew whose Navigator had to be removed for medical reasons. The crew had been together for some time and I was told there would be only a few more training missions at Drew before we left.

I was very nervous about my initial meeting with the members of my new crew. As it turned out, there was no need for concern. We met in a group just before being briefed for my first training mission with the crew.

Savannah Events Set, Time Flies

Do you have your tickets, or is your car ready, travel arrangements in hand?

It won't be too many weeks after you receive this issue of Echoes before you ought to be thinking seriously about reaching Savannah. It's a good trip however you make it, and people will be on hand to greet you along the Southeastern coast, an early immigration point for many who came to the New World to begin life over again.

While it won't be a start-over point for you it will be a time of renewal of those very special experiences which you had, whenever and wherever you first came into contact with the 306th Bomb Group. From the desert of Wendover, the airports, sea-ports and points of arrival in the UK, a step in your life that brought you all kinds of new experiences.

We know there were those who were unhappy with an assignment here and everywhere, there were those with whom you may never have had a good relationship, but this whole venture into a new medium of warfare was an experience which to some extent influenced your entire life afterwards—from the sublime to the ridiculous, from life to death, from little education to the upper ends of that road, from those who came from poverty to wealth, from disappointments to great success. And almost any of these extremes men came and went through the 306th, some in one direction and others in another.

Now we have come to that time for renewal of experiences with as fine a group of men as one could know. We know that to travel with a 306th group is a most pleasurable experience, the same can be said for coming together with them in reunions.

If you have not yet joined with the 306th reunion group, by all means plan now, make arrangements, gather up any family who should and want to come. We will be waiting to greet you in the spacious lobby of the Marriott Riverfront. It is indeed a most pleasant place to be, and it is likely that this will be the Group's final gathering in this place, not to denigrate Savannah and the fabulous Mighty 8th Museum, but a mere statement of fact. We must travel back towards the midwest for 2004, as we have been in the East long enough. And we want you to be with us in this year and the years ahead.

On page 8 of this issue you will find the Daily Schedule for the reunion, and right below it is the 306th Registration Form...Fill it out, write your check and post it to the address indicated. The third step down the page is the reservation form for the Marriott Riverfront Hotel. Or, as many have already done (56 at this writing) you can call the hotel at 912-233-7722 and ask for the reservation desk. Be sure to have your Visa, Master Charge, American Express or other charge card number ready to confirm your reservation.

What do we do at reunions? My experi-

turn to page 4

turn to page 3

Obituaries

Alfred J Ashton, 423rd bombardier (William Fortson's crew), died 29 Aug 02 of a heart attack in Lawton, OK. He joined the Group 29 Apr 44 and completed his missions, departing 13 Aug 44. He leaves his wife, Peggy.

Joseph C. Fowler, 367th navigator, died 18 May 03 in Houston, TX. He joined the group in December 43 and flew his first mission to Halberstadt 11 Jan 44. He ended up flying 34 missions, finishing 21 Jun 44. An avid tennis player, Fowler retired from Texaco Corp. He leaves his wife, Helen, 5c, 11gc.

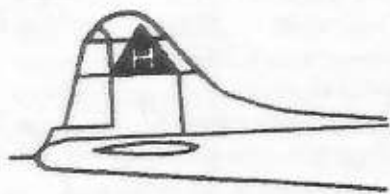
Leroy C Guthrie, 369th mechanic, died 28 Apr 02 in Ormond Beach, FL. He leaves his wife, 2d.

Marcel A. McCartney, 423rd bombardier (Robert Mox crew), died 29 Jun 2002 in Simi Valley, CA. He came to the Group 1 Jul 44 and finished his 35-mission combat tour 18 Nov 44. After the war he devoted a major effort to writing what became two books. More about these books and their availability can be found elsewhere in this issue. He leaves 3c, 7gc, 4ggc.

Charles E. Paine, 367th tailgunner (Richard Breed crew), died 2 Apr 02 in Detroit, MI. He came to Thurleigh 21 Aug 44 and flew his 35th mission on 3 Jan 45. He retired as a senior master sergeant, Michigan Air National Guard in 1983. He retired from Ford Motor Co. 1 Jan '90 after 31 years. He leaves his wife, Lois, 1s, 4gc, 2ggc.

Frank J. Scalera, 368th, died 7 May 02 in Verona, NJ. He had reported to the 306th 13 Mar 44.

Burns W. Roper, 367th co-pilot (Paul Martin crew), died 20 Jan 03 in Bourne, MA. He was the son of Elmo Roper, one of the great polling organizers in the country. At Burns' retirement in 1994 he was chairman of the board. His crew had several interesting reunions, one of which took them inside the doors in London's Buckingham Palace. Burns



Leland Kessler, president; Anthony J. Conroy, vice president; Russell A. Strong, secretary; Robert N. Houser, treasurer; Royce Hopkins, William F. Houlihan, Hugh E. Phelan, Frederick P. Sherman, directors; Lowell W. Burgess, past president. Ralph Franklin, British representative, National School Cottage, Keysoe, Beds., MK44 2HP, England; Telephone from U.S. 011-44-1234-708715.

306th **Echoes** is published four times annually: January, April, July and October, and is mailed free of charge to all known addresses of 306th personnel, 1942-45. Contributions in support of this effort may be remitted to the treasurer.

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TREASURER:
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The 306th Bomb Group Historical Association is a Federally tax-exempt organization and as a veteran's group is classified as 501 (c) (19)

joined the Group 17 Jul 44 and completed his combat tour in Jan 45. He leaves 4c, 3gc.

Frank D. Yaussi, assigned to the 423rd squadron (William Warner's crew), died 7 Sep 03 in Glendale, CA, where he had lived for many years. Early on regarded as the leading bombardier for the group, he was appointed Group Bombardier 12 Dec 42, and continued until his departure 6 Apr 43. He had been a U-Kans graduate in 1939. He received an Air Medal for his bombing accuracy on the 13 Mar 43 mission and a DFC for the mission of 6 Mar 43. He was the Group's first bombardier promoted to major.

306th Family

Margaret Nelson, wife of Harold Nelson, 367th waist gunner (John Heraty crew), died 7 Apr 02 in Sioux City, IA. Besides her husband, she leaves 2c, 5gc.

Jane O'Brien, widow of John J O'Brien, 423rd pilot, died 2 Aug 03 in Patterson, NY. He had died 21 Dec 1988. She leaves 2s, 3gc.

In Memory of...

Joseph Fowler, 367th navigator, by Bob Gill.

Barbara Beck, wife of Robert H. Beck, 423rd gunner, by Daryl Phillips.

Werner H. Kennedy, 367th engineer, by Ester Kennedy, his wife.

Memorial gifts go into a special fund administered by the Board of Directors and are used for special purposes to benefit the 306th BG Association.



POWs: Do You Get All Benefits From VA Funds?

Veterans Affairs wants former prisoners of war who are not getting disability compensation, health care and other benefits to contact the department. The agency said recently an estimated 11,000 former POWs are not getting benefits to which they are entitled. Included in the benefits they can now obtain are free dental treatments if their captivity lasted more than 90 days. If there are 306'ers who are not now included they ought to make contact with the VA immediately.

Items of all kinds for the Thurleigh Museum can be mailed to the address shown below:

**HQ, 3rd Air Force
Historian's Office
APO 09459**

Squares Lend Themselves to Visitors Afoot

From The Boston Globe

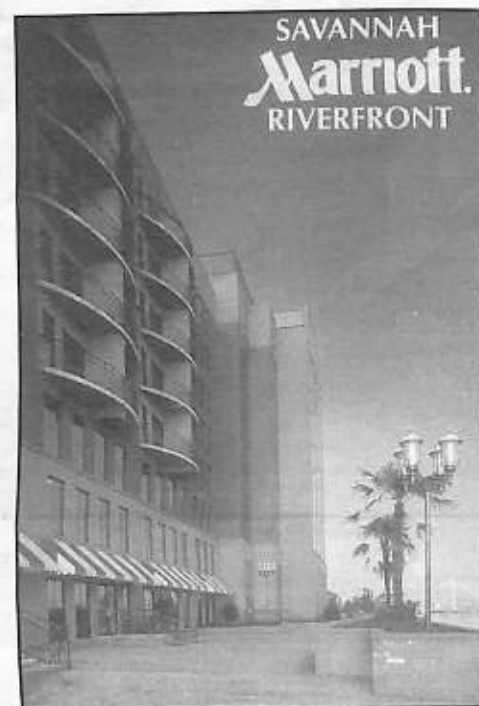
The deep green of live oak leaves. The silver green of Spanish moss, darkened to steel gray in the rain. The hard glossy green of azalea bushes. The rusty green of stubby salt marshes that seem to stretch endlessly. The yellow green of potted asparagus ferns, shot through with light and air. The green of quiet.

While it has achieved national distinction for its emerald-themed St. Patrick's Day celebration, Savannah is green most of the year, thanks to the distinctive squares that define and soften the intersections of its perfectly gridded streets. You cannot travel more than a few blocks in the historical district without running smack into one of these miniature parks, with their ancient live oaks spreading gnarled, arthritic limbs in all directions and dripping with Spanish moss, creating a visual and topographical oasis that invites pause.

Savannah's main squares are meant primarily to be viewed, not used in a recreational sense. "No one picnics in the squares except tourists," says one desk clerk on Oglethorpe Square. Those interested in sports, playgrounds, and picnics gravitate to Forsyth Park, a 20-acre gem at the southern tip of this historic district that boasts playground equipment and athletic fields, as well as shaded walks, monuments and a fountain.

For visitors, Savannah's squares are a delight. Put on your walking shoes to enjoy this city's compact, verdant center. Traffic is slower here than on the outskirts, and you'll be pleased to find that pedestrians and automobiles are on equal footing in the small rotaries the squares create.

Of General Oglethorpe's 24 original squares, 21 survive, bordered by churches and the homes for onetime merchants, now occupied by real estate brokers, law firms and inns.



306th MAIL ORDER MEMORABILIA

Send this form and check to 306th Bomb Group Association to: Marty Lenaghan, PO Box 918, Brunswick, OH 44212

Squadron Golf Shirts

Embroidered with B-17, squadron # and group #

Circle size in listing below:

___ 367th red	M, L, XL	\$22.00
___ 368th white	M, L, XL	\$22.00
___ 369th green	M, L, XL	\$22.00
___ 423rd blue	M, L, XL	\$22.00

Group Golf Shirts

Embroidered with 306th logo on left pocket

___ Putty color	S, M, L, XL	\$22.00	2X, 3X add \$5.00
___ Birch color	S, M, L, XL	\$22.00	2X, 3X add \$5.00
___ Grey color	S, M, L, XL	\$22.00	2X, 3X add \$5.00

Caps

___ Grey baseball, embroidered with First over Germany, B-17, 306th Bomb Group	\$12.00
___ Royal Blue, w/scrambled eggs on brim and 306th logo	\$17.00
___ Grey summer mesh, embroidered with B-17, Squadron# and group#	\$12.00
___ 367th	\$12.00
___ 368th	\$12.00
___ 369th	\$12.00
___ 423rd	\$12.00

Patches

___ 306th Patch 3 inch, with First Over Germany	\$6.00
___ 306th 2 inch without First Over Germany	\$6.00
___ 306th 5 inch Group logo	\$6.00
___ 367th 5 inch in full color	\$6.00
___ 368th 5 inch in full color	\$6.00
___ 369th 5 inch in full color	\$6.00
___ 423rd 5 inch in full color	\$6.00

___ B-17 Gold pin for lapel or hat	\$6.00
___ 306th decal w/First over Germany	\$.50
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SHIPPING AND HANDLING CHARGE \$6.00

GRAND TOTAL \$ _____

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Stewart's Crew and RAF Savior, All KIA; Later Praised for Work



Front: Lt James M Stewart, Lt William W Dickey, S/Sgt Raymond C Schroyer and Cpl. Hugh Langan. Back: TSgt Thomas E McMillan, T/Sgt. Charles J. Meriwether, S/Sgt Jack M Wheeler and Lt John A Creamer

HEADQUARTERS
EIGHTH AIR FORCE
ETOUSA (G-50)
OFFICE OF THE COMMANDING GENERAL A.P.O. 633

Air Chief Marshal Sir Charles Portal,
G.C.B., D.S.O., M.C., 4 November 1942.
Chief of Air Staff.

Dear Sir Chief Marshal Portal,

As an instance of the fine spirit of co-operation existing between the Royal Air Force and my Command, I wish to bring to your attention a report forwarded to me from Colonel Overacker, Air Corps, the Commanding Officer of the 306th Bombardment Group (H), which highly commends Flight Lieutenant A.J. Andrews, R.A.F., Hawkinge, for a notable display of skill and presence of mind which resulted in the certain saving of a disabled Fortress aircraft and quite possibly that of the lives of its crew.

On 9 October 1942, at approximately 1020 hours, a B-17 airplane No. 41-24486, piloted by 2nd Lieut. James M. Stewart, 367th Bombardment Squadron (H), was returning from an operational mission with three engines inoperative. In mid-channel, between Gravelines and Ramsgate, the aircraft had descended to 1500 feet altitude, and Lieut. Stewart had decided to force land in the Channel rather than risk attempting to locate an airdrome in England. At this time, a Spitfire, piloted by Flight Lieut. Andrews, pulled up in front of the Fortress, rocked his wings as a signal to follow him, and led the Fortress directly into the airdrome at Manston. Just prior to reaching the airdrome at Manston, which was not visible to Lieut. Stewart because of rising ground, the Spitfire lowered his landing gear. Lieut. Stewart did likewise and followed the Spitfire directly on to the runway. The cool thinking and resourcefulness which Flight Lieutenant Andrews displayed, reflected the highest credit upon this young officer and comes well within the high traditions of our allied flying commands.

It is my great pleasure, personally, to add my congratulations and appreciation not only of a gallant gesture, but for the material assistance Flight Lieutenant Andrews rendered an officer of my Command.

Sincerely,

Carl Spaatz
CARL SPAATZ
Major General, U.S.A.,
Commanding.

Savannah, continued from page 1

ence tells me that the MAJOR item is "talk". We are it endlessly, and this is where we find out how well others remember, and can relate their experiences. Believe me, some are better at this than others. Your wives will enjoy the talk, your kids will get a great pleasure out of the story telling and out of the Mighty Eighth Museum. I have been to the Museum more times than I can count now, starting with the dedication of it. Each time I stop there it looks better, and the exhibits keep on growing. You will find its library a treasure trove of 8th Air Force lore. There are books galore, and this is where you can often get questions answered. If you haven't heard from a friend who served with another group, ask at the desk and their remarkable computer file on the 200,000 people who served in the 8th may have just what you want to know. Library personnel are friendly and interested in your needs and desires, so give them a chance to find answers.

Also, some of our own publications will be available in our hospitality room for your purchase. This way you can check them out and not buy a "pig in a poke".

Savannah is a great place for walking and viewing some early Americana. Much has

happened here both before and after William Tecumseh Sherman made his visit there. John and Charles Wesley came to Savannah on their sole venture to the New World. Johnny Mercer sent his music out from here. The Girl Scout founder lived here. See Page 2 for a description of some of Savannah.

We guarantee that you will not be disappointed in what there is in Savannah, at the Museum and in the Hotel. And it is always a thrill to join once a year with a group of the finest people you will ever meet— just read the name tags around you. Have breakfast in a fine eatery off the upper lobby, go any lobby door and make your way to the river and then along its bank to lots of interesting shops, restaurants, other places to visit. It can be done alone or with groups. If you don't feel like walking back to the hotel, get a cab. One word of caution, don't walk to the Museum. It's more than 10 miles. If you have your car there is a quick easy way to get to the Museum by Interstate hwy. Just take I-16 to I-95, turn North and get off at the Pooler exit. Then go to the first stop light and turn left. You can't miss it!

Note that the Reunion calendar and the registration form present other opportunities to help keep you busy. Just remember— it may cut in on your conversation time!

Battle of Britian Museum Letter

Dear Alan,

The Officer you are enquiring about is Flight Lieutenant Alan Jeffery Andrews DFC and Bar, who flew with No. 91 Squadron, based at Hawkinge. Service No. 60748 and was a Royal Air Force Volunteer Reserve Officer.

He was posted missing in action whilst flying from RAF Hawkinge on Monday 2nd November 1942, at the age of 22 and is commemorated on Panel 65 of the Runnymede Memorial, Surrey, Great Britain. He was on a shipping recce /ASR search from Boulogne to Dieppe in Spitfire VB AB378, coded DL-T, when he went missing. Alan was the son of Ernest Gilbert Andrews and Jean Elsie Andrews, of Newport, Monmouthshire; and husband of Jean Elizabeth Andrews of Usk, Monmouthshire.

He was with No. 91 Squadron at Hawkinge in 1941 and is recorded as returning to the Squadron on the 25th August 1942. Andrews shortly afterwards took over 'B' Flight and on the 30th September 1942 claimed the destruction of a Junkers Ju 88, which crashed on a beach near Cap Gris Nez and burnt out. He claimed the joint destruction (with Sgt. D. H. Davy) of another Junkers Ju 88 on the 18th October, whilst on a recce to Ostend. Andrews damaged a Focke-Wulf FW 190 on the 26th October, but sustained cannon shell damage to his own aircraft in this combat.

Andrews received the personal congratulations from the AOC No. 11 Group following operations on the 31st October 1942, when the squadron intercepted a returning raid of FW 190's that had attacked Canterbury. The squadron claimed five FW 190's destroyed and several others were claimed as damaged during this combat.

By November 1942 Flt/Lt. Alan Andrews had become one of the most successful pilots

with No. 91 Squadron. He had claimed several enemy aircraft and been successful on anti-shipping and ground attack missions. He was a popular flight commander and got on just as well with his groundcrew, as he did with fellow pilots. (Sadly one of his ground crew, George Stubbs, recently died. He would have been able to furnish you with a lot more background information than I can.)

At the time of his death his wife was expecting a baby, and the prospective parents had agreed on Carol as a girl's name, but could not think of a name of a boy. LAC George Stubbs, who maintained his aircraft (R7292 Newbury 1), reflecting this dilemma and painted 'CAROL OR -' just forward of the cockpit.

On the 2nd November Andrews and Jean Maridor set out on a shipping recce and ASR search to cover the French coast from Boulogne and Dieppe. They took off from Hawkinge at 1640 hours and headed across the channel. Just off Le Touquet they spotted five FW 190's and attacked. Maridor claimed one destroyed. F/O Maridor tried to find Flt/Lt. Andrews for ten minutes, but saw no sign of him or anymore enemy aircraft. On returning to base F/O Jean Maridor's worst fears were confirmed, as Flt/Lt. Andrews had not returned from the sortie. Five Spitfires from 'B' Flight took off immediately in very bad weather to search for him, but were recalled due to worsening conditions back at Hawkinge. No trace was ever found of him and it was later confirmed that he had been shot down by Feldwebel Adolf 'Addi' Glunz of 4/Jagdgeschwader 26, his 23rd victim.

Sadly the letter you refer to was written two days after his death.

I would be very interested in seeing your research and having a copy of this letter, if at all possible?

306th PUBLICATIONS

Published materials now available from the Group will help you follow the 306th through the combat period 1942-45:

Combat Diaries of the 306th Squadrons

Day by day diaries kept by intelligence officers, of the Squadrons' combat activities. More than 150 pages, also including plane and personnel rosters. Plastic bound

Men of the 306th, on microfilm

A roll of 16mm film duplicates the 306th card file of nearly 9,000 men, including data extracted from various 306th records, and personal data on some of the men. 1995 edition.

Mission Reports

Copies of official reports on each mission you flew, including intelligence summaries, track charts, formations and crew interrogation reports. Data for some missions may be missing from the files. Three missions for \$5.

ORDER FORM

306th ECHOES' Book	\$55.00
Sept. 02 Directory	\$10.00
367th Combat Diary	\$20.00
368th Combat Diary	\$20.00
369th Combat Diary	\$20.00
423rd Combat Diary	\$20.00
Casey Jones Project	\$10.00
Men of the 306th (16mm film)	\$20.00

Make check payable to: 306th Bomb Group Association (prices quoted include postage and packaging charge)

Name:

Mailing Address:

Send to: Secretary, 306th BGA, 5323 Cheval Pl., Charlotte, NC 28205

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First Over Germany

A History of the 306th Bombardment Group

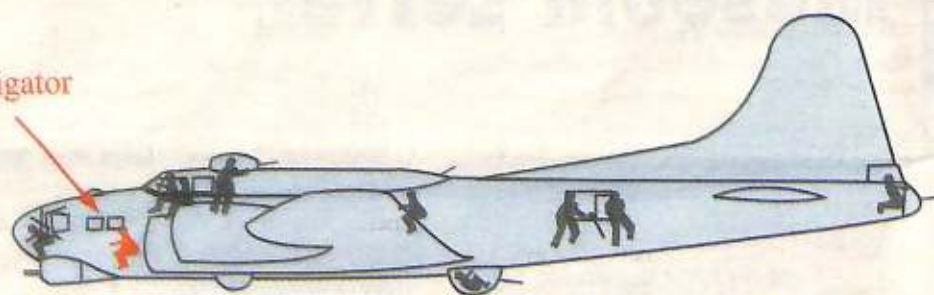
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Navigator

Navigator



The navigator, with aerial maps at his table, checks his course to the target and heavily defended flak areas.

Air navigation is simply defined as determining the position of an aircraft in relation to the earth. A task far from simple in practice, navigation is a highly exacting art demanding a quick mind and a knowledge of mathematical calculations. A navigator had to know the position of his aircraft at all times, even when guided by a formation—for in war, situations could change rapidly and a crew couldn't afford not to know where they were over enemy territory. Navigation was the key to avoiding heavily defended areas, reaching the target and returning to base; the pilots flew the plane, but the navigator supplied the course they must fly. Navigation could be by pilotage (visual reference to the ground), dead reckoning (using true airspeed, winds aloft, heading and time



A navigator in training computes time and distance to an assigned check-point.



Landmarks seen by the navigator through the side windows could confirm the plane's position, to calculate new position from last known), radio, celestial, or any combination of these four.

The navigator's table was fixed at the rear of the nose compartment, against the left side, behind the bombardier's station. Above the table were mounted two vital instruments: the gyro-magnetic compass and to its right, the radio compass. The radio compass was linked to a rotating loop antenna inside a tear-shaped housing located just forward of the bomb bay and to a fixed sense antenna, slung along the bottom of the nose. The signal received by these antennas was presented visually on the compass face as a relative bearing to a radio station. On the opposite side from the table was the drift meter. This was used to determine the angle between the heading of the aircraft and its track over the ground. The amount of drift was essential in the calculation of the winds aloft element of dead reckoning.

Throughout the mission the navigator would inform the pilot of their position and time estimates to various check points. When the initial point was reached for the bomb run the navigator would then inform the pilot.

The navigator operated the two cheek guns in the nose when not at his regular duties.



Under attack the navigator manned the cheek guns.

Bombardier



The bombardier's position equipped with the Norden bombsight.

The basic principle of any bombing mission was to deliver the bombs accurately on the target. To navigate through clouds or to evade and counter the enemy's defenses was an achievement itself, yet everything depended upon the bombardier's ability to hit his target. The bombardier's main tool was the Norden bombsight, a top secret piece of equip-

Good Metro Winds, continued from page 1

Bob Horn, the pilot, introduced himself to me first, and in the process told me how pleased he was to have finally been assigned a new navigator, and said he thought the rest of the crew would feel the same way. Horn and the nucleus of his crew had been together for some time and had repeatedly been held back from proceeding overseas by illness and accidents. Horn introduced me to the other crewmembers, all of whom were very pleasant but seemed to be somewhat reserved and certainly less than overwhelming in their welcome. I decided that they had a perfect right to feel that way and assumed they simply wanted an opportunity to evaluate for themselves my ability as a navigator, and whatever other qualities they thought would make me an acceptable crew mate.

The training mission assigned would take us on a series of short runs to an I.P. (Initial Point for a bomb run), then to a target (generally located in one of the towns or cities in the area) then to the next I.P. I was to provide information to the bombardier on wind direction and speed at each I.P. prior to the bomb run. An instructor bombardier was

present to observe the activities of Bob Alker, our crew's bombardier, and would evaluate his procedures on the practice bomb runs and those of all other crewmembers also involved in the runs. Needless to say, no bombs were dropped on these flights, the bombardier instructor evaluated bomb run techniques and formed his estimation of the abilities of our bombardier and those of us on the crew who worked with him during a bomb run.

After take off, since it was my first ride in a B-17, I was given some time to get familiar with the equipment locations, the general intercom procedures, oxygen check procedures, and other items. When I had my desk set up with required maps and navigation instruments in position, had removed the covers from the compass and the drift meter, and had set the station pressure on the altimeter, I called the pilot, told him I was ready to proceed and gave him the heading from Drew Field to the first of our scheduled I.P.s. We had been climbing and were already at our briefed altitude, 25,000 feet. I had put on my facemask when the pilot called for masks to be put on as we were going through 15,000 feet and was now breathing almost 100% oxygen. The pilot put the plane into a deep circle and pulled it out on the heading I

gave him just before we passed over Drew Field. We were headed for the first of the I.P.'s, a small town about 30 miles from Drew. The weather was cloudy with many small cumulus clouds building along our route. I had planned to do simple pilotage navigation, navigating by using ground features for visual checkpoints, but found that the clouds were making it difficult to find checkpoints. At our speed the first I.P. was only 12 minutes from Drew. When 8 or 9 of those minutes had elapsed I called the pilot and said something like, "Navigator to Pilot, I'm having some trouble finding check points with the clouds bunching up below us. Would you please make a 360 degree circle so I can get myself located." His only reply was, "Roger". During that circle I did find myself and when we finished the circle we were almost on top of the I.P. I gave him the heading to the first target and then called the Bombardier and gave him a quickly calculated wind, which turned out to be miraculously accurate, and a ground speed and ETA to the target. For the rest of the mission I had no more trouble, probably because I worked more rapidly and with more intensity than I had ever worked before in a plane. I soon discovered, however, that my request for a circle was about to have

long-range ramifications.

When we were on the ground we went through a debriefing in which the bombardier instructor commented on the flight and the work of each of us who worked with our bombardier in making the bomb runs. He was very satisfied with what he had seen and told us that he felt we were ready for our big trip soon. When the session was over we had a general chat. Bob Horn was delighted with the mission and told me that he was pleased with my call for him to circle. He said anytime I needed help from him, to ask for it. "Never jeopardize the mission because you don't want to admit you're lost." All the rest of the crew seemed much friendlier than at our earlier meeting. This had me confused for a minute until Smitty, the radio operator, came over and said, "Sir, I hope you realize that as far as this crew is concerned, your name is Circle from now on." I just smiled and said, "Sounds like a good name to me." He was right: from that time on I was Circle to everyone on the crew. They never called me that in front of anyone not on our crew, but once the enlisted men on the crew knew that I was not offended when they called me Circle, they rarely used another name. A few days later Bob Horn asked me if I had any

Bombardier



bomb sight, a closely guarded secret throughout the war.

ment the Allies guarded throughout the war. On a mission, the bombardier's real job began at the IP. This was the point at which the bombing run on the target began; from this point on, the bombardier would fly the airplane through the bombsight linked to the autopilot. The plane would have to be flown straight and level to the release point through



Fortresses encounter flak on the bomb run.

flak and fighter attacks. Few, if any, bombers equalled the B-17 in visibility afforded to the bombardier. Sitting behind the bombsight in the plexiglas nose gave him an unrestricted view for his mission. The Norden simplified the bombardier's job considerably by taking into account factors of altitude, airspeed, ground speed and drift to automatically calculate the bomb release point.



B-17's over the target.

The optical sighting mechanism of the bombsight was a small telescope. The bombardier would first locate the target by looking over the instrument and through the plexiglas nose. Once the target was located he would try to line it up in the telescope, often requiring several head up glances to find the target again. There were two cross hairs on the telescope, one to show drift left or right of the target, the other to show rate of closure. When the two indicators met the bomb would automatically release.

Originally the bombardier had a .30 caliber machine gun in the plexiglas nose but this was soon changed to a more effective .50 caliber. In late 1943, a powered chin turret was added to help combat frontal attacks and became standard equipment on the B-17G.

- Tail Gunner Sgt. Crooks, Robert B. Tail Turret, 2-50 cal.

One of my unpleasant memories of Drew Field is that after being assigned to a crew, the medical and dental people became very serious about our health, I found myself summoned to the medical clinic one day for a complete re-examination of my teeth. Although their records indicated many previously filled cavities with which I was having no trouble (I had dozens of fillings), a new Air Corps directive required all fillings in combat crewmembers to be replaced with fillings installed with a new liner. Apparently many aircrew members in Europe had been experiencing problems with existing fillings becoming painful at high altitudes. However, I think that only a very few ever had as many existing fillings as I.

At any rate, I spent three long days having all of the many fillings in my mouth reamed out and replaced with Air Corps approved fillings. Each day, after 3 or 4 barrels of novocain had been applied, they were unable to control the pain any longer and for the remaining hours I had a period of personal torture.

We had only two more practice missions when we were informed that we were each

getting a ten day leave to start March 18. I was again disappointed at another delay, but having finally become crewed up, I thought I could sweat it out. The other crewmembers had been without leave much longer than I and certainly deserved it. I did not go home on the leave because I was very low on funds and the 10 days could mean almost no time at home if hitch hiking by air was very slow. When I had used up most of the money I had seeing the sights in Tampa and St. Petersburg, I bought some books and holed up in the BOQ reading them. After everyone had returned from their leaves" we flew a few more practice missions and in about three weeks finally received orders to ship out.

The Atlantic Crossing

On April 24 we moved from Drew Field to Combat Crew Section, 3AF Staging Wing, Hunter Field, GA. At Hunter we were assigned a brand new B-17 G. For the next 4 days we spent all of our time checking out the aircraft, running a variety of ground and air checks. For me, this period was spent aligning the compass and spending hours checking deviation, the affect of aircraft electric and metallic items on the compass. We also spent time calibrating the air speed indicator and the altimeters. The navigator's compartment in the nose came equipped with new navigation equipment, all of the tools and equipment needed by a navigator including a new octant. All of the other crew specialties had their own lists of checkout procedures to complete. When we were through we all felt that we had a great airplane to take us wherever we were going. We had been warned a number of times that when we got overseas, wherever that might be, we were unlikely to have this airplane assigned to us, but probably would go through a combat checkout period of training, and then be assigned a plane when we were considered ready for combat. The scutebutt-wisdom was that the plane we were then assigned would most likely be some old clunker that had been through the wars for quite a while. However, the future belonged to the future, we were all very pleased to have this plane for our approaching trip.

On or about April 28 our crew was ordered to fly our new plane up to Grenier Field in Manchester, NH. We were instructed to take all personal belongings in anticipation of a change of station. This was very exciting to everyone on the crew but particularly exciting to me. Manchester N.H was about 40 miles north of my hometown Concord, Mass. I was hoping I'd get a chance to get home. I enjoyed the trip up the east coast. It was the first time I had ever been that way flying with my own crew. Bob Horn was willing to make small side trips to let any of us who wanted to see something special along the way have their chance. We all got an extended look at New York City at the lowest permitted altitude Bob felt to be safe. When we were getting into Massachusetts, I asked Bob if we could take a look at Concord. He said sure and then asked me to point out the town before we got to it. When I told him it was 5 miles dead ahead, he put the plane into a dive and dragged the town at an extremely low altitude with much changing of prop settings, which produced marvelously loud noises. After we landed at Grenier that night I made an illegal call to my folks. They said the whole town was aware of our passage that afternoon but they had not realized it was my crew. I had to tell them that I could not get home. I had found out we were restricted to the base after we landed. I couldn't tell them we were going overseas, also prohibited information. I told them it was just another training flight.

Pointing Out our Road

The next day, April 29th, we received our orders to proceed by air B-17G, # 42-102651, from Grenier Field, NH via the North Atlantic route to Nuts Corners, Ireland, reporting the route to the Air Transport

Command Terminal. Our first step in this trip was Grenier Field to Gander, Newfoundland where we would receive extended briefing for the North Atlantic crossing. The trip from Grenier to Gander was uneventful but long. At Gander we were given quarters and told to report to an 8 a.m. briefing in the morning.

We went through a number of briefings at Gander. The entire crew had lectures on radio procedures, on new enemy aircraft and enemy boat recognition photos which were provided to each crew member, lectures by a number of different officers and enlisted men on bailout procedures over land and sea. Procedures to be followed in the event of landing in enemy occupied territory, and evasion procedures.

The navigators were briefed separately on weather, enemy radio jamming, and coastal features of Ireland, England, and France. Navigators were warned of the possibility of enemy ships, presumably subs, located along our route with equipment capable of jamming high powered, commercial radio broadcasting stations in order to distort the readings on our direction finding equipment. These were the stations we would normally use for radio fixes. We were cautioned not to use any of the national or commercial radio stations in the British Isles, France, Iceland, or Ireland to home toward or to establish position fixes. We were also briefed on methods to establish "points of no return", i.e. the point at which wind at the altitude we were flying would have carried our aircraft beyond a point at which its gas supply would be adequate to permit return to a safe landing, which might be against the same winds that had helped us on the way out. We received a refresher lecture on making visual determinations of wind direction and force by observation of wave movement and direction with the navigator's drift meter. I felt that this technique might be useful in some emergencies, but required some dangerous assumptions. I was very confident of my celestial ability and in fact was looking forward to using celestial navigation again after so long a time.

We were told that the North Atlantic route had just opened. It was closed during the winter months. We were to keep a careful lookout for any ships, subs, planes, or other equipment noted during our passage.

We were also provided a number of horror stories by each of the speakers about flights of single aircraft and multiple aircraft becoming lost on the crossing and ultimately landing in France or other occupied countries and receiving a friendly welcome from the Germans, which included loss of their aircraft, and imprisonment as prisoners of war. At that time, I thought those stories were manufactured to increase our awareness of the dangers lurking, eventually I learned that they were all true.

Our briefing from the meteorologists was extensive and as thorough as they could make it. We were given predicted winds for the altitudes at which we would fly and the predicted changes in wind direction and speed as we progressed across the North Atlantic, with the oft-repeated warning that these were only predictions and that we must use the methods we had available to us (celestial navigation and dead reckoning) to pin point our location frequently enough to get good winds. We called the winds from meteorologists "metro winds" in contrast to the winds established by any of the navigators methods. The following day, during the morning and early afternoon prior to our afternoon take-off, the base navigation and meteorological people provided me with their latest, predicted wind information and worked with me on an initial point of no return determination based on those winds. This was revised several times prior to our designated take-off time to accommodate changing wind information. When we taxied

Good Metro Winds, continued from page 5

out to take off a landing gear problem was discovered and we were stood down for another day while that was corrected.

The years have blurred some of the particulars of our Atlantic crossing in my mind but I believe that what follows is generally correct. I think we were briefed to fly at about 10,000 or 12,000 feet. I know it was at an altitude that did not require us to be on oxygen. We took off at about 4 p.m. with clear weather conditions. This meant that we had about two hours before sunset during which I took a number of sun shots. With our generally northeast heading the sun was at our southwest and gave us excellent speed lines. The line of position on the earth of a celestial shot is perpendicular to the bearing from the sextant to the object being shot, in this case, the sun. Therefore the sun lines I was getting were roughly perpendicular to our northeast heading and provided a good indication of our groundspeed. I was quite pleased because the groundspeeds I was calculating were very close to the groundspeeds I'd predicted using the metro winds I'd received at Gander. I was running a continuous Air Plot (keeping a continuous plot of true heading by applying corrections for variation and deviation to the compass indicated headings for the time intervals they were maintained, and a continuous plot of true air speed by applying altitude and temperature corrections to the air speed indicator readings). In this manner, whenever I could get a fix, the vector from my air position at the time of the fix to the ground location of the fix would give me a wind direction and velocity for the elapsed time since my last known earth position, in this case Gander Field.

I continued using metro winds and the resultant compass headings until well after sunset. I wanted the best display of stars I could get, and after they were visible, spent some time choosing the ones I would use for my first fix in order to get the best course lines and speed lines I could achieve. When I was ready I moved my head up into the navigator's dome and prepared to take a shot at Polaris, which should give me a good course line, a line parallel to my intended course. Although Polaris is not a very bright star, I was able to see it well through the octant. I discovered, however, that one other ingredient in shooting a night shot was missing. I could not see the bubble in my octant. In an averaging aircraft octant, the star is placed in the center of an air bubble whose perimeter is lightly illuminated. The navigator holds the octant so that the star is positioned in the center of the air bubble and the air bubble is maintained in a level position while he presses continuously with one finger on a stylus that applies marks to a waxed paper disk for a designated period of time. The average of the altitudes of the star, in degrees and minutes, indicated by those marks and the center point of the time lapse over which they were taken gives an average altitude corrected for the roll of the aircraft. Most aircraft move through the air with a forward roll much like a sine curve. The averaging process assists in minimizing the affect of this roll on celestial shots. I stayed in the dome for some time trying to understand why I could not see the bubble. I finally assumed that when I took the sun shots earlier, I was able to see the perimeter of the bubble because of the ambient sunlight. Now without some perimeter illumination I could not see the bubble at all.

The navigator's dome in the roof of the nose of the B-17 is directly in front of the pilot's window. This means that the pilot can see the navigator's head pop up into the dome, can see it as long as it's there, and can see it as it leaves. When I got down from the dome and back to my desk, Bob Horn called and said he thought I was in the dome for quite a while and asked if everything was all

right. I didn't want to concern him at this point, in my mind there was still ample time to turn back if necessary, before reaching the point of no return and I felt the bubble light problem should be a simple thing to fix. I told him I was just evaluating which stars would make the most effective fix, and that I would be taking the fix shortly.

At my desk I worked for a long time trying to understand what was happening. My new octant came in a case with no reference book or back up material. It looked like the same model I had used all the way through training. There were no switches, places for the insertion of a plug, access doors for battery placement or removal, or any other devices I could see on the exterior of the octant that might provide illumination of the bubble. I had never before thought through the question of how the bubble was lighted. I was sure there was no battery device used because no one had ever mentioned one and because I had used my octant during training frequently over a number of months with no bubble lighting failure. I tried to find a way to open the octant to see if a view of the interior would shed any light. I could find no way to open it.

From time to time I climbed up into the dome and acted out the process of shooting a star. After one of these, the pilot called again and asked how everything was going. I told him that we seemed to be doing just what the metro winds had predicted. I told him that I was having some trouble with some of my equipment and wondered if he would ask Oren Walley, our flight engineer, to come down for a moment. He said sure.

When Oren showed up I explained my problem. Together he and I worked for a considerable time trying to find an answer to the mystery. I had very little mechanical aptitude and I figured that if anyone could find the answer to this problem it was Oren. We probed into every corner of the surface of that impenetrable octant. At some point I looked at my watch and realized that we were already well beyond the point of no return.

I sent Oren back to his position telling him there was no reason for concern because we had plenty of navigation options. I also asked him to say nothing about my octant problems to the pilot or any one else on the crew, because it would just needlessly worry them.

After he left, I again climbed into the navigator's dome and acted out my performance of shooting the stars for the benefit of the pilot. I spoke to the pilot several times, twice giving him small heading corrections that would have been required if the metro winds were still as predicted. I continued to maintain my charting of air positions to maintain our theoretical air position with no wind and also plotted a ground position course based on the metro winds. When the new day broke I was delighted to see the sun rise. I took my first sun shot and hurried to plot its location. I found it crossed more or less perpendicular to our path very close to where I thought it should be based on the metro winds and provided a ground speed very close to that yielded by the metro winds. I was pleased with that and felt quite confident about the distance we had traveled but was still very concerned that we had no course information. All that I really knew was that we were somewhere on that line of position from the sun. We could be dead on course or hundreds of miles off course.

I spent some time trying to pick up a wind by observing the wave movements with the drift meter. I found that I could get a very good reading of wind direction but had no faith in the wind speeds I found. When we were about 350 miles from the Irish coast I decided that it would have to be a brave enemy sub to take up a position that close to the British Isles and that I could probably safely take a radio fix. At least I felt I could take one and then evaluate whether it was something I could rely on or not. I picked up

a good course line from a commercial station in Dublin, Ireland, then crossed it with a good speed line from Reykjavik, Iceland. When plotted the fix looked excellent, just slightly south of my position calculated with metro winds. I decided to try for a third station and found one that sounded like a commercial station coming from the southeast. The needle had moved strongly to the station and remained rigidly fixed. I thought at first that it might be Paris or Brest, France but then realized that it wasn't French I was listening to and it wasn't Spanish. I finally concluded it was Portuguese, and at a station break heard the word Lisbon. I plotted it on the chart and ran it back with my current groundspeed and found that, even though it was almost 25 minutes since I had taken my Reykjavik line, I had drawn a very small triangle.

I decided that the fix was good, worked out the wind, using my air position, and plotted a new course and an ETA for the pilot. I called him and gave him the new heading, which was a minor correction, and the ETA. He called back and said he thought it was very close to our original ETA. I told him that we must have had excellent metro information.

In about 30 minutes I tried for another radio fix and to my dismay found nothing seemed to be working. I could find no response at the frequencies I had used for the Dublin, Reykjavik, or Lisbon lines of position. I continued to shoot sun lines and continued to find that the groundspeeds I calculated were very close to the groundspeeds I had predicted. Once again I was getting very nervous about my lack of good course data. I wanted some verification of that radio fix. I decided to try checking the ocean waves with drift meter again but once again was very uncomfortable with the results.

I was mulling about all of this when the Bob Alker called and said that he could see land of some sort off to the southeast. I looked to where he was pointing then went back to my charts. I decided that we were looking at the northern end of Mullet Peninsula off the coast of County Mayo, coming toward us just where it belonged, slightly south of our intended course. Plotting that visual bearing with the astro compass and another from Malinmore Head just outside the entrance to Donegal Bay gave me a quick fix. I gave the pilot a corrected heading with my old wind and when I had a new wind worked out from the visual fix found that my old ETA was still good. We sailed up Donegal Bay, past Ballyshannon and into Northern Ireland. When the pilot had Nuts Corners, our destination airfield, which was also the Belfast municipal airport, on his radio direction finder, I collapsed in my chair, totally exhausted. We came in over Nuts Corners just 2 minutes before my ETA.

I was very tired but my mind would not rest. I remembered Bob Horn's remark following that first training mission, "Whenever you need help, just ask for it. Never jeopardize a mission because you don't want to admit you're lost." Had I been guilty of exactly that, not wanting to admit I was lost? Had I taken responsibility for violating the point of no return on my own shoulders without alerting Bob of my problems with the octant? I rationalized that I was always quite sure that our metro winds were excellent, my sun lines had given fine confirming groundspeeds for a few hours after takeoff and again for a few hours before landfall. I never thought I was lost.

Why had I become so comfortable after taking a radio fix from very distant stations that I had been cautioned to avoid? That again opened endless mental conjecture. Why had the first radio fix been so easy and felt so correct and why had the second attempt produced nothing? Some fluke in the airwaves that permitted clear reception from such long distances for the first and renewed jamming or bad airwaves for the second? My mind went back and forth over

How It All Began - And Then Ended

When the Axis countries began World War II with the invasion of Poland on September 1, 1939, and then with the sneak attack on Pearl Harbor December 7, 1941, America was suddenly thrust into a war for which it was tragically unprepared. The armed forces had been neglected, even scorned between the wars. On the day the war began in 1939 the United States Army ranked 18th in the world, behind even tiny Holland. Some training was conducted with obsolete WWI equipment, even wooden rifles. After Pearl Harbor, initial losses on the high seas and on land almost devastated what remained of our fighting forces. The infamous march after the fall of Bataan resulted in the death of thousands of the 36,000 American prisoners. And then the garrison at Corregidor with its 10,000 men surrendered. The Battle of the Java Sea destroyed what remained of the American Asiatic fleet. The mighty Lexington was sunk in the Battle of the Coral Sea. It looked bleak. And then, only 6 months after Pearl Harbor the Japanese fleet was defeated at Midway. Japan would never again mount a serious offensive against the United States, and America would never again lose a single battle on land or at sea in the Pacific.

The teen-age Americans fresh from farms and factories and from schools and homes, and with no warrior class of culture, tradition and training inbred from childhood, fought the already seasoned, blooded and victorious Japanese combat veterans of years of warfare, and the Americans never lost a battle.

In the Atlantic, Europe and the Mediterranean, the Axis reigned supreme on the high seas, under the seas, on land, and in the air. And then the tide was turned. When the American armed forces went into combat in 1942 they had grown from 174,000 in 1940 to what would become an unstoppable force of 16 million fighting men. They fought the fanatical, experienced and barbarous warrior classes of Germany and Austria and they never lost a battle.

On the high seas in the Pacific, the modern, technically advanced and numerically superior Japanese navy had not suffered defeat at sea in 250 years. But from the Battle of Midway in 1942 to the Sea of Japan in 1945 the American Navy never lost a battle.

— Jerome M. O'Connor

these issues endlessly until I suddenly realized that the small space in the nose of the plane was full of people. Bob Horn was there with his hand out, Bob Alker was leaning over my desk on the other side with his hand out, the plane was silent. We had landed and I was being congratulated on what the crew considered to be an excellent navigation job.

Long after we had finished our tours, when I quite happily discovered that he was a pilot chauffeur of B-17's for radar student bombardiers at Boca Raton in Florida and I was assigned as a radar instructor teaching those same students, I told Bob the whole story of that North Atlantic crossing. When I finished he looked at me quietly for a few moments and said, "I knew." I couldn't believe he had said that.

"How," I asked, "How could you ever know?"

"You spent so much time in the dome for each night shot, without really getting a shot. I've carried enough navigators to know that when you're taking shots for a fix, you have to be constantly writing results. You weren't

Iraq Costs Require Some Perspective

USA Today
September 22, 2003
Pg. 21

By Larry Lindsey

A year ago, while I was serving as President Bush's White House economic adviser, I caused quite a controversy when I said that our objective in Iraq would be well worth spending 1% to 2% of America's gross domestic product. At the time, the president had not made any decisions about war with Iraq, so putting any price tag on the mission—particularly one so steep—was considered premature.

It now seems that the cost of deposing Saddam Hussein and re-establishing civil government in Iraq will be in that range. Critics are using words like "massive" and "staggering" to describe the cost. But what we really should ask is: Compared with what? We cannot walk away. If we have no choice but to fight, it makes sense to spend what it takes to win. While any dollar amount in the billions is substantial, it's important to put it into perspective. The Vietnam War cost 12% of GDP at the time and World War II cost 130% of GDP.

The cost to defeat Saddam was less than half a percent of America's annual income (measured as gross domestic product). If spending continues at the current pace, our involvement could cost us 0.4% of our income for the rest of this year. If President Bush's request for \$87 billion for Iraq and Afghanistan is approved, the cost of these two fronts will amount to about 0.8% of our income next year.

In an ideal world, the U.S. should not pay the whole cost of deposing Saddam and rebuilding Iraq. Countries such as France and Germany, which sold Saddam weapons parts and helped him build underground bunkers, are getting a free ride. They benefited from trading with Saddam and now gain from the reduction in potential terror by his departure, all the while enjoying the luxury of criticizing us.

But their record in combating tyranny is hardly exemplary. Without America, the French would be speaking German and the Germans would be speaking Russian. Europeans never have repaid us for our efforts on their behalf during the 20th century. But it was still in America's own interest to be involved in those conflicts. The same is true of deposing Saddam and building a more democratic Iraq. It's worth it, whether or not countries like France contribute.

On 9/11, we were attacked because terrorists did not fear retribution. We had not retaliated against attacks abroad or against the 1993 attack on the World Trade Center. Cutting and running from Iraq would embolden our enemies and risk untold loss of life and damage to our economy, costing far, far more than what we now spend on cigarettes or shampoo.

Larry Lindsey is president and CEO of The Lindsey Group, a global economic consulting firm based in Fairfax, Va.

Another Tribute to the B-17 We Came to Love

The Final Cut: The Post-War B-17 Flying Fortress: The Survivors

by Scott A Thompson. 2000, Missoula, MT, 216 8 1/2 x 11 pages.

Response to the page 1 article in the last issue of Echoes indicates there is a mountain of curiosity unfulfilled about the Flying Fortress. "Your" plane is of special importance to you, and many still talk about the last ride they had in a "17", the last time they saw one flying, the last time they ran their hands over the sleek aluminum sheeting, etc.

You're also reading all you can find on them, but if you haven't seen this book yet, you probably would be titillated by reading this document, authored by a man younger than we are, but who has a long-standing love affair with the B-17.

Scott Thompson is a Learjet 60 pilot for the FAA, and is based out of their Sacramento Flight Inspection Field Office.

He has authored several books on aviation, but we would recommend that you try to acquire a copy of this tome, as he tracks all of the existing air frames, even down to those of a partial nature.

When he reported that our "Eager Beaver" had disappeared completely, the editor quickly mailed him two copies of Echoes, telling the story of just where our 368th nose piece was being taken care of in the Mighty Eight Air Force Museum, something all of you will want to once again view at our upcoming Savannah reunion.



From the back cover of this book we quote: "The era of the B-17 is finally drawing to a close over fifty years after the Boeing Model 299 first left the drawing board. Those remaining in the U.S. are survivors of several decades of combat, military and civil use. For the most part they have now become pampered queens, especially those owned by private individuals and museums. They shine and glisten, with remounted gun turrets and other combat gear, often wearing precisely authentic paint and running better than the day they were built. They deserve pampering for they are the literal end of the line."

"This is the story of the survivors. Their trial of fire was German flak, military scrapyards, smelters, atomic explosions, air-to-air missiles, Bolivian density altitude, unthinking vandals, Southern California brush fires, and the economic bottom lines. These then, have made the final cut."

Put it in context

But what does that really mean? Each year American households spend about 1% of their income on alcoholic beverages and another 1% on tobacco products. We spend about 0.7% of our money on cosmetic products. In other words, our combined operations to combat terror in the Middle East cost a bit more than we spend on makeup and shampoo and a bit less than we spend on booze or tobacco.

What truly matters, however, is what would have happened had we not deposed Saddam. This is necessarily hypothetical. But we do know that taxpayers funded an extra \$40 billion in federal spending immediately after 9/11. This came on top of the costs paid by others, notably insurance companies, and reflects the direct costs, not the cost of the disruption to our economy. Moreover, the lives lost on that day remain priceless.

One cannot tell with any certainty what would have happened if Saddam had stayed in power. Certainly, damage done by a chemical, biological or radiological attack on America would make the costs of Sept. 11, 2001, seem small by comparison. Having watched closely what happened to our economy on a day-by-day basis immediately after 9/11, I am certain that global economic growth would not be possible if such weapons were used by terrorists in America or on one of our major trading partners.

What we know

We know Saddam used chemical weapons on his own people. We know that in 1998 President Clinton publicly worried about the weapons of mass destruction Saddam had. Moreover, we know there were terrorist training camps in Iraq and that members of terrorist groups now are entering Iraq to fight us.

STATION X


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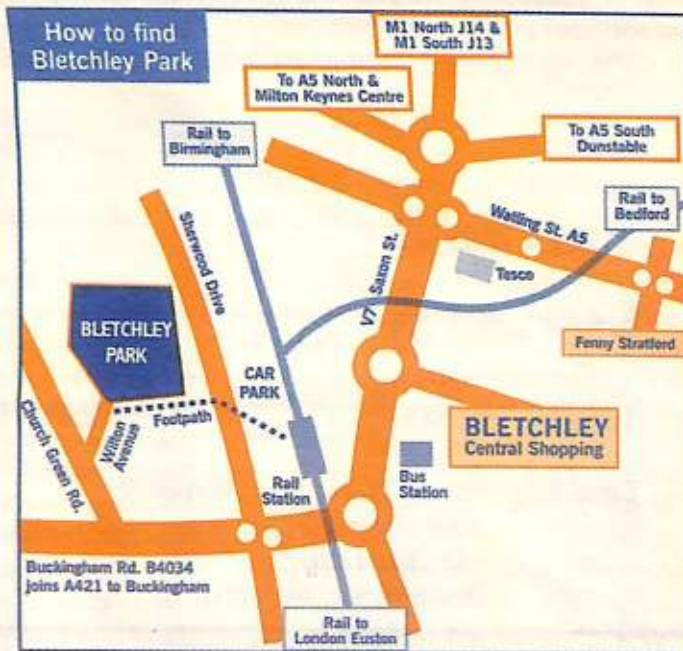
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Abwehr

Jeremy Paxman inspects the **Abwehr** Enigma machine, an unexpected postal delivery to the BBC.

Home of the world's first programmable electronic computer - Colossus



BY TRAIN. Fast frequent services to Bletchley from London Euston (40 min) or Birmingham New St (50 min), St. Pancras, via Bedford, Midland Rd. (No Sunday service from St. Pancras). Take the path opposite the station entrance. **By BUS.** There are buses from all areas arriving at Bletchley Bus Station. On leaving the station head towards Bletchley Rail Station and take the path opposite the entrance. **BY CAR.** It is best to approach Bletchley Park via the city grid system. Head for the V7 Saxon St. at the southern end of the grid roads, at the roundabout, go under the railway bridge towards Buckingham. Follow the signs for Bletchley station (at weekends there is free parking in the station car park). Take the signposted footpath direct to the main gate of the Park, only about 200 yards.

Registered Charity No.1012743



Good Metro Winds,
continued from page 6

doing that. In fact you did nothing but concentrate on that octant of yours. If you were shooting stars, even one star, let alone three, you were carrying more information in your head than I think you or anybody else I know is capable of."

"Why didn't you say something?" I asked.
"Hell, I didn't want to turn back. You'd been a good navigator from your first training mission with us. I just knew you'd work it out."

I think the answer is to combine good metro winds with dumb Irish luck.

Author's Note: When I started to write about this Atlantic crossing I checked on the internet to see if I could clarify why I had no bubble illumination. I found the Navigation Foundation who referred my query to The Navigator's Newsletter. I received a quick response from the Newsletter

saying that an old instrument manual in their possession contained the following: In the Type A-7 bubble octant, the bubble and field of view were illuminated by a radioactive material painted on the metal ring surrounding the bubble. A copy of the Navigator's Information File, later received from a friend who was also an Air Corps Navigator, confirmed this, calling it a luminous coating. It cautioned, however, that, "If the sextant has not been out of its carrying case during daylight you must introduce some light into the bubble chamber from another source, suggesting shining a flash light into the prisms for a few minutes. Later models had exterior battery packs, some had a self-contained lamp assembly, some had electrical connections using the aircraft 28 volt power supply. Since I did use my instrument during daylight hours, I've concluded that the brand new octant in my brand new airplane was an A-7, the same model I used throughout training, but one in which someone neglected to paint the radioactive material on that metal ring surrounding the bubble.

Dues? No! Gifts? Yes!

It does take money to keep the 306th Association flying. Those who are able are asked to make an annual contribution to keep everything running smoothly. No one is dropped from the mailing list for non-payment! Your gift is tax deductible.

Please accept my gift to the 306th BG Association: \$ _____

NAME _____

STREET AND NO. _____

CITY, STATE & ZIP _____

TELEPHONE NO. _____ 306TH UNIT _____

Send to: Robert N. Houser, Treasurer
306th Bomb Group Association
P.O. Box 13362
Des Moines, IA 50310

DATE _____

THE DAILY SCHEDULE at SAVANNAH

Wednesday, 3 Dec 9:a.m. Officers' breakfast

2 p.m. Officers & directors meet in Hospitality Room

Thursday, 4 Dec 8-10 a.m. Buses will leave from in front of Hotel for Mighty 8th Museum

Lunch at Museum

1-5 p.m. Buses return from Museum to Hotel

Hospitality room will be open from 5 to 10 p.m.

Dinner of your own

Friday, 5 Dec 11 a.m. Board buses for Savannah City Tour

Hospitality Room will be open in afternoon.

Twelve O'Clock High will be shown as well as other films of reunions, 306th events, and on the 8th and the B-17

Dinner on your own

7 p.m. Buses leave for "Lost in the Fifties" a musical variety show featuring '50s music.

8 p.m. More videos in the Hospitality Room

11 p.m. Buses return from musical

Saturday, 6 Dec 10 a.m. Annual Reunion Business Meeting

5:00 Bar will open in the Main Lobby

6:00 p.m. Reunion Banquet in the Hotel

Sunday, 7 Dec Checkout deadline is 11 a.m.

2003 Reunion
306th Bomb Group Association
Marriott Riverfront Hotel
3-7 December

Events for Your Participation

Thursday, 4 December Mighty Eighth Museum Excursion 4 x \$30.00 = \$120.00
Buses leave 8 to 10 a.m., return to Hotel 1 to 5 p.m.
Includes bus, admission, lunch

Friday, 5 December Savannah City Bus Tour _____ x \$25.00 = \$ _____
"Lost in the Fifties", evening musical with music of the 50s _____ x \$40.00 = \$ _____
Tickets only, you provide your own transportation _____ x \$29.00 = \$ _____

Saturday, 6 December Annual Reunion Banquet Prime Rib of Beef _____ x \$60.00 = \$ _____
Chicken Mediteranean 4 x \$50.00 = \$200.00

REUNION REGISTRATION 4 x \$30.00 = \$120.00

\$440.00

Checks to 306th Bomb Group Reunion

Name _____ Address _____
City, State Zip _____ Thurleigh Unit
Telephone # _____

Mail form and check to: Marty Lenaghan
PO Box 918
Brunswick, OH 44212

SAVANNAH **Marriott**
RIVERFRONT

- RIVERFRONT/RIVERVIEW ROOMS MAY BE AVAILABLE AT CHECK-IN FOR ADDITIONAL CHARGE
- PARKING IS AVAILABLE AT DISCOUNTED CHARGE OF \$6.00/DAY
- CHECK-IN TIME AFTER 4PM

NAME _____ GROUP/ORGANIZATION 306th Bomb

NAME(S) OF ADDITIONAL PERSON(S) SHARING ROOM _____ Group Assoc.

DATES Wed. 12/3/03 (or Thurs. 12/4) -

Sun. 12/7/03

SPECIAL REQUEST _____

STREET ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____ PHONE(DAY) _____

Please check the type of accommodations desired. ALL ACCOMMODATIONS ARE SUBJECT TO AVAILABILITY AT CHECK-IN.

NO. OF ROOMS	TYPE OF ACCOMMODATION	
	SINGLE: ONE (1) PERSON	\$95.00
	DOUBLE: TWO (2) PERSONS, ONE (1) BED	\$95.00
	TWILITE: TWO (2) PERSONS, TWO (2) BED2	\$95.00
		\$

For all reservations, please list each guest's name above. Suite rates are available upon request. Please contact the hotel directly at 912-233-7722. Reservations must be received by Nov. 3, 2003. After the date above, rooms will be confirmed on a space and rate available basis.

SMOKING NON-SMOKING

ARRIVAL DAY/DATE _____

TIME OF ARRIVAL _____

DEPARTURE DAY/DATE _____

NUMBER OF ADULTS OVER 17 YEARS _____

CHECK-IN TIME AFTER 4 PM. Accommodations prior to the time will be handled on a space available basis. Luggage storage is available.

CHECK-OUT TIME IS 11:00 AM.

Reservations must be accompanied by a guarantee for first night's lodging via check or credit card.

Fill in American Express, Diner's Club, Carte Blanche, VISA, MasterCard or Discover Card Information below. You will be charged for the first night's lodging unless reservations are cancelled 24 hours prior to arrival.

CARD TYPE _____ EXP. DATE _____

CARD NUMBER _____

SIGNATURE _____

Advance Deposit. Please Include one night's room plus 12% tax. Deposits are refundable if cancelled 24 hours prior to arrival.

SAVANNAH **Marriott**
RIVERFRONT

CHECK ENCLOSED
Amount \$ _____