

## 7<sup>th</sup> WEATHER SQUADRON



### LINEAGE

Air Corps Detachment, Weather, Hawaii constituted, 15 Nov 1940  
Activated 1 Jan 1941  
Redesignated 7<sup>th</sup> Air Corps Squadron, Weather (Regional Control) 18 Nov 1941  
Redesignated 7<sup>th</sup> Weather Squadron, Jan 1943  
Disbanded, 10 Feb 1945  
Reconstituted 7<sup>th</sup> Weather Squadron, 1 Jun 1959  
Activated, 8 Jul 1959

### STATIONS

Hickam Field, Oahu, 1 Jan 1941-10 Feb 1945  
Heidelberg, Germany, 8 Jul 1959  
Wiesbaden, Germany, 2013

### ASSIGNMENTS

17<sup>th</sup> Air Base Command, 1 Jan 1941  
Hawaiian Department Air Force, 18 Nov 1941  
Hawaiian Air Force Base Command, 22 Jan 1942  
Headquarters, Hickam Field, Territory of Hawaii, 10 Feb 1942  
Seventh Air Force, 19 Apr 1943  
United States Army Forces, Central Pacific Area, 12 May 1944  
Army Air Forces, Pacific Ocean Area, 1 Aug 1944  
1<sup>st</sup> Provisional Weather Group, 4 Sep 1944  
Air Weather Service (attached to the 2<sup>nd</sup> Weather Wing), 8 Jul 1959

### COMMANDERS

Cpt Ernest Moore, 1 Jan 1941  
Cpt John K. Arnold, Jr., 21 Jul 1941  
Cpt Newton C. Chaney, 14 Nov 1941  
Maj John K. Arnold, Jr., 15 Dec 1941  
Cpt Albert G. Kehrig, 23 Mar 1943  
Cpt Kenneth C. Banzhof, 13 Jul 1944  
Maj Albert G. Kehrig, 5 Sep 1944

LTC Robert B. Sykes, 8 Jul 1959  
LTC Roy A. Weidmaa (temporary), 18 Jul 1961  
LTC Walton L, Hogan, Sr., 27 Aug 1961  
Col Lewis A. Pitt, 23 Aug 1965  
Col Leonard V. Gillespie, 26 Jun 1968  
Col James M, Priest, 12 Oct 1971  
Col Boyce M. Smith, 29 Jul 1972  
Col John H. Elliff, 2 Aug 1976  
Col John A. Lasley, Jr., Jul 1979  
Col John H. Taylor, Aug 1982  
Col James B. Sands, Jr., 3 Jul 1985

## **HONORS**

### **Service Streamers**

Central Pacific, World War II, 7 Dec 1941-6 Dec 1943

### **Campaign Streamers**

### **Armed Forces Expeditionary Streamers**

### **Decorations**

Air Force Outstanding Unit Award

1 Jan 1968-31 Dec 1969

1 Jul 1972-30 Jun 1974

1 Jul 1975-30 Jan 1977

1 Jul 1977-30 Jun 1979

1 Jul 1982-30 Jun 1984

1 Jul 1984-30 Jun 1986

### **EMBLEM**

Approved, 15 Mar 1961

### **EMBLEM SIGNIFICANCE**

Against a background of blue and green (blue representing the sky, green the land) to symbolize the Air Force and the Army, a rising cumulus cloud omitting lightning and rain indicates the mission of weather service. The crossed rifle and psychrometer indicates the cooperation of the Army and Air Force and the squadron mission of providing weather service to the United States Army, Europe.

The squadron symbol consists of a roundel, with a background of green and blue, divided from top to bottom. Over this background is a cumulonimbus cloud with lightning and rainfall falling from the cloud. Superimposed over the CB is an M-1 rifle, pointing from the lower left to the upper right. Over the rifle is a sling psychrometer, pointing from lower right to upper left. A ribbon at the base of the roundel states "E NUBIBUS INFORMATO", which freely translated means "information from the clouds". The blue background color is symbolic of Air Force heritage and the green background color is symbolic of the Army support that 7 WS provides.

## **MOTTO**

E NUBIBUS INFORMATO--Information from the clouds

## **NICKNAME**

## **OPERATIONS**

The 7<sup>th</sup> Weather Squadron mission is to enhance USEUCOM land component effectiveness by equipping aligned warfighters to fully exploit weather impacts in planning and decision-making processes; provide fully trained Battlefield Airmen to support command-directed taskings across the full spectrum of Expeditionary Squadron capabilities.

There are currently 70 members in the 7th Weather Squadron. They consist of AF meteorologists, airfield systems support staff, knowledge operations managers, and personnel specialists. The squadron is responsible for over \$4 million in resources and equipment, Kestrel 4000, Tactical Meteorologic Observation System, laser rangefinder, Iridium Phones, and Humvees.

The 7 WS headquarters is located in Heidelberg, Germany. It consists of the Commander and support staff as well as 5 sections. These sections include Director of Current Operations, Director of Operations Superintendent, Director of Operations Logistics, Director of Operations Contingency, and Director of Operations Training. These sections, along with the Commander and support staff work in tandem to maximize the warfighting capabilities of the detachments assigned to the 7 WS.

Detachment 1, 7th Weather Squadron is located at Wiesbaden Army Airfield, Germany. Their mission is to provide and/or arrange for decision-scale environmental intelligence for the 1st Armored Division, while optimizing flight safety and resource protection for all parent and host organizations. Detachment 1 prides themselves on being combat ready to fight for freedom anywhere the United States Army and Air Force's Europe deploy.

Detachment 2, 7th Weather Squadron, is located at Grafenwoehr Army Air Field, Germany. Their mission is to enhance warfighter capability by interpreting meteorological impact upon training and real-world operations with optimized staff weather liaison support to Joint Multinational Command Training Center, Joint Multinational Readiness Center, 2nd Stryker Cavalry Regiment, 172nd Infantry Brigade, 1/214th Aviation Regiment, G. Company 52nd Aviation Regiment MEDEVAC, and NATO allies. As a secondary mission support role, Detachment 2 also hosts exercise CADRE FOCUS. "Cadre Focus" is a weeklong course that prepares USAFE Battlefield Weather Forecasters for downrange deployments in support of United States Army, United States Air Force, and joint operations by enhancing tactical meteorological operational and warrior combat skills expertise with an end state of improved success in mission accomplishment, improved service camaraderie, and individual self-confidence.

Detachment 3 is located in Vicenza, Italy. Detachment 3's airmen operate in support of US Army Africa and the 173rd Airborne Brigade Combat Team. Foremost is the monitoring of Army operations across Africa for weather impacts and seasonal trends. In autumn 2009, the detachment

continued its history of innovative weather support by deployment in support of Operation NATURAL FIRE in Uganda, where cooperative weather sensing and forecasting efforts between Det 3, the Uganda National Weather Center, and CJTF-HOA METOC were successful and will help support future deployments to the continent. Tactical support to 173 ABCT is on hold for the length of the brigade's deployment, but quarterly jumps continue.

Detachment 4, 7th Weather Squadron, is located on Katterbach Kaserne (Ansbach Army Heliport), Germany. Based in Bavaria, their mission is to support MEDEVAC and cargo rotary assets of the 12th Combat Aviation Brigade with area and location specific forecasts, as well as climatology and long-range forecasts to key headquarters staff. Personnel work with Detachment 5 personnel from Illesheim to provide comprehensive support to all facets of 12 CAB operations.

Detachment 5, 7th Weather Squadron, is located at Illesheim Army Heliport, Germany. Their mission is to provide decision-grade weather intelligence to 12 CAB Attack Aviation units. This is done by producing timely and accurate forecasts to mitigate mission limiting weather impacts to supported weapons systems. The Airmen of Detachment 5 have and will continue to personify combat readiness by honorably serving on combat deployments with both United States Army and Air Force assets in the USEUCOM, USAFRICOM, and USCENTCOM theaters.

OL-A is located at Coleman Army Airfield, Mannheim, Germany. OL-A's primary function is to provide flight weather forecasting and resource protection for US Army, Europe's (USAREUR) Coleman Army Airfield and Heidelberg Army Airfield. The team supports rotary wing VIP airlift operations across Europe; including movement of the USAREUR Commanding General and senior staff. Additionally, the team provides weather support for test flights following major maintenance and repair activity.

Det 1, Nurnberg, Germany  
Det 2, Hanau, Germany  
Det 3, Heidelberg, Germany  
Det 4, Schwabisch, Germany  
Det 5, Ansbach, Germany  
Det 6, Fulda, Germany  
Det 7, Grafenwohr, Germany  
Det 8, Frankfurt, Germany  
Det 9, Mohringen, Germany  
Det 10, Geibalstadt, Germany  
Det 11, Sandhofen, Germany  
Det 12, Mainz, Germany  
Det 13, Illesheim, Germany  
Det 26, Wiesbaden, Germany

***On 1 Jul 1994, the 7th Weather Squadron was deactivated and redesignated the 617th Weather Squadron under the 617th Air Support Operations Group, 17th Air Force.***

***On 1 August 1996 the 617th Weather Squadron was deactivated and once again redesignated the 7th Weather Squadron under the 4th Air Support Operations Group, 3rd Air Force.***

***On 3 March 1998, 7th Weather Squadron was released from the 4th Air Support Operations Group and reassigned under United States Air Forces in Europe, Directorate of Operations (Weather Division). On 1 Oct 2005, 7th Weather Squadron was reassigned to the 4th Air Support Operations Group under 3d Air Force.***



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Air Force Order of Battle  
Created: 27 Sep 2010  
Updated: 30 May 2012

Sources

Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.  
U.S. Army Institute of Heraldry

7th Weather Squadron

DETACHMENTS

- Det 1, 7th WS (Feucht)
- Det 2, 7th WS (Hanau)
- Det 3, 7th WS (Heidelberg)
- Det 4, 7th WS (Schwäbisch Hall)
- Det 5, 7th WS (Katterbach)
- Det 6, 7th WS (Fulda)
- Det 7, 7th WS (Grafenwöhr)
- Det 8, 7th WS (Bonames)
- Det 9, 7th WS (Echterdingen)
- Det 10, 7th WS (Giebelstadt)
- Det 11, 7th WS (Sandhofen)
- Det 12, 7th WS (Mainz-Finthen)
- Det 13, 7th WS (Traben-Trarbach)
- Det 14, 7th WS (Heidelberg)

## Watchers of the Skies

### USAREUR's Weathermen . . . the Air Force's 7th Weather Squadron

Will the ground at Grafenwöhr be hard enough to take an M60 tank? How will the direction and speed of winds affect an airdrop in Bavaria tomorrow? Would radioactive fallout over Kaiserslautern affect troops at Baumholder?

The Army has to have the answers to questions like these, and responsibility for providing them rests with the Air Force's Air Weather Service. What a ground commander wants to know about the weather is different from what the Air Force commander wants to know, and two weather squadrons have been set up to service the Army; the 16th services the Continental Army Command, and USAREUR is serviced by the **7th Weather Squadron**.

Weather is just as critical to the Army as to the Air Force. Tank and personnel carrier operations are as dependent on it as jet aircraft flights.

There's also the fact that the Air Force usually operates from hardened bases, whereas the Army operates on all kinds of terrain. And whether infantry troops will begin operations slogging through ankle-deep mud or not often depends on the accuracy of Air Weather forecasting.

**Air Force Col Walton  
L. Hogan, Sr.  
(standing),  
Commander of 7th  
Weather Squadron,  
briefs Maj Gen Francis  
T. Pachler, USAREUR  
Chief of Staff, on the  
weather squadron's  
support role.**

How accurate is this forecasting? Air Weather Service personnel, like weathermen the world over, are the butt of a lot of jokes. But the record is much better than you might suppose. Though a few elements of weather simply can't be accurately predicted with present methods, most can. Forecasting accuracy today averages 80 per cent -- and sometimes Air Weather Service can be as much as 98 per cent sure that certain things will occur at certain times. As Air Force Col Walton L. Hogan, Commander of the 7th Weather Squadron, points out, if a stockbroker could predict the stock market with accuracy anything like this, he could retire in a very short time.

The 7th Weather Squadron works directly with the Army in Europe. Its personnel are assigned at units of USAREUR, mostly at Army airfields, and Air Force weather personnel go into the field with the Army for exercises and maneuvers. There are staff weather officers at Seventh Army Headquarters, at the two corps headquarters, and at 10th Special Forces (which obviously has special requirements for weather information). Colonel Hogan, besides commanding the 7th Squadron, is Staff Weather Officer at USAREUR Headquarters.

This integration of the Army and Air Force in the field of meteorology has saved millions of defense dollars.

The 7th Weather Squadron is by no means working alone in providing weather information to USAREUR. The big weather picture for the European area comes out of Air Weather Central in London. A Tactical Center near Ramstein, Germany, provides USAREUR (as well as the 17th Air Force) with more detailed information. And, finally, there are the 7th's own 27 subordinate units.

This entire network is in constant intercommunication. Air Weather units at lower levels continually get the bigger picture from higher levels and interpret it for their own purposes. They also gather local information at least hourly and feed it back up the line.

Some units observe local conditions; others also forecast for their areas. Weather information is transmitted largely in the form of facsimile maps and in a number-letter code that is international. U. S. Air Weather Service cooperates closely with European military and civilian weather agencies. It trades information with the Bundeswehr, for example, and thus saves money by avoiding duplication of weather coverage.

## Holes in the Weather

The biggest service rendered to USAREUR by the 7th Weather Squadron is to Army pilots. Some 20,000 weather briefings are given to USAREUR pilots every month. The weather forecaster can often help the pilot in his flight planning to avoid bad flying weather.

Some of the other weather services provided to the Army were noted earlier -- information on the condition of roads and terrain (six inches of frozen soil, for example, will take the biggest tank the Army has); and wind information for airdrops and radioactive fallout. The standard periodical forecasts (for example, those carried on AFN) are so commonplace that they hardly need be mentioned.

Air Weather Service personnel obviously play a big role in Army planning. "Should we can we -- can we -- conduct an exercise in such-and-such an area next month?" (Hard frozen soil makes for less maneuver damage.) Air Weather Service helps answer the question. And Air Weather goes into the field with Army troops to supply on-the-spot weather information to commanders. It has mobile weather vans, and even pack units that an airman can tote on his back.

The value of weather information for military operations can't be overestimated -- for airdrops, beach landings -- you name it. Much of the success of the D-Day Normandy landings in World War II was due to expert weather prediction. Here, German weathermen were not quite on their toes. They told the Wehrmacht there was little chance of an invasion 6 June; weather was too bad. But Allied weathermen found holes in the weather, and the invasion went ahead as planned.

Air Weather Service also helps out in other kinds of Army planning. It provides climatic studies to Army Engineers to assist in the design and building of construction projects. The studies cover expected snow depth, rainfall, average temperatures, and maximum expected winds for the area in question.

But doesn't the Army do any of its own meteorology? In one specialized area, yes. It sounds the atmosphere, by means of radios attached to balloons, for artillery firing. But Air Weather Service can and sometimes does provide this service as well.

What are the weather elements actually observed and measured? In

fact they're simple; weathermen have been observing them for many years. Only the means of measurement have improved.

Cloud height: by means of a light beam. Visibility: by checking to see whether objects at known distances can be seen. (Only when visibility is very poor is a more complex photoelectric cell method used.) Humidity, barometric pressure, wind velocity and direction-and, of course, temperature. An expert can put these together and derive an amazing amount of knowledge from the total picture.

Weather satellites are gradually making their presence felt too. They can photograph huge cloud areas and provide information that more traditional means cannot. Someday the weather satellite may be king of the field. But today the monarch is still the weather airman who takes his observations and the weather forecaster who interprets them and fits the pieces of the puzzle together.

Air Weather Service is pretty proud of its personnel. All the men of the 7th Weather Squadron have at least a high school education. Over half have some college. An Air Weather officer will have a B.S. degree and then will attend an Air Force School. After that he serves a year's "apprenticeship." And any Air Weather man will tell you that school training alone doesn't fill the bill. A man has got to work on the job, get the feel of it, over a period of years.

The Army is fortunate to have the services of men of this caliber. USAREUR is particularly fortunate to have the support of a top-notch outfit like the 7th Weather Squadron. Joke about his predictions if you want, but when the chips are down, the Air Force weatherman is a pretty good man to have on your side.

## **A look at the folks who bring us the weather.**

By Shaun Gearon

"You don't need a weatherman to tell which way the wind blows," Bob Dylan once sang. But the medevac pilot facing an emergency flight at night through fog and ice needs accurate weather information. So does the corps commander planning an exercise that will take his tanks over German fields.

Knowing exactly what the weather will do is important to a wide variety of people in the Army, from the general in his bunker to the soldier in his foxhole. The Air Force's **7th Weather Squadron** provides the U.S. Army, Europe with that knowledge.

"We provide the army with its meteorological reports and forecasts," says Air Force Col. James Sands, who recently assumed command of the squadron.

"We can give an accurate picture of the weather situation in the USAREUR area of interest and

almost anywhere in the northern hemisphere. This includes not only the information that will affect Army flyers, but also the information that ground commanders need. We don't give the commanders soil conditions, but the information we feed his engineers enables them to predict how it will affect the cross-country movement of his vehicles;' says Sands

**Air Force Col James Sands commands the 7th Weather Squadron at Campbell Barracks.**

The squadron which is headquartered on Campbell Barracks, is composed of 25 detachments in operating locations throughout Europe; all are linked into a tactical communications network.

Each detachment has observers who feed local weather reports into two main processing centers one at Traben-Trarbach, near the Mosel Valley, and the other at Croughton in the United Kingdom. Here the data are collated and the forecasts made. The flow of information back and forth between the detachments is continuous. These two centers are also linked to the Air Force global weather central at Offutt Air Force Base, Neb.

Additional information is fed into the network from civilian weather stations. Most countries, including Russia and other East Block nations, have signed international accords agreeing to share this information.

Meteorology consists of two distinct operations: observing and forecasting.

"Weather observation varies from the oldest method, simply looking at the sky, to taking measurements with weather balloons, barometers and wind gauges," says Sands. "We also have more sophisticated instruments that measure cloud cover, different types of clouds and their altitude. This information is important to Army aviators and it's a part of every pre-flight briefing.

"The job of a weather forecaster is one of the most skilled in the Air Force. It takes an enlisted airman, on average, at least four years working as a weather observer to qualify as a forecaster. Only entrants with high aptitude scores can enlist for these specialities."

As Sands talks you can hear the continuous click of teleprinters in the background spewing out reams of information from the central processing point in Traben-Trarbach. Television monitors display a constant stream of data beamed in directly from the European weather satellite METEOSAT.

The room is covered with charts and maps showing the development of fronts, low and high systems, from the Azores to the Urals. Sands points to a small cluster of bright white dots on the satellite picture, "Here you can see heavy thunderstorms in the Pyrenees."

Then moving his hand up to Germany he points to a cold front that is moving to the east, he explains: "the rain and humidity should clear up and we can expect sunshine in a couple of days."

One of the areas that the staff at the 7th Weather Squadron is trying to improve is tactical communications. "At present much of the data that come into the headquarters is turned into pictures and maps by hand. We're still using templates and overlays essentially techniques that date back to World War II. We are in the process of getting the computers that will enable us to collate and evaluate all this information more rapidly, giving us better forecasts," says Sands.

I was in Det 2, 7th WS (Hanau) from Oct. 1964 to Nov. 67. The picture that you show on this web site of Lt Jerel D. Cathey looks just like I remember a Lt. Cathey who was in our unit during that period. Could the picture be that old? Our commander was Capt. Quelch and the Duty Forecaster was Lt. Cathey who is pictured on your web page.

Just a few miles away at the Heidelberg Army Airfield, another part of the 7th Weather Squadron, **Detachment 3**, is at work providing flight operations information to the many pilots who use the field.

"The detachment is manned 24-hours a day," says Senior Airman Bill Trowman. "The peak traffic time is 5 a.m. to 2 p.m., when two forecasters and an observer are on duty. A lot of the work is with medevac flights that need flight operations information when other detachments are closed down. A medevac going, say, from Hanau to Landstuhl late at night would call into Heidelberg to get its weather information."

How accurate can you be when forecasting something as fickle as the weather? Col Sands smiles and says: "On the whole we're pretty accurate. Of course there are occasions when we make mistakes."

"Weather prediction will always contain a degree of uncertainty. Some old wives tales have been replaced by scientific myths. For example, 'What causes changes in the climate?'

"There is an established correlation between changes in the El Nino current in the Pacific and the weather. A combination of atmospheric condition and ocean currents causes a warm current, called El Nino, to dip down from the equator to the normally cold waters off the coast of Peru.

This produces changes in the climate. It has caused droughts in Australia and India, severe flooding in Peru and Ecuador, and storms on the Pacific coast, Louisiana and Florida. El Nino also killed off vast amounts of plankton and anchovies, which in turn attracted tuna and sharks. This much is fact. But I have heard one expert claim that the solution to meteorology in the Pacific area is to monitor the movement of tuna and hammerhead sharks." Sands' smile breaks into a broad grin.

The Headquarters 7th Weather Squadron is located in 4th Allied Tactical Air Force building on Campbell Barracks and is aligned under the Deputy Chief of Staff for Intelligence.

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## LIST OF DETACHMENTS

OL-B, Det 5, 7th WS - Bamberg AAF (1981)

Do you know of any web sites that might help me find other members of Det 2?

Det 2, 7th WS  
Fliegerhorst AAF, Hanau

1. Teletype Room (KB)
2. Det 2 Briefing Room (KB)
3. Army Sp4 air traffic controller (KB)
4. Airman Roy Ellerbrock (KB)

(Source: STARS & STRIPES, April 3, 1966)

Det 2, 7th Weather Sq, located at the Army airfield on Fliegerhorst Kaserne, Hanau, is commanded by Air Force Maj William H. Quelch, Jr. Maj Quelch also serves as the Staff Weather Officer for 3rd Armd Div. (The Squadron commander, Col Lewis A. Pitt, Heidelberg, serves as the Staff Weather Officer at HQ USAREUR.)

The detachment's mission is to provide weather forecasting and observation services to V Corps Hq, 3rd Armd Div, and other USAREUR units in the Hanau area and to support the Air Weather Service's world-wide mission.

The detachment's staff is comprised of: Maj Quelch with four forecasters (Capt Robert W. Gossett, Jr. - chief forecaster; 1st Lt Jerel D. Cathey; T/Sgt Walter A. Longstreth; S/Sgt George E. Rice); nine observers (M/Sgt. Joseph P. Wade, chief observer); and two weather equipment technicians (Airman 1.C. James K. O'Hare; Airman 2.C. William W. Best). The detachment also has observing sub-dets at Fulda AAF and at Bonames AAF in Frankfurt.

The major flying unit at Hanau is the 503rd Aviation Bn, commanded by Lt Col Leland F. Wilhelm, who also serves as the 3rd Armd Div's aviation officer.

The Air Force Weather Station at Fliegerhorst has received new meteorological equipment (valued at \$30,000) which was recently installed by a team from the 2874th Ground Electronics Engineering & Installation Agency (GEEIA) Sq at Ramstein. This makes Fliegerhorst only the second Army airfield in Europe to have received this equipment. (The first installation occurred at Heidelberg AAF.)

The three new pieces of equipment are located at the end of the runway and consist of a wind indicator, rotating beam ceilometer, and transmissiometer.

The ceilometer operates with a rotating beam that bounces off of cloud cover. A receiver determines the height (of the clouds) by reporting the beam angle. This method replaces the old balloon system.

The transmissiometer also functions with a beam and receiver to accurately measure visibility, complementing visual readings.

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#### Detachment 4, Schwäbisch Hall

(Source: Heilbronn Eagle, February 1983)

Weather predictors keep pilots aloft

By Mike Novogradac

The Air Weather Service was established in 1937 as part of the Army Air Corps. Previously, Army weather had been a Signal Corps function. After the Air Force was created in 1947, the service took over the responsibility of providing the Army's, as well as its own, weather information service. The Air Weather Service celebrated its 50th anniversary July 1.

SCHWAEBISCH HALL - Before aviators with the 11th Aviation Group climb into their helicopter cockpits and begin a flying mission, there's one very important preflight stop that must be made - a check with weather forecasters of the Air Force's Detachment 4, 7th Weather Squadron.

One of the detachment's main missions is to monitor weather and issue weather forecasts and advisories to 11th Aviation Group aviators.

Another mission, but certainly not a lesser one, is protecting the Group's resources - in other words, warning Dolan Barracks and its aviators of approaching severe weather conditions.

"Basically, pilots would be flying blind without us," said Tech. Sgt. Jerry L. Sanders, noncommissioned officer-in-charge of Detachment 4's weather team. "The topography in Germany makes it so that in one valley, weather can be great and in the next, there can be rain or fog, which can put a cramp in their flying activities."

Each section of Detachment 4 has a key responsibility in the weather forecasting process.

The observation section actually records the weather as it is happening. One observer actually sits in the top of Dolan Barracks' air traffic control tower and constantly watches the weather. Wind instruments, barometers and glancing out at the horizon to determine visibility are all simple aspects of the big weather picture.

A satellite dish which receives a picture from above the Earth, however, is one of the more complicated aspects of predicting tomorrow's weather.

"The observers record the type, number and height of clouds, visibility and any obstructions such as rain or fog, temperature, the amount of moisture in the air, wind speed and its direction and barometer pressure readings," Sanders explained.

"Then, all of this information is supplied to our forecasters who, in turn, supply their forecast to the airfield, plus transmit it over a teletype for anyone in the world to receive weather information about Dolan Barracks."

Once the detachment's forecasters have generated their local forecasts, Dolan Barracks' flying units, base operations and air traffic control tower can contact the detachment for an up-to-date forecast at any time. "Once every hour, we take a record observation and note any significant changes in the weather," Sanders said.

"If there has been a change in the weather, this is called a 'special observation' and it also is reported to the people who need to know.

"Then, it's up to the aviators to decide what they want to do. Our forecasts either keep them flying, or keep them on the ground."

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Detachment 5, Katterbach (Ansbach)

(Source: Ansbach Community Bridge, January 19, 1983)

Weather station busy preparing reports for all

by Charlane Busse

When the folks at the weather detachment at Katterbach aren't trying to decide whether to get out the umbrellas or the snow shoes, the staff is busy preparing daily weather forecasts.

Their main purpose for keeping tabs on local conditions is to provide up to the minute information for pilots. During wartime, their mission would be to provide weather data to the 1st Armored Division.

Katterbach is an extremely busy heliport, according to Tech. Sgt. Robert Thomas, the assistant station chief at Air Force Detachment 5, 7th Weather Squadron. And the weathermen provide between 400-500 individual weather briefings a month, that are "officially logged." However, pilots call in and ask for up-dates on the information and that adds up to another 1,000 "unlogged briefings a month," he said.

From information gathered by weather instruments positioned in the runway area, observers gather information to prepare two types of forecasts: a specific airdrome forecast for aviators and a general forecast for community needs.

Even though the weather instruments have remote controls enabling the staff to gather information from the office, no one gets to stay indoors when it gets rough out there. The observers must go outside and physically look at the cloud cover hourly.

This data is then given to a forecaster, to prepare the report.

The airdrome forecast is updated three times during the day from information gathered hourly and is so specific that it includes the time when a pilot can expect a certain type of weather change, according to Thomas. The report gives

information about the weather in Ansbach, the weather at the destination and the worst possible weather that the pilot can expect in between.

Information at the destination is retrieved from a computerized weather information network containing all of Europe's current weather conditions. First Lt. Thomas Cadenhead, assistant staff weather officer, stated that Ramstein Air Base has the best flying weather in Germany.

Now the general forecast, which is prepared for the community needs, is compiled once in the morning and passed to the Division's G-2 section, said Thomas. This gives the command the information needed for planning around severe weather, like types of road conditions to expect, and for scheduling school buses.

Of course, the detachment keeps the command notified if any severe weather moves in.

After the folks at Katterbach stop sky watching for the day, the centralized facility in Heidelberg takes over from 5 p.m. to 5 a.m.

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(Source: Ansbach Community Bridge, November 17, 1982)  
Repair team keeps weather equipment current

By Charlane Busse

"There's certainly a lot more to meteorological equipment repair than fixing thermometers," chuckled Air Force Staff Sgt. Nick Baranov, a team chief and repairman for the 1945 Communications Group stationed at Katterbach.

Baranov and his six Air Force traveling maintenance teammates run the largest meteorological equipment repair and maintenance operation in Germany. The unit is stationed at Katterbach because it has the only radar equipment in Bavaria and is considered the prime meteorological equipment in Bavaria.

Although the teams don't forecast the weather, there would be no scientific weather forecast without the met repair team. Forecasting is done by the Air Weather Service people who inhabit the office next to met repair.

"Weather data isn't just important, it's a necessity. It's vital for safety and so commanders can plan activities and operations. It's also nice to know whether you should plan a picnic or get out your skis," said Air Force Tech. Sgt. Mark Hamberger, chief, weather station operations at Katterbach.

"This is one of the busiest heliports in USAREUR and for us, weather data is mandatory for safety. We depend on our repair service and they haven't let us down;" said Hamberger.

In fact, during a recent Air Force inspection, the Katterbach operation was commended for being the best maintained in all of Europe; Hamberger added with satisfaction.

Met repair is a demanding job, servicing everything from radar equipment to the simplest portable gear like a thermometer.

Two member teams tend 14 sites repairing, and performing routine and preventive maintenance on a circuit that would tire any traveling salesman.

The route includes Grafenwoehr to the west, Wertheim to the east, Bamberg to the north and Nellingen in the south, totaling more than 5,000 miles traveled a month.

This sort of work isn't for everyone and takes an unusual mix of talents - not only brains but a high degree of manual dexterity.

It calls for a delicate touch, the patience of Job and the quirk of being a borderline perfectionist. There is no margin for error and no "tolerance factor." "Good enough for government work just won't get it in this repair shop," said Baranov.

These specialists have to be perfectionists not only in repairing the equipment but also in keeping track of where every piece of gear is and in what condition it's in, which can sometimes be tricky when units have to mix and match gear.

Sensitive equipment won't take a swift kicking and still keep on ticking, with apologies to John Cameron Swazey. But occasionally a strong back is nice, especially when the repairman has to say, "Can't fix that here. I'll have to take it to the shop." Of course they never leave a site lacking equipment and carry spares for many items on their rounds.

The job takes an inquiring mind because learning isn't over after these specialists complete their initial eight months training. "You have to stay on top of the changes. The field is getting more technical and sophisticated all the time. Then every once in a while, you get some gear that no one has seen before. That's the time you have to do some reading and research," said Baranov with a glance toward the ceiling-to-floor shelves holding reference material.

Although the met repairmen can't control the weather, the weather report won't keep them from making their rounds -- neither rain, nor snow, nor . . .

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#### Detachment 7, Grafenwöhr

(Source: TRAINING TIMES, February 1983)

Air Force provides weather info; aids GTA with daily predictions  
by Bob Shipp

Have you ever noticed Air Force personnel walking around post and wondered where they were from? Some of them are assigned to Detachment 7, 7th Weather Squadron right here in Graf.

The detachment's primary mission is to provide forecast and observation support to the Graf airfield. They also support Range Operations with temperature and wind data and provide TDY personnel to augment other 7th Weather Squadron units on field exercises.

"When training units bring their helicopters here, they don't bring any weather people with them about 90 percent of the time so we must support them also," says Detachment Chief Senior Master Sergeant Thomas L. Cantwell.

Forecasters normally work from 6 a.m. until 5 p.m., depending on airfield hours. But observers are on-site 24-hours-a-day, seven-days-a-week, mainly to support 15th Med in any Medevac missions.

"The workload for observers is fairly continuous except during bad weather," remarks Cantwell. "As the weather gets worse more observations are required because of changes in visibility, ceiling and such. They normally take observations every hour but bad weather conditions can mean as many as eight an hour.

"Observers like to see good weather," he says, laughing.

The detachment has some exotic sounding equipment as well as the same plain instruments we all have at home.

"We have a Rotating Beam Ceilometer which is a revolving projector that emits an infrared beam into the sky," explains Cantwell. "When this beam hits the clouds it bounces back down into a detector. We can then determine the cloud base height.

"We have a wind vane near the runway and a readout that gives us a continuous record of the wind as well as two meters that give instantaneous wind direction and speed.

"There is a light meter aligned with the runway which measures visibility; how far down the runway you can see. It isn't needed much for helicopters but is important for fixed wing aircraft."

The weather station has two barometers to measure air pressure, a mercurial barometer, which every weather station has and an aneroid barometer.

"A reading is taken every half hour from the aneroid barometer and aircraft set their altimeters by these readings," says Cantwell.

"Our rain gauge is a six-inch cylinder with a two inch tube inside and we have a wet bulb and dry bulb thermometer."

The detachment also puts out a 24 hour forecast three times a day. Anyone can get the day's forecast simply by dialing 6159.

"I've enjoyed my time here," states Cantwell. "It's definitely a different type of situation here than any of the other jobs I've had. I'm looking forward to the next 18 months."

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Detachment 11, Mannheim-Sandhofen

(Source: Messenger, July 26, 1985)  
Army pilots depend on AF at Coleman

By Marie Ernest

Within the midst of Army motorpools, an airfield, and a dining facility at Coleman Barracks, lies a rather small but efficiently operated weather station - the U.S. Air Force 7th Weather Squadron, Detachment 11.

Although it is not the first instance of integrating two branches of service, the 12 airmen assigned there are sometimes overlooked because of the small size of their detachment.

Nevertheless, they have secured an important role in the smooth operation of neighboring Army units. Pilots of the aviation units and air traffic controllers depend on them for the condition of the skies. Ignoring their minority status at Coleman, the Air Force servicemen are faithful to their designated duties.

More than 20 years ago, Detachment 11 was established at Coleman. Their basic purpose is the same as that of any weather service - to provide environmental and meteorological support to the Army, Air Force and all other agencies as directed by the Department of Defense.

The first weather service was established by Congress as part of the Army Signal Corps in 1870. When the Air Force became a separate service in 1947, Air Weather Service went along with it.

There are 15 weather detachments and 12 operating locations that provide a weather support to Army units in Germany. Heidelberg has 24-hour operationis thought to be the largest such detachment working alongside the Army. Other examples are in Illesheim and Fulda.

Partnership with Army

The airmen in Detachment 11 seem to enjoy their partnership with the Army. "Army assignments are a fact of life for the people in Air Weather Service," says Tech. Sgt. James Foster, station chief. "This is my second assignment with the Army. The experience has been different. Most of us have met lifetime friends among Army soldiers."

AF Staff Sgt Gregory Green, Det 11. As with any individual branch of service, regulations differ. However, this detachment doesn't feel hampered by the Army's way of doing things.

"Most detachments receive pretty good Army support," Foster says. "Here at Coleman, we receive excellent support."

Part of that support was evident when Lt. Col. Julian Sullivan, commander of 70th Transportation Battalion and Coleman's installation coordinator, provided the unit with a remodeled facility and supplied the necessary logistical support when needed.

## Pros and cons

Since most weather detachments are small, numbering anywhere between 11 and 20 people, there is a question of advantage or disadvantage while working with such large Army units.

Foster explains, "There are no more advantages as far as being stationed on an Army base, but there is an advantage as far as unit cohesiveness and getting to know your people better."

So, the integration of USAFE and USAREUR continues. There's a lot to be said in favor of it. It runs smoothly. It's commonplace. Whenever there is an Army airfield, you'll find Air Weather Service. The two interchangeably dependent on each other. And best of all, it works for them and the Army.

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### Detachment 12, Mainz-Finthen

See article on 8th Inf Div Page.

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### Detachment 14, Heidelberg

(Source: Heidelberg Herald-Post, July 20, 1984)

Tactical Forecast Unit deactivates

Detachment 14, 7th Weather Squadron, the US Army Europe Tactical Forecast Unit, deactivated on July 1 and Detachment 13, 7th Weather Squadron, the USAREUR Forecast Unit, assumed Detachment 14's mission. Detachment 13 is located at Traben-Trarbach, West Germany, about 12 miles from Hahn Air Base.

Weather support to Headquarters USAREUR is now being provided by 7th Weather Squadron Headquarters located at Campbell Barracks, HM 7134 or HM 8316.

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