

Outdoor Picnic, Max Roby Highlight Center CFC Day October 3rd

A special Combined Federal Campaign day has been announced for the Aerospace Center on October 3rd as the start of the 1977 East-West Gateway CFC in the metro area. In making the announcement Center Project Officer, John Flaherty, said the CFC day will be centered around a special noon hour bar-b-que and bandstand show.

"We intend to have something for everyone," said Flaherty. "There will be music provided from the bandstand on the parade ground by the Air Force Concert Band of Mid-America from Scott Air Force Base; some people will come down to tell us how the CFC works and more importantly to show how our dollars are used and Max Roby of KSD-TV will serve as the master of ceremonies for the event."

The base restaurant council is also making plans with the dining hall concessionaire to have a special bar-b-que lunch served at the parade grounds.

The announcement of the CFC day was made during the Aerospace Center project managers meeting the latter part of August.

This year's goal for the Center has been set at \$112,000 with sub goals of 53 to 57% payroll deduction, \$51 to \$56 average payroll deduction gift and \$15 to \$16 average cash gift.

Col. James St. Clair, Center Director, pointed out to the assembled project managers that the campaign will again this year include recipient agencies on both sides of the river making it possible for those working in St. Louis and living in Illinois to contribute where they work to benefit where they live. The colonel also expressed his appreciation to the volunteers for

their interest in the campaign and encouraged all Center employees to lend their support to the campaign.

Project managers include: Nancy Clark, AA; Nancy Mallonee, AC; Adolph Wuenschel, AD; Robert McDaniel, CM; Al Lutes, FE; Charles Piller, GD; William Moran, LO; MSgt. Richard Gannon, OC; Marge Wisneski, PA, CO, D, EO; Denyse Ruesch, PD; Sharon Hertel, PO; Ed de la Pena, PP; June Moran, PR; Betty Qualls, SD; Ed Kendrick, SO; and Ed Alexander, Kansas City Office of AC.

In addition to Flaherty, Ms. Gretchen Hawk will serve in the Center CFC office as the assistant project officer and Joann Becker will be the CFC secretary. Ladorn Creighton has already begun his training as an agency loaned executive to the overall East-West Gateway CFC. He will have the task of coordinating the campaign of several agencies in the area.

New Director Expresses Confidence in Agency

Orienteor

DEFENSE MAPPING AGENCY AEROSPACE CENTER

Vol. XIX, No. 18

September 16, 1977

Labor Day Moving Day for Some



Brand spanking new . . . this is the way one of the new floor additions to the Building 36 wing looked just prior to the equipment, desks and people being moved in for the first occupancy over the Labor Day weekend. After the equipment is in place and tested, partitioning will be added where necessary to provide for the proper work environment. The new area sports brightly painted walls and the latest in lighting to add accent to the work area.

For some the Labor Day weekend was a moving weekend as the first pieces of equipment were moved into the newly constructed 3rd and 4th floors of the Building 36 Wing.

The spacious modern areas (shown left) include the latest of heating and air conditioning systems, lighting, ceilings and flooring. Modern color combinations have also been used to accent the working areas.

Some 65 people and specialized equipment began work in the areas following the Labor Day weekend with another 70 and more equipment moved in during the second week of September.

Building construction was handled by the U.S. Army Corps of Engineers, Omaha District.

Members of the Aerospace Cartography Department and the Geopositional Department will be the primary occupants of the new areas.

Whitfield Selected
United Way MC

The new Director of the Defense Mapping Agency, Lt. Gen. (selectee) Abner Martin, has issued his first statement to the personnel of the Agency since taking command the first of the month.

In his statement he said, "My first act as your new Director was to tell the Headquarters staff that I am not here to make a lot of changes, but to continue the fine record that DMA has established. I anticipate that any changes which do occur will come in a gradual

fashion after I have had a chance to learn what you are doing and how the Agency is going about its job.

"In my brief time with Admiral Cramer before he turned over the directorship to me I was impressed with his esteem for the mission and people of DMA. He told me I was getting 'the best three-star assignment in the Washington area.' Although I have been here only a few hours and have had a chance to meet only a few of you so far, from what I already knew

about DMA I am convinced that we do have a fine organization and that this Agency plays a critical role as a vital part of our national defense.

"As soon as I can do so I will be traveling to visit all DMA Components. At that time I expect to meet as many of you as my schedule will allow. I look forward to getting to know the military personnel and the civilian employees who make DMA a great organization. Together, let's make it even greater."

Age 70 Retirement Discussed

Chairman Alan K. Campbell of the U.S. Civil Service Commission has urged repeal of a law that requires Federal employees to retire at age 70 if they have completed 15 years of federal service.

"One of the basic principles of the civil service is that employment should be based on merit, and should be free of discrimination based on race, color, creed, sex, national origin, or age," Mr. Campbell said.

"Repeal of the mandatory age 70 retirement provision would certainly be more in keeping with principles of true merit and equal employment opportunity," he said.

Chairman Campbell was testifying before the Subcommittee on Compensation and Employee Benefits of the House Committee on Post Office and Civil Service. He said the commission would soon

submit legislation to repeal the mandatory retirement law.

He said, "It is our belief that removal of the mandatory age requirement provision would have very little adverse effect on management of the federal work force."

He indicated that approximately 40 per cent of all the federal work force is younger than 40, as compared with 55.3 per cent of all employed persons and 56.5 per cent of all the civilian labor force.

Only 1.2 per cent of the federal work force is 65 or older, as compared with 3.3 per cent of all employed persons and 3.2 per cent of the civilian labor force.

The age group of 40 through 64 accounts for 58.8 per cent of the federal work force, as compared with 41.4 per cent of all employed persons and 40.3 per cent of the civilian labor force.

Top Air Force Man To Address AFA

The Honorable Dr. John J. Martin, assistant secretary of the Air Force, will be the featured speaker before the St. Louis/Scott AFB chapters of the Air Force Association joint meeting in November.

The announcement was made by Stuart Popp, president of the Spirit of St. Louis chapter. The St. Louis chapter will serve as host for this year's joint meeting. Present plans call for the meeting to be held on November 18.

Additional information will be forthcoming, said Popp.

Bloodmobile Today

Ken Whitfield, PR, was the master of ceremonies for the United Way campaign kick-off luncheon held today, according to information received from the United Way, Inc. headquarters.

The luncheon is considered the most important of the campaign as it sets the tenor for the entire campaign.

The choice of Whitfield is a significant honor not only to the individual but to the Aerospace Center and the Federal government as well. It marks the first time that a Federal employee has been chosen for the task. Normally the assignment goes to radio and TV personalities or key civic leaders.

Whitfield was chosen as this year's master of ceremonies



because of his tremendous success as a loaned executive in past years and as a member of the United Way speakers bureau. His efforts have been directly responsible for increased giving in several agencies and private industrial groups.

FBA 50th Year

Metropolitan St. Louis Federal Business Association is celebrating its Golden Jubilee Year.

The Association was established in 1927 and with the purpose of promoting within the community a better public understanding of government agency operations and objectives.

Among its goals are to bring together civic, state and federal government groups to provide a better appreciation of each others' missions and to improve the image of Federal employees to the public,

in addition to exchanging ideas to foster efficiency and economy in the Federal Community in cooperation with the Federal Executive Board (FEB).

The new officers and directors for 1977-78 who will begin their terms are: President - Carl Zerweck, TSARCOM; 1st Vice President - George N. Shalhoob, DMAAC; 2nd Vice President - John Douvitsas, VARPC; Secretary - Janet Burkett, GSA-PBS; Treasurer - Dorothy Mahon, NRC - NAS.

Points of Law: Have You Been Had?

by Capt. John Beall, USAF

Have you been had lately? If you are a normal consumer, you probably have at one time or another bought something through the mail.

You may have been or may in the future be one of the unfortunate victims of what the Post Office terms "mail fraud." These frauds usually involve schemes designed to bilk only a small amount of money from many suckers on the theory that one individual will not complain about a small loss.

Legal offices throughout the Air Force have aided numerous individuals who have been ripped-off in schemes ranging from the sale of clothes, information about job opportunities, hair restorers, weight reducers, envelope stuffing and sex rejuvenators.

The most frequently used device is direct mail solicitation, although many of these operators also advertise in magazines and newspapers.

Unfortunately, for the most part, there is little hope of recovering most of the client's money as the company disappears when the postal authorities begin their investigation.

Individual consumers should investigate the reputation of the company, including checking with the local Better Business Bureau, before purchasing or ordering any product. If you should be taken in by a fraudulent scheme, immediately notify the local postal authorities. They will start action to prevent continuation of the scheme before others are taken in.

In some instances they might even be able to help you get your money back. Your best protection is common sense. If it sounds too good to be true, it probably is.

Space Shuttle Ride Great

The space shuttle orbiter Enterprise "flies like a good fighter," Air Force Lt. Col. Charles G. Fullerton said after piloting the first free-flight of the delta-winged spacecraft.

The 75-ton Enterprise was carried aloft Aug. 12 on the back of a Boeing 747 jumbo jet. The craft was blasted free by explosive bolts with spacecraft commander Fred W. Haise and Colonel Fullerton guiding the engineless shuttle to a landing on a dry California lakebed.

After descending 24,100 feet in 5 minutes 23 seconds, the colonel termed the orbiter "a very crisp, very stable aircraft."

Colonel Fullerton has been a member of the astronaut program since September 1969 when he was selected for the Manned Orbiting Laboratory Program as a flight crewmember. He served as a support crewmember on the National Aeronautics and Space Administration Apollo 14 and 17 missions.

Aerospace Center Contributor

Bits And Pieces

From the Black book:

There are several major events planned at the Center during the next few weeks, all of which you'll be reading more about but perhaps it would be well to call your attention to them now for calendar planning purposes. The first is the CFC Day rally to be held on October 3. A special barbecue lunch on the parade ground with entertainment by the Air Force concert band and Max Roby as the MC will be included in the program. On October 11 the Federal Women's Program will have a parade ground full of booths which will depict the various opportunities in the professional and technical societies associated with the Center. They'll also have lots of other things going on that will be of interest to all. On October 13 the Daughters of the American Revolution will hold special ceremonies on the parade ground as they place a special historical plaque on the sundial in recognition of its historic value. Former Congresswoman Leonor Sullivan is scheduled to be the speaker for the event. So you see the first part of October is going to be hopping on the parade ground.

-0-

Speaking of hopping . . . that's what's been going on in the move of people and equipment into the new wing addition. It seems that the move was accomplished without great loss to production. All involved are to be complimented for a "smooth move," to use today's terminology.

NCOs Report For Duty

The following NCOs reported for duty at the Center recently:

MSgt. Eddie Payne reported in from Rhein Main AB, Germany and has been assigned as Chief, Special Security replacing MSgt. Leroy T. Miller, who retired on July 31st.

MSgt. John Severson, MSgt. Nicholas Ziggas, SSgt. John Crawford from FIO-A, and MSgt. Andrew J.G. Foster, Panama, are assigned to the Aeronautical Information Department, Air Facilities Data Reduction Division. The FLIP function was returned to the Center upon deactivation of FIO-A.



SPEED KILLS

The ORIENTOR is an official newspaper, published bi-weekly on Friday by and for the personnel of the Defense Mapping Agency Aerospace Center, at St. Louis, Missouri. Opinions expressed herein do not necessarily represent those of the DOD.

Col. James H. St. Clair

Director

David L. Black

Chief, Public Affairs Office

Editor

Insulation



WHAT IS INSULATION?

Insulation is any material that resists the flow of heat from one surface to another. Some insulating materials are more effective than others. For example, four inches of high quality thermal insulation retards heat flow better than 15 feet of solid concrete.

Insulation retards the rate

of heat escaping from your house in winter and entering in summer. The most common types of insulation are the fibrous types, which hold the heated or cooled air in tiny air spaces. They are lightweight and porous. Reflective insulation retards heat transfer by reflecting the heat and is effective only if used in conjunction with a dead air space.

The U.S. Air Force 1947 - 1977

Sept. 18th is the 30th anniversary of the Air Force. On this date in 1947, W. Stuart Symington was sworn in as the first Secretary of the Air Force.

During that 30 years the Defense Mapping Agency Aerospace Center and its predecessor, the Air Force Aeronautical Chart and Information Center, made significant contributions to the success of many Air Force programs.

Whether involved in research and development activities for new weapon systems or supplying the cartographic products necessary to the accomplishment of an operational mission, the people of the Aerospace Center have made their mark on Air Force history.

As you read the story of the Air Force's 30 years it is important to remember that the Aerospace Center and the old ACIC were silent partners in many of the accomplishments.

The bill establishing the Air Force as a separate service was brought to President Harry S. Truman shortly after noon on July 26, 1947. He signed the National Security Act of 1947 on his airplane, a propeller-driven C-54 transport with a top speed of 265 miles per hour. The new service began proving its worth right from the

beginning when the Soviet Union clamped a land and rail blockade on West Berlin. The Air Force flew in nearly two and one-half million tons of food and supplies during the Berlin Airlift to save the city from Communist domination.

Less than three years later, trouble erupted in Korea. United States involvement there led the Air Force to develop expanded roles for airpower.

Dramatic victories over Communist MiGs captured the headlines as American pilots gained and maintained air superiority to protect friendly surface forces. Vast numbers of enemy personnel and tons of equipment were destroyed from the air.

Vietnam was an unpopular war under difficult and constraining conditions, but airpower was used with more versatility and greater diversity than in any earlier conflict. An intensive air campaign against North Vietnam sped up negotiations that ended the war and led to the return of our prisoners of war.

Besides discharging its number one responsibility—the conduct of defensive and offensive air operations for the Nation—the Air Force has contributed greatly to the betterment of our country in a number of nonmilitary ways.

Air Force people have helped in natural disasters—drought, floods, earthquakes, hurricanes and fires. Airlifting food, supplies and equipment to stricken areas, rescuing stranded civilians and providing communications are just a few of the humanitarian tasks Air Force people perform.

Research and development in military technology have also yielded dividends in business and industry. Jet airliners that speed civilian travelers around the world were built on technology first developed for military aircraft.

Consumer items as diverse as compact television sets, TV dinners, fire-resistant materials and integrated circuits began in Air Force laboratories.

Health care, too, has prospered from Air Force research and development programs. Development of heart and kidney machines was made easier by component miniaturization projects.

Delicate eye surgery has been made possible through laser beam procedures. Hospital systems that keep watch over seriously ill patients use components first developed for monitoring Air Force pilots.

As the Department of Defense's primary space agency, the Air

Force has been closely connected with the U.S. space program. Related achievements include communications satellites that have vastly improved transoceanic television service and telephonic communications.

New consumer products, materials and techniques generated by military departments are readily apparent. Less obvious is the great national contribution of human resources.

The Air Force trains thousands of specialists each year. When these people return to civilian life, they take their skills with them.

During the first 30 years, the Air Force has grown from subsonic, reciprocating-engine aircraft to supersonic jets. Its intercontinental ballistic missiles and manned bombers have joined with submarine-launched missiles as the bulwark against nuclear aggression.

The success of Air Force growth and maturity can be judged according to the degree in which we have provided the President a full range of defense options. Former members and Air Force personnel today can be proud of our contributions to a more secure international environment and the domestic goals of American society.

WHAT KINDS ARE AVAILABLE?

Home insulation is available, as blankets, batts, pouring wool, and blowing wool. Blankets and batts are similar-preformed strips of the proper width to fit between wall studs or ceiling or floor joists. Blankets come in rolls, batts are cut lengths of blankets.

HOW MUCH DO YOU NEED?

Insulation is most accurately selected by R-numbers. "R" stands for resistance to winter heat loss and summer heat gain. R-numbers are plainly marked on blanket and batt covering and on insulation bags. Thickness of blankets and batts can be misleading. One brand of insulation batts might be slightly thicker or thinner than another brand, but if both show the same R-number they'll perform equally well.

- In ceilings, use R-19.
- In walls, use R-11.
- In floors, use R-11, or R-19 if you live in a cold climate.
- If you have a little insulation in a ceiling, add R-11 to it.

TAC Briefings Show Product Use

Members of the Tactical Air Command briefing team pose with DMAAC Director, Col. James St. Clair, following a series of briefings presented on the Tactical Air Command to key personnel of the Aerospace Center during August. Shown are (left to right) Major Powers, Colonel St. Clair, Captain Crane and Major Landry. Captain Crane provided the oversight briefing on the mission of TAC and Major Powers briefed on the use of Aerospace Center products by the command operational units. Major Landry assisted in question and answers on technical matters. The Military Airlift Command is now being scheduled to brief during the next few months.



Save Your Buffalo Nickels

Although a nickel won't buy much anymore, if you find a Buffalo/Indian-Head nickel, don't spend it—it's becoming a collector's item.

James E. Fraser, the designer of this 1913 nickel, wanted to create a coin that was completely American; thus, he used the American Indian on the front and the Great Plains buffalo on the back. He designed the Indian profile as a composite of three American Indian chiefs who

Idea\$ Bring Dollar\$ To Innovative Worker\$

What's a good idea worth? Sometimes as much as \$25,000 to the person who submits it for adoption.

Recently, President Carter personally presented such an award to Lawrence L. Guzick in a Rose Garden ceremony, the first ever held by a President for a federal worker who had won the top federal incentive award for a beneficial suggestion.

Guzick had invented a metering device for releasing trapped steam on Navy ships resulting in the savings to date of more than 875,000 barrels of oil and upwards of half a million dollars in repair costs in the Navy alone. In all, the government calculated that the Navy has saved \$10,500,000 by putting the suggestion into operation.

paratively little effort. On the average, the government benefits at the rate of \$13.16 for every dollar awarded—a good deal in anyone's budget! In the 22 years the Federal Incentive Awards Program has been operating, benefits and savings have exceeded \$4 billions of our taxpayers' money. Total benefits this year are equivalent to the Federal income taxes of more than 182,000 Americans.

Federal employees' suggestions have resulted in better mapping and charting techniques, sonar technology breakthroughs, the heat-seeking air-to-air guided missile, wash-and-wear fabrics, nuclear reactor controls for submarines, and a new technique for testing visual acuity in small

August Honor Roll

35 YEARS

Vincent L. Saunders, Monroe W. Laturno, Harry Weinman, Mathew A. Midura, Herbert L. Renaud, Mitchel C. Compton, Henry E. Perkins.

30 YEARS

Louis E. Greco, LeRoy Witherspoon, Jr., Florenze A. Ackmann, Charles W. Kuzdas, James D. Stayton, Alfred H. Nagy, Edward J. Moore, Otto W. Henschen, Elmer D. Shoults.

25 YEARS

Ralph E. MacKenzie, Arthur C. Schmieding, Gordon J. Arnott, Nathan Whitfield, Jr., Harry Jacobs, Charles L. Mase.

20 YEARS

Joan A. Sadorf, Leonard G. Seger, Paul E. Frazier, Otis V. Sivley.

15 YEARS

Kenneth M. Diffie, Robert D. Hunter, Richard E. Newton, Jr., Emmett L. Burton, Alfred G. Gilbert, Sandral Jones, Elmer D. Lanigan, Jr., Martha J. Moore, Robert F. Pankey, Ivory O. Rucker, Jr., Frederick A. Hodes, Dennis W. Rumley, Inez J. Dimitrijevic, Harry W. Lamborn, Samuel M. Ivery, Turner H. Johnson.

10 YEARS

Benjamin Dawson, Jr., Gilbert L. Druen, Dennis E. Drum, James P. Hutchings, Jane E. Thomas, Erma R. Yanko, Frances L. Schmidt, Norman B. Adams, Walter H. Fisher, Lester R. Hines, Richard N. Hulsey, Lela A. Mierisch, Margaret A. Mills, Felton Mitchell, Jerome Reynolds, Lewis F. Rosenbaum, Elaine M. Stephenson, Vivian P. Tuckson.

OUTSTANDING PERFORMANCE RATING

Juliet L. Bauer, Antoinette P. Langford, Roy N. Mattke, Robert E. McDaniel, Gene McLeod, Thomas O. Seppelin.

OUTSTANDING PERFORMANCE RATING/QUALITY SALARY INCREASE

Edward E. Barr, Ritchie R. Julian, Caleb W. Melton, Gayle A. Powers.

OUTSTANDING PERFORMANCE RATING/SUSTAINED SUPERIOR PERFORMANCE

Dexter Johnson, Philip Rahall, Alice L. Schmuke.

QUALITY SALARY INCREASE

Renatus J. Gast, Lloyd V. Hollenbeck, Paul J. Lambeck, Carl E. Lebeque, Beverly A. Leiendecker, Sue A. Meyer, Judy L. Neiman.

SUSTAINED SUPERIOR PERFORMANCE

Henry R. Bauer, Tai Wha Chun, Dean H. Evans, Eugene F. French, Ronald B. Harrison, Rita M. Heitmeyer, Amos C. Ing, Leon K. Kappelmann, Geraldine B. Kast, Mary L. Keough, Mary E. King, Paul S. Kuliniewicz, John M. Rau, Betty Ann Saxler.

as a composite of three American Indian chiefs who posed as models: Chief Two-Moons, a Cheyenne; Chief John Big-Tree, a Seneca; and Chief Iron-Tail, a Sioux.

For the reverse of the coin, there was only one model: Black Diamond, a Great Plains bison. Actually, Black Diamond never saw the hills and plains of the West—he was born in 1893 in New York City's Central Park Zoo where he lived until his death in 1915.

Few coins were the result of so much research. Before he ever started work on the nickel, Fraser lived on the plains of the Dakotas where he studied the habits and features of the Great Plains bison and the facial expressions of the American Indian.

In Sympathy

Word has been received of the death of Horace Graf, 83, on Friday, August 26, 1977. Graf retired in 1963 after 13 years at the Center as a cartographer.

Memorial services were at Emmanuel Episcopal Church, Webster Groves.

He is survived by his wife Ellen,

Navy has saved \$10,500,000 by putting the suggestion into practice on more than 100 ships.

While the maximum award of \$25,000 has been made only six times, substantial amounts have been given to Federal employees for their suggestions. In FY 76 in DMA alone, 350 awards totaling \$33,475 were made for suggestions that resulted in savings of more than half a million dollars in DMA operations.

DMA top management, like that throughout government and industry, believes in the suggestion program, particularly since it brings huge results for com-

HC/TC Study Group Praised By Director

In a parting letter retiring Director for DMA, Admiral Shannon Cramer, Jr., expressed his appreciation to the members of the Hydrographic/Topographic

of Webster Groves, and a son King, of Dallas.

Word was also received of the death of Mrs. Ethel Blanche McCormick, wife of Willard J. McCormick, former chief of SOPB.

The McCormicks have been residing in Berger, Mo. since his retirement in 1975.

marines, and a new technique for testing visual acuity in small children and the linguistically handicapped, for example.

"But I never get a really new idea," some people argue.

Actually, under the Federal Incentive Awards Program an award-winning idea doesn't necessarily have to be new or original. The "acid-test" is whether the idea will improve operations if it is adopted.

Making a suggestion is easy. Just pick up a suggestion form and fill it out. Your incentive awards administrator is available for help, if you need it.

Consolidation Study Group for their excellent efforts.

"I was very pleased with the study. I believe it carefully and objectively documented the advantages and disadvantages of the various alternatives and provided a fully adequate basis for my decision," wrote the Admiral.

Members of the study group and those providing direct assistance from the Aerospace Center were: Lawrence Ayers, TD; Philip Rahall, PP; Penman Gilliam, PR; Bobby Hagler, PDX; Darryl Taylor, PPG; Ritchie Julian, POW; Daniel Ragusky, CMM; Paul Atkins, CMMM; William Leong, CMMM; Terence Kelly, CMMA and Erwin Bergt, CMMA.

Leon K. Kappelmann, Geraldine B. Kast, Mary L. Keough, Mary F. King, Paul S. Kuliniewicz, John M. Rau, Betty Ann Sayler, Clarence E. Ward.

SPECIAL ACHIEVEMENT AWARD

Uldis Alks, Robert W. Caples, Jerome R. Lundberg.

ASP To Publish Book For Youth

The St. Louis Region of the American Society of Photogrammetry is making plans to publish a book of experiments in the area of photogrammetry that will be useful to students at junior and senior high school level as guidance in preparing science fair exhibits.

The need for the book was indicated during recent science fairs held in the area when students indicated little knowledge of the science of photogrammetry and the variety of projects that can be accomplished using the photogrammetric principals.

Each year the St. Louis region of ASP presents \$25 and \$50 Savings Bonds to participants of the St. Louis Science Fair who are judged to have the most outstanding projects relating to photogrammetry.

The book was prepared in keeping with the societies 1977-78 theme, "Photogrammetry, a Prerequisite to Progress."

Those working on the booklet include Sandral Jones, Barbara Ivery, Harold Light, Melvin Harris, Maurice Daniell, and J. Edward Jones.

Reassignments Affect Three

Three managerial reassignments have been announced as part of the Center's continual program to provide top managers with broadened experience in key positions.

Affected by the lateral reassignments were Ronald Pierce

who moved from SDP to the new Photogrammetric Data Division of AC; Cliff Youngstrom from PPCC to the SDP position vacated by Pierce and Richard Webster from ACN to Youngstrom's position in PPCC.

Safety Begins With YOU!

Nco's Take Officers in Slug Fest

From An NCO's Viewpoint

The officers got bombed again! Robinson's raiders have completely dominated the softball season against the officers.

Although there has been a complete change of personnel for Lt. Col. Herbert (Charley E. Finley) Allison, it still has been a frustrating season for the officers.

The most recent game started out to be tight until the third inning, when Art (Hero) Hamilton got a base hit and Mich (Home run) Baker hit a 240 foot home run so the NCOs were off and running. Robinson the manager had his best stuff for five innings as the NCOs built up a lead of 13-0. Then the NCOs began to substitute freely.

The NCOs had some outstanding defense turned in by Andy (glove) Foster and John (Hot dog) Crawford, other NCOs that played outstanding all around ball was Bob (Speed) Bennett, Dick (Five iron) Johnson, John Severson, Big Chief (Old man) Moore and the most improved hitter on the team, Horace (No catch) Allborty. Then there was the power hitting of Mich (Home run) Baker and Art (Hero) Hamilton.

Glynn Atchley, Baker and Hamilton are batting over 600 in this league. The NCOs will miss the hustling of Bob (Speed) Bennett who is going PCS in September.

The NCOs lost Tom Howard due

to a PCS assignment but they got three good ball players from Alaska that will help the team. Eddie Payne also was assigned here and during his interview with first Sergeant Hamilton he indicated he was a superstar, but as of yet he has failed to participate.

The only bright spot for the officers was the new Navy Captain, Charles (Speed) Bird and the pitching and defense work of Ike (Fast pitch) Toran. The officer's manager didn't lead by example because he went hitless.

There was outstanding umpiring by Sally Naucke and good moral support from Ed (Beer) Granthum and Max (Chicken) Tubbs.

VA Work Study Program

Full-time veteran students who foresee money problems at fall enrollment time should look into the Veterans Administration's work-study program, say VA officials.

The VA says that new GI Bill payment procedures might leave students who don't have savings from summer jobs in a bind to pay necessary enrollment and subsistence expenses. To help offset this financial headache, VA will make more work-study jobs available.

GI Bill students can work up to 250 hours per semester for VA and receive \$2.50 per hour in addition to

their usual education assistance allowances. An advance of up to \$250 is available as soon as the employment agreement is processed. The advance covers the first 100 hours of work.

Jobs are available for VA-related work on a given campus or at a VA facility. Priority is established on the basis of service-connected disability, financial need, motivation and the nature of the work. After the first 100 hours, VA pays work-study students after each 50 hours of work.

Details are available from campus veterans counselors or any VA office.

Test Your E.Q.*

Take this quiz to check your knowledge and understanding of energy-environment issues. Check your answers below.

1.



How much of the energy used in gas stoves supplies the pilot lights?

- a. 10%
- b. 25%
- c. 50%

2. An incandescent lamp and a fluorescent lamp having the same light output: Which uses energy more

4. How long would a 100-watt light bulb burn on the energy needed to manufacture one throw-away soft-drink can or bottle?

- a. 10 minutes
- b. 5 hours
- c. 20 hours

5. How much of the energy stored in crude petroleum is lost between the oil well and a moving car?

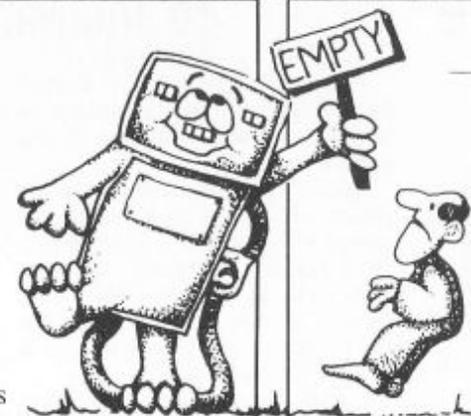
- a. 20%
- b. 60%
- c. 90%



7.

How much faster than their rate of production are we consuming our fossil fuels?

- a. 10 times
- b. 1,000 times
- c. 1,000,000 times



9. Which of the following fuel resources is in greatest danger of exhaustion?

- a. coal
- b. petroleum
- c. natural gas

10. In the year 2000, American total energy demand will be:

Which uses energy more efficiently?

- fluorescent
- incandescent
- both about the same efficiency

3. How many soft drink cans can be manufactured from recycled aluminum with the energy needed to make a single can from aluminum ore?
- three
 - five
 - twenty

* Energy Quotient.

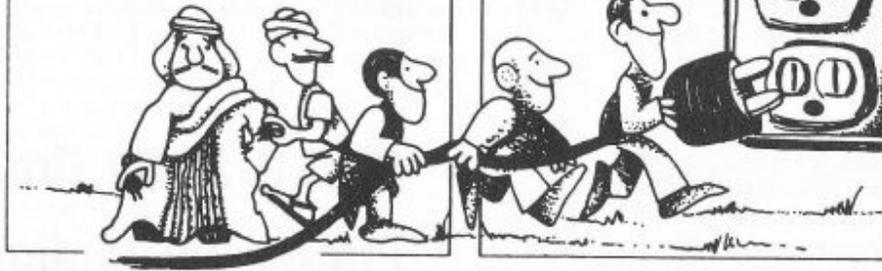
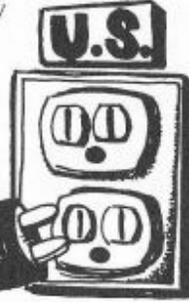
c. 90%



6. The heat energy of a gallon of gasoline is equivalent to:
- 5 man-days of labor
 - 15 man-days of labor
 - 25 man-days of labor

8. What fraction of the world's energy consumption occurs in the U. S.?
- over 10%
 - over 20%
 - over 30%

- demand will be:
- the same as today
 - twice as much as today
 - three times as much as today



E.Q. ANSWERS

10. (b) For more than a century, America's demand for energy has doubled, on the average, every 20 years or so. Petroleum should last for a century, coal, 500 years.
9. (c) Natural gas reserves in the United States are expected to be exhausted in about 70 years.
8. (c) More than a third of the world's energy is consumed by the 6% of the world's population residing in the United States.
7. (c) In less than 500 years man will have consumed the energy of a man at hard labor for 2 years.

6. (b) 15 man-days of labor. Said in another way, one barrel of oil contains heat energy equivalent to multiplying the six factors together, 6%:
- | | |
|------------------------------|-----|
| rolling efficiency | 30% |
| engine mechanical efficiency | 71% |
| gasoline thermal efficiency | 29% |
| refining | 97% |
| retreating the crude oil | 87% |
| producing the crude oil | 96% |
5. (c) Ninety per cent of the energy in the gasoline from crude petroleum is lost in making your car move. The efficiencies of the most important steps where energy is lost are:

4. (b) A 100-watt lamp could burn for 5 hours on the output of 10 large nuclear power plants.
3. (c) Aluminum is a very energy intensive material with the largest share of the energy going to process the ore. Recycling is a great energy saver. The Nation's total throwaway containers equivalent energy waste is equal to the output of 10 large nuclear power plants.
2. (a) Fluorescent lights give off three to four times as much light per watt of electricity used as incandescent lamps do. One 40-watt fluorescent light gives more light than three 60-watt incandescent bulbs (and the annual savings may be as much as \$10).
1. (c) Approximately half of the gas used in a gas stove is used to fuel the pilot lights because pilot lights burn continuously.
- Score 1 for each correct answer.
0—5 Poor, 6—7 Fair, 8—10 Good.