

Message from the Commanding General

To accomplish the Army Materiel Command mission requires thousands of varied skills and much diverse effort. All are important, but one of the most important is communicating. Our official communication system within AMC takes many forms—from face-to-face confrontation in conferences, to written directives, to sophisticated electronic systems.

With this first issue of the AMC News, a new medium of communication for all elements of the AMC workforce becomes available. Unofficial in nature, this new AMC newspaper can fill a void which has long existed. To bring the AMC family closer together—to instill pride in what we are accomplishing—to provide a two-way means of communication between headquarters and the field—these are some of the things we hope to accomplish with the AMC News.

Elsewhere on this page the editor has outlined the purposes and policies of the newspaper. With the help of each of you, I am confident that the AMC News will become the kind of newspaper we want it to be—a new voice for the entire command.



Gen. Henry A. Miley, Jr.
Commander
US Army Materiel Command

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AMC

US ARMY MATERIEL COMMAND

NEWS

WASHINGTON, D.C. NOV. 1972 VOL. 1 NO. 1



Our first edition!

Editorial

Our new newspaper — Its purposes and policies

As the US Army Materiel Command enters its second decade, we begin publication of our first command-wide newspaper—the AMC News. Issued on a monthly basis with a distribution of 20,000, AMC News will chronicle the activities of AMC—the Army's largest employer of civilians.

How can just a few pages of tabloid-sized newsprint even begin to tell what happened last month in AMC? Given this command's diversity of people, places, and programs, it's near impossible. Our 141,000 people scattered far and wide generate so much news on a regular basis that we can only hope to report a small fraction.

Besides, there is more to a newspaper than hard news. The AMC family

offers an incredible wealth of material for a paper—features, pictures, personalities, opinions—you name it.

We have decided, therefore, NOT to attempt to print all of the news all of the time. Instead, we intend to run a representative sampling of each month's goings-on around the command as well as most important hard news items.

Our goal is to show you, the AMC employee, how you and your warehouse, arsenal, machine shop, laboratory, or office fit into the AMC structure. We want to impress you with your importance as a member of the AMC team. You and your co-workers are essential to AMC's overall mission. We want to show you why you are—and why you should be proud of that

fact.

But communication is a two-way affair, so we expect to listen as well as speak. We want you to do some of the talking. For the paper to be successful, we will need your help, your ideas, your suggestions on what should be in the paper. Frankly, we do not plan to do much preaching or tearing down of established institutions (though we might poke some fun at them sometimes). We do plan to put out a readable, honest newspaper. We want to print the kind of paper you'll look forward to receiving. And since you are all sorts of people doing all kinds of jobs at all types of places, we'll try to have something for everybody—from a Wage Board employee painting the inside of a

rebuilt Armored Personnel Carrier to an eminent scientist with degrees out to here.

We want to let you know what's going on at Headquarters, and we want to share with you all the experiences and accomplishments of our major subcommands, installations, and activities. We do not plan to tell you that Susie Smith became engaged last week to Tom Miller, or that Bob Brown got his ten-year pin last Friday. We will, however, spotlight personalities throughout the AMC domain whose experiences, adventures, accomplishments or obstacles surmounted make them newsworthy to everyone.

Eventually we hope to have a "Hot Line" column in which questions of

AMC-wide concern will be answered. The column will not attempt to tell John Jones why he was not selected for the GS-9 vacancy, but will try to explain overall policies for RIFs, promotions, Defense Department, Army and AMC policies—to answer the "why" for all and not the specific individual gripe.

We can't hope to satisfy everyone. You—our readers—range from Wage Board 1's to commanders, from grade school dropouts to PhD's, from teen-aged summer hires to retirees. But bear with us. It took ten years to get this far—to have a newspaper for all of you on the AMC team. And as we noted earlier, this is YOUR newspaper. You make the news in the AMC News.

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AMC — Who we are

We are AMC. Who are we?

We are a nationwide network of 83 military installations and more than 100 activities in the United States and around the world.

We provide the U.S. Army and our other customers with effective, reliable weapons systems for national defense and mutual security. We serve not only the Army, but the Navy, Air Force, Marine Corps, and allied nations as well.

We are 141,000 strong. 11,000 of us are military; 130,000 are civilian.

We oversee an inventory of 28½ BILLION dollars.

We are structured in nine major subordinate commands, each providing management, testing, or support of our many weapons and support items. Our other activities include depots, laboratories, arsenals, schools, maintenance shops, test ranges, proving grounds, and procurement, assistance, and management offices.

But most important, we are people. We are Americans, whether civilian or military, working to keep this country the greatest in the world. We believe in peace, but we put our faith in preparedness. We believe in mutual trust, but we trust in superior strength. We believe in freedom, and we work hard to defend it.

We are AMC.



AMC BUILDING—Now nearing completion in Alexandria, Va. near the Capital Beltway, this 13-story building will be AMC's new home. Final interior work is underway in preparation for the move early next year. The command is presently housed in a temporary structure at Washington National Airport.

Is safety 'for the birds'?

Did you ever see a bird have an accident? Some birds make pretty weird landings. That's **DESIGN ERROR**. Birds get smashed by hail, thunderstorms, etc., but that's **WEATHER FACTOR**. A bird with a broken wing can't fly, but that has to be **MAINTENANCE FAILURE**. And of course the mother bird may push the youngster out of the nest too soon. Call that **SUPERVISORY ERROR**.

What I mean is the plain old garden variety **BIRD ERROR** accident. Like a bird fails to pay attention to what he's doing and flies right into a tree trunk. Or he gets so engrossed in looking at something that he quits flapping his wings and goes crashing to the ground.

Why is it then that this lowly creature, who can't read, can't reason, and can't benefit from other birds' experience, and who knows only what instinct and his mama taught him, goes through life without having an accident, and we thinking, reasoning, superior, intelligent human critters can't do likewise?

The lead paragraphs were originally printed in the US Army Aviation Digest and were obviously aimed at pilots in the interest of aviation safety, but the implication of the article has some value to us all, for few of the animals with which we are familiar have accidents—few, that is, except the human animal. Thanks to Mr. Nader, many design errors in the autos we drive are being corrected, but the design error in the operator (or maybe the "nut behind the wheel") continues to manifest itself. Why is it (or "how come") the majority of the drivers in this country refuse to wear seat belts? Certainly their value has been adequately demonstrated. How come so few people render the small courtesies in driving that not only make driving more pleasant, but safer as well? How come we continue to take risks which we know exist, putting up with bad tires, poor brakes, excess speed? How come?

Or take the case of safety around the home. How come all of us continue to use "handy" chairs for step ladders, or put off repairing that loose rug or bad electrical socket or loose stair rail? Why is it that we yank electrical cords from the wall rather than grasping the plug correctly? How many back strains must we suffer because we fail to lift heavy, bulky objects correctly? The list goes on and on. How come?

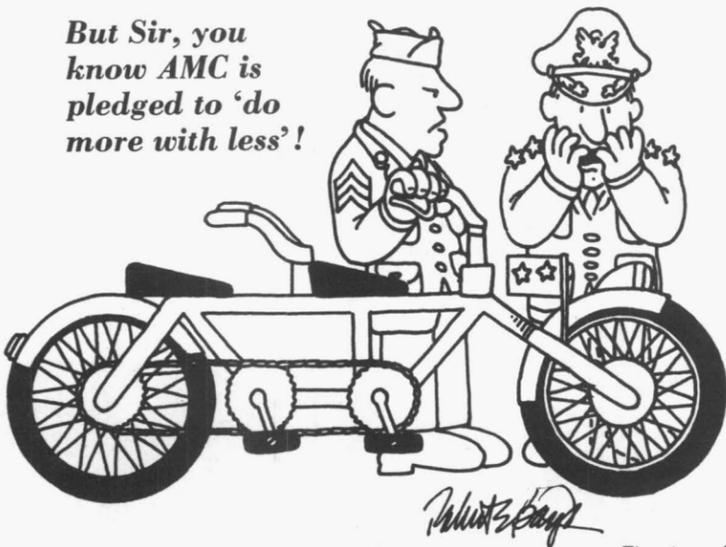
Perhaps the best publicized "how come" deals with smoking. How come so many people choose to ignore the medical evidence?

When we're dealing with things mechanical like cars or airplanes, we can sometimes pass a part of the blame off to design error, or weather, or sometimes even supervisory error, but in the final analysis, the majority of the blame must rest on those special, but peculiar, "birds" that are human. The obvious answer to most of the "how comes" is that most of us are not only willing to accept a few risks, but may even brag a little about those we've taken and gotten by with: "I drove 250 miles in three hours flat." (Did you ever hear anyone brag about how slowly they drove or how safely?)

So what's the point? Just this—the next time you're tempted to cheat just a little on safety, you might remember that lowly little bird who can't read, or write, or reason or think—but who doesn't have accidents. How come?

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But Sir, you know AMC is pledged to 'do more with less'!



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Materiel Command GEN Henry A. Miley, Jr.
Information Officer COL Robert J. Berens
Editor Bud Stolker

Get involved... for good. Support CFC.



YOU WON'T HURT ME, WILL YOU? . . . Timothy Johnson was rewarded with a banana so that he wouldn't cry when he got his blood test for sickle cell anemia. Little Tim shoved the banana in his pocket and bravely marched right up to nurse Betty Pearson for his smear test. The scene took place recently at Sharpe

Army Depot, Calif. Sickle cell anemia is only one of many diseases your contribution to the Combined Federal Campaign can help curb. CFC is people helping people. Please give. Headquarters campaign ends November 24; dates at field installations may vary. Check with your local key man.

EEO

New law protects rights of federal employees

US CIVIL SERVICE COMMISSION, Washington—On March 24, 1972, President Nixon signed Public Law 92-261 which, among other things, places federal employees and agencies under the Civil Rights Act of 1964, as amended. For the first time, it gives the Civil Service Commission statutory authority to see that all personnel actions in the federal government are not only free from discrimination, but are positively aimed at equality of opportunity.

The act represents the fruit of many years of hard work by civil rights groups, various committees of Congress, and the executive branch. The President and the administration supported it strongly as it worked its way through Congress, and the Civil Service Commission worked closely with Congress in developing the legislation as it affects federal employees.

Its name: the Equal Employment Opportunity Act of 1972.

The act opens up new avenues for enforcement. For federal employment it places responsibility for enforcement squarely on the Civil Service Commission.

But the act goes far beyond enforcement alone. It requires substantially more affirmative action on the part of federal agencies, and substantially more monitoring of such action by the Civil Service Commission.

In short, while the total integration of equal employment opportunity into every aspect of personnel policy and practice dealing with employees of the federal government remains an administrative commitment, it is now also the law of the land.

Where such integration is lacking, and when an agency overlooks a situation that needs correction, the Commission now has additional authority to correct matters "through appropriate remedies."

These remedies may be reinstatement or hiring with or without back pay—a new authority granted the Commission. Long-standing, of course, is the authority under executive order to issue such rules, regulations, and instructions in this area as the Commission deems necessary. The head of each agency is now obligated by statute to comply with such orders and instructions.

Furthermore, federal employees who allege discrimination based on race, color, religion, sex, or national origin are guaranteed access to the courts if they are not satisfied with the final action taken on their complaints by an agency or by the Commission's Board of Appeals and Review.

Effective the day it was signed, the act ushers in a new era for the federal Equal Employment Opportunity program.

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Civil Service Commission news

Time-in-grade rules revoked

Time-in-grade requirements for movement from wage to General Schedule positions have been revoked by the US Civil Service Commission.

The Commission originally established these requirements in February 1969, to prevent a person from being placed in a high grade General Schedule job through the "back door" route of getting a low-grade competitive appointment to a wage position and then receiving a multi-grade promotion—far outside the normal promotion pattern—to the position for which he was really hired.

A new regulation established by the Commission emphasizes the need for federal agencies to be sure appointments from competitive examinations and subsequent position changes are fully consistent with the spirit as well as the letter of merit principles.

The new regulation states: "As one factor in assessing an agency's compliance with competitive principles, the Commission will consider the relationship between appointments from competitive examinations and subsequent position changes. When the Commission finds that an agency has not complied with competitive principles, either in an individual case or on a program basis, the Commission will require the agency to take appropriate corrective action."

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Health rates changed; Open season scheduled

US CIVIL SERVICE COMMISSION, Washington—The US Civil Service Commission has announced changes in benefits and premium rates for the 38 existing plans and two new plans that will be participating in the Federal Employees Health Benefits Program in 1973. Premiums for both of the government-wide plans will be reduced for the first time in the 12-year history of the program.

An "open season" is scheduled for November 15-30, during which time eligible employees may newly enroll and employees and retirees already enrolled may change from one plan or option to another, or from self-only to family coverage.

Changes made by employees and annuitants during the open season will take effect the first pay period in January 1973, the same time that new premium rates and benefit changes become effective.

Premium rates for 32 existing plans will be increased by varying amounts in

1973 to pay for improved benefits, to enable a plan to meet its obligations to subscribers, or both. Four existing plans will hold 1973 rates to 1972 levels.

Premiums for the two government-wide plans, under which more than three-fourths of all employees and annuitants are covered, will be reduced in 1973.

Premium rates for the government-wide Service Benefit Plan (Blue Cross-Blue Shield) will be reduced by 10 per cent in the high option and 15 per cent in the low option. Rates for the Government-wide Indemnity Benefit Plan (Aetna) will be reduced 5 per cent for both high and low option.

The Commission said these reductions were made possible in part by price controls which went into effect in August 1971, resulting in favorable financial experience for both government-wide plans in the last half of 1971 and in 1972.

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MICOM updates Honest John

HQ, US ARMY MISSILE COMMAND, Huntsville, Ala.—Army Missile Command (MICOM) engineers have developed and successfully flight tested an inexpensive guidance system that functions for less than four seconds, yet substantially improves accuracy of a large operational Army rocket.

The guidance package has been successfully flight tested twice using the Improved Honest John with additional flights planned at White Sands Missile Range later this year. Accuracy of the rocket has been dramatically improved by use of this guidance system.

An Honest John rocket is fired from a launch rail, then follows a ballistic trajectory. Without self-contained guidance, its accuracy can be adversely affected by wind and other factors.

This guidance system, developed by members

of the Research, Development, Engineering and Missile Systems Laboratory of the Missile Command, has been packaged to fit around the rocket's motor. It thus does not require removal of the motor or similar costly and time-consuming modifications to the rocket. The launcher being used in the tests is the standard device now used by Honest John tactical units.

The fluidic control system consists of pressurized nitrogen, a constant gas flow regulator, a fluidic gyro, a modulator and four actuator vanes. The vanes are installed inside the rocket motor and deflect its thrust during system operation to steer the rocket while the motor burns.

First fielded with Army units in 1954, the Honest John rocket completed its modernization in 1961 and is still in wide use today. It has a range of up to 20 miles.

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MERDC given Aberdeen lab

HQ, US ARMY MATERIEL COMMAND, Washington—The US Army Mobility Equipment Research and Development Center, Fort Belvoir, Va., has acquired a new laboratory and an additional mission. The Coating and Chemical Laboratory at Aberdeen Proving Ground, Maryland, will become a branch of the R&D Center, while continuing to operate at its present location.

The Laboratory brings to MERDC the function of a lead laboratory for mobile equipment air pollution control, and total management of the AMC program in fuels, lubricants, hydraulic fluids and preservatives. Its researchers focus on materials, rather than hardware or systems, that will improve the protection of military equipment from adverse environmental elements, improve its operational efficiency and prolong its service life. The Coating and Chemical Lab is also responsible for developing, writing and updating military and federal specifications for materials related to its mission.

Organizationally, the Laboratory will become the fifth technical department under Colonel Bennett L. Lewis, Commanding Officer of MERDC, operating on a par with the current Countermeasures/Counter Intrusion, Electrotechnology, Mechanical Technology, and Military Technology departments. Mr. Harry L. Ammlung will continue as director of the Laboratory.

A sub-activity of the Coating and Chemical Laboratory, the US Army Fuels and Lubricants Laboratory at San Antonio, Texas, is also included in the in-place transfer.

The transfer of the Laboratory to MERDC conforms to overall realignment plans of the Army Materiel Command. AMC's goal is to best use and conserve its total manpower resources in the wake of dwindling defense budgets. This transfer is related to the disestablishment of the Aberdeen Research and Development Center (ARDC). Two other labs formerly under ARDC, the Ballistic Research Laboratory and the Human Engineering Laboratory, now report directly to AMC Headquarters.

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New ribbon bridge a winner

HQ, US ARMY MATERIEL COMMAND, Washington—The US Army Mobility Equipment Research and Development Center (MERDC), Fort Belvoir, Va., has been commended by the Department of the Army for its achievement in developing an improved floating bridge in the near record time of 33 months, with an expenditure of little more than \$3 million.

The Ribbon Bridge, as the new bridge is called, features fast assembly and superior performance in comparison with equipment now in the Army

WECOM's new howitzer under test

HQ, US ARMY MATERIEL COMMAND, Washington—Two prototype models of a new 155 millimeter artillery weapon for the Army have been produced and are undergoing tests at Aberdeen Proving Ground, Maryland.

The new weapon, designated the XM198, is to replace the Army's 30 year old M114A1 howitzer. Plans call for the new howitzer to be placed in the hands of troops in the mid-70's. According to Colonel S.T. Post, Project Manager of Cannon Artillery Weapon Systems, US Army Weapons Command (WECOM), Rock Island, Ill., one of the advantages of the new field piece is extended range, enough to match the distance of shells fired by similar size cannon fielded by Warsaw Pact Forces.

The first Advanced Development prototype model was designed and pro-

duced by WECOM in 1969. That model then underwent a series of firing and road tests. Results confirmed that the weapon concept was feasible and met requirements specified by the US Army Combat Developments Command.

A total of ten prototype models are scheduled to be produced at Rock Island Arsenal. Two of them have already been built. The cannon for the

system is being provided by Watervliet Arsenal, New York, and fire control (aiming devices) by Frankford Arsenal, Philadelphia. Carriage and recoil mechanisms are made at Rock Island Arsenal.

When all tests and evaluations have been made and standards met, Rock Island Arsenal will mass produce the weapon.

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AMC saved \$329 million in Fiscal Year 1972

Army Materiel Command (AMC) has exceeded its Department of the Army assigned \$200 million command-wide cost reduction goal by a whopping 165 percent, accounting for a Fiscal Year 1972 savings of \$329 million.

This year's achievements are expected to yield three-year total savings (FY 72-74) of \$557 million.

The Army Cost Reduction Program is aimed at reducing costs in twelve major management areas of emphasis.

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AMC has met or exceeded its annual cost reduction goals in each of the ten years the program has been in existence. The current Fiscal Year savings exceeds AMC's annual goal by the highest margin since 1967 and surpasses the entire Army-wide goal which had been set at \$300 million.

A major contribution to the Command's record annual savings is credited to AMC's nine major subordinate commands. Assigned 86 percent of the command-wide dollar goal, they collectively surpassed it by 61 percent. The contributions of the nine ranged from 120 percent of goal achieved by the Mobility Equipment Command, St. Louis, Mo., to the 205 percent chalked up by the Electronics Command at Fort Monmouth, N.J.

AMC's sixteen depots, located in various parts of the country, individually and collectively surpassed assigned goals with performance ranging from 105 percent by the Atlanta (Ga.) Army Depot to 345 percent by the Sharpe Army Depot in Lathrop, California.

Other activities such as class managers, laboratories, training agencies, etc., performed at 205 percent of the assigned goal.

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Raytheon gets Dragon missile contract

HQ, US ARMY MISSILE COMMAND, Huntsville, Ala.—The Missile Command (MICOM) has awarded a \$2.7 million contract to the Raytheon Company as an alternate producer of Dragon missiles, a man-portable, shoulder-fired anti-tank weapon.

Raytheon, Chrysler Corporation, Philco-Ford Corporation and Ling-Temco-Vought submitted proposals on the work in response to an invitation to bid issued by MICOM to more than 30 qualified missile producers. Raytheon was the low bidder on the firm fixed price contract.

Raytheon will produce a relatively small quantity of missiles for delivery in 1974. Should those missiles pass

Army qualification tests as expected, the contract provides options for additional production quantities, also at a firm fixed price.

Once Raytheon qualifies as a second source for the missile, MICOM plans a winner-take-all competition between McDonnell-Douglas Corporation, developer of the weapon system and current producer, and Raytheon with the majority of the Army's long term production requirement being awarded to the low bidder.

The procurement technique of establishing a qualified second source producer and conducting a price competition for long term production requirements has been used twice be-

fore by the Missile Command. Multi-million dollar savings resulted from competition in each instance.

Dragon is far superior in range, accuracy and lethality to the 90mm recoilless rifle which it will replace. The weapon system consists of three main items: a tracker, a recoilless launcher and a missile. The tracker includes a telescope for the gunner to sight the target, a sensing device and an electronics package. It is reuseable and is attached to the launcher prior to firing. The wire-guided missile is sealed in a carrying case which also serves as the launcher.

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Lance contract goes to Vought

HQ, US ARMY MISSILE COMMAND, Huntsville, Alabama—The Army Missile Command awarded \$25.1 million last month to Vought Missiles and Space Company for procurement of Lance missiles and ground support equipment.

This is the third production buy of Lance, which is designed to ultimately replace both the Sergeant and Honest John weapons. The first Army Lance battalion has been formed and is training at Fort Sill, Okla.

Brigadier General Robert J. Proudfoot at Redstone Arsenal, Ala., is

project manager for the Lance battle-field missile, which can go anywhere the soldier goes under all weather and terrain conditions.

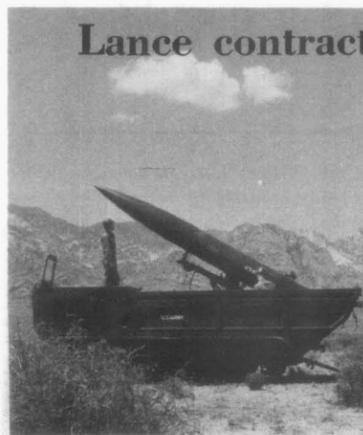
Highly mobile, Lance can travel across almost any terrain, can swim across deep inland waterways, can fly by plane or helicopter. It can destroy enemy troop concentrations, supply depots, transportation routes and similar targets.

Most of the work under the contract will be performed at Sterling Heights, Mich.

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DRAGON TEST FIRING—Nose of missile is just clearing launcher.



New survivor benefits explained

Active duty and retired Army personnel are asking about the new Survivor Benefit Plan (SBP) recently enacted by Congress. They want to know what's in it for them; others ask how to join.

In part, this is how the new law looks:

It replaces the Retired Serviceman's Family Protection Plan (RSFPP) for those now on active duty. Many retirees rejected RSFPP because of its high cost and restrictive and inflexible provisions.

The new law provides a fair level of income replacement for survivors of retired military personnel, calls for cost sharing at a reasonable level by retirees and the U.S. Government, and is easier to understand than the RSFPP.

A serviceman can enter the SBP as soon as he retires. Those who are now retired are eligible for the plan regardless of age, but they only have one year from date of enactment to enter the program.

Provision is made for a survivor annuity of up to 55 percent of retired pay. This same percentage is also used in computing Civil Service survivor annuities.

When a serviceman retires, he pays 2½ percent on the first \$300 of his designated base amount and 10 percent for anything above that figure up to a maximum of his retired pay. For example, if his base amount is \$500 a month, the annuity is \$275 and the cost is \$27.50 a month. This

\$27.50 represents approximately 60 percent of the cost of the annuity; the government pays the rest. The minimum base amount is \$300. However, if your retirement pay is less than \$300 per month, you can elect an annuity in the amount of your total retirement pay.

Unmarried persons can enter the plan and elect an annuity to be paid to another person with an insurable interest in him. The cost sharing formula is slightly more than for a married retiree.

Enrollment for the full annuity at retirement for servicemen with a spouse or dependent child is automatic unless the serviceman designates a lesser amount. As presently planned, this must be done 60 days before retirement. If less than the full annuity is selected, the Army must notify the spouse in writing.

The annuity ceases if a widow remarries before age 60; however, if she remarries after 60, it continues. If she remarries before age 60 and the marriage is terminated, the annuity will resume. At age 62 the widow, with no dependent children or one dependent child, will have the Social Security survivor benefit attributable to military service offset from the annuity.

No widow of a retirement-eligible member dying on active duty will receive less than a widow of a similar member (same grade and length of service) dying in retirement.



CHIEF WARRANT OFFICER Lester M. Whiteis, Jr., who recently received the Distinguished Flying Cross with First and Second Oak Leaf Clusters. CW3 Whiteis, presently assigned to the US Army Aviation Systems Command in St. Louis, was honored for his extraordinary achievements as a member of the first detachment in Vietnam equipped with the Army's new airborne TOW missile. He actively participated in more than 25 aerial missions over hostile territory.

During over 100 missions flown, the all-volunteer group destroyed 24 tanks, numerous armored personnel carriers, trucks, artillery pieces, machine guns, and rocket and anti-aircraft positions with no losses in spite of heavy enemy fire. The group also performed night experiments with the prototype missiles and trained replacement crews.

Survivor annuities will continue to be paid under RSFPP for as long as there are eligible survivors.

Present widows of retirees will be guaranteed a minimum income of about \$2,120 annually. Present participants in RSFPP will be allowed

to drop RSFPP and elect a survivor annuity under the provisions of the new plan. Alternatively, they will be allowed to continue to participate in RSFPP and elect into the new plan up to a maximum survivor benefit level of 100 percent of retired pay.

After hours, WAC is Red Cross volunteer

WHITE SANDS MISSILE RANGE, N.M.—Eight hours work each day suffices for most of us. After all, who in his right mind would ask for more?

One member of the Women's Army Corps at White Sands Missile Range

does just that—after serving as a clerk/typist in the chaplain's office during the day, Private First Class Edith Wyatt volunteers her evenings at McAfee Army Hospital.

"In the eighteen-and-one-half years

I've been in the service," said Lieutenant Colonel Clara Rice, chief of nursing at the hospital, "this is the first time I've seen a young WAC so interested in something outside of her immediate job that she would volunteer so much of her time."

As a Red Cross volunteer, PFC Wyatt spends much of her off-duty time helping with routine tasks at the hospital's medical surgical ward. Captain Paul Steinbach, one of her co-workers in the ward, commented, "She is especially helpful when it comes to feeding the small children too small to feed themselves."

PFC Wyatt radiates enthusiasm at the mention of children. "Those kids—I wish you could see them. They never let you get bored, for one thing. You play with the children and all of a sudden all your problems are gone. They brighten your day," she said.

When she first began her volunteer work at the hospital in March, her duties were at the front desk. Ward duty is her first love, though, and she soon returned to it. Her talkative nature has led her to an understanding of the sick person's need to talk to someone; she enjoys that part of her

work. "Some of them get so bored. I really feel sorry for them."

She herself finds life in the desert lacking. "It's too desert. There's not enough recreation and life for a young military person," she said, thus accounting for the extra time she has to devote to her Red Cross work. Barring nights for duty, she works at the hospital every week night until 11:00.

The soft-spoken WAC praises her co-workers at McAfee Hospital. "The doctors and nurses are nice. They have a lot of patience with a Red Cross volunteer. They make you feel like you're really doing something."

PFC Wyatt began her Red Cross volunteer work at the VA hospital in her hometown in Salisbury, N.C. during high school. "It was much sadder there," she said. "Many old veterans were sent there instead of to an old folks' home."

She attended Marygrove College in Detroit before enlisting in the Army last October "out of curiosity." The curiosity netted her basic training at Ft. McClellan, Ala. She has been stationed at White Sands since February, and plans to re-enlist when the time comes. "I'm going to re-up, but I won't say I'll be a lifer," she said.

Discounting her college experience as a mere extension of high school, she credits the Army with helping her to become an independent person. "It makes you grow up," she said. "If you come in the Army a child, you're going out a woman, whether you want to or not."

Her plans within her Army future include going into recruitment, with the aim of helping confused young women. After that, she is considering the possibility of a nursing career. "A nurse has more time to be with the patients than a doctor does," she said, "and I wouldn't want to be a doctor for that reason. Some of the patients just want to sit down and talk to you."

Even if she does not become a nurse, though, the friendly young woman plans to continue hospital work. "If I couldn't become a nurse, I'd just be a Red Cross volunteer. That way, even if I couldn't get the credit, I'd still get the mileage."

"I don't think I could accept pay for it anyway," she continued. "Why should I get paid when I'm helping somebody else? That's enough pay in itself."



EVEN VOLUNTEERS are required to know the status of the patients in McAfee Hospital. PFC Edith Wyatt confers with medical surgical ward nurse Captain Paul Steinbach regularly.

Legal aid for soldiers:

More on the way

HQ, U.S. ARMY MATERIEL COMMAND, Washington—Soldiers at Aberdeen Proving Ground and Edgewood Arsenal, Md. will soon receive expanded legal services under a pilot program already in effect in New Jersey.

The Army's Pilot Legal Assistance Program will provide lawyers to represent military personnel and their dependents in court in those situations where such personnel cannot afford the fees of civilian lawyers. Under the present legal assistance program, military lawyers are restricted to office counseling.

First established at Fort Monmouth, N.J., home of AMC's Electronics Command (ECOM), and at Fort Dix, N.J., the program is an apparent success in the Garden State. Even before the end of its one-year trial run the Department of Defense extended it for another year. Now the program is being continued indefinitely.

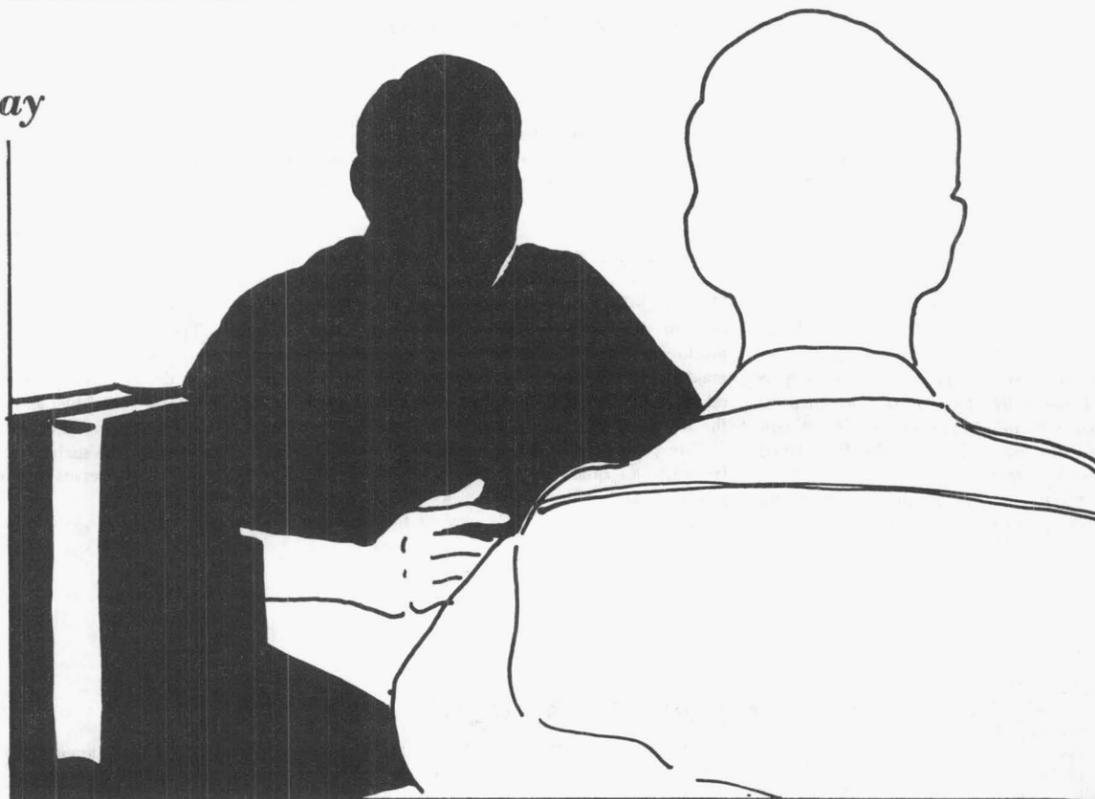
Lawyers assigned to the Maryland program, which closely resembles the New Jersey program, will represent eligible clients in both criminal and civil courts. The representation will, in general, extend to all types of cases involving the personal affairs of the client. These include domestic relations, small claims, landlord-tenant activities and criminal offenses. Military justice mat-

ters and problems involving private income-producing businesses of the client do not qualify under this program.

The basic standard of eligibility for assistance under the Pilot Legal Assistance Program is economic hardship. Soldiers in the grade of E-4 (corporal or specialist four) and below, and their dependents, may generally be accepted as clients. Even in this category, those persons able to pay legal fees without too much difficulty will need to retain civilian counsel at their own expense. Those in the grades of E-5 (sergeant) and above, and their dependents, may also be eligible provided they establish an economic necessity which meets this basic standard.

The pilot programs are not intended to deprive civilian attorneys of potential sources of income, but rather to provide legal services to eligible persons who otherwise would not have an attorney.

The programs are a Department of Defense-wide effort. The Army was the first military branch to obtain authorization for a test from one of the states (New Jersey). Officials of the state and county bar associations and the Supreme Court of the State of New Jersey indicated their support, and the first program began in February 1971.



Background:

Legal aid

The Armed Forces Legal Assistance Program was begun during World War II with the support of the American Bar Association. It has helped millions of soldiers, sailors, marines, airmen, and coastguardsmen. Lawyers in uniform

have, over the years, provided office-type legal advice to their servicemen-clients.

The personal legal problems facing the members of our armed forces arise in part from the nature of the induction process, in part from the transient nature of a military society, and in part from the concept of the citizen-soldier.

One of the major efforts being made by the bench and bar throughout the

United States today is to make justice equally available to both rich and poor alike. This goal will be reached only when all classes of people have equal access to the judicial process for the resolution of their disputes. The Army Materiel Command and the Department of Defense share this goal with the distinguished leaders of the legal profession.

Military

Notes:

Seminar stresses motivation

HQ, US ARMY MATERIEL COMMAND, Washington—The first annual Army-wide Management Practices in TOE (Tables of Organization and Equipment) Units seminar took place in Washington during September. Hosted by the Comptroller of the Army, the seminar had as its theme "Motivation for Greater Productivity" through MAP-TOE.

The MAP-TOE program is designed to improve military management procedures. Its basic concept is "there is a better way." By teaching supervisors to recognize and solve bottlenecks and work repetition, MAP-TOE can contribute across the board to the improvement of any Army activity.

Representatives from all major Army commands reported the results of their local MAP-TOE programs. In AMC, the Test and Evaluation Command (TECOM) was most successful in implementing the management improvements. Robert Page of TECOM outlined that command's experience under MAP-TOE:

- an estimated \$455,303 saved during MAP-TOE's first year of operation there

- 80% of TECOM's top managers trained in MAP-TOE techniques by the end of last June.

Army to allow early outs

DEPARTMENT OF DEFENSE, Washington—The Army will observe liberal leave policies and permit early separation of personnel for the 1972-73 Christmas-New Year's holiday season.

Enlisted personnel will be granted early separation if their terms of service expire between December 18, 1972 and January 5, 1973. Officers whose release dates occur between those dates will also be entitled to early separation. Those eligible will be processed during the period December 11-20, 1972.

The holiday leave period world-wide will run from December 21, 1972 through January 5, 1973.

New man in I. G. Office

HQ, US ARMY MATERIEL COMMAND, Washington—For the first time since its establishment, AMC Headquarters has an enlisted man in the Inspector General office. Sergeant Major Albert E. Forlenzo reported for duty in September following a tour with the Third Brigade, First Air Cavalry Division, Vietnam, where he held the position of Brigade AG Sergeant Major.

In his new Headquarters assignment, SGM Forlenzo will act as the enlisted personnel ombudsman at HQ and in the field on annual general inspections. He has extensive background experience in personnel and administration attained during his 25 years of Army service. His present assignment is the result of a memorandum from retired Army Chief of Staff General William C. Westmoreland to all Army Inspectors General, stressing the need for an enlisted voice in the command structure of the Modern Volunteer Army.

White Sands hosts mountain training

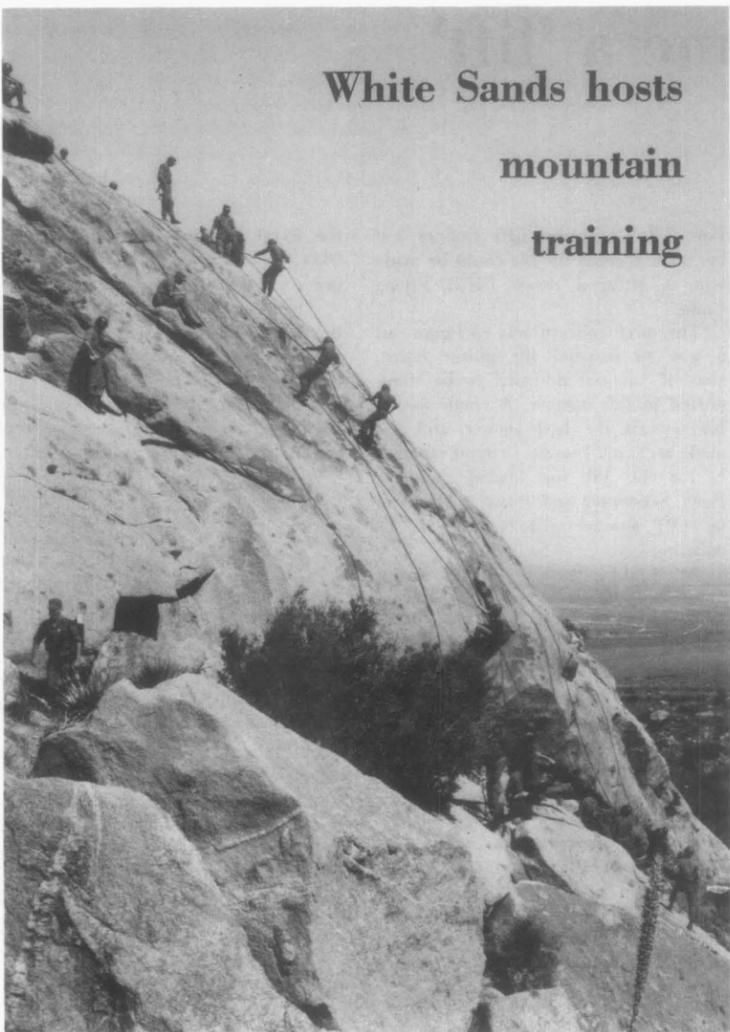


Photo by Frank Ontiveros

WHITE SANDS MISSILE RANGE, N.M.—A Fort Bragg, N.C., soldier grasped a rope rigging, part of equipment proffered by this test range, gingerly inched his way to the abrupt edge of an Organ Mountain peak, cast a wanton glance toward the Tularosa Basin below and rappelled his way down a 60-foot vertical drop.

Four-hundred thirty-five others followed him as soldiers from the East and West teamed in late September to bring the first official Army mountain training to the White Sands Missile Range area.

The trainees, men of the 2nd Battalion, 504th Infantry, 82nd Airborne Division, conquered the mountain peaks, some nearly 9,000-feet high, under the supervision of airborne rangers from the Ranger School at Fort Benning, Ga. Both White Sands and Fort Bliss, Tex., supported the effort.

The soldiers arrived in the Southwest Sept. 20 when they jumped from an Air Force C-141 Starlifter into the Coe Lake area, 12 miles south of the nation's only all-overland missile range. They camped at nearby Dona Ana Range camp, where the unit participated in three days of desert training. Three days were allotted for the mountain exercise before the unit left Sept. 26.

One who came back: He re-ups, tells why

SIERRA ARMY DEPOT, Herlong, Calif.—Sergeant John Schwartz, who had decided to terminate his military career at the end of his prior enlistment, returned to the 980th Military Police Company at Sierra Army Depot after spending some 40 days as a civilian in his home town of Decatur, Ill.

"Before my enlistment expired on July 10 the pastures looked greener on

the outside, so I decided to go back to my old job in Decatur," SGT Schwartz said. "It didn't take long, however, for me to realize how much I liked the Army and how much the Modern Volunteer Army has to offer.

"First of all it offers a challenging career with promotional opportunities commensurate with effort and ability. Then when I weighed all the other opportunities offered—job satisfaction, a good salary, travel, educational opportunities, free housing, early retirement, dental and medical care—my mind was made up to pursue an Army career.

"Why did I request reassignment to the 980th M.P. Co.? The Company is a good outfit, and we like the people as well as the area. My wife, Marsha, and I felt that Herlong was our second home and we wanted to come back."

Sergeant Schwartz, who was stationed at Sierra for 20 months of his previous enlistment, earned the Army Commendation Medal for his outstanding service. He was also selected as Soldier of the Month and Soldier of the Quarter while there. In March he was designated honor graduate at the Basic Leadership Course at the Presidio of San Francisco.

Needless to say, the depot and the company were glad that he decided to return.



DID YOU KNOW—A great number of Army developments have found beneficial use in civilian life. For instance, mechanical smoke generators were originally developed by the Army to produce battlefield smokescreens. Now this application is widely used in agriculture, where, for example, orchard trees are treated with chemical fogs.

Medical scholarships offered

DEPARTMENT OF DEFENSE, Washington—Assistant Secretary of Defense for Health and Environment Richard S. Wilbur has announced that Department of Defense scholarships, paying tuition and fees plus \$400 a month, are now available to male and female medical students enrolled in or accepted by accredited institutions.

The scholarships are being offered by the Army, Navy and Air Force under the Armed Forces Health Professions Scholarship Program, established by the Department of Defense to help provide qualified medical officers for the military services.

Under the program, each Military Department including the Army receives a prorated share of the scholarships, and may enroll a combined total of no more than 5,000 scholarship students at a given time.

Most of the scholarships will be used to train physicians. Scholarships are also being offered to students in other health professions such as dentistry, veterinary medicine, podiatry, optom-

etry and clinical psychology at the PhD level.

Applicants must be U.S. citizens eligible for Reserve commissions and accepted for admission or enrolled in a course of study for one of the listed health professions.

An individual selected must agree to complete the educational phase of the program and, subsequently, to serve on active duty in his profession in one of the three services. In the interim, he will be commissioned in the Reserve grade of Second Lieutenant (or equivalent) and will receive \$400 a month in addition to tuition, books, laboratory expenses and fees for other educational services. Room and board are excluded.

Each graduate will incur an active duty obligation of one year for each academic year (12 months or less) with a minimum active duty obligation of two years. Intern and residency training is not credited toward fulfilling this commitment, but it does not incur further military obligation.

Applications for scholarships may be made by writing to:

ARMY

Office of the Surgeon General
Department of the Army
ATTN: DASG-PTP
Washington, D.C. 20314

NAVY

Chief, Bureau of Medicine and Surgery
Department of the Navy
ATTN: Code 3
Washington, D.C. 20390

AIR FORCE

Air Force Military Personnel Center
ATTN: SGS
Randolph Air Force Base, Texas 78148

Rock Island Arsenal offers precision weapons course

HQ, US ARMY WEAPONS COMMAND (WECOM), Rock Island, Illinois—Soldiers and civilians alike completed classes in national match pistol and rifle maintenance last month at Rock Island Arsenal. The school, only one of its kind in the United States, draws people from around the world for its specialized training.

Four week classes are conducted three times a year with about 15 students to a class. During the training, students learn to file, sand and polish different parts of the rifle or pistol before fitting them into a precision instrument for greater accuracy. Parts fitted to one particular weapon are not interchangeable with parts from other weapons.

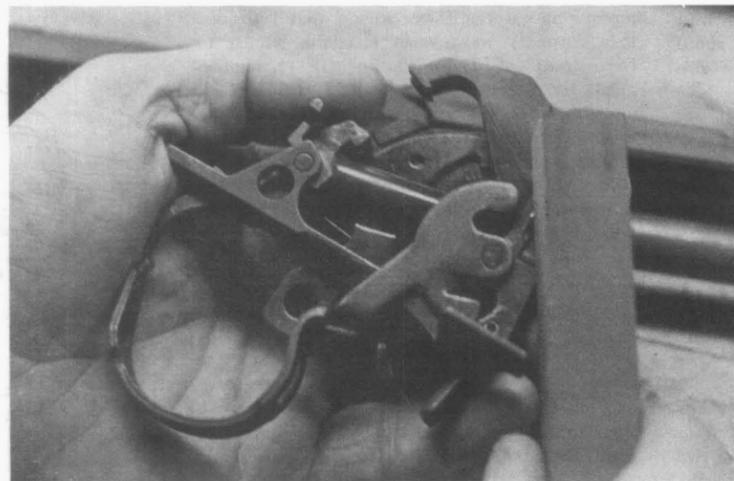
The classes are taught by three Rock Island Arsenal master armorers: Louis

Woll, Roger Wolfe, and Bob Mallette.

The student actually builds three pistols and three rifles. He is given a bare receiver and a box of parts and told to build from that. "We throw in some scrap metal, too—just to see if the men are learning," said Lou Woll.

Each student begins by assembling and accurizing the first weapon step by step under the master armorer's supervision. The trainee function-checks the weapon to see if it will fire, then finalizes his work by test-firing the weapon to determine its accuracy. Aided by the knowledge gained in assembling the first weapon, the student then proceeds with the remaining weapons.

When the course is completed, the trainee returns to his installation to assist in the conduct of national pistol and rifle matches.



NATIONAL MATCH WEAPON is a precision instrument; each piece is hand fitted. Here a student stones the hammer hooks to lighten the trigger pull.

Yuma gives motor home a 'lift'



National Science Foundation in Washington, D.C., requesting support to air lift a motor home (that's right, a motor home) from Boulder, Colorado to the 11,500 foot level of Niwot Ridge, approximately 28 miles from Boulder. The obvious question was asked, "Why don't they drive it?" The answer was simple: there are no roads.

The Institute of Alpine and Arctic Research of the University of Colorado wanted to conduct a research project of plant growth in alpine tundra at the 11,500 foot level. The motor home, owned by San Diego State University, had been converted to a mobile laboratory complete with a computer. Weighing about 13,000 pounds, the motor home is 23 feet long, seven feet wide and eight feet high.

The project was assigned to Captain Norris Conner of YPG's Air Delivery Engineering Branch. CPT Conner has a great deal of experience in working with helicopter sling loads.

His first concern was to determine which Army helicopter could pick up that much weight, fly with it and sit it down at 11,500 feet. Like automobiles, a helicopter's performance decreases at higher altitudes. In conjunction with

Fort Sill, Oklahoma, CPT Conner and his team decided the lift could be made with a stripped down CH54 Flying Crane.

The next concern was to figure out a way to suspend the motor home, since it was not designed to be transported in this manner. A cradle assembly seemed the best answer, and one made at Yuma Proving Ground especially for this job was loaded aboard a Huey helicopter and flown to Boulder by CPT Conner and the rest of his crew.

At Boulder they rigged the motor home and lifted it by a land-based crane to determine if the lift angle of five degrees nose down was correct. By this time they had reduced the weight of the motor home by 2400 pounds.

The actual pickup at Boulder Airport drew a number of spectators, attracted perhaps by the strange-looking helicopter. The Flying Crane, sometimes referred to as a Praying Mantis or Grasshopper, is indeed an odd-looking bird. Under ideal conditions, it can lift a maximum of 24,000 pounds at sea level, but its range is rather short when fully loaded. This helicopter, piloted by Chief Warrant Officer Hollis Scott of

the 291st Aviation Company, Fort Sill Okla., was stripped of excess weight in order to lift heavier loads.

The plan called for lifting and flying the motor home for a short flight and then sitting it back down to make changes if necessary. During the first few minutes of the flight, the pilot decided that since it was flying so well, he would continue on up the mountain.

The motor home tended to rotate some but usually would stabilize broadside to the line of flight. CWO Scott had little trouble and managed at times to hit speeds in excess of 60 miles per hour.

Meanwhile people at the site prepared for the motor home by placing smoke bombs at the exact point where they wanted the vehicle. Pilot Scott put the motor home right on the money even though surface winds at the time were gusting at 60 miles per hour.

Besides the satisfaction of doing a good job in only one short week, what reward was offered to the YPG crew? You guessed it—they had to go back the next month and airlift the unit from the mountain!

* * * * *

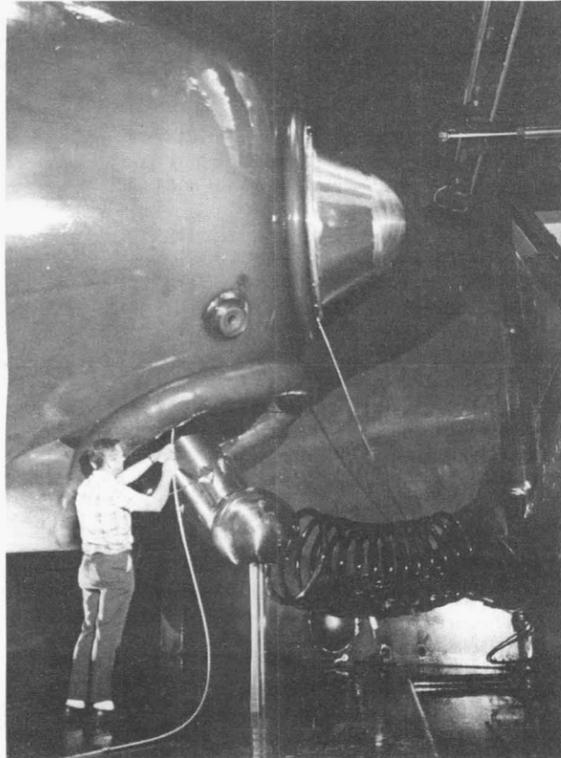
YUMA PROVING GROUND (YPG), Ariz.—Yuma employees are fast gaining the reputation for doing the unusual and, in some cases, what some say is impossible. That reputation arises from Yuma's mission to develop and test heavy lift techniques.

YPG personnel have assisted in retrievals of crashed and disabled aircraft from the mountainous jungles of Luzon in the Philippines, from the snow-capped peaks of Utah and from the

alligator-infested swamps of Louisiana. All these feats were considered impossible since the areas were inaccessible by road. The only way in for man was by helicopter. All the aircraft were recovered intact and are flying today. Replacing them would have cost the government at least \$3 million.

A typically un-typical episode occurred last summer when the Air Delivery Engineering Branch at the Proving Ground received a call from the

AURORA: Alternate to underground tests



AURORA FACILITY, Harry Diamond Labs, White Oak, Md.—A practical alternate to underground nuclear testing is now a reality. Since the opening of the Aurora Facility of AMC's Harry Diamond Laboratories in April, controlled simulation of nuclear weapon gamma ray effects has become routine.

The Aurora project was conceived by the Defense Nuclear Agency in close technical cooperation with Harry Diamond Labs. HDL is AMC's Lead Laboratory for Nuclear Weapons Effects—it oversees and coordinates this area of technology.

The mission of the Aurora Facility is to provide laboratory simulation that will lessen America's dependence on underground nuclear tests. Aurora can reproduce some of the effects of a nuclear explosion for about \$2000 per "shot," while underground tests cost millions of dollars for each blast. And Aurora testing has the added advantage

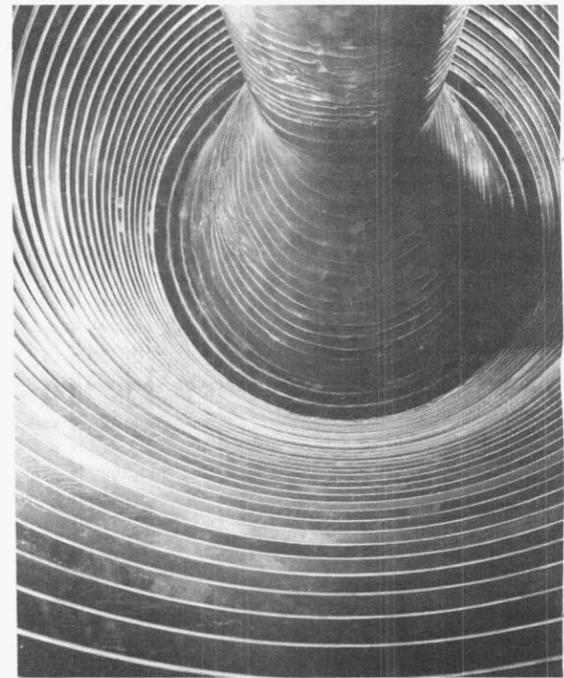
of a totally controllable environment.

Officials of the \$16 million facility stress that the testing done there involves no explosive characteristics and therefore is quite safe. Radiation impact on the environment is negligible.

The key to Aurora testing is a burst of controlled power—24 billion kilowatts for one hundred billionths of a second. Such a burst can simulate the radiation produced by a nuclear blast. Thus the Aurora Facility provides a relatively easy way to expose large electronic components of weapon and satellite systems to the kind of radiation that might cause the systems to malfunction.

Aurora's unique capability allows systems engineers to design survivability into their projects right in the planning stages. That is far more practical than protecting a vulnerable system from possible radiation hazard after the system is a reality.

* * * * *



ABOVE—Concentric rings of aluminum circle interior of vacuum tube. LEFT—Technician inspects one of four pulse-forming networks.

Tire Retread Program gaining ground

HQ, US ARMY MATERIEL COMMAND, Washington—By retreading vehicle tires instead of replacing them, the Army is saving \$10 million annually, and that figure is climbing fast.

AMC's Tank-Automotive Command (TACOM), Warren, Mich., assumed responsibility in 1970 for the Worldwide Tire Retreading Program, a government-wide project. The goal is to re-use 75% of the millions of tires currently in use in military operations around the world. AMC has established itself as a leader in the program by being one of the first agencies to meet the 75% mark. By June of next year, 75% of all Army replacement tires will be retreads.

The Army fleet of vehicles numbers over 376,000 combat and tactical types and about 100,000 of commercial design. There are also some 10,000 aircraft in the inventory.

Retreading is not new to the Army. It was done as far back as World War II as a means of conserving scarce rubber supplies and has continued, on a somewhat limited basis, up to the present time. By taking a worn tire casing and adding a new layer of rubber, treads and all, the Army gets a "new" tire at a fraction of the cost of new.

The Army operates retreading plants at Red River Army Depot in Texas and Tooele Army Depot in Utah. Federal Prison Industries does retreading for the Army in Virginia. The Army also had, until recently, three retreading plants overseas, operated by private contractors. Two were in Vietnam; one in West Germany. The two in Vietnam have since been turned over to the Republic of South Vietnam.

Aside from the dollar savings realized by avoiding new tire purchases, officials point out many additional benefits. Tires recapped at or

near the place of use speed up supply, reduce substantially the bulk shipping requirements for supplying overseas areas and account for savings in direct transportation costs.

Since rubber comprises only about 27% of the bulk of a tire, shipping requirements can be cut some 73% through transporting raw rubber to retreading facilities instead of completed tires to users. Also substantially reduced is the problem of disposing of the vast numbers of surplus tires worn out each year in the United States and many foreign countries where Army troops are stationed.

Officials do not consider retreads to be a compromise in safety. They explain that retreaded tires currently must meet standards similar to Department of Transportation (DOT) requirements for new tires. Separate DOT standards are under consideration for retreads. There is no specific limit to the number of times worn tires can be retreaded and some operators are known to have retreaded sound airplane tire bodies more than twenty times. Age, as well, is not a major factor and tire bodies as much as 17 years old have been safely used.

A high quality retread may, in fact, actually outlast a new tire. Because of the savings realized by retreading instead of buying new tires, the Army can afford to use a longer lasting grade of rubber in the retread than was used in the original tire tread. In addition, the retreaded military tire's profile against the road is flatter than the original profile, so the tread wears better and lasts longer.

In order to gain maximum benefit from the program, the Army is concentrating upon training its people in the proper maintenance, technical inspection and classification of tires. Last year,

more than 500 technicians were trained at Red River Army Depot in these subjects as well as in the art of scientific vulcanization.

Although the program has been confined almost exclusively to tires for administrative and tactical vehicles and heavy construction equip-

ment, officials are now extending it to include the rebuilding of road wheels for tanks and other tracked vehicles and also to tires for some Army-operated aircraft.

* * * * *



AMC studies C-5's potential

HQ, US ARMY MATERIEL COMMAND, Washington—Keeping distant Army outposts supplied with weapons and equipment (and their repair parts) is a Herculean task. The logistics of supply are costly and complicated.

One of the most puzzling problems is whether to keep materials—tanks, for example—on hand for an emergency, or to make sure they can be moved where you want them in a hurry when you need them. Until recently, some tanks, helicopters and other large pieces could not be moved to a faraway battle station quickly. Too large to fit in an airplane, they had to be carried by land or water or moved under their own power. This took time, and time was often precious. So the Army's strategic planners opted for more tanks, more helicopters, more heavy items scattered widely among Army bases around the world. It was a compromise. It cost a lot of money and was never wholly satisfactory.

Then the Air Force's Military Airlift Command (MAC) introduced the C-5 aircraft, largest in the world, and the Army saw in the huge flying box a new way to distribute materiel. MAC's new airplane has in fact vastly increased the deployment capability of the United States Armed Forces, especially the Army. For the first time, the giant C-5 transport is making possible economic air movement of outsize items of Army vehicles and equipment. But the question remains: how can the Army use the C-5 to best advantage?

AMC EVALUATES

In February 1971, the Army Materiel Command began a test and evaluation of the C-5 aircraft in the air logistics role and its relationship to the Army logistics system. The AMC Air Logistics Systems Office under the Directorate of Supply expects to complete the study by the end of this year.

The Air Logistics Systems team has studied the full range of the air logistics system, from depot processing to cargo arrival at the ultimate destination.

First they examined the ability of depots to prepare cargo for air movement. A number of AMC depots can now load and tie down standard aircraft pallets. Formerly depots loaded trucks or railroad cars and sent their material to the aerial ports, where the freight was unloaded and repacked on a pallet for overseas shipment. This method wasted time and delayed aircraft.

Tests at New Cumberland (Pennsylvania), Red River (Texas), and Sacramento and Sharpe Army Depots (California) allowed the AMC evaluators to investigate the depot palletization methods. They compare favorably to those of the "pros" at major MAC air freight terminals.

Since all aircraft, military and civilian, use the same kind of pallets, depot-loaded pallets can, in an emergency, be shipped overseas through any major air field with customs facilities. Primarily, though, Army freight travels through

strategically located Air Force aerial ports such as Dover Air Force Base, Delaware, Kelly AFB, Texas, and Travis AFB in California.

PREPARING CARGO

The evaluation team next examined that part of the logistic cycle from depot to placement on the C-5 aircraft. They observed the Air Force procedures for preparing cargo for shipment, and determined how the Army could improve its technique.

Another area the team looked into was actual air movement of Army cargo. Most freight moves via the MAC "channel airlift system"—routine, scheduled military freight flights, operated much like civilian airfreight service. Channel airlift and special assignment airlift missions—those contracted by the Army for shipment of specific cargo items—were evaluated in both directions, to and from overseas locations.

The Army is much more deeply involved than previously in processing its own shipments through overseas ports. Freight must clear customs and sometimes agricultural inspections. The team investigated port clearance performance, trying to discover problem areas and improve the system.

Finally, two developing Army logistics programs, Direct Support System (DSS) and Routine Economic Airlift (REAL) came under close scrutiny. Are they fully compatible with the latest

concepts of air transportation?

The study, now in its final stages, should answer that and other questions. Still under review are logistics training requirements, planning factors, and policies and procedures.

ADVANTAGES OF C-5

What does the C-5 aircraft offer the Army? How can logisticians take advantage of this giant freight train with wings? It's still too early to predict the C-5's ultimate use to the Army, but some completed tests and actual C-5 missions flown indicate tremendous possibilities.

Consider its size. The C-5 Galaxy is the world's largest military cargo aircraft. In length, it is just over 17.4 yards short of a football field. Its wings would extend well over both sides of the field. The four turbofan engines, with a combined take-off rating of 164,400 pounds of thrust, have already allowed gross weight flights exceeding 725,000 pounds, almost 200,000 pounds of which were payload. Its cargo compartment contains 34,795 cubic feet—enough space for about six moderate family houses.

C-5 PROVES WORTH

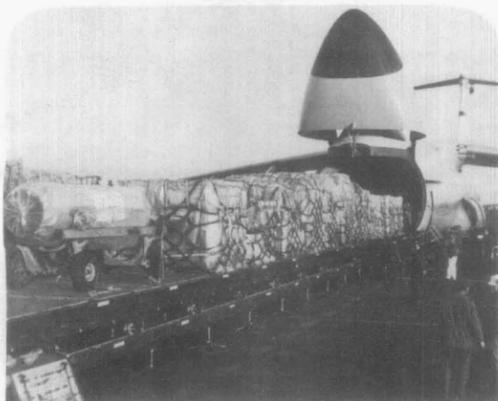
While AMC has been conducting its evaluation, the C-5 has demonstrated a considerable capability to move the Army's cargo. For example, CH-47

"Chinook" helicopters, three in each C-5, have frequently been airlifted from New Cumberland Army Depot in Pennsylvania to Vietnam, where three reparable CH-47s have been picked up and returned to the depot for repair. A combined load of 12 AH-1 Cobra and UH-1 "Huey" helicopters have been flown in a single C-5 from Red River Army Depot in Texas to Vietnam. On another mission the Army squeezed 22 OH-1 observation helicopters into the hold of a C-5. During the recent North Vietnamese invasion of South Vietnam, M-48 tanks, two per aircraft, were hurriedly delivered by C-5 to the battlefield. The C-5 has vastly increased the number of items of outsize Army equipment and vehicles that can be airlifted.

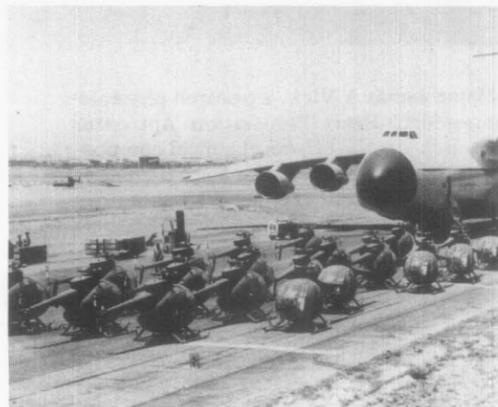
The AMC evaluation team, led by Lieutenant Colonel Hector Wood, a Corps of Engineers officer, has developed a number of far-reaching recommendations for the Army air logistics system, based on the research findings and conclusions made during the past 18 months. This is the first time the Army has evaluated the equipment of a sister service to determine that equipment's impact on and use to the Army logistics system. The C-5 has tremendous airlift potential. The Army's logistician managers in AMC must now learn to make good use of that newly developed airlift capability.

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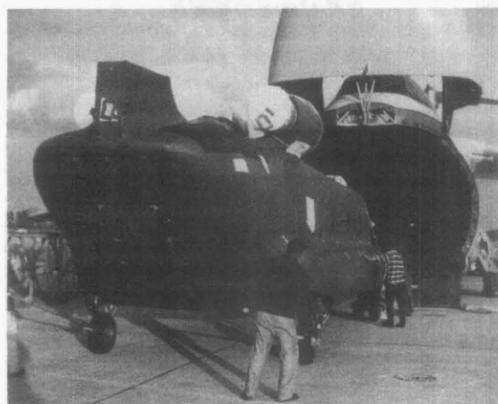
Feeding 'Fat Albert'...



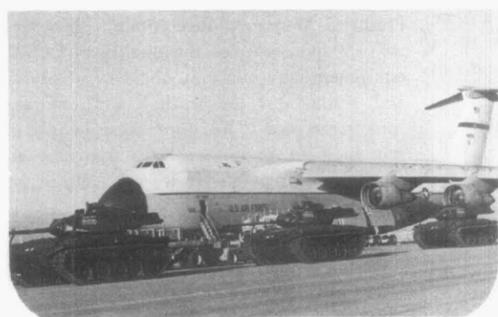
... at Dover AFB, Del.



... near Sharpe Army Depot, Calif.



... near New Cumberland Army Depot, Pa.



... near Pueblo Army Depot, Col.

MODULAR CAMOUFLAGE NET

A lightweight modular camouflage net has been developed by the U.S. Army Mobility Equipment Research and Development Center, Fort Belvoir, Va. The net provides a quick way to conceal equipment from visual, radar, photographic and near-infrared detection. However, a heat vision device such as ECOM's Thermoviewer (detailed on page 12) can detect a heat source within the net. The 900 foot square module is hexagonal in shape to approximate the symmetry typical of natural objects. The net comes in color combinations for use in woodland, desert, and snow areas. Each module is reversible to provide concealment even when seasons change.



DSA to oversee property disposal

HQ, US ARMY MATERIEL COMMAND, Washington—Assistant Secretary of Defense for Installations and Logistics Barry Shillito has announced the establishment of the Defense Property Disposal Service (DPDS) as a new command under the Director of the Defense Supply Agency (DSA), effective September 12, 1972.

The new command will assume operational responsibilities on a phased basis and become fully operational by July 1973. It will be responsible for worldwide integrated management of the disposal of Department of Defense surplus personal property.

This action is the result of an exhaustive study of methods to improve the effectiveness and efficiency of the disposal program. The DPDS will be commanded by a military officer

of general or flag rank and will be co-located with the Defense Logistics Services Center (DLSC), another major field command of DSA, in the federal center at Battle Creek, Michigan. It will integrate disposal operations currently performed by the military services and DSA. This will be done in a manner which will provide for centralized control, uniform accounting and standardized organizations and procedures for all defense surplus property disposal activities.

The property disposal functions being assigned to the DPDS involve operations which currently encompass 225 installations and more than 7000 personnel operating in 30 foreign countries and the United States. It will be responsible for the disposal of surplus personal property with an original acquisition value of

\$8.5 billion and more than 500,000 tons of scrap annually. The co-location of the command headquarters with the DLSC will minimize overhead costs for support and facilities and optimize the use of the DLSC files and computer system. Selected elements of the DLSC, including the current Defense Surplus Sales Offices, will be assigned to the new DPDS.

Regional offices under the DPDS will be established in the continental United States and the European and Pacific theaters. These offices will assume command over and provide for the management and control of those property disposal organizations formerly under the military departments and the DSA. In AMC, property disposal functions located at 21 AMC installations will be transferred to DPDS.

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1973 RDT&E requirements listed

US ARMY LOGISTIC MANAGEMENT CENTER (ALMC), Fort Lee, Va.—The ALMC Course Catalog for Fiscal Year 1973 outlines the criteria for award of Research, Development, Test and Evaluation Certificates. The technical society sponsor for this program is the Association of System Managers (ASM), Cleveland, Ohio. These certificates provide recognition to military and civilian personnel who have completed selected courses at ALMC.

To be eligible for an RDT&E Certificate, enrollees must complete the following four prerequisite courses:

- Risk Analysis (2 weeks)
- R&D Management (2 weeks)
- Cost Estimating for Engineers (2 weeks)
- Test and Evaluation Management (2 weeks)

In addition, a total of six of the following elective courses must be completed:

- Cost Estimating Techniques for System Acquisition (4 weeks)
- Defense Specification Management (3 weeks)
- Management of the Quality Function (3 weeks)
- Logistics Support Design Management (5 weeks)
- Army Management Information Systems (2 weeks)
- Procurement Seminar for Project Management (1 week)
- Should Cost Workshop (1 week)
- ADP for Logistics Executives (1 week)
- Life Cycle Cost Analysis of Weapons Systems (4 weeks)

Acceptable substitutes and correspondence courses may be used for some of the above courses; however, at least two must be taken at ALMC. In addition, credit for two courses is given for satisfactory completion of the Logistics Executive Development Course. Enrollees are required to read five technical books from a list provided by ALMC in addition to the formal courses listed above. Personnel employed in RDT&E functional areas are encouraged to qualify for RDT&E Certificates. Scheduling of formal training courses, however, should be oriented towards completion of those required by an individual's career program first, and eligibility for RDT&E Certificates second.



ALBERT D. RASBERRY is enrolled at Indiana University, where he is attending a special public affairs course for scientists. It is a humanist's view of science—how it affects man, how it shapes society, how it molds policy.

Rasberry came to the Army Aeronautical Depot Maintenance Center (ARADMAC), Corpus Christi, Texas, in 1963 with a degree in Chemistry from the University of Southwestern Louisiana. Five years later he assumed his present position as Chief of the Spectrographic Branch of the Directorate for Quality.



JOHN D. DANIELEWICZ is studying at the Massachusetts Institute of Technology. The 26-year-old procurement analyst is one of only two candidates in the entire Department of Defense to be chosen to attend M.I.T.

He started at the U.S. Army Tank-Automotive Command (TACOM), Warren, Mich. in 1969 as an intern trainee in the Procurement and Production Directorate.

Danielewicz has a degree in Business Administration from Eastern Michigan University, where he was graduated Magna Cum Laude in 1969.



DEAN C. STEWART is attending the University of Virginia. Though he is taking a variety of courses, he is concentrating on economics and political science.

Stewart began his federal career as a procurement intern ten years ago. He is now a contract specialist in the Directorate for Procurement and Production, Aviation Systems Command (AVSCOM), St. Louis. He holds a degree in Business Administration from the University of Denver.

To broaden horizons, three return to college

HQ, US ARMY MATERIEL COMMAND, Washington—Three AMC employees are back on the college campus this fall. John D. Danielewicz, Albert D. Rasberry, and Dean C. Stewart are three of the five Army civilians chosen for this year's Education for Public Management Program.

value to the government. The men will each attend a participating university on a nine month educational assignment while receiving full salary and benefits. Academic costs are paid for by the Department of the Army.

One goal of the program is to increase the sensitivity of talented federal careerists to the broad social, economic and political issues of the day, and to their effect on policy development.

Danielewicz, Rasberry, and Stewart were recognized by the Army as having the potential to hold high management positions. They, along with nominees from other agencies, were carefully screened for their initiative, record of achievement, educational background, and intellect. Thus these AMC civilians reflect the type of dynamic individual the U.S. Government seeks for positions of leadership.

Danielewicz is a procurement analyst with AMC's Tank-Automotive Command (TACOM), Warren, Mich. Rasberry is Chief of the Spectrographic Branch of the Directorate for Quality, US Army Aeronautical Depot Maintenance Center (ARADMAC), Corpus Christi, Texas. Stewart is a contract specialist with the U.S. Army Aviation Systems Command (AVSCOM), St. Louis.

The Education for Public Management Program, sponsored by the U.S. Civil Service Commission, enables promising federal executives to educate themselves in matters that will enhance their

Edgewood puts venom to work

EDGEWOOD ARSENAL, Md.—The worker bee has always been more honored than the queen or drone bee because she labors for the others. Now the sting of that busiest of all bees, the honey bee, has taken on significance in medical research at Edgewood Arsenal.

According to scientists in the Arsenal's Biomedical Laboratory, a nontoxic component of the honey bee's venom may prove useful in the search to find a cure to relieve the aches and pains of bursitis, arthritis and general neuralgia.

Moreover, preliminary experiments on animals have indicated that apamin, one of the three active components of bee venom, increases both the beat and force of the heart pumping blood into the body.

Other studies have revealed that the venom can be used to regulate the heart's rhythm for almost 90 minutes. By comparison, commercial drugs used to control irregular heartbeats have a duration of five to ten minutes.

At Edgewood's research laboratories the effect of apamin in the cardiovascular system has been studied in more than 30 isolated Langendorff heart prepara-

tions, the tool which scientists use to study the actions of drugs in the heart.

When separated from bee venom, apamin appears to be nontoxic and acts to sustain the body's blood flow network during periods of severe bleeding and shock.

Major James A. Vick, chief of the neurophysiology section in the Arsenal's Biomedical Laboratory, said the honey bee venom contains two other chemical components which are more toxic than apamin. "Both phospholipase A and melittin are blocking agents which produce a lethal effect through respiratory paralysis," he explained.

A pioneer in developing the use of bee spleen for medical purposes, Major Vick pointed out that the two components account for 85 per cent of the venom's chemical constituents. "The total content of apamin is less than two per cent," he added.

Major Vick began experimenting with bee venom at Edgewood Arsenal in 1967 and carried on his studies during a subsequent tour of duty at the Walter Reed Army Medical Center, Washington, D.C.

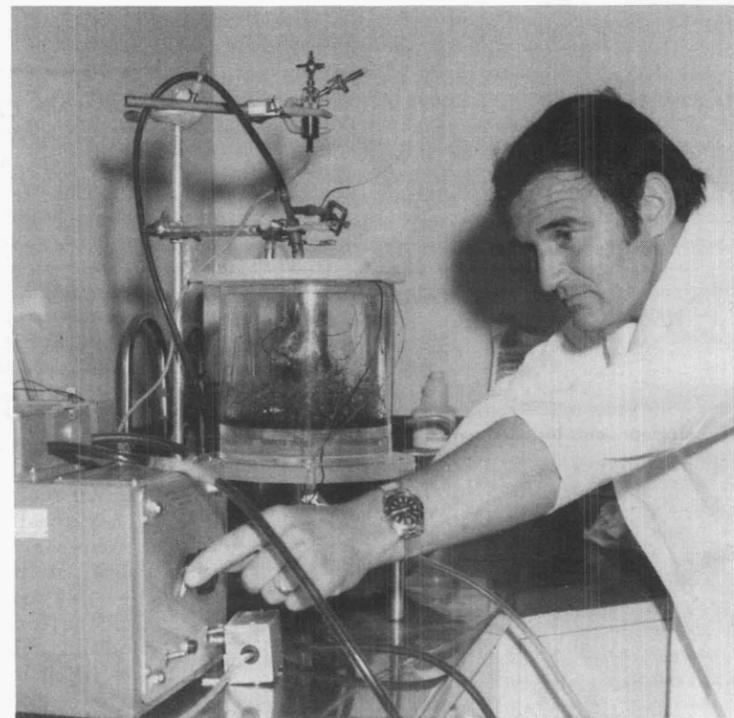
His research work on the pharmacological and physiological activities of bee venom continued when he was reassigned to Edgewood in 1971.

Other studies on animals have confirmed that whole bee venom is a mixture of substances capable of producing a variety of physiological and pharmacological changes. For example, according to the major, both whole bee venom and one of its components, melittin, are capable of producing marked and sustained increases in cortisone levels. Their studies show increases occur approximately one hour following injections under the skin and last from two to four days.

"This is surprising," Major Vick declared, "since bee venom is 75 per cent melittin but only a tiny amount is required to produce the same level of cortisone as the whole bee venom."

"It is well documented that arthritic conditions respond favorably to the administration of cortisone drugs," he added.

A member of the Military Surgeons Association and the New York Academy of Sciences, Major Vick's research experiments in arthritic conditions are conducted in association with Robert B. Brooks of the Warren Foundation. He is assisted in his studies by Harry Froehlich, a research physiologist.



HEART CHECK—Major James A. Vick, a research physiologist, utilizes a Langendorff Heart Preparation Apparatus while conducting research on the effects chemical components of bee venom have on the heart. Major Vick is chief of the neurophysiology section of the Biomedical Laboratory at Edgewood Arsenal, Md.



HIGH ATOP THE GATEWAY ARCH in Saint Louis, Army Aviation Systems Command (AVSCOM) engineer Silas Garrett (right) helps install an aircraft anti-collision light. Apparently nonplussed by the view are Harry Breitenstein (left), maintenance foreman with the National Park Service, and Henry Cantrell, senior engineer with the Grimes Manufacturing Company. The light, donated by the Grimes Company, will flash continuously during periods of low visibility. AVSCOM provided technical support for the installation.

Photo by Sandie Blackwell

Now ECOM's got your number

US ARMY ELECTRONICS COMMAND (ECOM), Fort Monmouth, N.J.—You may remember, if you're a radio listener, a jingle for a large hotel chain that pounded home, cleverly, repeatedly and relentlessly, its telephone number: "Eight Oh Oh, Three Two Five, Three Five Three Five."

If you're somewhere over 30, you may know about that million-seller by a top flight swing band, Glen something-or-other. The record's title was the phone number of a very popular New York City hotel: Pennsylvania Six Five Thousand.

If you remembered nothing else, you remembered those telephone numbers.

Now ECOM's Directorate of Product Assurance wants to get into the telephone number bit: and for a very good reason.

(201) 532-4543 (commercial)
992-4543 (Autovon)

You can call those numbers 24 hours a day, seven days a week, from the candy store around the corner or from any place in the world, if you're a user of ECOM equipment and you've run into a quality

problem. It's Product Assurance's way of letting the military know there's somebody ready to back them up and help them out with any problem pertaining to the quality of ECOM equipment.

Here's the way it works: Suppose a quality problem is discovered in any piece of ECOM equipment. You received a repair part that is different physically or electrically from the item description and serial number of the original part and it won't fit, or won't work, or perhaps a bug develops in any piece of ECOM materiel from a large radar to a small piece part. Pick up a commercial or Autovon telephone and call to state your trouble.

(201) 532-4543 (commercial)
992-4543 (Autovon)

The Product Assurance directorate will get someone knowledgeable about the equipment to call you back quickly. If the call is received during working hours, from 8:00 a.m. to 4:30 p.m., a Quality Assurance specialist will answer and start to resolve the situation.

If it is during non-working hours, the caller will hear a recorded message, giving brief instructions on how to present his complaint. The next morning, the taped message will be played back and action started.

If the complaint is detailed and involved, a stenographer will record the message so that no aspect of the trouble is overlooked.

(201) 532-4543 (commercial)
992-4543 (Autovon)

The service is the brainchild of the Product Assurance directorate. "We feel we're responsible for the quality of ECOM equipment any place in the United States and throughout the world," a directorate spokesman said. "We want these people in the field to know we'll do our best to guarantee our goods. If we can help it, no one will be left on the hook."

(201) 532-4543 (commercial)
992-4543 (Autovon)

Tracked or wheeled — Which way to go?



First IR&D seminar held

HQ, US ARMY MATERIEL COMMAND, Washington—The first seminar on the subject of Independent Research and Development (IR&D) was held in September, attesting to the increased interest and activity in this program. IR&D supports industrial contractors' in-house R&D activities intended to maintain or improve their technical competence and competitive position. The funds are made available by the Department of Defense (DOD) through a special overhead on all contracts. IR&D is considered a legitimate cost of business and is limited to those efforts which are not sponsored by contract, grant, or other arrangement. The object is to motivate defense contractors to establish a broad technology base and advance the state-of-the-art in order that the United States may have capable sources for rapid response to the need for advanced weapons systems and other materiel in the future.

The seminar brought together approximately 100 government scientific and fiscal personnel to discuss the new information systems that have been developed. They also examined procedures still under study, concerned with the technical evaluation of the contractors program and the negotiation process through which these activities are funded. Efforts to improve the technical evaluation process include the preparation of guidelines to assist contractors in preparing an annual IR&D brochure, new evaluation sheets for use in rating the quality of the contractor's program, and procedures to be employed when DOD personnel conduct on-site reviews of IR&D activities at the contractors' plants. As a result of these efforts, the IR&D program has improved in the past year. More improvement is expected.

At this time, approximately 175 contractors participate in this program. In FY 71 the amount of support provided was around \$600 million. This figure has dropped as the DOD contract program

has been reduced. Those contractors whose IR&D programs exceed 2 million dollars per year are required to submit a technical plan (brochure) each year which also contains the results of their previous year's effort.

DOD is anxious to improve the utilization of the technical results of the IR&D program by the defense R&D community. A DOD data bank containing IR&D technical information recently became operational. In addition, the US Army Missile Command (MICOM) IR&D data bank has provided information primarily for the benefit of technical personnel of MICOM during the past year.

Last fall DOD established an IR&D Policy Council made up of the Assistant Secretaries of the three services for Research and Development (R&D) and Installation and Logistics (I&L), plus the OSD Assistant Secretary for I&L, and chaired by the Director of Defense Research and Engineering (DDR&E). A report has been prepared by one of the Policy Council committees after a comprehensive study of the complexities inherent in the present program. It is expected that this report will provide the basis for Policy Council recommendations affecting future policies.

In addition, the DDR&E has implemented DOD's Instruction 5100.66 involving changes in the management of the Technical Evaluation aspects of the program, including establishment of Departmental IR&D Managers for the three services. IN HQ AMC, the Deputy for Laboratories is responsible for carrying out the Army's mission in IR&D in accordance with AMCR 70-40. His agent in this activity is the Army Departmental IR&D Manager, Mr. J. W. Crellin, of the Research Division, Research, Development & Engineering Directorate. The Director of Requirements & Procurement is responsible for coordinating a program for the uniform negotiation of IR&D costs.

TRACKED OR WHEELED—Which will it be? Under the watchful eye of AMC's Tank-Automotive Command (TACOM) in Warren, Mich., two companies are competing for the contract to build a new Armored Reconnaissance Scout Vehicle. The Food Machinery Corporation (FMC) says a tracked vehicle is best for the job; Lockheed Missiles and Space Company prefers a six-wheeled articulated carrier. Having been awarded prototype contracts, both companies will get a chance to prove their concepts during extensive prototype testing to be conducted at Aberdeen Proving Ground, Md. and Fort Knox, Ky. next year.

Requirements call for the Scout to be lightly armored, highly mobile, and capable of swimming and being air-carried. It must be small enough to be easily concealed and, because of its reconnaissance mission, will be required to accelerate rapidly and travel at relatively



high speeds on hard surfaces.

The vehicle will eventually replace the M114A1E1 Command and Recon-

naissance Vehicle.

Tracked or wheeled—what's your guess?

AMC revamps acquisition process

by W. W. Flynn

The rumors are true—changes are being made to the Materiel Acquisition Process. These changes include shortening qualitative requirements generation time, simplifying documentation, expediting high level decision making, shortening development time, establishing new funding priorities, providing for cost versus performance trade-offs, providing program cost control and improving cost effectiveness of weapon systems.

The fundamental principle supporting these new acquisition policies is that the Army will approach the decision to obligate large sums of money with great deliberation. In implementing the new policies, the Army will insure that there is a sound technological foundation on which to base the decision to proceed with each critical phase of the acquisition process.

The changes are contained in a Department of the Army ACSFOR Letter of Instruction dated Aug. 23, 1972. Copies of this LOI have been sent to all AMC major subordinate commands and other field activities involved in the materiel acquisition process.

A new language is involved. Materiel Need is out; Required Operational Capability (ROC) is in. For example, Development Plan (DP) replaces Advanced

Development (ADP) and System Development Plan (SDP). Development Test

Production Facilities (IPF) replaces part of the current Advance Production Engineering Program.

Teams from AMC will brief major subordinate commanders and Headquarters personnel, and a team headed by the Army Logistics Management Center (ALMC) will brief the working level at each command and separate activity. By the end of November everyone involved should have the word.

Training programs are being adjusted at ALMC and at the US Army Management Training Agency (AMETA). The modified courses will be available by the end of the calendar year or early in 1973.

The most important guidance contained in the LOI for each member of the AMC team is this: "The successful implementation of these new materiel acquisition guidelines throughout the Army will depend largely on all commands, staff agencies and individuals applying the spirit as well as the specifics of the procedures provided herein."

AMC Headquarters will provide you—the people in the field—with the specifics. The spirit, motivation, implementation and success of the new guidelines must come from everyone in AMC—from the top to the bottom.

"Our system acquisition process is the key to maintaining superiority over any potential opposing force."

—Hon. Robert F. Froehlke
Secretary of the Army

(DT) and Operational Test (OT) replace Engineering and Service Tests, and Initial

AMC offers training in data processing

HQ, US ARMY MATERIEL COMMAND, Washington—With over 100 installations using data processing equipment, AMC has a continuing need for people trained in computer techniques. That need is filled in part by the Command's ADP (Automatic Data Processing) Intern Program.

ADP interns from a variety of educational and cultural backgrounds are selected from a national recruitment drive by AMC Technical Placement Offices. The training program offers those seeking a career in ADP an opportunity to enter that field. It seeks highly motivated individuals, including those with no prior federal service.

The 14th Automatic Data Processing Intern Program began October 16 under direction of the US Army Management Engineering Training Agency (AMETA), Rock Island Arsenal, Illinois. AMETA has trained over 250 men and women since conducting its first ADP intern class in 1960.

The program begins with 14 weeks of classroom instruction at AMETA in such topics as introduction to ADP, computer programming, systems analysis and design, and other specialized computer courses. Then the interns take ten weeks of on-the-job training at an assigned installation. This gives them a chance to relate their classroom training to a work situation. The interns then return to AMETA for a final two weeks of class work. Back again at their assigned installations, they remain in an intern status until they achieve the GS-9 level.

Throughout the training, instructors emphasize practical exercise and case study experience to reinforce lecture and reading assignments.

A measure of the effectiveness of this AMC program is the large number of former interns still serving with the many AMC activities. Many former interns today occupy senior-level positions at ADP installations throughout AMC.

AVSCOM woman takes tech course

HQ, US ARMY AVIATION SYSTEMS COMMAND (AVSCOM), St. Louis—Mrs. Geraldine Hillburger spent a week at the AVCO Corporation's Lycoming Division recently as the first woman ever to take any of Lycoming's gas turbine engine maintenance courses. Part of a class of six soldiers and Army civilians, Mrs. Hillburger will incorporate the training into her work as an aerospace quality assurance specialist for AVSCOM.

The only woman among 140 males, Mrs. Hillburger has complete charge of developing product assurance plans for the whole life cycle of any new Army aviation program, as the plans relate to all tests regarding reliability, maintainability, quality and product assessment. She's been in quality engineering work since 1946, 18 years in government pro-



jects work with various industries, and an AVSCOM staff member since 1967.

During this 26-year career she has taken innumerable courses of special training, not the least of which was the highly concentrated course she completed at Lycoming.

She's always been the only woman among many men in every job she's had, Mrs. Hillburger reported, but she emphasized that she's never been discriminated against because of her sex. "As long as a woman is well trained for her work, is truly willing to work hard but knows her physical limitations, and knows where she has to rely on men, she will receive fair treatment and fine cooperation from her fellow workers and superiors," she said. Mrs. Hillburger was the first woman in her hometown state of Missouri ever to be certified as a senior engineering technician by the American Institute for Engineering Technicians.

Chinook to fight the long winter

US ARMY AVIATION TEST BOARD, Fort Rucker, Alabama—Seven men stationed here are combining two goals: the Modern Volunteer Army's concept of professionalism and meaningful work with adventure and travel, and AMC's determination to provide the fighting man with dependable equipment. In mid-September a task force of seven men from the US Army Aviation Test Board departed Fort Rucker, Alabama for six months' temporary duty at Fort Greely, Alaska. Their assignment:

to conduct an expanded service test under arctic winter conditions for the CH-47C Chinook helicopter. The Chinook covered the 3160 nautical mile flight in approximately 25 hours flying time.

The tests will determine to what degree the CH-47C is suited for Army use in an arctic winter environment, and the operational and maintainability limits imposed on the CH-47C, support equipment, and operating and maintenance personnel by the arctic winter

environment. The helicopter testing will include all normal emergency, and operational maneuvers using prepared and unprepared surfaces operating at maximum allowable weights and air speeds while transporting internal and external loads under day, night, and adverse weather conditions. During these activities, the adequacy of the cold weather systems (heating, defrosting, and anti-icing), maintainability characteristics, human factors and safety factors, will undergo close scrutiny.

Corrosion confab to be in Houston

HQ, US ARMY MATERIEL COMMAND, Washington—AMC's Materials Advisory Group will sponsor the 1972 Tri-Service Corrosion Conference December 5-7 in Houston. The gathering, held for defense employees and contractors as well as other interested individuals, will emphasize the many problems associated with corrosion of military equipment.



Profile:

by Bob Brewer

'Hump' Williams and friends

At 51, he finds the broncs a little meaner and the falls a little harder. Even so, "Hump" Williams, who has climbed aboard more still-legged broncs and wild-eyed bulls in 26 years of rodeoing than he can or wants to remember, is looking forward to another year of riding outlaw horses.

"Hump," whose real name is William Boyce Williams, is the undisputed leader of a trio employed at Red River Army Depot, Texarkana, Texas. They hit the professional rodeo circuit at nights, on weekends and during summer vacations. Besides Williams, the group includes Anthony Adkins and Harold Johns.

In age and experience, and perhaps in talent and ability, the three men differ greatly. But when it comes to their love of rodeoing, there is little if any difference. The smell of horseflesh and leather mingled with the sound of bawling cattle has a heady effect on all three. And when such sounds and smells are mixed with dust from a

hoof-packed arena, the noise of a crowd, strains of country-western music and the carnival atmosphere of a rodeo—well there's just no holding them back.

Because of his experience and national rodeo fame, "Hump" Williams is dean of the Red River group. A full-time professional cowboy from 1947 to 1952 and a part-time performer since, Williams was once a perennial candidate for national rodeo honors.

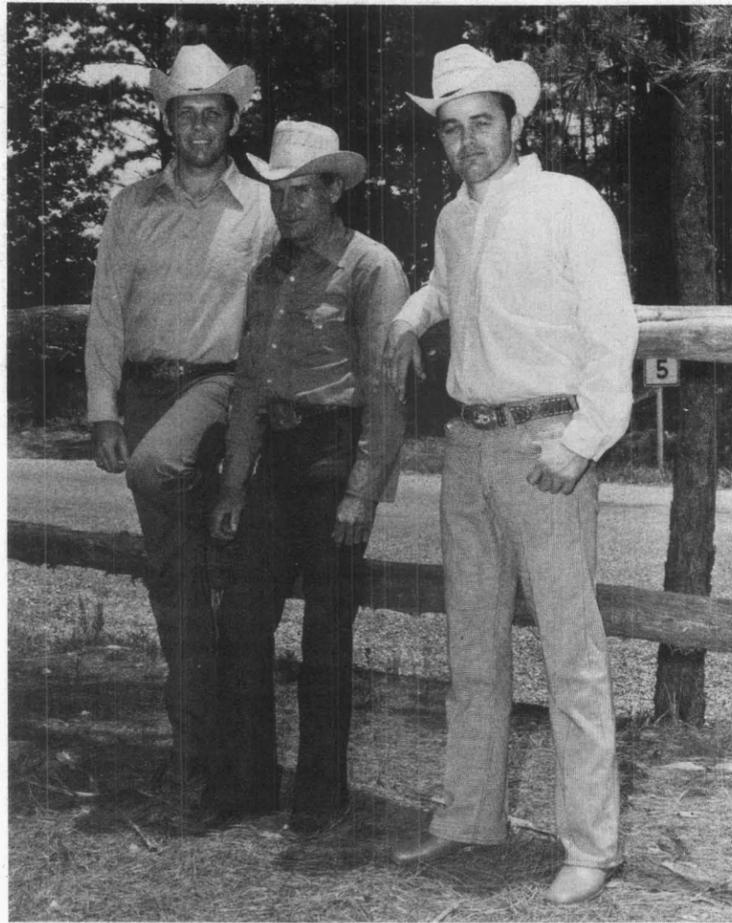
The two other members of the group, Adkins and Johns, are currently considered outstanding prospects as national competitors. Both are primarily calf-ropers, but they also compete in other events. Both have won All-Around Cowboy honors at various southwestern shows and both still have many years of competition before them... years in which they should gain national acclaim.

At Red River Army Depot, the skills and interests of the three men

differ greatly. Williams is a mobile equipment operator. Adkins is employed in the depot's Dynamometer Shop, and Johns is a supply specialist. But when their work day is over, their interests are the same, for it's time to hit the road to wherever the thrills of rodeoing can be found.

And what is it that makes a person take part in such a dangerous sport? Well, according to Red River's "wild bunch," two very important inducements are money and the thrill of competing. But to them, even more important than the money and competition is the satisfaction that comes from achieving success when the odds are stacked against you and everything depends on your own ability and effort.

As Harold Johns said, "After all, that's what life is all about. The greatest thrills always come with success born from the knowledge that you gave your best under difficult odds and won."



Harold Johns, "Hump" Williams, Anthony Adkins

Army Wife of the Year leads a busy life

US ARMY TANK-AUTOMOTIVE COMMAND (TACOM), Warren, Mich.—Eight months after she was named Army Wife of the Year, Mrs. Stan Sheridan finds herself busier than ever.

Suddenly plucked from an almost routine existence and cast into the spotlight of national and international publicity, she has emerged with class, real class. No personal aggrandizement with her, just determination to carry well the honor she won in competition with 150,000 other Army wives.

Ruth Sheridan was entered in the contest by the Officers' Wives Club at TACOM. Her husband, Colonel Stan Sheridan, is Project Manager for the M60 Main Battle Tank.

Since winning the Army Military Wife of the Year crown, Mrs. Sheridan has been deluged with telegrams, phone calls and letters from all parts of the world. Requests for her to speak at various gatherings have poured in by the hundreds, and she has visited many Army posts in the country as the guest of top military officers.

In addition to her many other talents, pretty, brunette Ruth Sheridan has emerged as a forceful public speaker. "I speak without notes," she says, "but before speaking I have read the speech at home hundreds of times and literally memorize it. I enjoy speaking before people."

Mrs. Sheridan usually speaks on military-community relationships. When speaking before civilian audiences, she relates how civilians can move into military life.

Another plus for Mrs. Sheridan is that she quietly has emerged as the unofficial leader of Army wives in the TACOM area. "Since being selected as 'Army wife,'" she says, "I've been overwhelmed by the warmth shown by other Army wives and find that more and more of them are turning to me for advice and help."

Mrs. Sheridan was poised before, but after two glittering rounds of ceremonies in Washington this year which included being guests of General and Mrs. Henry Miley, Jr. and General and Mrs. William Westmoreland, and other dignitaries, she has acquired a rare dignity.

Now ahead of Mrs. Sheridan are visits to many more Army posts and perhaps a trip to Europe.

Meanwhile, many ask the question, "Has all the new schedule disrupted Mrs. Sheridan's family life?" She replies: "Certainly it affects my home life, but I have a very understanding husband. And my two boys are very proud of me. All the members of my family rise to the occasion when I am away for a few days and make it easier for me to travel."

Healthwise, Mrs. Sheridan is thriving in her new role. "I run on lots and lots

of energy," she says. "I'm pretty healthy."

When she is home, Ruth Sheridan's day, in addition to household and volunteer chores, includes sessions of golf, tennis and water skiing.

She still spends at least 25 hours a week working with the TACOM Officers Wives Club, TACOM Army Community Service, the Boy and Girl Scouts and other organizations.

The all-service Military Wife of the Year title went to the Coast Guard representative, but there certainly was no bitterness on the part of Mrs. Sheridan on this score. "I feel the best woman won," she says.

So, as the days go by, Mrs. Sheridan's bubbling personality endears her to anyone she has contact with, and the afterglow of that personality lingers long after she has gone.

Even the long days she puts in fail to dim Ruth Sheridan's enthusiasm. She rises about 5:30 a.m. and doesn't go to bed until 11:00 p.m. or midnight. She almost regrets the time she has to sleep. "I've got to keep going," she explains. "Give me a week to myself and I consider it worthless. I've got to be involved."

And in her role as Army Wife of the Year, Mrs. Sheridan has certainly been a credit to TACOM and AMC.



Ruth Sheridan poses at AUSA Convention, Washington

After the dark days, Joe Draper returns

"It was wonderful to get back to work," Joe said. "I'm going to stay here at the Depot until they have to run me off." That would be about 16 years from now when Joe is 70, the mandatory retirement age for most federal civil servants.

Born in Waverly, Ill. in 1918 and raised in nearby Carlinville, Joe ran himself out of the family home when at 14 he announced to his father that he wanted to leave and get a job. He has been on his own since.

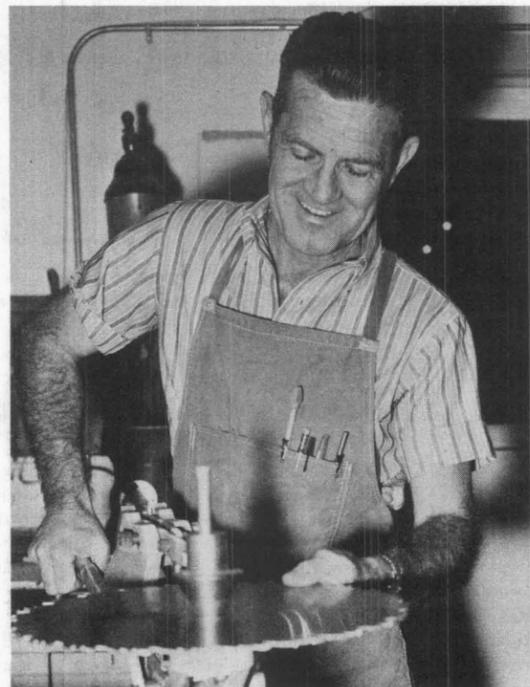
First he worked on a farm in Iowa, 12 hours a day for a dollar a day and board. It was at a CCC Camp in 1935 at Black River Falls, Wis. that he began learning the carpentry trade. Two years later he came to Oregon to visit his uncle, the late Carson Linder, who lived near Hermiston. He stayed in the area for several years working on grain elevator and house construction before returning to the Midwest. In 1942 he married his childhood sweetheart from Carlinville, and three months later he was in the Army serving with the Fourth Infantry. He drew an Aleutian Island as-

signment and made Staff Sergeant before his discharge in 1945.

At the close of World War II he brought Verda Mae and their small daughter, Connie Jo to live in Hermiston. Again he did carpentry work and when construction of McNary Dam was undertaken by the Army Corps of Engineers in the late 1940s, he went to work for the major contractor for five years. Then in 1953 he became a member of the security police force at Umatilla Army Depot.

In the intervening years Joe and Verda Mae have become grandparents. Connie Jo and her husband, Norman Howell, live in nearby Kennewick, Washington, with their three children, Rocky Joe, 10, Tondalaya, 7, and Clayton, 3.

For a long time Joe couldn't distinguish his grandchildren's features or play ball with them or spoil them quite as much as he'd like. Now he can do all those things again. He can mow his lawn and drive his car. He can make a living and be on his own. He can read without his vision fading out. Joe Draper is a happy man. He can see.



GLAD TO BE BACK—Joe Draper places blade on a saw set so he can renotch the metal. Legally blind following cataract surgery last year, Joe claims 20/20 vision with the aid of contact lenses or thick photogray glasses. He was recently promoted to saw reconditioner in Umatilla Army Depot's Support Division.

A boy and his dogface: Story of two 'Brave Men'

By
Frank Chandler

SHARPE ARMY DEPOT, CA—His name is Quinton and he is nine years old. He hobbles up to the batter's box on one leg and a crutch, his right pant leg empty from the knee down. He picks up the bat, pushes his unruly blond hair from his eyes and grins broadly. Quinton is one of those happy kids that smile a lot. As the boy on the mound pitches the ball the batter throws down his crutch, grabs the bat while balancing on one leg and takes a mighty swing. The bat meets the ball squarely, and it soars over the shortstop's head into left field. Quinton falls on his tail.

But the play isn't over by a long shot. The spunky kid hits the dirt beside home plate in a whirl of movement, rolling over and heading down the first base line on arms, elbows, knees and one leg, a human dynamo of courageous motion. The throw from the boy in left field is close, but too late. "SAFE," the umpire calls. Quinton has himself another single. He grins again as he brushes the dust from his clothes.

That's the way it is with him; thanks to an extra large helping of spunk. Quinton participates in baseball, football, kickball, swimming and basketball. He also does well in school and is accepted by others in his peer-group as a leader. Quinton is coping—coping well with what might be an insurmountable problem to a less gutsy boy his age.

But he has another serious problem he couldn't cope with until recently. Quinton doesn't have a father. He lives with his mother and two little sisters, but there is no man around the house that he can talk to about some of his problems. There are some things you just can't talk to a mother about when you're a boy growing up.

He's lucky Gerry came along.

Gerry is US Army Captain Gerald W. Monden, Commanding Officer of the 602D General Supply Company at Sharpe Army Depot, California. He is of Japanese ancestry, 27 years old, single, holds a degree in business from the University of Hawaii, sweated his way through Airborne and Ranger schools, and won the Bronze Star, Air Medal,



Quinton Serbousek
CPT Gerry Monden

Purple Heart and Combat Infantryman Badge the hard way. He was a rifle platoon leader in Vietnam. A rough dude? You better believe it!

Some might ask, "What could a professional soldier with that background have in common with a small fatherless boy without a leg?" The answer is all too obvious—communication, that's what!

Gerry is the sponsor for Quinton in the Sharpe chapter of the Brave Men Program, a group of ten men and ten boys that meets once or twice a month as a unit, and once or twice on a one-to-one basis.

When the Junior Officers' Council at Sharpe Army Depot began looking for a meaningful cause that the group could support, they discovered the Brave Men Program for Fatherless Boys through the YMCA. The objective of the program is to foster a relationship between male adult sponsors and boys without dads that can open avenues of communication based on a close personal relationship and trust, which would, in turn, assist the mother in meeting her son's needs.

Brave Men is a new approach by the YMCA to assist first, second and third grade boys by providing them with the opportunities for regular association with concerned men who can act as a male model in recreation, motivation and behavior. It takes a "Brave Man" to grow up in a society without a father; it takes a "Brave Man" to give his time to help a young boy.

The program is a natural one for a military installation because of the ready availability of recreation sites and a wide variety of military equipment and facilities that are of interest to a wide-eyed growing boy with an inclination to crawl over and into things. During a recent group meeting of the Sharpe chapter, sponsors treated the boys to a tour of the depot aboard a GI truck, stopping to see and touch Army aircraft at the flight line and the "Flying Scotsman," a famous old railroad train temporarily stored at Sharpe. Afterward, the group barbecued hamburgers and swam at the pool.

Individual sponsors have created togetherness with their fatherless proteges in many ways—the

movies, a rodeo, fishing, horseback riding, camping and even such unceremonious business as a trip to the dump. When a US Air Force C-5 Galaxy landed at Stockton Metropolitan Airport to pick up Sharpe Army Depot cargo, one of the fatherless boys had a special tour conducted by the airplane commander. The Brave Man had his picture made with the pilot at the controls of the plane. Events such as that live forever in the memory of a small boy.

Captain Kendall McIntyre, who is married and has two daughters of his own, has sponsored John since the chapter was formed at Sharpe Army Depot a few months ago. He says "John was reluctant to open up and talk to me when we first got together, but like the other boys, he has really loosened up and now will talk to me about whatever comes to his mind. We discuss things like school, sports, girls and what he wants to be when he grows up."

Captain Harold Franklin also has a family, including a son about the age of David, the boy he sponsors in the Brave Men Program. Franklin says "I find it very rewarding to share interests with these young boys who are disadvantaged because they have no father. It is also gratifying to see underprivileged kids from different ethnic and social groups expanding their horizons, learning additional skills and developing new relationships with other boys through Brave Men."

This contemporary approach to the Department of Defense Domestic Action Program has proven so rewarding to participants that other chapters are being planned on the depot.

This small group of military men at Sharpe is making a meaningful contribution to the improvement of the lives of these young fatherless Americans, while simultaneously finding that enrichment has also been added to their own lives. These men are doing a lot to demonstrate that the people of the US Army do have a heart.

Lieutenant Walter Gund, who has been married five years and has no children describes it well. He says, "Brave Men is a great program. It's like being an instant dad."

* * * * *

Engineer to see both sides now

REDSTONE ARSENAL, Alabama—What would prompt a young Missile Command engineer to leave a \$20,000 to \$30,000 a year job, uproot home and family, and leave friends to accept a temporary position with a major aircraft corporation?



"I think it'll be broadening from the standpoint of personal development... and I'm looking forward to the challenge," said Ernie Young, 39-year-old Chief of the Hawk System Support Division.

Early in September, Young left for Hartford, Conn. to work for at least a

year as assistant to the purchasing manager for United Aircraft Corporation.

The soft-spoken and articulate Young accepted the job as the Defense Department's nominee for President Nixon's Commission on Executive Interchange. That's a new program between government and industry to exchange high-potential young managers and acquaint them with each other's problems and capabilities.

Goal of the program is to bring business and government closer together.

"Many of our domestic, social and environmental problems will be solved only through the combined efforts of business and government," a commission spokesman said.

Young, who is to work with United Aircraft's Pratt and Whitney Division, said of his job, "I'm told I'll be dealing

with foreign countries who do business with the corporation to determine what goods and services United might buy from them. I'm excited about it because I'll be traveling to those countries to look at production facilities before we negotiate contracts."

The hand-picked executives who are getting a taste of what life's like on the other side of the fence, range in age from 25 to 40.

Young, who has 14 years of civil service, came to Redstone Arsenal in 1958. He has been associated with the Hawk program since 1962. A native of Union, S.C., he holds a B.S. degree in physics and an M.A. degree in public administration.

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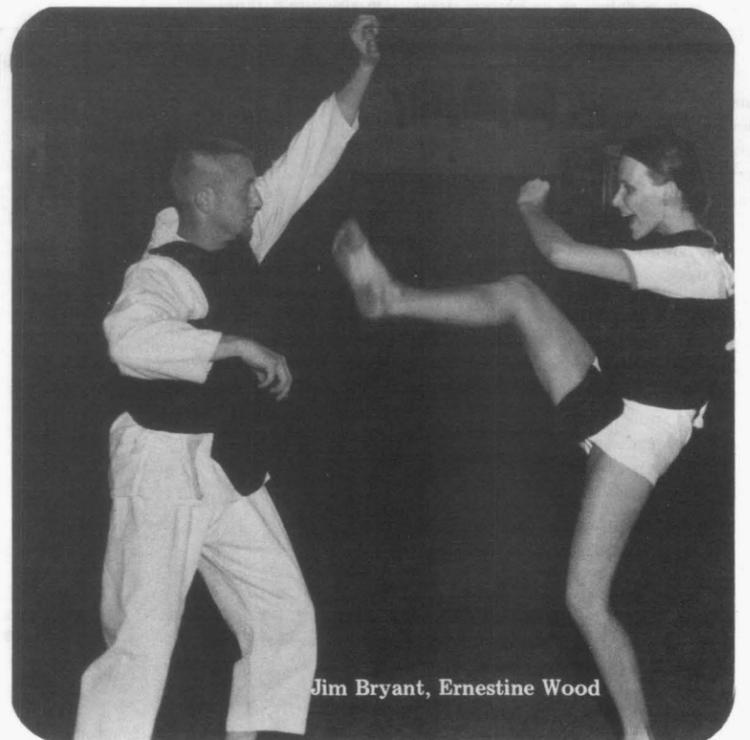
HQ, US ARMY MATERIEL COMMAND, Washington—General Creighton W. Abrams, new Army Chief of Staff, and General Frank S. Besson, Jr. (retired), first Commanding General of AMC, joined with the present Commander, General Henry A. Miley, Jr., and more than 750 civilian and military personnel and their guests to celebrate AMC's tenth anniversary year at the Fort Myer Officers Club Friday, November 3.

The event highlighted a tenth anniversary celebration that began in August. The US Army Materiel Command was officially activated August 1, 1962, assuming materiel functions formerly carried out by six of the Army's seven Technical Services—Ordnance, Signal, Quartermaster, Engineer, Transportation, and Chemical.

Special articles marking the event have appeared in Army Logistician, Army Research and Development Magazine, and several AMC newspapers. The tenth anniversary also made news as the subject of a US Army Command Information Spotlight, an edition of Army News Photo Features, and a speech on the floor of the US Congress by Senator Harold Hughes.

Music for the gala cocktail buffet November 3 was provided by members of the 324th Army Band (Test and Evaluation Command) and the US Army Band.

* * * * *



Jim Bryant, Ernestine Wood

AMC celebrates tenth anniversary



LOOKING IT OVER—General Creighton W. Abrams, US Army Chief of Staff, examines the walnut cigar humidor presented to AMC's first Commanding General, Frank S. Besson, Jr. (retired), by General Henry A. Miley, Jr., current Commander of AMC. The presentation was made at a party November 3 celebrating AMC's tenth anniversary.

FSTC:

On a karate kick

US ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER, Charlottesville, Va.—The Blue Ridge area of Virginia is being rent by guttural cries these days as AMC's Foreign Science and Technology Center (FSTC) reels under the impact of TAEKWONDO.

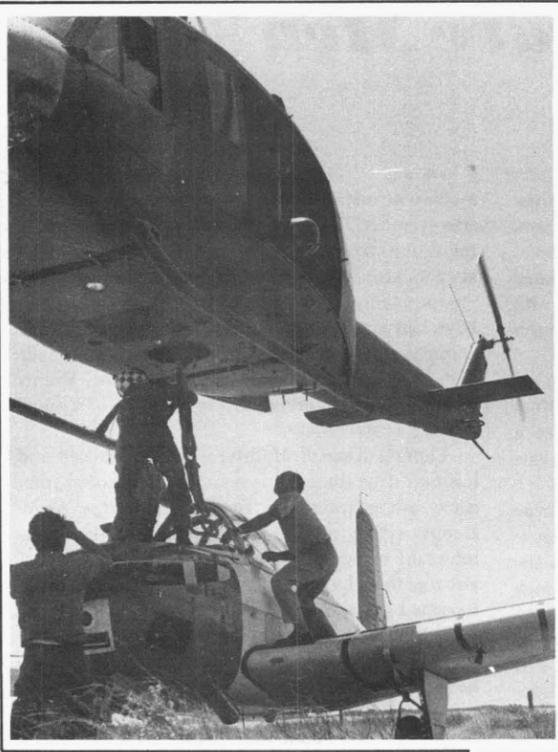
TAEKWONDO is Korean Karate, and it's all the rage in Charlottesville.

It began in February, when the local Fraternal Order of Police asked Charles Mason, an FSTC employee and a registered black belt in Korean Karate, to teach TAEKWONDO to FOP members.

When classes began, several women employees of FSTC asked for the same type of training. Instruction for 12 of them began the following week.

Word got around, and suddenly Charles Mason is a very busy man. He is conducting evening Karate classes for 40 Charlottesville teenagers on a cost-free basis. Together with his students, Mason is videotaping a series of half hour Karate programs to be aired by a local television station. And by doing so, he's proving once again that AMC people are "where the action is."

Aircraft rescue, Texas style



Photos by Ray Ayala



UP, UP AND AWAY . . . The sun in southern Texas was hot that Monday when the little T-34 training plane from Corpus Christi Naval Air Station made a forced landing on the sandy beach at Padre Island, on the Texas Gulf Coast. And that Tuesday was a beautiful day when Army Aeronautical Depot Maintenance Center (ARADMAC) pilots Lieutenant Colonel Billy R. Hawkins and Chief Warrant Officer Jim Swindle and civilian crew chief Randy Havel went out to rescue her. With the help of a crew of Navy men they attached a sling, and up and away she went . . . back home to NAS, where she and her sister T-34's have been helping to train midshipmen for their future careers as officers in the US Navy. ARADMAC, the Army's main helicopter overhaul and repair center, is a tenant aboard NAS.

ECOM sees bright future for Thermoviewer

NIGHT VISION LABORATORY, Fort Belvoir, Va.—If you really want to see a black cat in a coal bin at midnight, the Night Vision Lab of the Army Electronics Command has developed just the gadget.

It is the "Thermoviewer," or Handheld Thermal Viewer (AN/PAS-7), whose civilian applications may well exceed its primary military use, which is to detect and recognize personnel targets at night.

The Thermoviewer has already been successful in detecting loose rock that might cause mine cave-ins and in studying earth surface temperatures in geological surveys.

Other potential uses include detection and mapping of thermal pollution in water and a variety of medical applications, such as detecting cancerous tissue beneath the skin and studying burned tissue.

The device weighs only six pounds and can be handled as easily as a pair of binoculars. It is powered by a belt-mounted, five-pound rechargeable battery pack capable of 12 hours of continuous operation.

The Thermoviewer creates images by sensing temperature differences between the target, or object viewed, and its background. All objects with temperatures above absolute zero emit thermal radiation, or heat. In the visible wavelength, these waves can be seen as flames, for example, or the glowing red of heated iron. In other wavelengths, a detector is necessary.

The Thermoviewer has a detector array of lead selenide, thermoelectrically

cooled to almost 160 degrees below zero, Fahrenheit. The array is scanned electronically to create an image on a phosphor screen visible through the eyepiece.

The principle of the thermal viewer is not new, but previous equipment was heavy and bulky, and took 20 minutes to create a visible image. The new viewer creates images instantly.

Further, the Thermoviewer requires no outside illumination. Earlier infrared devices required an infrared light source that would bathe the target in invisible rays. An image converter then changed the rays back to visible light.

Most image intensification devices require some light source, even if it is only that provided by the night sky or decaying vegetation. The Thermoviewer works in absolute darkness.

Since the Thermoviewer detects only differences in temperature, it can be used in either darkness or daylight to indicate a person or vehicle partly shielded by foliage or camouflage. It also can be used to see through light fog or haze because it works at a longer wavelength than that of visible light.

In its most significant civilian use to date, the Thermoviewer was used by the U. S. Bureau of Mines to find hazardous loose rock behind apparently solid mine walls and in supporting pillars.

The Bureau discovered that the temperature of the air space around concealed loose rock was affected to a greater degree by mine temperatures than the solid rock surrounding it. The heat difference was easily spotted by the Thermoviewer.

Since rock falls in mines cause more than 100 fatal accidents in coal mining operations annually, it is estimated that the location of undetected weaknesses in apparently solid walls and pillars would save many lives.

The device also could be used to locate underground mine fires, combustion in waste dumps, and underground water courses.

The Thermoviewer was also used successfully by the U. S. Geological Survey. Mounted in an aircraft for flights over the Survey's Oklahoma test site, it was valuable in making a detailed study of conditions which affect surface temperatures of the earth.

It also has been suggested as a valuable aid in nighttime sea rescue work, since it could detect the difference between sea water temperature and that of anyone in the water or in a boat. This would be similar to the military application of detecting swimming infiltrators trying to approach friendly locations.

Thermal pollution of lakes, rivers and streams could easily be seen through a Thermoviewer carried in an aircraft.

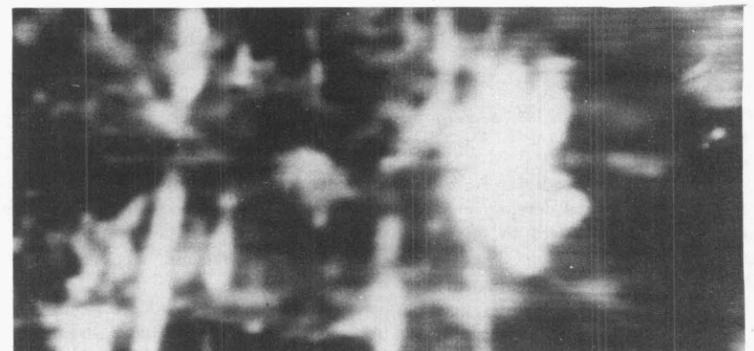
Other potential civilian applications are limited only by the imagination of the user.

Three companies built feasibility models of the Thermoviewer, and Phillips Broadcast Equipment Co., Mahwah, N.J., was selected to build 20 models used for tests by the Army and civilian agencies.



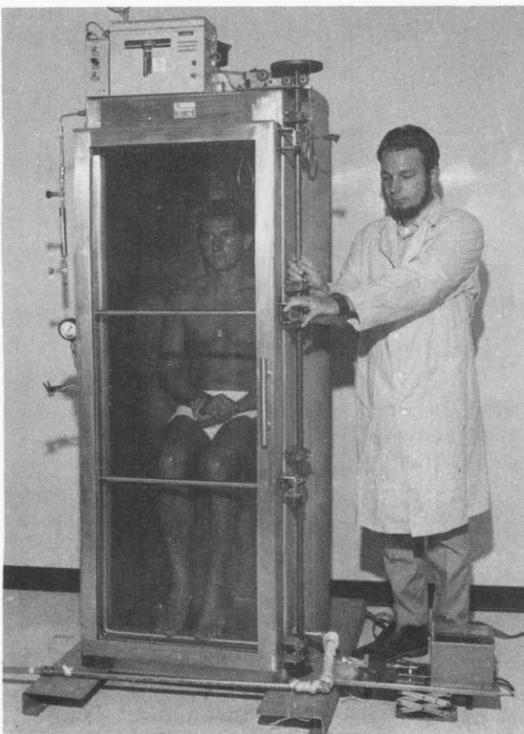
NOW YOU SEE IT, NOW YOU DON'T—In the upper photo, a soldier hidden by foliage is hardly visible (right, center). In the lower picture, taken through the Army's new Thermoviewer, he is clearly outlined. The handheld thermal viewer works by "seeing" the difference in temperature between men, animals or vehicles and their background.

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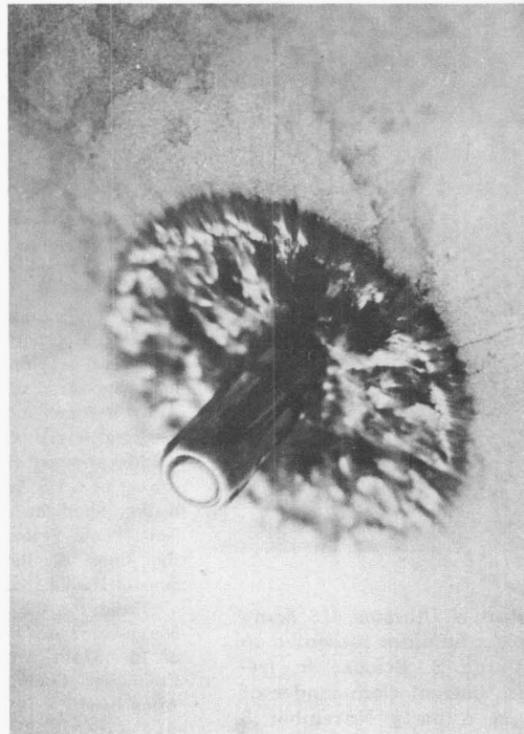
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On the lighter side: *Two for fun*



← SMILE! YOU'RE ON CANDID CAMERA . . . is just one of many possible captions for this photo. Here's your chance to break into journalism—write your own caption for this picture and send it to the Editor, AMC News. We'll run the best of the bunch in a future edition along with the story behind the photo. * * * * *

→ MYSTERY PHOTO NUMBER ONE . . . Because we're new to this racket, we'll start off with an easy one. What is the subject of this picture? Each month, if interest warrants, AMC News will run a mystery photo. Most will in some way be related to AMC—its people, places, or projects. We'll identify Mystery Photo Number One next month. And look out—Number Two will be a real stumper! * * * * *



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Send your ideas and comments to:

Editor, AMC News
ATTN: AMCIN-CI
HQ, US Army Materiel Command
Washington, D.C. 20315

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