



AIR WEATHER ASSOCIATION

Serving the Present - Remembering the Past - Air Force Weather

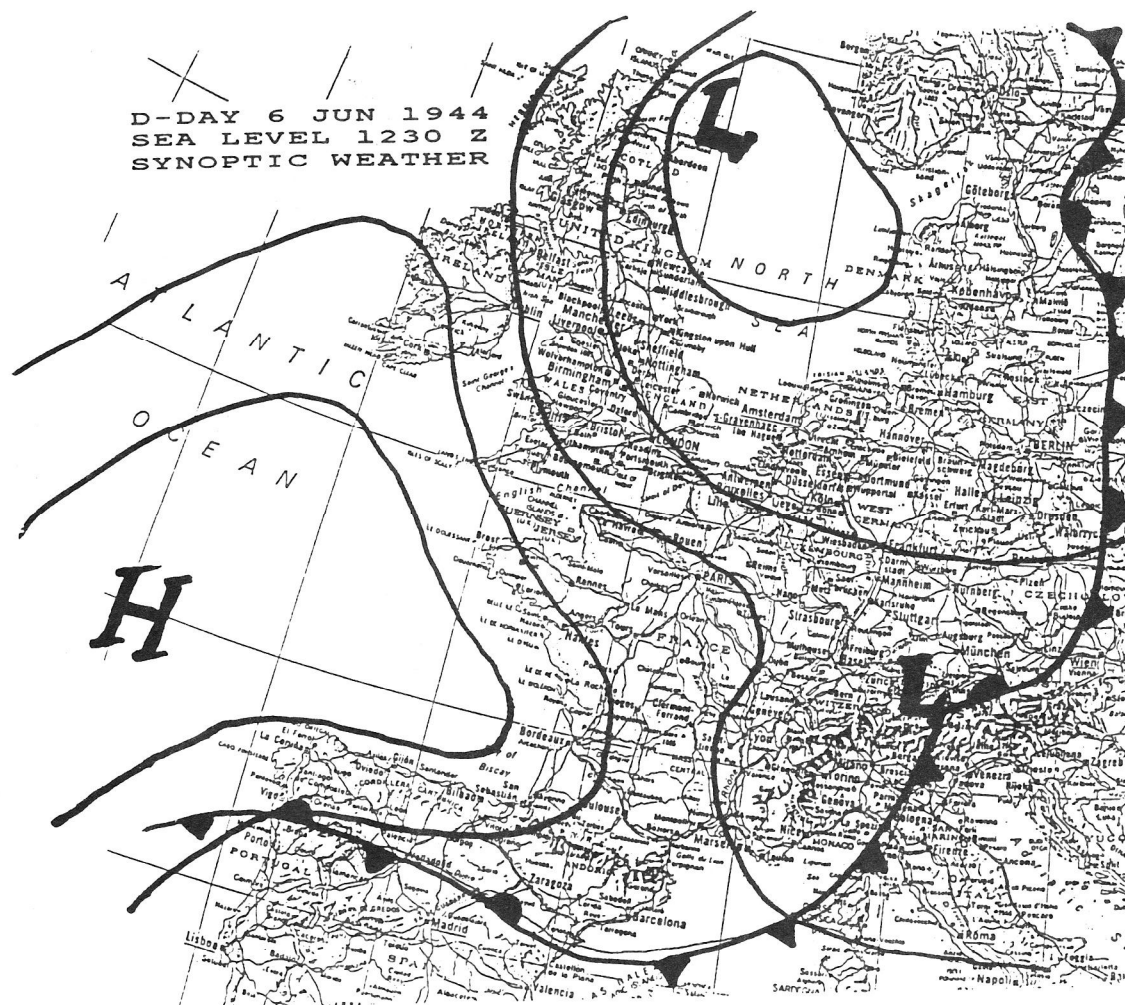
NEWSLETTER

Vol. 8, No. 1

June 1994



D-DAY COMMEMORATIVE EDITION UPCOMING TUSCON REUNION



Tucson Reunion — Don't Miss It

When: Oct. 26-30 this year.

Where: Holiday Inn Palo Verde, Tucson, AZ

Who: Members of this association, their spouse and their guests who are not eligible for membership.

Why: Our biennial gathering and expecting the largest turnout of any of our reunions.

What: A low-cost program at an excellent hotel with something for everyone, including individual unit get togethers. If you have attended one of our reunions you know they offer the best in nostalgia and camaraderie.

(Continued)

War—Weather Decision: D-Day

Nearly 2000 USAAF weathermen and women (WAC) were in the 18th and 21st weather squadrons providing support to the allied invasion force poised on English soil for the liberation of Europe in 1944. Then, in the pre dawn twilight of D-Day, three of the squadron's weather observers parachuted into France behind enemy lines with the 82d and 101st Airborne Divisions. In the days and hours before that historic event, a number of this association's members were a part of the weather central team that provided vital information for the decision to launch Operation Overload. (Ed.)

(Continued)

How Much: Just \$65 buys hosted hospitality bars for 4 days, two dinner meal functions, big-band era music, admission and transportation to the largest air museum in the U.S.A.

Reunion Registration — Enclosed you will find the registration form and hotel reservation envelope. Send that registration form in early to be eligible for the **free hotel room drawing**. If you subsequently have to cancel, we have a very generous cancellation policy (see the form). It doesn't pay to delay sending in your registration. *No one will be registered after 10 Oct. or at the Reunion.*

Hotel Reservations — We expect the hotel to be sold out just to our reunion. The rates are guaranteed for those who wish to extend their stay before and/or after the reunion. *In order to reserve a hotel room we must receive your reunion registration form.* Once all the rooms are reserved, room reservations will be cancelled for all those who have not registered for the reunion with this association. In short, we have bought out the hotel just for our reunion.

Send the hotel room reservation envelope in at the same time you send us the registration form. *Do not use the Holiday Inn toll-free reservation number — you will not get our low rates.* Our rate (fantastic!!): Rooms \$56, Suites \$69.

We have overflow contracts with nearby motels. The hotel will refer you to a motel once its rooms are all reserved. If you are not driving to the reunion, transportation will be provided from the motel to hotel.

The Reunion Details

Travel:

Reunion Airline — American Airlines will provide our group a discount. See their promotional insert herein, telephone toll-free 1-800-433-1790, and ask for Star File #S-1004UG. American Airlines has the largest number of arrivals/departures at Tucson International Airport.

Rental Car — Budget Rent-a-Car will provide to you our group's discounted rate if you wish to extend travel to nearby attractions before and after the reunion, or have personal transportation. The toll-free number is 1-800-279-3734, ask for reservations, and state Air Weather Reunion. Here are the rates (daily/-weekly = 5 day min): Compact - \$25/\$118; Midsize - \$28/\$137; Full size - \$32/\$156; Luxury - \$42/\$219; Vans: 7 pax - \$45/\$230; 15 pax - \$58/\$325.

Driving to the Reunion — see the map printed in this newsletter. Coming via RV or motorhome - see separate article herein.

(Continued page 4)

It has been 50 years since the greatest-ever armada put its troops ashore at Normandy to begin the liberation of Europe. Overhead, allied aircraft dominated the skies, assuring the battle would enjoy air supremacy. Herein we revisit the events of that day, 6 June 1944, as related by our WWII association members. They had a key role in General Eisenhower's decision to launch Operation Overlord.

On other pages we focus on the WWII Pacific theatre, picture and text provided by members of this association who were there. Read the accounts of these former U.S. Army Air Force Weather Service individuals as they take you back in time.

How D-Day Was Chosen

by Irving P. Krick with Lee Edson

By June 1944 the Allies were at last ready to launch the greatest, most complex, most carefully orchestrated military operation in World War II—the invasion of occupied France. Two thousand fighting ships, (along with thousands of landing craft and transporters), loaded with men and equipment were at harbour, anxiously awaiting the signal to cross the English Channel. Fleets of airplanes—bombers, fighters, cargo planes and gliders—were poised to take off from coastal airfields. At Supreme Headquarters in Portsmouth, England, General Eisenhower and the Allied Command had set their grand strategies. The actual period for launching the massive amphibious invasion had been narrowed down to the first week of June on the basis of climatological studies of sun, moon and tide. Everything now depended on pinpointing the right day and that depended entirely on the weather.

As Senior Forecaster of the U.S. section of the Weather Forecasting Team for SHAEF in the European Theatre, my instructions were clear. Select a period with weather conditions that meet certain criteria: no high winds to raise heavy running swells that might batter the ships while crossing the Channel; ceilings no lower than 11,000 feet for the heavy bombers, less for the medium and light bombers, and at least 2500 feet for cargo and troop carrier planes, along with a visibility of three miles. For fighters at least a 1,000 feet between clouds and ground surface, and for gliders a wind of no more than 35 mph with ceilings low enough to drop the paratroopers safely some distance inland from the beaches.

Never had a weatherman encountered so formidable a challenge in forecasting, or one so momentous for the future of civilization. Even Eisenhower admitted later that if the invasion had not taken place on June 6, 1944, the Germans might have mounted a stronger defense than they did and thereby delay, and indeed possibly change, the outcome of the war and the course of history.

(Continued page 4)

Nature,

unharnessed

and

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Worthy of

one name

and one

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(Tucson Reunion Cont'd)

Seating For Reunion Meal Functions:

Ballroom — allowing room for the 13-piece band and dancing at the Saturday banquet, the turnout may exceed the 690 persons that can be served in the ballroom (which is also our hospitality room). In which case some will have to be seated in adjacent areas (the indoor terraces) very convenient to that room. You'll even be able to hear the band from those areas, and can enter the open doors to the ballroom at any time. Seating in areas within the ballroom will be on a first-come basis (determined by receipt of your registration form), and controlled by the color of the name badge. We will attempt to seat all members of a unit together subject to capacity limitations of the ballroom or adjacent areas. [Recon (AWRA): do not write in your squadron preference. You will have a Recon area for all its squadrons. If desired, you may - on your own - establish squadron tables.] Everyone will be assigned seating to an area (ballroom or the indoor terraces) not a specific table or tablemates. Choose your tablemates at the reunion and reserve your seat with the place cards (one for Friday, another for Saturday) that will be in the packet issued to you upon checkin. *Register early for a better chance of ballroom seating.* **In any case, you may enter the ballroom at any time it is open for hospitality, to use its bars and for dancing. Your assigned seating area is for dining only. Table hopping is ok so long as the seat does not have a place card and is within your assigned area.**

The Program:

Everyday, Wed Oct. 26 thru Sat Oct 29 - hosted hospitality bars from 4 pm to 10:00 pm (11 pm on Sat), part of the reunion package. In order to permit the hotel to setup for our Friday and Saturday meal functions in the ballroom, the hospitality bars will be in adjacent areas from 4-6 pm on those days while the ballroom is closed.

Wed, Oct 26 — Afternoon golf at Davis-Monthan AFB, power cart, green fee and BBQ dinner at the course. Rental clubs are very limited; suggest you bring your own. All for \$25 (non-golfing spouse or golfer's guest - one only- may join the dinner for \$8).

Thu, Oct 27 — Nogales, Mexico tour and lunch at El Cid restaurant (order from the menu; Montezuma's revenge not allowed here. You pay for the meal). Nogales is one of the best Mexican border towns for shopping. Stops along the way at Tubac and other scenic vistas, time permitting. Depart at 9 am, back at hotel at 4 pm. Cost: \$11 on our chartered buses. Get a unit group of 45 together to have your own unit bus. That evening you are on your own; dine at the hotel (10% discount to our group) or on the town.

Fri, Oct 28 — You have loads of choices: doing nothing during the day, or go to local shopping malls, or (the better choices) take our bargain tours on chartered buses to (1) the fabulous Desert Museum in the

(D Day Cont'd)

The story of how that day was chosen and my role in it really began in the winter of 1943 when I was assigned to temporary duty with the Eighth Air Force. The Commander, General Fred Anderson, wanted me to make forecasts that would apply the long-range weather forecasting methodology developed earlier at Caltech. The Eighth Air Force operations had been scrapping missions based on forecasts of bad weather which turned out to be wrong. We were able to upgrade operations through our own methods of forecasting which proved to be more accurate. This success led General Anderson to recommend us for transfer to General Carl Spaatz, who then headed the newly formed U.S. Strategic Air Forces in Europe. Spaatz was interested in setting up a coordinated system that included long-range forecasting, and could be used in all his operations.

Throughout January 1944 our team made forecasts based on the 40 years of daily northern hemisphere weather maps which we had developed at Caltech during the fall of '42 and the winter and spring of '43 under Air Force sponsorship. One day, while researching previous situations analogous to current weather charts, we discovered an unusual window of opportunity for our bombers—a period of three to five days beginning on February 20th where we could carry out major bombing operations visually from high altitudes over central Europe.

I called our discovery to General Spaatz' attention during a weather briefing on February 17th. He promptly ordered an all-out bombing strike against the German installations and factories near Leipzig beginning on February 20th.

The other meteorologists attached to the Eighth Air Force staff argued against February 20th as a starting date for this operation, ridiculing our forecasts and saying the weather would be nasty over Leipzig. They convinced General Jimmy Doolittle, who had taken over command of the Eighth Air Force from General Anderson, to cancel the strike. Fortunately Spaatz, having faith in our methodology, countermanded that decision and rightly so. The bombing begun on that day proved to be one of the most successful missions of the war, going down in history as the "three days that broke the back of the German Air Force." Our own losses were minimal. Of the 2500 bombers we sent in on February 20th we lost 25.

The extraordinary success of our forecasting for the Eighth Air Force brought us to the attention of General Eisenhower and the Supreme Command in Portsmouth. Here we joined a team of four British meteorologists, two from the Admiralty and two from the Royal Air Force, who were there to help General Eisenhower fix the date for Operation Overlord, the invasion of France. The other American with me was Ben Holzman (Ed.) who had been trained at Caltech in our new methods of forecasting and had also worked

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Former Officers Save at USAA

When you compare auto or homeowners insurance, look at all the variables.

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*Safe driver dividends are not available in all states.



Those eligible for USAA membership include anyone who is now or ever has been an officer in the U.S. military. In addition, cadets/midshipmen of the U.S. military academies, OCS/OTS candidates, ROTC cadets under government contract, and other candidates for commission are also eligible to apply for membership.

(Tucson Reunion Cont'd)

Saguaro (cactus) National Monument, then on to Old Tucson, site of many famous western movies, for group BBQ lunch (beef ribs, chicken, beans, slaw, bread, dessert, non-alcoholic beverage) followed by the theme park's varied entertainment. Depart at 9 am, return to hotel at 4 pm. Cost is \$35 which is our rock-bottom outlay to pay for all of that at full-bus charter rate. **OR** (2) Desert Museum only, depart at 9 am, back at hotel at noon: Cost is \$11. **OR** Old Tucson only with the group BBQ lunch, depart at 11:30 am, back at hotel at 4 pm. Cost is \$28. Included in your reunion registration package is the 7 pm buffet dinner at the hotel. The menu: Sliced Roast Baron of Beef, Lemon Peppered Chicken Breast (your Editor recently tried it —GREAT!), Garden Salad with choice of dressings, 4 assorted salads, vegetable du jour, potato, rolls and butter, assorted desserts, coffee or tea.

Sat, Oct 29 — Make your own relaxed schedule to visit the largest collection of vintage aircraft and memorabilia at the Pima Air Museum. Shuttle buses will be departing the hotel beginning at 9 am with the last bus returning to the hotel at 4 pm. It is less than a 30 minute ride aboard our air conditioned (if needed) chartered buses. This tour includes admission which is a part of the reunion package. Also included in the reunion package is big-band era music and dancing following our banquet dinner which will be served at 7 pm in your designated area. Display the entree choice ticket at your place setting. The menu: Chicken Wellington with Dijon Sauce in Pastry, or Prime Rib with Au Jus, or Stuffed Sole with Seafood Stuffing topped with Lemon Sauce, Salad, vegetable du jour, appropriate potato or rice, breads, dessert, coffee or tea.

Sun, Oct 30 — We have scheduled the Chef's Special Buffet Breakfast from 8 am - 10 am to accommodate most of those leaving that day. The menu: Fresh fruit bowl, assorted Danish, scrambled eggs, home-style potatoes, crispy bacon, warm biscuits and gravy, jellies, juices, coffee and tea. The cost is \$10, must be paid when sending your registration form, and you surrender a ticket at the meal. Those with earlier departures should use the restaurant and not select this buffet when sending in their registration form.

Note to all Above: You must select the minimum reunion package which includes the hosted bars, two meal functions, big-band music, and the Saturday tour. No credit will be given for omission of any of these scheduled activities. Come on, where else can you get all of that for \$65? Tucson locals: give your spouse or kitchen a break; have 2 meals out this week and enjoy mixing with the crowd. In order to offer the tours at rock-bottom price (our cost), buses are full charters figured at 40 passengers per bus. We will keep a standby list until more reservation requests permit chartering additional buses. The reservation order is based upon receipt of your form. *Best Bet* —Send your reunion registration in early!!

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(D Day Cont'd)

with me on the forecasts for the bombings over Germany.

I knew from the start that if the February bombing mission had been a preliminary test of Caltech meteorology and our prowess in applying it, then the D Day decision would surely be its moment of truth.

And so it was. When I arrived at Supreme Headquarters the word was still out that the invasion would go on the 4th of June with the 5th and 6th as alternates. After that stormy weather would set in. The Channel would become choppy, and the tides along the coast of France inhospitable to a large-scale amphibious operation.

Toward the end of May, however, the British weather people were advising Ike not to go on the 4th or 5th, or even the 6th, because the weather over the Channel was too unstable. We disagreed. Our forecasts showed that the weather would clear sufficiently to sustain the planned military operation.

As the date for D Day came closer, our dispute with the British became sharper. The British, using a traditional approach, continued to allow for a forecast only a day or two in advance while we were able to forecast weeks ahead. At the afternoon briefing on June 3rd I presented our forecast for the next five days, reiterating my belief and that of Holzman, that the 5th or 6th would give us the opening we needed to launch the invasion and establish the beachheads. I pointed to an analogous weather pattern from the file that showed a similar sequence, the formation of a northward protrusion of the Azores high which would keep storms going north of the prevailing trajectories during the first four days of June.

We estimated this high would reach the British Isles on June 4th pushing a cold front ahead of it into France and bringing clearing weather. The British disagreed, noting that it was then raining heavily over the Atlantic and the rain was approaching the British Isles and the Continent. They contended it was likely to continue, making it impossible to carry on any military operations between the 4th and 6th.

At the critical conference in the early morning hours of June 4th we held fast to our position while the British held fast to theirs. Time was running out. It was necessary for Eisenhower to make his decision. And he did. He cancelled the invasion for June 4th and 5th, but to our immense gratification he accepted our choice of June 6th.

We did not know at the time that on the night before the vital decision, General Spaatz had called on the Supreme Commander and urged him to accept our forecast because, as he put it, we knew what we were doing. It was the credibilty that we had gained in February with General Spaatz during the all-out bombing missions over Germany that I think tipped the scales in our favor.

The weather turned out as we predicted, not perfect but operational, and the rest is history.

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Smokers Attention: We have provided for your needs with a room adjacent to the hospitality/ballroom. It will be the Smokers' Bar throughout the reunion (no food service). Our hospitality/ballroom, the lobby area & terraces have been designated no smoking areas by the hotel following its multi-million \$\$ redecoration project now underway. In addition, two floors of the 6-story tower and one floor of the 3-story suites have been designated NO SMOKING. The hotel's restaurant has both smoking and non-smoking areas. Units conducting a dining function on Thursday in sections of the ballroom will be in NO SMOKING areas. Time aboard the tour buses is short and will also be smoke-free.

How Should You Dress? Except for the banquet where coat and tie would be suggested for gentlemen (but if you don't have them, come anyway), casual wear is appropriate at all times. Tucson's temperature is at its best for our reunion time, neither cold nor hot. A light wrap for early morning and late evening when out-of-doors would be advised. Snowbirds, attention: October's max/min is 84/57 and November's is 72/45. We're at the end of October, so split the difference — 78-80/48-51. Bring your sunscreen or umbrella for shade (not rain). The overwhelming odds are that it will be clear the entire time you are in Tucson.

Cash Buffet Breakfasts will be available every morning in order to expedite serving the large number leaving at 9 am. There will also be a cash buffet lunch served on Saturday to accommodate those using the shuttle buses to and from Pima Air Museum. These buffets are served in the 200-person capacity restaurant, and on the lobby terraces for overflow.

Please — You must wear or display your name badge at all times when: (1) in the hospitality room and at its bars, (2) boarding the buses, or (3) at the meal functions. Your name badge will also be your admission/tour bus ticket for most events. This precaution is necessary to limit the use of our bars, meal, and tour functions to those who have paid for the reunion and its optional events, **and** to be readily identifiable to your compatriots who haven't seen you in years. We want all of you to come to the reunion without being troubled by off-the-street strangers. **If you do not display the name badge we will have to ask you to identify yourself, check the attendance roster, and (in some cases) delay bus departures (that's costly).** Please display the badge throughout our reunion area and when on all tours.

Do not invite local friends to participate unless you have paid and registered them beforehand as your guests, not at the reunion. No one will be registered at the reunion nor tours sold or exchanged by the reunion committee at the hotel. If you wish to buy, sell or exchange tour tickets, place a notice on the message board. See the other conditions concerning cancellations and liability as printed on the registration form.

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Fortunately, for our side, German meteorology suffered from the same traditionalist limitations that afflicted the British. As a result the German weather forecasters advised General Rommel and other high ranking commanders that the Allies would not dare risk an invasion of France in June under the weather conditions envisioned. Because the Germans listened to this bad advice they were caught by surprise and were poorly prepared for our attack. The victory of our meteorology was complete.

Ed.: Benjamin G. Holzman (deceased) continued on active duty post-war, attaining the rank of Brigadier General.

D-Day Forecast Fifty Years Later

by Robert C. Bundgaard

Military historian John Fuller calls it the most famous and important forecast ever made (1990); and, the eminent forecaster Sverre Pettersen described the making of it as meteorology's finest hour (1974). Monumental tributes these statements are, but, to or about what?

Could such tributes be about the D-day weather people and/or about their working setup? Or, about the weather events themselves, or about an actual atmospheric development that may have turned out to be so freakish or chaotic as to have belied its prediction by any means, scientific or otherwise? Could such tributes be about a perceived resolution in the D-day forecast effort of the ever present issue as to the reliability (as well as the validity) of forecasting in the near-term (short-range) *vis-a-vis* long range? Or, militarily, about Overlord having become in part a forecast-driven stratagem; or, about its strategic objective that itself, as it turned out, was even innovated *post facto* by the weather it experienced? These are some "about what's" illuminated in this perspective of looking at the D-day forecast 50 years later.

On the battlefield, many military strategists often place much emphasis in getting the best weather, rather than just the good, and have little interest for the barely usable. But, for Overlord, the meteorological problem was not to choose an *ideal* weather situation, but examine certain days known beforehand, as to the weather, wind, and sea conditions that would meet the *minimum* demands, together with the combination of tide and dawn twilight.

The main military requirements for Overlord are, of course, now well known - favorable combination of tide and pre-dawn twilight, for landing at the lowest tide before daybreak. June 5 with 50 minutes was the most ideal; June 6, about the same.

As it turned out, the invasion was carried out under a weather situation that was on the edge of being minimal, in a period of short improvement within a

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(Tucson Reunion Cont'd)

Photography — We'll have a Memory Book. If you choose, you may be photographed in portrait pose and candid throughout our reunion. Our reunion photographers will send proofs for you to select. Then your photo will appear in the memory book to be published after the reunion. There is no obligation to buy the book; the pose you select will appear without charge. If you do want it, you'll send to the publisher their order form that comes with the proofs. The book may be purchased for \$15 (B&W) or \$20 (color), postage and handling included. Also, VHS video tapes of the reunion will be available for \$25. If you will not attend the reunion, but wish to have a picture included in the book, send it to the publisher. See details in the photographer/publisher's insert which is enclosed.

Traveling via RV or Motorhome?

Listed here are RV Parks and Resort near our reunion hotel. They have been checked out by a local member. None is more than 8½ miles away from the hotel. The closest (4½ miles) and least expensive is the FamCamp at 3775 S. 5th St., Davis-Monthan AFB, \$12 and all hookups. Tel: (602) 750-3736 or write: 355 SVS/SVRO, Attn: Mr. Bunch, Davis-Monthan AFB, AZ 85707. Next closest (5 miles) is Crazy Horse RV Park, 6660 S. Craycroft Rd., Tucson, AZ 85706. Tel: (602) 574-0157. \$17.50 plus tax, all hookups. At 8 and 8½ miles away, respectively, are Voyager RV Resort, 8701 S. Kalb Rd., Tucson, AZ 85706. Tel: toll-free 1-800-424-9191. \$26.25 plus tax. And, Far Horizons Trailer and RV Park, 555 N. Pantano Rd., Tucson, AZ 85710. Tel: (602) 296-1234. \$18.75 plus tax. Welcome to the land of sunshine.

Commemorative Items for Sale

It isn't going to rain on our reunion, is it? No way, but we will have a clever screen print that suggests such an event (see reverse of registration form). That print will appear on the White 65-35 Poly/Cotton Mesh-back Cap (one size fits all) and on the upper left front of the White 50/50 Polo/Golf Shirt. The shirt has a 3-button placket, full collar, hemmed sleeves, left breast/chest pocket; it is **not** a t-shirt. Anticipating a minimum order, the price should be no more than: Cap - \$6; Shirt - \$11. These items are suitable for both men and women. You must order them when sending in the registration form and pick them up at the reunion (no mail orders). If ordered, they may not be returned, exchanged or canceled. Also for sale will be this association's AWS logo membership Tie Tac/Lapel pin and ladies pendant. Some of you failed to get them when offered earlier. You do not need to order the pin or pendant; they will be at the reception desk for \$3 each.

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(D Day Cont'd)

longer period of storms in which the final crossing of the channel was postponed from the fifth to the sixth because of bad weather, high seas, and large surf and breakers.

The Overlord weather organization was established in November 1943, at which time the United Kingdom's Dr. James Martin Stagg, as a civilian, became the chief meteorological officer to General Eisenhower, the supreme commander of the Supreme Headquarters Allied Expeditionary Forces, SHAEF. (Six weeks before D-day, Stagg became an RAF Group Captain.) One of the three forecast centers, Widewing, the American weather center, was collocated with SHAEF and the supreme commander. There, on May 17, I was briefed that D-Day would be June 5.

Beginning on 28 May, Widewing's forecasts for the channel weather foresaw a bad spell on 2 and 3 June, but otherwise had an optimistic outlook for the following weekend. Late on 2 June, Widewing's forecast still looked like a good bet for 5 June; and Stagg didn't disagree. So by early Saturday, 3 June, the invasion ships in the northern ports had already been set in motion for D-day on 5 June. *On the basis of Widewing's long-range forecast, the assault on the German occupation of Western Europe was underway.* — These forecasts are probably the ones to which Fuller made his "most famous" tribute.

The 3:00 AM meteorological conference on Sunday, 4 June, reluctantly agreed on non-operational weather for 5 June's D-day. Barely three hours earlier, however, from Bushy Park a Widewing briefer, L/C Irving Krick, had personally telephoned the UK's Air Ministry weather spokesman at Dunstable, Dr. Sverre Petterssen, vainly to hear if he, Petterssen, could have seen his way to a more optimistic forecast for continuing to go ahead on June 5. (Petterssen could not.) So, at that meteorological conference, Widewing agreed with the Air Ministry and the Admiralty weather centers.

At 4:15 AM on June 4, Stagg briefed in the Portsmouth Library. Admiral Creasy, RN, called him "Six-foot-two of Stagg and six-foot-one of gloom." (He was six-foot seven inches tall.) The operation was stopped, forces underway arrested and put in a holding position wherever they were. *Overlord was postponed* — This would be Fuller's "most important" forecast — So, the credit for the postponement forecast is given to the Dunstable Weather center, not Widewing.

The final briefing conference to the supreme commander was scheduled for 4:15 AM, 5 June, and the supporting meteorological discussion took place at 3:00 AM. There was agreement among the three forecast centers (the UK's Air Ministry and Admiralty, and Widewing): *It was agreed that there would be a period of improved weather between two storms.* — This would probably be the moment for pin-pointing Petterssen's "finest hour" tribute.

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(Tucson Reunion Cont'd)

Unit Dinners at Reunion

Members of 15-20 WS, 17 WS, 18 WS, and 3349 TTS (Chanute) are considering holding separate unit dinners on Thurs, Oct 27th at the hotel. Cost will be no more than \$18. Contact the following NLT 5 Oct for menu selection & reservations (see roster for addresses): 15-20 WS: Vincent G. James, 17 WS: James F. Van Dyne, 18 WS: Arthur W. Gulliver, 3349TTS: Marvin L. Stock.

Why The 10 Oct. Cutoff? Can't We Register At Reunion?

The short answer is — we are under contract for admissions, buses, meals and printing for our reunion program. We must give vendors both money and numbers of participants as much as two weeks prior to a scheduled activity. All of the bookkeeping is being done by our Secy-Treasurer in California. Add in mail time to the vendors in Tucson and 10 Oct. is the latest date to meet the contract terms.

We could pad the price of our meals and tours by additional dollars and have the extra money to allow later cancellations and registrations. However, this association charges you just the cost of an activity. By having full-bus charters, not accepting walk-in registrations, and having volunteer workers who also pay to attend, we have been able to make these reunions affordable for all of us.

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(D Day Cont'd)

In the library at Portsmouth, Stagg was glad to be able to reveal that the only change since the last forecast was for the better, and forecast over southern England an interval of clearing, which would probably last well over 24 hours and into Wednesday afternoon, 7 June.

Observed Stagg, the change on the faces of General Eisenhower and General Montgomery, Admiral Sir Bertram Ramsay and Air Chief Marshall Sir Leigh-Mallory was really a thing to behold. It seemed to put a new spirit in them; whereas, before, they simply looked at Stagg gloomily, expecting the worse. The change was so obvious that of a whole new life seemingly had come onto them.

Stagg came out of the library and waited in the hall in case he had to be brought in again. Within a few minutes, they came out; and General Eisenhower said to Stagg. "We put it on again. Hold it, hold it for another 48 hours! Don't let the weather go back again."

From research done by Thomas Parish and others, historian John Fuller dramatized that, in all of recorded military history, no single staff officer had ever before played a more direct forcing hand in the making of a main decision than did Stagg with his D-day forecast.

At Widewing, I can remember Irv Krick standing just behind me at my weather map table, at 6:15 AM on that morning of 6 June and quietly say, as if to himself,

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Serving Those Who Serve

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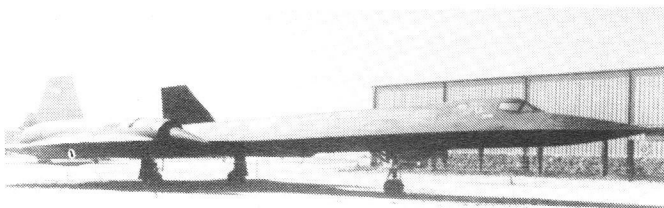


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(Tucson Reunion Cont'd)

(Tucson Reunion Cont'd)

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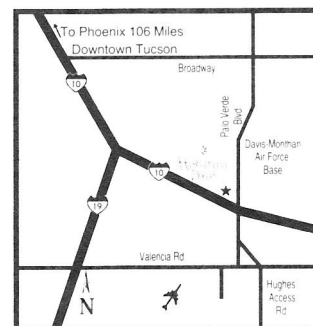
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(D Day Cont'd)

Farewell Old Board — Hello New Board !

Dayton Blanchard, John Collens, Hyko Gayikian, Bob Gottuso and Vernon Snead have served on the Board of Directors since inception of this association. They now step down and we welcome the 16 volunteers for the new Board. Hallelujah - association survives. That new Board will consist of:

— **J. Kevin Lavin**, Chairman (incumbent)

— **Donald G. Farrington**, next Reunion Organizer (incumbent)

And 5 of the following for you to choose:

— **John S.S. Kim**, age 49, Tacoma WA. Retired 1993, 25+ years active duty, weather officer, various AWS command and staff assignments, Asst. Professor AFROTC, interim commander of an Operations Support Sq. Education: BS (Chemistry); MA (Education); MA (Educational Admin); MA (Business Admin). Currently a high school teacher. Candidate for Secretary Treasurer position.

— **Robert E. Thompson**, age 62, Bristol FL. Retired 1987, 32 years as enlisted, officer, and civilian in AWS, serving as an observer, radiosonde, forecaster, weather reconnaissance, and Chief Reconnaissance Coordinator, National Hurricane Center. Post-military experience as Electronic Engineer and Junior AFROTC. Currently a substitute high school teacher. Candidate for the Editor position.

— **Clifford D. Kern**, age 66, Aromas CA. Retired, 27+ years active and reserve duty, weather officer, weather reconnaissance, satellite test center, special projects. Post-military experience as scientist at Nat'l Center for Atmospheric Research; Atomic Energy Commission; E.I. DuPont; Lockheed. Education: AB (Physics); MA (Meteorology); PhD (Atmospheric Sciences). Currently the Treasurer, American Shephard Sheepdog Assn. Candidate for Secretary-Treasurer position.

— **Wayne E. McCollom**, age 65, O'Fallon IL. Retired, 20 years active duty, weather officer, detachment commander, climatologist. Post-military experience as research assistant in atmospheric science at Univ of Missouri. Education: MA (Meteorology). Currently the Director of Air Weather Service Technical Library. Candidate for Secretary-Treasurer position.

— **David W. Hannum**, age 40, Fort Lewis WA. Currently serving on active duty (USAF) as Chief of Weather Station Operations, Fort Lewis, WA. Prior military experience as observer, forecaster, solar observatory operations, weather instructor, staff and operations manager. Civilian experience: college instructor. Education: MS (Business Admin) and enrolled for MS (Economics). Candidate for the Editor position.

"Boy, was that ever a horseshoe!"

From a military as well as from a meteorological viewpoint, although the postponement of D-day was a controlling factor for success in the invasion, it was not the determinant factor for its success. *In having set the sluggish invasion armada in motion, Widewing's optimistic long-range forecast (made May 28 and confirmed on 2 June), when later refined with short-term forecasting (on June 4 and 5) timed the invasion (June 6) successfully and with an overwhelming essence of surprise to the enemy.* In the long range, Widewing's unreserved optimism about the invasion weather had prevailed over the Air Ministry's absolutely black view, which in the short range proved to be correct.

The German command could not conceive in any way that the allies could accomplish, in the interlude of just 24 hours between storms, the four-day pre-invasion assembling and positioning of the invasion forces. From 4 June to 6 June, the German Weather Service forecast the weather situation to be unfavorable for a landing by the Allies on the Normandy coast. The commander of the German Seventh Army, Colonel General Dollman, therefore, ordered a temporary relaxation of alert conditions and summoned his senior officers to Rennes on the fifth for a two-day map exercise.

It turned out that the 4-5 June storm that grounded the Luftwaffe reconnaissance and harbored the German naval patrol boats, prevented the enemy from spotting the assembling of the allied invasion armada for its aborted assault on 5 June. And, for the Allies, it turned out that the actual weather on 6-7 June, observed by their weather people and experienced by their own combatants, was barely tolerable or even marginally operational at best. With the passing of time since 1944, I tend to adopt the notion that most of the after-the-fact assessments of weather effect on D-day Allied operations were providential. That is they turned out to be unintentionally self-serving in their verification of the D-day forecast as having been an accurate one, especially those assessments made shortly after D-day by the weather people and organizations themselves involved in the D-day forecast.

Thus, I believe, the unbridled optimism of the American long-range forecast for the invasion, although not entirely a correct forecast (indeed, it was really a busted forecast), may have been responsible for proceeding with the invasion at a time that caught the Germans off-guard.

Fifty years later, almost everyone would agree with Stagg that nothing is to be gained through a post mortem re-hash as to which Weather Central was right or wrong. The only thing that really matters, is that, in spite of an admittedly cumbersome and diffused weather organization, the Overlord weather forecasts were adequate and met the test.

When people do such wonderful things as was done

(Continued)

(Continued)

(New Board Cont'd)

How to Vote: If you approve of the 5 nominees whose biographical sketches appear (Kim, Thompson, Kern, McCollom, Hannum), do nothing. Your silence grants to the current Board your proxy to vote for the nominees. If you wish to vote for any of the other volunteers listed below, send your own ballot to the Secy-Treasurer (Placerville, CA address) with the names you choose - some of the nominees, none of them, whatever. Your ballot must be received NLT 10 October to be counted. Ballots received after that date are invalid. **Do not substitute a name that does not appear above or below - ONLY THIS LIST OF VOLUNTEERS IS TO BE CONSIDERED.** The call for volunteers closed at the end of March - see our 30 November 1993 letter. There is no business meeting at the reunion; nominations from the floor cannot be made. The new Board will be announced at the reunion, and subsequently install its officers. The membership elects only the Board, not its officers.

We own a vote of thanks to the other volunteers for the Board who allowed us to withdraw their nomination in order to reduce the number of candidates for you to choose. They are: Dr. James I. Califf, Cornelius J. Callahan, Wilson R. Dodge, Jr., Arnold B. Eddy, Alan W. Gibbs, John W. Herman, Boyd E. Quate, Dr. Peter A. Sanchez, Robert I. Vick. They are equally qualified to serve on the Board. Their withdrawal in no way implies they are less qualified than those who have been nominated. Should any of the new Board be unable to serve, this list will be an invaluable source for replacements by appointment.

History of AWS Published

We have contracted with Turner Publishers to produce a commemorative history of Air Weather Service with your input. Neither you nor this association will be obligated to purchase the books. Our membership list will appear in the book subject to the individual's approval. Materials and pictures you provide to the publisher will be returned. Promotional pieces, editing, research, and design of the book are the publisher's responsibility.

Soon you will receive a promotional from Turner. Please do not discard it. Your assistance is needed to produce the volume. Respond with whatever you may wish to contribute to the publication.

Taps

Brig Gen Berry W. Rowe, AWS Commander 1975-78
Lt Gen Donald N. Yates, AWS Commander 1945-50
More names in 1994 roster. Space limits us to publishing only the names of our deceased members and spouse. We rely upon information from the surviving spouse and others to notify us of these deaths. I have we missed anyone? If so, notify our Locator - see Roster cover.

(D Day Cont'd)

by all on D-day; it is hard to know how to express one's gratitude. Words always seem so inadequate, but that's all I have for this occasion. And so I would like to mention those at Widewing that contributed to the success of the invasion, what Sverre Petterssen has called "Meteorology's finest hour." They are Colonel Donald N. Yates, Lieutenant Colonels Irving P. Krick, Benjamin P. Holzman, Majors Jay Treat, Edward O. Smith, John J. Jones, R. G. Bounds, Jr., Captains Donald W. Roberts, Olav Njus, Donald T. Perkins, Thomas P. Wildman, William H. Wyatt, Rodney A. Jones, William L. Reeves, Harold L. Herzog, First Lieutenants Morrison H. Beach, Lloyd L. Falk, Arthur W. Wakeling, Clyde R. King, Joel M. Ginsberg, Kenneth C. Winslow, Frank W. Ward, Edgar H. Fickensher, William D. Cooke, Chief Warrant Officer Lycurgis G. Tsimpides, Sergeants John D. MacDonald, Bert Vance, Fred Bedleyon, Willie Altman, Bob Zuckerman, Ed M. Doherty, Albert Simonson, George N. Orlich, Fermin J. Aragon, Ewing Brown, and Gwen Bymers. (Ed.)

(Editor's Note: Yates, Holzman, Treat, J. Jones, MacDonald and Orlich are deceased. Krick, Bounds, Njus, R. Jones, Winslow, Fickensher, Cooke, Brown, and Bymers (a WAC) are members of this association. We do not know the status or whereabouts of the others who were at Widewing. One of the parachuting weathermen, SSgt Robert Dodson, is deceased. The status of the other two, Sgt Chuck Staub and Cpl Warren Wolf, is unknown).

Thoughts on D-Day Forecast

by Charles C. Bates

Organizational Structure:

LtGen Yates in his letter of 3/2/58 to Col Merewether (Ed.):

"The procedure for obtaining the forecast was essentially as follows. All conferees - two from SHAEF (Stagg and Yates), two from each of the three centrals and at least one each from TAC and Naval Headquarters participated. Alternately, Stagg and I acted as chairman of the conference. (Note: as this forecasting drill went on for the month before the invasion, twenty-four hours a day, seven days a week, duality of forecasters was needed in order to provide both availability and rest)..."

"At periodic intervals each day Stagg and I reported to the Supreme Commander who in every case had assembled his Deputy, Chief of Staff, the Commanders-in-Chief of Army, Navy and Air, and their deputies, and his G-3. During these briefings, Admiral Ramsey (C-in-C, Invasion Fleet) had present

(Continued)

(D Day Cont'd)

Seeking - Where are They?

Airborne Weather Parachutists — you have an association with newsletter/roster for all military jumpers (active, retired, prior service). Its founder/editor invites you to contact him: Johnny Reid, 219 Woodrow St., Fayetteville, NC 28303.

Korean War Tactical Weather Reconnaissance — if you served with the 6166th Air Weather Reconnaissance Flight (RB-26), and are not on its association mailing list, contact: Richard H. Langill, P.O. Box 162, Plainfield NH 03781-0162. They recently had a reunion in Pensacola.

Vietnam 1964-65, Det 11, 30 Wea Sq (Vinh Long) —those who supported the “Knights of the Air” 114th Aviation Co., US Army, contact: George J. Young, 114th Av Co Assn, P.O. Box 27470, San Antonio, TX 78227. Looking for (among others) Capt Darrell F. Mount; TSgt Dale D. Dotson; SSgt Frank C. Jensen; A1C Wendell H. Belcher; A1C David Lee Buzard. Their association publishes newsletter, holds reunions.

WWII 1940-42 Philippine Weather Detachments, specifically Clark Field and the following at that time: Sgt Kenneth Smith; Pvt Joe Bak; Pvt Louis Loicano. Anyone having knowledge contact: Prof. Kathleen Cooke, Humanities Dept, Johnson State College, Johnson VT 05656. She is writing a history about the fall of the Philippines. Her uncle (US Army Air Corps) Lt James H. Cooke was at Clark Field when it was attacked, survived the Bataan Death March, but died in POW camp in Japan in 1943.

To locate a former or retired military person — write a letter to the person, put it into a stamped and sealed envelope with his/her name on it and your return address. In a short, separate note, state the person's full name, your relationship to that person, and any identifying information about the retiree that you have (SSN, service serial number, rank, last known unit). Put your note and the sealed envelope in another larger envelope and address to one of the following: **Air Force** — Hq AFMPC/DPMD 003, Randolph AFB TX 78150-6001. If you are retired from the service, there is no charge. Otherwise enclose \$3. **Army** — ARPERCEN, Attn: DARP-PASEVS, 9700 Page Blvd, St Louis MO 63132-5200. **Navy** — Naval Reserve Personnel Center, Code 41, New Orleans LA 70149-7800. Unless the person you seek retired from the service or was in its reserve force, there may be no record. In such case, contact the nearest **Veterans Administration** office for location-service procedures.

his meteorological officer for personal advice (Cdr. John Fleming)...”

“As you can see this was a most cumbersome operation, and one which I would never recommend for future use. Just give me one center with a mixture of experts where I can knock their heads...I will be satisfied.”

RADM Sir John Fleming, RN, writing to Dr. Charles Bates on 6/14/82:

“With some modifications, I think the Overlord organization was about the best obtainable, bearing in mind the existing arrangements for meeting the requirements for all of the Services concerned. The setup was basically sound, and the difficulties which arose lay primarily in the shortcomings of the individuals responsible for making it work rather than in the organization itself.”

“Stagg, of course, was fundamentally unsuited to the appointment by reason of his negligible experience as a forecaster, especially of channel weather. To his credit, he freely admits this in his book (Forecast for Overlord, Ian Allan, London, 1971)... I would have insisted that Eisenhower's Chief Meteorological Officer should be a fully experienced forecaster. Secondly, I would have provided him with a small team of competent weathermen to provide him with the material required for conferences with the three main centres...The function of the three main centres would have been advisory only.”

I agree with Fleming. The key to this set-up is that the C-in-C's weather adviser must be a top weather forecaster of sufficient high rank to report to the C-in-C himself, not to an operations or intelligence officer. **Quality and Distribution of Key Forecasting Personnel:**

Eisenhower's chief meteorologist was not a forecaster and his Deputy (Yates) had been in the theater of operations for only six months or so. Local weather knowledge therefore had to come from the Weather Centrals. Although air support and command of the air was vital, even more vital was the ability of the navy amphibian craft to land men, vehicles and ammunition rapidly, steadily, and with volume. As a result, in-depth knowledge of surface weather in the English Channel and the limits on small craft operation had to come from the British Admiralty supplemented by attached AAF military oceanographers fresh from the wave forecasting developments at the Scripps Institution of Oceanography, myself among them.

Windows of Opportunity:

As repeatedly stated, the original D-Day (June 5, 1944) would have resulted in catastrophe because of gale conditions. June 6 offered a day in which the weather improved as daylight wore on — and the German High Command was in a relaxed mode with slow response times.

Delaying two weeks to the next window of opportunity would also have been disastrous as the weather
(Continued)

(D Day Cont'd)

Don't Become A Lost Member

In spite of repeating this every year, too many of our members fail to notify us of their mailing address changes. Thereafter, they do not get our newsletter and roster since our mailings go via 3d Class Bulk, cannot be forwarded, and are discarded at USPS.

We repeat our plea: send an address change notice at every move. It costs the association a bundle: (1) to get the address correction notices from USPS, then (2) a notice to the member to see if that person wants to pay for the extra postage to get the latest newsletter and roster. That imposes an unnecessary workload on the volunteer Secretary.

Also, we must rely upon the surviving spouse or friend to notify us of the death of a member or the member's spouse. We continue to send our publications to the last known address of the member or, if deceased, to that person's spouse. The surviving spouse will continue as a Lifetime Member at no cost.

Please help keep our costs down, don't get lost, and receive our publications. At every mail address change, or notice of a death, send that news to: AWA Locator, 4751 Knapp Way, Carmichael, CA 95608-5423.

turned into a "sucker hole."

Why was Eisenhower called "Lucky Ike"?

Because he acquired top-notch staff personnel and listened to them intently, i.e., the weather situation. When riding en route to the Inauguration ceremonies, Jack Kennedy asked Ike about D-Day. To his surprise, Ike didn't credit his success to the epic's grand design. Instead, Ike said the Allies probably prevailed because they had superior meteorologists. In that, Ike was being modest for German meteorologists had also forecast clearing after the storm - but the German generals had failed to pay any attention.

To summarize, the meteorologists succeeded because they had bosses who listened - and acted upon what they heard!

(Editor's Note: LtGen Donald N. Yates (deceased) subsequently became the first post-WWII commander of Air Weather Service. Col (USAAF Ret) Arthur F. Merewether was Chief of the Directorate of Weather, U.S. Army Air Corps from 1940-42, a position considered to be the commander of the forerunner of Air Weather Service. He resides in Bayside, NY.)

(Continued)



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Another '94 Weather Reunion

Space Coast-Central Florida Christmas Party, Indian River Colony Club (Melbourne), 10 Dec 1994. Contact (after October): Hyko Gayikian, 510 S. River Oaks Dr., Indialantic, FL 32903. Tel: (407) 723-4777.

Washington, DC Area. The traditional twice-yearly weather dinner parties are still going strong. The 1994 Christmas party will be in early December. Washington area active duty officers and retirees are invited. Contact Major Mark Andrews at (703) 614-9006.

Also in the DC area is the regular bi-monthly meeting of the Retired Old Weather Friends. This group meets on a Thursday at the Ft. Myer Officers Club basement lounge, *normally* the second Thursday. Contact Larry Johnson (703) 883-8645 or John Lasley (410) 785-0282.

Next Year's (1995) Weather Reunions

6th Weather Sq (Mobile) Alumni Assn., June 21-25, Oklahoma City, OK, Meridian Plaza Hotel. To join, contact: 6WSAA, PO Box 96922, Oklahoma City, OK 73143-6922.

Air Weather Reconnaissance Association, Oct. 5-8, Sacramento, CA, Capitol Plaza Holiday Inn. To join, contact: AWRA, Attn: Glen Sharp, 306 Sunset Ln., Belton, MO 64012.

D-Day and the Weather

by Cecil Dotson

In General Eisenhower's book, *Crusade in Europe*, he stated that the invasion could be on the 5th, 6th, or 7th of June, depending on the weather. It was tentatively set for the 5th but on June 4th it was postponed until the 6th, subject to a final look at the weather. On the morning of the 5th the Meteorological Staff predicted that by the morning of the 6th a period of relatively good weather would ensue for a period of 36 hours. After that, another spell of bad weather. On that basis, General Eisenhower ordered the invasion to proceed on June 6th. Most people have assumed that that's the way the weather worked out and so weather was not a factor in the invasion. The truth is that it did not work out as predicted and weather was a significant factor during those crucial first hours. The bad weather persisted through the night of the 5th and most of the day of the 6th. This dramatically affected the crucial events during the night and the early morning landings. A much better decision, in hindsight, would have been to wait until June 7 by which time we did have good weather for an extended period.

I was not involved in the longer range strategic weather forecasting for the invasion but I was involved in an operational forecast on June 5 and 6. I was the

(Continued)

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(D Day Cont'd)

WW II 18 WEA SQ Memories

"The Weathermen Let Them Fly: Memories of the 18th Weather Squadron" by our member, Ewing F. Brown. This 100+ page soft cover book is available through (check payable to 8AFHS for \$13.95 plus \$2.50 S/H): 8th AF Historical Society, c/o Art Swanson, 65 Beddington Ln., Strasburg, PA 17579. It covers activities/photos of the WWII 18th Wea Sq and Widewing weather central at Bushy Park.

Congratulations ANG Wea Flts

Thirty-three Air National Guard (ANG) weather flights, over 600 personnel, now provide mobilization support to units of the Air and Army National Guard. In addition, full-time weather service is provided at 12 National Guard bases. With the active duty armed forces now reduced, greater reliance is placed upon the reserve forces. Desert Storm found many National Guard units activated.

Two of the ANG weather flights were nominated to Hq USAF for the annual Outstanding Weather Unit awards. These two flights received the ANG's 1994 Collens Award. They are:

—113th ANG Wea Flt, Terre Haute, IN nominated for the Non-Tactical (Williams) Award.

—202nd ANG Wea Flt, Otis ANGB, MA nominated for the Tactical (Grimes) Award.

The Collens Award was established by former AWS Commander, Brig Gen Berry W. Rowe (deceased). It is named for another former AWS Commander, Maj Gen (Ret) John W. Collens, and is an ANG program.

What Constitutes a Veteran

You are a veteran if you served/now serve in the U.S. armed forces during any of the following periods: WWII and Korea - 9/16/40-1/31/55; Vietnam - 1/31/55-10/14/76; Iran, Lebanon, Grenada, Panama - 11/4/79-1/31/90; Persian Gulf - 8/2/90 to date. Perhaps Bosnia will be added. These periods are deemed "during time of war."

Air Force Academy Meteorology

Now a part of the geography major, meteorology is being taught at the USAF Academy and will produce graduates in 1995 who are fully qualified to enter the weather career field. In addition, it will produce pilot candidates with a strong knowledge of meteorology. The Meteorology Lab at the Academy was dedicated with up-to-date equipment and communications modules from bases recently closed. By 1997 the Academy anticipates having 10-15 meteorology graduates per year.

senior forecaster on duty at the 9th Air Force Bomber Command located in East Anglis, England. Our mission was to provide tactical support for the ground forces, flying B-26's and A-20's organized into 3 combat wings composed of 11 bomb groups. These were medium bombers operating at medium levels, generally about 10-12,000 ft. From a weather standpoint height of cloud bases and tops and visibility were crucial. We could not bomb from above the clouds if coverage was more than 50%. Target selections were made at 9th Air Force but the final selections of targets and combat operations were made at Bomber Command.

To better understand the events of that day let me describe the normal routine of the weather operation and its relation to the missions of the day. The senior forecaster comes on duty at noon with the primary focus on the next day's weather. The junior forecaster who came on duty at 0700 hrs. is focused on finishing off that day's missions. Both forecasters are on for 24 hours allowing them to follow through to completion of the morning mission and plan any afternoon missions. We had so little information and so much weather that every effort was made to share forecasts between all the Allied Air Forces. At 1430 hrs. the 8th Air Force and its 3 divisions (B-17's and B-24's) would discuss the next day's weather. We listened in on their conference for general information but their weather concerns were different than ours. At 1600 hrs. the main telephone conference was held between Ninth Bomber Command, 9th Air Force Headquarters, British Tactical Air Force, 2-Group of the British medium bombers, and 11-Group of the British fighters. All of these had a common interest in the same weather factors. A conference composite forecast was made and agreed upon and a summary was sent to all groups and wings. At 1700 hrs. the senior forecaster then briefed Major General Samuel A. Anderson, Commander of Ninth Bomber and the Operation controllers. Around 2300 hrs. the next day's selection of targets were received from Ninth Air Force by the A-3 controller. The weather officer and controller would then review the targets and based on the weather would select targets and time of the mission. At 0400 hrs. another telephone conference was held with the same participants as the 1600 hrs. conference in final preparation for the morning missions.

To also understand what happened on the night of June 5 and morning of June 6 one needs to know of the Ninth Weather Reconnaissance Squadron. Their mission was to fly routes over enemy territory which would give us for sure what the weather conditions were in the target areas one hour before takeoff and again just before the bombers crossed into enemy territory. Ten P-51 pilots were specially trained in meteorology and would report back by radio directly to the Bomber Command weather officer while still in

(Continued)

(D Day Cont'd)

Congratulations Outstanding USAF Weather Award Winners

Each year we recognize those selected as the outstanding USAF weather airmen and civilian. The nominees are Air Force weather people supporting USAF or US Army major commands, or serving in Air Weather Service. Final selection is made at the office of the Director of Weather, Hqs USAF.

The individuals chosen receive this association's recognition in the form of a \$100 cash award made possible by our Outstanding Airmen of the Year Trust Fund. You may contribute to that tax-deductible fund so that this worthwhile program may continue.

Congratulations to the following:

—Company Grade Officer of the Year

Capt Julie L. Hall

Det 8 AFSFC, San Vito, Italy.

—Senior Non-Commissioned Officer of the Year

MSgt Jimmy W. Long

97 OSSq, Altus AFB, Oklahoma

—Non-Commissioned Officer of the Year

TSgt Mathew L. Kline

410 OSSq, K.I. Sawyer AFB, Michigan

—Airman of the Year

SrA Robert M. Pucci

375 Wea Sq, Scott AFB, Illinois

—Civilian of the Year

Johnny W. Weems

45 Wea Sq, Patrick AFB, Florida

Getting AWS "Observer"?

The public affairs staff of Air Weather Service is experiencing some difficulty in maintaining an accurate mail list since the restructure of Air Weather Service and the numerous military and retired change of addresses. If you have not received the OBSERVER and wish to re-add your name to the list, please send your current address to HQ AWS/RMA, 102 W. Losey Street, Room 105, Scott AFB, IL 62225-5206, or contact TSgt William M. Rhodes, NCOIC, Public Affairs at 618-256-3350, Ext. 334.

Weather Instruments for AF Museum

Still needed are max-min thermometer, dry and wet bulb thermometers, anemometer and mast for the WWII English control tower being constructed at the USAF Museum, W-P AFB, Ohio. This is an 18 WS project. Contact Arthur W. Gulliver to donate these items.

the air. These reports were then reviewed with the Operation's controller and a final decision was made on each mission to scrub, delay or proceed. Recon reports were sent to all units in the theater within 60 minutes of the radio report. As far as I know 9th Weather Reconnaissance Squadron was unique in Europe. It was an important tool to us in accomplishing a high mission success rate.

On June 5 we had successful morning missions in the Calais area but heavy clouds persisted at all our bases in East Anglia and elsewhere on the continent throughout the afternoon. There were no more missions that day. I came on duty at noon as the senior forecaster. At 1400 hrs. Col. Hemphill, the Bomber Command Weather Officer and I were briefed on the impending invasion. At our regular 1600 hrs. telephone conference with 9th Air Force and the various British groups everyone agreed that the weather would perhaps clear in time for the various Air Forces to operate successfully the next morning. The Generals and Operations were briefed and plans were made for a maximum effort. The problem was that the weather didn't start to clear from the west but became worse in all areas. Recon flights that evening confirmed the bad weather. At midnight 9th Troop Carrier was dropping gliders and the 82nd and 101st Airborne behind the lines. General Omar Bradley in his book, *A General's Life* states that because of the bad weather the paratroopers were scattered far and wide of their objectives. We began sending out recon flights over the beachheads as often as planes were available, reporting the weather conditions by radio directly to me. To my knowledge, these were the only observations of actual weather by trained observers over the beachheads made during the night. These were shared with all other Air Forces and I personally talked to personnel on Eisenhower's meteorological staff several times during the night passing on the weather reports. Generals Anderson and Sanders and their key staff were in the station at 0130 hrs. for a briefing. The 0300 hrs. recon still found multilayered clouds up to 12,000 ft. With these conditions medium level bombing would not be possible and at this point any normal mission would have been scrubbed. The only possibility would be to go in at low level below the clouds. B-26's had had bad experiences at low level in the past. A further complication was that most of the planes were loaded with 2,000 lb bombs which are not safe to drop below 2,000 ft. In spite of this the decision was made to go in below the clouds. The message went out to all groups and shortly more than 400 bombers took off in the darkness with rain, clouds and ice to arrive over the beachhead at dawn completing their bomb runs between 500 and 4,000 ft. From a weather standpoint, there was great confusion during the night everywhere but the work of the 9th Weather Reconnaissance Squadron during the night greatly

(Continued)

(D Day Cont'd)

History of Air Weather Reconnaissance

The Air Weather Reconnaissance Association is compiling a history of all weather recon activities since its beginning in early 1940 until the present time. This is an ambitious project, but one that is worthwhile to all of us who flew the weather of the world. This has been a lifelong interest of mine since I flew the icy North Atlantic in early 1944, the hurricanes of the South Atlantic in mid and late 1944 and did weather recon across the Hump in the CBI in 1945.

This will not be an "I was there" type history, recounting only my experiences. I hope to stress the importance of weather recon - it is still being debated in the halls of Congress - and the heroic story of the men and machines that watched and reported the weather around the world. We have a publisher who will publish the history.

This will require the input of as many people as possible who were associated with weather recon. If you would like to add your experiences to this history, please write me for a questionnaire, which will explain more. Please write: Otha C. Spencer, historian, Air Weather Reconnaissance Association, Route 2 Box 54, Campbell, TX 75422.

Our New Business Address

At this publication date, and until a new Board is elected, we cannot list the mailing addresses for the new Secy-Treasurer or Editor. John Collens will forward the mail intended for the new officers and Freeman Smith will continue as our Locator. Use the following addresses until receiving the 1995 newsletter:

CHAIRMAN: (subjects concerning Hq AWS, Hq USAF, advertising, association policy and organization, interface with other organizations) - AWA (K. Lavin), 6704 Wolke Ct. Montgomery, AL 36116. Tel: (Central time) 205-271-3246.

REUNION ORGANIZER: (future reunions) - AWA (D. Farrington), 4149 Silver Hill Ct., Lithonia, GA 30058-6978. Tel: (Eastern time) 404-985-2240.

LOCATOR: (address changes, notices of deaths, location service) - AWA Locator (F. Smith), 4751 Knapp Way, Carmichael, CA 95608-5423. Tel: (after noon Pacific time) 916-972-8371.

INTERIM, ALL OTHER: (new membership inquiries, letters to Editor or Secy-Treasurer) - AWA (J. Collens), 5301 Reservation Rd., Placerville, CA 95667-9745. Tel: (Pacific time) 916-677-2100.

relieved the uncertainty. The weather was bad, but we knew what it was and could run the mission accordingly. Their information was passed on to all the Air Forces and I feel sure it helped all of them as it did the 9th Air Force.

Throughout the daylight hours of June 6 there continued to be much cloud over our bases and most of the French targets. Late in the day breaks in the clouds began to develop and the cloud bases rose to 7,000 ft. Our afternoon missions still had to be made under the clouds. By day's end 9th Bomber had completed over 1,000 missions over the beachheads, dropping 1,400 tons of bombs.

In General Bradley's book he cites the dawn attack of 360 medium bombers at Utah Beach, but states that the heavy overcast thwarted their aim and as a result little was achieved. Bad weather also existed at Omaha Beach. The ships here were more exposed to the boisterous channel weather. Waves were 3 to 6 feet high making loading of landing craft very difficult, with the infantry soon being seasick, half of the tanks and most of the regular artillery foundered at sea, leaving the assault waves with very little tank and artillery support. Because of poor flying weather the dawn aerial bombardment by 480 B-24's heavy bombers was completely ineffective. Because of all of these problems plus others the fate of Omaha Beach was very much in doubt all day. Bradley said that by late afternoon the sky was clearing and Allied air was there in force to keep German reinforcements from moving up until after dark. By then, Omaha Beach was secured. The weather continued good until the June 19 storm.

Certainly the June 4 forecast for June 5 was an excellent one and it was a wise decision to postpone the invasion until at least the 6. The June 5 forecast for the 6th was correct in seeing better weather coming but missed by a crucial 18 hours as to when it would arrive. I think I have shown that weather had an important influence on some aspects of the invasion and made the outcome less certain. A better forecast would have maybe led to a decision to attack on June 7 instead of the 6th. I think that would have been better for all our forces; air, sea and land.

And, that's the way it was June 6, 1944.

The Yates Legacy: D-Day Prelude and Post-War

by Lewis L. Mundell

On 1 January 1944 the U.S. Strategic Air Forces in Europe (USSTAF) were formed under then Lt. Gen. Carl Spaatz to plan and direct the operation of the AAF heavy bombers based in England and Italy...¹

(Continued)

What Does It Cost?

This edition of our newsletter and separate membership roster cost nearly \$5000 to print and mail. As with prior editions, the labor to insert, label, sack and take to the post office was donated by the Editor and his spouse. Also, no one was compensated for the articles herein. They were composed and contributed by our members, the Editor, and the Locator who composed the roster.

You pay just \$9 for LIFETIME MEMBERSHIP. But, what does it cost to support a member? For starters, each new member costs the association \$2.20 in postage plus the cost of the printing of what we send (m'ship application, newsletter, roster, envelopes). Add to that the cost of the membership lapel/tic tac pin, another \$1.25. A new member costs the association a total of \$3.45 when he or she comes onboard, plus the cost of the printed materials sent.

Only \$5.55 is left to provide the member our annual newsletter and roster every year. Each newsletter and roster costs \$1.45 (printing and mailing at today's rates, and going up). If that member moves and fails to notify us, add another 35 cents that USPS charges to let us know. If given a new address by USPS, we send a 19 cent card asking "do you want the newsletter and roster that was discarded by USPS?" Our 3d Class Bulk mail cannot be forwarded and sending via 1st Class is unaffordable.

We have been able to offset some of our costs with advertising revenue. Now that is drying up. You can help by contributing to the costs of our mailings or we may have to cease sending those publications. You can also help by saving the 54 cents that it costs when we send to an invalid address; just let us know your new address beforehand.

The choice is yours: donate a dollar and keep us advised of all address changes or risk the loss of future annual newsletters and membership roster. We can support a new member for just 3½ years before that account reaches zero. Most of you have already received back more than you paid for your membership. Send us a buck if you think the association's publications are worth it.

More on Women's Memorial

Kenelm C. Winslow advises that the Women in Military Service Memorial at Arlington National Cemetery will also include the names of American Red Cross ladies who served with our troops overseas. These women filled a niche for many of us who yearned for a glimpse of an American girl while overseas. Also, be advised that some 40 or 50 WACs served with the Widewing weather central and its supporting communications outfit. Contact the Memorial if you have further information and/or wish to make a contribution. It's a toll-free number: 1-800-472-5883.

Gen. (then Col.) Yates was placed in charge of the weather section in USSTAF to support this effort. His staff included the late Brig. Gen. Benjamin G. Holzman, LCol. Irving Krick, formerly head of meteorology at Cal. Tech., and other selected forecasters.

Prior to the organization of USSTAF, General of the Army George Marshall reported "large scale daylight raids require unlimited ceilings for precise aiming from high altitudes. Days of unlimited ceilings are rare in Europe, and the development of weather forecasting became a matter of extreme importance."²

Fortunately, the weather over Germany began to clear, and beginning Sunday, 20 February, there were 5 days of visual bombing opportunities.

Much has been written about those 5 days when up to 2000 heavy bombers from the UK and Italy, with fighter escorts, attacked German factories and other targets in daylight. General Arnold said, "Those five days changed the history of the air war." After the February offensive the allies made wide ranging attacks against German targets, and especially continued to hammer the Luftwaffe. Within weeks, it was no longer an effective force.

Emphasis soon changed to preparation for the Normandy invasion. That massive effort involving Army, Navy and Air Force units required careful consideration of all influencing factors. General Eisenhower set up rehearsal procedures involving his senior staff and the commanders to be sure that nothing was omitted.

General Yates and his staff, along with British counterparts, made careful preparation for coordinated weather briefings. Top meteorologists were available — Holzman and Krick on the US side, Douglas and Petterssen from the Air Ministry, Hogben, Bates and Fleming from the Admiralty. (Bates was actually an American, an oceanographer, loaned to the Admiralty).

General Yates and Group Captain Stagg, after secure telephonic consultations with the specialists listed above, developed an agreed upon forecast for a "theoretical D-day." Twice weekly, they briefed General Eisenhower and his Army, Navy and Air Force commanders. Then they prepared for the next theoretical D-day.

Unfortunately, by early June the weather deteriorated to the extent that the capability of the invasion forces to proceed became questionable. The pressure on the weather forecasters became intense. Group Captain Stagg gave the final briefing to General Eisenhower and his commanders, with operational inputs by General Yates. General Eisenhower made the decision to proceed on June 6, without dissent from the senior commanders, in spite of a forecast of marginal weather — a forecast that proved to be accurate. The rest is history.

In December, 1944, after victory in Europe seemed assured, Gen. Yates was ordered back to Washing-

(D Day Cont'd)

We Survived the Board Crisis

What is Next?

The ability of the association to offer Lifetime Membership without additional cost or annual dues depended upon getting advertising revenue for our annual newsletter and roster. Times have changed. Advertising budgets are shrinking. We also are experiencing low interest rates on our bank account that helped support printing and mailing costs.

Add to all of these negatives the fact that (1) we must use regular bulk mail versus the non-profit rate in order to include insurance industry ads (a Congressional mandate), and (2) many of our members change mailing addresses without notifying us; that impacts our printing and address notification costs.

The bottom line is this: if the association is to continue publishing an annual newsletter and separate roster, you must support the costs. To those who move and do not notify us, we are compelled to drop you from the mailing list. All who wish to continue receiving the publications and notices of biennial reunions will, no doubt, be willing to support the costs of printing and mailing.

If you are willing to send the small sum of \$1 and keep us advised of your current mailing address, we may be able to continue the "no annual dues" mode of operation. It costs nearly \$5000 to send our annual publications. We have almost 3500 members. You have a choice, and annual dues notices is not one of them.

Send your check for \$1 (or more) **NOW** to: AWA, 5301 Reservation Road, Placerville, CA 95667. Be generous. **THEN**, every time you move send an address change. **FINALLY**, each year when you receive the newsletter and roster packet send another \$1 (or more) to the Secy-Treasurer (new address to be announced in the 1995 newsletter.)

P.S. If you are attending the reunion, just add the amount to your registration and scribble "donation \$1 (or the sum)" on the form.

ton. At the direction of General Arnold, he reorganized the existing weather elements into the Air Weather Service, with Headquarters in the Washington, D.C. area, becoming its first Chief. He was soon promoted to Brigadier General.

In 1945 he was requested to go to New Mexico for consultation on a highly classified project. There he witnessed the explosion of the newly developed nuclear device — the predecessor of the first atomic bomb.

After the war, weather reconnaissance activities were initiated. One unit, stationed in Bermuda, was used to find and follow hurricanes - thus permitting better warnings. Also established were daily weather reconnaissance flights from Alaska to the North Pole.

By Jan. 1949, possibly from concern about Soviet nuclear activities, it was visualized that weather reconnaissance units could be put to another use. Air scoops and filters were installed in aircraft to collect atmospheric particulates. Laboratories installed at selected ground stations could then test the filters for radioactivity. The program became organized and equipped in the summer of 1949, and in August a cloud of radioactive materials was discovered.

The results were turned over to an office of specialists in Washington, D.C. (AFOAT-1)³. They also consulted other specialists, including J. Robert Oppenheimer. All concluded that the Soviets had indeed exploded a nuclear device, and they knew much about its composition. President Truman was informed, and he announced it publicly.

In 1950, General Yates was assigned to a new position in Hq. USAF.

¹ From second report to Secretary of War by General of the Army H.H. Arnold, 27 February '45.

² From Biennial Report, Chief of Staff, U.S. Army to Sec. of War, 1 July '41 - 30 June '43.

³ Air Force Office of Atomic Energy

Acknowledgements

All of the contributors to the D-Day and Pacific Theatre articles are members of this association. We thank them for making this issue of our newsletter both memorable and highly informative. They are (in the order of publication):

(1) Dr. (former USAAF LtCol) Irving P. Krick served at the Widewing Forecast Center as its Long Range Prediction specialist. He had been a professor and head of the Department of Meteorology at California Institute of Technology before WWII. He currently resides in Pasadena, CA. The text is adapted from an upcoming autobiography in cooperation with noted biographer, Lee Edson.

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(Acknowledgements Cont'd)

Air Force and Army Weather Support:

An Update

by Brig Gen John J. Kelly, Jr.
Director of Weather, HQ USAF

Over the past three years, much has changed with the organization, equipment, support methodology, and training of the weather support force. What follows is a high level recap.

We are in the home stretch with the installation of Doppler radars and automated information processing equipment in our weather stations—two pieces of equipment that are revolutionizing the way we operate. Working with the Navy, we developed joint doctrine for weather support to combat operations and are implementing several initiatives which will exploit our respective strengths, eliminate redundant capabilities, and improve interoperability. Additionally, we've laid the groundwork for the next generation of combat weather equipment and are in the midst of a large effort to modernize and reengineer Air Force Global Weather Central. The driving force of all of our actions has been to ensure the weather force is prepared to rapidly support the total spectrum of military operations. The key to achieving this is to train in peace as we will fight in war. Hence, the deployment systems we are procuring will have the "look and feel" of the systems used every day in the weather station. This similarity in our tool kit will minimize training time and cost, and maximize readiness. Weather information remains important to the warfighter; however, the process used to provide that information is changing. Today, and in the future, weather troops will use workstations to create tailored weather information to meet warfighter needs and disseminate this information via user command, control, communications, and intelligence systems. This information will be in the format specified by the operator and will be available where and when it is needed, e.g., tent, operations center, cockpit, etc. Weather troops will, in essence, become transparent as we move away from the "grease pencil and acetate" dissemination era. And, weather troops may be geographically remote from the decision-maker.

(2) Dr. (Col, USAF Retired) Robert C. Bundgaard was in the Widewing Forecast Center as its Upper Air Specialist. He currently resides in Colorado Springs, CO.

(3) Dr. (LtCol USAFR Retired) Charles C. Bates was one of the USAAF oceanographers at the U.K. Admiralty Forecast Center. He is co-author with John Fuller of "America's Weather Warriors," and resides in Green Valley, AZ.

(4) Cecil P. Dotson, (former USAAF Captain), served as the senior forecaster at 9th Air Force Bomber Command in East Anglia, England. He was recognized for his contribution to the success of D-Day missions through award of the Bronze Star by Maj Gen Anderson, the 9th Bombardment Division Commander. He resides in Dallas, TX.

(5) LtGen (USAF Ret) Lewis L. Mundell, writes with full knowledge of LtGen Yates' contributions to the Air Force. He served 10 years in Air Weather Service, most of them with LtGen Yates. He had a distinguished career in many facets of the USAF and now resides in Savannah, GA.

(6) Charles G. Markham (LtCol USAF Retired) served in the China-Burma-India Theatre with the 10th Weather Squadron during WWII and provided the copyright Weatherwise article (permission to reprint Vol. 48, No. 3, June/July 1993, pages 18-20, granted by Heldref Publications. Further reproduction is not allowed.) He now lives in Boulder City, NV.

(7) Michael C. Tonilas (LtCol USAF Retired) served in the Pacific Theatre with the 7th Weather Squadron in the Mariana Islands during WWII. He provided the photos of his trek from Met Cadet training at NYU to Saipan, and now resides in Dearborn, MI.

To those of you still serving in USAF weather units, the foregoing is a part of your heritage. For all reading this newsletter: **This is your Association; keep it alive.** If you are not already a member, fill out a copy of the application and join us. Do you know someone who qualifies, but is not a member? Urge that person to affiliate by personally sending them a membership application.

(Continued)

(Weather Support Update Cont'd)

We will capitalize on these initiatives with a well-trained force of enlisted and officer personnel. On the enlisted side we are revising our training method and moving to a true single career field. Newly-accessed airmen will receive initial skills training in the total spectrum of weather duties, i.e., forecaster and observer, and then proceed to duty locations to hone their skills and gain proficiency. On the officer side, we determined universities are graduating a sufficient number of meteorologists to meet accession needs and have eliminated the Basic Meteorology Program. Future officers will still come from ROTC, OTS, AECP, and the Air Force Academy, but they will enter the force with the required meteorology education. The Air Force Academy has added a meteorology track to the curriculum and we anticipate accessing at least six officers each year. All officers, shortly after commissioning, will attend a four-to-six week training course on military meteorology.

Our enlisted troops have been the backbone of the weather support force, and this will be even more true in the future. Over the next several years, we will, Air Force-wide, convert a large number of weather officers positions to enlisted authorizations. When the conversion is completed, the officer to enlisted ratio in weather will move from 1 officer to 2.6 enlisted to 1 officer for every 4.0 enlisted. This conversion translates to bigger leadership opportunities for the enlisted force.

Our path to quality weather support for the 21st Century is focused on our mission to support the warfighter. We will carry out that mission by following through on cooperative capability improvements with the other Services and, where warranted, with other agencies. We will exploit emerging technologies to achieve improved analysis and forecast capabilities. We will place these improved capabilities in the hands of a streamlined, well-trained, professional force. The end result will be a smaller, smarter, and better weather support system to provide quality weather service to the Air Force, Army, and joint forces.

Editor's Note: General Kelly retired from the Air Force on June 1st., At press time his replacement had not been announced.

Air Weather Service —Now and the Future—

*by Col. Frank J. Misciasci, Jr.
Commander*

It's a pleasure for me to be able to provide my fellow members of the Air Weather Association with an update on where the Air Weather Service is headed in

the next few years. Ugly rumors to the contrary, AWS is very much alive and well, and it is made up of a group of men and women who are as talented, eager, and dedicated as at any time in history.

This is fortunate, because the future is not without significant challenge. Force reductions and drawdowns will continue for the foreseeable future. Budgetary constraints will continue to limit the resources available for us to do our job. As a result, the AWS has undertaken a thorough look at everything we do to eliminate inefficiencies and identify services or products where we provide limited value added.

Let me give you a few examples. Currently, the Air Force Global Weather Central provides tailored severe weather forecasts for 331 points in the CONUS. Given the wide variety of weather information sources available in the CONUS, the advent of a dedicated cable weather channel, the quality products made available by the National Weather Service through various dedicated and media outlets, and the 24-hour weather units operated by the MAJCOMs, that's a service AFGWC no longer needs to provide. Accordingly, we'll cease CONUS severe weather support by 1 October of this year.

As another example, we've done weather editing at Croughton in Europe and Hickam in the Pacific for years. We've found that with the increased performance of the civil international weather exchange, we're getting little return on our investment. Accordingly, we're consolidating weather editing and weather communications requirements at our Automated Weather Network hub at Tinker AFB.

As a final example, in a further effort to consolidate all space-related activities under a single USAF major command, the Air Force Space Forecast Center and its subordinate solar observatories will transfer intact to the Air Force Space Command on 1 October 1994.

Even with these changes, our basic mission remains unchanged—provide centralized weather and climatological support to the Air Force and Army and assist Air Force major commands in fielding new equipment and techniques to improve weather support capabilities. To paraphrase Samuel Clemens, rumors of our demise are greatly exaggerated.

Where are they?

If you know the whereabouts of someone listed in the roster as "address unknown," send that information to our Locator (F. Smith). So many of our members fail to advise us of their address changes. USPS notifies us that they are "address unknown." Thereafter we can no longer send them the roster and newsletter.

by Charles G. Markham

A Balloon Blower in Wartime China

In 1939, depending on your point of view, I had either deserted or escaped from the farm in Nunn, Colorado, and was off to get a math degree from the Colorado State College of Education. The war effort was in full swing by the time I started my senior year in 1942. I was unable to join because my draft classification was 1E—a category for those with repairable physical defects who would be called and patched up if the country found itself desperate. The situation must have looked bad to Uncle Sam because I was drafted.

After induction in Denver, I found myself on a GI 6x6 truck bound for Fitzsimmons Army Hospital, one of a load of buck privates with a hernia, hemorrhoids, bunions, or some similar affliction. We were on our way for a quick patch-up job. While recuperating, I envisioned myself as an expert aircraft repairman, so I applied for the Aviation Cadet program in engineering. The papers came back approved, not for engineering but for meteorology—no doubt because of my math major.

With a long career in meteorology now behind me, I see that many of today's generation entered the field by rational decision. I had that choice made for me by military necessity and made my first real forecasts in China during World War II.

The road to being an army weatherman began in California, where I joined 222 other meteorology cadets at UCLA. We spent nine months taking daily calisthenics under what must have been the prototype for all hard-nosed physical-training instructors. We marched to meals and to classes. We learned dynamic meteorology, the art of drawing weather maps and making forecasts, and how to help pilots avoid clouds containing ice or hiding a mountain. All of this was under the tutelage of some of the greatest names in meteorology: Jacob Bjerknes, Jule Charney, and H. U. Sverdrup to name three.

Slow Boat to China

After graduation, I spent a year stateside, got married, and eventually was assigned to

the CBI, the China-Burma-India theater of operations. On the five-day trip from a replacement depot in North Carolina back to California, the troop train ran out of food near El Paso, Texas, and by the time we reached Camp Anza, we were famished. Arriving after dark, we unloaded near what we had positively identified as a mess hall. We entered salivating, only to find it to be a clinic, where instead of being fed we were given over-seas shots.

After a week, we boarded the troopship *General Randall* in Long Beach and headed southwest toward Australia, zigzagging to avoid being a target for Japanese submarines. My stateroom had four tiers of bunks, each three beds high in an area the size of a prison cell—pure luxury compared with the below-deck hold where enlisted men were stacked. My roommates were ten other second lieutenants and a captain, all weathermen.

I arrived in China in February 1945, after the Japanese became stalled in their campaign to take our airfields. Air-raid warnings were common, and some soldiers, mostly newcomers, took shelter, but I heard no bombs. Our offensive was limited because we lacked gasoline, which had to be flown across the Himalayas, "the Hump" as we called them. Jeeps ran on a methanol blend called "jing-bao-juh," or air-raid juice. Chinese vehicles ran on charcoal gas from generators mounted in the rear. There were many bad smells in China, but a bus stopped for charcoal recharge should be included on any list.

Everything American was flown across the Hump. Munitions and fuel outranked food, so we ate what the Chinese ate—eggs, rice, bean sprouts, water buffalo—mouthfuls of which got bigger with chewing. C ration sauce for rice was a treat. We had no beer or hard liquor, but there was a potable but numbing rice wine, and an indelible ink-like mulberry wine; if you drank it and smiled everyone knew where you'd been because your teeth remained purple for days. Because our skin was yellowed from taking Atabrine to prevent malaria, this made for an interesting color combination.

My first assignment was to Sian, in the north. Farther north were Mao and the Communists, to the east the Japanese. Winter still held on, with snow in shady

CHARLES G. MARKHAM is a retired Air Force lieutenant colonel and professor emeritus of geography at California State University in Fresno.

places. The station weather officer, Captain Stan Harris, and the station crew were old China hands. Six months before, they had evacuated from Liuzhou just before the Japanese took the airfield. The Sian weather station was in a bombed-out hangar but was soon moved to a new sod hut near the runway. Aircraft were P-40s piloted by the Chinese and P-51s piloted by Americans, but there was little flying because there was little gas. The airfield was being expanded to handle planes evacuated from the lost bases.

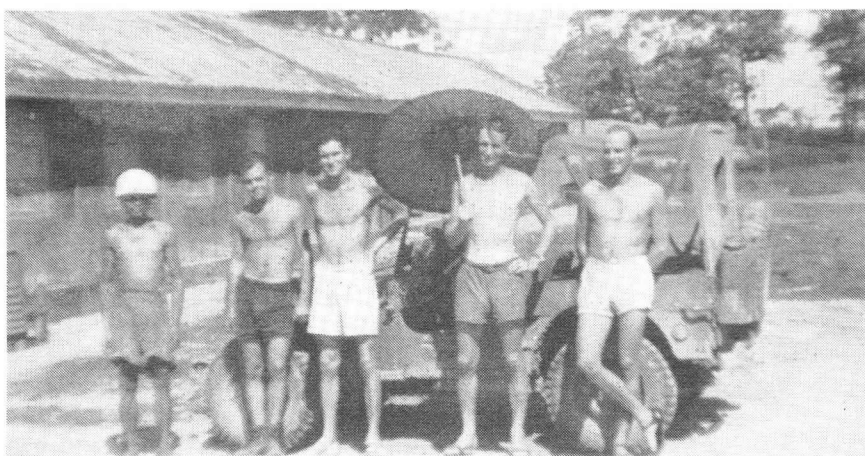
Wartime Weather

Army weathermen came to be known as "balloon blowers," because artillery installations and pilots relied on upper-wind information from the observation balloons we released every six hours. Weathermen filling balloons with hydrogen were a common sight at the airfield. The harmless moniker coined by the pilots stuck.

Forecasting, however, bore little resemblance to how we'd done it in school. Problems were three: scarce data, unreliable data, and delays caused by encryption. West of Sian, where the weather came from, were mountains, high plateaus, deserts, and no weather stations.

We had a few underground observers in the Japanese-controlled east and south, but they were often on the move or out of contact. Weather-station elevations were not precisely known, making comparisons of barometric pressures between stations impossible. All of our readings, measurements, and calculations were tentative. At one point our theodolite—the surveying instrument we used to track the balloons—was stolen. One of our sergeants looked in the construction area for it, then went into town, saw it in a shop, bought it, and came back triumphantly.

To further complicate matters, our observations had to be encrypted before transmission and decrypted upon receipt; to give weather information to the Japanese would have been stupid. No mechanical or electronic devices existed for the job, just tedious pencil-and-paper work with a code book. Our product was stale before customers got it. We relied heavily on pilot descriptions of weather they'd just flown through. Perhaps our greatest



The July heat at Nanning encouraged topless forecasting.



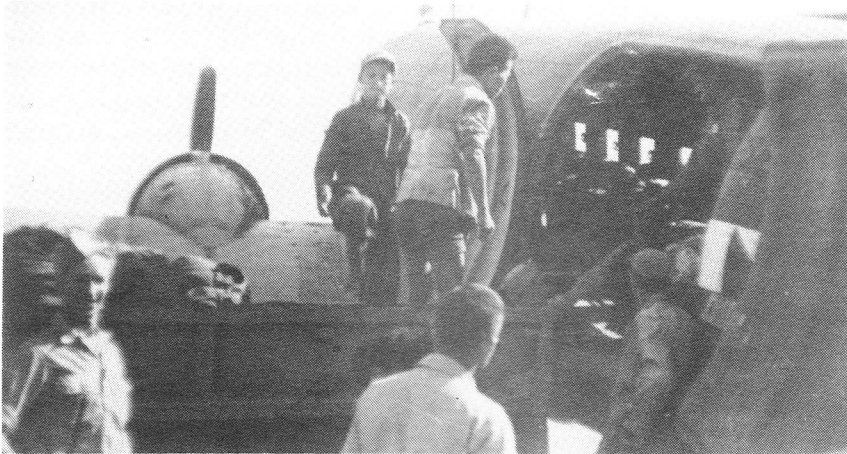
Expanding the airfield at Sian.



Loading the planes.

service was as a clearinghouse for pilot reports.

In July, I was moved to Nanning, in southern China. That base had been recaptured from the Japanese, and the weather station had to be restaffed. Sian in March had been bearably cold, but Nanning in July was unbearably hot and humid. All males, Chinese and American, were topless. Uniforms consisted of a pair of GI shorts, shoes, and nothing more. This lasted until September, when it cooled down, dried up, and became pleasant. The station weather officer, a first lieutenant, was sent away on temporary duty shortly



When the war ended, we packed up the weather station and didn't look back.

after my arrival. He didn't return and I have never known why. I was the only other officer and became commander, still a second lieutenant. Fortunately I had seasoned sergeants to keep me out of trouble.

Before Nanning had been abandoned to the Japanese, tent quarters for weather personnel had been in a Chinese graveyard. In struggles for the base, the same barrage that had opened some graves also blew away the superstructure from our latrine. Only the seats remained, which we continued to use in the open. A Chinese soldier was detailed to guard our area.

One morning I returned to my tent to find the guard asleep and snoring on my cot under my mosquito net. My carbine—loaded with muzzle upward—was hanging from the tent pole. I then did something only a second lieutenant would do: I softly approached the carbine, touched the trigger, and presto, the tent had a new hole in the roof. The guard levitated horizontally to the top of the mosquito net, turned vertical, hit the ground running, and disappeared like a cartoon road runner. I didn't report him; he would have been shot. After that the tent leaked a little when it rained.

Nanning's mission was to receive Chinese troops being ferried from Burma. The first contingents had blunted the Japanese drive toward Kunming, and now more were coming to attack Canton. American C-47s loaded with Chinese soldiers, including cavalry with their small Chinese horses, kept coming in. Pilots had plenty of stories. They said that soldiers would become restless and walk around in groups, throwing the plane off balance. To stop this, the flight crew put on oxygen masks and climbed higher. The soldiers, without oxygen, were then happy to stay in their seats. C-47s had cargo doors re-

moved, and we would look up to see the crew chief gazing down like a hobo from an open boxcar door. Most Chinese soldiers were peasants, yet to learn the ways of the 20th or even the 19th centuries. The pilots said that more than one Chinese soldier had been pushed through that open cargo door by his buddies who, not understanding the result, would shout "Ding Hao!" and laughingly cheer him on.

Homeward Bound

Soldiers wear two dog tags. The bottom dog tag is removed only to report the soldier's death; the other dog tag remains to identify the corpse. The nearest I came to getting my bottom dog tag removed was the evening of V-J Day, the day the Japanese surrendered. The Chinese army was encamped between our air base and town. When the war was over they celebrated by shooting everything they had, including rockets and artillery, over our heads. We, too, were glad the war was over. The tragedies of Hiroshima and Nagasaki did not rest on our consciences. Our main concern was to get the war over and go home.

In mid-October we received orders to close the station. We packed the equipment the government intended to keep and gave the rest to the Chinese. When our transport plane arrived, we loaded it, walked out the door without ceremony, and the whole dozen of us boarded and left for Shanghai. From there, each went to his separate destiny. Although it was now November, I found that I had been promoted to first lieutenant in September, but nobody had let me know. Two years as a second lieutenant is not an auspicious beginning for a military career.

After a few weeks in Shanghai, I embarked for home on the *U.S.S. Anza*, an aircraft carrier with planes and pilots removed being used to bring troops home. Accommodations were much better than those on the way there. Officers were assigned the absent pilots' air-conditioned staterooms. Enlisted men had cots in the spacious below-deck hangars. Navy food was unbelievably good—my first American meal in a year. I arrived home the day after Christmas, was reunited with my wife, and continued in the field of meteorology until the end of my working days. □

Editorial — Thank You

by John W. Collens

As the founder of this association, its Secy-Treasurer, Editor, and Reunion Organizer, I had a lot of help. Without that assistance we would only have an occasional ad hoc reunion; no newsletter nor membership roster; no central voice for the worldwide Air Force weather family; and many of you would never have found your former associates nor enjoyed the camaraderie the association provides.

In departing these Board positions, I wish to express my thanks to all the members who helped recruit new members, and specifically:

—Tom Aldrich who, as an Anheuser-Busch executive, provided the initial funds and typesetting assistance that got us started with the first newsletter and charter memberships seven years ago.

—Milt Sipple (deceased, but looking from above to wish us the best reunion ever); Hyko Gayikian, Stan Goodwin; Freeman Smith; and others who provided the initial mailing lists of AWS veterans to whom we mailed our charter membership invitations.

—George Chapman, the AWS commander when we formed the association; his successor, John (Jack) Kelly, who went on to the Pentagon as its Director of Weather; and his successor as AWS commander, Frank Misciasci.

—The former AWS wing commanders and their successors who are now integrated with Air Force major commands as their Director of Weather. They keep us in touch with the far-flung weather units.

—The active duty/ANG/Reserve members who joined today to assure that the association is there to serve them in the future.

—The other members of the current Board (Dayton Blanchard, Bob Gottuso, Vernon Snead) who provided sage advice and support.

—The companies who have steadfastly provided the dollars to assist in publishing our newsletter and roster. Buy their products; they supported you.

Thank you. God-willing, I'll see you this year at Tucson, then in 1996 at the next reunion, wherever it may be.

Congratulations Outstanding Units

The winners of this year's outstanding weather unit awards have been announced. The Grimes Award, given to the best Tactical Support weather unit goes to the 16 Wea Flt, 16 Operations Support Sq, Hurlburt Field, FL. The Williams Award, given to the best Non-Tactical weather unit goes to the 401 Wea Flt, 401 Operations Support Sq, Aviano AB, Italy.

The Grimes Award is named for former AWS Col. Keith R. Grimes (deceased) who specialized in unconventional warfare weather support during the Vietnam War. This award is given to the best weather unit exhibiting the highest stage of readiness to support wartime tactical missions.

The Williams Award is named for Col. Randolph P. Williams (deceased) who, in the 1930s authored the plan to establish an Army Air Corps Weather Service. This award has traditionally gone to the best non-tactical unit performing a weather observing, forecasting, or briefing function.

Views from the Pacific WWII



1st Platoon, A Flight, NYU Met Cadets, Sep 1943



Rawinsonde release from B-24 tail.

Views from the Pacific WWII



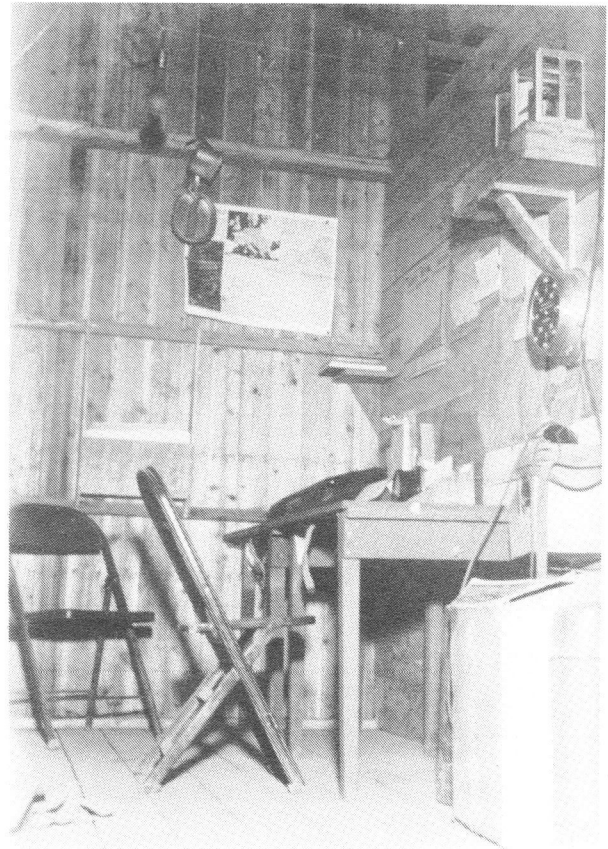
Guam Weather Station, Aug. 1944.

Navy POW Weathermen WWII

In response to an inquiry from one of our members, John Fuller gave this bit from the history books. When the Japanese attacked Kiska, Aleutian Islands (Alaska), in June 1942, they captured 9 aerographers from the Navy weather detachment. One, Aerologist Mate William House, the Detco, avoided capture and fled to the other side of the island. Fifty days of exposure and near starvation forced him to surrender to the Japanese. All of these Navy weathermen survived the war as did their dog which the Japanese had adopted. The dog was waiting and greeted the Americans when Kiska was recaptured the following year. This is not a shaggy dog story; it is duly recorded in various histories and Navy reports.

USAF “Banked” Pilots in Meteorology

With more pilots on board than the Air Force has cockpits, a program was initiated to place new pilots into support positions until cockpits became available. Two “banked” pilots who had 24 semester hours in meteorology while in college are now serving in the weather career field. Stay tuned, there could be more as the Air Force endures further drawdown.



Observers desk, Saipan Jun 1944 - note the mess kit shares honors with barograph and wind indicator.



7th Wea Sq, Saipan det, jungle training on Oahu, Hawaii, Apr 1944.

AIR WEATHER ASSOCIATION MEMBERSHIP APPLICATION

Membership is open to civilian and military who serve, or formerly served, in a USAF/USAAF weather support unit (including reconnaissance), or a weather training unit, regardless of AFSC/MOS, and to the surviving spouse.

Membership is lifetime. No annual dues.

Member No. _____ (Assn. Use) Release _____ (Assn. Use)

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IF APPLICABLE, ENTER CURRENT SPOUSE'S

NAME/NICKNAME _____ HOME PHONE NO. () _____

FULL MAILING ADDRESS _____

SERVICE DATES _____ CURRENT OR LAST WEATHER UNIT _____

CURRENT OR HIGHEST MILITARY RANK _____ IF CURRENT, WHERE _____

(CHECK ONE) ACTIVE DUTY/ANG/RESERVE _____ RETIRED MILITARY _____ PRIOR MILITARY SERVICE _____

IF APPLICABLE, (CHECK) MILITARY SERVICE AS: CIVILIAN _____ GRADE _____ RETIRED _____

WAR VETERAN (ON ACTIVE DUTY DURING WWII, KOREA, VIETNAM, PANAMA OR DESERT STORM)? YES ___ NO ___

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**** TO ORDER ADDITIONAL PINS OR PENDANTS, UP TO A MAXIMUM OF 5 EACH, SEND \$3 FOR EACH ONE TO OUR SUPPLIER: Forest View Enterprises, P.O. Box 550, Yucaipa, CA 92399.**

NOTICE TO THE ASSOCIATION: Release the above information ONLY to the members of the Association upon their request. You may also include the names, address *** and telephone number *** in a membership roster distributed ONLY to Association members. YES _____ NO _____

Date: _____ Signature: _____

*** If you checked YES, but do not wish your address or telephone number to appear in the roster, encircle the appropriate ***
If you do not wish the names to appear in the roster or for your address or telephone number to be released to another member upon request, check NO.