

## Cerro Coso's art faculty will exhibit works of art

Cerro Coso Community College's art faculty will exhibit recent works entitled "New Works" at the Maturango Museum. The show will open May 3 in the Sylvia Winslow Gallery and continue through May 28. An opening reception is planned for May 3 from 2:30 to 4:30 p.m.

Cerro Coso faculty participating in the show include John Dunker, Eric Bengtson, Dick Benson, Mark Archer, Steven Emrick, Hal Williams, Henry Woolbert and Erling Sjøvold.

Archer's works in the show will include a print and ceramics. Archer instructs ceramics, design and print making at the College.

Bengtson's display will include a painting and ceramics. He is a part-time instructor of painting, life drawing, two-dimensional design, gallery technology and ceramics.

Emrick will show the use of wood for sculpture and art oriented furniture. Emrick is a visiting instructor who

recently graduated from San Diego State University.

Sjøvold is a recent graduate of Berkeley and is currently being considered for graduate study at Yale University. He instructs a drawing and painting class for the college.

Dunker has been with the college for many years and instructs photography classes; he also instructs a new course to the curriculum in darkroom technology.

Bengtson's display will consist of graphics, he is a full-time graphic artist and teaches graphic design and illustration.

Williams is new to the area and is presently conducting a stained glass workshop class. He maintains a commercial stained glass studio locally and will display some of his works.

Woolbert will exhibit a watercolor piece. He is a welcomed addition from the Darwin area and is currently instructing watercolor and sumi-e.



**JUST RIGHT** — Properly distributed on stage, thanks to the set-up crew, members of the Desert Community Orchestra take part in a concert rehearsal in the NWC Theater. — Photo by Bill Blanc

## Stage crew proves its appreciation of music

When Conductor Ron Burdick lifts his baton to open the Desert Community Orchestra's final series concert on May 3, his musicians will be properly arranged on the NWC theater stage thanks to the strenuous labor of an unsung group of supporters who spring into action for every dress rehearsal as well as every concert.

Platforms, chairs, podium and acoustic shell modules are available at the theater, but Bryan Thomas' stage crew has to haul just about everything else — music stands, stand lights, power cords, percussion cabinet, etc. — from the Orchestra's rehearsal facilities in St. Michael's Episcopal Church on Drummond Ave. "Even after we've got everything there," Thomas points out, "it's still a race with the clock. To keep expenses down, the Orchestra Association rents the theater for the shortest time possible before the program starts, so we have to move fast!"

Thomas and his stage hands face extra challenges when a concert involves such

variations as relocating a grand piano for a part of the program, re-arranging seating for smaller ensemble numbers or positioning overhead lighting to spot a featured soloist. "And it's all volunteer work," says Gordon Wilcher, Associate Stage Crew Chief. "Don't tell me we're not the world's greatest music lovers!"

Thomas says several Orchestra musicians regularly help with the set-up too. Anyone who wants to give a hand is invited to call him at 446-4281 or Wilcher at 446-2060.

With the fruits of the stage crew's labor underpinning its performance at the May 3 concert, the Orchestra will perform selections from Kodaly's 'Hary Janos Suite,' Dvorak's 'Serenade for Winds' and the Saint-Saens 'Cello Concerto in A Minor' with Glenn Grab as soloist.

The program begins at 3 p.m. Single-concert tickets will be sold at the door. General admission is \$6; \$4 for senior citizens, students and active-duty military personnel.

## Natural history overview

Janet Westbrook will instruct a 1-unit biology course entitled "Natural History of the Foothills" during the spring 1987 short-term line-up of courses being offered by Cerro Coso Community College.

This course was designed as an overview of the ecology, geology, flora and fauna of the California foothills and will include two

weekend field trips. Classes will meet on Thursday, April 30 from 7 to 10 p.m. and on Saturdays and Sundays, May 2, 3, 16 and 17 from 8 a.m. to 4:30 p.m.

Registration will be conducted Monday through Thursday from 10 a.m. to 1 p.m. and from 4 to 7 p.m. and on Fridays from 10 a.m. to 1 p.m. and 3 to 4 p.m. in the Office of Admissions and Records.

## Eighteenth Manzanar pilgrimage will honor the U.S. Constitution

Work projects, tours, religious ceremonies and a talk by Richard Drinnon, author of "Keeper of Concentration Camps," will be featured at the 18th annual Manzanar Pilgrimage tomorrow (Saturday). Located between Lone Pine and Independence on

Highway 395, Manzanar was the war-time resettlement camp for thousands of Japanese-Americans during World War II. This year's theme is "Honor the U.S. Constitution." The pilgrimage will start with work projects at 10 a.m., followed by a potluck lunch, presentations and guest speakers at noon. Religious ceremonies at 1 p.m. will be followed by campsite tours at 1:30 p.m. and an Ondo/Japanese Folk Dance at 2:30 p.m.

## Auction, food from St. Ann's

St. Ann's Catholic Church will hold a mini-auction at the Knights of Columbus Hall tomorrow (Saturday) from 7 a.m. to midnight as a fund raising activity. Many gifts and services have been donated by area merchants. Hors d'oeuvres, wine and punch will be served. A no-host bar will also be open. Tickets, available at the door, are \$5 per person. For more information call 375-1764/6490.



Disco with Disc Werks tonight and tomorrow night at the Enlisted Mess from 9 p.m. until 1 a.m. Admission is only \$1 per active duty military personnel and \$2 each for others. More disco is planned for the Enlisted Mess on Wednesday, April 29 from 8 until 11:30 p.m.

Flower lovers can avoid trips into the hills to view spring wildflowers by visiting the Maturango Museum's 10th Annual Spring Wildflower Show today (Friday) through Sunday. The museum is open from 10 a.m. to 5 p.m. More than 100 identified and labeled species of spring blooms from desert plants will be on display.

Sierra Crafts Guild is hosting its 10-year anniversary show on April 30 and May 1-3. The show will be held in the Community Room of the Desert Counseling Clinic. Artists featured are Nancy Hoyem, Jean Donovan, Carol Wilcher, Rosemary Rausten, Julie Slayton and a special guest artist, Barbara Mann.

Volunteers are sought by the Community Connection for Child Care, Ridgecrest Police Department and the Automobile Club of Southern California to assist in a Bicycle Safety Clinic at Kern Regional Park on May 9.

The Auto Club is responsible for a committee on testing skills of bike riders. Volunteers are needed to assist participants in the seven different skill tests. Three monitors per test are sought, with each monitor working an hour. The clinic is scheduled from 9 a.m. to 5 p.m.

Anyone interested is asked to call Susan Smith at 375-8426 for additional information or to volunteer services.

William C. Gatchet of the Bakersfield office of Merrill Lynch investment firm will be guest speaker at the May 5 meeting of the China Lake Chapter, Federal Managers Association (FMA). Gatchet, a retired military member, will speak on "Changes in the Income Tax Laws as Related to Investment." FMA members will meet for their luncheon meeting on Tuesday in the Enlisted Mess' Flight Deck Room at 11:30 a.m. For information call Jim McVay at NWC ext. 7460.

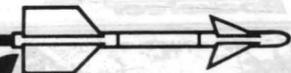
## Movies

FRIDAY, SATURDAY APRIL 24, 25  
"JUMPIN' JACK FLASH"  
Starring  
Whoopi Goldberg and Stephen Collins  
(Comedy, rated R, 105 min.)  
SUNDAY APRIL 26  
"CAMEL BOY"  
(Animated, rated G, 75 min.)  
WEDNESDAY APRIL 29  
"SONG OF THE SOUTH"  
Starring  
James Baskett and Ruth Warrick  
(Animated, rated G, 95 min.)  
FRIDAY MAY 1  
"STAR TREK II: VOYAGE HOME"  
Starring  
William Shatner and Leonard Nimoy  
(Science-Fiction, rated PG, 119 min.)  
Starting Time: Evening / 7 pm  
I (I) ALL AGES ADMITTED  
General Audiences  
I (I) ALL AGES ADMITTED  
Parental Guidance Suggested  
R (R) RESTRICTED  
Under 17 Requires Accompanying  
Parent or Adult Guardian

U.S. Government Printing Office  
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TO \_\_\_\_\_



## Rehabilitated anechoic chamber set to function

Debugging of the Naval Weapons Center's largest anechoic (echo free) chamber is underway following a major overhaul of the facility located near Thompson Lab in the RF Area.

Anechoic chambers are designed to absorb unwanted indirect electromagnetic radiation. Indirect radiation is that energy transmitted by a source antenna in directions other than toward the test antenna; it would potentially bounce or be reflected from extraneous objects (wires, test stand, etc.) toward the test antenna.

Within the anechoic chamber is a quiet zone, a region containing the least amount of extraneous, reflected radiation. The test antenna is placed within this quiet zone so primary signals intercepted by the test antenna are direct emissions from the source antenna and reflected signals bouncing off walls, ceilings or floor are at a minimum.

The large anechoic chamber just rehabilitated is the lowest frequency facility in the Navy used for antenna testing. Items to be tested are placed in the middle of a volume 40 feet long, wide and high. The chamber then tapers toward the emitting source, about 66 feet away.

Such a large facility is required to permit testing at frequencies as low as 150 megahertz and to test large-scale systems such as large antennas and missile seekers.

The walls, ceiling and floor of the anechoic chamber are covered with pyramids and wedges made of microwave absorptive materials. The largest absorptive sections are up to 12-feet in length — made up of a two-foot pedestal topped with a 10-foot-long, four-sided pyramid.

After 20 years of use, the absorptive material initially installed needed replacement.

The microwave absorptive materials also deteriorated because of their age; over time the carbon in the absorber settles to the bottom, so the materials are not homogeneous. This occurs particularly in areas where the material is walked on. The pyramids have also sagged and have become permeated with dust despite the building being relatively sealed.

Several years ago, the sprinkler system in the chamber froze, broke and flooded the floor, causing some deterioration in the materials on the floor. The adhesive holding the sections to the ceiling has also deteriorated, so some of the material on the ceiling has fallen.

All-in-all, replacement of the absorptive materials was essential if the chamber was to continue serving the Navy, Air Force and Army. The necessary rehabilitation also permitted upgrading the chamber.

New materials developed for microwave absorption are more fire retardant; the chamber is now safer for personnel who work within it. (Even with enhanced fire safety, regular drills with the NWC Fire Division will continue.)

A telescoping platform for holding source transmitters has been installed about 20 feet from the area where the test object is mounted. When the platform is extended into position, test antennas and missile seekers can be tested at higher frequencies than had formerly been possible.

Upgrading the chamber and replacing worn-out materials means personnel of the Radio Frequency Division of the Electronic Warfare Department will be able to continue to use it well into the next century.

## Code 64 job to Burford

### EWTES moves to department

Capt. John Burt, Naval Weapons Center Commander, announced the selection of Milt Burford as the head of Aerosystems Department, Code 64. Burford has headed the Electronic Warfare Threats Environment Simulation (EWTES) Division, better known as Echo Range, of the Electronic Warfare Department since 1983.

With his appointment, the EWTES Division becomes a part of a reorganized Aerosystems Department as Code 644. Burford said this move will add to and complement the Aerosystems Department's mission at NWC. It also brings Echo Range into a single line of management under the Test and Evaluation (T&E) Directorate. Previously, the division had reported to the head of the Electronic Warfare Department and, as a separate cost center, to the head of the T&E Directorate.

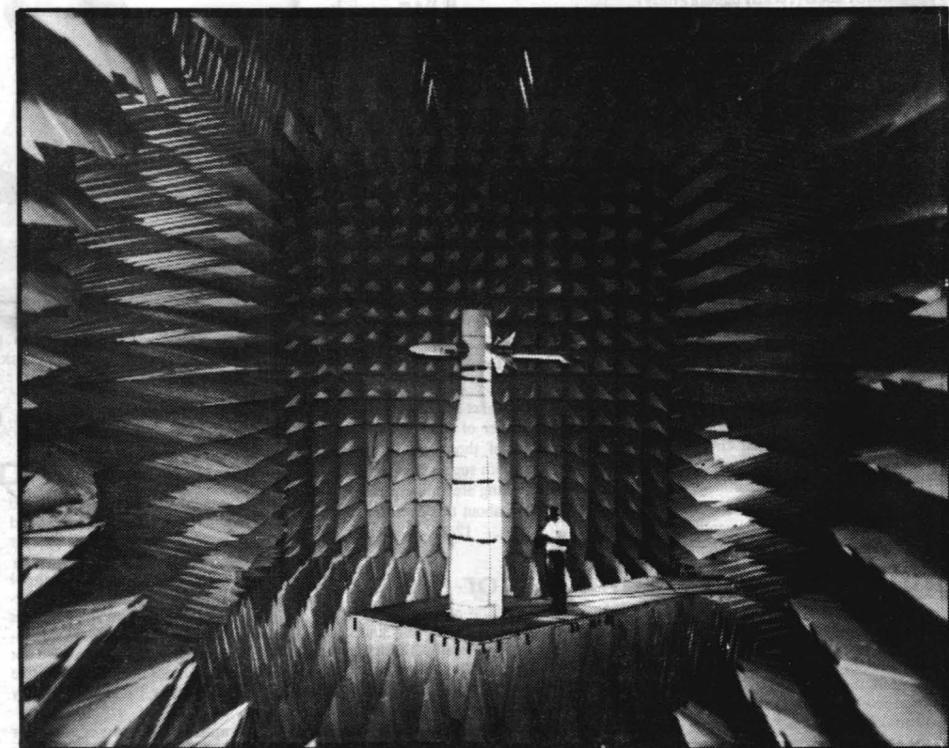
"The addition of Echo Range also brings Code 64 up to a nominal size and certainly improves the economy of management in the department," added Burford. He noted the department staff size is adequate to handle the addition of the EWTES Division.

A 1962 graduate of the Missouri School of Mining and Metallurgy in Rolla, Mo., he came to work at the then Naval Ordnance Test Station that same year with a degree in mechanical engineering. As a junior professional (JP) engineer, he began his lengthy China Lake career in the Warhead Development Branch, old Code 4032.

Burford's experience at NWC was interrupted by two years with the U.S. Army Corps of Engineers from May of 1963 to May of 1965. He returned to China Lake and Code 40, working on warhead development projects and serving as program manager of the APAM Cluster Weapon.

He was later associate division head of the Conventional Weapons Division of the Ordnance Systems Department, working for Paul Cordle, then the division head. In August of 1978, he assumed the division head's position when Cordle became associate department head. Warhead projects he worked while in the Conventional Weapons Division included Sidewinder, HARM, Harpoon, Gator, Rockeye, FAE, CATFAE and Smoke-Eye. His accomplishments include winning the L.T.E. Thompson Award.

"It has been a busy and very enjoyable



**MISSILE TEST** — Technicians work with a Shrike missile in the Center's largest anechoic chamber. This facility recently underwent extensive rehabilitation and upgrading.

## Insensitive Munitions Office coordinates many IM efforts at Naval Weapons Center

Researchers and technologists working on insensitive munitions (IM) and users of IM technology have a new focal point at the Naval Weapons Center: the recently created Insensitive Munitions Office (Code 3208). The office was established last August in response to the need for coordination of the many IM efforts under way at the Center.

John Fontenot, NWC IM Coordinator, who heads the IM Office, says one of the most important services the office provides is helping weapon program and technical managers finalize their IM program plans and assisting them as they transition IM fires into their weapons.

"I find being able to work with the various program offices one of the more interesting aspects of my job," Fontenot

says, "partly because each program differs somewhat in its methods of accomplishing IM implementation."

Also important is educating both Department of the Navy and private industry personnel. They are interested in learning more about what IM is as well as the status of technology intended to address specific IM threats.

Included in the duties of the IM Office is matrix management oversight of all IM technology base and advanced development programs at NWC. These areas include insensitive munitions propulsion, air-launched ordnance, explosives and technology transition as well as related magazine firefighting work.

Since the official beginning of the IM program in 1984, recognition of the im-

provements needed to ensure ship combat survivability as a function of the sensitivity of the ship's munitions has grown rapidly.

"The reason I'm so firmly committed to insensitive munitions," says Fontenot, "is that I believe it's the single most important thing the ordnance community can do to increase the combat survivability of the U.S. Navy. The added safety will be a terrific bonus in significantly decreasing the risk of accidental munitions explosions, which can cause terrible devastation and loss of life."

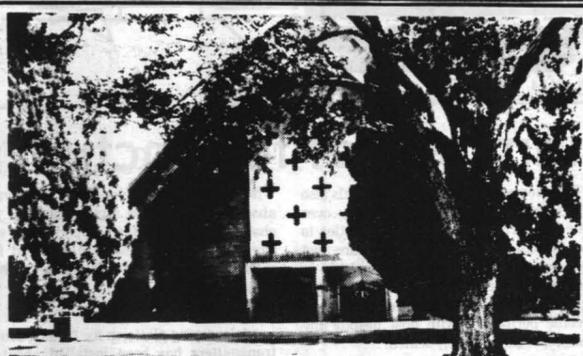
CNO policy calls for all Navy weapons to be designed to minimize the effects of unplanned stimuli, incorporating insensitive energetic materials when possible to meet the goal for complete transition to an

(Continued on Page 3)



	Max	Min	Peak Gust
Fri.	93	52	27 knots
Sat.	80	54	35 knots
Sun.	72	44	10 knots
Mon.	77	38	18 knots
Tues.	89	37	15 knots
Wed.	92	39	14 knots
Thurs.	90	50	19 knots

All measurements are made at Armitage Airfield.



## Divine Services

**PROTESTANT**  
**SUNDAY WORSHIP SERVICE** 10:30 a.m.  
**SUNDAY SCHOOL (Annexes 1, 2, 4, and the East Wing)** 9 a.m.  
**BIBLE STUDY (East Wing)**

Wednesday 11:30 a.m. Sept. through June  
 Thursday 7:00 p.m. Officer's Christian Fellowship  
 Christian Military Fellowship  
**ROMAN CATHOLIC**

**SUNDAY MASS** 9:00 a.m.  
**CONFESSIONS (Sunday)** 8:15-8:45 a.m.  
**COMMUNION SERVICE (Monday)** 11:35 a.m.  
**DAILY MASS (Tuesday through Friday)** 11:35 a.m.  
**CONFESSIONS (Friday)** 4:30-5:00 p.m.  
**RELIGIOUS EDUCATION CLASSES (Sunday)** Sept. to May 10:30 a.m.

**JEWISH**  
**WEEKLY SERVICES (Friday, East Wing)** 7:30 p.m.  
**ADULT EDUCATION (Saturday, Annex 4)** 9 a.m.  
**RELIGIOUS SCHOOL (Sunday, Annex 4)** 1 p.m.

## Code 36 clean air building

Effective Monday, May 3, the Engineering Building at the Naval Weapons Center will be designated a "Clean Air Building," smoking will not be permitted anywhere in the building according to the Engineering Department Office.

Since initial occupation of the building in 1985, there have been complaints about the poor air circulation and air quality.

The Public Works Department has been asked to do an engineering study of the air conditioning and ventilation system and to make recommendations on

ways to improve air flow. Until the study can be done and informed decisions made about how to fix the problems, it is in the best interests of a majority of those occupying the building to put a no smoking rule in effect.

There is an area set aside, outdoors, at the northeast corner of the building for the convenience of those who wish to smoke. Anyone with suggestions on how to make the smoking area more pleasant, or with questions about this decision can call NWC ext. 1243 for more information.

## Immunizations available for kids

Parents who have a child born in 1985, there is a good chance he or she needs an immunization right now, advises the Kern County Director of Public Health Services. In an effort to call attention to this, May has been proclaimed Toddler Immunization Month in California.

Although most parents know that babies must receive immunizations during their first year, all children need additional, very important immunizations during their second year to protect them from dangerous vaccine-preventable diseases.

California studies have shown that two out of three toddlers are behind in their immunizations.

If any children are due or overdue for immunizations, call a doctor to schedule an

immunization visit or attend one of the Health Department Immunization Clinics.

The Kern County Health Department holds monthly immunization clinics throughout the county for children and adults. Appointments are not necessary. A parent or legal guardian must be present to sign consent forms for persons under 18 years of age.

The cost for each immunization required for school entry and for Hib vaccine is \$2, with a maximum charge of \$5 per family per visit. Credit cards, insurance forms or large bills will not be accepted; however, Medi-Cal stickers will be honored.

The local Health Department immunization clinic for May will be held at the Health Department, 250 W. Ridgecrest Blvd. from 8:30 a.m. to 12 noon on May 4.

## Patent clerk finds her job rewarding, challenging

Shelley Salisbury has been a patent clerk with the Naval Weapons Center's Patent Counsel Officer for more than two years. She has been with NWC, in other clerical positions for nearly four years.

Her work is challenging and rewarding. She noted the work with patent applications and amendments really give her the feeling of being a part of the Center's overall research and development function.

Working with three current patent attorneys, she types patent applications for inventions developed at NWC and transmits them to the Patent and Trademark Office in Washington, D.C.

for review and further action.

She began work at China Lake in the WAE clerical pool and went full time when the opportunity came for interesting work in her current job.

A native of Myrtle Creek, Oregon, Mrs. Salisbury notes her husband to be (Jim, employed by Pan Am) moved from Oregon to the Indian Wells Valley first and she followed a few months later. They have been in the Ridgecrest area for more than four and a half years.

Active in outdoors sports, she likes to fish, hunt, cross-country ski, camp and spend time in the Sierra Nevada mountains.



ENJOYS WORK — Duties as a patent clerk at NWC keep Shelley Salisbury busy with interesting tasks. — Photo by PHAN Bob Reynolds

## Kindergarten enrollment necessitates appointments

Kindergarten pre-registration is scheduled May 4 through May 14 in Ridgecrest and May 19 in Inyokern. Parents may register their children by appointment only by calling the Sierra Sands Unified School District, 446-7631. Immunization information will be needed from the parent at this time as well as at the actual registration. Kindergarten students who have not pre-registered will not be registered at the school sites until after 1 p.m. the first day of school.

Children must be five years of age on or before December 1 to be eligible for kindergarten for the 1987-8 school year. Proof of age must be presented at the time of registration. Recognized proof of age can be a birth certificate, a baptismal certificate duly attested, a passport, or a legally executed affidavit by the parent, guardian, or custodian of the child. Affidavit forms are available at the District Office, 113 Felspar, Ridgecrest and may be obtained prior to registration.

At the time of registration, a written immunization record must be presented. Because no child can be registered for kindergarten if he/she is not up to date on immunizations or has a written exemption

from a physician, parents are being advised to see their private physicians or to call the Kern County Health Department to obtain complete copies prior to registering. Located at 250 W. Ridgecrest Blvd., the Ridgecrest Health Department has an immunization clinic on the first Monday of each month from 8 to 11:30 a.m. and 1 to 3 p.m. (no appointments needed). Pre-school physicals are also given to financially qualifying children by appointment only.

If a parent or guardian requests exemption from the required immunizations and/or physical examination for reasons of a personal belief, this statement may be signed on a form provided at registration. A statement of medical exemption to the immunizations must be signed by a physician.

During registration, the district nurse will be available to check the children's vision.

All students should have a physical examination within six months prior to entering kindergarten. Students will be expected to have the physical examination completed before entering first grade.

## NCMA's regular meeting features SAIC speaker

The National Contract Management Association (NCMA) announces the monthly meeting of the China Lake Chapter at 11:15 on May 1 at the Naval Weapons Center's Commissioned Officers' Mess. NCMA is an organization of persons who deal with government contracts. The guest

speaker will be Stephen Ayers, Regional Vice President and Director of Contracts of Science Applications International Corporation. The subject will be "Profit Policy." All those interested in attending should call Bonnie Trammel at NWC ext. 2986 for reservations.

## Epcot Center: Visitor's paradise in Florida

Consider 43 square miles of luxuriant entertainment, offering nearly anything from a trip into the future to dinner in Morocco; or the choice of lunch in a Parisian bistro or a quaint English pub?

Only one spot in the United States can make good on this kind of promise...Walt Disney World Resort and Epcot Center, the latest way to discover the world according to Walt Disney.

Just a few miles from Orlando, Fla., Epcot Center combines a look at the future with a showcase on the world. It is also adjacent to Walt Disney World for easy access. Allow at least two days in each to really see what makes this tropical (and improved) version of Disneyland very special.

From the time a visitor enters the front gate of Epcot Center and comes face-to-face with Spaceship Earth, until they run out of time when the park closes, guests are treated to an seemingly endless array of sights and sounds found no where else in this country.

Epcot is really two attractions. Future World is full of ideas about technological improvements and changes man can expect by sometime in the 21st century. From space travel to undersea living and from new agricultural techniques to changes in transportation.

On CommuniCore video screens visitors can learn more about Epcot, check up on the stock market, get a sports or weather report, even use interactive graphics to design a personal roller coaster. Of course there are video games, a talking computer, programmed to respond to certain words and more. There's even a backstage exhibit showing how many of the special effects are created with electronics and the computer.

Explore The Land, the Living Seas, the Imagination, New Horizons, the Universe of Energy, the World of Motion, Computer Central and Spaceship Earth in Future World.

Ten nations from around the world highlight Epcot's World Showcase. Visitors can breakfast in Italy, have lunch in Paris and dinner in Japan. Other countries represented are the United Kingdom, Canada, China, Germany, Morocco, the United States, Norway (in 1988) and our southern neighbor, Mexico.

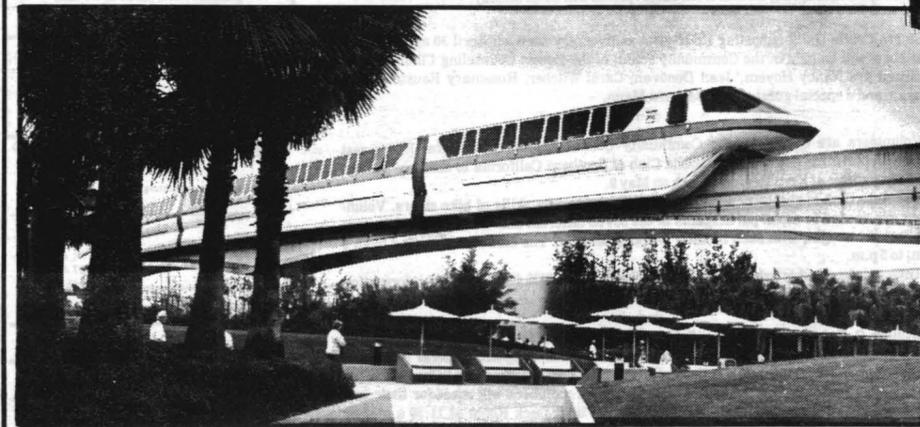
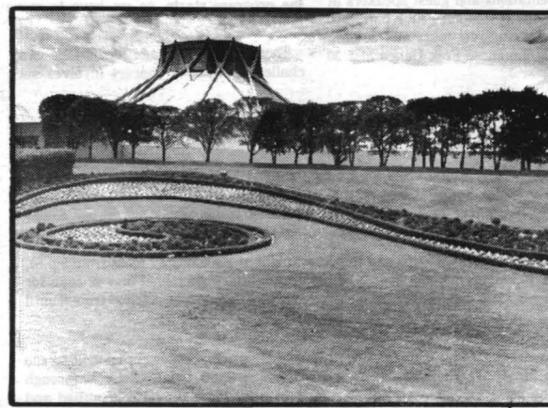
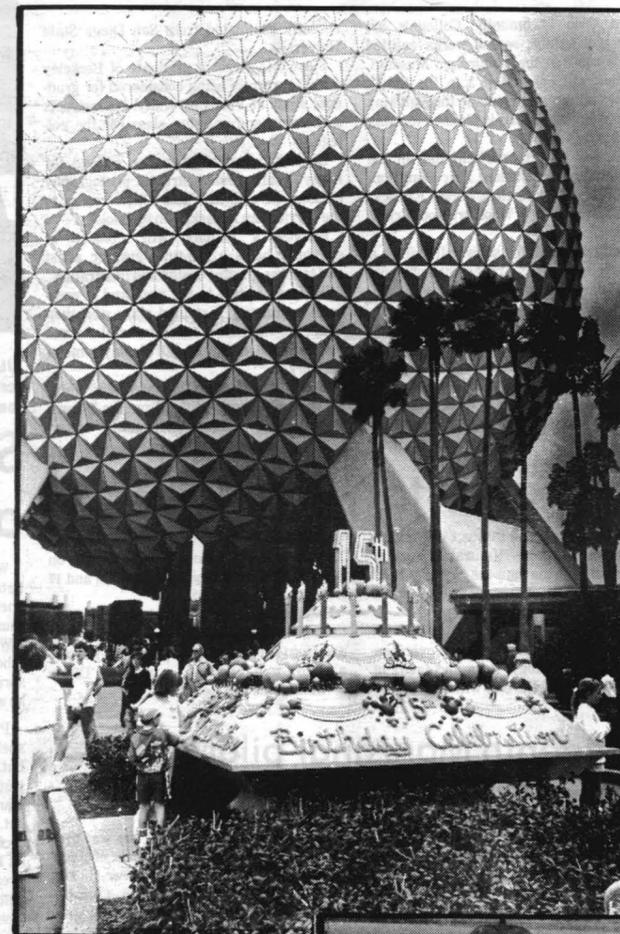
Since it opened in late 1982, Epcot Center has become nearly as much a magnet for the Disney Resort as Walt Disney World. More than 21 million people a year will visit one or both the special resorts.

Food isn't the only reason to visit the World Showcase. All participating countries have exhibits of arts and crafts, they sell everything from Moroccan leather handbags to fine French wine, famous German wine and of course, that special British ale.

China has erected a replica of the Temple of Heaven and has a display of priceless clocks from the Qing Dynasty. Canada joins China in presenting special movies in CircleVision 360 that will whisk viewers to the Forbidden City, the Great Wall, Montreal and the Canadian Rockies.

Few places offer the diversity of Epcot. It is a place to explore, to learn about other cultures, to enjoy good food, see and appreciate art and entertainment from around the world.

After all, Disney must know something about keeping people happy, more than 230 million people have been to Epcot or Disney World since the park opened in 1971.



EPCOT CENTER—From Spaceship Earth (top) to the monorail (bottom) Epcot Center near Orlando, Fla., is a look at technology of the future. Alfredo di Roma is one of many unique restaurants guests will find in the park. And, the New Horizons pavilion is flanked by trees and expertly kept lawns. Epcot is a visitor's paradise, clean, well maintained and staffed with friendly hosts.

Photos & Story By Steve Boster

**NWC Rocketeer**

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# Sierra region inaugurates trout season Saturday

Eastern Sierra region lakes and streams will be swarming with anglers tomorrow as the 1987 general trout season opens at dawn on Saturday, April 25.

More than 25,000 anglers are expected to be found fishing from Lone Pine to the Nevada border. Most of them will be concentrated near Crowley Lake, June Lake Loop and Bridgeport. In fact, 10,000 or more are likely to be fishing Crowley Lake, either from one of the thousands of boats on the water or from the long shoreline.

Some of the waters expected to be most heavily fished are Sabrina and South Lakes, Bishop Creek and Intake Two west of Bishop. Further north, Crowley will at-

tract its usual throng. Rock Creek Lake may still be iced over, but anglers who take the long trip up the road may get good results.

Convict Lake, all lakes in the June Lake

Loop and Twin Lakes in Bridgeport are all reported to be ice-free for the 1987 season opener.

Rush Creek has been in the news because of the battle to keep it flowing into Mono

Lake and keep the fishery intact. Some anglers, mostly locals or frequent visitors to the June Lake Loop, know Rush Creek between Silver and Grant Lakes is a hidden hot spot for trophy-size German brown trout. The trick is to find the pools and fish with flies or lures similar to the native stream food. Most of the thousands who will fish the creek this year will toss salmon eggs, cheese or marshmallow baits and happily land the planted rainbow trout.

The only new restriction on this part of the season finds the Owens River above Crowley limited to two fish, lures only and an 18-inch minimum keeper size for the first two months of the season.



## Sports

### Windy weather hampers youth soccer competition

Strong winds were a distinct disadvantage to teams playing down wind this past weekend during the fifth week of play for NWC's Youth Soccer league.

#### Whitecaps 2, Fury 0

Chris Marshall and Ted Mechtenburg teamed up well for the Whitecaps in this match. Leslie Blowers tried hard and Tim Seufert played well for the Fury.

#### Roughnecks 2, Kicks 0

Jonathon Rae kicked in the two goals for the Roughnecks, assisted once by Eric Armstrong. Good passing by Mike Eberhart and Ryan Webb with good defense by Danny Hill and Tiffany Marshall propelled the Roughnecks in the win. Outstanding team play was shown by all of the Kicks with great plays by Mike Ogren, Josh Benson, Allen Ricks and David Renner. Tom Foisy and Melanie Lloyd made several good goal saves, but not enough in the loss.

#### Sounders 4, Diplomats 1

Not only did he kick two goals in the first quarter but Damon Kelling also made many saves as goalie in the second half for the Sounders. Sean Waldon and Jamie Scholl made the other two goals in the

win. Ben "Again" Lee scored the only goal for the Diplomats with good plays by Mike Matson and Mark Lopez.

#### Rogues 3, Fury 0

Many great defensive plays by both teams were shown in this match. Goals for the Rogues came from Brent Seybold, Nathan Nickell and Steven Mills with defensive plays by Will Stansell, Seybold and Ryan Phillips. Damien Watson and Tim Seufert tried to stop the Rogues, but to no avail in the loss.

#### Tornadoes 6, Whitecaps 0

Goals made by Kenny Carr, Chad Shedlock and Philip Johnson, along with excellent defense by Howard Gamble and great goalie playing by Chad Shedlock and Joe Battaglia won the game for the Tornadoes. Joel Haynes was credited with an assist in the win. The Whitecaps didn't turn in a score sheet.

#### Cobras 2, Coyotes 0

Timothy Best scored the only two goals for the Cobras with assists from Scott Giroux and Matthew Armstrong. Cori Walker and Jesse Weston were excellent players in the win. The Coyotes didn't turn in a score sheet.



**INTRAMURAL PLAY** — Teams in the NWC intramural Volleyball League are winding down the last few weeks of the 1987 spring season. Action continues next week in the NWC Gym with games starting at 6 p.m. Monday through Thursday.

— Photo by PHAN Bob Reynolds

### Mini-Triathlon set May 2

Youngsters from six to 17 years will be challenged by the Recreational Services Department's annual Youth Mini-Triathlon on Saturday, May 2. Members of the Los Angeles Rams football team will be here to kick off the day's action as part of their visit to the Center.

Sponsored by the department's Youth Activities Branch, the competition will begin at 9 a.m. Late registration will be accepted from entrants at 8:30 a.m.

Youngsters will compete in the one-mile

run, four-mile bike race and a 125-yard swim. Competitors may enter as individuals or as part of a team. Each entrant will receive a mini-triathlon t-shirt and awards will be presented through 10th place.

Registration received on or before Thursday, April 30 is \$5 per person. Late registration is \$10 per person. Sign-ups are being taken at the Information, Ticket and Tour Office from 9 a.m. to 5 p.m. For more information call the ITT Office.

### Little League season to begin tomorrow



Tomorrow the 1987 Little League season kicks off with opening ceremonies at 4 p.m. Exhibitions of all teams will be presented; followed by two major league games. The Tigers will battle with the Red Sox and the Dodgers will fight it out with the Yankees.

From tomorrow until the end of the Little League season, East Inyokern Road, from Dibbs to Richmond, will be blocked off. It is recommended that people take extra precautions this season due to the unusual congestion in that area.

China Lake Senior Season will begin later on with matches against Kern River Valley and Searles Valley.

### Final week for volleyball

GBU and The Roofing Company are tied for the "A" Division lead in the NWC Intramural Volleyball League with 9-1 records. The Ball Busters are holding down the third slot with an 8-2 record.

Leading the 13 teams in the "B" Division are the 6-1 Rec Wreckers. With a 9-2 record, the Aeronettors are in second place, while the Rocketeers boast an 8-2 mark in third place.

Next week is the final four days of action in the volleyball league for the 26 teams in the loop.

### Build a fly rod

Anglers who want to learn how to build their own fly rods can attend an informational meeting of the Aguabonita Flyfishers on Monday, April 27, 7:30 p.m. at 827 North China Lake Blvd. (upstairs). A class on fly rod building will start May 9.

Some tools and supplies will be provided by the Aguabonita Flyfishers. For more information call Chuck Newmyer at 375-5810.



## The Skipper Sex...

### QUESTION

**Civilian employee** -- With the use of contractor personnel taking over much of the supply, shipping, public works and an increasing amount of the development tasks aboard the station, inclusion of their names, locations and phone numbers in the NAVWPNCEN telephone directory would drastically shorten the time required to find contractor personnel by phone.

For example, I needed to request information from a Pan-Am employee in shipping/receiving. I made three phone calls to people I thought would know how to contact him by phone. These calls resulted in two lengthy consultations with an organization chart and five numbers to try. The third number I tried, after collecting more information during the previous two calls, was the correct one. This process took me five plus minutes and disturbed five other people. I have been on station for 23 years and know how to find what I want relatively quickly. A new employee would, no doubt, have had more trouble and spent more time. At fifty plus dollars per hour for labor, this results in a very large amount of money wasted throughout the station in a year's time.

Please consider implementing a method by which contractor employees can be located quickly by phone.

### ANSWER

Your question was very timely and appropriate since we are currently updating the Center's telephone directory and many personnel on base work for contractors. I interpret your question to ask "Why don't we include contractors along with civil servants in the base phone directory."

As you indicated, the directory currently lists the office phone numbers of our major contractors, but not their individual employees. We asked most of them informally about this and for various reasons, contractors do not want to list their locally-sited employee names in a civil service directory. Since contractor personnel assignments are dynamic, in keeping with Center tasking, many of the contractors said they preferred not to have their individual employees listed in the Center's directory. I respect the contractor's prerogative and the Center will not include contractor employee's telephone numbers in the current update of our directory.

I might note that the code directory, which is regularly updated, does include the primary offices of contractors performing functions heavily integrated into the Center structure, such as Codes C255 and C267. Those supervisors can give you the number of a specific individual if required.

### QUESTION

Hello, Sir. I am calling in regards to the French Street gate. When you come from Ridgecrest coming on board the Center, it is so dark right there at the intersection where you turn (say after 5 o'clock) that it is very easy to miss the turn. I have passed the road two or three times and have had to come back. You can just barely see it. The guard shack there is pretty lit up, but the intersection is pretty dark. Maybe some sort of light could be put up there indicating a cross road. Thank you.

### ANSWER

As you've probably noticed, there is a considerable amount of earth-moving and construction work occurring directly west of the Capehart "B" housing area. The shopping center that is being constructed at this location will include a new access road. Drummond Drive will connect with French Street just south of the NWC/Capehart "B" perimeter fence. Drummond Drive will be provided with street lights from China Lake Boulevard to French Street. According to the Planning Department for the city of Ridgecrest, this road will be completed prior to the opening of the shopping center.

All China Lake area, including military personnel, civilian employees and their dependents, are invited to submit questions to this column. Such queries must be in good taste and pertain to matters of interest to a large segment of the China Lake community. Answers to these questions are directly from Capt. John Bur. Please call NWC ext. 2727 with your question and state whether you are a military member, civilian employee or dependent. No other identification is necessary. Since only three or four questions can be answered in the Rocketeer each week, anyone who would like to ensure getting an answer to a question may leave name and address for a direct contact, but this not required otherwise. There is no intent that this column be used to subvert normal established chain of command channels.

## IM Office . . .

(Continued from Page 1)

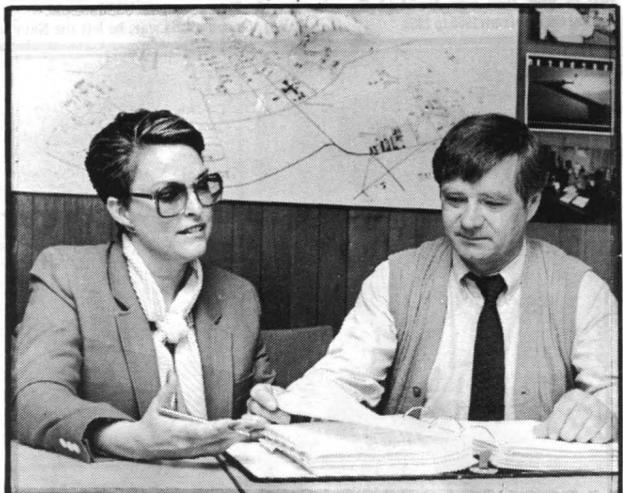
insensitive arsenal by 1995. Where such technology is not available, weapon project managers are instructed to identify ways to mitigate damage to ships and aircraft.

"Within that framework," says Fontenot, "we're trying to meet insensitive munitions goals in a common-sense manner reflecting the needs of the fleet."

To that end, Fontenot has visited ships to

familiarize himself with actual weapons storage and use and urges others in the IM field to do the same.

He also emphasizes that the IM Office remains available to aid weapon system program managers in choosing solutions that are most suitable to meet their needs and promote joint service and industry awareness of the need for and the path to an insensitive arsenal.



**IM PLANNERS** — John Fontenot, Insensitive Munitions Coordinator, reviews weapon system program offices' IM plans with Carolyn Dettling, Deputy IM Coordinator. — Photo by PHAN Bob Reynolds

### State has 22 million vehicles

Vehicle registration in California jumped to 22,921,091 in 1986, up 864,600 from last year, according figures released by the state Department of Motor Vehicles.

DMV statistics show 22,584,513 paid registrations, including 431,000 in Kern County and 336,578 state, county and local gov-

ernment fee-exempt vehicles. Of paid registrations, 629,355 automobiles were added to California's vehicle registry in 1986. Truck and trailer registration increased by 186,336 and 40,369, respectively, while motorcycle numbers declined by 3,543.

### DoD as a good neighbor

If your new neighbor began tossing his garbage into your yard, there is little doubt your relationship would not stay cordial.

The same would hold true for a Department of Defense installation that moved into a community, set up operations and began polluting the environment. That's one reason why DoD has an active and ongoing environmental program. Another is that it's big business — DoD spends about a billion dollars a year to clean up pollution from its activities and to comply with environmental laws and regulations.

DoD has an overwhelming interest in environmental matters, said Carl J. Schafer, Jr., newly appointed deputy assistant secretary of defense for environment. "The department," he said, "is responsible for nearly 1,300 major installations worldwide. Each installation has the same kinds of residential, commercial and industrial activities as you find in the cities and factories of civilian communities. And they generate pollution which must be controlled." Schafer pointed out that his office is also responsible for 24 million acres of public property, much of it a natural resource that needs to be protected and preserved.

When it comes to environmental matters, DoD prefers to take an early, active role. "There are many number of arenas where environmental concerns, when correctly addressed up front, will serve to avoid delay and controversy after the fact," said Schafer. "And because environmental protection is so expensive, it is better to do it earlier rather than later."

### Brown bag lunch part of Library Week activities

NWC's Technical Library celebrated National Library Week recently by hosting a meeting and brown bag lunch for desert area librarians. In addition to the Technical Information Department's Library Division personnel, the group consisted of representatives from Sierra Sands Unified School District, Trona Unified School District, the Ridgecrest Branch of the Kern County Public Library, Cerro Coso Community College, Immanuel Baptist School and NWC contractor libraries.

The program consisted of demonstrations of the various functions of the Research Libraries Information Network (RLIN) automated bibliographic information system. The RLIN computer is housed at Stanford and the Tech Library accesses the computer via a dedicated phone line.

The Technical Library uses RLIN for bibliographic searching, cataloging and interlibrary loan. Char-Lou Dinger began the program by giving an overview of the system and its functions.

Tanya Jones demonstrated searching and cataloging functions. She invited the audience to suggest a title to be searched. Attendees were quite pleased when

Tanya was able to find a record for a title for which a manual search had failed to produce information.

Ann Rodgers explained that the Technical Library is in the process of converting its book catalog into machine-readable records using RLIN. This process is being conducted in preparation for the installation of an integrated on-line library system, which will eventually replace the card catalog.

Mary Garback demonstrated the interlibrary loan function. This feature gives the Tech Library reciprocal borrowing arrangements with participating RLIN libraries.

Liz Mayes demonstrated RLIN's latest enhancement, which allows access to Dialog via RLIN. Dialog is a commercial on-line system consisting of over two hundred databases.

Mary-Deirdre Coraggio concluded the meeting with a summary and brief discussion of plans for further automation. Other Library Division participants were Cyndy Kitchens, Mara Emerson, Craig Pelz and Flora Whiting. The demonstrations were followed by a brief tour of the Technical Library and a brown bag lunch and information exchange.

**NOTES/PAGES from the Past**

Rear Admiral William J. Moran, who commanded the Naval Weapons Center from 1970 to 1972, served three outstanding tours of duty at China Lake.

He first came on board as Operations Officer/Assistant Experimental Officer from 1950 to 1952, then was Assistant Experimental Officer from 1955 to 1958.

RAdm. Moran entered the Navy from the University of Nevada in 1941, becoming a Naval aviator in December 1941. His wartime service included VF-72 on the USS Hornet until she was sunk at the Battle of Santa Cruz in 1942. He flew from the escort carrier Nassau and the USS Intrepid.

At the end of the war, he left the Navy to

finish his education at the University of Nevada. Upon receiving a bachelor's degree, he re-entered the Navy and served at China Lake before serving on the USS Essex during the Korean conflict and off the coast of Vietnam during the siege of Dien Bien Phu.

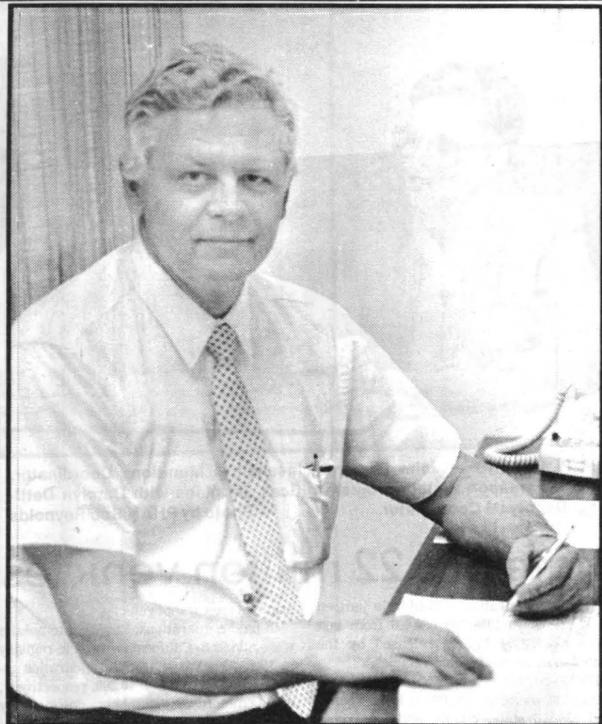
Attendance at the Naval War College preceded his return to China Lake, this time to participate in the development of airborne weapons systems. His work was sufficiently outstanding to win him the L.T.E. Thompson Award, the Center's highest.

A second tour followed on the USS Essex, as did Washington duty, attendance at the

National War College, sea duty on the USS Rainier and the USS Randolph and heading the Navy Space Program Division in the Office of the Deputy Chief of Naval Operations. In 1970 he returned to China Lake as Center Commander.

His tour here again was sufficiently distinguished so that he became Director of Research, Development, Test and Evaluation in the Office of the Chief of Naval Operations when he left China Lake. This assignment brought with it promotion to Vice Admiral.

VAdm. Moran retired from the Navy May 1, 1975.



**DEPARTMENT HEAD** — Milt Burford has been selected by Capt. John Burt, NWC Commander, as the new head of the Center's Aerosystems Department, Code 64.

**Burford heads Code 64 . . .**

(Continued from Page 1)

career," Burford noted. "There have been absolutely fantastic people to work with at all levels and it has been a great place to serve your country," he added.

Burford said the structure and talent at the Naval Weapons Center makes for a climate where people who want to work

hard and make a contribution to their country can do so. "It's a great place to work," he added.

Burford and his wife, Jane, are the parents of two daughters, Kelly and Kristi, both recent college graduates.

He summed up his feelings about working at China Lake saying, "It's great to be part of number one."

**Civilian workers have health option**

Department of Defense civilians will have an option for long-term care insurance if a current personnel proposal goes into effect.

The Office of Personnel Management has proposed offering federal workers an option of additional insurance that would cover nursing home and home health care expenses.

"A growing number of American workers, their spouses and families are forced to carry the heavy and unanticipated cost of nursing home or some extended care for an older family member," said Constance Horner, Office of Personnel Management director. "This new option relieves the family of a great financial burden at an already difficult time."

The long-term care option will be offered through the Federal Employees Group Life Insurance Program. More than

900,000 DOD civilians are already enrolled in the program, which private-sector insurance companies administer and insure. The new option will be added by redirection, not increasing, current federal costs, Horner said.

The Office of Personnel Management proposal will work as follows:

Upon reading 50 years of age, a worker who has participated in the basic life insurance program for 10 years will have a one-time opportunity to convert the face value of basic insurance or \$25,000, whichever is less, to long-term care coverage;

The employee will then be entitled to benefits of three years' coverage in a nursing home at \$40 per day or alternative home health care of \$20 per visit;

The amount of the long-term premium will be based on the employee's age at

election, with the premium increasing at the same rate as the general-schedule pay increases. (For those who convert at age 50, the premium will be about \$11 per pay period.) The employee will continue to pay his share for any remaining basic life insurance, and the government will continue to make premium contributions as if the employee had not converted;

The employee can purchase long-term care coverage for his or her spouse at group rates without evidence of insurability;

The employee will continue to be eligible for all optional coverages under the life insurance program and thus can have both long-term care protection and a death benefit of up to five times his salary. A minimum death benefit of \$2,000 will be guaranteed.



**China Lake Police Reports**

Minor damage to one vehicle resulted from a hit-and-run traffic accident in the parking lot of the BEQ.

The value of trim rings stolen from a parked vehicle on-Center resulted in a petty theft report being filed.

A motorist stopped by CLPD officers for speeding on-Center was unlicensed. The driver was cited into East Kern Municipal Court.

There were no injuries and only moderate damage to a motorcycle in a one-vehicle accident.

No one was hurt in a two-car accident at the intersection of Bullard and Inyokern Roads when a driver failed to yield to oncoming traffic.

Officers responded to a complaint of a loud party and advised the occupants of the residence on-Center to turn down the music.

A wallet was stolen from an unattended purse. The wallet, minus cash and valuables, was found discarded.

A Center resident reported a petty theft when a screen door was removed from the home.

Authorities searched for two hours, looking for an NWC employee who failed to clear the ranges as scheduled. He was found at home.

Officers received a report of the theft of cable television service when a resident of the BEQ allegedly illegally hooked up cable to his room.

China Lake Police officers investigated a report of a motorcycle stolen from the NWC Federal Credit Union on Friday. The motorcycle was found Saturday behind Cerro Coso College.

Minor damage to two vehicles came from an accident in the Michelson Lab compound. One car slipped out of gear, rolling forward and hitting a second vehicle.

An unlicensed driver was stopped on Randsburg Wash Road. The motorist was issued a citation for East Kern Municipal Court.

An officer found a lawn mower behind the NWC Housing Office. It was placed in the evidence room for safe keeping.

On Sunday a motorist driving on Pole Line Road told officers he swerved to miss a wild animal on the roadway. The vehicle left the road and hit a utility pole. There was major damage to the vehicle.

Rock-throwing vandals broke eight windows at Richmond Elementary School early this week. The incident remains under investigation.

Two motorcycle helmets and a set of keys were found by CLPD officers and placed the evidence system. They can be claimed by the owners at the police station.

A B Capehart resident reported a petty theft to police, three sprinkler heads were taken from the lawn sprinkler system.

**Firefighters urge safety for residents**

Capt. Bill Alexander of the Kern County Fire Department reminds all residents that the property owner or user is required to follow minimum safeguards to help prevent fires in mountainous areas, forests, brush or grass-covered lands or land covered with flammable material of any kind.

Owners or users need to clear a fire break adjacent to any such building or structure not less than 300 feet from it or to the property line (whichever is nearer). All flammable vegetation or other combustible growth must be cleared and this includes clearing vacant lots.

Single specimens of trees, ornamental shrubbery or similar plants used as ground cover don't need to be cleared if they won't be a means of transmitting fire from native growth to any building or structure.

Deadline for compliance is June 1. Hazard reduction teams from the Kern County Fire Department will inspect property throughout the county.

**New ombudsman recognizes military way of life**

Joyce Hudson has assumed duties as the Naval Weapons Center's Ombudsman, a liaison between Center command and military families in the area.

The wife of PRCM R.J. Hudson, the new Ombudsman says she can "relate to the problems experienced by military families, I've been there. I know where they are coming from." In addition to being married to a career military member for 21 years, her daughter, Robin, is married to a second class petty officer in the Navy and she comes from a military family. They are also the parents of twins, Bobby and Patty, juniors at

Burroughs High School. Mrs. Hudson is marketing director for the NWC Federal Credit Union on-Center and is thus easily accessible for family members or sailors who need to talk to her about problems.

"I have the time now and felt I had a lot to offer," she said of the new

position. She also said it is an opportunity to keep in touch with the wives and families of military personnel in the China Lake area.

Dependents or military members who want to talk to her can call her at home,

375-4893 an answering machine on the phone will allow callers to leave a message for her to return later.

The Navy Ombudsman program was established in 1970 for the purpose of giving Navy spouses a knowledgeable representative with direct access to commanding officers.

NWC's new Ombudsman will be a command communication link, serve as a source of information about community services, act as a referral guide agencies in the community, develop community relations programs and provide personal liaison between families and Center command.



**Military News**

**NEX news**

Beginning yesterday, the Navy Exchange's Fish-O-Rama sale is in full swing. These fantastic savings will be in effect until May 3.

On May 2, from 10 a.m. until 12 noon, a Munson Sporting Goods Demo will be presented at the NEX.

This Sunday is Super Sunday from 10 a.m. until 2 p.m. with the NEX's two-hours Early Bird Special from 10 a.m. until 12 noon. Also being featured during Super Sunday; Quaker State Oil will be on sale in the Mini-Mart.

Outstanding values on a super selection

of gifts for Mother's Day will be available from now until Mother's Day on May 10. But the special Mother's Day Event will begin April 30 to May 10. Mother's Day candy is already on sale at the Mini-Mart.

Open seven days a week, Monday-Friday from 10 a.m. to 7 p.m., Saturday from 9 a.m. to 7 p.m., and Sunday from 10 a.m. to 7 p.m., the Garden Shop will provide what is needed to make any yard beautiful.

Video cameras, TVs, VCRs, microwaves and rug shampoos are now available to rent at Personalize Services located in the Navy Exchange.

**Crack causes real trouble**

Washington (NES) . . . Crack is cocaine in smokeable form and it's trouble.

Crack, the most potent and toxic form of cocaine available, is five to 10 times as addictive as cocaine taken in other forms. Cocaine is generally 15 percent to 20 percent pure; crack is often 90 percent pure.

Crack takes six seconds in which to reach a person's brain. Once there, the individual becomes high instantly.

Using cocaine in any form is like playing Russian roulette. It can kill you the first time you use it, the 10th time or the 100th time.

If you have any questions about crack or cocaine, ask your command Drug and Alcohol Program Advisor or call the cocaine hot line at (800) COCAINE or the National Institute on Drug Abuse hot line at (800) 662-HELP.



**OMBUDSMAN DUTIES** — Joyce Hudson (right) talks to Lisa Cordoza about life as the spouse of an active duty military member. Mrs. Hudson is NWC's new Ombudsman, providing a personal link between Center command and military families in the area. — Photo by Steve Boster

**Guard, Reserves continue to increase their readiness**

Today's National Guard and Reserve have made large strides in increasing their wartime capabilities but still have critical shortages of equipment and medical personnel.

That's the conclusion of the Reserve Forces Policy Board, an advisory board to the secretary of defense on Reserve components' issues.

The board recently reported to the president and Congress that overall capability and readiness of the Guard and Reserve increased during fiscal 1986. This was largely due to an increase in overseas training, the recruitment of high-quality personnel and the introduction of new equipment, according to the report.

The quality of Guard and Reserve training reached an all-time high, with impressive mission-oriented training at home and abroad for members of the Reserve components, the board reported. More than 85,000 reservists and guardsmen participated in overseas training during fiscal 1986, an increase of 11,500 over the 1985 number.

This, the board reported, allows units to receive training not available in the United States, to exercise mobilization plans and to contribute to real-world missions -- all of which improve readiness.

In addition, some Reserve component units supported overseas commands, a strong indication of the increasing reliance of national defense plans on these troops.

Equipment modernization is taking place in the Reserve components at a faster pace than ever before. Guard and Reserve units that would be among the first to mobilize are also now among the first to receive new equipment.

During fiscal 1986, an impressive

amount of equipment entered the Reserve components' inventory. Frigates continued to be added to the Naval Reserve, and small arms were purchased for Air Force Reserve security units. Modern wheeled vehicles, from bobtail tractors to heavy trucks, continued to flow from manufacturing plants to Reserve component units. In addition, F-15 and F-16 aircraft went to the Air National Guard, and the introduction of large C-5 and C-141 aircraft enhanced the Air National Guard's and Air Force Reserve's transport capabilities.

But equipment shortages, many created as new missions are assigned to the Reserve components, still hamper the ability of these forces to do the jobs fully that wartime would require. According to the board, the Reserve components are crippled by an estimated \$16.8 billion in equipment short-falls. The most critical of these are communications and electronic gear and wheeled vehicles. That's a \$1.1 billion increase over the previous year.

The medical field was a problem. During wartime, the services would depend heavily on the Reserve and National Guard for combat medical care. Yet the board reported that DOD needs an additional 7,100 physicians, 31,000 nurses and 73,000 enlisted health specialists to provide health care needs upon full mobilization. The most critical need is for general and orthopedic surgeons, anesthesiologists and medical-surgery nurses.

The board recommended that the services keep reducing the red tape required to bring medical personnel on board and develop innovative training programs to meet the training requirements of enlisted medical personnel.



**THIRTY YEARS** — AFCEM Joel E. Johnson (Master Chief Zoom-Zoom) is congratulated by LCdr. J.D. Reece after reenlisting for three more years. This enlistment will take Master Chief Johnson to 30 years service with the Navy. The China Laker is currently serving in NWC's Aircraft Department's Airfield Operations Division. — Photo by PH1 Bill Howe

## Computer science courses scheduled for Cal-State Chico

The following classes are being offered this summer for the Cal-State Chico Computer Science Program (bachelor's and master's degrees). To enroll in these classes, submit an on-Center Training Request (NAVWPNCEN 12410/73) via department channels to Code 094. Registration will be held in class at the first class meeting. Deadline for enrolling is 10 calendar days before the starting date of the class. Although training requests will be accepted after the deadline, that date will be used to determine whether the class will be held.

**CSCI 272: MULTI-USER OPERATING SYSTEMS (3 units)**  
 May 30-31, June 20-21 and July 18-19; Saturdays and Sundays; 0800-1600; Training Center. By Professor Luk, CSUC.  
 Prerequisite: CSCI 152 (Operating Systems Programming), equivalent, or consent of instructor.

Scope: Analysis of time-sharing (multi-user) operating systems including hardware and software requirements. Comparison of differing types of scheduling and memory allocation routines. Analysis of system deadlocks and their prevention. I/O control in a time-sharing environment.

Text: Introduction to Operating Systems, Deitel Addison-Wesley, 1984.  
 Note: This is a required course for the BSCS Systems option.

**CSCI 171: COMPUTER ARCHITECTURE (3 units)**  
 June 8-July 22; Mondays and Wednesday; 1610-1850; Training Center. By Professor Ray Crosbie, CSUC.

Prerequisite: Assembly Language Programming or equivalent.  
 Scope: Internal processor architectures, basic combinational and sequential logic, codes, instruction sets and instruction decoding, memories and memory operations, arithmetic units, and stack structures.

Text: Computer Systems Architecture, Morris Manor, Prentice-Hall, second edition, 1982.  
 Note: This is a core course for all BSCS options and a required foundation course for the MSCS degree program.

**CSCI 172: SYSTEMS ARCHITECTURE (3 units)**  
 June 8-July 23; Mondays, Wednesdays and Thursdays; 1130-1320; Safety Building. Professor Ray Crosbie, CSUC.

Prerequisite: CSCI 151 (Data and Program Structures) and CSCI 171 (Computer Architecture) or equivalent. Those taking the course to satisfy BSCS degree requirements

must have passed the Writing Effectiveness Screening Test (WEST).  
 Scope: The course will identify and discuss the individual elements of complete computer systems. Problems relating to the interconnection of these elements will be defined and analyzed from the viewpoint of total system performance. This is a writing proficiency course.  
 Text: Computer Organization Hardware/Software, Gorsline, Prentice-Hall, second edition.  
 Note: This is a core course for all BSCS options and a required foundation course for the MSCS degree program.

**CSCI 298C: MICROPROCESSOR APPLICATIONS (3 units)**  
 June 9-July 23; Tuesdays and Thursdays; 1610-1850; Training Center. By Professor Ray Crosbie, CSUC.

Prerequisite: Assembly Language Programming.  
 Scope: Microprocessor interfacing and applications. Keyboard and display interfaces direct memory access, diskette controllers, graphics display controllers, analog to digital and digital to analog conversion. Memory systems design. Selected applications.

Text: Microcomputers for Engineers and Scientists, Gibson E. Liv. Prentice-Hall.  
 Note: This course may be of interest to those students who completed EE 459 (Microprocessor Systems).

**MATH 477: LINEAR ALGEBRA (5 quarter units)**  
 June 18-August 14; Thursdays, 1600-1900 and Fridays, 1030-1230; Training Center. By Professor Mohamed El-Ansary, CSB.

Prerequisite: Calculus III or equivalent.  
 Scope: Linear equations, matrices, vector spaces, dimensions, determinants, linear transformations, eigenvalues, and eigenvectors.

Text: To be announced.  
 Note: This course is required for the BSCS Math/Science option and is an optional requirement for the BSCS Systems option and MSCS math core.

### GENERAL COMMENTS

1. Textbooks are available at bookstores locally.
2. Job-related courses other than those listed above or those offered under contract with Cal-State Northridge or Cal-State Bakersfield must be approved on an off-Center Training Request (DD Form 1556) before registration if NWC is expected to pay for the training. For more information, contact Cecil Webb, NWC ext. 2648.

## CSUN schedules classes for Engineering program

The following classes are being offered this summer for the Cal-State Northridge Engineering Program (bachelor's and master's degrees). For enrolling in these classes submit an on-Center Training Request (NAVWPNCEN 12410/73) via department channels to Code 094. Registration will be held in class at the first class meeting. Deadline for enrolling is 10 calendar days before the starting date of the class. Although training requests will be accepted after the deadline, that date will be used to determine whether the class will be held.

**EE 355: THEORY OF DIGITAL SYSTEMS (4 units)**  
 June 2-July 29; Lecture on Tuesdays, 1900-2100, and Wednesdays, 0800-1100; Laboratory on Tuesdays 1200-1700; Training Center for lecture and Cerro Coso Community College for laboratory. (Training Center for first laboratory session.) By Professor Nagi-El Naga, CSUN.

Prerequisite: Calculus II or equivalent.  
 Scope: Introduction to digital systems. Topics treated include: number systems, binary codes, Boolean Algebra, combinational logic design, logic minimization techniques, sequential circuits design, arithmetic operations, data transfers using register transfer notation, memory devices, digital system organization and subsystems design.

Text: Digital Logic and Computer Design, Mano, Prentice-Hall, latest edition.  
 Note: This is a core course for the BSEE degree program.

**EE 466: INTRODUCTION TO COMMUNICATION SYSTEMS (3 units)**  
 June 18-August 21; Thursdays, 1500-1800, and Fridays 1030-1230; Training Center. By Professor Ray Petit, CSUN.

Prerequisite: EE 360A: Linear Systems I or equivalent.  
 Scope: Introduction to information transmission; transmission through electric networks; analogue and digital communication systems; amplitude, frequency, PAM, PCM, and PPM modulation techniques; physical sources of noise, and evaluations of different systems in the presence of noise.

Text: Analog and Digital Communications Systems, Martin Roden, Prentice-Hall, latest edition.  
 Note: This course is a senior elective for the BSEE degree program.

**ME 375/90: HEAT TRANSFER/FLUID MECHANICS (3 units)**  
 June 3-July 30; Wednesday, 1530-1830 and Thursdays, 1000-1200; Training Center. By Professor Tim Fox, CSUN.

Prerequisite: ME 370: Thermodynamics or equivalent.

Scope: Basic principles of heat transfer and their application; introduction to conductive, convective, and radiative heat transfer; the fundamental equations of fluid mechanics are derived and applied to engineering problems, with emphasis on understanding the physical principles involved; the basic developments are applied to compressible as well as incompressible fluids. Selective exploration of the state of the art of experimental knowledge in major areas of application.

Text: Introduction to Thermal Sciences: Thermodynamics, Fluid Dynamics, and Heat Transfer, Frank Schmidt, Robert Henderson, Carl Walgemuth. John Wiley, 1984.  
 Note: This is a core course for the BSEE degree program.

**AM 410: MECHANICAL VIBRATIONS (3 units)**  
 June 1-July 28; Mondays, 1500-1800, and Tuesdays, 1030-1230; Training Center. By Professor Stephen Gadamski, CSUN.

Prerequisite: AM 316: Engineering Dynamics or equivalent.  
 Scope: Study of linear and torsional vibratory motion. Systems of one, two, and multiple degrees of freedom under transient and steady-state excitation. Introduction to nonlinear vibration, isolation, absorption, damping, and transmission problems arising in machinery.

Text: Theory of Vibration, Thompson, Prentice-Hall, latest edition.  
 Note: This course is a prerequisite to AM 510: Advanced Mechanical Vibrations, which is scheduled to be offered during the 1987-1988 academic year.

**MATH 477: LINEAR ALGEBRA (5 quarter units)**  
 June 18-August 14; Thursdays, 1600-1900 and Fridays, 1030-1230; Training Center. By Professor Mohamed El-Ansary, CSB.

Prerequisite: Calculus III or equivalent.  
 Scope: Linear equations, matrices, vector spaces, dimensions, determinants, linear transformations, eigenvalues, and eigenvectors.

Text: TBA.

### GENERAL COMMENTS

1. Textbooks are available at bookstores locally.
2. Job-related courses other than those listed above or those offered under contract with Cal-State Chico or Cal-State Bakersfield, must be approved on an off-Center Training Request (DD Form 1556) before registration if NWC is expected to pay for the training. For more information about any of these programs or classes, contact Steve Lee or Cecil Webb at NWC ext. 2648.

demo programs that reflect the work environment.

Scope: This course will provide an overview of personal computers and demonstrate the use of the most popular business software used today on IBM-PC compatible computers for the production of correspondence, reports, financial analyses and scheduling. Hands-on demonstrations of WORDSTAR, LOTUS 1-2-3, DBASE and TimeLine are included.

Presentation Methods: Lecture and demo workshop.  
 Deadline: May 4.



## Promotional opportunities

Applications for positions listed in this column will be accepted from appointable Department of Navy employees within the area of consideration and from eligible employees of attached activities who are permanently assigned to NWC unless otherwise specified in the ad. Appointable means career or career conditional employees, temporary employees with reinstatement of VRA eligibility and employees serving under Veterans Readjustment Appointments (VRAs). Alternative recruitment sources may also be used in filling these positions; vacancies are subject to restrictions imposed by the DOD Priority Placement Program. Applicants must meet all legal and regulatory requirements including minimum qualification requirements by the closing date. Applicants will be evaluated on the basis of experience, education, training, performance ratings and awards as indicated in the SF-171 along with any tests, medical examinations, performance evaluations, supplemental qualification statements and/or interview that may be necessary. Career ladder promotions are subject to satisfactory performance and cannot be guaranteed. APPLICATION PROCEDURES: Candidates must submit a current SF-171, along with a supplemental qualifications statement (if required), and should submit a copy of their latest Annual Performance Evaluation if relevant to the vacancy. If a supplemental statement is not required, candidates are encouraged to submit additional information which then addresses the specific Knowledge/Skill/Abilities (KSAs) cited in the ad. Write the position title/series/level and announcement number on the SF-171 and all attachments. Be sure that your forms are complete and accurate since you cannot be rated on missing data nor will you be contacted for additional information. Be certain the SF-171 and supplement are dated and have original signatures in ink. All applications will be retained in the vacancy announcement file; they will not be returned or filed in official personnel folders. Applications and supplements are accepted at the Reception Desk, Room 100, Personnel Department, 505 Blandy. Ads close at 4:30 p.m. on Friday, one week after the announcement, unless otherwise specified. Applications received after 4:30 p.m. on the closing date will not be considered. The Naval Weapons Center is an Equal Opportunity Employer; selections are made without discrimination for any nonmerit reason.

**No. 36-035, Supervisory Interdisciplinary Computer Scientist / Electronics Engineer / General Engineer / Mathematician / Physicist, DP - 1550/855/801/1520/1310, DP-2/3, Code 36224** - This position is that of Head, Software Support Section located in the Systems Electronics Branch of the Systems Engineering Division of the Engineering Department. This section is responsible for supporting and participating in the transition of the Sidewinder AIM-9R software design from Code 39 to Code 36. In addition, the incumbent will be responsible for establishing and controlling the System Software Support Facility for AIM-9R production support.  
**Job Relevant Criteria:** Knowledge of programming and documentation practices; knowledge of hardware and software; knowledge of NWC's EEO policies and procedures; ability to plan and schedule work; ability to communicate orally. If selected the incumbent may be required to serve a one-year supervisory probationary period. Promotion potential DP-3.

**No. 36-036, Specification Writer/Editor, DS-1083-1, Code 36562** - This position is located in the Specifications Branch, Technical Data Division, Engineering Department. The incumbent will write, edit, maintain, and revise data, specifications and related documents used in the procurement of weapon systems development by NWC.  
**Job Relevant Criteria:** Knowledge of weapons system design performance maintenance and operating characteristics; knowledge of basic military documentation policies and procedures; knowledge of basic standards used in development of specifications; ability to write specifications and related documents; ability to describe operating characteristics in clear, concise technical language. Promotion potential to DS-3.

**No. 36-037, Computer Specialist/Computer System Analyst, DS-334-2/3, Code 3605** - The incumbent will evaluate software and

multiprocessing computing developed by a contractor for a major center program. The incumbent identifies computing and software needs; examines, analyzes, and evaluates software project plans; evaluates software design and implementation; evaluates proposed test plans and procedures for software and gives advice for software management.  
**Job Relevant Criteria:** Knowledge of military specifications, instructions, and software engineering methodologies for development, documentation, management controls, quality assurance, and test of software; knowledge of life cycle development and operational support of software; knowledge of computing and software applications; ability to communicate orally; ability to communicate in writing. Promotion potential DP-3.

**No. 38-005, Clerk-Typist, GS-322-4, Code 385** - The incumbent provides clerical support to personnel in branch offices, and also provides support to Division Head and Administrative Officer when needed.  
**Job Relevant Criteria:** Ability to maintain files in a current and orderly manner; knowledge of the organization and its functions to be able to refer phone calls and visitors, distribute mail, and provide general, non-technical information; knowledge of procedures required to prepare time cards and travel orders. Promotion potential GS-4.

**No. 39-020, Supervisory Interdisciplinary General Engineer/ Electronics Engineer / Physicist, DP-801/855/1310-3/4, Code 3952** - This position is the head of the RF Sensors Branch. The branch is responsible for technology programs in microwave and millimeter wave transmitters, signal analysis, and target discrimination systems; operating a computer-based signal analysis facility and supporting major Navy and joint service missile programs. The incumbent's primary duties and responsibilities will be predominantly technical in nature. The incumbent will provide overall direction, coordination and management of branch

activities. A background in RF guidance systems is desired.  
**Job Relevant Criteria:** Knowledge of RF systems and subsystems; ability to communicate in writing; ability to deal effectively with NWC management and sponsors; understanding of NWC personnel policies and procedures; willingness to support NWC EEO policies and goals. Incumbent may be required to serve one-year probationary period. Promotion potential to DP-4, however is not guaranteed.

**No. 61-008, Model Maker, WG-4714-14, Code 61322** - This position is located in the Engineering Support Division, Aircraft Department. The incumbent is responsible for the machining and fabrication of various types of hardware. The incumbent will work from formal documentation, sketches and verbal instructions. The incumbent is responsible for the planning of interim operations, heat treat, plating, etc. The incumbent will, upon request, assist the customer with project design and material selection. The incumbent is responsible for his own setups.  
**Job Relevant Criteria:** Ability to do the work of the position without more than normal supervision; ability to do the theoretical, precise, and/or artistic work of a trade; ability to use shop drawings; ability to use hand tools for machine shop; knowledge of pertinent metals; skill in measurement and layout. A supplemental is required and can be obtained in Room 100 of the Personnel Building. Promotion potential to WG-14.

**No. 62-027, Ordnance Equipment Mechanic (Worker), WG-6641-8, Code 6211** - This position is located in the Test Engineering Section of the Ballistics Test Branch with the Range Department. The incumbent will be responsible for the maintenance of hydraulic, pneumatic, electrical and automotive equipment necessary for the movement and handling of Fleet Ballistics Missiles (FBM) and related ballistics test hardware. Responsible for setup and modification of equipment before, during and after missile movements.  
**Job Relevant Criteria:** Ability to be licensed for forklifts and trucks with trailer operation is desirable; ability to do the work of the position without more than normal supervision; knowledge of equipment assembly, installation, repair, etc.; ability to use and maintain tools and equipment; ability to use measuring instruments appropriate to the line of work; ability to interpret instructions, specifications, etc; ability to do the theoretical, precise work of the trade. A supplemental is required and may be obtained in Room 100 of the Personnel Building. Promotion potential to WG-10.

**No. 64-166, Inventory Management Specialist, DA-2010-1/2, Code 3556** - This position is located in the Range Services Branch of the Electronic Warfare Threat Environment Simulation (EWTES) Division of the Electronic Warfare Department. The incumbent will perform inventory management functions in support of threat simulator development, radar maintenance and operations, and improvement and modernization efforts for the EWTES Division. Work schedule is "First Forty," and bus transportation is provided.  
**Job Relevant Criteria:** Ability to deal

effectively with people; ability to interpret and apply rules, regulations, policies, procedures and instructions; ability to communicate in writing. Promotion potential to DA-3.

**No. 64-170, Electronics Technician, DT-856-3, Code 3553, (2 vacancies)** - This position is in the Radar Maintenance and Operations Branch of the EWTES Division, Electronic Warfare Department. The schedule of work is "First Forty," Monday through Thursday 0630-1630. The incumbent is responsible for operation, calibration, repair, and modification of electronic digital and/or analog circuits, and radar sub-systems and systems using schematics and electronic test equipment.  
**Job Relevant Criteria:** Knowledge of digital and/or analog circuit design; knowledge of radar and radar systems; ability to develop and interpret schematics and engineering drawings. Promotion potential to DT-3.

**No. 64-171, Electronics Technician, DT-856-2, Code 3553, (2 vacancies)** - This position is in the Radar Maintenance and Operations Branch of the EWTES Division, Electronic Warfare Department. The schedule of work is "First Forty," Monday through Thursday 0630-1630. The incumbent is responsible for operation, calibration, and repair of electronic digital and/or analog circuits, and radar sub-systems and systems using schematics and electronic test equipment.  
**Job Relevant Criteria:** Knowledge of radar and radar systems; ability to troubleshoot digital and/or analog circuits; ability to develop and interpret schematics and engineering drawings. This position may have promotion potential to DT-3; however, promotion is not guaranteed.

**No. 64-172, Electronics Technician, DT-856-1, Code 3553, (2 vacancies)** - This position is in the Radar Maintenance and Operations Branch of the EWTES Division, Electronic Warfare Department. The schedule of work is "First Forty," Monday through Thursday 0630-1630. The incumbent is responsible for operation, calibration, and repair of electronic circuits, and radar sub-systems and systems using schematics and electronic test equipment.  
**Job Relevant Criteria:** Ability to develop and interpret schematics and engineering drawings; skill in installation, maintenance and repair of electronic equipment; ability to use electronic test equipment. This position may have promotion potential to DT-3; however, promotion is not guaranteed.

**No. 64-173, Electronics Technician, DT-856-A, Code 3553, (2 vacancies)** - This position is in the Radar Maintenance and Operations Branch of the EWTES Division, Electronic Warfare Department. The schedule of work is "First Forty," Monday through Thursday 0630-1630. This is a training position. The incumbent is responsible for learning to operate and calibrate electronic circuits, and radar sub-systems and systems using verbal and written instructions and procedures.  
**Job Relevant Criteria:** Knowledge of electronics principles; ability to work as a member of a technical



## Personnel Development Opportunities

### MICROCOMPUTERS FOR MANAGERS

May 18-21; Monday-Thursday; 0800-1600; Training Center. By Robin Stark, Evolving Technology.

Intended Audience: Middle managers, administrators with planning responsibility for implementing microcomputers in the office.

Course Objectives: In this course you should learn the basic capabilities of microcomputer software, primarily word processing, spreadsheets, scheduling and graphing software. You should also gain hands-on experience in using the software with

team; ability to understand instructions and procedures. This position may have

promotion potential to DT-3; however, promotion is not guaranteed.

## Reassignment opportunities

This column is used to fill positions through reassignment only. For this reason, the Reassignment Opportunity Announcements are separate from the Promotion Opportunities column in the Rocketeer. Applications will be accepted until the date stated in the announcement. Employees whose work history has not been brought up to date are encouraged to file an SF-171 or 172. All applicants must meet minimum qualification requirements established by the Office of Personnel Management. Information concerning the recruitment and placement program and the evaluation methods used in these reassignment opportunities may be obtained from Personnel Management Advisors (Code 096 or 097). Applications should be filed with the person whose name is listed in the announcement. The Naval Weapons Center is an Equal Opportunity Employer.

**No. 31-037, Interdisciplinary (Electronics / Mechanical / Aerospace/General Engineer/Physicist/Computer Scientist), DP-855/830/861/801/1310/1550-3, (Multiple Vacancies) Code 3112** - These positions are located in the A-6F Facility Branch of the Avionics Facilities Division, Aircraft Weapons Integration Department. The A-6F Facility Branch is responsible for the design, construction, operation and maintenance of real-time avionics simulation facilities to support development and validation of operational flight programs for the A-6 aircraft. The branch is currently seeking several individuals to serve as project leaders for the development of multiple avionics facility test consoles to support the A-6F aircraft under development by Grumman Aerospace Corporation. Each project leader will be responsible for both technical and programmatic aspects of the avionics facilities to support one or more subsystems on the A-6F aircraft. Each project leader shall be responsible for overseeing the analysis, design construction, coding, integration, testing and documentation of the facility hardware and software. The project leader shall interface with facility users, support contractors, vendors and other facility team members. Knowledge of avionics facilities and project management is highly desirable, but not required for these positions. To apply, submit a current SF-171 to Jerry Bradley, Code 3112, NWC ext. 5388.

**No. 36-038, Interdisciplinary, Operations Research Analyst/Computer Scientist / Electronics Engineer, DP - 1515/1550/855, DP-2/3, Code 3605** - The incumbent will evaluate software and multiprocessing computing developed by a contractor for a major center program. The incumbent identifies computing and software needs; examines, analyzes, and evaluates software project plans; evaluates software design and implementation; evaluates proposed test plans and procedures for software and gives advice for software management. Please submit current SF-171 to Dave Rugg, Code 3605, NWC ext. 2191.

**No. 39-021, Interdisciplinary, Physicist / Electronics Engineer, DP-1310-855-3, Code 3926** - This position is located in the Inertial Development Division, Weapons Department. The Inertial Development Branch develops, tests and evaluates inertial sensors and inertial systems. It also functionally integrates inertial systems with navigation aids, such as the Global Positioning System. The incumbent will use the existing technology base to develop low-cost strapdown inertial measurement units for tactical missiles. Knowledge of inertial

guidance fundamentals; knowledge of hardware and software fundamentals of tactical missile-borne computers; ability to organize and prioritize tasks, to effectively lead a technical team; to communicate effectively both orally and in writing. Submit SF-171 to John Freeman, Code 392, NWC ext. 2922.

**No. 64-167, Interdisciplinary Electronics / Electrical / General/Physicist / Mathematician / Computer Scientist, DP-855/850/801/1310/1520/1550-2/3, Code 3554, (2 vacancies)** - This position is located in the Computing Section of the Instrumentation Engineering Branch at Echo Range. The primary duty is system programmer on the four Gould SEL 32/9780 computer systems currently in use at Echo Range. The incumbent will identify man-machine and inter-machine interfaces, operating system deficiencies and then produce appropriate software to meet facility needs. This activity will be performed on an individual and group basis, possibly requiring the incumbent to have contacts with other branches and divisions of the department as needed to support the facility. Additional duties will include assisting the section head, system administrator and ADPE security officer in implementing the ADP security procedures for the SELs. Desired skills and abilities include a basic understanding of the daily operations of a super-mini computer facility, system architecture, operating systems, and proficiency in assembly language and Fortran 77. To apply, submit current SF-171 to Ray Hiller, Code 3554, NWC ext. 3571.

**No. 64-174, Interdisciplinary General/Aerospace/ Electronics/Mechanical Engineer / Physicist/Program Manager, DP-801/861/855/830/1310/340-3, Code 35503** - This position is located in the Simulator Development Program Office of the Aerosystems Department. The Simulator Development Program Office is responsible for the management of the Navy's Integrated Naval Air Defense Simulation (INADS Program). The incumbent will be responsible for the management of a major simulator development program. This simulator will be contractor developed with NWC serving as COTR, providing technical monitoring, and integrating the simulator into the EWTES facility. This program will extend over a 5-year period commencing with the fourth quarter of FY-87. Incumbent will be responsible for program planning, budgeting and scheduling; sponsor and contractor interface; and in-house technical coordination. Incumbent reports to the Simulator Development Program Manager. Please send current SF-171 to

Gary Castor, Code 35503, NWC ext. 3571.

**No. 64-168, Interdisciplinary Electronics/ Electrical/ General/Physicist / Mathematician / Computer Scientist, DP-855/850/801/1310/1520/1550-2/3, Code 3554** - This position is located in the System Engineering Section of the Instrumentation Engineering Branch of the Electronic Warfare Threat Environment Simulation (EWTES) Division of the Electronic Warfare Department. The incumbent will perform instrumentation system engineering functions in support of threat simulator development efforts as well as EWTES improvement and modernization efforts. General knowledge of project management, digital computers, computer interfacing and audio, video and digital communication techniques is desired. An ability to work individually and in a group as well as communicate orally and in writing is desired. Please send current SF-171 to Gene Anderson, Code 3554, NWC ext. 3571.

**No. 64-169, Interdisciplinary**

**Electronics/ Electrical/ General/Mechanical / Aerospace Engineer, DP-855/850/801/830/861 - 1/2/3, Code 35542, (2 vacancies)** - This position is in the Communications Section, Instrumentation Branch, EWTES Division of the Electronics Warfare Department. Responsibilities will include providing definition, implementation and application of technological advances in the communications field as applied to transmission of digital, audio, and video, via fiber optics and other media. This activity will be performed on an individual and group basis. Occasionally the incumbent will be required to support other branches and divisions of the department. Knowledge of analog and digital communications design, and a basic knowledge of fiber optics is desirable. Ability to communicate, both orally and in writing, and the ability to work as a team member is also desirable. Incumbent must have ability to analyze technical data to develop plans and projects in accordance with EWTES Configuration Management plans. To apply, submit current SF-171 to David J. Allen, Code 35542, NWC ext. 3571.



## Recreation Department Non-Appropriated Funds

The following vacancies are not Civil Service positions. These positions are paid for from non-appropriated funds and are administered in accordance with policies established by the Department of Defense. Persons selected for these positions have no Civil Service status and are not eligible for appointment to positions in the Civil Service. Persons interested in applying for these positions should fill out a standard application form (SF-171). Applicants need not be presently employed in a Non-Appropriated Fund Instrumentality (NAFI) position, nor must they be employed at the Naval Weapons Center. The SF-171 should clearly be marked "NAFI" on the top and should have the appropriated Announcement Number listed in Block 1 on the form. Completed applications can be delivered to Room 100 or to Room 120 in the Personnel Building or can be mailed to: Naval Weapons Center, Personnel Department (Code 096), ATTN: NAFI Service Team, China Lake, CA 93555.

**No. 22-8712, Recreation Aid, PS-0189-4, Temporary Full-Time, \$4.89 per hour, Code 2227** - Incumbent is part of youth summer staff. Assists with the planning of special events during the summer, working at matinees, supervises attendants at the Youth/Skating Rink. Promotes programs and makes suggestions to the Head, Youth Activities Branch. Supervisory experience in recreation or youth programming is desirable. **THIS IS NOT A CIVIL SERVICE POSITION.**

**No. 22-8714, Publicity Clerk (Typing), AS-303-3, \$4.78 per hour, Intermittent Unscheduled, Code 22022** - Incumbent serves as an assistant for the Marketing Section and as relief for the department secretary at the Recreational Services Department. Ability to deal with the public in a friendly and professional manner; to type 40 w.p.m.; knowledge and skill in graphic design and layout desirable. Must be available on an on-call basis. **THIS IS NOT A CIVIL SERVICE POSITION.**

**No. 22-8719, Snack Bar Operator, PS-2091-5, \$5.19 per hour, Temporary Full-Time not to exceed 12-1-87, Code 2227** -

Incumbent ensures that snack bar rules and regulations are posted and adhered to, schedules employees to ensure adequate coverage, and monitors quality of staff performance. Incumbent must be accountable for inventory sold and money taken in and be able to maintain adequate stock of all food items and reorder as necessary. Incumbent prepares and cooks such items as hamburgers, hotdogs, french fries, etc. Ability to deal with the public effectively and continually handle objects up to 40 lbs. **THIS IS NOT A CIVIL SERVICE POSITION.**

**No. 22-8720, Offset Press Operator, NA-4417-6/7, \$5.74-\$6.03 per hour, Regular Part-Time, Code 22022** - Incumbent will prepare a single color or multicolor offset press for production runs, maintain quantity/quality control on production runs and will be responsible for ordering and stocking supplies necessary for operation of press equipment. Incumbent is responsible for the preparation, adjustments, operation, and maintenance of single color or multicolor offset press equipment. Inexperienced operator will be hired at NA-6 level with promotion potential to NA-7 level. **THIS IS NOT A CIVIL SERVICE POSITION.**

## Secretaries requested to postpone applying for "You Deserve A Break Today"

The new off-Center secretarial course titled YOU DESERVE A BREAK TODAY is being previewed by Training Center personnel.

We request employees do not submit off-Center requests until the course has been previewed.

If the course is of good quality and suitable for NWC personnel, it will be brought to NWC as an on-site course in the near future.

Look for further information on this course around June 23.

## Writing proficiency test slated for Cal-State Northridge students

The English Writing Proficiency Test will be given on May 27 at 8 a.m. Cal-State Northridge students should take the exam as soon as application for admission has been approved. This test must be passed before the student is granted unconditional status as a master's candidate. Graduate students must attain uncondi-

tional status before earning more than 12 units of academic work acceptable toward the master's degree. The exam fee is \$12.

Checks must be made payable to California State University Northridge (CSUN). Contact Cyndi Jones, NWC ext. 2648, to arrange to take the exam.

## JPs offered career guidance, counseling

The purpose of the JP Career Guidance and Counseling Program is to provide new professionals with information about themselves that will help them plan their careers at NWC. The JP career guidance and counseling program includes eight hours of tests and a feedback session with a professional counselor. Some questions to be answered during this program are:

1. Do you now have essentially technical or managerial (or both) capabilities? What are your prospects for future development?
2. How can you use your creativity? Should you emphasize research or applications?
3. What are your major values and pri-

orities for personal and career development?

4. What are your major strengths and weaknesses in dealing with others?

5. With what size group would you work best?

6. What additional training (technical, academic, or other) do you need for further development?

The next testing will be held May 28 and 29 from 7:30 to 11:30 a.m. at the Training Center. Counseling sessions will be held at a later date. If you want to be included in the May testing, contact Cyndi Jones, NWC ext. 2648.

Note: Test results and any related information are kept confidential.

## Someone forgot to return it!

Someone has removed the audiocassette course "How to Improve Your Memory" from the Training Center, Room 101.

Anyone who knows about this or anyone who has this course; please return it to the Training Center, Room 100, as soon as possible.



This Question and Answer column will be published as needed to answer questions you may have about FERS. Questions should be submitted, in writing, to Code 091.

I AM CONSIDERING TRANSFERRING TO FERS SO I CAN RETIRE EARLY. WILL YOU EXPLAIN HOW THE EARLY RETIREMENT WITH REDUCED ANNUITY WORKS?

You can retire and begin receiving benefits before you are eligible for voluntary unreduced retirement once you:

1. Reach your minimum retirement age; and
  2. Complete at least 10 years of service, including five years of civilian service.
- Your benefits would, however, be reduced as described below and you would not be entitled to a supplement.

If you retire on or after you reach your minimum retirement age and have at least 10 years of service, your benefits will be calculated according to the formula for voluntary unreduced retirement benefits. However, your benefits will be reduced 5/12 of one percent for each month (five percent per year) by which your first benefit payment precedes your 62nd birthday.

The reduction factors for retirement at various ages prior to eligibility for voluntary unreduced retirement are shown in the following table:

Reduced Retirement Table

Age	When Payments Begin	% of Benefits Payable
62		100%
61		95%
60		90%
59		85%
58		80%
57		75%
56		70%
55		65%

### Example of Voluntary Reduced Retirement

Suppose your minimum retirement age is 55 and you decide to retire at that time with 20 years of service and average compensation over your three consecutive highest-paid years of \$41,500. Your voluntary reduced annual retirement benefit would be calculated as follows:

Voluntary, Unreduced Benefit (1.0% x \$41,500 x 20):	\$8,300
times	
Percent of benefit payable at age 55	x 65%
equals	
Voluntary Reduced Annual Retirement Benefit	\$5,395

Thus, you would receive an annual benefit of \$5,395, or \$450 a month, upon your retirement at age 55, and no supplemental is payable.

## CSRS/FERS information

Help in picking CSRS or FERS will soon be available . . .

The Office of Personnel Management (OPM) has written a 100-page Transfer Workbook to assist Civil Service Retirement System (CSRS) employees in making a decision on whether or not to transfer to the Federal Employees Retirement System (FERS).

Distribution of this workbook is scheduled for the first of June. All employees eligible to transfer to FERS will receive a copy of the workbook.

The open season for transferring to FERS is July 1 through December 31, 1987.

Anyone with any questions regarding this matter should contact Virginia Spille, NWC ext. 2592.

## Another open season for the Thrift Savings Plan begins May 15

There will be another open season for enrollment in the Thrift Savings Plan (TSP) May 15 through July 31.

New TSP Booklets are scheduled to be received sometime in May. Distribution to all employees will be made as soon as the booklets are received.

For further information contact Virginia Spille, NWC ext. 2592.

## FERS/CSRS Retirement System Analysis Package available at Learning Center

The Training Center has the IBM-PC disc and Federal Retirement Benefit Analysis forms. With these items, you can input your personal employment data to do a side-by-side comparison of the FERS/CSRS systems to see which system best meets your needs. This package can be checked out by people interested in doing an individual comparison of the new civil service retirement system called FERS and the old civil service retirement system called CSRS (which all civil service employees hired prior to 1984 are currently under).

Employees covered under CSRS may elect to transfer to FERS during the period of July 1 through December 31, 1987.

People interested in checking out this package should call the Learning Center, NWC ext. 2451, to reserve the package.