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Weather picks best; one takes MAC honors

Air Weather Service has chosen its top three airmen for 1980, and one will represent the Military Airlift Command as one of the five outstanding airmen of the year.

MSgt. John J. Hewitt, TSgt. James A. Hoy, and SrA. Starr A. Olson took top honors in AWS.

Sergeant Hoy will represent MAC in the Air Force Outstanding Airmen of the Year competition. This is the second year in a row that an AWS member has won command recognition.

Top senior NCO

Sergeant Hewitt is detachment chief for Det. 2, 7th Weather Squadron at Hanau AAF, Germany.

The Hillsboro, Ill., native entered the Air Force in July 1959. After weather observer training at Chanute AFB, Ill., he went to McChord AFB, Wash.

He served at DaNang AB, Vietnam, where he earned the Air Force Commendation Medal for working with the Vietnamization Program. He also received the Vietnamese Technical Services Second Class Award for support to the South Vietnamese Air Force.

Next on his career list was working the Special Projects at Air Force Global Weather Central, Offutt AFB, Neb. Developing new computer flight planning techniques highlighted his work there.

(Continued on Page 8)

AWS Observer

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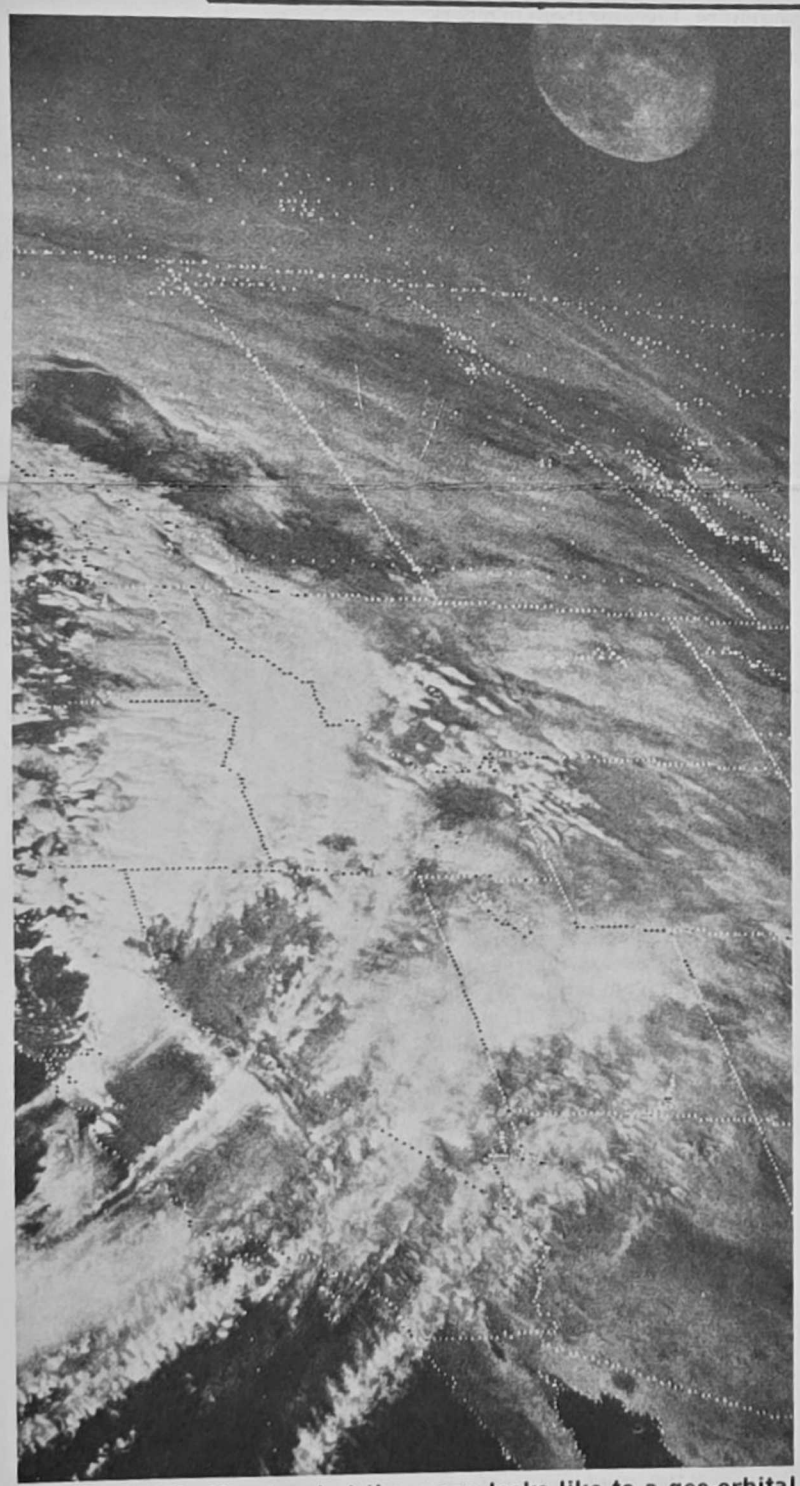

GOES WEST—Here's what the moon looks like to a geo-orbital earth satellite west, which was taken when the moon was full Feb. 19. Det. 14, 17th Weather Squadron, Norton AFB, Calif., received the photo from United Press International. The photo was reproduced by the Defense Audio Visual Agency. It is the first photo the detachment received that shows the moon and the United States. (DAVA Imagery)

Works for the Army now

NCO goes from desk to desert; gets STEP promotion as well

By Sgt. Matt Scherer
Bergstrom AFB, Texas

For most of his career, TSgt. Donny Weaver did his work mostly indoors, either at a weather observing console or behind a briefing counter.

As a weather observer and forecaster, he usually had the help of electronic sensors and sophisticated weather communications gear.

Now, however, MSgt. Donny Weaver works in forests, deserts—outdoors—as a parachute-qualified weatherman forecaster supporting the 7th Special Forces Group at Fort Bragg, N.C.

Sergeant Weaver, assigned to Det. 3, 5th Weather Squadron, was selected for an Air Weather Service's STEP (Stripes for Exceptional Performers) promotion earlier this year.

The STEP Program began on a trial basis earlier this year and allows commanders at major command levels to select and promote a limited number of airmen with exceptional potential to grades E-4 through E-7.

The program will be evaluated for a year before Air Force officials will decide if it should be adopted permanently.

Sergeant Weaver is finding that working for the Army is different than normal Air Force weather operations.

"The Air Force is more concerned with weather in the sky for flying, while for the Army, you forecast for different areas," he said.

He now supports mainly ground forces instead of flying units, which means he spends a lot of time in the field. He recently participated in Border Star '81, a U.S. Readiness Command exercise which involved all four military branches in maneuvers in southwestern Texas and eastern New Mexico.

"For Army airborne and special forces, you tell them what type of winds to expect and what type of cloud cover they'll have on their drops," he said, noting that he, too, must be jump qualified.

"What I forecast has an effect on the mission—when or if the operation gets pulled off depends on what the weather does.

"Sometimes when our communications foul up, we have to use a helium balloon and the visual help of your weather observations to give the weather to the Army customers. Our missions are very weather critical," he said.

A very different part of his job is the combat jump.

"When I jump, it's a feeling of floating," he said. "Things get different-looking from a parachute."

Once in the field, "it's not like camping out," he said. "The Army has very strict rules when you're in the field. You have to work on your camouflage, dig a foxhole and have your face painted up. At first it's a real culture shock.

"Plus the guys in the Army aren't used to having an Air Force guy working with them," he said. "But once they know what you're doing for them, they appreciate it."

Sergeant Weaver is one of two Air Force people to receive their Distinguished Trooper Award.

"Although working with the Army is different, I like being a weatherman," he said. "I enjoy the scientific aspect of it.

"And working with the Air Force and Army, I get the best of both worlds. I like that."

Space Shuttle

Air Weather Service units worldwide team up for support

When Columbia lifted to life, Air Weather Service people around the world were ready. They had been giving continuous observations and forecasts, so there would be no atmospheric surprises that would affect the shuttle and the ability of launch preparation crews to safely do their jobs.

Months before launch, AWS and other meteorological experts had studied the cape's weather in fine detail and provided critical, up-to-the-minute forecasts for prelaunch.

After launch, an AWS global network of optical and audio telescopes watched and listened to the sun, gathering evidence of possible increases in solar activity.

Their vigilance persisted, even to landing, for an adverse weather forecast for the Edwards AFB, Calif., landing site could have altered history.

Weather affected every phase of the shuttle mission—from lift off to recovery, each operation depended upon accurate and timely weather information.

Air Weather Service people provided it.

This issue of the AWS OBSERVER takes a look at weather support for the shuttle. While it is impossible to list every unit directly involved in the historic mission, all AWS members can know they took part in the history-making event.

See Pages 4 and 5 for details.

Command line . . .

Coming summer months bring increasing need for leadership

I came across an interesting quote recently, one that I find particularly appropriate to our Air Force way of life. It goes like this: "The leaders and the men who follow them represent one of the oldest, most natural, and most effective of all human relationships. The manager, and those he manages, are a later product, with neither so romantic nor so inspiring a history. Leadership is of the spirit, compounded of personality and vision—its practice is an art. Management is of the mind, more a matter of accurate calculations, statistics, methods, time tables, and routine—its practice is a science. Managers are necessary—leaders are essential."

That quote comes from an Australian Army Journal.

It is also appropriate to focus on this subject during May (although leadership is an ever-present need) as we begin a round of reassignments usually associated with summer months.

Many of our people will be moving to new jobs involving command and supervisory responsibilities; others will be moving up within their units to jobs with greater responsibilities; and still others who are leaving command jobs will be reflecting, and assessing how well things went. And so, I want to share some thoughts with you on the subject of leadership.

All too often we are inclined to think that leadership, like integrity, is to be found or observed only in senior people—senior NCOs and senior officers. Not so. Leadership opportunities occur for each of us, almost every day.

I recognize that some of us will have more opportunities to demonstrate leadership because of our jobs or where we fit in the organizational setup; however, many other opportunities occur, both at work and off duty, in civic affairs, base councils, athletics, and church activities, where each of us can rise to the occasion.

Focus on the following characteristics of a successful leader—and set about applying these to your daily lives, both on and off the job.

SELF DISCIPLINE. The successful leader clearly demonstrates this quality. No doubt, it may be stronger in some areas than others—but where you observe strong leadership ability, self discipline will surely be there.

AWARENESS OF OPPORTUNITY. Always be on the lookout for ways to do the job better. Continually assess how the operation is going—and have the courage of your convictions to recommend well-thought-through changes, implementing them to increase the productivity of all involved.

SENSITIVITY TO DETAIL. Visit your people regularly in their work areas. Observe their work conditions, listen to all their comments, and read thoroughly the papers they've prepared. Remember, "People will support those things they help create."

APPRECIATION FOR HUMAN VALUES. You can't treat everyone the same way. People are all different, and you have to capitalize on those differences. "One job in life is not to work with perfect people—but to work with imperfect people." Never miss a chance to give an "atta boy!"

ECONOMIC ACUITY. Know the value of the resources made available to you, and devote all your energy to getting the most out of those resources. Motivate your people toward greater productivity, and thus greater job satisfaction (with measurable) economics, where possible).

SPIRITUAL DEPTH. The successful leader is one whom people admire a great deal. That recognition comes from a set of characteristics, ideals, and principles which people can relate to, admire, and attempt to emulate.

Think about these six characteristics as you go about your daily activities. Look for them in others, and try them on for size whenever you get the chance.

Remember, leadership knows no rank, age, nor gender. The five-phase Professional Military Education program for our enlisted people provides an excellent vehicle for leadership development; our officers have many opportunities in the leadership arena very early-on in their careers.

The opportunities are there: don't miss them—go get them!

Finally, never forget recognition

Brig. Gen. Albert J. Kaehn Jr.
AWS Commander

of those who do the job every hour of every day—true, some better than others, but all make a contribution in a team effort. Recall, "no man is an island unto himself."

Another quote is right on the mark: "No person can be a great leader unless he takes genuine joy in the success of those under him."

You are doing a great job. Your work does not go unnoticed.

Keep pitchin'!

Enlisted line . . .

Top chief talks promotion statistics, school, money news

Hearty congratulations to all those selected for promotion to senior master sergeant. Selection rates were 25 percent for weather E-8s. Names are on Page 3.

The comparative promotion statistics for the fiscal year 82 E-8 cycle are in. Note that all the weather NCOs had their Senior Noncommissioned Officers Academy tickets punched.

Air Force wide, there were 13,248 eligible for promotion to E-8; 3,211 were selected, for a 24 percent selection rate. For weather folks, there were 122 eligibles, 30 selected, for a 25 percent rate.

Time-in-grade average was 3.99 years for AF; 3.57 for weather.

Time-in-service was 19.32 years as opposed to 19.58. Professional military education was 32.2 for AF, 35 for weather.

Exam scores Air Force wide averaged 61.92, and 65.14 for weather.

The average APR scores were 134.93, and 134.82. Air Force wide decorations averaged 10 points, while weather averaged eight.

Retention improving

As in all the services, Air Force and Air Weather Service retention is up, probably because of an increased perception that the country and the Congress care.

From October 1980 through March 1981, AWS retention looks like this—first-term, about 43 percent; second-term, 72 percent; and career, 91 percent.

If this keeps up, our enlisted forecaster manning problem should be solved sooner than expected.

Let us not forget, however, that one of the biggest factors in keeping good people among us is still an inside job. It's still up to us to treat people in a way that will make them want to stay with us.

Please don't ease off on that.

Overseas PME

It's a fact that the opportunity for NCO Academy attendance overseas is less than in the continental United States.

The overall Military Airlift Command opportunity rate for example, is about 30 percent, compared to 9 percent in United States Air Forces Europe and 8 percent in Pacific Air Forces.

The reason? Fewer and smaller NCO Academies in USAFE and PACAF. That, plus a recent order to stop spending travel money for overseas-to-CONUS PME travel.

As a result, most CONUS quotas for our people stationed overseas have been chopped.

Since AWS and MAC people in Europe and the Pacific have the same opportunity as their overseas counterparts, there is very little we can do about this except take and use every available quota.

We're told that more and bigger schools are planned for Europe and the Pacific—if they work out, the opportunity in both theaters will, of course, improve.

Scores change

You must have noticed that some recent graduates of the Weather Observer Course have general scores of 65 rather than the previously required 80.

Air Force Manpower and Personnel Center says it is OK, that it is a different number, different test, but same aptitude.

An October 1980 revision of the Armed Services Vocational Aptitude Battery tests triggered 'renorming' of the scores. The result is that minimum scores could be lowered 15 points with no effect on quality or aptitude.

The new ASVAB 65 is assumed to be the same as the old Airman Qualifying Exam score of 80. AFMPC and the Air Force Human Resources Laboratory are studying the effects of the change and probably will not change the requirements in the regulation until everyone is sure the new numbers really equate to the old.

Forecaster school changes

The forecaster course will definitely go from temporary duty to permanent change of station status beginning with the Jan. 6, 1982 class. Exact course length is still not known.

Representatives of Palace Weather, Operating Location C, AWS Headquarters and AWS Training met recently with MAC officials to iron out the details involved in switching from TDY to PCS. A message went to the field soon after.

If you have any specific problems or questions on the new policy, don't hesitate to ask your wing senior enlisted adviser, or myself (Av 638-4002), Palace Weather (AV 487-4769), or CMSgt. Jim Denton, AWS Training (AV 638-5651).

CMSgt. George M. Horn
AWS Senior Enlisted Adviser

The Chanute staff can use four more staff or technical sergeants to help with the increased instructor load. Palace Weather has more information.

Course expensive

According to the Chanute Technical Training Center, the Navy and U.S. Air Force forecaster courses top the list of Chanute's 10 most expensive schools.

The Navy course costs $11,363 for each graduate, while the Air Force is only a little cheaper at $10,916.

Brig. Gen. A. J. Kaehn Jr.
AWS Commander

SSgt. Michele Crenshaw
Editor

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Dream assignment? Palace Weather helps

Every wonder why some people always seem to get the assignment of their dreams—or "Dream Sheet?"

"Pearls from the Palace," or the following assignment tips might tell Air Weather Service members why, as well as increase their chances for matching what's on their dream sheet to what's on their orders.

Palace Weather assignment makers at Air Force Manpower and Personnel Center at Randolph AFB, Texas, try very hard to match weather service requirements to individual wants. But it doesn't always work.

It's important to understand that a vacancy in the continental United States is not necessarily a requirement, say Palace Weather officials.

If Charleston AFB, S.C., is short one person and McChord AFB, Wash., is short three people, then McChord has a requirement for people. More than 200 enlisted forecaster vacancies are in the CONUS—they are continually reviewed and put in priority order to identify requirements.

People returning from overseas are assigned to the requirements highest on the priority list.

So even though there may be a vacancy at Charleston, it will necessarily be unfilled for the moment, and McChord or another base on the priority requirements list will get the people.

But Palace Weather people say they go through Air Force Forms 392 or "Dream Sheets" very carefully to try to match as many people as possible to their preferences.

Overseas volunteers

Palace Weather would like to fill all overseas requirements with volunteers, picking the most eligible and qualified people first. They determine eligibility this way: volunteers for consecutive tours, then extended tours and then normal tours.

Extended-tour and normal-tour volunteers are selected by the date they arrived on station.

First-term airmen volunteers are considered differently.

The most eligible first-termers are the ones whose date of separation month will coincide with the date they will return from overseas. Others must have at least six months retainability upon tour completion.

Nonvolunteers are next, if no volunteers are available. First ones to go are those who have never been overseas, taken by their total active federal military service date. Next are those with the oldest oversea duty selection date.

Dream Sheet

Crucial to overseas assignment selection is the AF Form 392, better known as the "Dream Sheet," says Palace Weather. It must be filled out correctly and kept up to date in order to maximize the chance for assignments.

One popular misconception, according to Palace Weather, is that volunteers for a specific country can be picked as a volunteer for another. That is not true.

People can be picked as nonvolunteers for other countries if the requirement is there, and they are the most eligible.

Three short tours

There are only three countries with short tour assignments for weather people—Korea, Alaska and Turkey. Palace Weather folks say volunteering for a short tour in any other country wastes a choice.

Tour lengths for most European countries are 36 months accompanied and 24 months unaccompanied. First-termers with less than four years or career airman over four years with families may select a tour option after they've been picked for an assignment.

Single airmen with more than four years must serve a 36-month tour in England, Germany, Spain, Italy, Hawaii or Japan.

Air Force Regulation 36-20, Table 4-1, gives all overseas tour lengths, and AFR 39-11, Table 4-4, gives information on all overseas tour types.

Overseas assignments are made about 10 months in advance, which means slots available in the spring of 1983 will be filled by November 1982.

Palace Weather can give callers a fair idea of their assignment chances if they call about 30 days before the selection months, which are located in Table 2.

Overseas returnees

People returning from overseas are put in this priority—first, short-tour returnees, then long-tour returnees by greatest number of previous short tours.

Short-tour returnees have an excellent chance of receiving what they want, and long-tour returnees have about a 50 percent chance, says Palace Weather.

Palace Weather needs some flexibility to match preferences.

Expanding choices, by listing three or four bases, then two or three states, and finally a CONUS locale, such as Southeast, will increase the chances for a match better than if eight bases were listed.

"We try very hard to match preferences to requirements," said one Palace Weather official. "But let's face it—we can't send everybody to Florida, California and Texas."

Palace Weather does try to avoid consecutive Army-support assignments, unless they are requested.

Also, if a weather person wants to go to Offutt AFB, Neb., they say it should be listed as the first and only choice. Chances of getting it are very good.

Moving in the states

Generally, three years at the present base is required before moving anywhere else in the states without a waiver. Balancing the enlisted forecaster shortage is the biggest reason for CONUS moves.

If forecaster manning at one unit is now or projected to be 100 percent or better, someone will probably move to a unit that is less well-manned.

Usually the forecaster with the most time on station is selected, but grade, experience and units' needs are also considered. A four- to six-month notice is usually provided.

Palace Weather officials say there is no way to discuss all the rules in an article. They encourage weather people to call or drop them a line if they have specific questions.

Their number is Autovon 487-4768 and address is AFMPC/MACPRS5E, Randolph AFB, Texas 78148.

As one Palace Weather assigner put it, "We can't always tell you what you want to hear, but we'll always give you an honest answer."

Where most jobs are, best time to try for them

Where are the overseas authorizations for officers and enlisted weather people? According to the information provided by Palace Weather, they are:

Alaska—Officer, enlisted forecaster and observer, long and short tour lengths.

Australia and Azores—Officer, enlisted forecaster, long tour, with a short tour option (15 months or less) after selection for long tour.

England and Germany—Officer, enlisted forecaster and observer, long tour.

Greece—Officer and enlisted forecaster, long tour.

Guam—Officer, enlisted forecaster and observer, long tour, with a short tour option after selection for long tour.

Hawaii—Officer, enlisted forecaster and observer, long tour.

Italy—Officer and enlisted forecaster and observer, long tour.

Japan—Officer, enlisted forecaster and observer, long tour.

Korea—Officer, enlisted forecaster and observer, short tour.

Netherlands—Officer only, long tour.

Panama, Philippines and Puerto Rico and Spain—Officer, enlisted forecaster and observer, long tour.

Turkey—Officer, enlisted forecaster and observer, short tour.

Palace Weather has set up an overseas selection schedule based on the month a person is required to report. Normally, a person is selected for an assignment eight to nine months before the reporting date.

Requirements for December and January are selected in April; February-March in June; April-May in August; June-July in October; August-September in December; and October-November in February.

Thirty will sew on senior

Thirty Air Weather Service master sergeants were selected for promotion to senior master sergeant, personnel officials announced recently.

The soon-to-be senior master sergeants from Headquarters AWS are Thomas D. Hornell, Terry M. Howard, Alan T. Jensen, Patrick G. Lee, Joseph H. Runyon, and Dennis L. Yuhas; 1st WW, James P. Radtke.

Second WW, Jerry D. Bates, Robert W. Curran, Rodney W. Gaudreau, John J. Hewitt, Gary D. Johnson, John L. McCoy, James W. Nasman, George M. Slater and Charles A. Spicer.

Third WW, Bruce W. Fegley, Horace R. Rowe, and Dennis A. Willman, 5th WW, Richard L. Curry, Danny W. Milner, Jimmy D. Munday and David T. Mursch.

From 7th WW, Robert L. Hagan, Donald B. Hines and Vito J. Monteleon.

Finally, Air Force Global Weather Central selectees are Larry W. Cox, Thomas M. Craig, Dan W. Hipes and Stephen T. Parker.

Personnel shorts . . .

Did you know that:

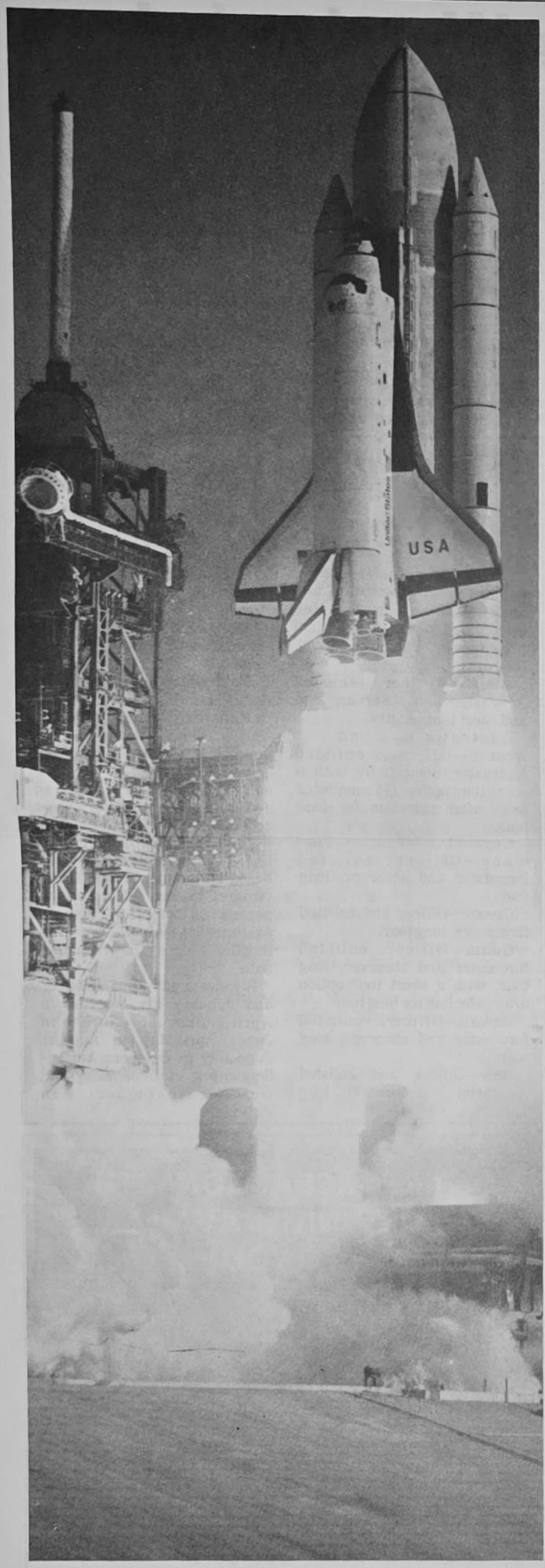
• Four family support centers at Kadena AB, Japan, Bitburg AB, Germany; Travis AFB, Calif., and Moody AFB, Ga., will open in September? Each will be staffed by three or four civilian professionals, one master or senior master sergeant, and two to three civilian administrators.

• The revised Air Force Regulation 50-39 allows airmen basic through airmen first class to attend Phase I of Professional Military Education, the 21.5-hour basic NCO military orientation course, if they are in supervisory jobs and have their commanders' OK? Minimum grade used to be E-4. Senior airmen who completed Phase I may now also attend Phase II, the U.S. Air Force Supervisors' Course.

• The latest Gallop poll on the subject found that 51 percent of the people felt the amount budgeted for national defense and the military was "too little," while 22 percent said "about right," and 15 percent thought it was "too much."

• The nonrated officer aircrew badge has been manufactured and distributed to most base exchange clothing sales stores? Prices range from $3 to $7, depending on the size and type of badge desired. The badge can be special ordered through the clothing sales store.

Columbia takes giant step



LIFTOFF—Space Shuttle Columbia lifts off from Complex 39A at Cape Canaveral, Fla. Weather people around the globe worked with the program from the beginning, as part of a behind-the-scenes team that made the shuttle a reality. (Photo courtesy of NASA)

By Capt. N.R. Carron
Air Weather Service

On April 12-14, a very large step in the United States ongoing space program was taken. The Space Shuttle, Columbia, launched from Kennedy Space Center, Fla. and some 54 hours later landed on the dry lake bed at Edwards AFB, Calif.

The smoothness with which the entire mission was accomplished is a tribute to the thousands of technicians and workers who helped make the space shuttle a reality.

Prominent among those who played a key role, were the many Air Weather Service members who planned for and provided operational support for that memorable first orbital flight test.

Operational weather support

Operational weather support began five days prior to the launch, when Air Force Global Weather Control began issuing surface and upper air planning forecasts for the launch site at the Kennedy Space Center.

Staff meteorologists from Det. 11, 2nd Weather Squadron, Patrick AFB, Fla. and OLA Det. 50, 2WS, Johnson Space Center, Texas, began monitoring weather conditions around-the-clock for launch, landing, and emergency landing sites. Launch and mission directors received briefings twice daily and the frequency increased as the launch date approached.

The five-day outlook from AFGWC called for scattered skies, light winds, with patchy fog for the launch. There was some concern that if the launch was delayed for any reason, thunderstorms would move into the area later in the day.

Good weather forecast

Weather criteria for this first launch were critical. Directors essentially wanted cloud-free conditions and no precipitation.

At launch minus 48 hours, AFGWC began a worldwide metwatch, and initiated planning forecasts (24-48 hours) for Edwards AFB, Northrup Strip, N.M., and the Kennedy Space Center. Forecasts remained essentially the same for launch, and the outlook for Edwards called for good weather as well.

AFGWC and staff meteorologists were but a part of the pre-launch weather support machine. At Boulder, Colo., the Joint Space Environmental Services Center, which is comprised of National Oceanic and Atmospheric Administration and AWS personnel, received and processed data from AWS solar and geophysical observatories around the world. Tailored data and forecasts were relayed from the Space Environmental Services Center to the mission director at Johnson Space Center.

Launch minus 24

Environmental support activity peaked at launch minus 24 hours AFGWC continued its planning forecasts for the landing and contingency landing sites; NOAA and AFGWC continued their surveillance of the space environment; the terminal forecasts for launch, landing, and contingency landing sites were briefed by staff meteorologists at the Kennedy and Johnson Space Centers; Patrick, Edwards and Northrup Strip began issuing plain language bulletins forecasting weather conditions for critical time frames during the mission.

Det. 21, 2nd WS, Edwards AFB, normally a limited duty station, increased its operation to 24 hours, set up observations from the lakebed, and upper-air observations increased threefold.

The 24-hour forecast for Kennedy still called for good weather, and the further outlook for Edwards also called for good weather. However, not all weather was forecast to be favorable. Outlooks for Northrup Strip, the primary alternate to Edwards, was forecast to be poor and not suitable for a shuttle landing; Kadena's outlook called for marginal conditions, thus eliminating Kadena as one of the contingency landing sites in the event of an early deorbit.

On the original launch day, the shuttle experienced computer problems and launch was delayed until April 12. Weather support, however, did not slow down; all support activities remained in high gear.

Significant event

From an environmental point of view a most significant event occurred April 10. At 4:34, Greenwich Mean Time, an exceptionally large solar flare began. The flare produced strong x-ray flux increases. The solar magnetic field near the site of the flare accelerated charged particles (protons and electrons) toward the earth at speeds approaching 40 percent of the speed of light.

These potentially lethal particles began arriving at the earth before 5:30 GMT and reached a peak level at approximately 8:30 GMT. During the next 36 hours, the energy particle fluxes gradually decreased. The high energy fluxes were near background levels by 3 a.m. GMT April 12, nine hours before launch. Less energetic protons continued to be observed at launch time

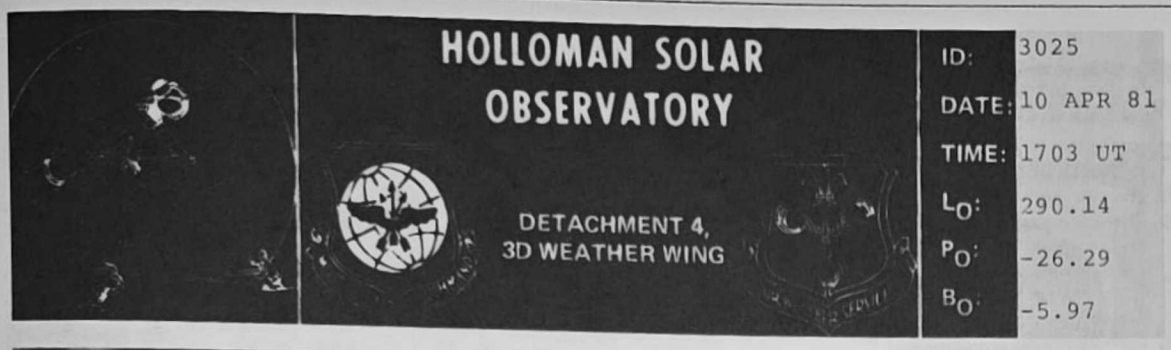
. . . launch weather was as forecast—scattered skies, no precipitation, light winds with patches of fog.

When the launch director at Kennedy Space Center gave thumbs-up, and the Columbia launched at 12 p.m. GMT, April 12, launch weather was as forecast—scattered skies, no precipitation, light winds with patches of fog in the area. As soon as the shuttle launched, command and control shifted to the Johnson Space Center.

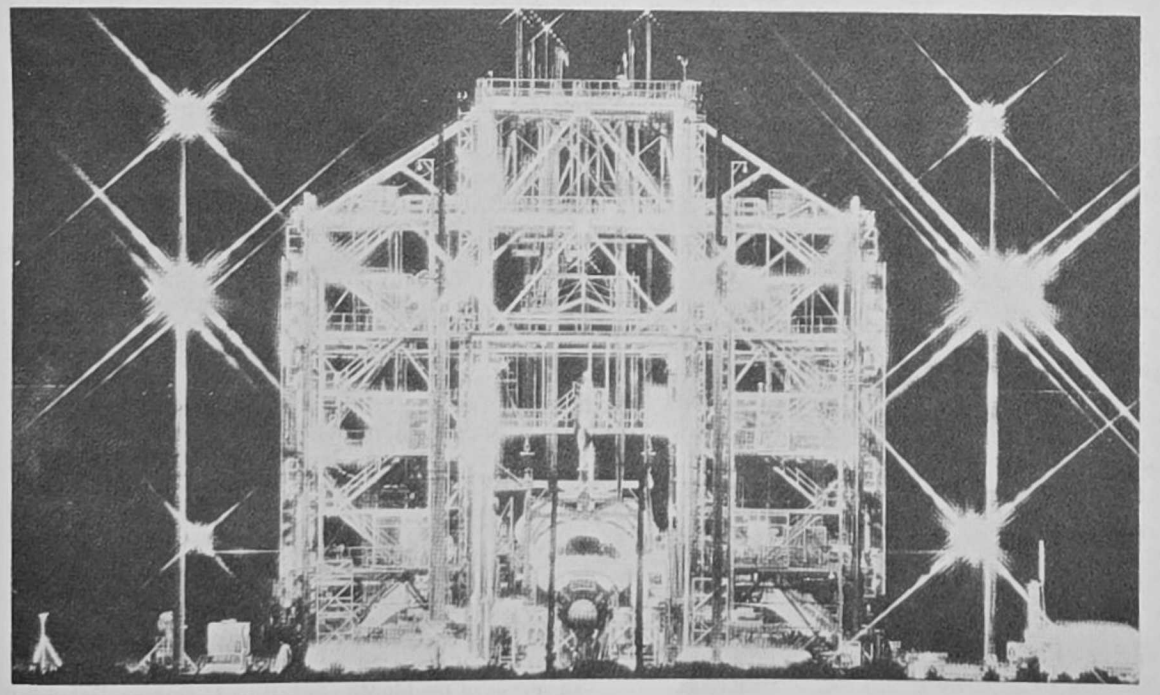
Although the launch went

(Continued on Page 5)

LOOKING OVER—Lt. Col. Winston K. Crandall, Det. 21, 2nd WS commander, and T.K. Gwin, Edwards AFB, Calif., airfield manager, examine Rogers Dry Lakebed at the point where the nose gear of the Space Shuttle Columbia touched down. (U.S. Air Force photo)



SOLAR FLARE—The April 10 solar flare was caught on film by Det. 4, 3rd Weather Wing, Holloman Solar Observatory. The photograph, taken in the light of hydrogen alpha shows brilliant bands and knots which are larger than the earth. The flare caused some problems for the shuttle mission by producing an intense magnetic storm. (U.S. Air Force photo)



PIGGY-BACK RIDE—The Space Shuttle Columbia is readied for piggy-back ride aboard a special 747 aircraft to Cape Canaveral, Fla. Workers at Edwards AFB, Calif., use the 100-foot-high, open-steel trusswork to lift the shuttle onto or off the 747. Columbia's return to space is planned for this fall. (U.S. Air Force photo by TSgt. Wayne W. Specht)

Columbia...

(Continued from Page 4)

smoothly, and orbit was attained on schedule, problems were encountered in orbit because of the solar flare observed two days earlier. The large flux of charged particles from the solar flare produced an intense magnetic disturbance.

This disturbance reached the earth at approximately 4 a.m. GMT on April 13 (16 hours after launch), producing an intense magnetic storm. The magnetic storm, in turn, destabilized charged particles trapped in the earth's magnetic field, forcing them to dissipate their energy in the polar regions.

At 7 a.m. GMT, on April 13, the precipitating charged particles seen by the NOAA-6 weather satellite were depositing energy into the earth's atmosphere. The high disposition rate of energy was accompanied by a bright aurorae, which was visible as far south as Oklahoma and Louisiana in the continental United States.

The heating of the upper atmosphere produced by the auroral activity noticeably increased the atmospheric drag on the shuttle. During the high magnetic activity, on April 13, tracking error rates amounting to over 400 meters per orbit were observed by the Flight Planning and Analysis Group at the Johnson Space Center. The cumulative error rate reached 25 kilometers before corrective action could be initiated.

Corrective Action

Corrective action chosen by NASA included abandoning original plans to use climatological space data and contacting the Joint Space Environmental Services Center for the additional real-time data neccesary to update their atmospheric model.

The data were provided by the Space Environmental Services Center and AFGWC, and immediately reduced tracing errors to nominal limits.

Fortunately, the programmed flight profile carried the Columbia into a low inclination circular orbit, and did not require extravehicular activity or spacewalking. At this orbit, the shuttle did not pass through the precipitating proton and electron sheets in the polar regions.

Had the shuttle been in a high-inclination on polar orbit, the crew would have experienced hazardous doses of radiation, which would have been lethal if the crew had walked in space. Some future missions will use a high-inclination orbit.

Aside from the minor radiation hazard for the low inclination orbit and the drag problem, the rest of the orbit, deorbit and landing went smoothly. The landing weather was as forecast, and the lakebed was dry enough to sustain the shuttle's landing.

Future missions

One other incident, which may significantly affect future shuttle missions, occurred right after launch. The solid rocket booster emits a cloud of hydrochloric acid. The hydrochloric acid cloud emitted by the Columbia rose to level of approximately 1200 meters, which was the height of the temperature inversion that day.

Upper winds carried the cloud over an area of vegetation downstream from the launch pad. Resulting acid rain severely burned and damaged the area's vegetation. In the future, shuttle launches may be delayed by forecast wind directions which might move the acid cloud over a populated area, or if the temperature inversion is too low.

Unlike other space vehicle launches, the Columbia was put into orbit with the assistance of Solid Rocket Boosters. What made these boosters different from the TITANs used in the past was that the SRBs were recoverable. The SRBs' sole function were to boost the Columbia into orbit, separate, and parachute back to earth. The area designated as the touchdown area for the SRBs was off the east coast of Florida.

The crew would have experienced hazardous doses of radiation, which would have been lethal if they had walked in space.

The SRBs landed in the designated area without problems and were quickly recovered by the Navy. The SRB recovery operation also required specialized environmental support. AFGWC produced the sensible weather forecast directly, and the Navy provided the sea state forecast. The forecast for SRB recovery called for good weather and light seas, and verified very well.

Words of praise

All feedback on weather support to the first shuttle mission indicates a job well done. AWS personnel participating in this important national program have every reason to feel very proud, as do all Americans, said AWS commander in chief of the Military Airlift Command, praised AWS participants saying, "It is with much appreciation that I recognize the outstanding role the men and women of the Air Weather Service performed in the momentus first launch and return of the shuttle, Columbia. The professional actions of your people had a direct and significant impact on the success of this giant undertaking."

The days of routine weather support to the shuttle may still be a long way off, but the work of dozens of AWS members supporting the shuttle's historical first flight brought that day many steps closer.

AWS salutes . . .

(Continued from Page 6)

Forecaster of the Month—TSgt. Kennie R. Eastwood, Det. 3, 34d WS, Mrytle Beach AFB, S.C.

7th WW Career NCO (for period July to December 1980)—SSgt. David G. Knepper, Det. 9, 7th WW, Scott AFB, Ill.

NCO of the Quarter—SSgt. Larry K. Broomfield, Det. 23, 17th WS, Kirtland AFB, N.M.; SSgt. Mary Jo L. Bertrand, Det. 1, 11th WS, Elemendorf AFB, Alaska; TSgt. Philip L. Canter, Det. 7, 5th WS, Fort Ord, Calif.; SSgt. Steven P. Moretz, Det. 17, 24th WS, William AFB, Ariz.; For Det. 10, Career NCO, SSgt. John L. Pawlik, Det. 10, 2nd WS, Eglin AFB, Fla.

Airman of the Quarter—Sgt. William R. Wertz, Det. 10, 2nd WS, Eglin AFB,Fla.; SrA. Michael L. Moneypenny, Det. 1, 11th WS, Elmendorf AFB, Alaska; A1C Charles C. Geeting, Det. 17, 24th WS, Williams AFB, Ariz.

Education

TSgt. Harry E. Dillard, 25th WS, Bergstrom AFB, Texas, a bachelor of arts degree in management and also distinguished graduate from TAC NCOA West, Class 81-3 at Bergstrom.

SSgt. Tom Hill III, 25th WS, Bergstrom AFB, Texas, graduated from TAC NCO Leadership School, Class 81-D at Bergstrom.

Capt. Jerrold S. Foster, Det. 11, 2nd WS, Patrick AFB, Fla., graduated from Air Command Staff College.

TSgt. Thomas D. Avery, Det. 11, 2nd WS, Patrick AFB, Fla., graduated from MAC NCO Academy.

Capt. Jeppie R. L. Compton, Det. 50, 2nd WS, Los Angeles, Calif., completed Ballistic Missile Staff Course at Vandenberg AFB, Calif.

MSgt. Kirby Danielson, Det. 25, 31st WS, Rhein Main AB, Germany, completed the Senior NCO Academy course by correspondence.

TSgt. Norbert G. Eakle Jr., was distinguished graduate of Class 81-82, NCO Academy East. He was also the first person to obtain a perfect score on the final examination. He is assigned to Det. 1, 15th WS, Andrews AFB, Md.

SSgt. Gregory Myles, Det. 12, 17th WS, Richards-Gebaur AFB, Mo., graduated from NCO Leadership School, Norton AFB, Calif.

SSgt. Suzanne Wesselman earned Distinguished graduate of the Andersen AFB NCO Leadership School, Class 81-D. She is assigned to Det. 4, HQ AWS, Anderson AFB, Guam.

Sgt. Harvey L. Hudson, Det. 2, 5th WS, Fort Belvoir, Va., completed NCO Leadership School of Myrtle Beach, S.C.; finished second in drill competition and was named a distinguished graduate.

Capt. Gerard M. Hill, Det. 2, 5th WS, Fort Belvoir, Va., received his master of arts in human resources management from Pepperdine University.

A1C Gaylor M. White graduated from Weather Observer School at Chanute AFB, Ill. and SrA Jeffrey W. Gilbert was honor graduate from PME I. They are assigned to Det. 26, 26th WS, Grissom AFB, Ind.

SrA. Merle J. Delande and SrA. Elizabeth M. Brummer, Det. 1, 31st WS, Bitburg AB, Germany, completed Phase I PME.

Sgt. Kenneth J. Harris, Det. 10, 2nd WS, Eglin AFB, Fla., received academic leadership award in management for Air Force supervisors course, NCO PME Phase II.

SSgt. Robert J. Wolf, Det. 4, 11th WS, Fort Richardson, Alaska, took honor graduate and academic awards at the Alaska Air Command NCO Leadership School.

Special honors

Mrs. Josephine M. Johnston, Det. 50, 2nd WS, Los Angeles, Calif., unit secretary, received a Certificate of Recognition for outstanding contribution and service to the mission of the Military Airlift Command.

Capt. James E. Pettett, HQ 1st WW climatologist, received a 1st WW plaque in recognition of his outstanding services as the wing climatologist in 1980. He was also 1st WW nominee for the 1980 Zimmerman Award.

TSgt. Albert J. Smedley, Det. 11, 2nd WS, Patrick AFB, Fla., received a monetary suggestion award for suggesting the partial elimination of ballistic wind rawinsonde runs at Shemya AFB, Alaska.

Det. 15, 15th WS, Wright-Patterson AFB, Ohio, received recognition from the National Safety Council for accident-free 1980.

SSgt. Larry Combs, 11th WS, Elmendorf AFB, Alaska, received an outstanding forecaster award. Lt. Col. Robert E. Black, 25th WS, Bergstrom AFB, Texas, was awarded the Nonrated Officer Aircrew Member Badge.

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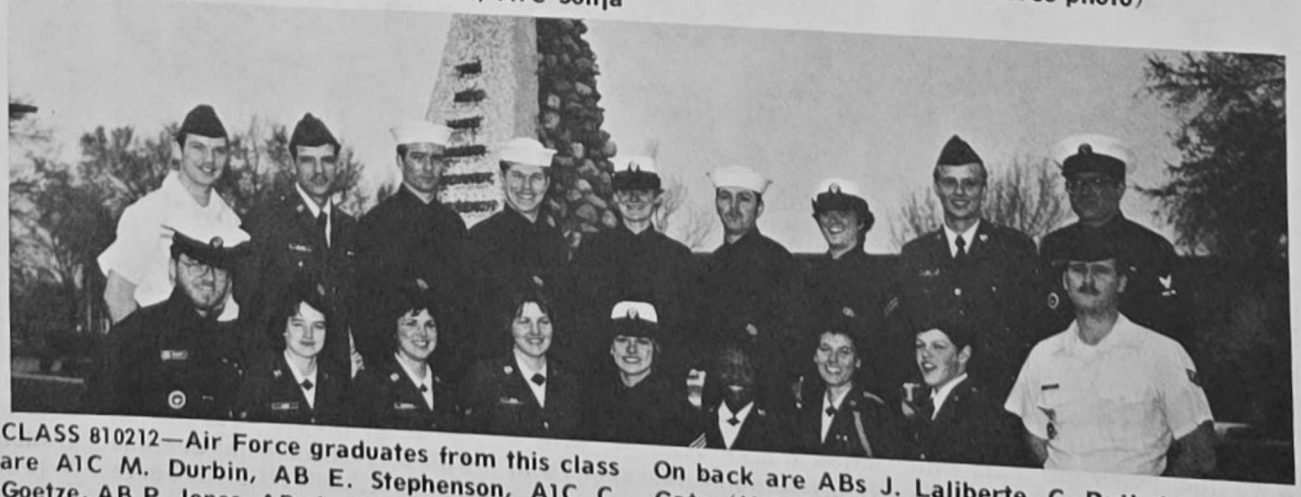
GRADUATES—Graduates of a recent weather course at Chanute Technical Training Center are kneeling, ABs Charles Wood, Eric Stord and Ken Sorenson; first row, A1C Margaret Gonyeau, Amn. Tonja Brown, Amn. Carol Plant, AB Daniel Lackey, Amn. Lamar Chambers, A1C Shannon Snoopy, A1C Martin Kaczmarek, Amn. Fay Gooch. Second row are A1C Stuart Hannah, AB Jay Mace, A1C Rob Stivers, AA Doug Emmons, AA John Hampton, PO3 Scott Williams and Air Force instructor SSgt. D. Allen. (U.S. Air Force photo)

CLASS 3 ABR25130—Graduates from this course are all smiles—many have assignments near their homes. First row, from left, are AB Jeff Cimini, AB Dan Ebbert, AB James Mims and A1C Paul Harper. Second row, AB Chuck Ratliff, A1C Sonja Weese, A1C Jennifer Bateman and AB Florentino Versoza; Third row, ABs Pete Taylor, Mike Poplin and Dan Rea, A1C Gary Lover, ABs D.C. Galligan, and Tim Scheidt. (U.S. Air Force photo)



CLASS 810212—Air Force graduates from this class are A1C M. Durbin, AB E. Stephenson, A1C C. Goetze, AB P. Jones, ABs L. Joyner and G. Ganley. On back are ABs J. Laliberte, C. Rutledge, and J. Gatz. (U.S. Air Force photo)

Outstanding airmen cited as professionals

(Continued from Page 1)

He was selected to brief the new program to all Air Force Strategic Air Command bomb wing operations officers during this assignment, an honor seldom afforded an NCO.

After serving as station chief at Dobbins AFB, Ga., he went to Germany. Sergeant Hewitt has been selected 2nd WW Senior NCO of the Quarter and took the AWS Technical Supervisor Award for 1980.

He has a bachelor's degree in sociology from the University of Nebraska.

Sergeant Hewitt is married and has three children. His son is an Air Force member serving at Bitburg AB, Germany.

MAC selectee

An 11-year veteran who supervises a two-man unconventional warfare weather team in support of Army Special Forces took double honors for AWS and MAC.

Sergeant Hoy is an airborne weather technician at Operating Location C, 7th WS, Bad Toelz, Germany.

The Nebraska native has been an airborne weather observer at Hurlburt Field, Fla., and Fort Bragg, N.C., and was assigned to AFGWC after attending forecaster school.

Sergeant Hoy has received top honors at professional military education schools, including honor graduate of 21st Air Force Leadership School; distinguished graduate of 7th Army NCO Academy, to honors at the MAC NCO Academy.

He was one of the first Community College of the Air Force graduates and also has another associates degree in pre-pharmacy.

Other honors include 2nd WW Outstanding Airman of the Year in 1973 and Outstanding NCO of the Year in 1978.

Airman is a "Starr"

Recently promoted below the zone, SrA. Starr Olson of Det. 20, 17th WS, Little Rock AFB, Ark., took AWS Airman of the Year honors.

The Victorville, Calif., native joined the Air Force in June 1979 while her husband, another Air Force member, was stationed at RAF Alconbury, England.

She has been cited for her professionalism during potential panic situations. Accurately reporting rapidly changing severe weather conditions resulted in "virtually zero damage to base resources," her citation read.

Airman Olson is active in community projects, including Girl Scouts, elementary school health programs, and Red Cross.

She was selected by the U.S. Jaycees as an Outstanding Young Woman of America for 1980.

MSGT. JOHN J. HEWITT took AWS top honors as Senior NCO of the Year. (U.S. Air Force photo)

TSGT. JAMES A. HOY took both AWS and Military Airlift Command honors as NCO of the Year. (U.S. Air Force photo)

SRA. STARR A. OLSON is the AWS Airman of the Year for 1980. (U.S. Air Force photo)

AWS salutes . . .

(Continued from page 7)

Det. 10, 2nd WS, Eglin AFB, Fla., was the 2nd WS and AFGWC Base Weather Station of the Year for 1980.

MSgt. Gerhard Krausser, Meteorologist of the Year; MSgt. Joe B. Carpenter, Technical Supervisor of the Year; and SrA. Carol L. Blucher, Observer of the Year. These honors were given by 2nd WS and AFGWC and all are assigned to Det. 10, 2nd WS, Eglin AFB. Fla.

Civilian honors

Mrs. Alberta T. Terry, Det. 11, 2nd WS, Patrick AFB, Fla., received a certificate and pin in recognition of 30 years of Federal service.

Dave Evans, OL-A, Det. 9, 5th WS, Troy Ala., received outstanding achievement award; he also received a quality step increase.

Edward J. Keppel and Gilda G. Lindner, Det. 10, 2nd WS, Eglin AFB, Fla., received civilian outstanding performance rating; Ms. Lindner received quality step increase.

Mr. Milt M. Rasmussen, senior weather forecaster at Det. 14, 17th WS, Norton AFB, Calif., was chosen 17th WS Outstanding Civilian of the Year.

Special honors

SSgt. Blaine L. Bachman, Det. 2, 11th WS, Eielson AFB, Alaska, received $50 for a suggestion to install a time hack speaker at the base ops counter.

AB Timothy J. Scheidt was an honor graduate of class 810115 with a 98 percent score.

Four Weather Training Branch instructors at Chanute AFB, Ill., were honored for accomplishments recently. Mr. Dale Lester, was Air Training Command Civilian Instructor of the Year; Marine Gunnery Sergeant Robert Fields, was NCO Instructor of the Year for Technical Training Center; Capt. Michael Read, was Chanute's Junior Officer of the Year; and SSgt. Duane Parker, was Chanute's NCO of the Year.

Correction

Lewis Holston, of Det. 21, 2nd WS, Kapaun AS, Germany, was promoted to technical sergeant. His name was left off the January-February AWS Salutes column because of a proofreading error. The OBSERVER regrets the error.

Births

December—SrA. Michael P. and Shelley J.A. Blomquist, a daughter, Heather Adell. Blomquist is a typhoon duty assistant at Det. 1, 1st WW, Nimitz Hill, Guam.

TSgt. and Mrs. Gary R. Emmons, Det. 26, 26th WS, Grissom AFB, Ind., a daughter, Trista Jill.

February—SSgt. Jerry and Boonpa Spencer, a daughter, Lisa Marie. Sergeant Spencer is assigned to Det. 7, 3rd WS. Langley AFB, Va.

TSgt. and Mrs. Larry Gilliam, a daughter, Amy Vanessa. He is assigned to Det. 6, 1st WW, Palehua, Hawaii.

SSgt. and Mrs. Donald E. Ward, Det. 1, 15th WS, Andrews AFB, Md., a son Justin Lee.

March—SSgt. and Mrs. Ralf W. Gruhn, Det. 25, 31st WS, Rhein-Main AB, Germany, a son, Michael Patrick.

A1C and Mrs. Dale S. Russett, Det. 7, 5th WS, Fort Ord, Calif., a daughter, Lisa Jean.

Capt. and Mrs. Ghee Fry, a daughter, Emma Kiele. Captain Fry is assigned to Headquarters 11th WS, Elmendorf AFB, Alaska.

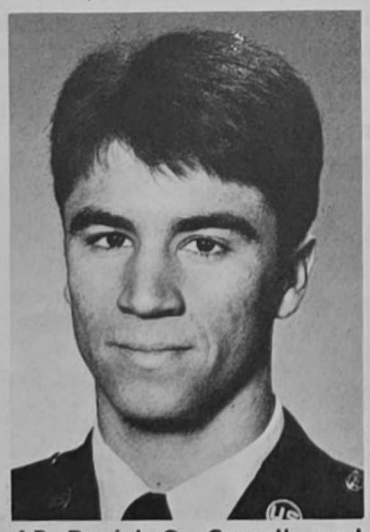
Capt. and Mrs. Jerrold S. Foster, a son, Aaron Samuel. Father is chief forecaster with Det. 11, 2nd WS, Patrick AFB, Fla.

Retirements

Lt. Col. Iwan Choronenko, HQ AWS, Scott AFB, Ill.

Capt. Carl L. Nelson, 25th WS, Bergstrom AFB, Texas, March 31.

A1C RICKY HILTBRAND was a weather honor graduate with a 97 grade point average. He graduated March 4, 1981. (U.S. Air Force photo)



AB Daniel G. Cornell graduated March 11, 1981, with a 99 grade point average. (U.S. Air Force photo)

AMN. CAROL A. PLANT took honor graduate recognition with a 97 grade point average March 11, 1981. (U.S. Air Force photo)

A1C JAMES R. BRADSHAW was another weather honor graduate March 4, 1991, with a 97 grade point average. (U.S. Air Force photo)

A1C MARTY J. KACZMAREK graduated with a 97 grade point average on March 11, 1981 (U.S. Air Force photo)

*U.S. Government Printing Office: 1981-765-053-13