

Mother Nature's fiercer side

By 1st Lt Gregory T. Marx
Det 4, HQ AWS

Each year, the beginning of May signals the start of another typhoon season, when Mother Nature turns her fiercer side toward the Western Pacific.

Last year's unusually early beginning was kicked off by Tropical Storm Mamie in mid-March. This instilled a high degree of anticipation toward 1983 for many of the Typhoon Chaser's "seasoned" veterans. However, it was not until June 24 that Tropical Storm Sarah officially ushered in the current storm season.

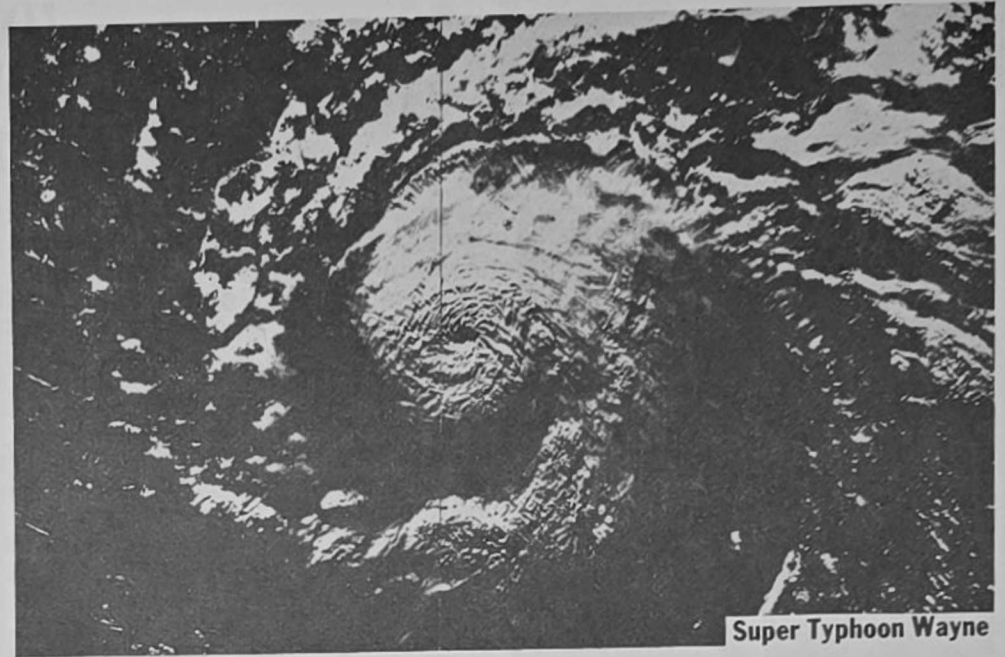
This season has already acquired several distinctions. The first is in regard to "late-starting." Not since 1973 has the year's first tropical cyclone formed as late as June. Also, super typhoons occur two or three times per year on an average; but rarely do these furious storms (characterized by 130-knot surface winds) form consecutively. Tip and Vera were the last back-to-back super typhoons during October-November 1979. This super typhoon event was replayed this year with Super Typhoons Wane and Abby.

Wayne originated as Tropical

Depression number four on July 22 in the Philippine Sea, midway between Guam and the Philippines. By the 24th, Wayne had intensified into the season's first super typhoon while 300 nautical miles northeast of Clark AB.

Only a brief 10-day interval separated the dissipation of Wayne and the birth of Abby. On August 5, Tropical Depression number five started as a 30-knot surface wind circulation. By the end of the following day, Abby had already attained typhoon force (surface winds of 64 knots or greater). It maintained this intensity until August 16, when it was formally classified as a tropical storm once again.

On August 8, the Joint Typhoon Warning Center declared Abby a Super Typhoon. It held this title for 42 hours. Captains Mike Middlebrooke and Linda Lolie, instructor Aerial Reconnaissance Weather Officers, and Sgt. Steve DeBree, Dropsonde System Operator, were the weather personnel aboard the WC-130 reconnaissance mission on the morning of August 8 when the central sea level pressure was recorded at 888.0 millibars (standard pressure is 1013.2 millibars). The potent typhoon eventually lashed the central and eastern portions of Honshu (the main



Super Typhoon Wayne

island of Japan) with 80 mph winds and torrential rains.

Forty-nine reconnaissance aircraft fixes on Abby's center amounted to nearly 300 flying hours. This was the greatest number of aircraft fixes on any given tropical cyclone since Super Typhoon Tip of 1979.

This storm season has already produced four tropical storms, two

typhoons and two super typhoons. The "Typhoon Chasers" of the 54th Weather Reconnaissance Squadron and Det 4, HQ AWS, Andersen AFB, Guam, as well as augmentees from the "Hurricane Hunters" of the 53rd Weather Reconnaissance Squadron and Det 5, HQ AWS, Keesler AFB, Miss., are waiting to see what the remainder of this season will bring.



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WEATHER AWARD — Capt. Jeppie R. L. Compton, staff meteorologist at Space Division's weather detachment, receives the Robert Long award from Col. Fred Fowler, commander, 2WS at Air Force Systems Command headquarters. The 2WS is the SD weather unit's parent organization and provides meteorology support for all of AFSC.

Compton receives award for Space Division support

Capt. Jeppie R. L. Compton, staff meteorologist of Space Division's weather detachment, has been named recipient of the Robert (Bud) Long Award.

The award recognizes support to the Space Division commander and staff. The award was named after Brig. Gen. Robert (Bud) Long, who established the concept of the staff meteorologist in research, development, test and evaluation.

The captain has been the single point of contact between the Air Weather Service and the Defense Department's Space Transportation System (STS) program office here. In that position, his focus in the last year has been on preparing for the launch of the shuttle from Vandenberg AFB, Calif.

As part of his efforts, he has assessed the potential effects of shuttle rocket exhaust clouds and sonic booms on shuttle operations, AWS officials said.

He led a joint NASA-Air Force effort to produce and test an exhaust cloud diffusion model. To gather his data, he was present at all shuttle launches to make visual observations and gather exhaust deposition

material that were later analyzed back at SD and other Air Force laboratories.

He also led an effort to define the focusing phenomena associated with sonic booms produced during a shuttle launch. To gather information for his effort, Captain Compton was selected as the lead meteorologist on a team station in the Atlantic under the STS-5 and STS-7 flight paths.

With this data in hand, Captain Compton will work with shuttle contractor teams to help refine and verify models which will help explain the effects of sonic booms that might occur at Vandenberg, officials said.

He is also the single point of contact between AWS and the Consolidated Space Operations Center program office. During the acquisition of DSOC, Captain Compton was the sole planner for all future weather support.

His efforts have insured that state-of-the-art environmental support will be available for satellite control and manned spacecraft operations, officials said.

Captain Compton has also been selected to the technical review team to monitor the CSOC contractor's efforts. (Reprinted from "Astro News.")

Command line

"Welcome Back, 4th Weather Wing"



Col. George E. Chapman
AWS Commander

On the 3rd of October, it was my pleasure and privilege to participate in the ceremonies reactivating the 4th Weather Wing at Colorado Springs, Colorado, home of the Air Force's new Space Command. In fact, it was our

recognition of the Air Force's expanding investment in the space program and the Space Command that prompted us to reexamine our own organizational structure. The result was the reactivation of the 4th Weather Wing, effective October 1983, under the command of Colonel Serhij (Sandy) Pilipowskyj.

The files of history show us that the 4th Weather Wing was originally activated on Aug. 8, 1959, to support the US Air Defense Command (ADC) and the North American Air Defense Command (NORAD). At one point in the life of the 4th Weather Wing it was one of our biggest wings, with eight subordinate squadrons aligned with the various ADC/NORAD regions. However, the mission of the wing was reduced during the late 60s and early 70s, and the wing was deactivated in 1972 and the mission was then turned over to the 12th Weather Squadron. The last

Commander of the 4th Weather Wing was Colonel Louis J. Neyland, whose son Mike is now an Air Weather Service officer currently attending Air Command and Staff College.

The Air Defense commitment remains strong, but now we have added to that the Air Force role in space. Air Force doctrine tells us that "the Air Force mission in space is to conduct three types of space operations: space support, force enhancement, and space defense." The Space Command, activated one year ago in September 1982, will give the Air Force an organization to fulfill this doctrine by addressing the challenges of space and the many opportunities it will offer.

And that's where the 4th Weather Wing comes in. Not only will the 4th Weather Wing retain the Air Defense support mission presently

vested in the 12th Weather Squadron, but it will assume responsibility for two additional missions. The 2nd Weather Squadron plays a big role in our support to the Air Force's mission in space through its staff meteorologist support to Air Force Systems Command's Space Technology Center, the Space Division, the Eastern and Western Test Ranges, and to all other Systems Command units. The 2nd Weather Squadron will now become a part of the 4th Weather Wing, as will all of our Space Environmental Support System (SESS) units currently scattered worldwide under three different wings. With this focal point of leadership to our space support mission centralized under one wing, we feel that this will benefit AWS as the Air Force's mission in space grows in the years ahead.

Again, to the 4th Weather Wing, welcome aboard.

Chief's comments: Are you competitive?

"Noncommissioned Officer Professional Military Education (PME) is a five-phase program that prepares Air Force NCO's for positions of responsibility by broadening their leadership and management skills and by expanding their perspective of the military profession."

This is the objective of the NCO PME program in the Air Force as stated in AFR 50-39. This regulation is for NCO PME, but the same objective generally applies equally to officers.

From reading this statement, you realize that the Air Force is aware that a program is needed to prepare future leaders. To provide anyone this type of training is a big challenge, but as the Air Force has discovered, it is necessary. The program is a professionally-staffed program that accomplishes what it is designed to do — groom our future leaders and managers. We, as members in the Air Force, also have a responsibility, and that is to accept the challenge of completing the different phases of PME.

The cost to an individual is the giving of some personal time and effort — about two hours a day with the ECI courses. When attending in-residence,

you can devote as much of your time as you want — you are free from your job and your normal daily routines — just study and learn.

All of the learning from the in-residence courses doesn't just come from the books. The association with others and the friendship developed while in attendance, provides us a broad perspective of management techniques and management problems within the different career fields. We are not limited to our own background and career field.

The cost (dollar wise) for a university to provide courses similar to any of our different phases would be extremely high. It would be very difficult for us to attend because of the cost. And that's why this type of training is not available in the civilian community. Some large companies provide this type of training, but to their employees only and not anywhere near the magnitude in time or study material as compared to the Air Force program.

What's the payback for you? Different jobs, more responsibility, better assignments for advancement, promotions, CCAF credit and many more intangible benefits. Because of

this exposure — jobs, training, friendship — you become a better person to the entire community.

As you have been reading this article, you've probably asked, "What's the point, Chief? We know about PME — we push for our folks to attend — we know the training will pay big dividends to the Air Force — we know about the college credit from CCAF — we know about APR indorsement. What's the point?"

The point being, we still have many officers and enlisted folks who have not completed their commensurate PME with their rank. Many are doing an outstanding job in their present position — all "9s" or "1s." They just haven't taken the initiative to complete their PME. The Air Force is looking at the initiative of people very hard. There has to be a dividing line of some sort when most APRs/OERs are to the "right." The person who completes his/her PME by correspondence versus waiting for a quota has the initiative I am talking about. He/she will probably get an in-residence quota before those that are "just waiting." These same persons will have a better chance at early promotion and those



CMSgt. Charles T. Melson
AWS Senior Enlisted Advisor

"just waiting" will soon be left behind, career-wise.

My basic point is that PME is very important — to the Air Force in getting the mission accomplished — to the individual in challenging and channeling his/her potential to a full satisfying career. You make the decision — complete and march forward, or ignore and join the "also ran" group.

Col. George E. Chapman
AWS Commander

SSgt. Michael T. Devine
Editor

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A lesson from history: Origins of the Hurricane Warning Service

by John Fuller
AWS Historian

Today's national hurricane warning service has its origins in the Spanish-American War.

Earlier accounts in this column mentioned how, in 1891, the responsibility for the nation's weather service was transferred from the Army Signal Corps to a newly established U.S. Weather Bureau in the Department of Agriculture.

The Signal Corps budget for meteorological purposes was chopped from \$753,000 in fiscal year 1890-91 to \$32,000 in fiscal 1891-92, and very little was accomplished within the Army in the field of meteorology afterward. In fact, during the late 1800s and early 1900s, the Weather Bureau totally dominated the field; so much so, that in the Navy's case, it was required by law to depend on the Weather Bureau for forecasts.

War with Spain

On Feb. 15, 1898, the Battleship Maine was blown up in Havana Harbor, and on April 25, the United States declared war on Spain. Four days later a Spanish fleet left the Cape Verde Islands for Cuba.

American warships departed for the West Indies, to prepare the way for the movement of troops for the upcoming campaign in Cuba. It was June 29, however, before the transports arrived at Santiago, carrying about 17,000 troops. By then, commanders on both sides began worrying about storms, for hurricanes had appeared as early as June in some years, bringing destructive winds and torrential rains to Cuba and the Caribbean.

Willis Luther Moore was chief of the Weather Bureau. He had been a sergeant in the Signal Corps, and transferred when the service was given to the Department of Agriculture. He knew very well the difficulties of tracking storms, especially in the West Indies where only scattered weather reports could be obtained by cable from some of the islands. A hurricane could easily sneak



EARLY WEATHER OBSERVER — a U.S. Army Signal Service soldier of the late 1880s transmits the latest weather data by heliograph. (US National Archives photo.)

up on the U.S. forces through the broad waters of the Caribbean, a predicament likely to arise if the Weather Bureau depended on cable messages from native observers.

Meeting the President

Moore surfaced his worries with James Wilson, Secretary of Agriculture, who decided that they should go to the president. At the White House they soon had an audience with William McKinley, and Wilson presented the case. Moore had maps and charts and data on hurricanes and the disasters they had caused in the West Indies. Also, he had sketched a plan for a cordon of storm hunters on islands around the Caribbean to protect the U.S. fleet. He reminded the

president that armadas had been defeated, not by the enemy, but by weather. He believed it probable that as many warships had been sent to the bottom by storms as by fire from the enemy.

McKinley listened respectfully at first, then with impatience at the lengthy discussion. The president had made up his mind. Interrupting Moore, he got up, sat on the corner of his desk and declared, "Wilson, I am more afraid of a West Indian hurricane than I am of the entire Spanish Navy. Get this service started at the earliest possible moment." "Yes, indeed, Mr. President, but the Weather Bureau will need the authority of Congress to organize a weather service on foreign soil," ventured Moore. "Report to Chairman Cannon of the Appropriations Committee at once," instructed the president, "they are preparing a bill to give me all necessary powers to conduct the war and this authority can be included."

Fast Action

It was soon done. As part of the plan, a fast cruiser was stationed at Key West, with steam up, ready to carry the news to the blockading U.S. fleet off Santiago in case the Weather Bureau predicted a hurricane. Although the need never arose, the fleet might have had to abandon the blockade to get sea room to avoid the storm's center.

With the proper authority, the

Weather Bureau moved swiftly to station men and equipment on the islands. Letters were written to European countries for permission to send observers into their possessions. And, although the bill containing the authority only passed Congress on July 7, by the end of August, the Bureau had observers at Kingston, Santiago, Trinidad, San Domingo, St. Thomas, Barranquilla, Barbados, St. Kitts and Panama.

Land fighting continued until Aug. 13, when a U.S. force put ashore in Puerto Rico eliminated the last of the Spanish forces in the West Indies. The Spanish fleet was destroyed on July 3 during a desperate effort to escape from the harbor at Santiago. Up to that time, there had been no tropical disturbances in the region. A small storm hit near Tampa on Aug. 3, and a small, but vicious hurricane swept the coast of Georgia on Aug. 31. The first big one of the season raked Barbados, St. Vincent and St. Lucia on Sept. 10 and 11.

By the time the Treaty of Paris was signed in December 1898 (Spain relinquished sovereignty over Cuba, ceded Puerto Rico and Guam to the U.S., and sold the Philippines to the U.S. for \$20 million), the hurricane warning service was well established. Thus, when a killer hurricane struck Galveston, Texas in September 1900, it had been well-tracked across Cuba into the Gulf of Mexico.

Looking back at AWS

25 Years Ago

Headquarters USAF approved an AWS request for special AFIT training in tropical meteorology to be offered at the University of

Hawaii with the first class tentatively scheduled to begin after Jan. 1, 1959.

20 Years Ago

Jet-age weather reconnaissance came to the North Atlantic when the first WB-47 was christened. The weather-modified Boeing Stratojet was assigned to the 53rd Weather Reconnaissance Squadron, Hunter AFB, Ga., and was named "City of

Savannah-Hurricane Hunter I."

Forty out of 109 AWS lieutenants selected for promotion to temporary captain donned their new bars Oct. 1. One of these new captains was S. J. Pilipowskyj, now 4WW commander.

15 Years Ago

The new look in weather radar made its initial appearance in Europe with the installation and

take over of AWS's AN/FPS-77 radar set at Det 19, 31WS, Aviano AB, Italy.

10 Years Ago

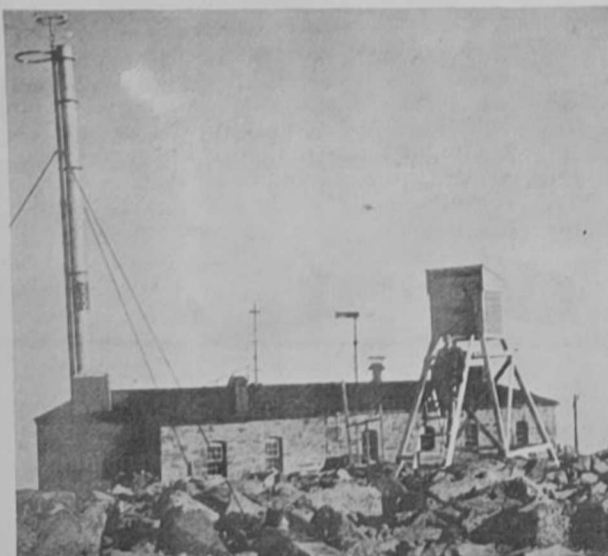
Col. Leonard E. Zapinski succeeded Col. Walter A. Keils as 5WW

commander.

5 Years Ago

As of Oct. 1, the 1505 uniform passed into history. The last day to officially wear the tan short-sleeve

uniform, also known as combination 4a, was Sept. 30.



ON PIKE'S PEAK — at an altitude of some 14,000 feet, military weathermen from 1885 to 1894 took meteorological observations at this signal and weather station on the summit. (US National Archives photo)

4WW-proud history, bright future

Originally activated as the 103rd Weather Group at Kelly AFB, Texas, the 4WW was moved to Peterson AFB, Colo., and activated on Aug. 8, 1959. It was the primary weather support organization for NORAD forces, including the U.S. Army Air Defense Command, Continental Air Defense Command, Air (later Aerospace) Defense Command, Alaskan Command, Alaskan Air Command and U.S. Army-Alaska.

In 1959, 4WW added meteorological support of the Air Force Academy and in 1968, the Defense Communications Agency-Western Hemisphere.

Wing field organization usually grew or declined in alignment with NORAD forces. At its largest, the 4WW had eight squadrons and 21 detachments. But by the end of 1969, had declined to a single squadron, plus detachments and operating locations.

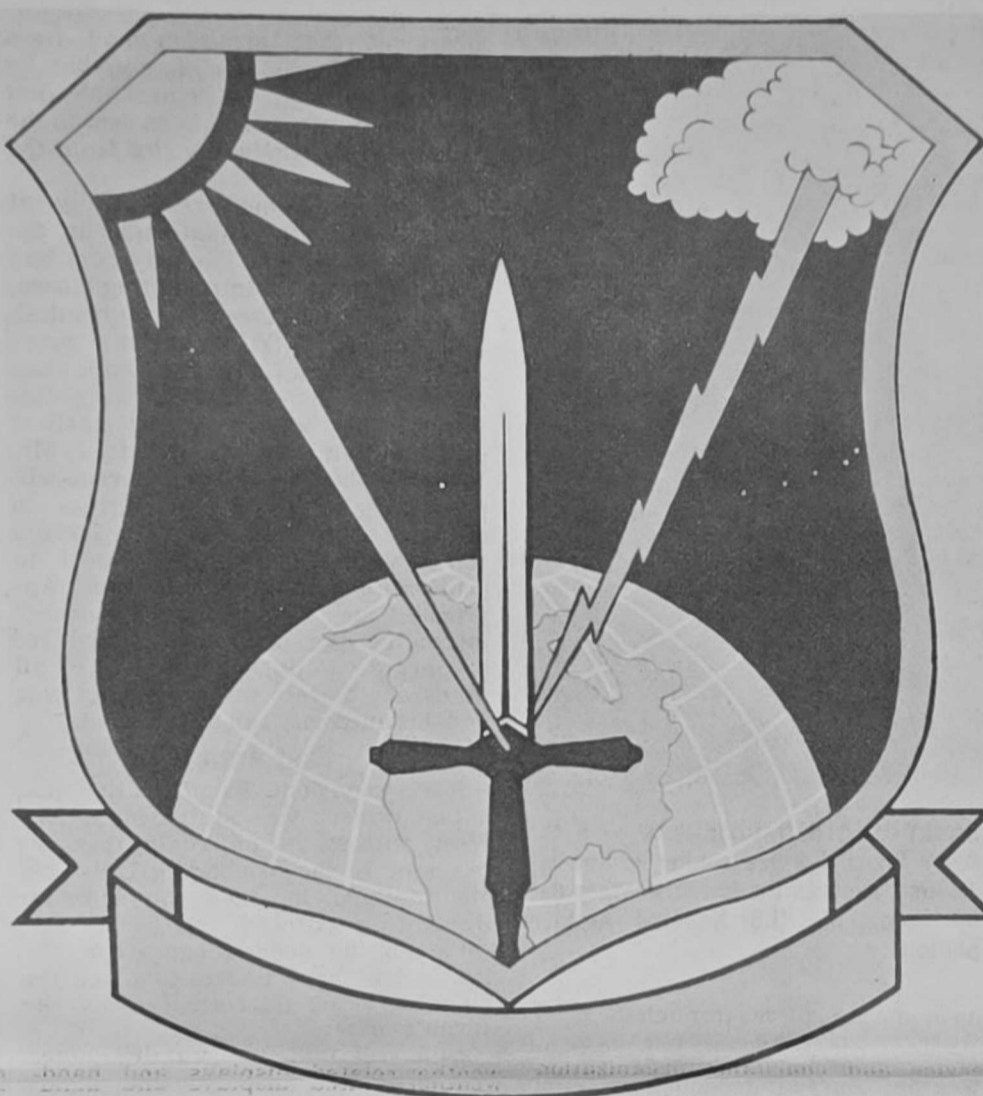
On June 30, 1972, the wing was deactivated and replaced by the 12th Weather Squadron, 5WW.

Fourth Weather Wing Commanders included Cols. Kenneth A. Linder, Robert L. Sorey, Robert R. Osborn, Richard M. Gill, Paul R. McAnally, and Lewis J. Neyland.

Reactivated

Reactivated to consolidate the management of AWS worldwide space environmental observing sites, 4WW will enhance the internal management of space-related resources and improve AWS support to the USAF Space Command.

Fourth Weather Wing will provide aerospace environmental services and technical advice on the effects of the



environment on military systems. Fourth Weather Wing will also provide staff and operational support to NORAD, SPACECOM, Air Force Systems Command and the Aerospace

Defense Center as well as manage the operation of worldwide solar observatories and insure that data are provided, as required, to supported agencies.

On Oct. 1, 4WW will have detachments at Peterson AFB, Colo. and Hancock Field, Syracuse, N.Y.; an operating location at the Air Force Academy, Colorado Springs, Colo.; and Space Environmental Support System (SESS) sites at Holloman AFB, N.M.; Sagamore Hill, Mass.; and Ramey AB, P.R.

During 1984, 2WS will move out from under HQ AWS joining SESS sites at Learmonth, Australia; Palehua, Hawaii; and Athens, Greece that will also move under 4WW.

When the realignments are completed, 4WW will have 306 people at 12 detachments and seven operating locations. Some functions of 4WW will be providing solar, geophysical, and atmospheric environmental support to the Cheyenne Mountain complex and to the NORAD Backup Facility, supplementing AFGWC forecasts. Fourth Weather Wing will also provide managerial and aerospace technical guidance to space sensor and missile warning systems, SPACECOM satellite systems, and DOD manned space programs.

Other new units

In addition to 4WW, two other AWS units activated Oct. 1. Operating location "I" of the 7WS, Tempelhof Central Airport, will provide staff weather support to the U.S. Command Berlin.

Det. 9, 31WS is now providing weather support to the U.S. Air Force's Europe newest base, Comiso AB, Italy (Sicily). Comiso is home of the 487th Tactical Missile Wing, which will be equipped with the ground-launched cruise missile.

Since 1941, MAC played large part in U.S. air power

When President Harry S. Truman signed the National Security Act on Sept. 18, 1947, establishing the United States Air Force as a separate and independent branch of the armed services, he recognized the vital role that air power had played and must play in the future to protect the nation's freedom.

The earliest forerunner of the Military Airlift Command, the Air Corps Ferrying Command, had been demonstrating the importance and potential of air transport during the most difficult wartime conditions. Activated on May 29, 1941, the purpose of the new command was to take over the ferrying of American-built British Lend Lease airplanes from factory to departure points in Canada and the United States, but that mission soon expanded to include a regular air transport service.

Beginning with the first flights from Bolling Field, Washington, D.C., to Scotland via Montreal and Newfoundland, the modified B-24 Liberator bombers that made up the "Arnold Line" (named after Gen. Hap Arnold, Chief of the Air Corps) made six round trips to Scotland monthly.

The pioneering exploits of the Air

Force's early airlifters in their C-47s and C-54s foreshadowed today's C-130, C-141 and C-5 transports. The C-5 Galaxy, the world's largest military transport aircraft, can carry more than 20 times as much cargo as the C-47 and transport that cargo twice as far. At the peak of the Berlin Airlift, it took 1,400 flights to deliver 13,000 tons of food and supplies; using C-5s the United States could have transported the same supplies in 117 flights. Seventeen of the Giant Galaxys could have done the same job it took 347 planes to do then.

The C-5 and C-141 give the Air Force an all-jet strategic airlift force. The air refueling capability of the aircraft give them virtually unlimited range.

"Honoring America's Reach for the Skies," the theme of this year's Bicentennial of Air and Space Flight, not only sums up the Air Force's past achievements, but is a reminder of the dramatic advances that are sure to mark its future.

For the near term, the purchase of 50 new C-5B aircraft and MAC-use of KC-10 tankers will enhance the command's airlift capabilities. Current plans call for the full-scale development of the McDonnell Douglas C-17 in Fiscal Year



C-17 — built by McDonnell Douglas is expected to be operational by fiscal 1992.

1985. Operational capability — delivery of the 12th airplane — is expected by fiscal 1992.

The C-17 will be a multi-engine turboprop, wide-body aircraft, capable of airlifting large outside payloads

over intercontinental ranges and delivering them into small, austere airfields close to the battle area. The airplane will be capable of performing both intertheater and intratheater airlift missions. (MNS)



Making history at EFU

Production teams of the European Forecast Unit (EFU), Det 21, 2WW, represent the backbone of theater weather center capability. EFU supports NATO, EUCOM and CENTCOM operational forces as well as command and control facilities — from transatlantic air drops and crisis action deployments to JCS directed exercises and unit mobility readiness.

Day-in and day-out, team chiefs and their teams provide customers the best possible service. Mission success is directly coupled to their leadership skills and production management.

Team Chiefs are "out front" where it counts, and for the first time, all EFU teams are headed up by female officers.

TEAM CHIEFS — at the European Forecast Unit, Kapaun AS, FRG, are (left to right) 1st Lt Pamela M. Hougland, Capt Eleanor L. Smith, 1st Lt Kathy M. Long and 1st Lt Karen L. McClimon.

Annual event draws thousands

Saturday in the park

By Lt. Col. Henry A. Adams
Det 4, 3WW, Holloman AFB, NM

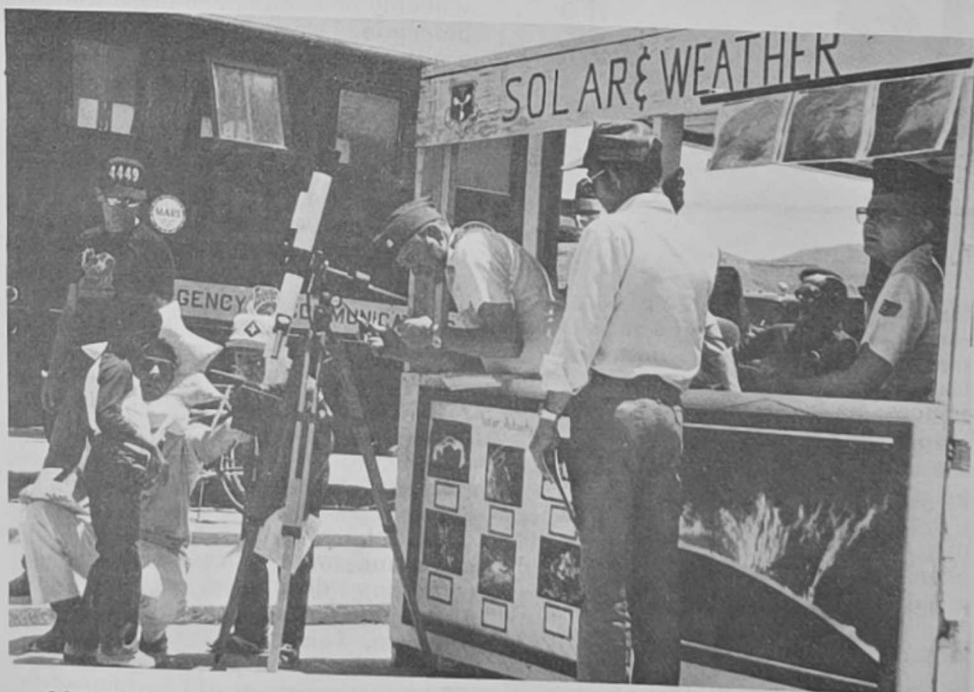
Saturday in the Park is an annual event where residents of Alamogordo, New Mexico and surrounding communities gather at Holloman AFB for a full day of activities, including a parade.

This year, the Holloman Solar Observatory, Det 4, 3WW, and the Holloman Base Weather Station, Det 14, 25WS, worked together producing a videotape of solar activity and other weather-related displays and handouts.

Sammy the Sun, alias MSgt Frank Blasi Jr., provided entertainment in his sun-face pillow and was responsible for much of the booth construction and painting.

The cloudless sky enhanced tracking of sunspot reflection with a telescope. Visitors included thousands of local residents and a dust devil who made its presence known in the late afternoon by lifting and scattering handouts.

Captain Robert Allen, Det 14/CC and members of both units enthusiastically supported the community affair.



SAMMY THE SUN — alias MSgt. Frank Blasi Jr., explains sunspot reflections to a young visitor while Lt Col Henry Adams III lends a helping hand.

Pidley Mountain rolls thunder for Red Cross Disaster Fund

By Capt David T. Guiney

RAF Alconbury's Det 36, 28WS rolled some thunder over the Pidley Mountain Rescue Team in a Red Cross Disaster Fund Bowling Tournament.

Twelve games were bowled and while the Rescue folks fought a good fight, a "560 series" from forecaster C. J. Johnson was their undoing.

Best shot of the day went to the Rescue team's Glenn Cavilla, who picked up a 4-6-10 split, TWICE! Most interesting bowl of the day went to Weather's Don Zafke, whose shot went three feet, directly backwards. He blamed a recently eaten batch of french fries.

Special thanks were given to the management and staff of Spartan Lanes and to SSgt. Jim DePecol and A1C Carol Larkins who collected \$90 and \$72 respectively for the Red Cross Disaster Fund. A total of \$225 was collected and given to the Red Cross by members of the Weather Detachment.

(Editor's Note: The Pidley Mountain Rescue Team is an Anglo-American service and charitable organization whose main purpose is to sponsor various fund-raising activities for local charities. They are so named because the nearby village of Pidley rests on the highest point of land around, 14 feet above sea level, in the otherwise flat lowlands of East Anglia.)

30WS's Korean coincidence

By Capt David L. Homan

(Editor's note: "Webster's Handy College Dictionary" defines coincidence as: 1. exact correspondence in space or time; 2. a notable occurrence of events apparently accidental.)

Headquarter's 30th WS, Yongsan Army Installation, Seoul, Korea, has only three lieutenants assigned. All are U.S. Air Force officers of the same rank, all are naturalized citizens of the United States and all have prior enlisted service.

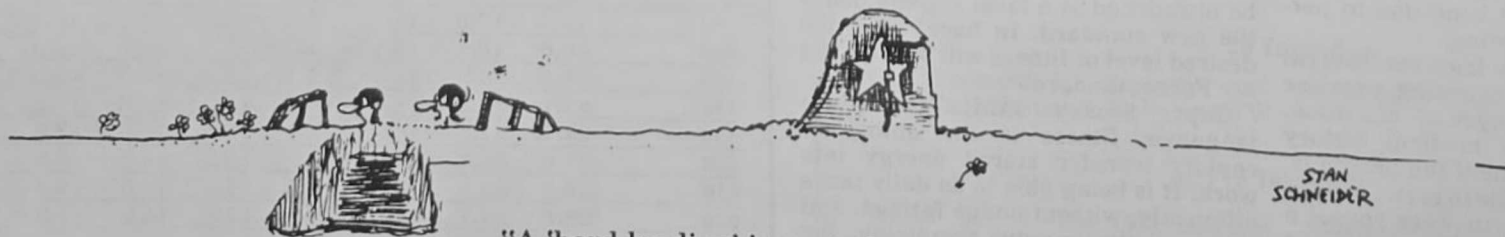
1st Lt John C. Holbrook was born in England, was enlisted in both the USAF and U.S. Marine Corps before

being commissioned through OTS.

1st Lt John H. Jacobson was born in West Germany as a Latvian citizen, enlisting in the U.S. Air Force before being commissioned through OTS.

1st Lt Won Y. Kim was born in Seoul, Korea, was enlisted in the Republic of Korea Air Force and U.S. Air Force before being commissioned through OTS.

All three lieutenants work in the same organization and their offices are within five steps of each other. They are all the same age (33) and Korea is their first overseas assignment as officers.



"A 'hard landing' is an understatement!"

Enhanced fitness program tested

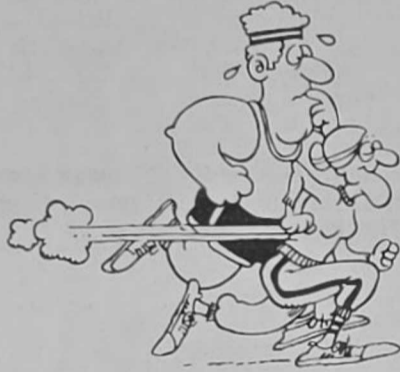
Two Military Airlift Command bases are among 23 bases around the Air Force testing the Enhanced Physical Fitness Program, which is scheduled for Air Force-wide implementation in fiscal year 1984.

McChord AFB, Wash., and Dover AFB, Del., are testing 200 to 400 people using the new program's standards, which entail reduced running times in the 1.5-mile run and a specified number of sit-ups in one minute.

Lt. Col. Ron Odum, chief of the Force Management Division, MAC Directorate of Personnel Programs, explained that because McChord and Dover are simply testing the new standards, members will receive credit for this year's aerobics testing if they meet or exceed the current standards for the 1.5 mile run.

"The three-mile walk and stationary run are being eliminated from aerobics

limitations, and the member fails the fitness test, he or she will be enrolled in the Fitness Improvement Training Program which will be overseen by Morale, Welfare and Recreation.



"Although walking is a good form of exercise, it's not a satisfactory test of fitness."

People who fail again will be continued in the FIT Program and receive administrative action that could, after a period of failures, result in separation," the captain said.

TSgt. Paul Mast, NCOIC of the MAC Physical Fitness and Weight Management program, pointed out that people with a genuine medical problem which prevents them from running — a knee problem, for example — will have the option of swimming or a stationary bicycle test.

"It should be noted that these tests are at least as rigorous as the run, and will only be available to those who are determined by medical personnel to be physically unable to test by running," he said.

Presidential direction

The impetus for the new fitness standards was provided by President Ronald Reagan, who asked about the physical condition of the armed forces in 1981. The Air Force conducted tests at Minot AFB, N.D., and Carswell AFB, Texas. The results revealed that while the test sample met current Air Force standards, the standards fell short of what should have been required.

In October 1982, a physical fitness workshop was held at the Air Force Manpower and Personnel Center, Randolph AFB, Texas. All major commands were represented, and the workshop developed a series of proposals for an enhanced fitness program. The new fitness standards resulted from these proposals.

The new program will be phased in over the next two fiscal years. In fiscal 1984, running times will be set halfway between current and new Air Force standards; also, sit-ups per minute will be introduced at a level slightly below the new standard. In fiscal 1985, the desired level of fitness will become the Air Force standard.

Capt. Stokes said, "In plain language, fitness is the ability to rapidly transfer stored energy into work. It is being able to do daily tasks efficiently, without undue fatigue, and have ample energy remaining for military contingencies, emergencies and leisure time pursuits." He went on

to explain a numerical measure of fitness called "maximum volume of oxygen" has been derived from extensive research of fitness data.

MVO is based on the amount of oxygen an individual requires to do a set amount of work. Current Air Force standards require an MVO of 37 for men and 33 for women. For example, the desired MVO level for people in the 29 and under age group has been determined to be 42 for men and 33 for women.

"Women will notice little change in their run times," he said, "because their standards are already in line with the desired level of fitness."

The overall responsibility for administering the program will remain with unit commanders who will be assisted by Personnel, MWR, and the Surgeon.

Colonel Odum stressed, "This will not be a duty hours program. Squadron commanders will have some latitude in allowing extended duty hours for conditioning, but each person's condition will continue to be his or her own responsibility."

"The MWR people will provide a program for out-of-condition people to get into shape, but it's up to each person to follow the program on their own." (MNS)



WALK
It's good for you.

testing. Although walking is a good form of exercise, it's not a satisfactory test of fitness," Colonel Odum said.

Capt. Clyde Stokes, also of the Force Management Division, said, "The new standards are tougher, but safer than the current system. Right now, many people go out once a year and 'gut out' their mile and a half. However, in order to meet the new standards most people will have to engage in some kind of ongoing exercise program."

A medical screen consisting of a statement of each member's ability to test, or get into proper condition to test, is an important safety feature of the new program, Captain Stokes said.

"Under the current system," he said, "only people 35 and older have been required to sign a statement saying they were in condition to perform their annual testing."

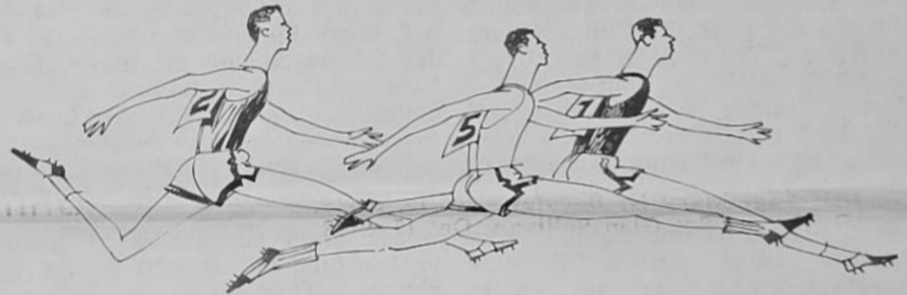
"The new system features several specific questions regarding exercise habits, smoking, physical condition, and a brief family medical history designed to determine if the person is, indeed, physically able to test."

"If the member's answers reveal a medical concern, the member is referred to the base medical personnel for evaluation. If there are no medical

How Many Calories Do You Burn Per Mile?

There are many reasons why people run—weight loss, fitness, getting away from it all and others.

If you run, or would like to, and one of your reasons is to control body weight, the following charts from "Medical Advice to Runners" by Dr. George Sheehan will give you an idea of approximately how many calories are being burned.



Calories Used Per Mile of Running

WEIGHT Pounds	PACE PER MILE (Minutes: Seconds)								
	5:20	6:00	6:40	7:20	8:00	8:40	9:20	10:00	10:40
120	83	83	81	80	79	78	77	76	75
130	90	89	88	87	85	84	83	82	81
140	97	95	94	93	92	91	89	88	87
150	103	102	101	99	98	97	95	94	93
160	110	109	107	106	104	103	101	100	99
170	117	115	113	112	111	109	107	106	105
180	123	121	120	119	117	115	114	112	111
190	130	128	127	125	123	121	120	118	117
200	137	135	133	131	129	128	126	124	123
210	143	141	139	137	136	134	132	130	129
220	150	148	146	144	142	140	138	136	135

Calories Used Per Minute of Running

WEIGHT Pounds	PACE PER MILE (Minutes: Seconds)								
	5:20	6:00	6:40	7:20	8:00	8:40	9:20	10:00	10:40
120	15.6	13.8	12.1	10.9	9.9	9.0	8.3	7.6	7.0
130	16.9	14.8	13.2	11.8	10.7	9.7	8.9	8.2	7.6
140	18.1	15.9	14.1	12.6	11.5	10.5	9.6	8.8	8.1
150	19.4	17.0	15.1	13.5	12.3	11.2	10.2	9.4	8.7
160	20.6	18.1	16.1	14.5	13.0	11.8	10.9	10.0	9.3
170	21.9	19.2	17.0	15.3	13.8	12.7	11.5	10.6	9.8
180	23.1	20.2	18.0	16.2	14.6	13.3	12.2	11.2	10.4
190	24.4	21.3	19.0	17.0	15.4	14.0	12.9	11.8	10.9
200	25.6	22.4	19.9	17.9	16.2	14.8	13.5	12.4	11.5
210	26.9	23.6	20.9	18.7	17.0	15.5	14.1	13.0	12.1
220	28.1	24.7	21.9	19.6	17.8	16.2	14.8	13.6	12.6

NOTE: Expenditure of 3,500 calories equals one-pound weight loss.

AWS salutes. . .

Medals

Legion of Merit: Col Donald E. Smith, 24WS, Randolph AFB, Texas.

Meritorious Service Medal: Lt Col William O. Kiser, Det 1, 15WS, Andrews AFB, DC (20LC); SMSgt Thomas D. Hornell, Det 1, 15WS, Andrews AFB, DC (20LC); TSgt Richard D. Zentz, Det 1, 15WS, Andrews AFB, DC; Lt Col Wallace H. Chaplin, HQ 2WS, Andrews AFB, DC; Lt Col Jack W. Brown, 24WS, Randolph AFB, Texas (10C); Capt. James E. Young, Det 22, 24WS, Randolph AFB, Texas; MSgt Denis J. Gartner, Det 14, 17WS, Norton AFB, Calif.

Air Force Commendation Medal: SSgt Michael L. Neumann, Det 19, 30WS, Camp Humphreys AIN, Korea; A1C Cynthia A. Huston, Det 20, 26WS, Barksdale AFB, La; MSgt Howard Haroldson, Det 7, 24WS, Mather AFB, Calif; TSgt Michael G. Josias, Det 2, 11WS, Eielson AFB, Alaska; SSgt Richard L. Foster Jr., Det 10, 2WS, Eglin AFB, Fla; 2nd Lt Frank Sornatale, Det 1, 15WS, Andrews AFB, DC; TSgt Gregory D. Keates, Det 21, 2WS, Edwards AFB, Calif; TSgt Michael E. Gravier, Det 15, 30WS, Osan AB, Korea; SSgt Elsie F. Skaggs, Det 15, 30WS, Osan AB, Korea; MSgt Lawrence E. Cain, Det 22, 24WS, Randolph AFB, Texas; SrA Don Cobb, Det 19, 31WS, Konye WRG, Turkey; 1st Lt Kevin Scasny, Det 2, 31WS, Ramstein AB, FRG; SSgt Steven Harris, Det 14, 31WS, Hahn AB, FRG; Sgt Edna D. Otten, Det 17, 28WS, RAF Upper Heyford, UK; SSgt Carmen Peters, Det 18, 28WS, RAF Fairford, UK (1 OLC); TSgt Leslie Taylor, Det 26, 28WS, RAF Greenham Common, UK (3 OLC).

Air Force Achievement Medal: MSgt James M. Davis, Det 21, 2WS, Edwards AFB, Calif; SSgt Michael A. Estes, Det 21, 2WS, Edwards AFB, Calif; SrA Ronald V. Smith Jr, Det 21, 2WS, Edwards AFB, Calif; SrA Craig E. Sowers, Det 1, 15WS, Andrews AFB, DC; TSgt Mary N. Buckley, Det 15, 30WS, Osan AB, Korea; Sgt Glen Sullivan, Det 17, 9WS, Ellsworth AFB, S.D.; A1C Killayne Rudy, Det 2, 31WS, Ramstein AB, FRG.

Air Force Good Conduct Medal: SrA Paul A. Lamon, Det 20, 26WS, Barksdale AFB, La; TSgt Tom Garrett, Det 31, 15WS, Dobbins AFB, Ga; TSgt Martin L. Torres, Det 16, 9WS, Dyess AFB, Texas; Sgt Glen Sullivan, Det 17, 9WS, Ellsworth AFB, SD; SrA Mike Bitter, Det 19, 31WS, Incirlik AB, Turkey; Sgt Dave Walton, Det 19, 31WS, Incirlik AB, Turkey.

Air Force Longevity Service Award: SSgt Cornelius Martin, Det 19, 31WS, Incirlik AB, Turkey; A1C Willie Mack, Det 19, 31WS, Incirlik AB, Turkey; TSgt Gerald Baur, Det 14, 31WS, Hahn AB, FRG (2 OLC); Capt William Munley, Det 14, 31WS, Hahn AB, FRG.

Promotions

To major: Billy Woolley, 28WS, RAF Mildenhall, UK.

To captain: Kenneth H. Wallingford, Det 1, 31WS, Bitburg AB, FRG; Mark J. Andrews, HQ 1WW, Hickam AFB, Hawaii; Kim Pantley, Det 20, 31WS, Sembach AB, FRG.

To 1st lieutenant: William C. Keller, Det 16, 25WS, Nellis AFB, Nev; John A. Coover, Det 10, 15WS, McGuire AFB, N.J.; Patricia Nicols, Det 3, 9WS, Fairchild AFB, Wash; Michael S. Fontaine, Det 6, 5WS, Ft. Lewis AIN, Wash.

To senior master sergeant: Franklin P. Hauck, Det 28, 26WS, Wurtsmith AFB, Mich.

To master sergeant: James E. Burlingham, Det 15, 30WS, Osan AB, Korea; Kenneth Van Alstyne Jr., Det 19, 26WS, Wurtsmith AFB, Mich; John M. Hahn, Det 1, 9WS, Offutt AFB, Neb.

To technical sergeant: Doyle E. Diener, Det 21, 2WW, Kapaun, FRG; Jeffrey A. Fries, Det 21, 2WW, Kapaun, FRG; Thomas G. Sleeker, Det 1, 31WS, Bitburg AB, FRG; Paul D. Church, Det 26, 26WS, Grissom AFB, Ind; Ron Muller, Det 11, 31WS, Spangdahlem AB, FRG; William Conner, Det 14, 31WS, Hahn AB, FRG; Dave Walton, Det 19, 31WS, Incirlik AB, Turkey.

To staff sergeant: Janice Miller, Det 1, 15WS, Andrews AFB, DC; Frank Chernowetz, Det 1, 15WS,

Andrews AFB, DC; Sharyl M. Shoemaker, Det 10, 2WS, Eglin AFB, Fla; Charles Duncan, Det 21, Minot AFB, ND; Sheri L. Ricketts, Det 22, 24WS Randolph AFB, Texas; Volel Emile, Det 16, 31WS, Zaragoza AB, Spain; Don Cobb, Det 19, 31WS, Incirlik AB, Turkey.

To sergeant: Todd L. Bills, Det 14, 7WS, AIN Heidelberg, FRG; Christopher L. Russell, Det 15, 30WS, Osan AB, Korea; Joel M. Rzepecki, Det 10, 2WS, Eglin AFB, Fla; Kathy L. Ray, Det 4, 11WS, Fort Richardson AIN, Alaska; George H. DaVall, Det 21, 2WS, Edwards AFB, Calif; Marion Stinnett, Det 15, 9WS, Grand Forks AFB, ND; Timothy Early, Det 11, 31WS, Spangdahlem AB, FRG; Rhonda Gratzl, Det 25, 31WS, Rhein-Main AB, FRG; Dwight A. Jacobs, 3WS, Shaw AFB, SC.

To senior airman: Angel L. Montalvo, Det 14, 7WS, AIN Heidelberg, FRG; Robert T. Warner, Det 14, 7WS, AIN Heidelberg, FRG; Brian F. Nesius, Det 20, 31WS, Sembach AB, FRG; Paul A. Lamon, Det 20, 26WS, Barksdale AFB, La; Teresa R. Fredrickson, Det 21, 2WS, Edwards AFB, Calif; Gordon S. W. Kim, HQ 1WW, Hickam AFB, Hawaii.

To airman first class: Mark Redford, Det 20, 24WS, Laughlin AFB, Texas; Rory Koch, Det 1, 9WS, Offutt AFB, Neb.; Michele A. Gatton, Det 16, 9WS, Dyess AFB, Texas; Thomas C. Stanley, Det 22, 24WS, Randolph AFB, Texas; John Masters, Det 4, 28WS, RAF Bentwaters, UK; Luke Purdy, Det 18, 28WS, RAF Fairford, UK; David W. Law, Det 6, 5WS, Ft. Lewis AIN, Wash; Michael T. Caldwell, Det 14, 26WS, Blytheville AFB, Ark.

To airman: Darren P. Mansfield, Det 22, 24WS, Randolph AFB Texas; Daniel S. Plumlee, Det 17, 1WW, Hickam AFB, Hawaii; Mark D. Quigley, Det 21, 2WW, Kindsbach, FRG.

Unit Honors

Senior NCO of the Quarter: MSgt Norbert Eakle Jr., Det 31, 15WS, Dobbins AFB, Ga; MSgt William Phillips, Det 5, 9WS, Malmstrom AFB, Mont.

NCO of the Quarter: SSgt Anthony R. Ramirez, Det 21, 2WS, Andrews AFB, MD; Sgt Gerry Claycomb, Det 3, 11WS, Shemya AFB, Alaska; SSgt Stanley Krenz, Det 5, 9WS, Malmstrom AFB, Mont; Sgt Alice Daudelin, Det 3, chosen 28WS and 2WW NCO of the Quarter; Sgt Edna D. Otten, Det 17, 28WS, RAF Upper Heyford, UK; SSgt Patrick J. Aldrich, Det 10, 7WS, Geibelstadt AAF, FRG.

Airman of the Quarter: A1C Tim Bank, Det 3, 11WS, Shemya AFB, Alaska; A1C Thomas J. McDaniels, Det 14, 7WS, AIN Heidelberg, FRG; A1C Matthew Lawson, Det 5, 9WS, Malmstrom AFB, Mont; A1C Luke Purdy, Det 18, 28WS, RAF Fairford, UK; A1C Anne Cipot, Det 1, 31WS, Bitburg AB, FRG.

Career NCO of the Quarter: SSgt Art Comeau, Det 31, 15WS, Dobbins AFB, Ga.

1st Term Airman of the Quarter: Sgt Scott E. Brotz, Det 11, 2WS, Patrick AFB, Fla.

Letters of Appreciation: SrA Tony Taylor and A1C Rachel Fobert, Det 1, 9WS, Offutt AFB, Neb., from 3902 ABW/OT for assistance as members of the 1983 Offutt Open House Committee.

2nd Lt Randy Skov, Det 1, 9WS, Offutt AFB, Neb., from 3WW/CC for support provided at the 3WW Change of Command Ceremony.

SSgt David McGee, Det 2, 9WS, Castle AFB, Calif, received three letters from the 93 CSG/CC.

TSgt Daniel Freeman and SSgt Lawrence Lehr, Det 17, 9WS, Ellsworth AFB, SD, for outstanding performance while deployed during Global Shield '83.

Outstanding Performer: A1C Kathy Richmond, Det 11, 9WS, Beale AFB, Calif.

Disaster Preparedness Unit of the Quarter: Det 21, 9WS, Minot AFB, ND. Presented by 91 SMW/CC.

Education

NCO Academy: TSgt Mary Hebert, Det 15, 28WS, RAF Mildenhall, UK (USAFE Academy)

NCO Leadership School: SSgt Venice J. Washington, Det 14, 7WS, AIN Heidelberg, FRG; SSgt Deborah Devine, Det 20, 17WS, Little Rock AFB, Ark, Distinguished Graduate-22nd AF NCOLS; Sgt Theodora L. Samuels, Det 16, 25WS, Nellis AFB, Nev; Sgt Gary D. Morris, Det 6, 5WS, Ft. Lewis AIN, Wash; SSgt Randy J. Brennan, Det 21, 2WW, Kindsbach, FRG; SSgt Dale Sturdevant, Det 8, 26WS, Griffiss AFB, NY.

PME Phase II: Sgt Patrick D. Hawkins, Det 14, 7WS, AIN Heidelberg, FRG; Sgt Edna S. Ramsay, Det 14, 7WS, AIN Heidelberg, FRG; Sgt Lester J. Reel Jr., Det 16, 25WS, Nellis AFB, Nev; SSgt Daniel J. Hoffman, Det 21, 2WS, Edwards AFB, Calif; Sgt Karen Merritt, Det 2, 9WS, Castle AFB, Calif; Sgt Ronald Sisson, Det 6, 5WS, Ft. Lewis AIN, Wash.

PME Phase I: SrA Florence Carmody, Det 16, 25WS, Nellis AFB, Nev.

Forecaster School Graduates: SSgt Gerd Pokorra, Det 17, 9 WS, Ellsworth AFB, SD (Honor Graduate).

OJT Manager's Course: SSgt Suzanne Wesselman, Det. 11, 9WS, Beale AFB, Calif.

Advanced Satellite Interpretation: SSgt Gregory Dillon, Det 8, 26WS, Griffiss AFB, NY.

Master of Arts: Capt Joseph C. Borja, HQ 1WW, Hickam AFB, Hawaii; Business Management from Central Michigan University.

Heir Force

Michael Charles to Capt Charles and Theresa Doolittle, Det. 8, 26WS, Griffiss AFB, N.Y.

Daniel Lee to TSgt Stephen and Pamela Rosemeier, Det. 8, 26 WS, Griffiss AFB, N.Y.

Candice Akany to SSgt Robert and Kathy Smith, Det. 6, 17WS, Hill AFB, Utah.

Christopher H. to Maj Gregory L. and Penny Logan, Det. 3, 15WS, Charleston AFB, S.C.

Suzanne Marie to SSgt Erv and Yough Hui McGinnes, Det. 18, 30WS, Yongsan, Korea.

Carina Ann to SSgt Charles D. and Ann Harris, 6WS, Tinker AFB, Okla.

Kyle Anthony to A1C Steven L. and Lori Flora, 6WS, Tinker AFB, Okla.

Gregory Lukas to SSgt Jeffrey A. and SSgt Laurie A. Fried, Det. 21, 2WW, Kapaun, Germany.

Michael J. to SSgt James and Peggy Surey, 3330th Tech Tng Wing, Chanute AFB, Ill.

Michael J. to SSgt William and Vickie Woodford, 3330th Tech Tng Wing, Chanute AFB, Ill.

Allyson Marie to SSgt Steven L. and Nancy E. Garrett, Det. 2, 3WW, Sagamore Hill Solar Radio Observatory, Mass.

Chelsea Ann to SSgt Gary L. and Cynthia J. Gumm, Det. 7, 1WW, Wheeler AFB, Hawaii.

Kristopher James to SSgt James E. and Rene Foster, Det. 2, 24WS, Columbus AFB, Miss.

Tara Nicole to AMN David W. and Ann Law, Det. 6, 5WS, Ft. Lewis AIN, Wash.

Christopher to TSgt and Mrs. Ronald L. Williams, Det. 9, 5WS, Ft. Rucker, Ala.

Robert to SrA and Mrs. Alan B. Bryant, Det. 9, 5WS, Ft. Rucker, Ala.

Neil Anthony to SSgt Carl O. and Sjon, Sharp, Det. 17, 24WS, Williams AFB, Ariz.

Sarah Kate to Sgt Virgil W. and Laura Israel, Det. 4, 11WS, Ft. Richardson AIN, Alaska.

Daughter to A1Cs David and Mary Weinman, Det. 19, 26 WS, Whiteman AFB, Mo.

Daughter to SSgt Brian and Pam Kenny, Det. 19, OL-A, Richards-Gebaur AFB, Mo.

James Steven to Sgt Mark H. and Amy Lynn Hafner, Det. 6, 5WS, Ft. Lewis AIN, Wash.

Ian Jon to SrA Gary W. and Helly M. Altman, Det. 4, HQ AWS, Andersen AFB, Guam.

Kimberley Joan to 1st Lt Robert and Martha Thorp, Det. 15, 28WS, RAF Mildenhall, UK.

Trina Lee to A1C Lee and Bethany May Nations, HQ 31WS, Sembach AB, Germany.

Laura Ann to SSgt James E. and Stefanie Callen, Det 6, 5WS, Ft. Lewis AIN, Wash.

Sarah Elizabeth to SSgt Terry L. and Sgt Lee A. Thrasher, Det 21, 2WW, Kindsbach FRG.

News Briefs

CHAMPUS claims update

A new CHAMPUS health benefit handbook is now available for military families and medical professionals. The handbook gives tips for getting faster payment of claims and a list of Health Benefits Advisor (HBA) phone numbers in the U.S. and overseas.

People living near military hospitals or clinics can get a copy of the CHAMPUS handbook from the HBA, Personal Affairs Office or Family Service Center. Handbooks

can also be requested by writing: CHAMPUS Handbook, Aurora, Colo. 80045.

CHAMPUS has also updated its list of claims processors for all regions of the U.S. and overseas. The update includes mailing addresses and toll-free as well as commercial telephone numbers. Check with the nearest military hospital or clinic for a complete list of CHAMPUS claims processors.

Suggestion nets NCO \$3,382

The largest suggestion award ever made at Dyess AFB, Texas was recently presented to SMSgt. Kenneth A. Brown.

Brown, who retired August 4, was chief of weather station operations when he challenged the price of an order of paper. Air Force Logistics

Command officials investigated and found that the stock list price was wrong.

As a result, the Air Force has saved over \$89,400 and Brown received a check for \$3,382. (Reprinted from the "Peacemaker.")

Organizational patches sought

The Weather Training Branch at Chanute AFB, Ill., is building a display depicting the many and various units that AWS supports. Included will be patches from active duty units (all services), Guard,

Reserve and other nations.

Anyone wishing to donate a unit's distinctive patch should contact CMSgt. Benjamin L. Coughran, OLC HQ AWS (MAC), Chanute AFB, Ill. 61868.

DMSP van visits SAC

By CMSgt. Thomas E. White
3WW, Offutt AFB, Neb.

A MARK IV Meteorological satellite receiving van was recently demonstrated for the staff of the Strategic Air Command Headquarters at Offutt AFB, Neb.

The van was deployed from McDill AFB, Fla., with a highly qualified weather satellite interpreter and four maintenance specialists in conjunction

with SAC's command-wide exercise, Global Shield '83.

The van was operated from a flatbed truck as a demonstration of its mobility. Weather satellite imagery it received from polar orbiting and geostationary satellites were used to provide detailed weather information during Global Shield '83. The system proved to be highly reliable and the data very useful during its deployment.



MARK IV DMSP VAN — operations are explained to Brig. Gen. Wayne O. Jefferson, SAC/DOO, by Capt. John D. Weisser, 1WS, McDill AFB, Fla.

Origin of Military Ranks

(This is part of a series on the origins and histories of military ranks. It is condensed from the booklet "Why Is The Colonel Called 'Kernal'?" by Air Force historian Ray Oliver.)

Admiral. Admiral comes from the Arabic Term amir-al-bahr meaning commander of the seas. Crusaders learned the term during their encounters with the Arabs, perhaps as early as the 11th century. The Sicilians and Genoese took the first two parts of the term and used them as one word, amiral. The French and Spanish gave their sea commander similar titles.

As the word was used by people speaking Latin or Latin-based languages it gained the 'd' and endured a series of different endings and spellings leading to the English spelling "admyrall" in the 14th century and to "admiral" by the 16th century.

The British began using admirals for fleet commanders by the 16th century. When commanding a fleet, an admiral would either be in the lead or the middle portion of the fleet. When an admiral commanded from the middle portion of the fleet his deputy, the vice admiral, would be in the leading portion or van.

The British vice admiral also had a deputy. His post was at the rear of the fleet, and his title became rear admiral.

Our Navy did not have any admirals until 1862, because many people felt the title too reminiscent of royalty to be

used in the republic's navy. Others saw the need for ranks above captain. Among them was John Paul Jones, who pointed out that the Navy had to have officers who ranked with Army generals.

General. The title of general comes from the Latin word generalis, meaning something pertaining to a whole unit of anything rather than just to a part. The military term general started as an adjective, as in captain general, indicating a captain who had overall or "general" command of the army.

The British army stopped using the captain part of the title by the 18th century, leaving just "general" as the top commander. When the captain general was away, the job of running the army fell to his lieutenant — the lieutenant general.

The Army's chief administrative officer was the sergeant major general. As the general ranks became fixed, the sergeant portion fell away leaving the title as major general.

When there got to be too many regiments for the lieutenant general and the sergeant major general to handle effectively, they organized battle groups or brigades, usually composed of three or more regiments. Brigade comes from the Florentine word brigate that, in turn, came from the Latin briga, both of which referred to fighting or strife. The brigade's commander was the brigadier, who in some armies later became brigadier general. (AFPS)



INCENTIVE FLIGHT — 1st Lt Ann Ulpus, Wing Weather Officer, Det 1, 3WS, Shaw AFB, S.C., recently took a ride in an F-16B with Col. Richard Carr, 363 TFW Commander. Shaw received the flight after being selected the Shaw AFB Junior Officer of the Quarter, Federal Woman Employee of the year for 1982 and for excellent weather support to the 363TFW.