



**PARADE TIME**—Members of the U.S. Marine Corps Liaison Office at NWC rode the Toys for Tots float in last Saturday's Christmas Parade. First Sergeant Richard Zink and Ted Lemon (not pictured) were in the front, while GySgt. William A. Conner, GySgt. Al

Bucharelli and MSgt. Edward Alba accompanied the bulldog in the back of the pickup. Toys for Tots donation boxes can be found in the lobby of Michelson Lab as well as the NWC Headquarters Building lobby.

## TV tips, info offered free

"Multichannel TV Service," a "layman's language" paper on recent developments in television technology, will be distributed free of charge at the IWTV Booster booth at Santa's Art Shop at the Desert Empire Fairgrounds this weekend. This is a preview chapter from "The TV Booster Book," a publication the volunteer organization is updating to help local residents get the most out of their television sets.

Both visitors can also learn about other projects of the not-for-profit organization. One of the services offered is a recorded announcement service on 446-7442 that provides a message on current through-the-air reception conditions for particular channels or FM radio stations. Callers are also able to leave word about problems that they may be having to alert TV Booster volunteers of the need for corrective action.

## Contest planned

Residents in Center housing will be putting the finishing touches on their outdoor Christmas decorations this weekend; the annual "best decorated residence" contest will be judged next week by Housing Division personnel.

There will be an award made for each of three areas: Capehart B housing, Hill housing and the Old Duplex area.

Housing Division personnel remind residents to use minimal outdoor lighting—energy conservation is still vital.



	Max	Min	Peak Gust	Precip
Fri.	57	32	12 knots	0.94
Sat.	62	42	15 knots	0.05
Sun.	58	43	29 knots	—
Mon.	63	33	7 knots	—
Tues.	59	28	9 knots	—
Wed.	59	26	7 knots	—
Thurs.	61	24	6 knots	—

All measurements are made at Armitage Airfield.

## Robinson talk at IEEE Wed.

Dale Robinson will be the speaker for the December lunch meeting of the China Lake Section of the IEEE, which will be held at the Commissioned Officers' Mess on Wednesday. Lunch will be served from 11:30 a.m. until noon, with the program beginning at that time.

Robinson is Technical Manager of the Intelligent Air Attack System program at NWC. His topic is "The Cockpit of the Future."

Reservations are requested and can be made by telephoning Clark Hay, NWC ext. 5607; Horace Joseph, 375-9397; or Bo Arnold, NWC ext. 3493.

## Matinees slated

In December, the Center Theater will be showing holiday matinees for the entire family's viewing pleasure.

Special dates for these matinees are Tuesday, Dec. 23 and 30 and Saturday, Dec. 27. The box office will open at 1:30 p.m. and showtime will be 2 p.m.

Cost for these matinees will be \$1.35 for youths 12 years old or older, \$0.50 for youths 6-11 and free for children 5 and under.

Advanced tickets may be bought at the Information, Ticket and Tour (ITT) Office or tickets may be purchased at the theater door prior to the matinee.

For more information call the ITT Office at NWC ext. 2010.

## Adm. Bird visits

Admiral Bird will be visiting China Lake next week. Center personnel are advised that the Admiral will be touring work sites and visiting with Center personnel to assess morale, welfare and recreation at China Lake.

All personnel are encouraged to cooperate fully with Adm. Bird and to extend him every courtesy.

Further information about the Admiral's visit can be obtained by telephoning NWC ext. 3387.

## Movies

FRIDAY, SATURDAY	DEC. 12, 13
"FERRIS BUELLER'S DAY OFF"	
Starring Matthew Broderick and Alan Ruck (Comedy, rated PG-13, 103 min.)	
SUNDAY	NO MOVIE
DEC. 14	
WEDNESDAY	DEC. 17
"THE MANHATTAN PROJECT"	
Starring John Lithgow and Christopher Collet (Comedy, rated PG-13, 118 min.)	
FRIDAY	DEC. 19
"HEARTBURN"	
Starring Meryl Streep and Jack Nicholson (Comedy-Drama, rated R, 110 min.)	
Starting Time: Evening 7 pm	
(G) ALL AGES ADMITTED General Audiences (PG) ALL AGES ADMITTED Parental Guidance Suggested (R) RESTRICTED Under 17 Requires Accompanying Parent or Adult Guardian	

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FROM \_\_\_\_\_ PLACE STAMP HERE

TO: \_\_\_\_\_

## Martin's performance brings him Skaar Award

Years of safe operations, professionalism and resourcefulness combined to bring the 1986 Kit Skaar Award for Outstanding Firing Officer to Soliman Martin of NWC's Ordnance Systems Department last week. Capt. John Burt, NWC Commander, presented the award, the fourth time the Kit Skaar Award has gone to a Naval Weapons Center employee.

Roy Parris, head, Safety and Security Department, noted the firing officer training program was now 13 years old at China Lake. In 12 of those 13 years firing officers have led the Center to years free of injury accidents during ordnance firing operations.

Described as a vital part of the safety effort at NWC, the firing officer program has conducted 17 classes for more than 350

employees, half of whom have gone on to become firing officers. Parris noted a history of severe accidents in ordnance firing operations was the motivation for the establishment of the program in 1973.

In making the presentation, Capt. Burt stressed the need for people to be recognized for their contribution to safety to continue to be a part of the firing officer program. He also noted NWC was fortunate to have had employees, such as Skaar, with the foresight to set-up such a program and keep it going.

"Firing officers have tremendous responsibility on their shoulders," noted Capt. Burt. "It's important that we recognize them."

Martin joins Ed Regan (first winner of the award) from 1983, Ben Parsons from

1984 and Bob Rasmussen from last year as a holder of the coveted Skaar Award.

Martin told the crowd assembled at the CLPP Cafeteria that he was very surprised to be honored. He thought this was a routine safety meeting that his branch head insisted he attend.

The 1986 Kit Skaar Award winner said he wanted to thank his former branch head for providing the opportunity and encouragement to get involved with the firing officer program.

Skaar, now retired from NWC, attended the presentation and congratulated Martin and the 11 other firing officers who received certificates for five and 10 years of safe ordnance operations at NWC.

The former Safety Department head said it is unfortunate it sometimes takes a bad

accident to accomplish something you want to do. The 1972 accident that claimed two lives provided the backing necessary to put the firing officer program together and kept it a strong and viable safety program.

Skaar also cautioned firing officers, and others, not to get over-confident because of the success in curbing accidents over the past 13 years. Safety must remain a vital part of the research, development, test and evaluation effort at China Lake in order to maintain these levels of excellence.

Five year firing officer certificates were presented by Al Wiruth, Safety Program Officer and Parris to R.D. Ambre, W.P. Bailey, L.L. Hacker and J.E. Jones. Receiving 10-year certificates were J.R. Thompson, H.P. Richter, R.Y. Yee, W.E. Johnson, B.G. Brown, J.A. Haug and D.L. Holdaway.



**SKAAR AWARD**—Soliman Martin (C), of NWC's Ordnance Systems Department, receives the Kit Skaar Firing Officer's Award from Capt. John Burt, Center Commander.

Kit Skaar, a former Safety Department head, for whom the award was named, looks on at the Fifth Annual Firing Officer Awards Ceremony.

## Leading civilian award rounds out lengthy NWC career for Freedman

Culminating Robert J. Freedman's long career at China Lake was the presentation to him of the Navy Meritorious Civilian Service Award during his retirement party on Dec. 4.

Capt. John Burt, NWC Commander, noted that it was a particular pleasure to be able to make this presentation because "When I was at Lemoore in 1968 and flying the A-7, I was one of your customers in the A-7 program."

Capt. Burt continued, "You are to be commended for being able to pick such a great team. I am happy to be able to provide this recognition for you and the people who have worked for you with this award."

Freedman began his career at China Lake in April 1945, holding pay number 475 — the lowest active pay number by several hundred, according to Paul Homer, head of the Electronic Warfare Department, who served as master of ceremonies. After a number of assignments, Freedman became A-7 program manager in 1968, creating a new type of effort for China Lake. Currently, Homer said, 400 people at China Lake are involved with supporting aircraft systems in the same way Freedman set up the position at that time. His outstanding performance earned him the Michelson Laboratories Award in 1976.

After 10 years of work with the A-7 program, Freedman became Field Station Program Coordinator for the F/A-18 aircraft. In 1980 he returned to the A-7 program as A-7E Program Manager, a position he held for four years until the move to Washington to become HARM Low Cost Seeker Manager.

"In this position," the letter of nomination for the award written by Homer states, "Mr. Freedman earned the respect of people he dealt with in OCNR, SPAWAR, NAVAIR, OPNAV, ASN and OUSDR by his pleasant personality and honest 'tell it like it is' method of operation."

Freedman responded to the presentation by saying, "I've had a long, interesting and productive career, one I've really enjoyed. I've served as front man for a really terrific team."

He concluded with "The secret of having such a team is mutual trust and mutual friendship. If you have that, you'll work together beautifully."

Freedman and his wife, Mickey, have not yet decided, they said, where they will reside now that he has completed his 41-1/2 year career with the Naval Weapons Center and its predecessor, the Naval Ordnance Test Station.



**CONTRIBUTIONS HONORED**—Capt. John Burt, NWC Commander, reads the citation for the Navy Meritorious Civilian Service Award that he then presented to Robert Freedman.

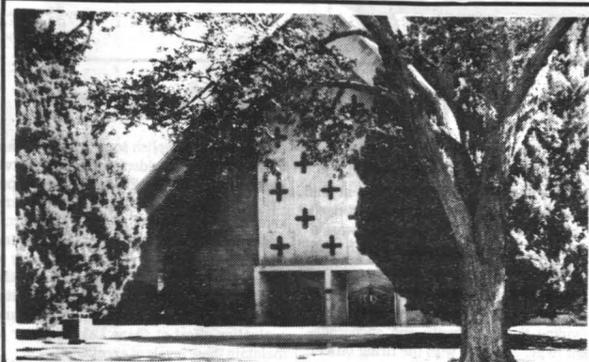
## CFC ends at \$170,045

For the 1987 drive, more than 1,650 China Lakers contributed to the annual Combined Federal Campaign during the past month. Military and civilian employees pledged \$170,045.40 for 1987 according to Natalie Harrison and Loretta King, chairmen of the drive.

This is the one time each year where federal government workers are asked to support a charity fund raising effort. At China Lake, 26 percent of the military and civilian employees took advantage of this opportunity to help others in their community and throughout the world.

The Branch Dental Clinic was the only China Lake activity with 100 percent participation in the CFC. The second best organization was the Defense Reutilization and Marketing Office with an 80 percent rate. At NWC, the Weapons Planning Group hit the 65 percent participation rate by its employees.

China Lakers did not equal the record of more than \$211,000 pledged last year and the level of participation declined from 34 to 26 percent.



## 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.

Chaplain J. Whiton Collins, Capt. CHC USN  
 Chaplain A.J. Smith, Capt. CHC USN  
 Chaplain C.R. Beede, Lt. jg. CHC USNR  
 Hearing impaired equipment available. Nursery available.  
 Phone NWC ext. 3506, 2773.

## Scalds, burns possible with microwave ovens

WASHINGTON (NES) . . . Because microwave ovens heat foods and objects very quickly, scald and burn injuries are often the result.

In one case, someone warmed a jellyroll in a microwave oven. The person took the roll out of the oven, felt the pastry was warm and, without thinking, took a big bite. The cake was fine, but the jelly scalded the person's lips, tongue and palate.

In another case, an individual was warming soup in a microwave oven. The container felt cool when removed from the oven, so the person took a big swallow of soup. Unfortunately, the soup was scalding hot.

What these cases illustrate and what the victims learned too late is that microwaves heat containers and foods at different rates. To prevent injuries, observe the recommended standing times for foods after cooking. Also, be cautious in taking that first mouthful.

Microwave-generated steam is another problem. Steam develops when food is microwaved in sealed or covered con-

tainers. When the seal is broken or the cover removed, the steam vents quickly. Someone's hand or face near the steam could be burned. To prevent such burns, poke small holes in plastic wrappers, pouches or sacks before cooking. After cooking, lift rigid covers with care.

Don't cook food in paper or plastic containers secured with metal staples or wire twists. Doing so could cause a fire. The metal heats faster than the container, easily exceeding the ignition temperature of the combustible material.

Don't cook food in foil paper. Electrical arcing can occur between foil wrappers and oven walls. A fire may not start, but the oven itself can be damaged. Keep all metallic objects out of your microwave.

**NWC HOTLINE**  
 Integrity, efficiency program  
 Call: NWC ext. 3636 (24 hrs.)  
 or call the Inspector General at:  
 (800)522-3451 (toll free)  
 288-6743 (Autovon)  
 (202)433-6743 (commercial)

## Hannukah celebration set by Temple Beth Torah

Temple Beth Torah, the Jewish congregation of the All Faith Chapel, will begin celebrating Hannukah (Festival of Lights) with religious services in the east wing of the Chapel on Friday, Dec. 27, at 7:30 p.m.

The Indian Wells Valley Jewish Women's Club invites everyone to join in the celebration by attending the Hannukah dinner in the Chapel's east wing on Saturday, Dec. 27, at 5:30 p.m.

Menu for the dinner includes fruit salad, potato pancakes with sour cream or apple

sauce, jelly doughnuts, coffee, tea, and punch. Cost of the dinner is \$4 for each adult and \$2 for a child from 5 to 12 years old; children under 5 are free.

Jewish military personnel and their families are welcome as honored guests.

Everyone who plans to attend must make a reservation no later than Tuesday, Dec. 23. Reservations can be made by telephoning 446-3939, or by sending a check payable to IWV Jewish Women's Club to 312 Ward Street, Ridgecrest, CA 93555.

## Acetaminophen, alcohol bad combination

You may have heard that alcohol and aspirin don't mix; they irritate the stomach and the combination can cause bleeding of the stomach lining. But now, people who regularly drink as little three or four beers a day are being warned to go easy on acetaminophen, the pain reliever contained in Anacin-3, Panadol, Tylenol, Valadol and Datril Extra Strength.

The reason: Combined with alcohol, the pain reliever, even in regular doses, can cause liver damage. Some doctors, according to articles in medical publications, recommend a maximum daily dosage of no more than two grams (about four Extra Stength Tylenol tablets) per day for drinkers.

American Forces Press Service

## Mitzi Fortune spends much time on Sidewinder

When Mitzi Fortune, Guidance Control Section Technical Manager for the production Sidewinder began her first job with the Sidewinder Program, she did not anticipate where her career would lead her.

She had started working at NWC in September 1970 as a WAE clerk-typist and got hired two weeks later as a mail and file clerk. In September 1971, she moved to become branch secretary in the AIM-9L Program Office. Her secretarial skills took her from that job to become division secretary in the Applied Science Division of the Research Department in 1973, but her interest was not in continuing a secretarial career.

Mrs. Fortune's first big career change came in August 1974 when she returned to the Sidewinder Program in the Missile Guidance Branch as an Electronics Mechanic's Helper — the first step of a pre-journeyman development program. In January 1978 she earned her AS degree from Cerro Coso Community College in

electronics technology and in March of that year she completed her training as a journeyman electronics mechanic.

Her interest in education was only whetted by this training. In January 1979 the Engineering Department sponsored her to go to school full time at Cal Poly San Luis Obispo on an NWC Undergraduate Fellowship to study electronics engineering.

There was one slight glitch during this training, Mrs. Fortune says, laughing. She had to take some time out from school because Curtis, the youngest of the Fortune's three sons, arrived in March 1981. Her husband, also Curtis, who is an electrician at CLPP, kept all three boys here when she went back to school to finish her training and graduate with an EE degree in September 1982.

"I really appreciated his being willing to do so," she says, "because when you've worked hard enough to get that close to a degree, you really want to be able to finish

the training."

On returning to NWC, she first served a detail on the Sidewinder PIP and, since July of last year, she has held her present job.

"We're long time Indian Wells Valley rats," Mrs. Fortune says, adding that her husband moved to the local area with his family in 1949 and she moved here with her mother in 1956. Both are graduates of the local school system and felt that working for NWC, like their parents did, was a natural course to follow.

They own five acres off Jacks Ranch Road but, she says, "We raise nothing but

junk cars."

She and their oldest son, David, who is an auto mechanic, work on restoring a 1967 and a 1969 Camaro, while Curtis increasingly serves as family chef.

One of the things that he as chef likes to cook is some of the fish that they catch on family fishing outings up to the Owens Valley in their travel trailer. Their other favorite outing, however, doesn't lead to anything edible — it's to Las Vegas, to which Mrs. Fortune refers as "my kind of Disneyland."



**COMMUNICATING**—Mitzi Fortune stays in touch with the contractor who is producing the guidance control section of Sidewinder, for which she is the Technical Manager.

## Red Rock Canyon represents nearby recreation

China Lakers, like motion picture companies, have discovered they don't need to go to the Canyonlands of Utah or the Grand Canyon in Arizona to find beautiful rock formations. Less than 50 miles from China Lake lies Red Rock Canyon State Park, a smaller and closer version of the more famous red rock country of the southwest.

Over a 10-million year period wind and water have eroded away the rock to create buttes, pinnacles and fluted cliffs in the state park. The park is an easy trip down Highway 14 for a picnic, photography expedition or weekend getaway from the throngs.

During the winter months ranger-led day hikes offer visitors a chance to learn about the geology, desert plant life and the history of early Indian residents of this portion of the Mojave Desert.

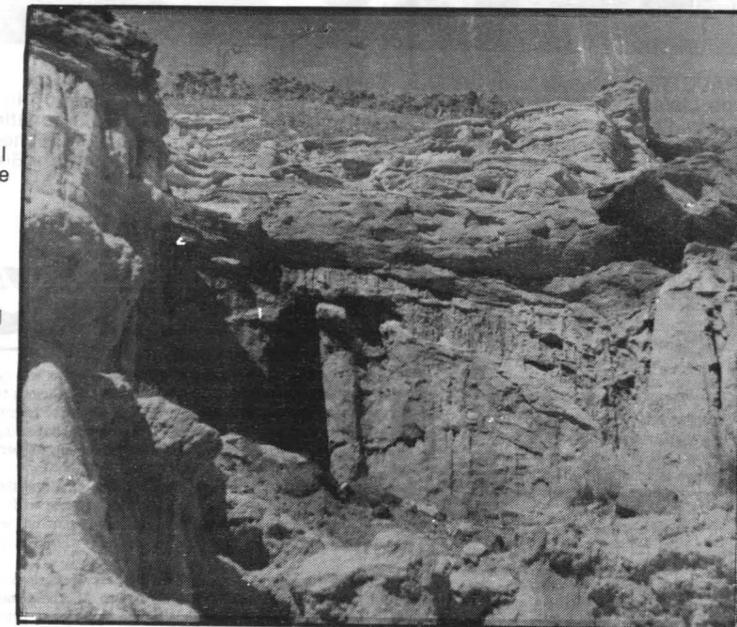
Several tributary ravines lead into the main canyon or open onto the highway. They are only a few hundred feet deep and the area is easily explored on foot. The park covers only about 4,000 acres and includes many trails and primitive roads.

Off-road enthusiasts can ride off-road vehicles in the park, but must remain on the roadways. There is a large and popular off-road area in Jawbone Canyon, just south of the state park, for those who really want that kind of adventure.

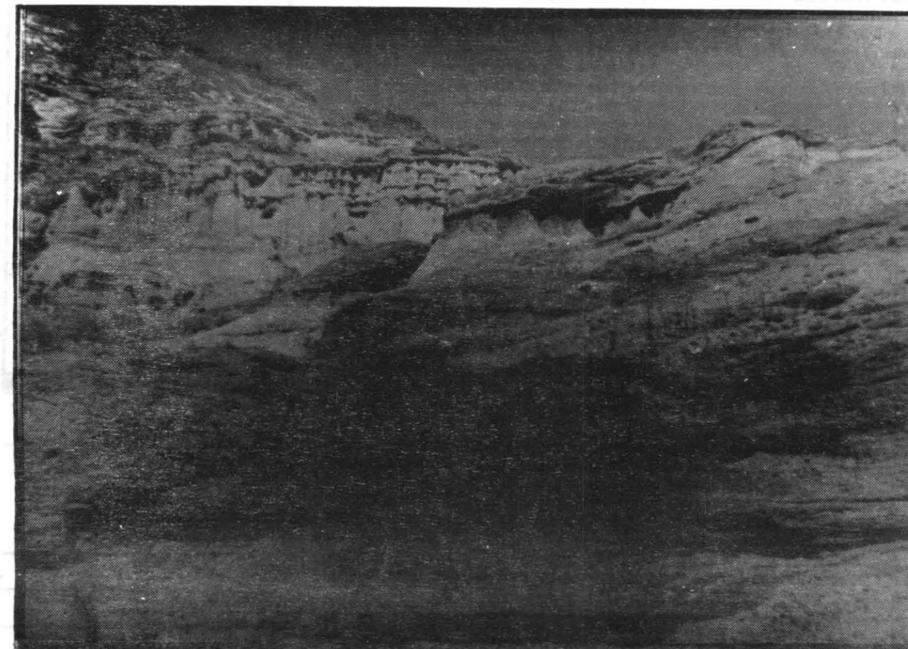
The canyon is where the western edge of the El Paso Mountains joins the southernmost tip of the Sierra Nevada. Mining occurred in the area since the 1870s, but was not a busy area until strikes in Garlock and Randsburg brought enough miners to the region to prospect in all the canyons and gulches.

Nearby is Nightmare Gulch, an important breeding habitat for golden eagles, great horned owls and prairie falcons.

The park is open year round, with winter and spring the most popular periods. Colors in the cliffs range from off-white to yellow and from a dull brown to red. It has been the colorful rocks and the strange formations that have made Red Rock Canyon a favorite for movie and television companies as well as the casual visitor, out for and enjoyable drive.



PHOTOS BY PH2 RICK MOORE



**RED ROCKS**-- Just a few miles from the edge of the Indian Wells Valley lies Red Rock Canyon State Park, an easy day trip for visitors from China Lake. The beautiful and colorful rock formations were sculpted over a period of more than 10 million years by wind and water. Today the park is California's scaled down version of the famous red rock canyon country of Utah and Arizona, only a lot closer to home. It has become a favorite for movie and tv companies as well as the average tourist looking for someplace different.

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# Young Scorpions conclude regular season play

Regular season play ended for the under-14 Scorpion soccer team last Saturday on a winning note. The youngest Scorpion squad blanked the Bakersfield Strikers 1-0 to close out their first fall season.

Chris Marshall accounted for the first, and only, goal scored by either team. His tally came at the 57 minute mark when he kicked the ball over the goalie's head from about 18 yards out.

The Scorpions finished with a strong

second half performance, making seven shots on goal, compared to just one for the visiting Strikers.

David Caraker, Robin Hemmings, Scott Wilson and Tom Watt sparked the second half effort. The win was enough to boost

the Scorp into sixth place to close out the Golden Empire Soccer League.

Tomorrow (Saturday) the Scorpions will take part in a single elimination tournament. They open against the Revolution team.

Earlier, over Thanksgiving weekend, the young soccer squad took part in the Fifth Annual Turkey Shoot Tournament in Bakersfield, winning one, a 2-1 triumph against the Santa Maria Overlanders, while dropping two hard fought contests.



**Sports**

## Pick-a-pace run Saturday

Tomorrow marks the date of the annual "pick-a-pace" prediction race sponsored by the Over-The-Hill Track Club at the Desert Empire Fairgrounds.

In this race victory belongs to the person who can run the five or 10 mile course closest to their predicted time. It takes a combination of luck and knowing the kind of pace to expect to win this one.

Participants are not allowed to use watches, stop watches, alarm clocks, sundials or any timing assistance while running this race.

Sign-ups start at 8:30 a.m. at the fairgrounds. Race time is 9 a.m.

Those whose elapsed time most closely matches their written predictions take home the awards, anyone can win if they can guess their running time.

OTHTC members say this is a good tune up for marathon and half marathon runners and a chance for them to check their sense of pace on the course.

There is a \$2 entry fee for the race. For additional information all Mike Hartney, race director, at 375-1764.

## Golf tourney

Golfers are invited to compete in the John Emery Burroughs Booster Club Fund for Junior Golfers tournament at the China Lake Golf Club tomorrow morning.

Proceeds from the Texas Scramble-style tournament will go to assist golfers at Burroughs High School.

Interested golfers can sign-up at the pro shop.

## License worth \$

Don't throw away that old hunting license, it may save time and money for nimrods when they go for a 1987-88 license. Being able to show the 1986-87 license will make it easier to get the new one according to California Department of Fish and Game officials.

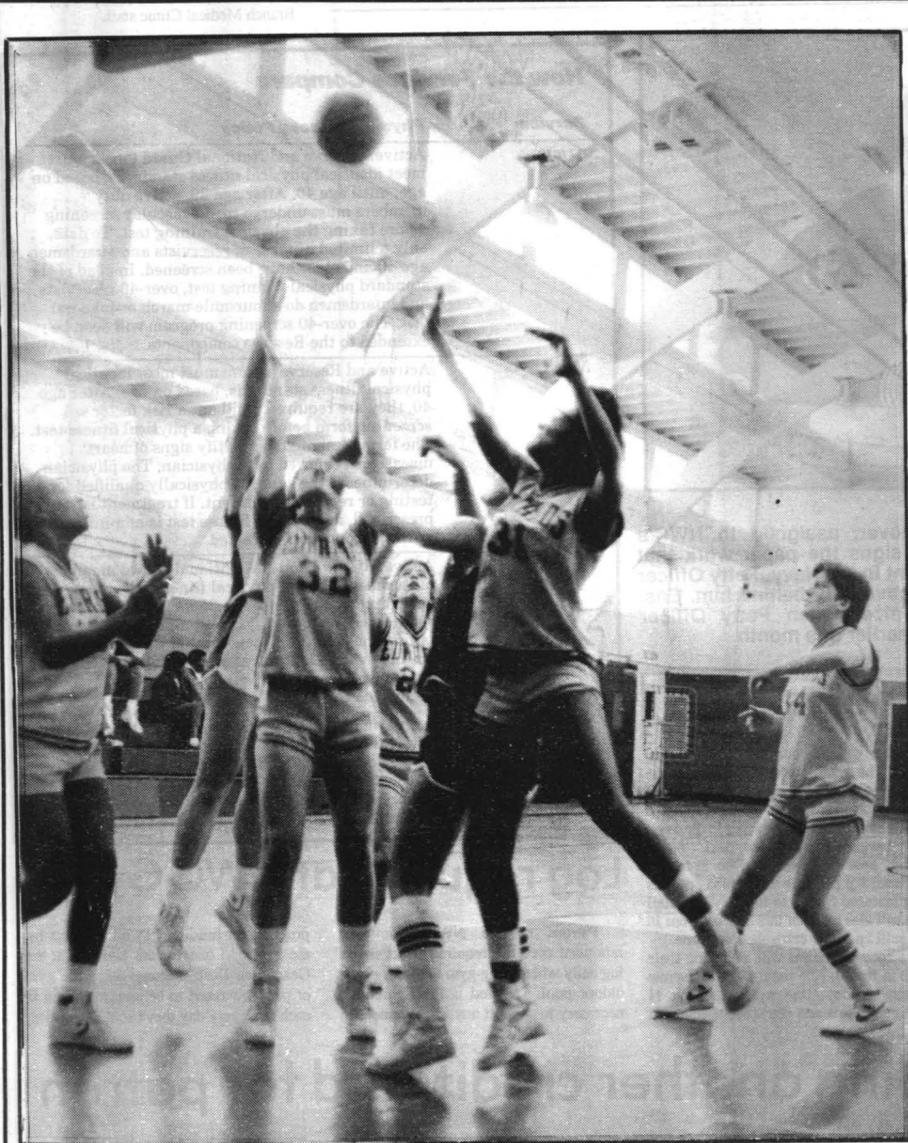
Starting next July, applicants for a hunting license will have to show a previous year's license, proof of completion of a hunter safety training course or a certificate of equivalency after taking a hunter safety exam set up under Fish and Game rules.

## Coaching class

China Lakers interested in basketball are urged to attend a referee and coaches clinic sponsored by the NWC Youth Activities Branch on Thursday, Dec. 18 at 6:30 p.m. The clinic will be offered again on Jan. 6 at 5 p.m.

Coaches are needed for the youth basketball league beginning next month.

For additional information call the Information Ticket and Tour Office (ITT) at NWC ext. 2010.



**WINNING WAYS--NWC's Women's Varsity basketball team boasts a 4-0 record following a win against Edwards AFB women last Sunday. The NWC team, coached by Richard Staples, took an early lead in the Mojave Desert Interservice League contest played at the Center Gym.**

## 'Race Yourself' program planned

Individual fitness program at the Naval Weapons Center for 1987 will have a "Race Yourself" theme for runners, swimmers and bike riders.

The program begins Jan. 1 and will conclude on Dec. 31, 1987. The object of this program is to complete a given distance during the year. Mileage will be logged at the NWC Gym gear issue desk

and buttons will be presented for passing mileage markers. In addition, individuals who complete the entire distance will receive a special t-shirt.

Events are mapped out as routes in Europe. For runners, the 1,040 kilometer goal represents the distance between Paris, France and Barcelona, Spain. Bike riders will cover 5,180 kilometers, the

distance between Stockholm, Sweden and Athens, Greece. For swimmers the goal is 352 kilometers, the distance from Kufos, Greece to Istanbul, Turkey.

There is a \$6 per person entry fee for the 1987 Race Yourself program.

For additional information call the Recreational Services Department's Sports Office at NWC ext. 2334.

# Party plans in high gear

Now is the time for those who plan to attend the Center's all-hands Christmas party to ensure that they will be able to join in: ticket sales are brisk with all groups invited to attend, including military personnel, DOD civilians and contractors and their spouses or dates.

The party will be held on Saturday, Dec. 20 at the Enlisted Mess. A social hour at 6 p.m. begins the evening, followed by a luxurious three-meat buffet dinner at 7:30 and dancing to the music of the "Blue Star Bandits" from 9 p.m. on. Prizes will be awarded throughout the evening to those in attendance.

Tickets for the event are \$7.50 for enlisted personnel and their spouses or dates, \$9.50 for chiefs and their spouses or dates and \$11.50 for all others. Tickets can be purchased from the Protocol Office in the lobby of Michelson Laboratory, from Lt. J.G. Marty VanDerKamp in the Military Administration Department Building and in Hangar 3 from both ACI Kim Rusk at Airfield Operations and at the First Lieutenant's Office. Tickets can also be purchased at the door.

Appropriate dress for the evening will be desert casual, but no jeans.

During the all-hands Christmas Party, the NWC Children's Centers will be open for evening child care. Hours for the evening are 6 p.m. to 1 a.m. Children should arrive in pajamas and with blankets for sleeping. It is recommended that older children bring sleeping bags. A bedtime snack will be served. An evening of fun activities, including movies, are planned for the children by the qualified staff. Fees for the evening are:

	MIL E1-E4	MIL E-5 and above	DOD Civilian
INFANTS (4 wks-18 mos.)	\$10.50	\$10.85	\$15.75
Additional Care	7.70	9.10	12.60
TODDLERS (18 mos.-3 yrs.)	9.80	10.50	14.00
Additional Care	7.00	7.70	11.90
PRESCHOOLERS/SCHOOL AGE (4-11 years)	8.75	9.10	11.90
Additional Care	6.65	7.00	9.00

A late fee of \$3 will be charged for every 15 minutes or portion thereof after the close of business. No refunds can be given. Reservations and advanced payment for the evening should be made at the Children's Part Time Center, Bldg. 463, no later than close of business on Dec. 16. Because of staffing requirements, no reservations can be taken after that date.

For more information contact Polly at NWC ext. 3913 or Janet at NWC ext. 2653.

## Oversight inspection slated

Under the direction of the Naval Inspector General, an Occupational Safety and Health oversight inspection of the Naval Weapons Center will be conducted Dec. 15 through 18. The inspection team, headed by W. H. Frick, Jr., will be located in Conference Room B of Bldg. 00465 at the corner of Nimitz and Hussey.

SECNAVINST 5430.57 (series), the Naval Inspector General provides an alternative to the chain of command for receipt of complaints from the Navy military personnel and serves the Secretary of the Navy as the official to whom Navy civilian employees may, without fear of reprisal, provide facts concerning alleged violations of civil service rules.

The senior inspector will be available on Dec. 16 between 1 and 4 p.m., to meet privately with personnel wishing to present alleged violations of occupational safety and health program requirements. Appointments can be made by calling the Safety Office, NWC ext. 2315, prior to Dec. 15. Personnel wishing to remain anonymous may telephone the senior inspector directly on Dec. 16 between 1 and 4 p.m. at NWC ext. 2781.

Personnel should bring copies of any supporting documentary information. Personnel in the process of grievance or formal appeal, or matters related to OWCP handling of workers compensation, environmental differential pay, or past disagreements with supervisors will not be entertained by the senior inspector.

## Speed limits change Dec. 22

On Dec. 22, posted speed limits on several of the Center's streets and roads will change. Changes include:

South Knox Road changes from 25 mph to 45 mph from the stop sign at the intersection of Rowe Street and South Knox Road north to the traffic circle.

## Disaster luncheon hosted by local Red Cross group

In an on-going effort to bring awareness of disaster needs and services to the attention of the local area, Diane Grattaroti hosted a "disaster lunch" for local personnel involved with disaster planning.

Mrs. Grattaroti, administrative assistant for the local American National Red Cross unit, served the group what would be a typical lunch given those who are in Red Cross shelters following a disaster: a sandwich, cookies and a hot drink. She pointed out that usually no hot food is served during the initial day after a disaster because getting in supplies to cook hot meals generally takes 36 to 48 hours or more. Meals, she noted, have to be fast to prepare, cost effective and nutritious to meet the needs of persons of a variety of ages that need shelter care. Emphasis of the whole program was to

encourage all residents of the Indian Wells Valley to have food on hand for themselves, their families and their pets.

"There is only a two-day supply of food kept in the Indian Wells Valley," Mrs. Grattaroti pointed out, "and just a day-and-a-half supply of water. When any sort of disaster occurs, getting additional food and water into the local area could be a major problem if roads are out, which would be the case should the disaster be an earthquake. Each family should be sure to have food for several days on hand--food that doesn't require cooking to prepare--and water for several days as well."

She also again emphasized that all disaster assistance provided by the Red Cross is always free, that it is a gift from the American people to those in need.



**WELCOME GIFT--Dick Malone, chairman of the Employee Services Board, presents a check for the Navy Recreation Fund to Capt. Paul Valovich, Chief Staff Officer. Funds raised through ESB activities have assisted a number of local programs and the ESB has also aided employee welfare in ways such as by initiating a study to provide postal service on board and to provide a convenience store for Center residents. Anyone who has suggestions about other activities for the ESB is asked to get in touch with Doris Funk, Code 0909, at NWC ext. 2929.**

## Community effort

# Clean-up day set in Jan.

China Lake, Kern County, Ridgecrest, Inyokern and area schools are joining forces to combat litter and trash in the community when they sponsor the Seventh Annual Project Community Pride Day on Saturday, Jan. 10 at the Kern Desert Regional Park in Ridgecrest.

More than 1,000 persons are expected to show up for this annual effort at cleaning up public property and main streets in Ridgecrest, Inyokern and China Lake.

Advance registration is requested so organizers know how much food to have on hand and how many people will be available to clean key areas. To register, please call NWC's Community Liaison Assistant, Natalie Harrison at NWC ext. 1362.

This is an opportunity to make China Lake, Inyokern and Ridgecrest better looking communities with a lot of help from a lot of hard working volunteers. Join others in your community and lend a hand in making this a cleaner, better place to live and work.

Volunteers will be able to get free coffee and donuts in the morning, free transportation to and from clean-up sites and a free lunch in the park when work is done is available to all volunteers.



**DEMONSTRATION--Diane Grattaroti, administrative assistant for the American Red Cross in the Indian Wells Valley, shows the kind of lunch that would be served to people in Red Cross shelters--sandwiches and cookies.**

# Center saves Navy money with C-8A Buffalo



When two of the Center's aircraft — an average C-117 Skytrain and a C-131 Samaritan — both were ready to be retired, buying a replacement aircraft looked very expensive. An ideal replacement, for instance, would have been a DeHavilland C-8A Buffalo; new, these run about \$14 million and there was about a 5-year wait to get one.

Naval Air Systems Command personnel heard that a 14-year-old Buffalo was being retired by the National Oceanic and Atmospheric Administration. NWC personnel flew to Andrews AFB, Washington, where the elderly craft was parked. Despite birds nesting in its tail and what seemed to be corrosion, the aircraft looked sound to them, so they recommended that NWC acquire the craft and refurbish it.

The 16-month overhaul showed that their decision had been sound. The corrosion, for instance, proved to be a coat of chromate paint topped by another coat of paint that was flaking off.

Since the aircraft has been a prototype, many of the vendors that had originally made parts no longer had any stock, but Field Aviation of Calgary, Canada, served as primary contractor and was able to refurbish the aircraft so that it is now 85 percent standard and the 15 percent that is not is maintainable with depot level assistance.

Cost of the 16-month overhaul and replacement parts was a little under \$1 million, saving the Navy \$13 million and nearly 4 years. Since it went into service at China Lake in 1982, the 28-seat Buffalo has served as a platform for parachutists, as a cargo-hauler and as a carrier of a combination of cargo and passengers since all seats fold up.



## China Lake Police Reports

NWC police and fire personnel responded to a call that a minor chemical spill had taken place at the NEX gas station. Investigation showed that one person spilled sulphuric acid while working in that area. The acid was diluted and neutralized.

Tracks indicate that an unknown person or persons drove into the Mojave B range.

A resident of Center housing on Nimitz reported that an unknown person had smashed his above-the-ground lawn sprinklers.

An unknown vandal shot a BB shot through the sliding glass door of a residence on Sykes Circle, causing the glass to shatter.

Two employees of the carpenter shop at Randsburg Wash engaged in a verbal altercation that escalated into a physical battle. Both subjects sustained minor injuries as a result of the fight.

When a traffic officer tried to stop a car at Blandy and Knox during evening colors, the driver did not stop. The driver got a ticket as a result.

The rider of a 1986 Honda motorcycle failed to see the vehicle in front of her on Blandy Avenue just west of Mitscher on Friday. She applied her brakes, lost control of her motorcycle, and sustained injuries in the resulting accident. She was transported to the Ridgecrest Community Hospital emergency room by NWC ambulance.

One vehicle lost its brakes while parked in the east parking lot at 505 Blandy Avenue, and rolled backwards, striking another vehicle and causing minor damage to both vehicles.

During a consent search involved in another investigation, police found marijuana and drug paraphernalia in a residence on Inyokern Road. The case is pending and will be forwarded to the district attorney.

A vehicle backing on Cobra Street south of E street struck another vehicle, resulting in damage to the first vehicle.

A 16-year-old male was found to be in possession of property stolen from an 11-year-old. The property was recovered and the suspect released to his parents.

China Lake police assisted the California Highway Patrol with investigation of a traffic accident occurring on Red Mountain Road.

Police officers responded to a report of a peace disturbance and discovered that a military suspect had been making threatening telephone calls to two civilian women.

During a follow-up on a previously reported burglary, part of property reported stolen was recovered. The case is still pending.

An unknown person or persons cut the lock on a victim's garage on Herbert Street and removed property from the garage.

# Suggestions offered for safe Christmas parties

To ensure that everyone has a happy holiday, the China Lake police have the following suggestions for safe holiday parties:

When going to a party, don't wait until one of you has had too much to drink to settle the question of who's going to drive home. Decide before you go out so the driver can limit his or her drinks. Get in the habit of sharing the driving on evenings out so that it doesn't offend your partner when he or she has had one too many and make a pact that one of you will call the police if the other ever drives off while intoxicated.

Steer clear of drunken drivers. Leave parties early because the highest percentage of drunk drivers are on the road Friday and Saturday nights between 12:30 and 3 a.m.

Stay away from any car that's making very wide turns, swerving and weaving, hugging the shoulder, stopping for no apparent cause, driving without lights or approaching traffic signals either particularly quickly or particularly slowly.

When hosting a party, make sure all your guests get home safely. Serve plenty of food. That's one thing that slows down absorption of alcohol into the bloodstream. If dinner isn't in your plan, put out snacks during the party.

Keep the cocktail hour to just that — one hour. Don't let guests pour their own drinks.

Hire or appoint a bartender who will measure the liquor or water down drinks as necessary.

Don't serve doubles or freshen drink glasses before they are empty (try to keep the pace to about one drink per hour).

Send out stop signals if you notice someone gulping booze. Alert the bartender. Serve coffee. Stage diversionary tactics to steer the drinker away from the bar.

Make soft drinks available. Close the bar an hour before the party's over and end the evening with more coffee and food.

Provide alternatives for incapacitated guests. Ask someone else to drive them home or do it yourself. Call a cab. In some communities, corporations and auto associates sponsor free cab rides home during the holiday season. If none of this works, invite them to spend the night.

## New gate hours

To determine whether longer hours at the Richmond Road gate would be appropriate, the gate will remain open until 10 p.m. Sundays through Thursdays and until 11 p.m. Fridays and Saturdays until the end of the year.

If sufficient use is made of the gate during these extended hours, they will become permanent.

## CLPD offers shopping tips for holidays

To help keep the holidays happy, the China Lake police offer the following tips:

Shop early to avoid the rush. Shop early in the day to avoid crowds. If you must shop in the evenings, shop with a friend.

Park in well-lighted areas, as close as possible to store entrances. Be particularly aware of persons in the parking lot, especially near your car.

Carry only the charge cards or identification that you will need. Do not carry large sums of cash.

Women should shop without purses. Credit cards and personal identification should be carried in a pocket.

If you must carry a purse, carry it close



to your body tucked under your arm. Be aware of the people around you and don't allow your attention to become distracted from your purse or packages.

Men should carry their wallets in front or inside pockets.

Make frequent trips to your car to stash your packages out of sight in the trunk. Don't let yourself get overloaded with bundles.

Don't hesitate to contact mall or store security if you see any suspicious activity.

If you are the victim of a crime, report it to the police or sheriff's department immediately. Don't wait until you get home to call. Try to remember details about the offender (e.g., hair color, height).

# Hospital CO explains NWC Medical Clinic policy

All military retirees and their families and all other interested persons are reminded that a discussion will be held on current policies in effect at the Branch Medical Clinic and on planning for future medical needs. The meeting will be held on Thursday at 6 p.m. at the All Faith Chapel.

Principal speaker for the evening will be Capt. M. F. Hall, Commanding Officer, Naval Hospital, Long Beach and Commanding Officer of Fleet Hospital One, who will talk about "Changes in Health Care: Current Problems with System Access."

This will be followed by a panel discussion including local health care providers from the Branch Medical Clinic and Ridgecrest.

Cdr. Dean Hermann, Officer in Charge of the Branch Medical Clinic, says that

the aim of the meeting is to give everyone a better understanding of what has happened regarding medical benefits for dependents and retirees, what will be happening and alternatives available.

Cdr. Hermann says that the main change for the Branch Medical Clinic is that now

definite appointments are required for retirees and dependents to be seen by doctors or staff because of the limited number of medical personnel available. Neither emergency care nor specialist care is now available at the clinic.

The emphasis of the Branch Medical Clinic, Cdr. Hermann points out, is still to provide high quality care for everyone who is ill and is entitled to care. Unfortunately for the patients, maintaining an acceptable level of quality sometimes means referring patients to other sources of care since there are no specialists on the Branch Medical Clinic staff.



## Military News



**SIX MORE--AME1** Vernon L. Conover, assigned to NWC's Targets Quality Assurance Office, signs the paper work that gives him another six-year enlistment in the Navy. Petty Officer Conover has more than 12 years active duty behind him. Ens. K.L. Black was the reenlisting officer when Petty Officer Conover shipped over for six more earlier this month.

## Navy Exchange news

Only a few days remain for the special Christmas sale at the NEX; this particular sale ends on Tuesday, but every Tuesday until Christmas will continue to be a late shopping night. The retail store, personalized services and minimart will all be open until 7 p.m.

Tomorrow morning from 8 to 9 a.m. is "Kids' Shopping Day with Santa," but the store will be open until 5 p.m. to accommodate anyone who can't get in early. Santa will also be in the store for the remaining two Saturdays until Christmas. He'll be available from 10:30 a.m. until noon and from 1 to 2:30 p.m. for kids (and adults, too) to get their pictures taken with Santa.

Monday will be "customer appreciation night." The retail store, personalized services store and minimart will be open until 8 p.m. to help those who can't get away to do their holiday shopping earlier in the day.

For bargain hunters, the next "Super Sunday" sale will be held on Dec. 21 from 8 a.m. until 8 p.m., with early bird specials being featured from 8 to 10 a.m. The retail store will also be open this Sunday from 10 a.m. until 2 p.m. for extra shopping time.

Two concessionaires will be selling their wares in front of the main NEX tomorrow through Monday. One will be selling 14 karat gold items and the other specialized ballcaps.

# Exchange adding another credit card for patron

Army, Air Force and Marine Corps exchange customers can now use another credit card for their purchases. Navy Exchange Service customers can use the card beginning in January.

Discover Card has been added to Mastercard and Visa, making it the third charge plate being accepted by military exchanges. A limited number of exchanges in the continental United States and Hawaii began accepting Discover Card on Nov. 1.

Exchange officials expect all other stateside exchanges, as well as those in Alaska and Puerto Rico, to begin accepting Discover Card before the year's end.

How popular have credit cards become with exchange customers?

Navy Exchange Service: "They've been well received by our customers," said a spokeswoman. "We started phasing them in overseas in June 1986 and finished last

August. Credit cards now account for 9.4 percent of total retail sales in Navy exchanges and the use is growing."

"The average sale in our stateside exchanges is \$52," she said. "It's \$56 in Hawaii. We haven't been using them long enough overseas to compile an average."

Marine Corps Exchange Service: Use is up from July 1986 when only stateside exchanges started accepting them. "Our credit card sales averaged about \$1.4 million a month, or about 8 percent of our total sales during the first six months," said a spokesman. "We started using Mastercard and Visa in the United States in January 1986 and overseas in Japan, Cuba and Panama in July 1986."

"We're very satisfied with the results," he said. "Our operating cost for Mastercard and Visa is right on target."

Army and Air Force Exchange Service:

## Log required at NWC Gym

Patrons of the NWC Gym are reminded they are required to sign a log daily when using gym facilities or the indoor pool. Detailed usage figures are necessary to support any improvement in

programs or funding. Two log sheets for the gym and one for the pool are at the Gear Issue Desk. Persons using the gym or pool are asked to be sure they sign in each and every day they use the facilities.

Credit card purchases accounted for about 10.6 percent of retail sales in stateside Army and Air Force Exchange Service facilities between January and August 1986. That rose to 11.6 percent in September 1986.

When credit cards were first introduced, DOD officials estimated they would account for 15 percent or more of total sales.

Officials said they expected the 1986 holiday season to increase credit card use.

"The average credit card purchase in stateside exchanges is \$53," said a spokesman. "The average sale overseas is \$78. In just two months, credit card sales overseas was 5.7 percent of total sales."

Coast Guard: "We started accepting Mastercard and Visa in our Honolulu (Hawaii) exchange about the same time the DOD exchanges started accepting them," said a Coast Guard spokesman. "We haven't ruled out Discover Card, but

we haven't done anything about getting it into our system."

Visa, Mastercard and Discover Card can be used in main exchanges, military clothing sales stores, speciality stores and service stations for purchases other than gasoline. Some convenience stores and troop stores may also accept the cards.

Credit cards cannot be used for personal services, such as haircuts, hairdos, shoe shines or theater tickets or for meals in military-run restaurants.

About half of the profits generated by credit card use are "rebated" to customers through contributions to morale, welfare and recreation activities, said a DOD spokesman.

By Sgt. Maj. Rudi Williams, USA  
American Forces Information Service

## VAX & DCL COMMANDS, INTRO TO

January 20-23; Tuesday-Friday; 0730-1130; Training Center. By Walter Gallant.

Prerequisite: Access to currently installed VAX system.

Intended Audience: Timeshare users of VAX and MICROVAX II systems.

Scope: You will learn how to use Digital's VAX/VMS system as a tool. You will learn how to log into the system, run canned software packages such as wordprocessor and electronic mail, and get off the VAX. Topics include introduction to computers, what is a VAX, operating systems, VCMS, command language-DCL, terminal types, logging into the VMS system, directories and subdirectories, changing the default directories, file specification and file types, file protection, understanding error messages, and command procedures.

Note: Optional lab time and instruction will be available in the afternoon of the first 3 class days.

Deadline: January 5.

## CONTRACT MANAGEMENT

January 5-7; Monday-Wednesday; 0800-1600; Training Center.

Scope: Designed to sharpen skills of technical managers in achieving results from contractors and in effectively using Government procurement processes to accomplish goals. Process and organizational issues are explored so that the technical manager can more readily understand and identify actions that will work to achieve desired results. Topics include procurement principles, Government procurement processes, and contract administration.

Deadline: December 23.

## Self-Study

### THE SECRETS OF POWER NEGOTIATING

Training Center. By Roger Dawson.

Scope: Explains the 5 basic rules of negotiating. The win-win techniques and three guiding principles. In this course you should learn how to:

1. Become a more effective negotiator by recognizing and fully utilizing three stages of negotiating.
2. Use the many techniques involved in negotiating such as good-guy, bad-guy; walk-away power; trade-off principles; and grinding-away process.
3. Understand power that comes from eight different sources.
4. Understand the different personality types (pragmatic, extrovert, analytical, and amiable).
5. Understand body language; spotting attention, boredom, discomfort, embarrassment, confidence, nervousness, and annoyance.
6. Understand the meanings in conversation: hidden implications, exact opposites, throw-aways, legitimizers, justifiers, expressions, erasers, deceptions, and preparers.

To enroll in these classes submit Training Request & Authorization Form (NAVWPNCEN 12410/73) via department channels to Code 094.

## CALIFORNIA STATE UNIVERSITY SPRING CLASSES

The following classes are being offered this spring for the Cal-State Northridge Engineering Program (bachelor's and master's degrees). For enrolling in these classes (other than Cerro Coso) 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.

### ME 370: THERMODYNAMICS (3 semester units)

January 26 - May 18; Mondays; 1530-1830; Training Center. By Professor Tim Fox, CSUN.

Prerequisite: Physics 1a (Mechanics) and Math 6c (Calculus).

Scope: Fundamental theories and engineering applications of thermodynamics with emphasis of first and second laws of thermodynamics. The thermodynamic properties of solids, liquids, gases, and mixtures. Work-producing and work-absorbing system.

Text: "Fundamentals of Classical Thermodynamics," Van Wylen and Sonntag, 3rd Edition, Wiley, SI version.

### ME 501B: SEMINAR IN ENGINEERING ANALYSIS (3 semester units)

January 27 - May 21; Tuesdays and Thursdays; 1600-1730; Training Center. By Bob Rockwell, PhD., NWC ext. 5597.

Prerequisite: Graduate standing.

Scope: Vector analysis, calculus of variations, analytic functions of a complex variable, infinite series in the complex plane, theory of residues, and conformal mapping.

Text: "Advanced Engineering Mathematics," Wylie and Barrett, McGraw-Hill, 5th edition.

Note: This is a core course for the master's program in electrical engineering.

### ME 590A: ADVANCED TOPICS IN FLUID DYNAMICS -- INVISCID FLOW (3 units)

January 26 - May 20; Mondays and Wednesdays; 1600-1730; Training Center. By Ray Van Aken, NWC ext. 7483.

Prerequisite: Thermodynamics and Fluid Dynamics or consent of instructor.

Scope: Application of analytical and numerical techniques to the solution of inviscid flow problems. Topics include: governing equations, one-dimensional compressible flow with area change, friction, and heating/cooling, two-dimensional compressible flow, linearized flow and the method of characteristics.

Text: "Compressible Fluid Flow," M. A. Saad, Prentice Hall, 1985.

### IE 520B: ADVANCED MATERIALS ENGINEERING -- COMPOSITES (3 units)

January 27 - May 21; Tuesdays and Thursdays; 1130-1300; Training Center. By George Hayes, PhD., NWC ext. 1038 and Craig Porter, PhD., NWC ext. 2824.

Prerequisite: AM 420A (Advanced Mechanics of Materials) and IE 427 (Mechanical Properties of Materials) or consent of instructor.

Scope: This course is concerned with a class of complex materials, composites, in which fibers are deliberately oriented in a matrix in such a way as to increase its structural efficiency. The use of unusually strong, high modulus fibers and organic, ceramic, or metal matrices promise to be far more efficient than any structural materials known previously. By combining fibers and matrices with the concept of lamination, designers have today greatly increased opportunities for tailoring

structures and/or materials to meet systems of forces and changing environments. The objective of this course is to introduce the student to the basic concepts of mechanical behavior of composite materials. The whole gamut of topics from micromechanics and macromechanics through lamination theory and examples using plate bending theory are developed. Equal time will be spent discussing material science issues and structural analysis/design issues.

Text: TBA.

### EE 567: RADAR SYSTEMS (3 units)

January 26 - May 20; Mondays and Wednesdays; 1600-1730; Training Center. By John Johnson, Comarco.

Prerequisite: Some probability and random processes or consent of instructor.

Scope: The course will cover the following: radar concepts and terminology; the radar range equation; detection of targets in noise; CW and frequency-modulated radar; MTI and Pulse-Doppler radar; tracking radar: sequential and simultaneous lobing; radar clutter: area clutter and volume clutter; environmental effects: multipath and atmospheric attenuation; pulse compression; radar and electronic warfare.

Text: "Introduction To Radar Systems," Skolnik, McGraw Hill, 2nd edition, 1980.

Reference: "Introduction To Airborne Radar," Stimson, Hughes Aircraft.

### EE 563A: ANTENNA ENGINEERING (3 units)

January 26 - May 20; Mondays and Wednesdays; 1130-1300; Training Center. By Bob Dinger, PhD., NWC ext 1414.

Prerequisite: Electromagnetic field theory or consent of instructor.

Scope: An introduction to modern theory and practice for the design and analysis of antennas. Theoretical topics include electromagnetic fundamentals, method of moments, equivalence principles, and array pattern synthesis. Applied/experimental topics include radiation patterns, input and mutual impedances, bandwidth, impedance matching, and antennas in communication and radar systems. Antenna types to be covered include dipoles, electrically small antennas, traveling wave antennas, frequency independent antennas, microstrip antennas, aperture antennas, and antenna arrays.

Text: "Antenna Theory And Design," Stutzman and Thiel, Wiley.

Reference: "Antenna Theory and Design," Elliot, Prentice Hall.

### MATH 477: DIFFERENTIAL EQUATIONS (5 quarter units)

January 16 - March 20; Fridays; 1530-2030 (1-hour dinner break); Training Center. By Professor El-Ansary.

Scope: First-order differential equations (d.e.); linear d.e.; linear systems; Laplace transform and its application to solutions of linear d.e. and systems; series solutions of second-order linear equations and/or numerical solutions of d.e.; topics in non-linear d.e. and systems; applications.

Text: "A First Course in Differential Equations With Applications," Dennis G. Zill.

## UNDERGRADUATE PROGRAM IN ELECTRICAL ENGINEERING

The following required courses for the undergraduate electrical engineering program are being offered this semester (quarter).

### Cerro Coso

Chem 1A	M:	5-7:15 p.m.	
	W:	5-7:15 p.m.	Lab
	W:	8-8:50 p.m.	Recitation
Chem 1B	MWF:	11-11:50 a.m.	
	W:	2-4:50 p.m.	Lab
	W:	1-1:50 p.m.	Recitation
CS 15	T TH:	8:00-8:50 a.m./9:00-10:20 a.m.	
	MW:	7:30-8:30 p.m./8:30-10:00 p.m.	
Engr 25	T TH:	6:40-8:00 p.m.	
	T:	3:30-6:20 p.m.	Lab
Math 6B	MTWTH:	11:30 a.m.-12:20 p.m.	
	MTWTH:	12:30-13:20 p.m.	
Phys 1A	T TH:	5:00-6:20 p.m.	
	TH:	7:00-9:50 p.m.	Lab
	T:	6:40-8:30 p.m.	Recitation

### Cal State Bakersfield

Math 477A Differential Equations F: 3:30-8:30 p.m. (1-hour dinner break)

### Cal State University Northridge

ME 370 Thermodynamics (see description given above)

## 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.

## Courses for Business Admin set

Cerro Coso Community College has scheduled five Business Administration courses covering a variety of subjects during the spring term for interested students.

Two classes in "Principles of Accounting" will be offered. This 3-unit course covering accounting concepts and techniques will meet with Gurney Hoggard on Tuesday and Thursday mornings from 9:30 to 10:50 a.m. in Room 246. Carol Schwartz will instruct a course in the evening on Monday and Wednesdays from 6:40 to 8 p.m. at the City Center in Room 101.

A study of small claims court, debtor-creditor and landlord-tenant rights, marriage and divorce law, and selected legal topics will be covered in the 3-unit course entitled "Practical Law for Business and Society." This course will meet on Tuesdays and Thursdays from 6:40 to 8 p.m. in Room 229.

"Principles of Management and Organization," a 3-unit course in the formal organization, its environment and structure; elements of planning, organizing, staffing and controlling will meet on Tuesdays and Thursdays from 5 to 6:20 p.m. in Room 319. This course is designed for business career students.

Other Business Administration courses being offered include: "Principles of Accounting" 1b on Tuesday and Thursday evenings from 5 to 6:20 p.m. at the City Center in Room 101; and "Business Law II" on Tuesday and Thursday evenings from 6:40 to 8 p.m. at the City Center in Room 107.

For more information on these classes or registering, contact the college at 375-5001.



# Personnel News & Notes

No. 76 / December 12, 1986

Naval Weapons Center, China Lake, California 93555 6001

## 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 or 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. 00-029, Public Affairs Specialist, DA-1035-2/3, Code 0031 — This is a detail not to exceed one year, may lead to permanent assignment. Incumbent plans and executes programs and presentations for Center visitors, including high-level civilian and military leaders, scientists, engineers and managers from industry. Must be available for morning, evening and weekend work as required. Knowledges: of the DOD, Navy and NWC organizational structures; of NWC technical programs. Abilities: to communicate orally; to establish and maintain good working relationships and deal effectively with persons of all levels; to work independently. Promotion potential to DA-1035-3.

No. 06-077, Computer Specialist, DS-334-1, GS-303-3/4/5, Code 2611 — This position is located in the Central Staff, Equipment Management Office. Position provides Data Base Management of the Test and Equipment Management System for NWC Metrology Calibration Program. This system is maintained on the Sperry 1100/83 computer system. Duties include entering and retrieving information through direct access remote terminal forwarding output to requester. Knowledge: systems control language, program documentation, user oriented control language needed to execute job entry through a remote, on-line computer terminal. Abilities: to effectively communicate orally and in writing with all levels of organization at NAVWPNCEN; to work under stress and pressure; to interface with system users and contractors. Promotion potential to DS-2. Status eligibles may apply.

No. 06-078, Payroll Clerk, GS-544-4/5, Code 0653 — This position is located in the Payroll Office, Central Staff. Incumbent performs routine research of payroll records to correct leave data; prepares changes to employee earnings, deductions and leave records; prepares report of leave and earning data. Knowledge: of computerized payroll systems; of leave and labor accounting. Ability: to interpret and apply Federal payroll regulations. Promotion potential to GS-5.

No. 26-082, Facility Management Specialist, DA-1040-3, Code 2673 — Quality Control Branch (multiple vacancies). The incumbent is involved with the definition and application of quality assurance tech-

niques for facility maintenance contracts. These include the specific disciplines of painting, paving and roofing as well as positions requiring multiple trades knowledge and the acceptance of warranty work. Elements: Knowledge: of workflow utilized in indefinite quantity contract; general knowledge of trades practices for painting, paving, roofing and knowledge of multiple trade practices. Ability: to communicate effectively orally and in writing; ability to use blueprints, schematics and architectural drawings; ability to plan, coordinate and assist in preparation, review and approval of quality assurance plans relating to indefinite quantity contracts.

No. 26-083, Production Facilities Clerk, GS-303-3/4/5, Code 2611 — The incumbent is for reception, maintenance and control of all work requests generated on the Center and for initial data entry and maintenance work request information in the on-line Public Works computer system. Maintains work request Master File; assists in the training of employees in the use of a remote terminal and develops special reports for customers as requested. Elements: Knowledge: of the Public Works maintenance function and the work request processing system. Ability: to deal effectively with others; ability to operate data processing equipment sufficient to perform data entry. Promotion potential to GS-5.

No. 26-084, Materials Expediter, WG-0910-5/7, Code 2611 — Supplemental required. Provide assistance to the Shop Material Controller determining material availability, reviewing bills of material and follow-up support; coordinates the staging of material. KSAs: Knowledge of parts and equipment. Ability to do materials expediting work; personal work practices and characteristics; materials expediting practices; use reference materials and materials.

No. 26-085, Planner and Estimator (General), WD-4701-5, Code 2613 — The incumbent is responsible for planning and estimating of planned jobs as well as facilities inspections. Qualifying experience: Journeyman level work in the following trade areas will serve as the basis for qualification: carpentry, masonry or painting. Job Relevant Criteria: Ability to facilitate production; technical practices;

ability to interpret instructions, specifications, etc.; knowledge of pertinent materials; knowledge of pertinent tools and equipment. Supplemental is required.

No. 26-086, Equipment Specialist (Automotive), DS-1670-2, Code 2672 — The incumbent performs work involved in collecting, analyzing, interpreting and developing specialized information about automotive equipment. Prepares special reports pertaining to acquisition, procurement, disposition, utilization, assignment, loan and rental and operating and maintenance costs. KSAs: Knowledge of procurement regulations (general). Ability to communicate effectively both orally and in writing; to prepare and analyze special reports.

No. 32-237, Administrative Officer, DP-341-3, Code 3202 — This position is the head of staff for the Ordnance Systems Department and is located in the CLPL Headquarters area. The incumbent provides and coordinates the full range of administrative support functions for a department of over 300 personnel geographically dispersed over some 45 square miles. This includes the areas of budget, finance, security, personnel, space, resource and organizational analyses and forming and implementing administrative policy. Provides administrative advice and assistance to the department head, associate department head and division/office heads and administrators. Job Relevant Criteria: Knowledge of budget, financial, personnel, space and security management policies and procedures; ability to analyze diverse and complex processes; ability to communicate effectively, both verbally and in writing; ability to deal effectively with all levels of personnel; knowledge of Center-wide administrative processes; and ability to supervise.

No. 35-070, Clerk Typist, GS-322-3/4, Code 3527 — Incumbent provides typing and general clerical support to the Branch Office as well as general support to the Division. KSAs: Knowledge of format and clerical procedures; ability to work independently; ability to deal with people at all levels; ability to ensure correct spelling, punctuation and basic grammar in written materials; knowledge of Xerox Star desirable but not required. Promotion potential to GS-4.

No. 35-071, Interdisciplinary (Equipment Specialist or Program Analyst), DS-1670 / DA-345-3, Code 35025 — The incumbent is responsible for pre-procurement procedures for all Code 35 purchase requests. This includes vendor selection, review of paperwork for accuracy and completeness, advice and guidance to requestors and interface with Code 25 buyers and contract specialists on procurement actions. It also involves developing a method for evaluating recurring resource needs within the department. Elements: knowledge of procurement procedures and regulations including legislation and methods used in contracting; knowledge of equipment and electronic parts and the ordering process pertaining to specialized equipment; ability to analyze data; ability to develop procedures or systems for estimating resource requirements.

No. 35-072, Interdisciplinary (Electronics Engineer/Research Physicist), DP-855/1510-3, Code 3514 — This position is located in RF and Microwave Technology Branch, Physics Division, Research Department. The incumbent will conduct fundamental and applied research in the following areas: design, test and evaluation of microstrip and waveguide devices (active and passive) design, test and evaluation of planar antennas and antenna arrays at microwave and millimeter wave frequencies and incorporation of two terminal active devices into antenna arrays. The incumbent proposes new techniques/devices,

in these areas, develops research, plans, conducts the research and documents results in written paper/reports and at scientific meetings. Meets and interfaces with research sponsors at NWC, ONR and other organizations and exchanges his research results with colleagues in government, academia and industry. Relevant Criteria: Knowledge of microwave and millimeter wave waveguiding and radiating devices; electromagnetic theory and its application to microwave/millimeter wave circuits, CAD in microwave/millimeter wave device research and use of anechoic chambers for antenna measurements. Ability to communicate effectively both orally and in writing. Promotion potential to DP-4, but not guaranteed.

No. 36-206, Engineering Data Management Specialist, DS-1/2/3, Code 3653 — Multiple vacancies. The incumbent ensures that drawing quality, format and correctness are in compliance with NWC, military and DOD standards. At the trainee level, the incumbent will work in support of senior drawing manager and have regular contact with program office personnel, contractors and technical associates. At the journeyman level, the incumbent will provide documentation support to major programs. Elements: Knowledge: of drawing practices; of guidelines and standards for use in preparation of engineering drawings. Ability: to communicate in writing; to communicate orally. Promotion potential to DS-3.

No. 36-209, Engineering Technician, DT-802-A/1/2/3, Code 3653 — Multiple vacancies. The incumbent ensures that drawing quality, format and correctness are in compliance with NWC, military and DOD standards. At the trainee level, the incumbent will work in support of senior drawing manager and have regular contact with program office personnel, contractors and technical associates. At the journeyman level, the incumbent will provide documentation support to major programs. Elements: Knowledge: of drawing practices; of guidelines and standards for use in preparation of engineering drawings. Ability: to communicate in writing; to communicate orally. Promotion potential to DT-3.

No. 36-006, Clerk-Typist, GS-322-2/3/4, Code 36102 — This position is located in the Physics Division of the Research Department. The incumbent will assist the Administrative Officer, as well as support other division clerical staff as needed. Incumbent will learn to operate a Rainbow 100. KSAs: Knowledge of general office procedures. Ability to type accurately from rough drafts. Ability to work well with others.

No. 39-047, Office Services Clerk (Typing), GS-302-4/5, Code 3907 — This position is located in the Cruise Missile Program Office, Weapons Department. The incumbent performs clerical duties for the Cruise Missile Program Staff. Duties include typing of letters, memorandums, travel orders, travel itineraries, transmittals, purchase orders, etc.; receiving and directing visitors and incoming telephone calls; preparation of time cards; and arranging travel. Job Relevant Criteria: Ability to perform receptionist and telephone duties; ability to review, control, screen and distribute incoming mail; ability to compose correspondence and/or prepare nontechnical reports; knowledge of filing systems and file management; ability to plan and coordinate travel arrangements; ability to maintain and coordinate supervisor's calendar and to arrange conferences. Promotion potential to GS-5. Previous applicants need not apply. Status eligibles may apply.

No. 39-051, Clerk-Typist, GS-322-3/4, Code 390E — Incumbent provides support to the

Advanced Projects Office. Duties include typing, filing, receiving visitors and phone calls and assisting with the preparation of a variety of administrative forms. Elements: Knowledge of NWC office procedures and ability to learn internal procedures. Incumbent must be able to obtain a Top Secret Clearance. Status eligibles may apply.

No. 61-022, Equipment Specialist (Aircraft and Missile), DS-1670-3, Code 6132 — This position is in the Engineering Support Branch, Code 6132 and is physically located at Armitage Field. The primary duties associated with this position include the following: control movement and assign spotting locations for aircraft; ensure compliance with NWC regulations, instructions, procedures and policies regarding the conduct of airborne T&E project requirements, schedules and familiarization training with cognizant military and civil service integrity of installed systems/components and removal of foreign objects/items from the aircraft areas modified; initiate corrective actions for malfunctioning hangar bay and support equipment. Knowledge: NWC regulations, instructions, procedures and policies related to NWC aircraft modifications and hangar bay operations; aircraft standards for structural hardware and electrical wiring; military functions and coordination procedures for support of airborne T&E projects. Abilities: to interpret engineering drawings and requirements; to communicate well both orally and in writing; to work effectively and constructively with T&E and support requirements; to adapt to changes and schedule pressures. Promotion potential to DS-3.

No. 62-129, Electronics Technician, DT-856-3, Code 62311 — This position is located in the Electro-Optical Branch, Instrumentation Division, Range Department. The

incumbent operates, maintains and provides limited design and development of highly specialized optical and electronic devices, including laser equipment, to gather test data for NAVWPNCEN ranges; performs work using specialized optical, video and tracking equipment and improves new methods and techniques for using such equipment. Assists in planning and conducting field tests. Knowledge: of photo- and electro-optical systems and their uses for gathering field test data; of photo-, electro-optical equipment; of current field instrumentation technology, data links, laser tracking range operations; modern weapons systems and test and evaluation operations. Abilities: to support a specific project/program and assist project engineers in accomplishing their goals. Typical equipment used within the Branch, but not restricted to, are: cine sextants and cine theodolite tracking equipment, various medium and high speed cameras, specialized shuttered video cameras and recorders. Promotion potential to DT-3.

No. 62-132, Administrative Assistant, DA-341-1/2, Code 6202 — This position is located in the Range Department Staff Office. The incumbent assists the head of staff in providing staff and management services to the department head and the department. Emphasis is on personnel advice and services, planning, budgeting, management and organization analysis, manpower and financial analysis, space and facilities management and general administrative services. Knowledge: of the personnel system, budget procedures and plant account and equipment management activities. Abilities: to organize and assemble facts in a clear, concise fashion and to express ideas and thoughts both orally and in writing; to prioritize tasks and organize his/her work; to communicate with personnel of all levels.

## SECRETARIAL OPPORTUNITIES

This column is used to announce secretary positions for which the duties and job relevant criteria are generally similar. Secretaries serve as the principal clerical and administrative support in the designated organization by coordinating and carrying out such activities. Secretaries perform numerous tasks which may be dissimilar. Positions at lower grades consist primarily of clerical and procedural duties and, as positions increase in grades, administrative functions become predominant. At the higher levels, secretaries apply a considerable knowledge of the organization, its objectives and lines of communication. Depending on grade level, typical secretary duties are implied by the job relevant criteria indicated below.

Applicants will be rated against 4 or more of the following job relevant criteria: (1) ability to perform receptionist and telephone duties; (2) ability to review, track, screen and distribute incoming mail; (3) ability to review outgoing correspondence; (4) ability to compose correspondence and/or prepare non-technical reports; (5) knowledge of filing systems and files management (6) ability to meet the administrative needs of the office; (7) ability to train clerical personnel and organize workload of clerical staff processes; (8) ability to plan and coordinate travel arrangements; (9) ability to maintain and coordinate supervisor's calendar and to arrange conferences.

Unless otherwise indicated, applicants for Branch Secretary will be rated on elements 1/2/3/5/8; Division Secretary applicants will be rated on elements 1/2/3/4/7/8/9; Program Office Secretary applicants will be rated on elements 1/2/3/4/5/8/9; and Department Secretary applicants will be rated on elements 4/7/8/9. A SUPPLEMENTAL FORM IS REQUIRED AND MAY BE OBTAINED IN ROOM 100 OF THE PERSONNEL BUILDING.

No. 00-030, Secretary (Typing), GS-318-5, Code 0031 — Incumbent provides secretarial support to Protocol Office. Position involves considerable contact with all levels of management and distinguished visitors to the Naval Weapons Center. Knowledge of the STAR computer desirable. Promotion potential to GS-5.

No. 31-168, Secretary (Typing), GS-318-

4/5, Code 3143 — This position provides secretarial and administrative support to the Test Engineering Branch. Knowledge of the Xerox 860 and VAX Commands desirable. Promotion potential to GS-5.

No. 39-057, Secretary (Typing), GS-318-4/5, Code 3911 — Provides secretarial support to the RF Missile Systems Branch. Promotion potential to GS-5.

## 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. 14-011R, Interdisciplinary (Electronics Engineer, Physicist), DP-855/1310-2/3, Code 1421 — This position as a project engineer is located in the Communications Development Branch. The prime function of this position will be to analyze user requirements, plan, design, specify and integrate networks with emphasis on networking with the Fiber Optics Truck System as part of the Centerwide Integrated Communications System Program. The incumbent will also analyze technology trends for network systems as it relates to existing and planned corporate NWC networks. The incumbent will also interface computer to computer networks such as DECNET with fiber optics; networks using protocol standards such as IEEE 802, X.25; networks with communication topologies such as Bus, Star and Ring; and network transmission techniques such as baseband and broadband; extensive training will be provided for specialized network system design skills. To apply, submit current SF-171 to John LaMarr, Code 142, NWC ext. 3711. Previous applicants need not reapply.

No. 36-210, Interdisciplinary Supervisor Computer Scientist/Electronics Engineer/General Engineer/Mathematician/Physicist, DP-1550/855/801/1520/1310-DP-3, Code 36224 — This position is head of the Software Support Section, Systems Electronics Branch, Systems Engineering Division, Engineering Department. This section is responsible for supporting and participating in the transition of the Sidewinder AIM-9B 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-9B production support. To apply, submit current SF-171 to Cheryl Preul, Code 36209, NWC ext. 1049.

No. 62-130, Interdisciplinary Electronics Engineer/Physicist, DP-855/1310-1/2/3, Code 6255 — The Advanced Systems Branch of the Range Department has opportunities for a talented engineer or physicist who would enjoy participating in the development of complex range instrumentation systems and following that development through to early deployment on the range. The position requires experience in digital, microprocessor-based, control system, analog, video, electro-optic and/or laser tracker design. Also required is a desire to work with people, to work in a hands-on environment and to occasionally leave the Lab for field work. Our programs are relatively small and our probability of fielding systems is high. Openings are available to work on Laser Tracking, Advanced Video and Video Tracking systems. For more information, contact Bob Harriman at NWC ext. 6337 or send your SF-171 to Code 6255. Status eligibles may apply.

No. 62-131, Electronics Engineer, DP-855-1/2/3, Code 6255 — The Advanced Systems Branch of the Range Department has opportunities for talented engineers who would enjoy participating in the development of complex range instrumentation systems and following that development through to early deployment on the Range. The positions require experience in digital, microprocessor-based, control system, analog and/or video design. Also required is a desire to work with people, to work in a hands-on environment and to occasionally leave the lab for field work. Our programs are relatively small and our probability of fielding systems is high. Openings are available to work on Laser Tracking, Advanced Video and Video Tracking systems. For more information, contact Bob Harriman at NWC ext. 6337 or send your SF-171 to Code 6255. Status eligibles may apply.

## Recent Additions

Code	Name	Title
0825	Galer, Vickie L.	Management Analyst
0841	Thorpe, Jane D.	Computer Spec. Supvy.
0854	Serjeant, Dave F.	Clerk-Typist
087	Short, Rosemary	Secretary (Typing)
08C1	Leopard, John M.	Operations Research Ana.
2833	Dorrell, Karyn L.	Clerk-Typist
3261	Zimmerman, Roberta A.	Mechanical Engr.
3263	Kennedy, Jim	Mechanical Engr.
3275	France, John H.	Mechanical Engr.
3606	Chase, Julia E.	Clerk-Typist
62118	Byrd, Stanley G.	Electronics Tech.

## Recent Separations

Code	Name	Title
097	Johnson, Judith L.	Employee Development Spvy.
24321	Baker, Ellen M.	Security Asst.
24322	Young, Beverly J.	Info. Receptionist
26436	Spring, Jerry C.	Electrician (High Volt.)
26437	Peyton, Robert L.	Water Treatment Plant
3143	Fratello, Robert J.	Electronics Engr.
3269	Edwards, Eugene M.	Photographer (Sci./Tech.)
3351	Ward, Jay Dee	Mechanical Engrg. Tech.
3521	Hooper, John O.	Physicist Supvy.
3556	Mooney, Frances L.	Mail/File Asst.
3651	Horton, Sharlene K.	Clerk-Typist
6202	Benson, Edward E.	Eq. Spec. (Airc/Missile)
621	Maples, Crill	Physical Science Admin.
64111	Butler, Manley C.	Aerospace Engr.

## Pre-registration is required

### ATTENTION CERRO COSO STUDENTS

If you are an NWC employee planning to take any of the following courses at Cerro Coso during the spring 1987 semester, you will not have to pay tuition for these classes. To ensure your name is on the list provided to Cerro Coso before registration, please call Teri Glover, NWC ext. 1185. If you do not call Teri, your name will not be on the list and you will be required to pay the tuition when you register.

- Drafting Technology
  - 30a Engineering Drawing
  - 30b Engineering Drawing
  - 30C Engineering Drawing
  - 51 Blueprint Reading
- Electronics Technology
  - 36 Electronics Documentation
  - 53 Geometric Dimensioning and Tolerancing
- Machine Tool Technology
  - 50a Beginning Machine Shop
- Mathematics
  - 52 Technical Math
- Computer Science
  - 30 Introduction to Computer-Aided Drafting and Design
  - 31 Computer-Aided Drafting and Design
  - 32 Computer-Aided Drafting and Design
- Drafting Technology
  - 60 Occ./Career Work Exp. Seminar
  - 61 Occ./Career Work Exp.

## Northridge writing exam planned

The English Writing Proficiency Test will be given on Tuesday, January 27, at 9 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 unconditional 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.



### Personnel Development Opportunities

#### MANAGING CHANGE

January 29-30; Thursday-Friday; 0800-1600; Training Center. By Roger L. Kirkham.

Prerequisite: None.  
Intended Audience: Managers and Senior Level Supervisors.

Scope: Topics include  
1. Overview of current management thought on managing innovation and change from *The Chance Masters* (Kanter, Simon & Schuster, 1983), *Re-inventing The Corporation* (Naisbitt & Aburdene, Warner Books, 1985) and *In Search of Excellence* (Peterson & Waterman, Harper & Row, 1982).  
2. How people's perceptions determine their reaction to changes in spite of reality.

3. How an individual can exert leverage in an organization to cause change.  
4. Twenty-four steps to manage a change which include the following: how to justify a need for change; how to eliminate indifference to making a change; how to justify what will be improved by making a change; how to establish adequate control during the change process; how to identify and secure support from those who must authorize, implement and use the changes; how the uncertainty of the transition period should be managed; how to identify individual as well as organizational resistance; and how to defuse defensive reactions.

5. Development by each participant of an actual plan for change based on the 24 steps for managing change.  
Deadline: January 7.

#### IN SEARCH OF EXCELLENCE

January 28; Wednesday; 0800-1600; Training Center, Room 114. By Roger L. Kirkham.

Prerequisite: None.  
Intended Audience: Managers and Senior Level Supervisors.

- Scope: Course outline
- I. Establishing an Organizational Culture That Fosters Excellence.
    - A. Self-discipline is strongest in customer-oriented cultures.
    - B. Eliminating cultures that foster internal politics.
    - C. Strong cultures should foster individual autonomy and innovation.
    - D. Cultures in excellent organizations come from transforming leadership.
  - II. Leaders vs. Managers
    - A. Leaders are movers and shakers, original, unpredictable, imaginative, and full of surprises that discomfit the enemy in war and the main office in peace.
    - B. Managers are safe, conservative, predictable, conforming organizational people and are team players, dedicated to the establishment.
    - C. Transforming leadership raises leaders and followers to higher levels of motivation.
    - D. Transforming leaders instills greater self-confidence rather than forcing submission of followers.
    - E. Leadership is escape from mediocrity and has a passion for equality.
    - F. Management shuns equality and feeds on mediocrity by not promoting individuals whose competence might threaten their own position; so as the power of management spreads wider, the quality deteriorates.
  - III. Managing for Excellence

- A. Getting everyone pulling in the same direction.
- B. Strengthening accountability will boost morale, increase productivity, and improve communication.
- C. An organization's ability to improve is proportional to its ability to learn from experience. Things that don't change remain the same.
- D. Without change, there can never be improvement.

NOTE: This class requires that attendees read four chapters of "In Search of Excellence" prior to class. Employees will be provided this book after they have had their training request approved.

Deadline: January 28.

#### UNDERSTANDING AND APPLYING THE 68000 MICROPROCESSOR

January 12-16; Monday-Friday; 0800-1600; Training Center. By James Coffron, Brian Rushka, Evolving Technology Institute.

Intended Audience: Scientists, engineers, and advanced technicians familiar with the basic concepts of 8-bit microprocessors and needing a course on the application of the 68000 16-bit microprocessor.

Prerequisite: Completion of a course on any 8-bit microprocessor or equivalent work experience.

Objectives: To help you gain a comprehensive understanding of the uses of 16-bit microprocessors and their applications; acquire skills in programming a 16-bit microprocessor for performing basic computer functions; and gain experience in microcomputer system development and be able to perform hardware/software tradeoffs.

Scope: This course is intended to provide an intensive hands-on introduction to the use of the Motorola 68000. The architecture and instruction set are described in detail. Examples and hands-on experiments will cover such subjects as simple operations, decisions, loops, arrays, arithmetic, and look-up tables. The hardware aspects of the 68000 will be considered, including detailed discussions of control signals, input/output, interrupts, and memories. Some actual I/O and timing examples will be executed on the microcomputer. Particular emphasis will be placed on the use of system chips and on specific applications. System development will then be presented; the emphasis here will be on development methods, problem formulation, integration of hardware and software, documentation, and testing. This course will offer a detailed explanation of a 68000 microprocessor at the level required by a potential user; it will be of value both to those familiar with 8-bit microprocessors and those starting at the 16-bit level.

NOTE: Limited to 20 students.

Deadline: December 29.

#### STRUCTURED ANALYSIS OF REAL-TIME SYSTEMS

January 22, 0730-1130; January 26-30, 0800-1600; Training Center. By Lawrence Peters, Software Consultants International, Limited.

Intended Audience: Analysts, designers, users, and technical managers involved in the development of interactive, real-time systems.

Objectives: Upon successful completion of this course, the student should be able to prepare complete, concise, correct, and consistent analysis models of real-time systems compatible with structured analysis concepts and of sufficient quality for use in software design and other problem-solving activities.

#### Outline

- I. The Nature of Analysis
- II. The Group Power Cycle and Software Life Cycle
- III. Real-Time Issues
- IV. Overview of Structured Analysis
- V. Dataflow Diagrams-Part I
- VI. Data Dictionary
- VII. Dataflow Diagrams-Part II
- VIII. Stating Policies Regarding R/T Systems
- IX. State Transition Diagrams
- X. Using Prototypes To Define Requirements
- XI. Data Structure Diagrams and E-R Diagrams
- XII. Planning Structured Analysis
- XIII. Overview of R/T Structured Design

NOTE: The text, "Structured Analysis and System Specification," by T. DeMarco, will be provided to students. This will be a "hands-on" workshop with case studies using the Excelsior Software Development System. The Jan. 22 session is an overview of "Excelsior" for those with no previous knowledge and will cover a new release that even those with previous experience will find of benefit.

Deadline: January 9.

#### 1100 CONVERSATIONAL TIMESHARING (CTS)

January 20-23; Tuesday-Friday; 0730-1130; Trailer 1414A, Michelson Laboratory. By Joanne Barton.

Prerequisite: Intro to UNIVAC or knowledge of 1100 Series computer.  
Intended Audience: Terminal users of the Sperry 1183 (UNIVAC).

Scope: In this course you will learn to work in the demand mode when interacting with the host (Sperry 1183) computer to input data, make corrections, manipulate CTS files and syntax, and check source code. Topics include calling CTS, manipulating text, basic editing in CTS, CTS utilities, building canned runstreams, and file commands.

Note: This course with "Intro to UNIVAC" is equivalent to "1100 Demand User."  
Deadline: January 5.

#### CONFIGURATION MANAGEMENT FOR THE 80S

January 21 and 22; Wednesday and Thursday; 0800-1600; Training Center. By J. W. Dean.

Scope: Presents a comprehensive analysis of configuration management (CM), including the key elements that impact program cost, scheduling, and quality control. Designed for experienced professionals in program management, contracts, engineering, finance, production, and related areas, it assumes a basic knowledge of CM principles and objectives and moves into a "hands-on" approach that emphasizes advanced management strategies and tools for configuration identification/documentation, change control, status reporting, design review/configuration audits, personnel organization, and more. Included will be an update on the latest DOD, NATO, and other policy trends, customer requirements, and the advantages and optimal use of CM in proposals.

Deadline: December 29.

