

Redstone Rocket

33
Vol. 34 No. 7

Published in the interest of personnel at Redstone Arsenal Al.

July 18, 1984

Germans support U.S. fire units in precedent-setting Patriot deal

It's worth billions but, more importantly, the agreement just reached by the United States and Federal Republic of Germany draws the allies closer together and greatly strengthens NATO air defense.

That is the bottom line of the joint air defense pact signed in Washington July 12 by Defense Secretary Caspar Weinberger and West German Defense Minister Manfred Woerner.

The 10-year pact, pending approval of Congress and the West German Parliament, will use an elaborate network of Patriot and Roland air defense missiles to protect and defend US and German military facilities. One unique aspect is that West German soldiers will operate some Patriot and Roland battalions protecting American facilities.

Under the agreement, Germany will obtain 28 Patriot fire units, buying half with the US furnishing the other half.

The US will provide 12 tactical fire units, less government furnished equipment (trucks, communications, etc.) plus two additional fire units as opera-

tional, maintenance and training floats. The US will provide training for FRG personnel, perform depot maintenance for the units and be responsible for any modifications that might be needed.

The FRG, meanwhile, will buy 12 tactical fire units plus two additional operational, maintenance and training units.

The U.S. will waive some \$350 million in Patriot research and development charges which normally would be included in the transfer of all 28 fire units.

Germany will also procure 27 Roland fire units for defense of three US air bases there, part of 95 systems overall that will defend several German bases, some of which could be used by US forces during a conflict.

Germany will man, operate and support 12 US Patriot fire units, thereby reducing US manpower requirements, and the 27 Roland fire units for ten years.

"It's one of the largest agreements ever reached at the command," said A.Q. Oldacre, assistant project manager for Patriot International Operations, "involving more than two and a half billion dollars. This

assures that the air defense belt in Central Europe will be upgraded from Hercules to Patriot and is a major step forward in improving NATO air defense."

Brig. Gen. Donald R. Infante, Patriot project manager, said the US has spent time, effort and resources making Patriot the best air defense system in the world.

"We view it as our job, not only to produce and deploy Patriot with our own Army but also to assist our allies in obtaining and deploying the system. Our common goals remain to ensure the mutual defense of the free world and preserve our free way of life.

"Patriot will contribute substantially to both these goals," he said.

The Secretary of Defense and Federal Minister of Defense agreed that all the allies must work together to strengthen and modernize NATO's deterrent forces in Europe—not only in air defense but in all areas of the NATO defense mission.

Services work together in targets effort

BY ED PETERS

A tri-service group got together at the Missile Command last week to talk about targets. Not targets in the classic form of concentric circles centered by a bull's eye, but aerial targets ranging from model airplanes to supersonic fighter jets.

The conference Wednesday and Thursday drew some of the American military's top targets people: Col. Winslow Reither of DOD and a member of the Armament and Munitions Requirements and Development Committee, Jim Cowgill of the Office of the Secretary of Defense, Capt. J. Shulick, director of the Navy's Target Systems Division; Alto Smith, Air Force director of aerial targets and John Irvin, program manager of the Army Targets Management Office at the Missile Command.

They met here with engineering and technical personnel from the three services. Their purpose was to find ways to reduce duplication of effort, achieve cost saving and cost avoidance and discuss joint planning, testing and buying and exchange of data and hardware.

These annual tri-service R&D targets conferences began in 1974. They are rotated among the services with the Missile command hosting one for the Army every third year. This was the best-attended one ever held here, drawing 45 people from off post, said Howard Vail, an electrical engineer in Targets Management Office who coordinated last week's conference.

The conferences bring together both decision makers and support personnel and are credited with finding ways to save \$35 million over the past 10 years, according to Vail. "There is a transfer of information not only from the authoritative level but from the technical level as well. So as a result we have an effective program that has resulted in this type of savings," he said.

The conferences have also helped the services find ways to cooperate that have resulted in "realistic aerial targets and augmentation for testing our weapons and training our own service personnel," Vail said.

In remarks at the conference, Missile Logistics Center Director Jack Isom said prospects are looking brighter for the targets program as a result of Congressional and other studies showing "the need for improved targets that meet the threat" but that the pro-



AIR SHOW—Eyes to the sky and smiles on their faces, tri-service targets people enjoy watching an air battle in miniature as a U.S. F-16 chases a Soviet MiG during a demonstration of aerial targets similar to model airplanes. (See related story on Page 12)

gram has been troubled by low priority and inadequate funding.

"That," said Vail, "is why this meeting was so important. There is so much emphasis on saving money and at the same time we have been able to come with a better product by working together rather than separately. It's almost like a synergistic effect."

"The importance of targets," said Vail, "stems from the impact of the threat we are trying to counter and be prepared for with our weapon systems." Targets, he stressed, must accurately portray the threat if weapons are to be developed that will defend against it.

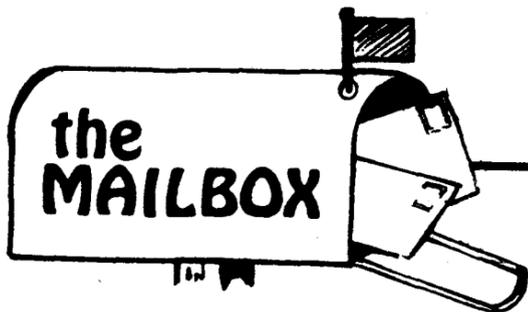
"It's an ongoing problem — not just what does a MiG-27 do this year but what will it do the next and what will our weapon systems need to do to counter threat today and tomorrow."

The military services work together in finding answers to questions like these. For example, the fighter plane targets such as the QF-100 used for testing and training purposes for missiles such as Chaparral, Patriot and Stinger are developed jointly by the Army and Air Force.

"We worked with the Air Force to convert the QF-100 from fighter status to full-scale target status. We adapted all the electronic and command and control systems so that it can not only fly man-rated but also by remote control," said Vail. "It also has a drone control formation capability so we can put up more than one at a time," he added.

The Missile Command's Targets Management Office is responsible for some 10 varieties of targets.

(See Service cont'd on Page 2)



Enlightened

Editor:

Reference the article concerning the engineer who won a discrimination suit. It was enlightening to learn that what I have always suspected about civilian personnel manipulations is, indeed, fact.

For more than a year I have applied for every GS-318-07/08 position advertised through merit promotion (through the voluntary applicant program). I am qualified as a GS-318-08 and a GS-318-09. I have

previous experience as the secretary to commanding general of a major command in USAREUR and have never received a performance rating of less than Highly Successful in 20 years.

Yet, I work at USAMMCS as a GS-318-05. Am I being discriminated against because I am a "camp follower" or are people being promoted because they know someone and not because they are really the best qualified? To date I have never gotten a straight answer from Civilian Personal.

Linda Williams

Letters to the editor should be signed (name withheld on request) and sent to: The Redstone Rocket, DRSMI-G. Unsigned letters will not be used.

Lawyer vows court fight over Olin DDT plan

TRIANA — A Birmingham lawyer warned a panel of federal agencies in a public hearing here July 14 that he would seek a court order to stop a DDT cleanup project on Redstone Arsenal if the panel allows the Olin Corp. to go ahead with the project.

Frank McPhillips, who represents about 1,500 persons who have filed a new suit against Olin, the Army and the Tennessee Valley Authority, said Olin's cleanup plan is a quick fix, unacceptable to his clients.

The federal panel has until Aug. 31 to decide whether it will let Olin go ahead, modify the Olin plan, or reject it. The panel was appointed a year ago by a federal judge as part of a settlement reached in an earlier DDT suit.

Olin has proposed filling in more than a mile of Huntsville Spring Branch channel on the arsenal and diverting the stream into a new channel to by-pass the worst areas of DDT contamination in the branch between Patton Road and Dodd Road. Olin believes the plan will cover or isolate most of the DDT and eventually drop the DDT content in fish in the area to 5

parts per million. That is the standard the company agreed to meet as part of the settlement of the earlier suit.

McPhillips contended that the company's proposed solution would leave about 100 tons of pesticide uncovered elsewhere in the swamp, in Huntsville Spring Branch and in Indian Creek.

"Before we will accept this, we will ask the court to order the Army and Olin to dig it all up and dispose of it properly," he said.

Several hundred people attended the hearing. The panel charged by the court with overseeing Olin's cleanup operations includes representatives of the Environmental Protection Agency, Army, TVA, Fish and Wildlife Service and the Alabama Department of Environmental Management.

Olin estimates the proposed project will cost about \$20 million and take about four years to complete. It includes building four low dams in the Spring Branch swamp.

AER drive sets record

More than \$38,300 was collected here for Army Emergency Relief, setting a record for this fund raising drive.

The final total was \$38,312.90, according to Juanita Phillips, AER officer at Redstone. This included \$5,081.90 cash and \$33,231 in payroll allotments.

"It's the highest ever. We just keep exceeding the goal and the (top) total amount ever collected here at Redstone," Phillips said. The goal was \$25,000.

Army Emergency Relief makes interest-free loans and grants to military personnel and their families. The AER campaign here was held April 16 through June 30.

Open house set on ACS birthday

An open house marking the 19th anniversary of Army Community Services will be held next Wednesday at the ACS office in building 3491 on Honest John Road.

The Army Community Services program was established in 1965 as a volunteer program of "self-help, service and stability". The primary functions were welcome packets, information and referral services, relocation services and a lending closet.

The years have seen the programs vastly increased. Basic services provided by dedicated volunteers have been augmented by an array of professional services provided by a trained staff assisted by the volunteer corps. The mission in 1984 is to provide personal, family and social services to improve the quality of life and well-being of the military community.

ACS has programs for child development services, consumer affairs and financial assistance. It also sponsors the Army Family Advocacy Program and Army Emergency Relief.

The community is invited to attend the ACS open house and 19th birthday celebration on July 25.

THE REDSTONE ROCKET
 Editorial Offices.....876-1500
 Advertising Offices.....539-3980

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The Redstone Rocket is published weekly on Wednesday. The publisher will receive editorial content for publication in the Redstone Rocket through the Information Office, Army Missile Command, Redstone Arsenal, Ala. 35809, Bldg. 5250, Room A-134, Extension 876-1500.

The Advertising office of the Redstone Rocket is located at 108-B, South Side Square, Huntsville, phone 539-3980, post office box 5351, 35805.

Advertising deadline for display and commercial classified is 5 p.m. Friday before Wednesday publication.

The Redstone Rocket is distributed free of cost to personnel at Redstone Arsenal, NASA and Industrial Park, Huntsville. Mailing rates off post for the Rocket are \$20.00 a year, tax included.

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Services

(Cont'd from Page 1)

"Our business is to replicate the enemy threat," said John Irvin, targets program manager here.

These targets include full-scale jet aircraft, helicopters, sub-scale targets both supersonic and subsonic, miniature targets and towed targets. Irvin's group of 35 workers in arsenal building 5681 is also responsible for "augmentation" of these targets. Augmentation refers, for example, to the process by which U.S. fighter planes are given Soviet characteristics for target purposes. Also, sub-scale targets are augmented to appear full-size on a radar screen or augmentation can give a small towed target an exhaust plume the size of jet fighter as might be needed for testing a heat-seeking missile.

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Engineer here dies while scuba diving in Egypt

A two-week vacation through Greece, Egypt and Israel turned into tragedy for a high-ranking engineer here.

Dr. Donald W. Burlage, 44, of the advanced sensors directorate in Army Missile Laboratory, died in a scuba diving accident Sunday, July 8 in Egypt.

Burlage was staying in Sharmel Shiek, Egypt when the mishap occurred while he was scuba diving with others.

"They were in 30 to 35 feet of water. He indicated he was low on air," said William Low, his supervisor. Burlage apparently was going to surface and when the others in the group surfaced, they saw him floating on the water. Officials later ruled he suffered an apparent heart attack caused by blood clots on the lung.

An Israeli physician in a nearby boat tried to revive him before the body was taken by helicopter. "He got immediate medical attention but there wasn't anything they could do," Low said.

Burlage, a GS-15 research engineer, was an experienced scuba diver who had done some diving in Mexico and Australia.

"He left on the Sunday before the Fourth (July 1) and was due back to work here on the 16th," said Bill Phillips, administrative officer with advanced sensors directorate.

The St. Louis native was graduated from the University of Missouri at Rolla in 1961 with a bachelor's degree in electrical engineering. He received

from the University of Alabama at Tuscaloosa a master's degrees in electrical engineering in 1968 and mathematics in 1969 and a doctorate in electrical engineering in 1972.

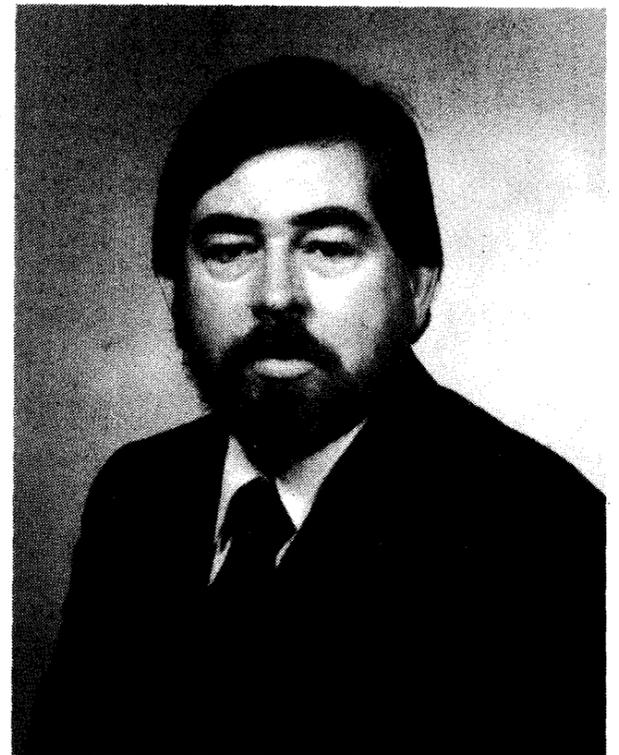
Burlage was a power system design engineer with Westinghouse Electric Corporation from 1961-62. He was an Army officer from 1962-65, assigned to the Ordnance Guided Missile School at Redstone. He worked at Boeing Company and Sperry Rand Corporation before becoming a research and teaching associate at the University of Alabama.

He came to work in advanced sensors directorate in 1971.

"He was a very respected, conscientious worker," Low said. Burlage was among about 25 people in the directorate's radar technology area and served as the signal processing group leader.

In 1981 he received the MICOM research and development achievement award. He was on temporary duty in Washington, D.C. from July 1981 through May 1983 in the office of the Deputy Under Secretary of Defense for research and advanced technology.

Burlage, who was divorced, is survived by his mother Helen Burlage of Herculaneum, Mo. and a sister Carolyn Butler of Beaumont, Texas. The body was to be shipped last week to Missouri. A memorial service was set for 10 a.m. Friday, July 13 at the Bicentennial Chapel here.



ACCIDENT VICTIM — Dr. Donald Burlage, who was an engineer here, died in a scuba diving accident.

Accounting official dies after long illness

A worker who had been named MICOM's handicapped employee of the year a decade ago died July 7 after a lengthy illness.

James Keith Armstrong was a supervisory operating accountant in Finance and Accounting. He came to Redstone in 1965 after he was graduated in accounting at Florence State.

"He was unparalleled in technical capability," said James L. O'Hara, his supervisor. "You could ask him any question in his technical area and he could give you an immediate answer and was always right. He was one of the sharpest section chiefs we have had."

Armstrong was honored as MICOM handicapped employee of the year in 1974.

"I realize that many times he did not feel well, but he always turned out good work. We will miss him," O'Hara said.

Armstrong was 40 years old when he died. Survivors include two sisters, Boadice Elkins of Red Bay, Ala. and Judy Owens of Kingston, Tenn. Funeral and burial were held at Red Bay.



Armstrong

Babers named director of Defense Logistics Agency

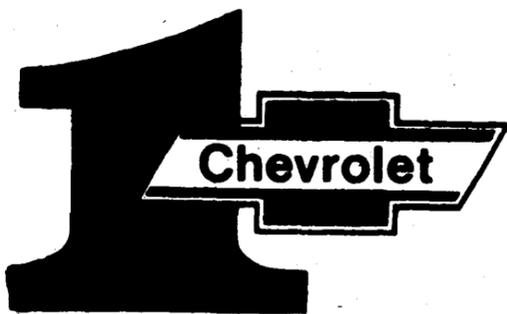
ALEXANDRIA, Va. — Lt. Gen. Donald M. Babers is the new director of the Defense Logistics Agency at Cameron Station, Va.

Babers had been DARCOM's deputy for procurement and readiness and headed the Army's program to eliminate fraud, waste and abuse in repair parts purchases.

The Defense Logistics Agency employs 49,000 military and civilian workers. The agency provides worldwide supply and logistics support to the military services, administers contracts, disposes of surplus property and provides other defense-related technical logistics services.

Babers replaces Vice Adm. Eugene A. Grinstead Jr. who retired as DLA director on July 1.

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Four youngsters win Space Camp scholarships

Four youngsters have the right stuff to attend Space Camp, thanks to an essay contest sponsored by wives' clubs on post.

Family members in the sixth through eighth grade who had a high interest in science and an overall "B" average for the 1983-84 year were eligible to apply. The scholarships to the educational program at the Alabama Space and Rocket Center were made possible by donations from the NCO Wives Club and the Officers Wives Club.

Space Camp scholarship winners were Jennifer Puhl, daughter of SSgt. and Mrs. William Puhl; Gregory Eugene Torbert, son of Maj. and Mrs. Tommy Torbert; Powell Trusler III, son of Capt. and Mrs. Powell Trusler Jr.; and David Allen Jansen, son of Lt. Col. and Mrs. Alexander Jansen.

"Hopefully it's something that might lead you to bigger and better things," Maj. Gen. Jerry Max Bunyard told the winners. He praised Ed Buckbee, director of the Space and Rocket Center, for "just a magnificent operation over there that's now known

worldwide." He also recognized the wives' clubs for providing the scholarships and thanked the parents for their efforts.

Buckbee presented Space Camp caps and packets to the winners at Friday's award ceremony. This made each of them "an honorary right stuff person," he said. He recalled that the idea for a program like Space Camp had come from the late Dr. Wernher von Braun, the German-born space pioneer. "I think he'd be proud of it," Buckbee said.

The director drew laughter when he made a comment to one of the scholarship winners. "I think the time they have a shuttle launch and the pilot doesn't show up, they may call you," joked Buckbee.

Attendees at the ceremony included representatives from the Officers Wives Club and the NCO Wives Club and members of the ACS (Army Community Services) Education Committee. The youngsters had been required to write a one to two page essay on "Why I want to go to space camp."

Exchange store savings average 23.9 percent

DALLAS—An A. C. Nielsen 1984 survey of Army and Air Force exchange stores shows overall savings ranging from 16.8 percent in the Ohio Valley exchange region to 26.1 percent in Golden Gate region. Departmental savings ranged from a low of 5.2 percent for food and beverages to a high 35 percent for clothing and furnishings. The survey was conducted in April 1984 at 17 locations in the continental U.S. Some 317 nationally branded retail items sold by AAFES were compared to identical merchandise on sale in communities outside of military installations.

Five commercial shoppings were attempted for each of 317 items at the 17 locations. Exchange regular prices were compared with the "price of day" in commercial stores. If the Nielsen shopper found "loss leaders," "door-buster" or blue-light" specials in the commercial stores, the special price was used to compare with the exchange regular price. Savings would be even greater if exchange promotional prices were considered. Additionally any saving attributed to sales tax was excluded.

Does the exchange always sell at the lowest price? AAFES officials say "no." A shopper, willing to compare and willing to time purchases with promotions can find many items at a better price in civilian stores. Likewise many items in the exchange represent the best buy. Even with commercial promotions A. C. Nielsen found that the exchange beat competition 88 percent of the time, tied one percent and was beaten 11 percent.

Since AAFES generally has identical prices throughout continental U.S. stores, difference in regional savings is attributed mainly to commercial price structures in civilian stores.

The individual markets surveyed in the south were areas around England AFB, La; Fort Sill, Okla; Randolph AFB, Texas; Fort Jackson, S.C.; Patrick AFB, Fla.; and Robins AFB, Ga.

The Nielsen survey is commissioned annually by

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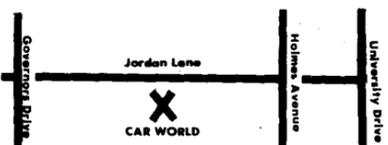
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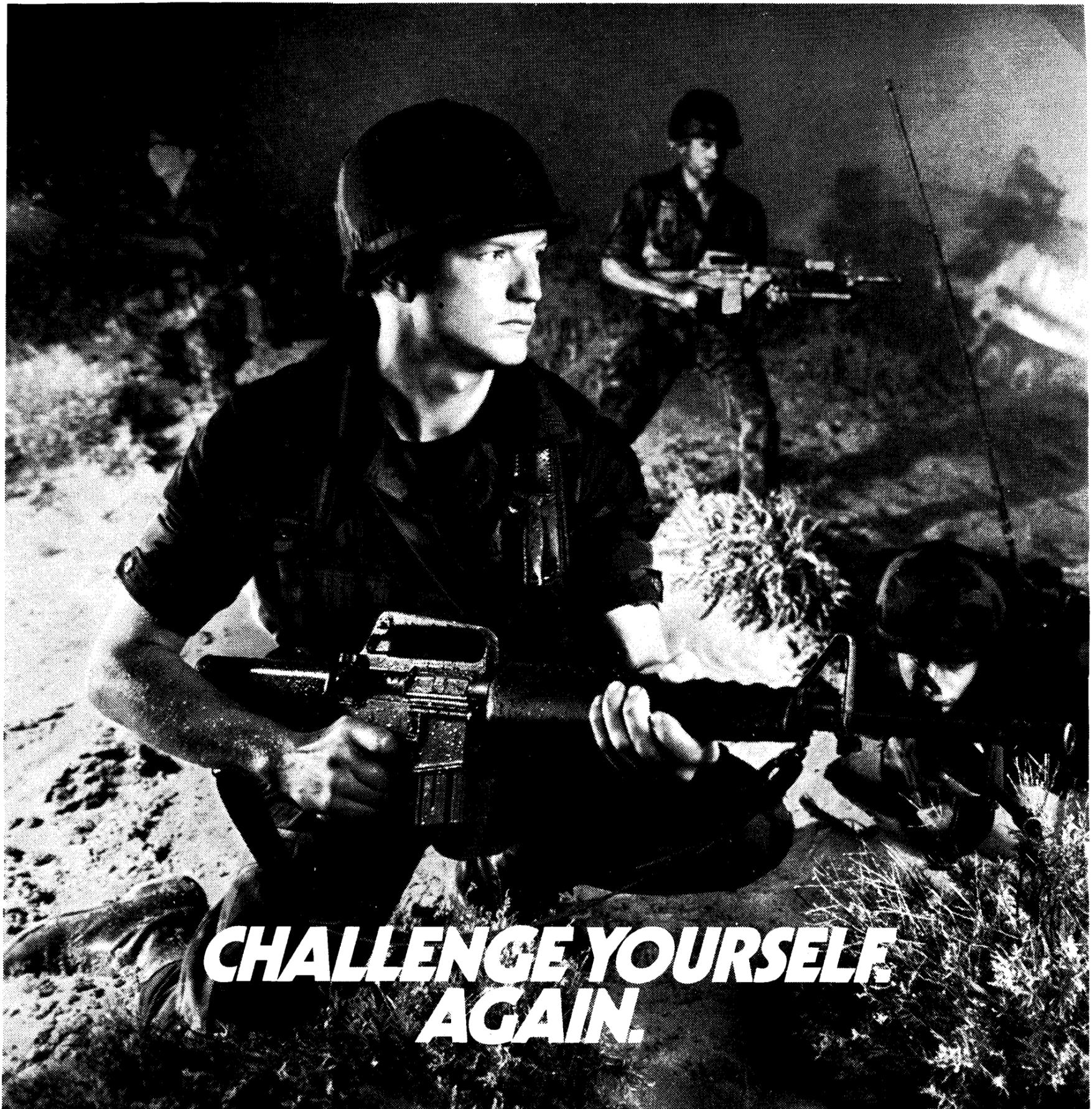
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Crafts shop offers cheap way to change car color

BY SKIP VAUGHN

A do-it-yourself car painting shop is open here for the military community.

The paint spray booth officially opened last week in the automotive crafts shop at building 3617 for military people, retirees and their family members.

By reservation and for a fee, they can drive in their car and paint it themselves. Instructors are there to provide assistance.

"This makes the paint job come very cheap. They can do it for a fraction of what they can do it for in town plus they'll be picking up a new skill for the Army," said Robert Henson, installation crafts director with Morale Support Activities.

"We'll teach them how to prepare their car for painting, safe and proper use of the painting equipment, and how to mix paints," he added.

The cost is \$10 for four hours. For 50 cents an hour, people can prepare their cars for painting. The automotive crafts building stocks primers, sand paper and other materials plus tools to make repairs. It does not have paints so users need to bring their own.

A spray gun can get compressed air after it is hooked up to the wall inside the booth. The connection is made by a 12-foot flexible hose. There are five spray guns and six or seven hoses.

Each user is furnished a small respirator mask so he or she can avoid breathing paint fumes. An automatic waterfall inside the booth is to remove paint particles from the air, Henson said.

Other features include a sprinkler system in case of fire and a heating system so the booth can be used during cold weather.

"The paint spray booth is a very modern, well equipped facility with all the safety features," Henson said.

Besides painting, the automotive shop allows users to do everything from minor repairs to major overhauls. It includes 17 bays, four hydraulic lifts and various equipment for fixing or cleaning. The shop opened in August 1956.

"There's anywhere from 30 to 40 (users) a day



PAINTING CAR — Sp4 Will Anderson of 291st MP Company uses paint spray booth at automotive crafts shop. average," said Clarence Mathews, one of three instructors. Others include Alfred Lankford, the manager, and John Smallwood. David Jones is the tool crib keeper.

Shop hours are 1:30-10 p.m. Tuesday through Friday, 9 a.m. to 5:30 p.m. Saturday and Sunday, and closed on Monday. For a painting reservation, call 883-2502.

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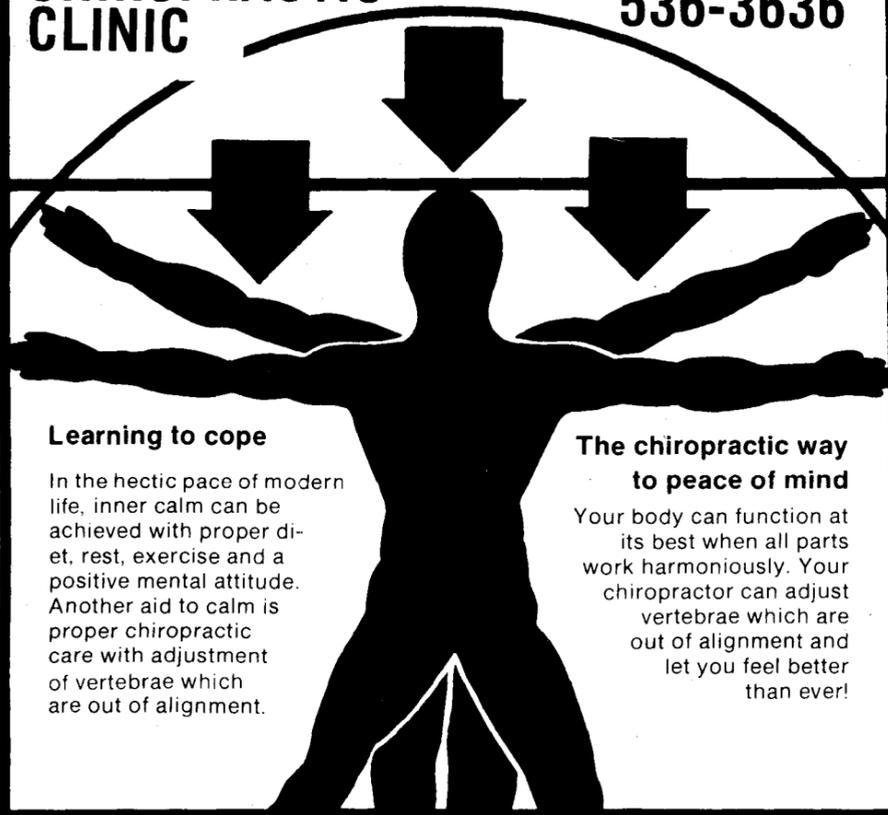
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Kwajalein Missile Range has leadership changes

Col. William A. Spin, a veteran artillery officer, has assumed command of the U.S. Army Kwajalein Missile Range in the Marshall Islands of the central Pacific Ocean.

In another leadership change affecting the national test range operated by the Army, Lt. Col. James R. Allred has assumed the position in Huntsville of director, Kwajalein Missile Range Directorate. The directorate is part of the Ballistic Missile Defense Systems Command in Huntsville's Research Park.

Spin will oversee the operations of approximately 1,600 contractor employees and 70 Government personnel at the remote base, which lies some 2,100 miles southwest of Hawaii.

It was from Kwajalein Missile Range that the Army in June launched its Homing Overlay Experiment missile which intercepted and destroyed an incoming intercontinental ballistic missile fired from

Vandenberg Air Force Base in California.

Before arriving at Kwajalein, Spin was assigned for four years to the BMD Systems Command in Huntsville, with the last two years of that spent as director of the Kwajalein Missile Range Directorate. Spin's 24-year Army career has included tours of duty in Thailand, Vietnam and the United States.

Spin replaces Col. John W. Banks, Jr., range commander since June 1982.

Allred comes to the post of director, Kwajalein Missile Range Directorate, with a background of 23 years of Army service, including a two-year assignment at the missile range as chief of range operations. He has served in Germany, Vietnam and Korea, in addition to stateside posts. His immediate past assignment was as commander of the Kansas Army Ammunition Plant in Parsons, Kan.

Soldier serving on

United Nations panel

WASHINGTON—A Maryland soldier in basic training at Fort Dix, N.J., recently visited the White House as part of a 133-member United Nations international youth year council.

Pvt. William B. Berard, 20, and the group visited with President Reagan in the Rose Garden on June 22. The topic of discussion included the importance of international youth year and leaders of tomorrow.

Berard is the only U.S. servicemember on the commission, which will gather opinions of young people and eventually meet in a series of seminars on issues affected today's youth.

Before enlisting, Berard did volunteer work for the Interstate Taxpayers Network, which nominated him for the honor. (Arnews)

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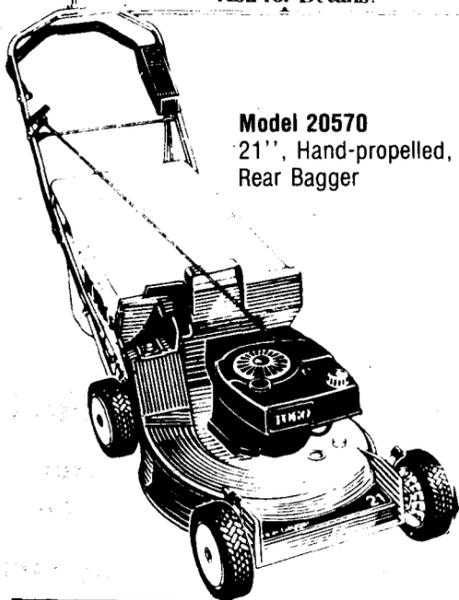
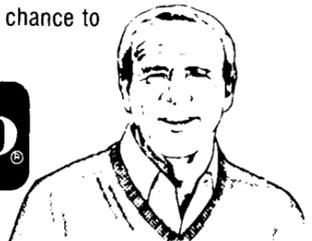
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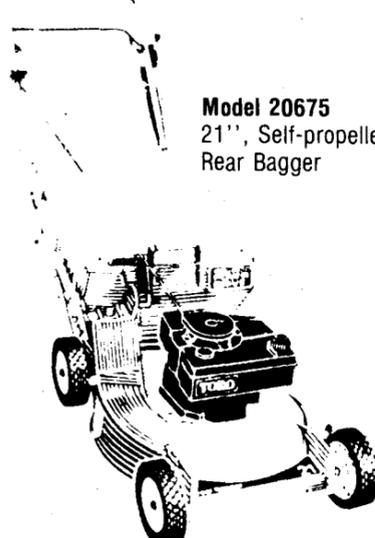
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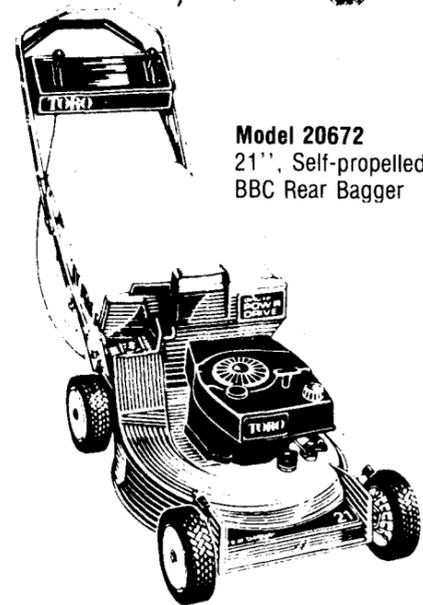
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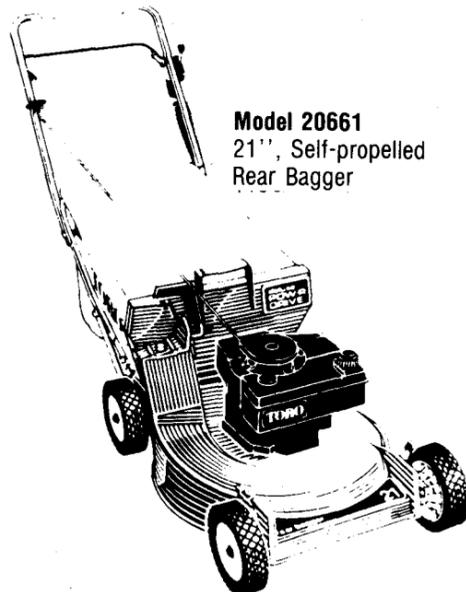


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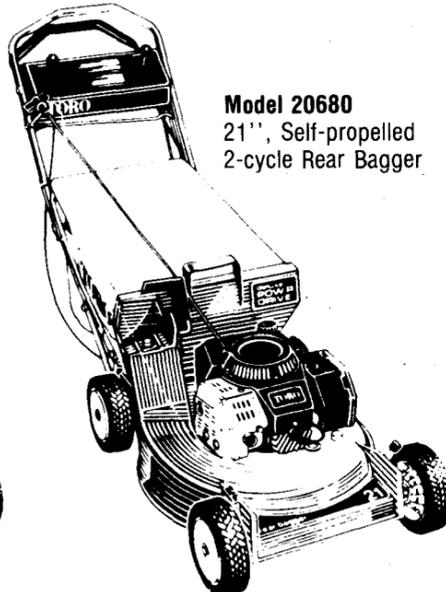


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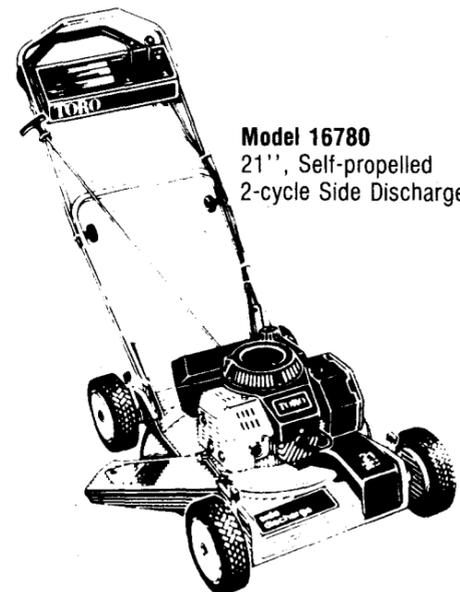
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T&E team wins three straight in civilian softball

BY MIKE McCOLPIN

T&E won three games last week to move within two games of RADS and the Cougars in the civilian softball league.

It blasted Pershing Project 12-2, COE 21-5, and Dr. Zoom 17-4. RADS and Cougars won both of their games as RADS beat Rachels 10-5 and CPO, while the Cougars beat the Express 16-4 and Rachels 8-7.

F&A took two of three games, thumping the Express 30-16 and CPO 16-0 before losing to the Stallions 19-7. Thiokol beat CPO 21-9 and MLC 12-11 while the Express got by SIO and COE beat P&P Engineers 18-9. MIA played MLC and Pershing Project but no results were reported.

In T&E's win over Pershing, Ken Alongi had four hits and Joel Stark blasted a home run to give Doug Warren the win. Against COE, Earl Shirley, Stark and Tony Cook had four hits apiece with Stark getting two homers and Don Hughes and Alongi getting one each. Hughes was the winning pitcher. Against Dr. Zoom, Alongi had four hits while Shirley and Jim Springer picked up three hits apiece. Everyone else for T&E had two hits as Hughes picked up his second win. Jay Russell had three hits for Dr. Zoom.

RADS' win over Rachels was sparked by Lloyd Brooks' three-run homer and Jim Knauer's four hits. Winning pitcher Dean Reese gave up a three-run homer to Gary Belue. CPO's Joe Holder came up with three hits against RADS but it wasn't enough to stem

the tide as RADS rode a balanced attack to win.

The Cougars' victory over the Express was led by two home runs by Sam Meadows and one each by Danny Smith, Bob Nichols and Stan Williams. Williams had an inside-the-park homer. Their win over Rachels was keyed by Smith's bases-loaded double. Ken Smith of Rachels homered to keep his team close.

The Stallions' win over F&A was led by two homers by Gary Payne and one each by Jim Chiarizio, Rick Hedrick and Don Sutton. Payne, Hedrick and Chiarizio had their first homers of the year. Chiarizio also had a single, double, and triple. Cedric Wherry homered for F&A.

In F&A's victory over the Express, Harold Jacobs and Wherry had five hits apiece with Wherry getting a home run. Bill Leatherwood and William Epps homered for the Express. In their shutout win over CPO, F&A's Frank Thomas, Ricky Prince and Wherry had three hits each with Wherry getting another homer.

Jesse Murph had four hits while Steve Harvison, Forrest Emfinger, Cary Mann and Bart Fulmer had three hits each in Thiokol's win over CPO. Harvison, Emfinger and Scooter West homered for Thiokol. Van Durr and Len Farbman were both three for four for CPO with Durr getting two homers and four runs batted in. Durr's home runs were the first homers for CPO this season. In the win over MLC, Thiokol was paced by Danny Holt, Cary Mann and Seth Lawson

with three hits apiece. Bill Cooley was the winning pitcher. Jeff Willis had four hits while Norman Goodrich and Greg Bliss had three hits apiece for MLC.

Standings

Western Conference				
	W	L	PCT	GB
Stallions	14	0	1.000	--
Rachels	8	5	.615	5 1/2
Dr. Zoom	6	7	.462	7 1/2
Express	6	8	.429	8
MLC	5	9	.357	9
COE	4	10	.286	10
Pershing Proj	1	12	.077	12 1/2
CPO	1	14	.067	13 1/2

Eastern Conference				
	W	L	PCT	GB5
RADS	12	1	.923	--
Cougars	13	2	.867	--
T&E	11	4	.733	2
MIA	8	4	.667	3 1/2
F&A	8	6	.571	4 1/2
Thiokol	6	7	.462	6
SIO	6	8	.429	6 1/2
P&P Engineers	1	13	.071	11 1/2

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7th Students	10	5	5
6th Students	9	6	6
A Company	9	6	6
TMDE/95th	9	6	8
5th Students	6	8	6
291st MPs	6	8	8
USACC	5	9	9
MEDDAC 1	3	12	12
4th Students 2	0	18	18

Western Conference		W	L
Marines	14	0	0
HHC	12	2	2
MEDDAC 2	11	5	5
Air Force	8	8	8
C Company	8	8	8
8th Students	8	10	10
515th Ord	5	9	9
4th Students 1	5	11	11
B Company 2	5	12	12

Army, Navy agree to operating guidelines

WASHINGTON—The Army and Navy's top logistics officials recently signed a "memorandum of agreement" that will institutionalize a two-year-old program designed to assure operational readiness through a closer working relationship in common objectives, functions and resources.

The program, titled the "U.S. Army and Navy joint strategic mobility program development and coordination," began as an effort to study joint interservice responsibility in the development, acquisition and use of Army and Navy cargo offload and discharge systems.

The new memorandum sets forth a list of specific tasks to be fulfilled by cooperative and single-service actions. These involve appointing Army liaison officers at key Navy staff and command elements, developing a plan to coordinate ready reserve ship readiness and berthing sites, developing an offshore petroleum-handling system, refining doctrine for the use of common cargo handling systems, and managing and reviewing annual budgets.

The memorandum of agreement was signed by the Army's then deputy chief of staff for logistics, Lt. Gen. R. H. Thompson, and his counterpart, the deputy chief of naval operations for logistics, Vice Adm. T.

J. Hughes, at the Pentagon June 27.

Thompson noted the "solid accomplishments" in the program that has included mutual cost savings in equipment, improved deployment capabilities, and cooperative solutions to problems surfaced in the course of fine-tuning the program.

Having received the endorsement of the two services' top leaders in a briefing in May, the program now is being expanded to achieve greater results in logistics planning, mobility program balance, and the cooperative definition of mobility requirements. (Arnews)

Trailer parks to open on some Army posts

WASHINGTON—Soldiers may soon be able to rent space in mobile home parks on some military installations, according to Army housing management officials.

Mobile home site construction and repair plans are presently being developed by the Army Corps of engineers for selected Army installations in the United States, these sites will eventually be made available for rent by soldiers.

Officials say existing inactive sites could be ready next year with new site construction completed by 1987.

The number of sites will depend upon funding, according to Col. Everette L. Tucker, project spokesman. A request for the funding will be included in the fiscal year 1986 budget.

He said the facilities would be especially beneficial to married junior enlisted soldiers who cannot afford conventional housing.

"These facilities would provide soldiers the opportunity to build equity and enjoy, among other benefits, the tax advantages of home ownership," Tucker said. "Moreover, on-post facilities would provide savings in lower rental rates, shorter commuting distances, and help build a 'sense of community.'" (Arnews)

Collection action taken on student loan defaulters

WASHINGTON—Some 35,000 Defense Department personnel who have defaulted on Education Department student loans are receiving final repayment notices, according to the Education Department's student financial assistance office.

Army finance officials say they expect to see "salary offset" action, a collection from regular pay, take effect shortly against the Army personnel who still owe money for past Department of Education student loans.

Personnel involved include civilians, active-duty service members, reservists, and retirees who are on a list of people still in debt to various agencies despite passage of repayment deadlines for government loans.

The collection plan calls for loan holdouts to be certified for the salary offset action under authority of

the Debt Collection Act of 1982.

Finance and accounting center officials have contacted 5,000 Army personnel who haven't responded to the Department of Education's past notices.

Active duty and retired soldiers have received "mailgrams" signed by the comptroller of the Army. Officials point out that this canvass also includes members of the Army national guard and reserve.

Early last year, Department of Education data analysts matched files of loan hold outs against personnel records at the Defense Manpower Data Center in California. Using the addresses from the listing, officials mailed collection letters on three separate occasions offering the chance for voluntary settlement. (Arnews)



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1981 GMC SIERRA **SAVE**
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1983 TERCEL WAGON . \$7950
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1982 COROLLA \$6850
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1981 STARLET \$4350
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Airlines offer military discount

WASHINGTON—Can't afford to take vacation because of high airline fares? Military personnel and family members may want to look into the airlines' military furlough program.

Several airlines are now offering military personnel and their family members sizable discounts on regular coach fares.

Airlines participating in the family furlough fare program include with discounts and eligibility rules:

Carrier	Discount	Travel Status	
		Accompanied	Unaccompanied
Eastern	25-50	Yes	No
Empire	50	Yes	Yes
Frontier	25-50	Yes	No
Northwest	50	Yes	No
Republic	25-50	Yes	No
Piedmont	25-50	Yes	No
USAIR	50	Yes	Yes
World	50	Yes	Yes
Delta	25-50	Yes	No

Discounts fare packages may carry some restrictions. Empire, Piedmont, and USAIR limit discounts to round-trip travel. In addition, discounts may not be available on all carrier routes.

Discount fares are not limited to family members of servicemen on active duty. Dependents of retired military personnel qualify for a 60 percent discount on Pan Am, and World's discount fares include dependents of reservists and national guardsmen when sponsor is traveling in conjunction with active duty.

Discounts notwithstanding, Military Traffic Management Command urges travelers to "shop around." Airlines regularly offer promotional fares which can save travelers even more should they meet the restrictions.

For more information, contact the airlines, the nearest scheduled airline traffic office, or a travel agent.(Arnews)

Army laboratory director receives high award

WASHINGTON—An Army civilian, Max Adler of the U.S. Army Electronic Research and Development Command was one of six recipients of this year's Defense Department-sponsored distinguished civilian service award.

Adler, director of the Electronic Warfare Laboratory at Fort Monmouth, N.J., received the award, the highest honor the Defense Department can bestow on its civilians, for many contributions to the nation's intelligence and electronic warfare capabilities.

"Mr. Adler is known as the father of the aviation survivability program," said Secretary of the Army John O. Marsh Jr., reading the award. "This research and endeavors have helped improve our ability to survive hostile air attack."

Recognizing the winners at the 29th annual awards ceremony June 21, Deputy Secretary of Defense William H. Taft IV commended them for their "commitment to the American values of hard work, selfless dedication, and uncompromising excellence."

The award is presented annually by the Secretary of Defense to civilian employees whose careers reflect exceptional devotion to duty and extremely significant scientific, technical, and administrative contributions to increase effectiveness in Defense Department operations.(Arnews)

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Model airplane target looks like the real thing

BY ED PETERS

"Thunderbird!", an Air Force officer exclaimed, drawing laughter from the other onlookers.

They were watching intently as a small aircraft executed a series of rolls, turns, loops, dives and other maneuvers which, while somewhat less exciting than the aerobatics of the Air Force's famed Thunderbirds precision flying team, were impressive nonetheless.

The object of their attention was a Soviet MiG-27 which part of the time was being chased by a U.S. F-16 jet fighter in the skies above the arsenal's Range 3. Not a real MiG-27 nor real F-16 but a model airplane astonishingly like the real thing. In military parlance it is a remote controlled miniature aerial target, or RCMAT.

These little radio-controlled jet fighter look-alikes are for small arms air defense training and are newly developed by the Targets Management Office in Missile Logistics Center.

They were demonstrated Thursday to Air Force, Navy and Army representatives attending a targets conference at the Missile Command.

The Army plans to begin fielding the MiG-27 version early next year. A 1/9 scale model of the Soviet fighter jet, the training target has a wing span and length of approximately 6 feet, is made of plastic foam painted camouflage color and weighs only five lbs.

Its engine and controls are similar to model airplane parts available in hobby shops. An operator flies it using a hand-held transmitter with sticks that control the throttle and operation of the ailerons on the wings and elevator on the tail. It utilizes a propeller-driven model airplane engine.

"On the ground it isn't very realistic but in the air looks an awful lot like the real thing," said Herb Wiggins, who is handling the new aerial target's engineering and testing in the systems engineering division of Targets Management Office.

"A 1/9 scale target flown at 1/9 scale distance at 1/9 scale speed becomes a very realistic simulation as there is no reference point," added Frank Goodwin, whose RS Systems branch of Tech Serv Inc. in Beltsville, Md. is contracted to build the new targets.

"The only difference you'll notice is the sound," Wiggins observed. "We can't replicate the sound of a Soviet jet but in battle sound is not, generally speaking, an aircraft identification technique."

Some 30,000 of the targets are to be placed with Army units all over the world for use in small arms air defense training ("There's a philosophy that if enough rifles shoot at a jet one may hit it," notes Wiggins) and

for target tracking practice. In the latter application it can be fitted with an infrared source for tracking practice using heat seeking missiles such as Redeye, Stinger and Chaparral. An F-16 model is also being built to assist soldiers in friend-or-foe identification.

The MiG-27 model is intended to fly at 40 knots per hour, or 1/9 the expected Soviet attack speed of 360 knots per hour. "If the guy's going faster than that he's not going to hit ground troops. He may throw flak out there but he won't be hitting them," said Wiggins.

Since the flying targets are of plastic foam, broken ones can be repaired with epoxy glue and reused in only a few minutes, said SSgt. Martin Ortiz-Padilla, avionics specialist in Targets Management Office. They cost a little over \$150 each, very cheap for a flying target, and are actually shot down by soldiers in training exercises.

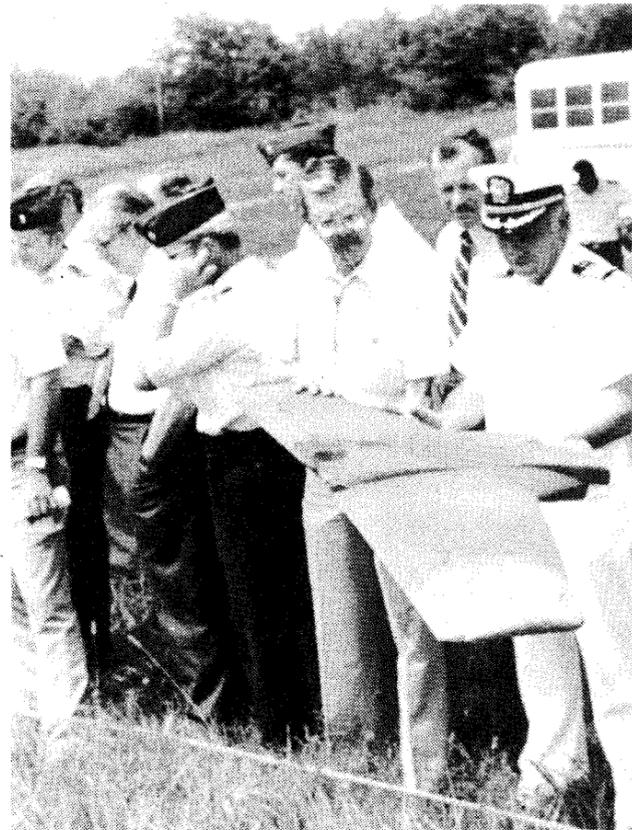
Thursday's demonstrations were flown by professional model airplane pilots working for RS Systems, the contractor. One of them, Steve Stricker, 22, is ranked among the best in the nation. The Army's models "fly very good by hobby standards," he said. "They're easy to fly, lightly loaded and have very good performance."

But Wiggins says that flying the little airplanes is a lot harder than it looks. Although Wiggins knew all about the flying target's engineering, he did not know how to fly it. But he bought a model airplane of his own and is learning so he will better understand how targets will perform in the hands of soldiers. "As the result of the work I've done here as an engineer I realize you've got to have hands-on experience — theoretical information is not enough," he said.

Bob Chalmers, a logistics management specialist responsible for getting thousands of the model airplane targets into the field beginning early next year, said this targets program looks simple but isn't. "I can't overemphasize that the testing program and fielding matches a major weapon system," he said.

There's quite a bit to the training too. Soldiers who fly them in the units will get seven weeks of instruction and have to fly regularly to maintain proficiency. "It's one thing to keep it in the air and quite another to fly the representative target threats."

"People tend to take it lightly but it's a very dangerous, high-performance aerial target," said Chalmers. "Operators have to be safety conscious and know what they're doing out there on the range."



WING SECTION of model airplane target is examined by tri-serv



AERIAL TARGET is hand-launched.



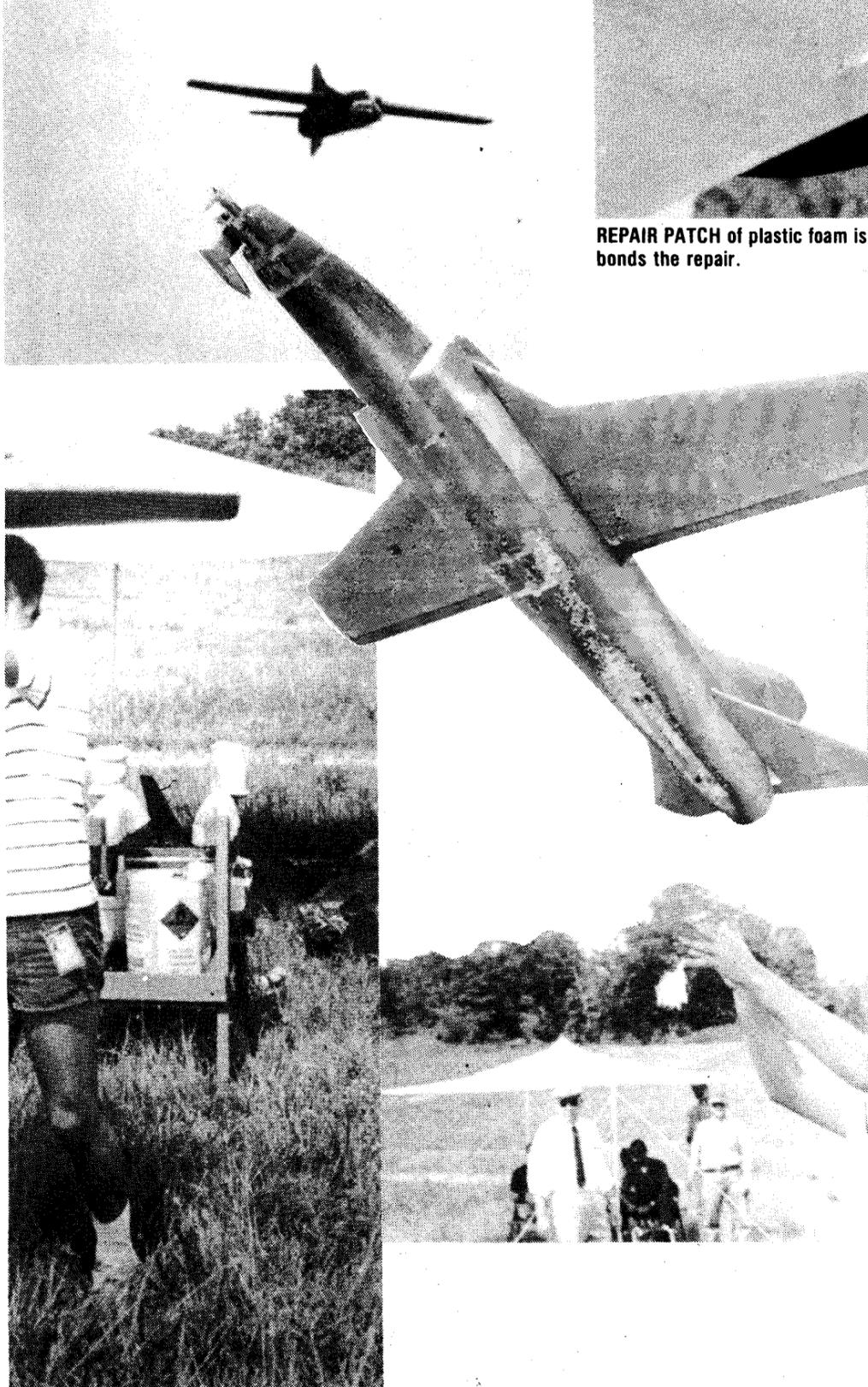
MAINTENANCE CONCEPTS for the new aerial target were observed by Jim Howell of Maintenance Engineering, who watches Chris Lash of RS Systems make a repair.



...gets conference attendees.



REPAIR PATCH of plastic foam is trimmed to fit a broken place in the tail section. Epoxy glue that dries in a few minutes bonds the repair.



HAND-HELD transmitter used by Steve Stricker of RS Systems has sticks that control rudders and throttle. The aerial target employs the latest in model airplane technology.

Program aims at recruiting engineers and scientists

WASHINGTON—A test program offering college undergraduates part-time government employment while enrolled in ROTC is intended to increase the number of scientists and engineers in the Army's officer and civilian ranks, the Army announced.

The program has students enroll in the Reserve Officers Training Corps while at the same time working as part-time government employees in jobs related to their majors. Graduates will have opportunities for permanent Army civilian jobs after completing active duty obligations or upon entering the Army Reserve, officials explain.

A one-year test of the program is scheduled to begin in September in the Army's First ROTC Region, which involves more than 60 colleges and universities participating in the ROTC and co-op programs. Army activities have already listed almost 175 co-op jobs open throughout the U.S.

"The economy is doing better and we're competing with industry for engineers and scientists," said Maj. Donnie Shelton at the Army's Training and Doctrine Command in Fort Monroe, Va. "Everybody wants them. We want our share, too. So we're offering incentives to get them into the Army, at least into the government work force."

Sophomores who enroll in the program will work at least 26 weeks at their co-op in addition to taking academic classes and ROTC training, officials say. As employees, students will receive vacation, sick leave and other government benefits while earning between

\$5.95 and \$7.10 an hour, and time credited toward gaining civil service status.

"The student should become the best qualified person the Army could hire in a professional scientist or engineering job," said Suzanne Funes of the Pentagon's civilian personnel office. "He or she has been trained on both sides of the house, military and civilian."

Prospects for the program have also been told that part-time employers may pay student's tuition and books as well as salary. "Since we're dealing with shortage skills, the tendency is for the employing agencies to pay tuition from their training funds," Funes said. "But it goes activity-by-activity."

Students who go on active duty for four years or less

will be entitled to return to the jobs that they left, complete with promotions and pay raises that would have accrued if they had remained in the civilian job, Funes said.

"Department of the Army must find a job for this person," she said. "Hopefully it will be at the same activity as before. If not, hopefully in the same community."

Officers who stay on active duty more than four years will be eligible for reinstatement, under which they may apply for civilian employment at any DA activity.

Students in the program who join the reserves can also expect to be offered government jobs with the Army after graduation, officials say. (Arnews)

Report claims savings from contracting out

WASHINGTON—Cost comparison figures recently released by the Army comptroller's office reveal an average 19 percent cost advantage to the Army for activities converted to contract performances under the "commercial activities" program.

The figures, gathered for a recent Defense Department report to Congress, were based on 69 Army activities converted from in-house to contract performance between Oct. 1, 1980, and Oct. 1, 1982.

The comparisons were reconstructed to compare actual contract costs to what in-house performances

would have cost. The original cost comparison for these activities projected an average contract-cost advantage equal to 23 percent of total in-house costs.

The summary notes that "about 43 percent of the money paid to contractors went to small business as prime or sub contractors."

According to the summary, the overall DOD statistics parallel the Army's in this resource management program revitalized five years ago and confirms the Army can save money by hiring private contractors. (Arnews)

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Test range extended by mounting target on mountain

When new test specifications for the Tow missile required extending the flight path by more than 300 yards, test engineers at Range 6 knew there was no way to go but up.

The old flight path for Tow tests dead-ended at the foot of Bradford Mountain, nearly 1,000 feet shy of the new test requirement. "We either had to reorient the range or fire up on the side of the mountain," explained Phil Carmack, flight test supervisor for Test and Evaluation Directorate.

To extend the flight path up the mountain the required distance, the target had to be moved to near the top of the mountain, an access road had to be cut, an instrument tower erected and power and water supplied to the impact area.

The project posed some interesting problems for Range 6 personnel and crews from Roads and Grounds and Utilities Branch who assisted.

The target area on the mountain's northern face was a limestone bluff. Nature cooperated somewhat by providing rock shelves on which targets could be placed but the road builders in Harold Stacey's heavy equipment section had a difficult job.

Bulldozer operators cut through wilderness and picked their way around boulders, engineering the road as they went. Many loads of fill dirt were needed to build up a road bed through the bluffs and boulders.

Power cables for cameras trained on the target

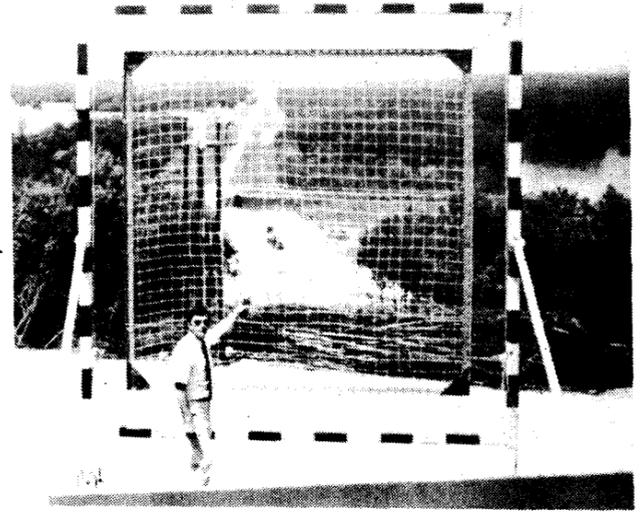
follow the road's steep, twisted course up the mountain since the road bed offered the only place the cables could be buried to shield them from missile blasts.

Range engineer Rick Wright said it was also necessary to pipe water up the mountain to the target which sits some 140 feet above level ground. "To conduct the fairest test possible requires that we cool the background" of the target, he said. The shots at the mountain target are being made with production-line missiles in a type of test that requires shooting into a "clean" environment, meaning that heat in the target background must be significantly less than the heat from the sighting beacon glowing in the back of the missile, Wright explained.

The cooling water is pumped out of Indian Creek. Before a test, lawn sprinklers with garden hoses attached douse the limestone ledge the target sits on.

Cameras mounted on the ledge record the missile's angle of attack as it passes through a target net backstopped by a big slab of six-inch armor plate. Missiles are fired from a blockhouse about two miles up-range.

Wright said test programs during the day required that much of the range extension be accomplished after hours and on weekends. He said Facilities Engineering workers put in many hours of overtime to get the work done and allow the extended-range tests to be done on schedule. "Those boys flat do a good job for you," he said.



HIGH TARGET — Range Engineer Rick Wright shows the target net that has been moved onto Bradford Mountain. The target has been perched on a limestone ledge near the top of the mountain in order to extend the length of Range 6.

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Black federal employees

There will be an organizational meeting for the formation of a local black federal employees association on July 23 at 6 p.m. at the Cavalry Hill neighborhood center. All interested persons are invited to attend.

Bloodmobile

The bloodmobile will be at the Recreation Center in building 3711 today from 9 a.m. - 12 noon, at Thiokol on Thursday from 7:30 a.m. 12 noon and at building 5681 on Friday from 7 a.m. - 12 noon.

Recreation Center

Tonight - Ping pong at 7 p.m. Thursday - Bingo at 8:30 p.m. Friday Foosball at 7 p.m. Saturday - Risk at 2 p.m. Sunday - Jam session at 2 p.m. Monday - Trivia quiz and refreshments at 7 p.m. Tuesday - Pool at 7 p.m.

Science fiction

The North Alabama Science Fiction Association will meet at 7:15 p.m. on July 21 in the First American Federal Savings & Loan building on University Drive. For further information call Jack Lundy 876-7729.

Flying club

The Redstone Arsenal Flying Club will hold a mandatory quarterly safety and membership meeting on Thursday, July 26, at 5:30 p.m. in the conference room in the lobby of building 5250. A second safety meeting will be held there on August 1 at 7 p.m. All members must attend one of the two meetings.

Logistics engineers

The Tennessee Valley Chapter of the Society of Logistics Engineers will hold its regular business luncheon meeting on July 19 at the Officers Club. A social (cash bar) is at 11:30 with lunch at noon. Madison County Commission Chairman Mike Gillespie is guest speaker. Present and prospective members and guests are invited. Cost is \$6. For reservations call Glenn Smith 876-4019 or Marty Martin 876-8166.

Retired officers

The Huntsville Chapter of the Retired Officers Association (TROA) will hold its installation of officers for the 1984-85 term on Wednesday, July 25 at the Redstone Officers Club. Members and their wives, and prospective members and their wives, are invited to this meeting that will begin with a luncheon buffet (dutch treat) at 11 a.m. in the TROA meeting room.

Moon walk anniversary

A commemorative Mass on the 15th anniversary of the moon walk will be held at 7:30 p.m. Friday, July 20 at the Huntsville Knights of Columbus hall at 3053 Leeman Ferry Road SW. Bishop Joseph Vath of the Diocese of Birmingham is to conduct the service. The service is open to everyone, regardless of creed. Refreshments will be served after the Mass. For more information call T. Leach 883-6467 after 6 p.m.

Handicapped support group

HERO of Huntsville, an interdenominational, spiritual support group of the handicapped, meets on the third Saturday of each month. The next meeting is from 11 a.m. to 2 p.m. July 21 at St. Stephen's Episcopal Church on Whitesburg Drive. For more information and/or transportation assistance, call Lois Render 882-0909 evenings or 876-1606 days.

Alcoholics Anonymous

The Redstone Arsenal Group of Alcoholics Anonymous meets each Friday at 5:15 p.m. in room 11 of the Bicentennial Chapel. This is an open discussion meeting. Anyone interested in the subject of alcoholism is invited.

Carpool Hotline



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Huntland

Carpool member wanted from Huntland, Tenn. to 5400, 4488 or 5681 areas, hours 7:30-4:15. Grover Campbell 876-4108.

Bicycle registration

Bicycle owners are encouraged to register their bikes on Redstone Arsenal. Registration can be obtained at the Pass and ID Section in building 3423. A complete description of the bicycle to include the serial number will be required when registering. The registration decal will assist military police in finding the owner should the bicycle become lost or stolen.

Found property

A girls 10-speed bicycle, yellow with brand name Sears, Roebuck and Co. "Free Spirit," has been found, according to military police.

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Weather team here measured winds that led to tragedy

BY SKIP VAUGHN

Until near hurricane winds led to a fatal riverboat accident, the weather team here was known mainly by the people it supports.

A member of the team happened to be on duty that Saturday, July 7, because of a mission on Test Area 1. The team, a tenant activity here, provides weather data to research, development, test and evaluation activities.

"About two hours into the shift, about 11:20 a.m., a thunderstorm developed which grew into a severe thunderstorm and lasted about, say, 20 minutes total," says Guy Copeland, the meteorological technician who was on duty. "During which time we experienced 71 mph winds and approximately six-tenths of an inch of rain."

He called the National Weather Service in Huntsville before and just after getting the wind measurement. Over about seven minutes, the wind built up from 12 or 14 mph to 71 mph then returned to normal thunderstorm winds, Copeland recalls.

The 71 mph winds broke the previous record measurement at the weather team station at Test Area 1. The old record was 58 mph in January 1983. Hurricanes have wind speeds of 75 mph or more so the winds here were only 4 mph shy of hurricane force.

"It passed right over this trailer and if you'd have been in this trailer you'd have known it was going over, too," says Copeland. He describes it as a severe thunderstorm and not a tornado. Minutes after the measurement, the riverboat SCItanic was capsized in the Tennessee River and 11 people died. Seven others on the boat, owned by SCI Systems Inc. of Huntsville, survived.

There was an estimated \$7,500 in damage at the weather team station. A 2,000-pound Ground Meteorological Device, an antennae that looks like a radar disc, was blown over and so was a wind measuring system at the base of a tower. Three members of the five-member staff came out the next day, Sunday, and repaired the damage with spare parts.

News accounts on the boat accident quoted the wind measurements at Redstone and federal officials investigating the tragedy contacted the weather team.

"With Mr. Copeland calling the National Weather Service office, they were able to verify that a severe thunderstorm did in fact occur and they extended a weather warning to include the counties in the storm's path which probably saved additional lives," says

Douglas Isaacson, chief of the weather team.

Its formal name is ASL (atmospheric sciences laboratory) Redstone Meteorological Team. The team's higher headquarters is at White Sands Missile Range, N.M. At Redstone it is attached to the Test and Evaluation Directorate. Besides providing weather data here, the team also supports the Army Chemical Surety Program at Anniston (Ala.) Army Depot.

Two of the meteorological technicians travel to Anniston at least once a week to check on the equipment there.

Weather data the team provides at Redstone includes temperatures, humidity, surface observations, wind measurements, solar radiation measurements, atmospheric pressures, and upper atmospheric sounding data.

"We also provide weather forecasting services on a local basis, basically for the immediate area (Test Area 1)," says Isaacson.

The team sends up a large balloon each morning Monday through Friday. Attached to it is a radio sonde, an instrument that measures temperature, humidity and pressure at upper levels. The Ground Meteorological Device, the antennae turned over by strong wind, tracks that instrument. "The angle measurements which we receive from the GMD are used to determine the upper level winds," Isaacson says.

Other equipment includes towers with wind sensors and temperature sensors. During the heavy winds July 7, a sensor mounted atop the weather station trailer transmitted to a wind recording device inside the trailer.

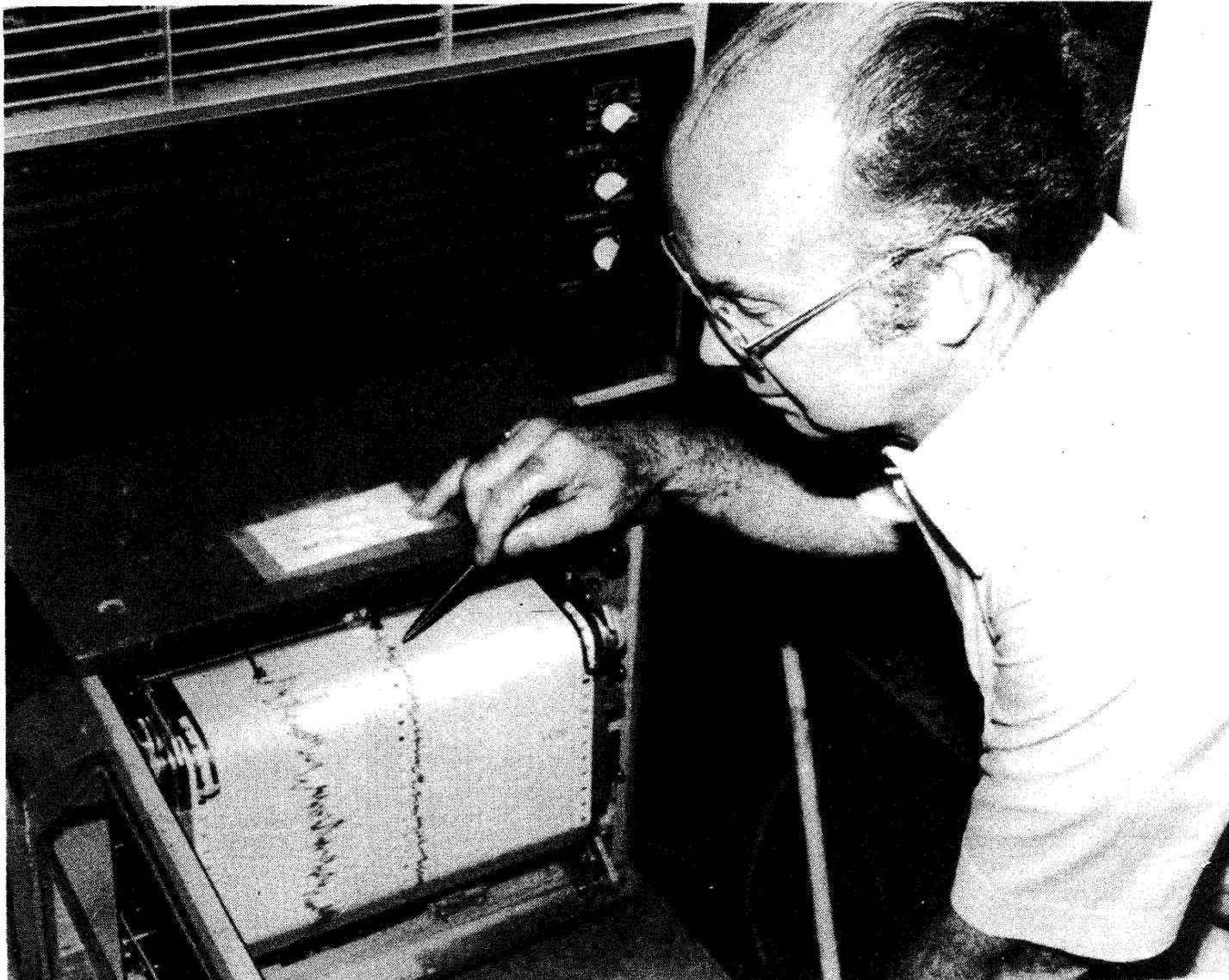
The weather station, on post since around 1970, has been located at Test Area 1 since October 1982. Before then it was at building 7770. In fiscal 1985 the team tentatively plans to support 26 projects here along with providing weather data to a number of directorates.

Isaacson, the team chief since returning to Redstone in July 1982, was stationed with the team as a soldier 1976-77. In September he is to become section chief of the meteorological team at White Sands. Besides Isaacson and Copeland, the other team members here include Douglas Carper, electronic technician, and meteorological technicians Dave Evans and Leo Lachapelle. Copeland will probably remember the weekend shift he had during record-breaking winds.

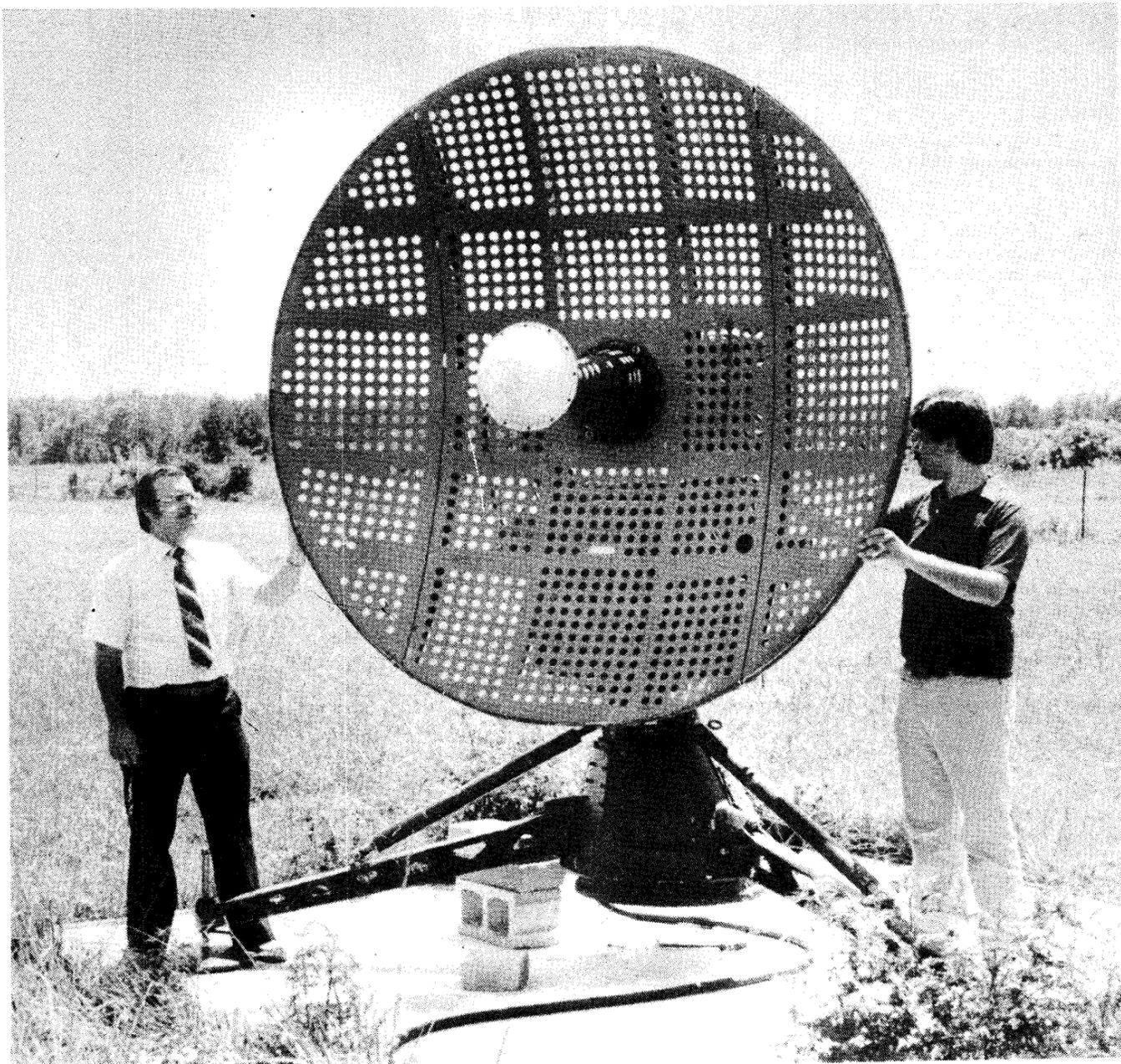
"It was a routine duty, a routine measurement, but the storm was not routine," says Copeland.



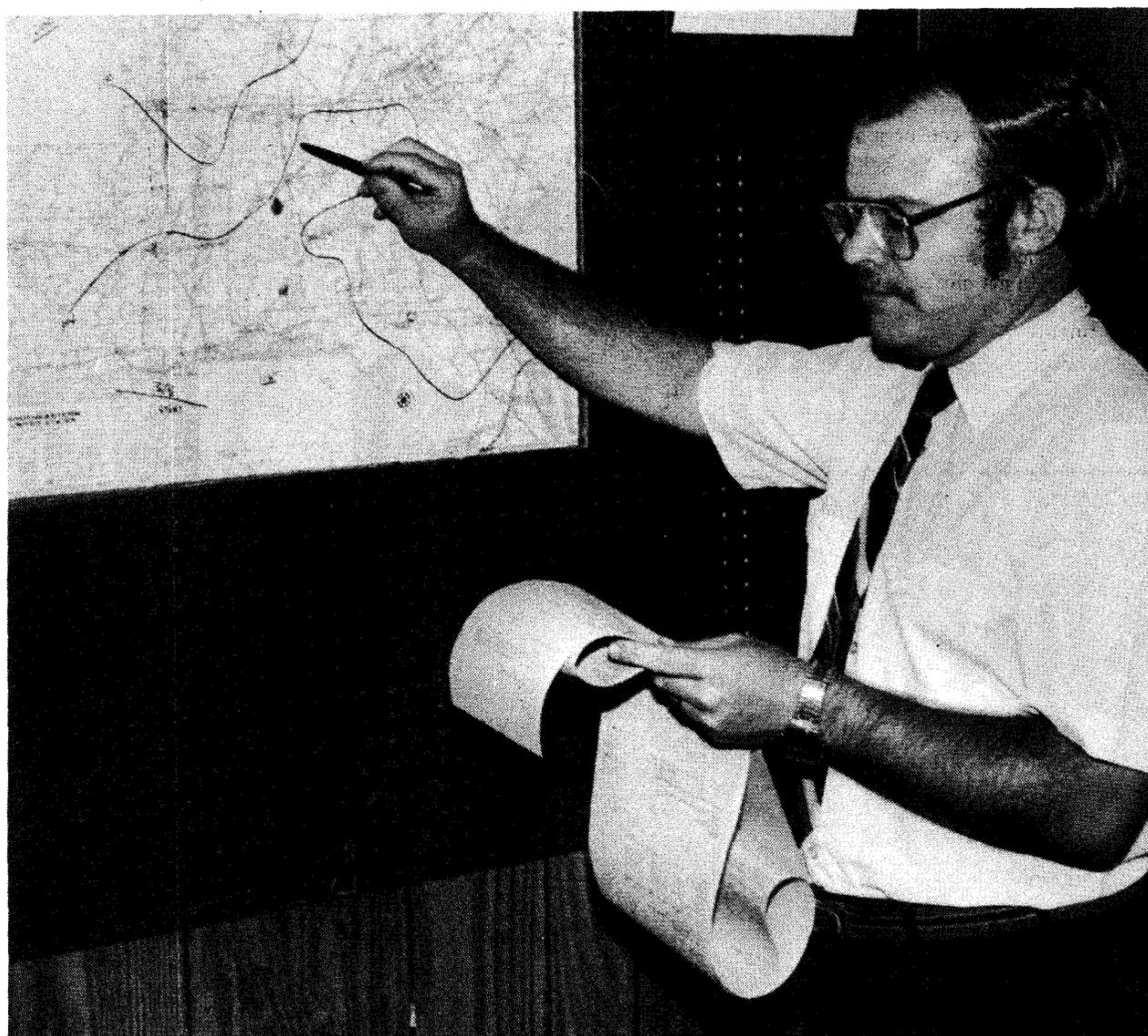
WEATHER BALLOON—Preparing weather balloon from morning release are, left to right, Douglas Carper and Leo Lachapelle.



MEASURING WIND—Guy Copeland, a meteorological technician, reads device that recently recorded 71 mph winds.



AFTER STORM—Douglas Isaacson and Douglas Carper do final calibration checks on Gound Meteorological Device that had to be repaired after recent storm.



FORECASTER—Douglas Isaacson prepares morning weather forecast.

Rules governing POW conduct have changed

BY CAPT. LONNIE N. GROOT
Legal Assistance Officer

"War is like a giant pack rat. It takes something from you and it leaves something behind in its stead. It burned me out in some ways, so that now I feel like an old man, but still sometimes act like a dumb kid. It made me grow up too fast."

Audie Murphy
New York Journal American
Aug. 30, 1955

Audie Murphy was the most decorated GI during World War II and became a Hollywood movie star as a result. But, if you look at his statement, you may see that his post-war feelings weren't overly enthusiastic. The war hero and movie star sounds like Dallas Cowboy Coach Tom Landry would if he said he had "mixed emotions" about winning the Super Bowl. The explanation for the tone of Murphy's comment is that war isn't, and never will be, an experience which only produces medals and glory for conquering heroes. This is particularly true when a soldier is captured and becomes a POW. That's why the Code of Conduct exists for U.S. military personnel. Is "name, rank and serial number" all you need to know if you become a POW? Let's find out.

The Code of Conduct was drafted by the Defense Advising Committee on Prisoners of War following the Korean War and was signed by President Eisenhower in 1955. The code resulted from the failure of our enemies to abide by the Geneva Convention Relative to the Treatment of Prisoners of War. Our Korean War adversaries tried to obtain propaganda materials for psychological warfare efforts and coerce valuable military intelligence from POWs. The treaty violators also attempted to convert POWs. The Geneva Convention does not require a POW to give any information beyond name, rank, identification number, and a date of birth, and prohibits the inhumane treatment of POWs.

What can soldiers expect in the future if they become POWs? Unfortunately, United States experience indicates that American personnel can not be assured of proper treatment and may expect psychological pressure, physical mistreatment, medical neglect, and coercion to make anti-U.S. propaganda statements.

The Code of Conduct was developed to provide U.S. service members with a form of mental defense to resist illegal POW manipulation tactics. Should you expect the Code of Conduct to enable you to withhold all information except your name, rank, ID number, and date of birth?

Claude L. Watkins, a former World War II POW, recognized as a top authority on the Code of Conduct and an expert in POW survival, evasion, escape, and resistance, states that "any prisoner can be made to give more than that—no matter what he was trained to do—if the captor wants him to." Watkins goes on to say that "I've known and talked with hundreds of POWs and I've never had one say 'Hey, I was able to give only my name, rank, service number, and date of birth.' If they want more they'll get more. You'd better be trained how to give them more—but not give them any classified information."

Watkins' statement is borne out by the case of hard core Navy pilot Jeremiah Denton whose lengthy experience as a POW in North Vietnam was dramatized

in a movie starring Hal Holbrook. Denton, the tough Navy pilot, who is now a U.S. Senator from Alabama, "broke" and gave more information than required although the intelligence he gave was outdated and tactically useless by the time he gave it to the North Vietnamese.

The language of the Code of Conduct originally stated that a service member could not disclose anything else. In 1977, President Carter amended that provision to "require" a service member to provide the basic information and the amendment also removed the word "only." His action came after a committee, which included four former POWs, advised the Pentagon "that the Code of Conduct and related training must become more realistic concerning a POWs disclosure of information."

The President also modified the rules relating to who is in command at POW camps when prisoners are from more than one service.

In short, the rules relating to POW conduct have changed and troops need to be fully informed of the current policies which go far beyond "name, rank, ID

Presidential proclamation honors POWs, MIAs

WASHINGTON—Ronald Ragan has signed a presidential proclamation designating July 20, 1984 as "National POW/MIA Recognition Day."

A partial text of the proclamation follows:

"Ever since the Revolutionary War, America's men and women have heroically served their country in times of conflict. In each of America's wars, our prisoners of war have been required to make special sacrifices, serving their country under conditions of hardship. Their burden greatly increased when they were treated in violation of the fundamental standards of morality and international codes of conduct for the treatment of prisoners of war.

"Our POWs and MIAs have earned a very special place in the hearts of all Americans because of their selfless devotion to duty and unflinching courage. We must not forget or fail to honor those who have served their country so faithfully.

"Our nation deeply appreciates the acute suffering and pain experienced by the families of our servicemen held captive or missing in action. The loss of a loved one is a tragic situation under any circumstance, but that burden is magnified when the fate of the loved one is unknown. All Americans fully support efforts to end the uncertainties with which they continue to live.

"We accept and remember our obligation to these missing servicemen. Until the POW/MIA issue is resolved, it will remain a matter of highest national priority. On July 20, 1984, the POW/MIA flag will fly over the White House, the Departments of State and Defense, and the Veteran's Administration as a symbol of our unswerving commitment to achieve the

number, and date of birth." It is Army policy that every soldier will understand the Code of Conduct, its purposes, and its objectives so that he or she "can...appear and defeat decisively, mentally and physically, any enemy of (the) country." Adherence to this policy will enable our captured troops to withstand the horrible pressures of a POW camp and, like Senator Denton, provide the enemy with only information which is tactically and politically useless.

Commanders can contact the staff judge advocate if they desire Code of Conduct instruction for their units. The need for Code of Conduct training is real. Of the forty-two Americans who spent 444 days in Iran as hostages, twenty-one were service members (nine Marines, six Army, three Navy, three Air Force). Several of the military hostages said the Code of Conduct gave them guidance and inspiration when dealing with their captors. Some were also misinformed as to what their responsibilities under the Code of Conduct were. Can we afford to have soldiers captured who do not know how to behave in the national interest?

fullest possible accounting for the servicemen and civilians..."



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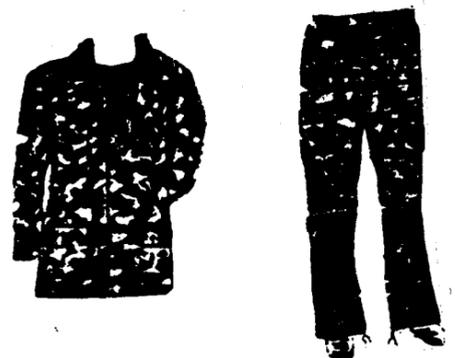
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HHC soldiers practice basic skills

Members of Headquarters and Headquarters Company were tested last week on basic soldiering skills. In recent months they have received refresher training from noncommissioned officers in their company. The classes, held Tuesdays and Thursdays, are ongoing and the next tests are planned for September. "The main purpose is to do our best to keep our soldiers aware of basic soldiering skills," said MSgt. Charlie Roberts, NCOIC for S-3 operations. The training is held in conjunction with the soldiers' daily

duties and not after hours, he said. Around 130 soldiers in HHC MICOM were tested over two days last week. The skills included identifying NATO vehicles, map reading, first aid training, maintaining the rifle, and wearing protective clothing. "We're in the process now of tabulating our score sheets," said Roberts, who was in charge of last Thursday's testing. "We think most of the people did very well."

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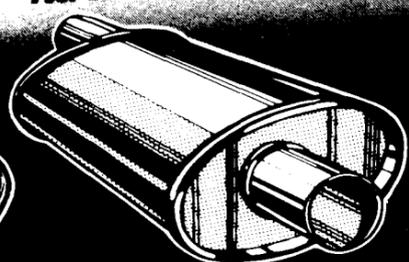
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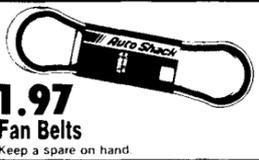
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Post's top soldiers find Army a good experience



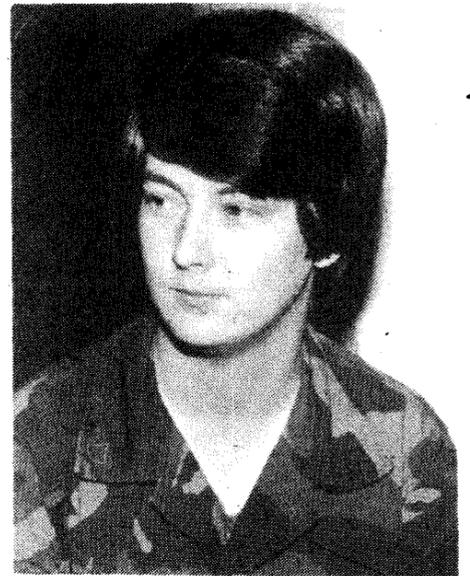
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COLLINS

To top soldiers here the Army is a family, a pleasant surprise, and a good place for career experience.

"It's like a family to me and I've always been happy in it," says PFC Carol Collins of 7th Student Company. She was named post soldier of the month for June.

Other top soldiers include Sp5 Delois Heidelberg, NCO of the quarter for the third quarter of 1984, and PFC Frank Schaeffler, post soldier of the month for July. A board met Friday to decide on the Marine of the quarter.

Collins plans on a long Army career. Her goals include becoming a warrant officer and a drill sergeant. "I hope to get my college in," she adds, "and I'm looking forward to my tour in Germany."

Heidelberg of B Company sees the Army as a good place for experience and says she has learned a lot

about her field of computers.

"I have learned a great deal about computers since I've been in the Army which will probably be of great value to me when and if I decide to get out of the Army," she says. The NCO of the quarter plans to take classes to possibly get a programming degree. She is a computer operator in scheduling in the missile school's professional development training department.

Schaeffler of Company C found the Army to be a pleasant surprise. "I like it very much. Its been a lot better than I thought it would be," he says. "I was kind of wary when I joined but now I've got no complaints whatsoever. I'm going to probably reenlist and make it a career."

Before joining the Army in 1983 when he was 19,

Schaeffler had lived in England since he was 2 1-2 years old. He was born in Tennessee.

"I'm 99 percent sure I'm going to reenlist again and I'm hoping to be sent to Germany, overseas tour," he says. "If I decide to reenlist for a third time, I'll make it a career, no doubt."

The Marine of the quarter is PFC George Nelson, a 20-year-old from Crisfield, Md. who has been here since last November.

"I like the Marines just for the fact that it's the Marines, the few the proud," he said, "the feeling that you're the best, the respect that you get wherever you go."

He plans to stay in at least 20 years and would like to become a sergeant major.



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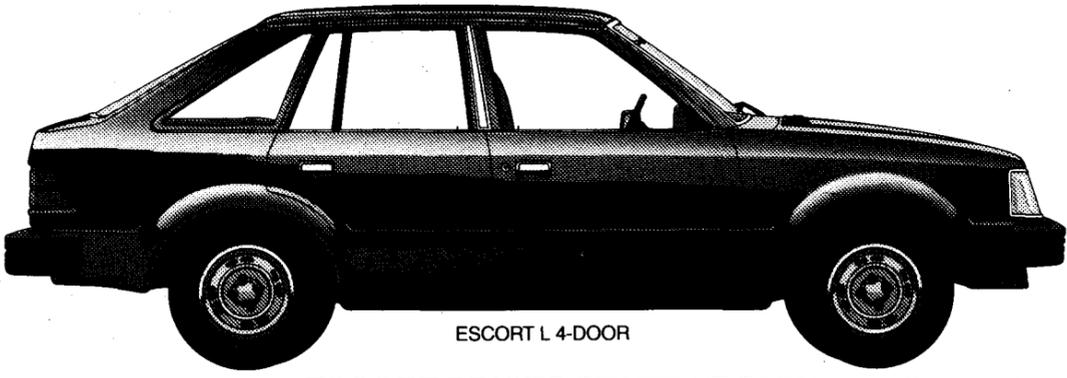
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DATES: MW sessions Sept. 5–Oct. 29; TT sessions Sept. 4–Oct. 25. Sat. sessions Sept. 8–Oct. 27.

REGISTRATION: Continuous through first session. Reservations are required (telephone 837-9726).

FEES: Full-term 300/600 level: \$225 tuition per course plus \$5 registration, or as noted. Application (one-time): \$5 special (non-degree); \$25 regular. Textbooks are additional.

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INFORMATION: Telephone (205) 837-9726 or write P.O. Box 1485, Huntsville, AL 35807.

11-571 RADAR SYSTEMS MW 4:30-6:40 p.m.
An introduction to the theory, functions, and applications of modern radar systems. Background: basic knowledge of circuits and signals. Instructor: Stephen M. Gilbert; Ph.D.; Dynetics, Inc.

11-581 SIGNAL PROCESSING TT 4:30-6:40 p.m.
A study of signal characteristics, detection and estimation, and processing techniques. Background: basic knowledge of signals and higher mathematics. Instructor: Mervin C. Budge; Ph.D.; Dynetics, Inc.

11-611 ANTENNAS AND ARRAYS MW 6:50-9:00 p.m.
A study of the theory and practical design of antennas and arrays. Background: basic knowledge of electromagnetic theory desirable. Instructor: Vernon W. Ramsey; Ph.D.; Boeing Military Airplane Company.

14-521 APPLIED AERODYNAMICS TT 4:30-6:40 p.m.
An introduction to the analysis of atmospheric flight of aircraft and missiles. Background: basic knowledge of fluid mechanics. Instructor: Terry F. Greenwood; Ph.D.; NASA Marshall Space Flight Center.

17-301 COMPUTER PROGRAMMING MW 4:30-6:40 p.m.
An introduction to computer programming using Fortran. Background: basic knowledge of college mathematics. Instructor: Robert R. Covelli; S.M.; System Development Corporation.

17-309 PROGRAMMING LABORATORY *TT 6:50-9:00 p.m.
Hands-on practice using advanced personal computers. Choice of languages. Credit 1.5 units; fee \$120. (*) Primarily hours arranged. Instructor: John L. Montgomery; B.S.M.E.; Dynetics, Inc.; Consultant.

17-514 DATA STRUCTURES TT 4:30-6:40 p.m.
A study of logical data structures and their machine processing. Background: basic knowledge of computer programming. Instructor: Newman V. Vosbury; Ph.D.; System Development Corporation.

17-547 MICROPROCESSOR SYSTEMS TT 6:50-9:00 p.m.
An introduction to the hardware, software, and applications of microprocessors. Background: basic knowledge of electronics and programming. Instructor: J.B. White; Ph.D.; General Electric Company.

17-622 ADVANCED PROGRAMMING: ADA MW 4:30-6:40 p.m.
An examination of the development, structure, and applications of the Ada language. Background: knowledge of high-level programming. Instructor: Marvin Polan; M.Sc.; Teledyne Brown Engineering.

17-674 SOFTWARE COST ANALYSIS Sat. 8:00-12:00 noon
An examination of the cost factors in advanced software development. Background: good knowledge of programming; knowledge of software design desirable. Instructor: Mack W. Alford; M.A.; TRW Defense Systems Group.

21-611 MANAGEMENT RESPONSIBILITIES MW 6:50-9:00 p.m.
An examination of the functional and societal responsibilities of management. Background: degree or equivalent. Instructor: Walter W. Tribble; D.Mgt.; U.S. Army Missile Command.

21-654 REGULATION OF PERSONNEL MW 4:30-6:40 p.m.
A study of federal regulations relating to personnel and human resources management. Background: studies or experience in management. Instructor: John A. Logan; M.Sc.Mgt.; Teledyne Brown Engineering.

24-531 BUDGETING AND FINANCING MW 4:30-6:40 p.m.
A study of the theory and techniques of budgeting and financial management in organizations. Background: basic knowledge of accounting desirable. Instructor: Richard H. Shuford, Jr.; D.B.A.; Management Consultant.

24-552 CONTRACTS ADMINISTRATION TT 4:30-6:40 p.m.
An introduction to contracts administration emphasizing contracting by and with the Federal government. No particular background required. Instructor: Eugene R. Andrzejewski; M.B.A.; Teledyne Brown Engineering.

24-615 ECONOMIC AND LEGAL ISSUES Sat. 8:00-12:00 noon
A seminar on economic and legal issues currently affecting business and government organizations. Background: basic knowledge of economics. Instructor: Orba F. Traylor; Ph.D., J.D.; Consultant.

27-671 R&D PLANNING AND CONTROL TT 6:50-9:00p.m.
An examination of planning and control processes in R&D organizations. Background: studies or experience in management. Instructor: Julian S. Kobler; J.D., D.Sc.; Management Consultant.

31-303 ELEMENTS OF CALCULUS Sat. 8:00-12:00 noon
A concentrated introduction to basic calculus and its application. Background: knowledge of introductory college mathematics. Instructor: Robert R. Covelli; S.M.; System Development Corporation.

31-641 ADVANCED ANALYSIS TECHNIQUES II TT 6:50-9:00 p.m.
A study of vectors, tensors, complex variables, and calculus of variations emphasizing applications. Background: knowledge of differential equations. Instructor: Raymond C. Watson, Jr.; Ph.D.; Southeastern Inst. of Technology.

34-541 OPTICS & ELECTRO-OPTICS TT 6:50-9:00 p.m.
A study of contemporary optics with applications in electro-optical devices. Background: knowledge of physics and mathematics. Instructor: Charles L. Wyman; Ph.D.; NASA Marshall Space Flight Center.

34-633 INFRARED RADIATION TT 4:30-6:40 p.m.
A study of the theory of infrared radiation, characteristics of sources, and radiation calculations. Background: knowledge of optics and mathematics. Instructor: J. William Foreman, Jr.; Ph.D.; Teledyne Brown Engineering.

SHORT-TERM COURSE

11-591 RADAR PRINCIPLES Sept. 17-21; 8:00-12:00 noon
An overview of modern radar theory and applications, primarily for engineers and managers involved in radar-related projects. Not available for academic credit. Instructor: Stephen M. Gilbert, Ph.D.; Dynetics, Inc. Fee: \$350.

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- Missile and Space Systems
- Optical and Electro-Optical Systems
- Radar Systems and Signal Processing
- Research and Engineering Management

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Many of Southeastern's programs might be of considerable value for individuals seeking a change in careers. To assist in developing a background needed for the advanced offerings, the Institute offers a variety of basic courses. Certain of these (such as 17-301, Computer Programming, and 31-303, Elements of Calculus) are provided in the regular curriculum. In addition, many other basic courses are available through independent study.

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