

Community Connection for Child Care offers family day care home licensing each Tuesday of the month

On the fourth Tuesday of each month, the Kern County Department of Human Services holds a family day care home licensing orientation at 440 W. Robertson, Ridgecrest. The orientation, which starts at

1:15 p.m., is open to any interested person. Although appointments are not necessary, please call 375-6781 the day of the orientation to confirm the class is being held. For more information, call Jean at CCCC,

375-3234. This orientation is part of the state licensing process, not part of the Family Home Care Program on Center.

People living on Center who are interested in becoming home day care

providers should remember that they need to complete NWC's Family Home Care Program before providing care in their homes. For more information, call Janet Butler, at NWC ext. 6681.

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August 1, 1991

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**Weather Report****WEATHER**

	Max	Min	Peak Gusts
Weds.	104	67	16
Thurs.	104	66	12
Fri	104	66	10
Sat.	106	69	16
Sun.	109	67	10
Mon.	112	68	14
Tues.	107	73	15

**ROA sets annual
Military Exposition
for next January**

Reserve Officers Association will hold its seventh annual Military Exposition in conjunction with its Mid-Winter Conference at the Washington Hilton Hotel in Washington, DC, January 19-22, 1992.

As many as 100 defense, supply and service contractors will be on hand to display and promote their products to an expected 3,000 ROA members and guests during the exposition. "This will provide an atmosphere conducive to a free exchange of ideas between suppliers and users," commented Betsy Lauer, exposition coordinator.

Further information on the exposition can be obtained from Mrs. Lauer at (202) 646-7778.

**Congress clears
path for closure
of many facilities**

WASHINGTON--Congressional action early this week has cleared the way for implementation of the Department of Defense's Base Closure Commission's recommendations.

The House of Representatives voted overwhelmingly to approve the recommendations of the commission. The recommendations have previously been endorsed by President Bush.

The Navy closures include the Long Beach Naval Station and the Naval Shipyard in Philadelphia. The biggest impact in California will be closure of the Army's Fort Ord near Monterey.

NWC Rocketeer

Naval Weapons Center, China Lake, California 93555-6001

Vol. XLVI, No. 29, August 1, 1991

Matt Anderson:

Year-long industry exchange program prepared him for Code 36 leadership

by Kristine L. Roquemore
Rocketeer Staff Writer

One of the biggest fears people experience when going on travel for the government is the *thought* of having their luggage lost by the airlines and ending up in an executive meeting wearing faded blue jeans and an old wrinkled

shirt. Sound like a nightmare? Not to the new head of the Naval Weapons Center's Engineering Department (Code 36). To Matt Anderson, that scenario sounds pretty tame after what he went through at the start of his year assignment with the President's Commission on Executive Exchange Program (PCEE).

Anderson's journey from the world of engineering at China Lake to the world of private industry with Xerox Corporation in Rochester New York was the experience of a lifetime. And though it got off to a rocky start, the actual time spent with the company proved to
(Continued on Page 6)



TECH TALK--Jim Netzer and Larry Strutz of NWC join Ron Smith from NASA Ames to discuss wind tunnel testing of the propfan missile model.
NWC Photo by Leroy Krzycki

New effort links propfan, missiles

Center-led research project shows strong promise in this once-dismissed propulsion system

by Steve Boster
Rocketeer Editor

Once dismissed by the airline industry, propfan engines may stage a comeback and do it in an unlikely fashion, powering Navy and Air Force cruise missiles, such as future generation Tomahawks.

Leroy Krzycki, manager of the Long Range Cruise Standoff Weapons Aeropropulsion Project Office at the Naval Weapons Center, said a rejuvenation of this technology could provide capability to launch cruise missiles from very-long standoff ranges or fly much heavier payloads over current ranges. These advances are possible, in part, because

a propfan propulsion system offers up to a 30 percent improvement in fuel efficiency compared to a conventional turbofan jet engine such as those powering today's Tomahawk missiles.

"We're on the very cutting edge of this kind of technology," commented Krzycki. "We're the leaders. This work is the first of its kind for cruise missile applications," he added.

The DoD/NASA Propfan Missile Interactions Project, headed by Krzycki, was a now-completed joint Department of Defense (DoD) and National Aeronautics & Space Administration (NASA) effort to investigate propfan propulsion for standoff missiles. Join-

ing NWC in the overall effort were the Air Force, Mississippi State University, the Naval Aviation Depot at NAS North Island, private industry and NASA Ames and NASA Lewis Research Centers which used NWC-issued work orders and their own resources.

Stressing the Center-wide nature of the project, Krzycki commended the Attack Weapons Department, Aerosystems Department, Technical Information Department, Attack Weapons Department and his co-workers in the Ordnance Systems Department for their team approach to problem solving throughout the life of the project.

(Continued on Page 12)

**Vampires
finish era
with A-7s**

Another era is over, another aircraft type passes into history as Air Test and Evaluation Squadron Five (VX-5) retires the last two A-7 Corsair IIs from active service.

On July 16, Lt. Rick "Skyler" Botham and Lt. Eric "Slider" Hinson delivered the final "Harleys," XE-01 and XE-02, to the boneyard at Davis-Monthan Air Force Base, near Tucson, Ariz.

The A-7 began its long VX-5 career on Dec. 23, 1967. The long-time mainstay of the Navy's light attack community, A-7Es logged thousands of flying hours with the Vampires in support of operational testing and evaluation of nearly every weapon in today's Navy aviation arsenal.

Weapon systems supported with Corsair flying time range
(Continued on Page 3)

Commentary

NWC Rocketeer

Published by High Desert Newspapers, Inc.
224 East Ridgecrest Blvd.
Ridgecrest, CA 93555
(619) 375-4481

This commercial enterprise (CE) newspaper is an authorized publication. Content of NWC ROCKETEER are not necessarily the official view of, or endorsed by, the U.S. Government, the Department of Defense or High Desert Newspapers, Inc.

The editorial content is edited, prepared and provided by the Public Affairs Office of the Naval Weapons Center, China Lake. Correspondence and material for publication should be addressed to: Editor, NWC ROCKETEER, Code 0033, Naval Weapons Center. Phone: 939-3354. FAX: 939-2796

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QUESTION

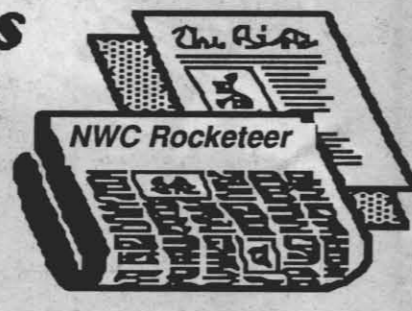
Why does Building 2337, over at 71 Parsons, still have a rope around it, preventing parking around the building? Parking is hard to get to.

ANSWER

There is a rope barrier at 71 Parsons because the complex temporarily houses a restricted activity, which must be provided parking protection per OPNAV 5530.14B. Thus, the rope serves as a "fence" until the activity can be moved into permanent quarters. This move is anticipated to occur within the next two to three weeks, if it has not been already. At that time, the parking situation will be reevaluated. In all probability, parking next to the building will be restored. Thank you for your concern in this matter.

QUESTION

Pages from the Past



August 1, 1951

Cdr. Gordon Miller, a gunnery officer at Armitage Field, was forced to bail out of his burning AD-4 Skyraider last week. He broke an arm and suffered minor burns, the AD-4 crashed near the B-4 track. . . Chaplain and Mrs. W.L. Wolf departed NOTS for San Diego area duty. . . G.R. Makepeace was the featured speaker at a propellant seminar. . . Maj. John Griffin relieved Maj. Tom Boler as commander of the Marine Guard unit at China Lake. . . New water cooling units were provided 250 families in NOTS housing.

July 29, 1966

Lorin Madsen heads the new Microelectronics Section of the Engineering Department. . . Capt. and Glenn Roquemore headed for Chalfant Valley to study the aftermath of the 6.1 magnitude earthquake there. . . Capt. Robert Dropp came aboard as NWC's new supply director. . . Camie Fielder was named to head the childrens center's enrichment program. . . Art Karrer and Richard Hunter headed a test program on extending the useful life cycle for parachute canopies. . . The Center's Information, Ticketing & Tour Office moved to Bennington Plaza.

ians will replace 55 sailors.

August 7, 1981

Potential lease bidders started heat flow testing in the Coso Known Geothermal Resource Area before submitting bids to the Navy. . . Brent Nave became the first China Lake graduate from Cal State Northridge's EE master's program. . . Air Force and Army personnel joined China Lakers to install communications great at the new Range Control Center. . . AOAN Tim Hill is NWC's Sailor of the Quarter. . . Bob Boot, head of the Fuze and Sensors Department will be honored at a retirement party late this month.

August 1, 1986

NWC geologists John Zellmer and Glenn Roquemore headed for Chalfant Valley to study the aftermath of the 6.1 magnitude earthquake there. . . Capt. Robert Dropp came aboard as NWC's new supply director. . . Camie Fielder was named to head the childrens center's enrichment program. . . Art Karrer and Richard Hunter headed a test program on extending the useful life cycle for parachute canopies. . . The Center's Information, Ticketing & Tour Office moved to Bennington Plaza.

The Skipper Sez...

I have a question about the Commissary being earth friendly. I noticed that every time I purchase a dozen eggs, they are in a styrofoam container. I know they also come in a pressed paper-type of container. Is there any outlet that we can get them from where they are in a different type of container?

ANSWER

The Navy Exchange and Commissary's Earth Friendly program has embarked on an important mission to be a more responsible retailer when it comes to environmental issues. The Commissary Store manager has requested that our egg supplier replace styrofoam containers with pulp carton containers. The supplier has indicated that he will comply with our request. Thanks for caring!

All China Lakers, including military personnel, civilian employees and their dependents, are invited to submit questions to this column. Such queries must be in good taste and pertain to matters of interest to a large segment of the China Lake community. Answers to these questions are directly from Capt. Douglas Cook. Please call NWC ext. 2727 with your question and state whether you are a military member, civilian employee or dependent. No other identification is necessary. There is no intent that this column be used to subvert normal, established chain-of-command channels.

China Lake Calendar

Tuesday, August 6

. . . L.T.E. Thompson, McLean Awards luncheon, 11:30 a.m., Seafarer Club.

. . . SAME lunch, Farris' at the Heritage, Linn Gun guest speaker, 11:30 a.m.

. . . SUN Users Group, The Hideaway, 11 a.m.

Thursday, August 8

. . . Air Safety Foundation seminar, Station Theater, 7 p.m.

. . . CalComp demo, NWC Viz Lab (Room C208A, Michelson Lab).

Wednesday, August 14

. . . ESB-sponsored Shoemobile visits NWC, 7:30-9 a.m., Building 01474 parking lot (Public Works Compound)

Items of interest to the China Lake population may be placed in the CHINA LAKE CALENDAR by calling the NWC Rocketeer at NWC ext. 3354 before 11:30 a.m. on Monday before Thursday's publication.

Police list radar patrol areas

Motorists on board the Naval Weapons Center (NWC) are reminded that China Lake Police (CLP) officers enforce state and NWC traffic regulations.

According to Kerry B. Swigum, traffic manager, CLP Operations Branch, areas of concentration for radar traffic enforcement

for next week are below.

•Friday -- CLPL Road.
•Monday -- Randsburg Wash Rd.
•Tuesday -- Poleline Road.
•Wednesday -- Blandy Avenue.
•Thursday -- Richmond Road.

Violations may be cited at any time, as well as in areas other than the ones mentioned above.

ROCKETEER CLASSIFIEDS

1 PERSONALS

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ROOMMATE NEEDED IMMEDIATELY! FEMALE ONLY! Have own room and bath. \$214.50/mo. + dep. and 1/3 util. Pool, Jacuzzi access. 1 child OK. 371-3975, leave message.

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30 SERVICES

the Dirty Blind Lady
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CHILD CARE IN MY HOME - Preschool and school age. Around the corner from Richmond Elementary. Drop-ins, part time & full time. Base certification pending. 446-1012.

30 SERVICES

BABYSITTING - Full or part time. Days, nights, & evenings avail. Reasonable fees. Call Denise at 446-4689 for more info.

EAST COAST HAIRSTYLIST
Looking for clientel. For more info call 466-1075 after 3pm.

PARENTS NIGHT OUT! Fri & Sat nights. Bring your kids to my house, then pick them up the next morning. Base Certification pending. 446-1012, ask for Chris.

WINDOW TINTING - Auto, commercial, residential. Special for many trucks. Single Pane rear window - \$25. Call Larry, 446-6612.

35 AUTOMOTIVE

'86 4x4 Toyota Extra Cab, custom, \$6800. Call 377-3405.

4- 185/80R-13" radial tires with rims, 4-lug. Good Shape, \$50.00. Call 377-3405.

FOR SALE - Sandrail, for more info call 377-3405.

1962 3/4 TON FLAT BED 4 WD Jeep. Rebuilt motor & trans, needs glass. \$900. 377-5234.

1969 TR6 650cc Triumph, custom, nice. \$2000. Call 371-2286 for more info.

400 cu. in. Ford Motor, ready to go. \$350. 371-2286.

1987 Ford Taurus GL Sedan, auto, A/C, AM/FM, PM, PW, PS, \$4,500/OBO. 371-3375.

80 CHEVY LUV - \$1,000 OBO. Frank, 446-7172.

85 FORD ESCORT - 4 speed w/air. \$2,200 OBO. 446-3955.

86 MAZDA B200 LX - 63K miles, mags, shell, PS, bedliner, excellent condition. \$4,000 neg. MUST SELL! 446-4689.

CLUTCH SET - Brand new. Will fit 76-78 Honda Accord CVCC w/5 speed transmission. \$75. 375-6055.

OVER THE CAB CAMPER SHELL with carpet kit for small truck. \$500 OBO. Frank, 446-7172.

REALISTIC 40 CHANNEL MINI CB - Complete with car mounting kit and magnetic antenna. Almost new. \$50. 375-2695.

SMALL MOTOR HOME - 1981 Rol-a-Long on Ford chassis. Sleeps 4. Call 377-4451.

TRAILER WITH UTILITY BODY, \$300. Coleman Sanoe (Boat), 15', olds up to 600 lbs. with Minakota 5 forward & 5 speed reverse electric motor. \$400. 377-5234.

Classifieds Get Results!

40 MISC. FOR SALE

BABY SWING - \$20. Baby crib w/matching changing table and accessories, \$200. One blue carpet, 12x8, \$50. One rose carpet, 11x12, \$50. Exercise bike, \$20. 446-7746 after 5pm.

14" DEEP DISH, 5 star, custom rims. 1 week old. Alpine digital cassette deck, 32 watts per channel. Model 7256. (619) 382-7188.

DITCHWITCH TRENCHER C-90, rebuilt motor, many new parts and steel tilt bed trailer. \$1,700. 377-5234.

HYDROLIC LIFT CART, \$75. 2 large solar panels for hot water, no glass, \$100. Wooden fencing, 6' wide x 5' high, approx 80', \$50. 25 gallon propane tank, \$75. 377-5234.

REALISTIC 40 CHANNEL MINI CB - Complete with car mounting kit and magnetic antenna. Almost new. \$50. 375-2695.

START YOUR OWN Sewer and Drain Cleaning Business. For sale - Nearly new (used 5 times) Electric EII Sewer equipment. Set up in a 65 Ford Econoline Van, \$3,000. Call 377-5234.

WILL TRADE A 5' Solid Onyx table for your Thousand Trails Membership. 377-3111.

World Progress Encyclopedias, \$200. Jenny Lynn baby crib, \$50. 3 cockatiels w/cage, \$75. Shepard/husky, 1-1/2 yrs., free. 446-7666 after 3 p.m.

45 GARAGE SALES

MOVING SALE - Upright freezer, lots of furniture, overhead camper, microwave, console TV, tools, water fountain, books, propane bottles, kitchen items, 1986 Dodge Ram 4 cyl pickup, 14K gold/diamond ring & much more. 1630 S. Downs & CL Blvd. Fri & Sat. 375-8395.

YARD SALE - Sat only, 7am-12pm. 256 N. Broadway.

50 PETS/SUPPLIES

AKC BISCON FREISE - Available 7 August. \$350/each. 371-1571.

AKC CHOW CHOW PUPPIES - Only 3 left. MUST SELL. \$100. 446-2072.

FREE TO GOOD HOME - 1 year old male Shih Tsu. Very good with kids. 446-7746 after 5pm.

Must give away 4 beautiful Chow/Shepard puppies or will have to go to the pound! Call 371-2286 eves.

55 REAL ESTATE

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ads is Mon. 4 p.m.

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or to place a display ad
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Community Events



Bodie, California, considered by some to be the most famous of all ghost towns, will be the subject of the Maturango Museum's August slide presentation. Gary Staab will host a photographer's tour of Bodie on Wednesday, August 14 at 7:30 p.m. in the City Council Chambers (100 W. California). This is a prelude to the Museum field trip to Bodie on August 24-25.

Bodie was a mining town during gold rush days and is located 30 miles north and east of Mono Lake. It was still functioning at the turn of the century, and still occupied into the 1940's. It is now a state park. Its dozens of buildings are protected; a photographer's delight of old houses, mining buildings and a cemetery.

Janet Westbrook will lead the Maturango Museum's annual overnight camping trip to the Bristlecone Pines planned for August 17-18. The Bristlecone Pines grow at elevations of 9,000 to 11,500 feet, from the White Mountains all the way to Wheeler

Peak in Eastern Nevada. Some of these venerable trees are over 4,000 years old.

On Saturday, August 17, meet at the Museum parking lot at 8 a.m. and caravan to the area. You may camp Saturday night at the Pinon Camp group campground; bring all your own water and food. Motel accommodations are also available in Big Pine or Bishop.

On Sunday, August 18, the group will go on to the Patriarch Grove where the real scraggly and largest trees are. This rough dirt road goes 11,500 feet; be sure your vehicle is in very good condition.

On the way home, you can shop at the Museum at Independence or the Laws Railroad Museum north of Bishop. Call the Museum at 375-6900 for reservations.

On August 17, the Maturango Museum will present a Saturday Adventure at 2 p.m. Bill Sims, retired school principal, will entertain pre-schoolers with his tale of *Narcissus*. While this program is especially geared towards the younger set, parents are encouraged to come out and enjoy this program. Saturday Adventures are free with admission to the museum.

Beginning August 17 through Sept. 11, a series of acrylic paintings entitled *Nature to Infinity* by Los Angeles artist Norma Jean Squires will be displayed in the Sylvia Winslow Gallery of the Maturango Museum. A preview reception for members only will be held Friday evening, August 16, from 7 to 9 p.m. at the gallery.

One of the few remaining 19th century Victorian homes in the Owens Valley, the Commander's House in Independence is now open for tours on weekends. Built in 1872, the home is furnished to reflect life in the valley in the late 19th century. Examples of early

handicrafts such as quilting, furniture, toys and more can be seen in the home. Located on Highway 395 in Independence, the Commanders House is open for tours from noon to 4 p.m. Saturdays and Sunday's through Labor Day.

For more information, call the Eastern California Museum at 878-2010 or 878-2411.

Community Connection for Child Care is presenting a complete series of parenting tapes over the phone. Developed by Resources for Family Development, the tapes cover 25 different topics and can be heard by calling 375-0446 from 5 p.m. to 10 a.m.

Aug. 5-Aug. 9: *Preschoolers and divorce*. Information about divorce for preschoolers.

Many China Lake residents that regularly commute from within Kern County have discovered a gold mine. They've called Kern Rideshare for a free carpool matchlist.

They save money on gas and car maintenance, arrive at work relaxed, help in reducing Kern's air pollution and have the security of travelling with others during harsh weather.

For more information about this free service, call (805) 832-RIDE.

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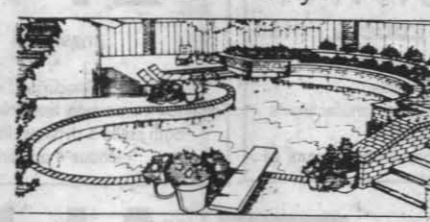
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Military News

Last of the A-7 Corsair IIs retired

(Continued from Page 1)

from the CP-741 bomb release computer to the Standoff Land-Attack Missile and from Sidewinder missiles to the AWW-13, Advanced Data Link Pod.

A brand new A-7A, number 31 off the production line, was the first Corsair II delivered to VX-5. At the time it was only the second A-7 assigned to the west coast. Replacing the A-4 Skyhawk, the A-7A would carry roughly twice the ordnance load and had more hard points under the wings for weapons racks.

As Navy aviators have come to expect, the rugged A-7Es were fully mission capable even as they were retired to the Arizona desert last month.



BON VOYAGE -- Lt. Rick "Skyler" Botham and Lt. Eric "Slider" Hinson prior to delivering the final "Harleys", XE-01 and XE-02, from Air Test and Evaluation Squadron Five (VX-5) to the boneyard at Davis-Monthan Air Force Base, near Tucson, Ariz. VX-5 Photo



DEEKE ENDS CAREER - After spending 20 years not only building a career, but a reputation for his extraordinary technical competence, professionalism and resourcefulness, Master Sergeant Stanley E. Deeke bids a fond farewell to his comrades at the Marine Aviation Detachment. Deeke and his wife, Mryna, are in the process of departing from the desert to enjoy the four seasons of St. Louis, Mo. Photo by PH3 Brady

New "Uniform Regs" is on way to the fleet

Washington (NES) -- The latest edition of U.S. Navy Uniform Regulations soon will be on its way to the fleet, and the differences between it and its predecessors are substantial.

"Uniform regs" is the more common term given to the Navy's bible for the proper way to wear the many required

and optional uniform items available to officers and enlisted members. They have appeared in published form at least since the 1840's.

The enlisted women's service dress white jumper uniform undoubtedly is the most dramatic addition to the new volume. It was approved for female sailors two years ago.

"One of the big things we included is a color page for the precedence of awards," said Cdr. Dan Richey, who as head of the Navy's uniform matters office supervised the two-year effort to update the publication.

"That hasn't been in the uniform regs for ages, but it's one of the things we get the most questions about."

The revision also has been "sailor-tested" for ease of reading,

Richey said, with a streamlined format and more clearly written guidance. Among subjects covered are laws and directives pertaining to uniforms, clothing replacement allowances, uniform standards and personal appearance. Most pages, however, are given over to pictures and

descriptions of the different types of uniforms and related items. Other changes from the current edition range from the proper way to wear battle dress uniforms -- "cammies" being worn by more and more Navy people -- to the correct position of the sword women officers

now may wear with their full dress uniforms.

The new edition also eliminates inequities found in earlier versions of the regs, Richey said. As one example, the regs now specify that women officers and chief petty officers may wear a formal skirt with dinner dress blues. The skirt already was approved wear for enlisted women with blues.

"Until now, if (female officers and chiefs) wanted to wear the formal skirt, they had to wear the mess jacket," Richey said.

NEXCOM established as headquarters for NEX's

With a new name and a renewed commitment to providing quality merchandise and quality customer service, the Navy Exchange Service Command (NEXCOM) is the headquarters and support office for Navy Exchanges, including the NEX at China Lake, around the world.

In another change, more accurately reflecting the orientation of the overall organization, the network of stores, regional support offices and headquarters is now known as the Navy Exchange System, replacing what was called the Navy Resale System.

The Navy Exchange System employs more than 26,000 civilian associates at 139 Navy commands ashore.

Reflected in the name change is the forthcoming transfer of Navy commissaries to operational control of the Defense Commissary Agency (DeCA) in October.

NEXCOM is working closely with DeCA to ensure an orderly transition. No change in customer service or operations is anticipated at the commissary store level as a result of this transfer.

Taking care of sailors, meeting the needs of Navy families, providing quality merchandise and substantial savings, and ensuring customer satisfaction is guaranteed are continuing commitments of the Navy Exchange Service Command and the Navy Exchange System.

Commissary salutes stellar employees



APPRECIATION EXTENDED TO EMPLOYEES -- SHCS R. Binaro, NWC Commissary Store Manager presents both the "Sailor of the Quarter" and the NAVRESSO/FSO regional "Sailor of the Quarter" nominee from Capt. Hout, Commanding Officer, NAVRESSO/FSO, awards to SH2 Robert Tyus (above) and the "Employee of the Quarter" award to sales audit clerk, Dean O. Rice (below). Photo by PH3 Cary Brady



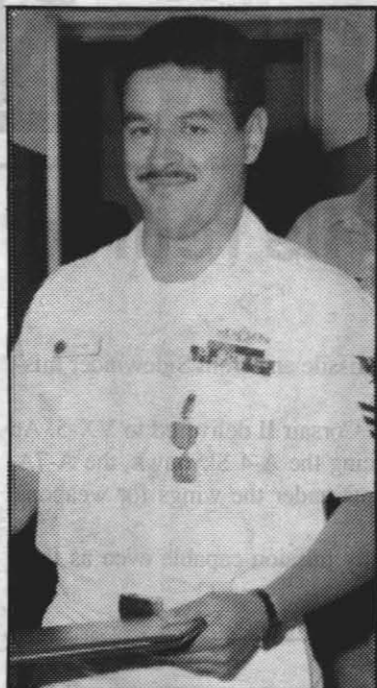
CHAMPUS updates policies

Here's an update on CHAMPUS benefit and policy items:
Cochlear Implants-- CHAMPUS cost-shares cochlear implants. These are electronic instruments, parts which are surgically implanted to stimulate auditory nerve fibers, and parts of which are carried or worn by a person to capture and amplify sound.

Cochlear implants approved by the Food and Drug Administration are covered for services obtained on or after March 2, 1988, by adults aged 18 and older who suffer from profound deafness which occurred after they had learned to speak, and who don't benefit from the use of normal hearing aids.

When CHAMPUS contractors have made the necessary administrative adjustments to their systems, the implants may also be covered (effective June, 1990) for children aged 2 through 17 who are profoundly deaf in both ears, and who don't benefit from standard hearing aids. However, even though a child may have deafness in both ears, the cochlear implant would only be recommended for one ear.

There are other guidelines to meet as well, for CHAMPUS to cover implants. Check with your Health Benefits Advisor for details



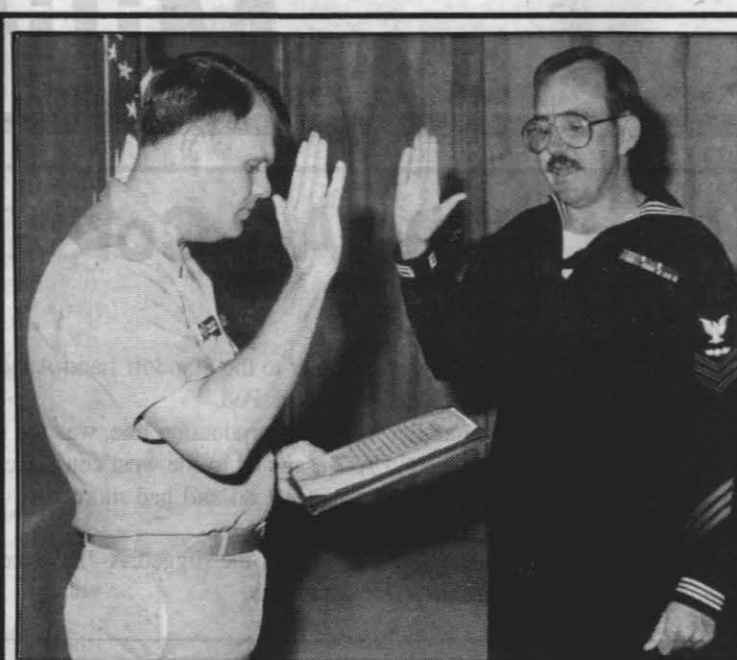
DISPERSING CLERK EARNS NAM -- DK1 Bruce John Minoria was presented the Navy Achievement Medal for demonstrating unsurpassed professional knowledge and perseverance while attached to Personnel Support Activity Detachment, Misawa. The citation letter hailed Minoria for assuming additional responsibilities which allowed the disbursing operation to function without interruption while the disbursing officer was detached. Photo by PH3 Brady

Navy Uniform Center offers special sizes

Navy uniforms and accessories for tall Navy men and women are available from the Navy Uniform Support Center in Virginia. Items available for sale include extra large uniforms, trousers, outerwear and sweaters; shirts with an extra three inches added to the tail; footwear for those who wear size 14 and 15; and 60-inch long neckwear.

Tall uniforms may be ordered directly from the Uniform Support Center or placed through the local Navy Exchange Uniform Shop. Both the 55" and 60" men's neckwear is being stocked at the larger Uniform Shops, all other items are available from the Uniform Support Center.

The Center also has a toll-free number (1-800-368-4088) that



EXTENDED SERVICE -- VX-5's AE1 Robert Haynes, of the Maintenance Administration Department, raises his hand to Chaplain Goodman as he pledges to serve in the Navy for another four years. Haynes plans to leave VX-5 in Oct. to attend school in San Diego prior to joining unit HC-5 in Guam. Photo by PH3 Rob Foster



Divine Services

Protestant	
Sunday Worship Service, East Wing	8:00 a.m.
Sunday Worship Service, Main Chapel	10:30 a.m.
Sunday School, 1008-10 Blandy & 1903-05 Mitscher	9:00 a.m.
Bible Study (East Wing), Wednesday	11:30 a.m.
(September thru June)	
Men's Prayer Breakfast, East Wing, Thursday	6:30 a.m.
Officers' Christian Fellowship/Christian Military Fellowships, East Wing, Thursday	7:00 p.m.
Islamic	
Jumaa Prayer (Friday at 1002 Blandy)	1 p.m. (DST) 12 p.m.(ST)
Roman Catholic	
Sunday Mass, Main Chapel	9:00 a.m.
Daily Mass, Small Chapel	11:35 a.m.
Confessions, Weekdays	By appointment
Religious Education Classes (Sunday)	10:30 a.m.
(September thru May)	
1902 Dobb, 1002 Blandy, 1008-10 Blandy & 1903-05 Mitscher	
Jewish	
(375-0385 Messages)	
Weekly Services (Friday - East Wing)	7:30 p.m.
Adult Hebrew Lessons (Saturday, East Wing)	3:00-5:00 p.m.
(September thru June)	
Religious Education (Sunday, East Wing)	9:00 a.m.-12 (noon)
(September thru June)	

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Chaplain G. L. Goodman, LT, CHC, USNR
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Classes starting

(Continued from Page 20)

If tuition is involved, and the employee is not yet a California resident, submit DD Form 1556 (Request, Authorization, Agreement and Certification of Training and Reimbursement) via department channels to Code 224. A **job order number is required** on the form.

Code 224 will return the approved forms to the applicants. Applicants must take the forms with them to Cerro Coso when expecting NWC to pay the tuition.

Enrollment Deadline

Requests for tuition support must be received by Code 224 at least three days prior to the employee's registration at Cerro Coso. This allows the request to be processed and returned in time for registration. The approved NAVWPNCEN 12410/73 or DD Form 1556 must be taken to Cerro Coso when registering in order for NWC to pay the tuition. Employees who pay tuition themselves will not be reimbursed. For any further information, call Cecil Webb, NWC ext. 2648.

Sort-of-special books

Exploring Mathematics with Mathematica (Gray & Glynn, Addison Wesley, \$38.95) with a MS-DOS & Mac CD-ROM containing unabridged copy of text, equations, graphics, animations, & sound (requires Mathematica to use equations). Generally in stock.

Almost always in stock:
Exploring Mathematics w/Mathematica
Introduction to Neural Networks (we stock BrainMaker & Brainmaker Professional)
Operating System Concepts, 3rd Ed.
Crafting a Compiler with C (\$47.95)
Computing Tools for Scientific Prob. Solv.
Neurobiology of Cognition (\$22.50)
Computer Arithmetic & Self-Validating Numerical Methods (\$39.95)
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VX-5 advertises for technical writer/editor

Following is a Merit Promotion Program vacancy announcement submitted by the Consolidated Civilian Personnel Office in Norfolk, Virginia.

No. 0190/SS/C1, Technical Publications Writer-Editor (Physical Science and Engineering), GS-1083-7/9/11/12. This position is assigned to Commander Operational Test and Evaluation Force in Norfolk, Virginia and located at Air Test and Evaluation Squadron Five, China Lake, California. Incumbent edits material submitted by operation test directors, engineers and technical writers. Determines whether material should be added or omitted in order to fulfill project requirements or to convey the author's intended message. Writes publications based on personal knowledge of the subject matter and on information gained through research, interviews, observation and notes or other material. **Qualifications:** To be eligible, applicants must have the amounts of general and/or spe-

cialized experience required by the published qualifications standards. For general schedule positions, such experience must be at a level sufficient to satisfy time-in-grade and quality level stipulations as of the closing date of this announcement. The following experience and/or rating factors are relevant to this vacancy. Applicants must have one year specialized experience equivalent to the next lower grade level. **Rating Factors:** Applicants need to have strong technical background in the area of flight test and evaluation; proficiency in researching, writing, editing and publishing technical reports, test plans and related documents; and be familiar with Navy's current technical reporting style and common formats used by the naval aviation community. Note: If selection is made at the GS-7/9 or 11 level, selectee may be promoted to the full performance level of GS-12 without further competition. Activity will not pay relocation expenses. Selectee

must be eligible for a SECRET security clearance. Area of consideration includes appointable employees of DoD activities nationwide and spouses (with appointable status currently in permanent positions on DoD rolls) of relocating active duty military members and DoD civilian employees during the 30 days preceding through the six months following sponsor's relocation to the commuting area. Area of consideration is limited due to hiring freeze imposed by higher authority. To apply, submit a completed SF-171 and current annual performance rating to CCPO Naval Base, Norfolk, VA 23511-5360 by 4 p.m. on August 7. If no rating is available, submit statement to this effect and reason. Applicants who wish to be notified of action taken must submit CCPO NORVA 12330/12 Reply Card with their SF-171s. To ensure proper consideration, applicants should put the announcement number of the position applied for on their SF-171s.

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P195/75R14	\$42.88
P205/75R14	\$44.88
P205/75R15	\$45.88
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P205/75R14	\$67.88
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Co-workers could use a helping hand

Employees indicated below have been approved to become leave recipients under the Leave Transfer Program. These employees have exhausted annual and/or sick leave because of personal emergencies and will be in a non-pay status for at least ten days. Employees who wish to donate annual leave to the employee should call NWC ext. 2018.

Linda Harinek, Purchasing Agent, Code 254 -- underwent coronary angiography and is in need of leave.

Linda J. Roether, Secretary, Code 6204 -- is indebted for leave which was required due to a fractured right elbow.

Charlotte L. Brennan, Budget Analyst, Code 2836 -- is in need of leave in order to care for her two-year old son who is recuperating from reconstructive foot surgery.

Betty Cirotski, Procurement Assistant, Code 31B1 -- is undergoing treatment for an acute staph infection in her surgically replaced hip. She will be unable to work for three months.

Sandy Joyal, Procurement Assistant, Code 257 -- broke her elbow in four places.

Barbara J. Bennett, Secretary, Code 308 -- had arthroplasty and needs to be off work for three months. She is indebted for leave.

Leo Montano, Visual Information Specialist, Code 3441 -- is undergoing further cancer treatment and is in need of leave.

Polly Bainbridge, Secretary, Code 3922 -- is currently undergoing medical treatment and is indebted for leave.

Jay W. Hill, Code 6421, Electronic Technician -- is being treated for pneumonia and valley fever and is indebted for leave.

Rick A. Breitengross (Code 36813) Engineering Technician is providing care for his step-mother who is in total kidney failure and on dialysis.

Cynthia Langham (Code 64154), Aerospace Engineering Technician, is undergoing medical treatment and is indebted for leave.

Herschel R. Sibley, Mechanical Engineering Technician, Code 3571 -- underwent heart surgery and is in need of leave.

Soldering course set

On August 26-30, one 40-hour high-reliability soldering course to MIL-STD-2000 will be held from 7:30 a.m. to 4:30 p.m. at 543 Graaf Street.

This course is for government/contractor personnel needing certification as inspectors or operators. The requirements for the course are (1) previous soldering experience and (2) a current eye examination.

To be scheduled into class, contact the Soldering Training Facility, Code 36812, at 446-5571.

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Cerro Coso prepares for fall classes

Fall semester registration for continuing students at Cerro Coso Community College will be August 5, 7, 8, 13 and 15 by appointment. Registration for new students will be August 7, 8, 12, 13, 14 and 15 by appointment. Open registration (no appointment necessary) will be August 16 and 17.

The Center will pay full tuition at Cerro Coso Community College if employees are enrolled in courses provided under the NWC/Cerro Coso Contract. If the NWC employee can show courses are job-related, or will strengthen his contributions to the Center's mission, tuition will be paid directly to the college by Code 224. To have tuition paid, submit NAVWPNCEN 12410/73 (Rev. 12-88) Request for On-Center Training) via department channels to Code 224.



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If a course is not directly job-related, employees should, along with the NAVWPNCEN 12310/73, submit NAVWPNCEN 12410/66, Academic Enrollment Justification and NAVWPNCEN 12410/68, Individual Develop-

ment Plan, describing how the course fits into their overall career plans and how attendance at the course will strengthen their contribution to the Center's mission.

(Continued on Page 21)

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Sponsored By: PC Lab, Code 2741 NWC ext. 6631

By now you've probably heard so much about the pros and cons of System 7.0 you're not quite sure what to do. Let's try to put 7.0 into perspective for the average Mac user and provide some sound advice.

All Mac users will eventually upgrade to Macintosh System 7.0 because:

- Future software designed to run only under System 7.0 will have features they want or need.
- Apple will eventually support only System 7.0 or later releases.

Older Macs won't be able to use some of the features of 7.0, but they will be able to use all of the most important features.

Most users don't need to upgrade immediately; there's plenty of time to prepare. Code 27 is leaving the timing of upgrades to each department.

Some easy things you can do to smooth your eventual transition to 7.0 include:

- Be sure you have a hard disk, a System 7.0 requirement. If you already have a 20 megabyte hard disk, it will do. If you must buy a new one, consider that 80 megabyte drives are now available for less than \$500. Avoid the false economy of buying anything smaller.
- A minimum of two megabytes of RAM is required, but four is preferred. Since RAM costs under \$50 per megabyte, this should not be a problem. Also

suggested is the purchase of 80 nanosecond or faster RAM, which costs only a little more than slower RAM. It will make your Mac run faster even before you upgrade to 7.0, and can be moved to a faster Mac if you upgrade your hardware later.

- Run the Compatibility Checker to determine which applications you use that may have problems. The latest version of this software can be found on the Code 27 Server (Ethernet Zone) Public f: System 7.0 f:).
- Most existing software works fine with System 7.0, and most incompatibilities indicated by the compatibility checker are quite minor. You can learn more by browsing through Compatibility Notes on the server.
- Most vendors charge a small handling fee for upgrades, but Claris (408/727-8227) has free upgrades available for reasonably up-to-date software.
- Update the driver on your hard disk to the current version. Utilities for Apple and other hard drives are in the "Sys 7-Compatibility Drivers" folder on the server. Be careful not to accidentally reformat your drive. Use only the "Update Driver" or "Reinstall Driver" buttons. Don't press the "Format" or "Initialize" buttons unless you are well backed up. If you need help, ask for it.

SUN Users Group sets next meeting for August 6 at 11

A China Lake SUN USERS GROUP meeting will be held at 11 a.m. on Tuesday, August 6, at the Hideaway. Video of New SPARCSTATION Products will be the topic of discussion.

For more information call Chuck at 446-2397.

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GIVING A HELPING HAND -- To show their appreciation for the support services provided by the Navy-Marine Corps Relief Society to service men and women serving in the Armed Forces, Immanuel Christian School donated \$200 to the society. In the picture above, Larry Lyon, school committee chairman, hands the check to Kathie Gorhan, NMCRS volunteers coordinator. Looking on is a representative from Immanuel Christian School, Wayne Temple. Photo by PH3 Cary Brady

SAME hosting talk by Gun

Linn Gun will present *Mineral Management in the Indian Wells Valley* during the next S.A.M.E. meeting, which is scheduled for 11:30 a.m. on August 6 at Farris' at the Heritage. Cost for the luncheon meeting is \$8, at the door. Gun is the Bureau of Land Management's mineral staff chief.

Reservations are required and must be made by the close of business on Friday, August 2. Reservations may be made by calling Dot Johnson at NWC ext. 3411, ext. 283 or Darrell Hovde at NWC ext. 3411, ext. 360.

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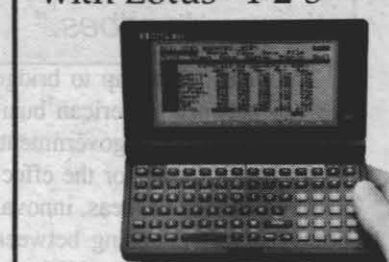
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Engineering Department head talks of tour

Matt Anderson shares his unique experiences while working with Xerox Corporation in Rochester, New York

(Continued from Page 1)

far outweigh the headaches first experienced. So let's start back at the beginning.

After being the first China Laker in 20 years to be selected by the PCEE to work for a year in the private sector, Anderson, who was then head of the Ordnance Systems Department, happily packed up his van with necessities to last him for a year and began his trek across country.

Everything went like clockwork -- that is -- until he hit Chicago. After filling up the dual gas tanks in his van, he retired for the night at a motel with thoughts of an early rise to get back on the road. But, alas, when he awoke and headed for the van-- nothing was there -- not even the van!

And you thought just losing your luggage was bad. No more van, no more clothes, no more stereo, no more boxes of research paperwork and no more income tax records -- the list of items lost went on and on. Well, what does one do in the face of such adversity? Simple, call NWC's Civilian Personnel Director, Eva Bien, cry for help and be extremely grateful for credit cards!

After that, things couldn't get any worse, they could only get better. And they did.

"The program offers a chance to understand what it's like to be in the other guy's shoes."

The PCEE is set up to bridge the gap between American business and the federal government. It provides a forum for the effective interchange of ideas, innovations and understanding between the two sectors and establishes a vehicle for cooperation and communication. According to Anderson, "The program offers a chance to understand what it's like to be in the other guy's shoes."

There were many reasons why the department head pushed to be placed with the Xerox Corporation. "I wanted to spend a year with a company that had already established Total Quality Management (TQM) techniques. And, I also wanted a company that produced high technological durable goods through engineering practices because that's the business we're in at China Lake," said Anderson. "The Xerox Cor-

poration, winner of the Malcolm Baldrige National Quality Award in 1989, met all those criteria."

Anderson's hope was to go and learn how Xerox practiced its engineering and management techniques so he could bring back his findings to the Center. He was fortunate to be placed with their Advanced Products Technology and Engineering Department which was in the process of developing the next generation of copy machines. "They are constantly designing faster and more accurate machines. It was really exciting to be put into a group of research scientists and engineers that were designing this future product," commented Anderson.

The engineer found himself in a bonus situation because the department's chief engineer had just completed a two-year assignment in Japan working for a subsidiary of Xerox, called Fuji Xerox. This meant he could study with someone who had a complete understanding of the Japanese management style concerning TQM.

"Not only did I get to experience the Xerox style, but I was able to gain an understanding of how the Japanese portion of the company operates," explained Anderson. And taking it one step further, Anderson was sent to Japan on two occasions and spent a week each time visiting with their engineering managers. "I really got some good insight that I never expected to get."

The China Laker explained how Xerox personnel were very

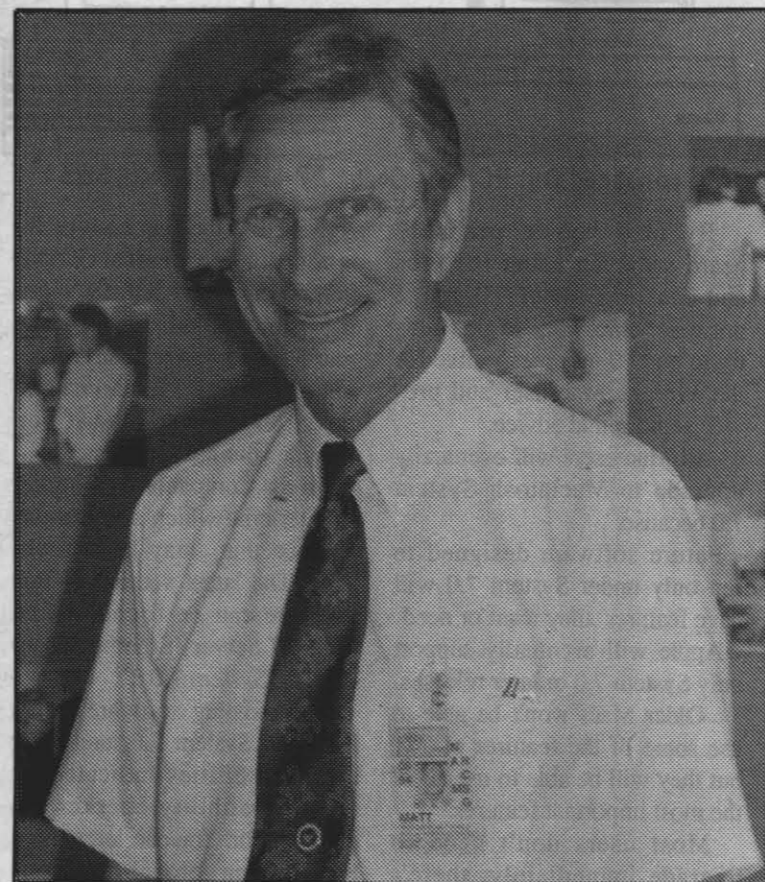
eager to gather information from people outside of the company.

"They were anxious to learn new things from an objective observer," commented Anderson. He was given a menu of assignments which included a project tasked to upgrade the engineering training programs in the corporation; he became part of a Quality Improvement Team to upgrade and establish new engineering work stations; and the biggest effort was being part of a team analyzing design practices within Xerox.

"There are a lot of techniques used at China Lake... that are valuable practices Xerox could learn from."

"Xerox is trying to shorten the time-frame from when they start a new project to when they introduce it to the market, and here is where my experience at China Lake really came to help the company. There are a lot of techniques we use at China Lake, such as modeling, simulation, and systems engineering, that are valuable practices Xerox could learn from," explained Anderson. "Over the past 20 years, NWC has developed laboratories which simulate the flight of missiles using computers. We gather a hundred flights a day in a little chamber in Michelson Lab rather than getting one flight per month on the range. The cost savings is

(Continued on Page 7)



Matt Anderson

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Too busy for a total-body workout during lunch? Right? Wrong! **AS FIT** is the same high-energy workout in 35 to 45 minutes. Classes are Monday-Thursday 11:30am to 12:15 pm in the NWC Gym Annex.

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Qualified applicants sought

(Continued from Page 18)

track ranges. The incumbent will perform as a computer scientist in the branch's instrumentation section. The incumbent will provide customer data product support to include analysis of data requirements, modification of software, operational test support, and post test data analysis. Development and implementation of PC based data reduction systems. Conversion of software to DOS. Maintenance and development of local area network hardware and software applications. Manage ADP computing resources (includes administrative responsibilities and VAX system management). Applicants should possess experience and knowledge of PCM and FM based telemetry systems, VAX VMS systems management, 386/486 based computing hardware, local area networks, Fortran, C and/or Pascal, Instrumentation Systems, and Electronics. Promotion potential to DP-3 but not guaranteed. To apply send an updated SF-171 to Larry Bradburn, Code 62221, NWC Ext. 4316. This ad will close on August 8th, 1991.

No. 64-036, Electronics Engi-

neer, DP-855-2/3, Code 64212 - Position is located in the Calibration Section, Instrumentation Design Branch of the Telemetry Division. Section provides necessary support for the design, fabrication and field support of telemetry systems and related instrumentation as applied to weapons and parachute related recovery systems. Incumbent will have responsibility for design and development of telemetry systems for branch programs. Areas of support include component testing, and captive and live firing test support. Incumbent must have experience with or knowledge of FM/FM and PAM/PCM telemetry systems. Applicants with experience and knowledge of electronic design, development, test, and analysis for electronic circuitry and components are highly desirable. Must be able to communicate both orally and in writing with all levels of Center management. Promotion potential to DP-3, but not guaranteed.

To apply send an updated SF-171 to Randy Morris, Code 6421, NWC ext. 3761/3762. Ad closes on August 8th, 1991.

CSUN writing exam scheduled

On Sept. 5, the English Writing Proficiency Test will be given to graduate students of Cal-State Northridge (CSUN). CSUN students should take the exam as soon as application for admission has been submitted. **This test must be passed before the student is granted classified (unconditional) status as a master's candidate.**

Graduate students must attain classified status before earning more than 12 units of academic work acceptable towards the master's degree. The exam fee is \$20. Checks must be made payable to

California State University, Northridge.

To arrange to take the exam, or for more information, call Denise at NWC ext. 2648.

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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 four 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 1/2/3/4/5/8/9; 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. 35-018, Secretary (Typing), DG-0318-1/2, Code 3512 This position is located in the Weapons Analysis Branch, Weapons Systems Analysis Division, Attack Weapons Department. Incumbent provides secretarial support to the Weapons Analysis Branch. Experience with a Macintosh computer is desired, but not required. Promotion potential to DG-2, but not guaranteed.

No. 31-017, Secretary (Typing), DG-318-1/2, Code 3183 - This posi-

tion provides secretarial and administrative support to the Systems Engineering Branch. Knowledge and working skill on the MacIntosh II, and related software is desirable. The incumbent is responsible for providing support to a team of engineers to include travel and security arrangements, timely submission of progress reports, and tracking the financial status of projects. Must presently have a Secret clearance. The full performance level of this position is DG-2.



Registration fees raised

Fees for registering at all California community colleges have increased from \$5 to \$6 per unit. The maximum registration fee under the new system is \$60. This fee increase is effective immediately for all community campuses, including Cerro Coso Community College.

Students who have already registered for the upcoming semester will not be required to pay the increased fee. However, students who wish to add classes may be charged the new fee if they were enrolled in less than 10 units.

If further information is needed, call Cerro Coso at 375-5001.

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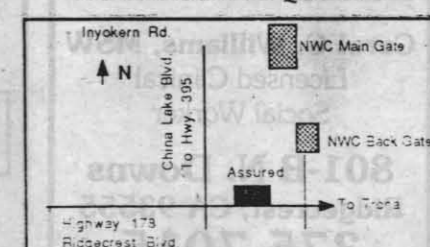


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Personnel News

Promotional opportunities

Applications for positions listed below are being accepted from Department of Navy employees currently working at NWC and from eligible employees of attached activities who are permanently assigned to NWC. This group includes employees with career or career conditional appointments; employees with permanent Veterans Readjustment Act (VRA) appointments; temporary employees with reinstatement eligibility; and handicapped employees with Sch. (A) continuing appointments. Also included are spouses, with competitive status, of civilian sponsors hired by a DOD activity within NWC's commuting area. Applications from other groups will be accepted when specified in an advertisement. Vacancies are subject to restrictions imposed by the DOD Priority Placement Program. Applicants must meet all legal and regulatory requirements, including minimum qualifications requirements, by the closing date of the advertisement. Evaluation of applicant's qualifications will involve using at least two assessment measures. Assessment measures are work experience, annual performance assessment rating and narrative, education, training, performance assessment and awards.

Eligible spouses (of military sponsors) with competitive employment status may apply for employment preference. Those enrolled in this program will automatically receive consideration for employment on vacancies for which they applied. For initial employment information, career counseling and enrollment, call 939-3317 for an appointment.

HOW TO APPLY: Submit the following: a current application, SF-171 or other Human Resources Department pre-approved form; a copy of your most recent annual performance assessment narrative (note: a copy of your performance plan should be attached if the annual performance narrative description does not clearly state the tasks/duties performed); and a completed Background Survey Questionnaire. A supplemental narrative which relates your qualifications to each knowledge, skill or ability (KSAs) as cited in the advertisement is always desirable and may be required if stated in the vacancy announcement. Write the title, series, level (grade), and announcement number on all application materials. Not submitting the annual performance narrative may adversely affect your evaluation scores. Prior to submitting your application, complete Cover Sheet Form 12335/2, available at the reception desk. **Make sure your address, phone number, etc. are current, correct and that all forms are complete and accurate.** If information is missing, your qualifications may not be fully and completely rated. Additional information cannot be submitted after the closing date of the announcement. A current date and a signature on the last page completes the application. Civilian Spousal Program Eligibles with competitive employment status must submit a copy of their sponsor's PCS orders with each application in order to be considered for Merit Promotion vacancies which do not state that status eligibles may apply.

Application materials are accepted, and blank forms are available, at the Reception Desk, Room 100, Human Resources Department, 505 Blandy. Announcements close at 4:30 p.m. on Thursday, one week after the opening date of the announcement, unless otherwise specified. Applications received after 4:30 p.m. on the closing date will not be considered. Copies of Applications may be submitted since applications are kept in an announcement file and cannot be returned or filed in personnel folders. The Naval Weapons Center is an Equal Opportunity Employer; selections are made without discrimination for any non-merit reason.

Notice Regarding Drug Testing Designated Positions

Any applicant tentatively selected for one of these positions will be required to submit to urinalysis to detect illegal use of drugs prior to a final selection. Final selection is contingent upon a negative drug test result, and thereafter the selectee will be subject to drug testing on a random basis as the incumbent of a Testing Designated Position (TDP). Further, all Department of the Navy employees may be subject to drug testing under certain circumstances such as reasonable suspicion and after an accident. All individuals will have an opportunity to submit medical documentation that may support the legitimate use of a specific drug to a Medical Review Officer. An applicant's test results will be provided to the selecting official and servicing Civilian Personnel Office before a final selection is made. A verified positive drug test of a current Department of the Navy employee will also be provided to the employing activity/command. (NAVWPNCENINST 12792.2, 14 Dec 90).

No. 00-014, Supervisory Program Manager, DP-340-3/4, Code 008 - Position is located on the Commander's staff, Environmental Office. The incumbent is the Deputy for Program Management and is responsible for the execution of all NAVWPNCEN environmental programs. In addition to directly supporting the Head of the Environmental Office in providing oversight of all facets of the project office, the incumbent will serve as the lead in coordination and management of the business office, program planning, and budgetary control. The incumbent will be responsible for establishing short and long-range mission objectives and monitoring of the project office's five year plan's objectives to ensure its compliance with growing environmental requirements. The incumbent and the Head of the Environmental Office will work closely to ensure effective, consistent DON policy and program execution to satisfy environ-

mental, natural resources and Navy mission requirements. The remaining time is devoted to administrative matters such as hiring and rating personnel, generating budget elements, assuring implementation of local policy and procedures, meetings, and writing contingency/management plans, risk assessments and memorandums. The incumbent will be involved in monitoring the efforts of contractors and other government activities. This includes but is not limited to, providing technical assistance to contractors, communication regarding interpretation of government regulations, and a close working relationship with regional administrators and agency coordinators. Appropriate contact with all levels of management at contractors, WES-DIV, SWDIV, and NAVAIR, including participation with NAVWPNCEN Public Works Officer shall be maintained to ensure cognizance of all significant activities. The incumbent

will assume all of the project managers duties and authority in his absence. **Job Relevant Criteria:** (1) Knowledge and experience in program management (program planning, budgetary control, contract management, problem analysis, and decision-making); (2) knowledge of NWC personnel, policies, and procedures; (3) knowledge of affirmative action including a willingness to implement EEO policies and goals; (4) ability to influence and motivate others; (5) ability to plan, organize, coordinate, and manage technical projects; (6) ability to communicate both orally and in writing. Incumbent may be required to serve a one year probationary period. Promotion potential is to DP-4, but not guaranteed.

No. 35-019 Interdisciplinary (Electronics/Electrical General Engineer/Physicist), DP-855/850/801/1310-3/4, Code 35B3 - This position is the Deputy Project Man-

ager for the Advanced Interdiction Weapon System Project Office, Attack Weapons Department. The Naval Weapons Center has been designated by NAVAIR as Lead Field Activity for development of the Advanced Interdiction Weapons System (AIWS). Code 35B3 has been assigned as the Technical Design Agent (TDA) responsible for the AIWS program under the cognizance of AIR-540. The project office is responsible for developing and reviewing requirements, chairing the Systems Engineering Support Team (SEST), reviewing and evaluating DEMVAL contractor's performance. In addition, the project office will be responsible for reviewing and monitoring the Engineering and Manufacturing Development (E&MD) contractor when selected. The Deputy Project Manager works very closely with the Project Manager on all aspects of the project office. The position requires a technical management background and interaction with Washington sponsors, major and small contractors, Navy Field activities, and NWC in-house activities and their relationship with outside organizations. The Deputy will also work closely with Washington sponsors and major contractors to resolve issues and provide direction to NWC support task. Specific duties include preparation of project WBS, generating weekly status report, coordinating major in-house reviews (PRCs), participate in ESMD contractor and NAVAIR reviews and coordinate the Program Planned Product Improvement (P3I) efforts at NWC. **Job Relevant Criteria:** Ability to plan, organize, coordinate, and manage a technical program; Ability to influence and motivate others; Knowledge of guidelines and procedures for engineering development, transition-to-production, and production; Ability to communicate orally; Ability to communicate in writing. Promotion potential to DP-4 but not guaranteed.

No. 35-020 Supervisory Interdisciplinary Electronics/Electrical General Engineer/Physicist, DP-855/850/801/1310-3/4, Code 35B3 - This position is Project Manager for the Advanced Interdiction Weapon

System Project Office, Attack Weapons Department. The Naval Weapons Center has been designated by NAVAIR as Lead Field activity for development of the Advanced Interdiction Weapon System (AIWS). Code 35B3 has been assigned the Technical Design Agent (TDA) responsibility for the AIWS program under the cognizance of AIR-540. The project office is responsible for developing and reviewing requirements, chairing the systems Engineering Support Team (SEST), reviewing and evaluating DEMVAL contractor's performance. In addition, the project office will be responsible for reviewing and monitoring the Engineering and Manufacturing Development (E&MD) contractor when selected. The Project Manager works very closely with the sponsor on all aspects of the project office. The position requires a technical background and interaction with Washington sponsors, major and small contractors, Navy Field activities, and NWC team members. The Project Manager will emphasize the management of the NWC in-house activities and their relationship with outside organizations. The Project Manager will also work closely with Washington sponsors, major and small contractors, Navy Field activities, and NWC team members. The Project Manager will emphasize the management of the NWC in-house activities and their relationship with outside organizations. The Project Manager will also work closely with Washington sponsors, major and small contractors, Navy Field activities, and NWC team members. The Project Manager will emphasize the management of the NWC in-house activities and their relationship with outside organizations.

The Deputy will also work closely with Washington sponsors and major contractors to resolve issues and provide direction to NWC support tasks. **Job Relevant Criteria:** Ability to plan, organize, coordinate, and manage a technical program; knowledge of guidelines and procedures for engineering development, transition-to-production, and production; Knowledge of affirmative action principles including a willingness to implement EEO practices; ability to communicate in writing; ability to communicate in writing. This ad will close on August 15, 1991. A one year supervisory probationary period may be required. Promotion potential to DP-4, but not guaranteed.

Reassignment opportunities

This column is used to fill positions through reassignment only. For this reason, the Reassignment Opportunity Announcements are separate from the Promotion Opportunities column in the Rocketeer. Applications will be accepted until the date stated in the announcement. Employees whose work history has not been brought up to date are encouraged to file an SF-171 or 172. All applications 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. 62-028, Computer Scientist, DP-1550-3, Code 62221 - This position is located in the Supersonic Naval Ordnance Research Track

(SNORT) Operations Branch. The branch provides the facilities, personnel, and equipment to operate the (Continued on Page 19)

Experience with private industry beneficial

(Continued from Page 6)

He was able to introduce the company to some new wrinkles in this area. He also brought a group of Xerox managers out to China Lake for a tour of the Center and spent two days showing them, on an unclassified basis, some of the managerial and engineering techniques employed by Naval Weapons Center personnel.

Then a real funny thing happened. Desert Storm began! "All the Xerox folks were watching CNN and saw the Tomahawk missiles flying into Bagdad. And they said, 'Did you have anything to do with that?' And I said yeah, that's one of the systems we work on at China Lake. So, my credibility and the curiosity that people had about me jumped way up!" chuckled the new department head.

"The biggest change in my outlook is on the concept of focusing on the customer. . . until you work in an environment where you feel it in your gut -- it's not real."

Desert Storm had just increased Matt Anderson's work load. He was asked to give additional presentations about management/engineering techniques and how they applied to missiles. An exciting way to end the year assignment with Xerox!

In the middle of March, Anderson returned to China Lake and was immediately put to work by Bill Porter, NWC's Technical Director, assembling a performance

assessment of all the China Lake weapons systems used in Desert Storm. "This tasking turned out to be very fortuitous. It was an excellent way to get back into the mainstream and learn what I had missed out on during my year absence."

In the true spirit of TQM, Anderson spent four months obtaining feedback from the Center's number one customer -- the fleet. He interviewed Navy and Marine pilots, from both east and west coasts, who had flown missions in the Gulf. "I got the straight story and basically our systems worked very well, but not perfectly. So, we've got to find out where we can make improvements," stated Anderson.

Looking back, the department head observed some very valuable lessons about TQM from his experience with private industry. Three major points learned were; one, you must always focus on the customer; two, you have to constantly be thinking about how to do things better; and three, management must empower the people and let them be innovative. This way they feel comfortable enough to tell management the truth when something doesn't work.

"The biggest change in my outlook is on the concept of focusing on the customer. You can read about it in all the text books and get sort of an academic understanding, but until you work in an environment where you feel it in your gut -- it's not real. The Xerox employees come to work every day with the fundamental understanding that they better put in their best effort each day or the company isn't going to survive. . . the competition is out there working just as hard," reflected Anderson.

As far as management and engineering techniques go, the experience with Xerox brought to focus in Anderson's mind the concept of concurrent engineering. Xerox is heavily involved with concurrent engineering -- which

"We here at China Lake are not behind the times and are off to a good start. But, we can't quit. . . we still have a long way to go!"

means getting the manufacturing engineer involved with the early design stages of a product. This procedure ensures engineers don't end up finding out manufacturers can't make the product or it's too expensive to be made in later stages. Anderson anticipates incorporating this concept into weapons systems being developed in the Engineering Department.

Anderson's new Engineering Department head position evolved from his experience with Xerox. Sitting in his new office he feels very comfortable with the way operations have been handled within the department. He commented, "I was very pleasantly surprised when I took over that a lot of these TQM principles were already in place. That says a great deal for the managers here. They've already taken extensive training and instituted many of these procedures to empower the people. We here at China Lake are not behind the times and are off to a good start. But, we can't quit. . . we still have a long way to go!"

For those of you who are wondering if he ever found his van, the answer is yes, but, unfortunately, it was a little tattered and the only thing left.

President Bush approves base closure and realignment list

WASHINGTON (NNS)--President Bush approved the Defense base closure and realignment commission's list of 79 facilities recommended for closure or realignment July 10, including 33 from the Navy and Marine Corps.

The President forwarded the list to

Congress, which has 45 working days to enact a joint resolution to disapprove the recommendations in their entirety before they take effect.

If approved by Congress, closure or realignment will commence within two years, with completion no later than six

years after approval.

The 17 Navy and Marine Corps activities recommended for closure by the commission include: NAS Chase Field, Beeville, Texas; Hunters Point Annex, San Francisco; NAVSTA Long Beach; Navy Shipyard, Philadelphia; NAVSTA Sand

Point, (Puget Sound), Wash; Marine Corps Air Station, Tustin, Calif.; and nine other engineering and fleet support activities.

Navy facilities recommended for realignment include Midway Island Naval Air Facility and 15 engineering and fleet support activities.

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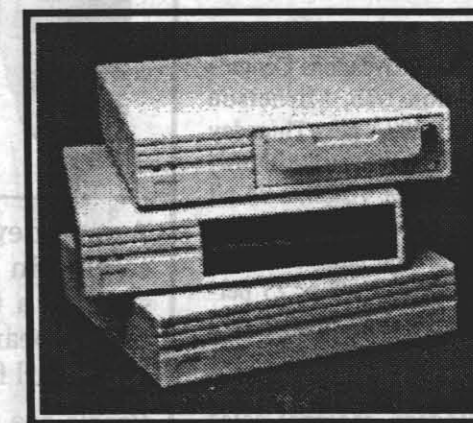
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Code 32 develops own TQL training effort

Eight Center employees received recognition recently for their contribution to the Total Quality Leadership (TQL) effort in the Ordnance Systems Department. Seven are members of the Department: Steven Fowler, Skip Bennett, John France, Jim Bryant, Mark Behrends, Eric Saiken and Sirell Lane; and one, Monica Wildman, is with the Office of the Comptroller. This group of people, led by Steve Fowler, used TQL principles to develop a department specific course on TQL and then presented the course to all of the department's employees and a number of other Center employees who work closely with the department. The class taught from April to June, significantly increased the level of awareness and knowledge of TQL principles. Dan Goss, department head, recognized the accomplishments of this group by awarding them the first issue of a new Ordnance Systems department plaque intended to recognize significant quality improvement accomplishments.

Ordnance Systems Department management decided to develop a department specific TQL course for all department employees during a management retreat last year. After a lively discussion, the managers decided that it was mandatory for them to begin a process of continuous improvement in order to thrive in today's environment and that a department specific course was the best way to make rapid progress. As Dan Goss told each class, "People, often equate change with problems and there are enough problems for us in the current environment to warrant this view. But, there are also some interesting challenges and, I believe, some real opportunities for the department in this environment." The managers in the Ordnance Systems Department recognize that miraculous changes will not come overnight. However, they do believe substantial improvements are possible and mandatory to survive and prosper.

Popular cellular phones limited by Center policy

Cellular phones have become a popular item and a number of cellular phones are used aboard the Naval Weapons Center (NWC), there is some safety concern over the electromagnetic radiation hazards present when operating the phones in an ordnance area. According to the Naval Surface Warfare Center (NSWC) Dahlgren, cellular phones should be categorized the same as common hand-held transceivers. Therefore, a separation distance of at least 25 feet is required between cellular phones and ordnance.

Personal safety considerations are the same as those followed when operating any hand-held radio.

Remember -- when on-Center, private radio transmission is prohibited without prior approval by Command.

By Code 2405

CalComp demo set in Viz Lab

CalComp representatives will be at the Naval Weapons Center's Visualization Lab, Michelson Lab Room C208A next Thursday (Aug. 8) to demonstrate DrawingCard Chroma Vision, a 24-bit true-color display system with acceleration. The larger 21-inch, two page display offers 25 percent more viewing area than a 19-inch monitor. It features 72-dots per inch display.

Jeff Rogers, regional sales manager will demo the display system throughout the day. For advance information on the demo, or for more information on CalComp, call 1-800-225-0065 and ask for Sue. The demo is sponsored by NWC Code 2724.



CODE 32 TQL--Members of the Ordnance Systems Department (Code 32), with help from the Office of the Comptroller (Code 28), recently led development of department-wide Total Quality Leadership coursework. Taking part were, from left, Sirell Lane, Steve Fowler and John France of Code 32 and Monica Wildman, Code 28. Dan Goss, far right, head of Code 32 thanked the team for their efforts. Missing from the photo are Jim Bryant, Skip Bennett, Mark Behrends and Eric Saiken. For more information, call Nelta Vechione at NWC ext. 7200.

Navy seeking reserve sailors who eye career

Part-time jobs for veterans who were recommended for reenlistment are available with excellent pay and outstanding benefits.

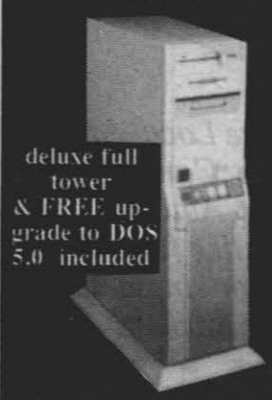
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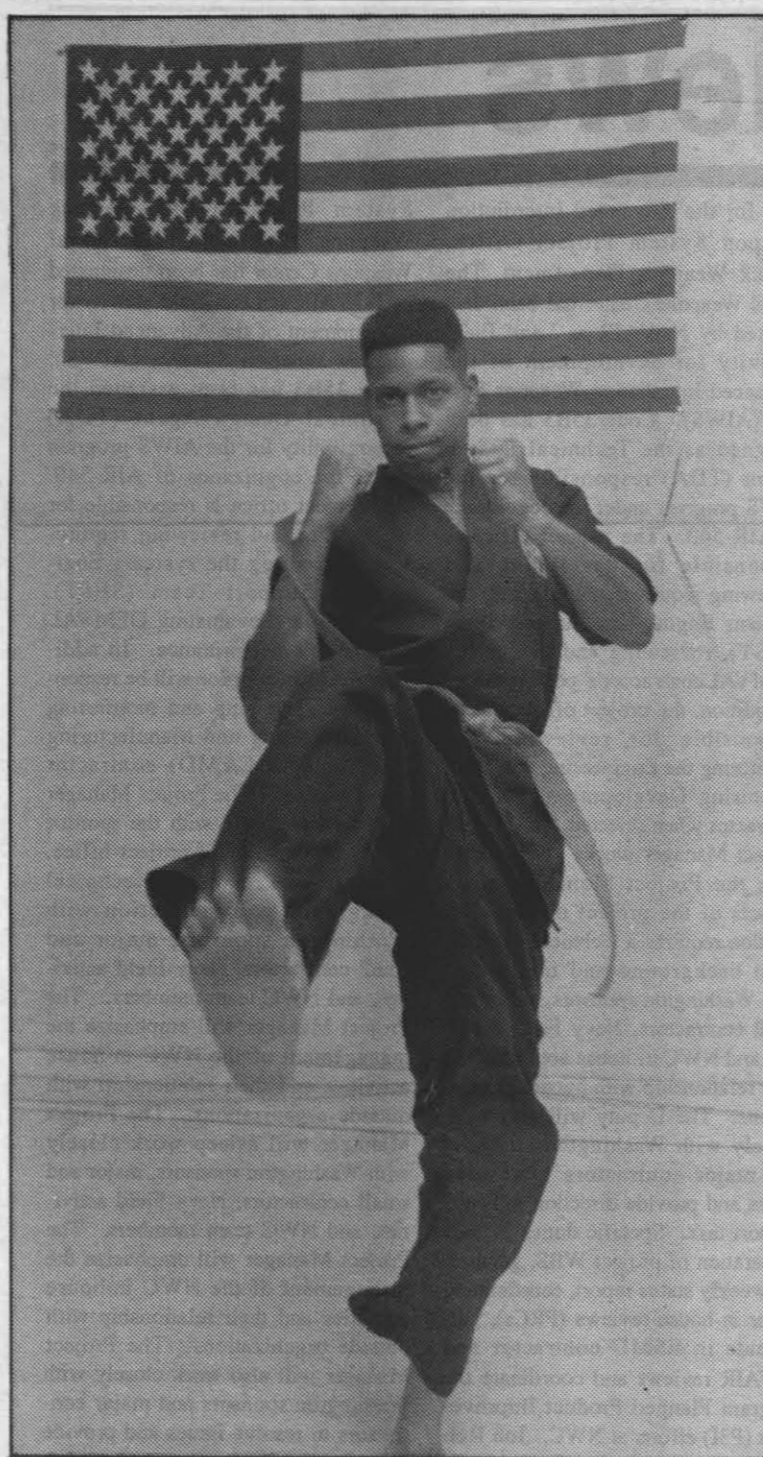


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TAKE THAT! -- AD2 Leslie Lewis concentrates as he practices Tae Kwon Do at the NWC gym annex. Due to his hard work and natural abilities, Lewis is now winning orange belt competition after only three and a half months of training.

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Natural ability, hard work pay off

(Continued from Page 16)

for the upcoming Green Belt test. "It's hard," he said. "The instructor looks at form, stances, punches, kicks and focus."

During the test, Lewis will face other orange belts and even higher. Lewis noted the instructor could invite black belts to test him. "Gunny doesn't give us any slack," he said. "If we pass the test, it

will be because we have earned it. If we don't pass it, we have only ourselves to blame."

Lewis plans to work hard at his martial arts so he can become a black belt as soon as possible. His ultimate goal is to represent the United States in the Olympics. Can he do it? If determination, natural ability and the willingness to give it his all is any indication, he stands a good chance!

Registration, tryout dates set for Fall Ball

Registration and tryouts for Fall Ball will begin next week. Registration will be held from 5:30 to 7:30 p.m. on Monday through Wednesday, August 5-7. Tryouts will be held August 8 and 9 from 5:30 to 7:30 p.m. on the NWC Bronco Field located on the corner of Richmond and King streets. All players, regardless of previous standings or experience,

must try out.

Cost is \$25 for one child and \$40 for two or more children from the same family. A \$30 uniform deposit, per family, is also required.

For more information, call Jerry Vanderslice at 446-5712; Rick Booth, 375-3309; or Laura Craig, 446-1540.

Thirteen-inch trout biting at Big Pine Creek

Big Pine Creek is releasing trout 13 inches and longer at the upper end near Glacier Lodge, notes the Bishop Chamber of Commerce. Salmon eggs or powerbait are the best bait, while the Panther Martin lures are doing well for trollers.

Lakes in the Bishop area were stocked recently and reports say flyfishing is great at North Lake. Intake 2 has seen lots of action for those using floating powerbait. South Lake has reported a run on browns (14-18 inches).

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Sports

AD2 Leslie Lewis takes first place in orange belt karate competition

Three and a half months ago, AD2 Leslie Gerard Lewis started studying Tae Kwon Do. On July 21, he brought home the first place trophy for sparring in the Randy Edwardson Open Karate Championships' Orange Belt, Heavyweight Division.

Like any beginner, the aviation jet mechanic, who works in the Naval Weapons Center's Power Plant, started as a white belt. Unlike most, he quickly graduated to orange belt competition. Early next month, he'll try for a green belt.

According to his instructor, Gunnery Sgt. Mike Wood, a member of the Marine Aviation Detachment at China Lake, AD2 Lewis shows a remarkable dedication to the martial arts and has a natural ability.

How does he do it? Lewis says he works hard, spends lots of time studying tapes made at practice and attends Wood's Tae Kwon Do class at the NWC Gym annex five days a week.

After only one and a half months of training, Lewis entered his first competition and earned first place in white belt competition. He enters as many competitions as he can, learning from each and applying it in his next bout.

At the end of August, Lewis will be one of the

four competitors from China Lake in the Labor Day Kick Off Tournament in San Diego.

Lewis admits he does get nervous before each tournament. "I have butterflies and get light-headed before a competition because I don't know what to expect," he said. "I have learned to always expect the unexpected and to never underestimate my opponents."

The fact his instructor came with him to the competition also helped. Lewis noted politics play a part in any competition and if a competitor doesn't have someone with him to take care of those details, concentration is lost, which is a sure way to lose the competition.

Like many competitors, Lewis is superstitious and has his own lucky routine. Before each competition, he calls his two daughters, Victoria and Cherylle, who live with their grandmother in Texas. "I couldn't do it without them wishing me good luck," he said.

Before getting into the martial arts, Lewis was an avid weight lifter. While he's not as active as he was before, he still uses weights to tone muscles.

Lewis noted he will need all his muscles toned (Continued on Page 17)

Funding cuts affect military

Due to a decrease in funding for Fiscal Year 1991, the athletic director, from the Morale, Welfare & Recreation Regional Recreation Services, Naval Base, San Diego, has decided to cancel participation in some Southpac activities until further notice.

Canceled events are: Chess Conference Championships, July 15-19; Surfing Invitational, July 27-28; Swimming & Diving, August 24-25; Triathlon, Sept. 7; Skeet & Trap, Sept. 18-20; and the Racquetball Invitational, Sept. 30-Oct. 4.

The decision to cut these activities was made due to a letter written to his department by the Department of the Navy, Naval Military Personnel Command. The letter states, in part "The Naval Military Personnel Command is committed to reduce, wherever possible, the size and scope of our general and operating expenses. . . . With less funds available, the intent is to enable all regions to maintain a minimum core program consistent with the goal of active duty participation in at least one higher level of competition above the local base/ship level. . . . Major team sports and those with high intramural interest at member bases should be first priority."

For more information, call Elaine Amell, NWC ext. 2571.

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Pilots' group offers August 8 seminar

Using the Airspace will be the topic of discussion during the Accident Prevention Program's Aviation Safety-Education Seminar being held Thursday, August 8, at the NWC Station Theatre. The program will run from 7 to 9:30 p.m.

Information is essential to safe flights in our complex airspace. A comprehensive review of the complete airspace system will be presented. Extra emphasis will be placed on operations in Terminal Control Areas, Airport Radar Service Areas and proper communication techniques.

The film, *Pilot Operations at Nontowered Airports*, will be shown. It presents information on CTAF radio procedures, FAA regulations, midair collision avoidance procedures, traffic pattern hazards and airport courtesy.

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MEDALS assists logistics agency users

Since October, 1988, the Defense Logistics Service Center (DLSC) has used the Military Engineering Data Assets Locator System (MEDALS) to help customers. Now, officials at DLSC are releasing the improved version of the MEDALS database.

This database houses technical data asset information. A data asset is a blueprint, specification or technical drawing found in a

data repository. No security drawings, nuclear weapons or communications gear are listed.

The computer program identifies the repository location of a data asset. These 24 repositories, are Defense Logistic Agency Supply Centers, Navy, Air Force, Army and Marine Corps centers.

This package helps users develop or prepare technical data packages by assisting in research-

ing procurement of spare parts, design control and value engineering. The system helps cut storage costs and prevents duplicate purchases of engineering data. A stand-alone system, MEDALS can interface with systems such as the DLANET and DDN network.

Authorization for accessing MEDALS requires approval of the headquarters of a service-

e/defense agency or DLA. After authorization, the customer receives a user code/password assignment, not a specific terminal. If you are a LOGRUN user and want access, call DLSC-JCB at Autovon 932-4754 or FAX (616) 961-4725. If you do not have access to DLSC remote terminal and you want MEDALS, call your service or agency focal point.



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Wellness Corner



The Naval Weapons Center's Wellness Program sponsors a blood pressure monitoring program. The following China Laker have been trained to take blood pressure readings: Michelson Lab--Gerard Kersten, Room 149B, NWC ext. 3302. Building 33-- Maragret Porter, Room C9, NWC ext. 2137. CLPL Area--Sandy Brown, Building 151, Room 19, NWC ext. 7586. Building 00003--Cal Kato, Room 520, NWC ext. 3664. Personnel Building -- Jerry Stein, Room 204, NWC ext. 2348. RCC Area -- Lynn Becker, Building 31454, Room 259, NWC ext. 6010. TID --Reg Read, Room 106, NWC ext. 3346.

The Wellness Program offers a class later this year to train additional people in taking blood pressure readings. Interested employees can call NWC ext. 2468 for more information.

You're traveling on business or vacation. You're eating the typical high-fat, high-cholesterol foods. And, you're not exercising. It doesn't have to be this way. With

a little savvy, you can travel in style, enjoy local cuisine, and still keep a healthy lifestyle.

When you choose your menu - whether at home or on the road - follow the American Heart Association's dietary guidelines. They're for healthy people trying to prevent heart disease.

The AHA suggests breaking down your diet into a little more than half of the calories from carbohydrates, a third or less from fat and the rest from protein. Limit cholesterol intake to less than 300 milligrams per day, and keep sodium intake to 3,000 milligrams (about a teaspoon of salt) or less per day. If you drink alcohol, limit your daily intake to no more than one or two ounces. An ounce of ethanol (pure alcohol) is contained in two ounces of 100-proof whiskey, eight ounces of wine or 24 ounces of beer. The AHA also suggests eating a variety of foods.

It's a matter of choices. Margarine instead of butter. Fish and poultry more often than red meats, and lean red meats more often than fatty ones. Choose low-fat dairy products such as skim and one-percent milk, low-fat yogurt and low-fat cheese.

Here are some "Rules of the Road" for how to stay fit and healthy:

1. When flying, get up and move around. This improves blood circulation and could prevent a blood clot in your legs.
2. Order your airline meals in advance. Most major air carriers offer special low-fat, low-cholesterol meals.
3. When on a flight, drink mainly non-alcoholic drinks, and go easy on the alcohol. Because you may get dehydrated, it's good to drink liquids every hour. This also will force you to get up once in a while.
4. Choose restaurants with healthful alternatives to rich foods and sauces. Many ethnic foods such as Oriental or Mediterranean offer good taste with relatively little saturated fat and cholesterol compared to what you'll find in haute cuisine.
5. Choose a hotel with a good exercise facility. Then use it every day if only for a couple of laps around the pool or indoor track.
6. Walk wherever possible: up stairs, sightseeing, shopping, to a restaurant or meeting. The exercise you'll get makes a difference in how you feel.



Never forgive an addict. That's somebody else's job.

Forgiveness calls for higher powers; you're just the boss. Your job is to help. And to do it in the here and now. And that's tough. Because you'll have to tell a decent person to get well or get out. You'll have to deliver an ultimatum to somebody who's already in trouble. That's what it takes. No one has ever sweet-talked an addict into treatment. Once you've done the tough part, there's help to go to the next step.

1-800-843-4971 is the National Institute on Drug Abuse helpline for managers and CEOs. Call Monday to Friday, 9:00 a.m. to 8:00 p.m. Eastern Time. They'll refer you to professionals who can help your company set up drug education, employee assistance and treatment referral programs. That's how you can start helping -- here and now.

Sponsored by the NWC Employee Assistance Program, NWC ext. 2408

Partnership for A Drug Free America

MWR

Fast action makes youth basketball fun to watch

Superb shooting skills and fast action kept the fans attending last week's Naval Weapons Center's Youth Basketball League games on their toes. Jaime Rugg, a Super Sonics team member was the week's high scorer with 24 points.

Rugg led his Division II team to victory against the Kings last week when he shot in nine field goals and six free throws. Other scorers in the win were Peter Beaudin, who shot in eight points, Ryan Katzenstein, who shot in six points and Bryan McCollum who put in two points.

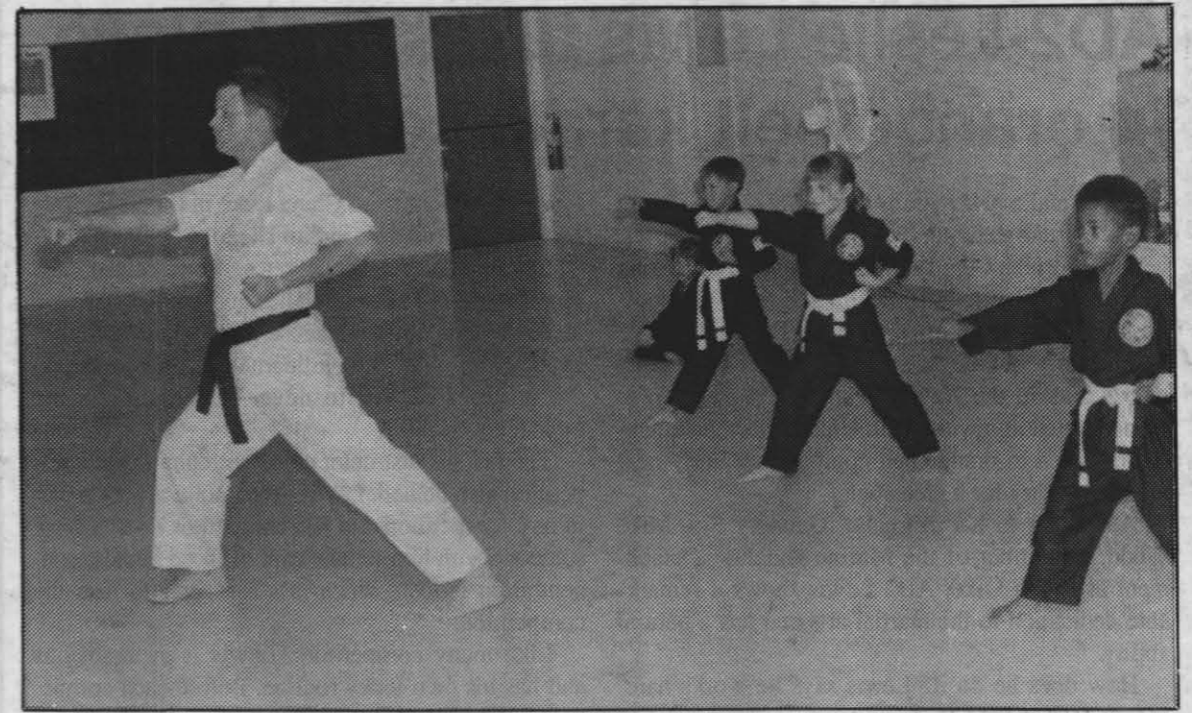
Despite a good team effort, the Kings couldn't stop the Super Sonics. Mark Norlund tallied 19 points, while Derrick Mason put in 10. Other scorers in the loss were Daniel Davis (4) and Kenny Thompson (2).

In Division III action, the Rockets upset the Cavaliers 55-27. Eighteen points by Daniel Hartley, 10 by Lenny Winterly and nine by Jay Norlund shot the Rockets to victory. Other scorers in the win were Sommai Otto (8), Daniel Peoples (4), and Angie Thomason, Jonathan Davis and Jamie Rugg, who shot in two points each.

Tiffany McCollum and Andrew Huston managed to score nine and eight points respectively, but they couldn't prevent the loss. Other Cavaliers' scorers were Matthew Girardot (4) and Anton Kiren, Eddy Crawford and Jeff Blanchette, who each tossed in two points.

The Spurs dominated the game against the Bullets, defeating them 70-29. Twenty-one points by Becker Brett and 10 each by Jason Rollinson and Thompson gave them a solid edge. Baskets by Tiffany McCollum, Chris Maki, Eric Kline and Matthew Girardot secured the victory. Despite great board playing and rebounding by Steve Krum and Melissa Ames, the Bullets couldn't slow down the Spurs. Josh Crawford and Jim Critchfield were top scorers in the loss, shooting in nine and eight points respectively. Other scorers were Mike Terry, Jeff Blanchette, Jay Norlund, Lenny Winterly and Daniel Peoples.

For a nutritional breakfast, don't forget to check out the snack bar at the NWC Golf Course.



STARTING OUT YOUNG - Children are learning the art of self-defense in Tae Kwon Do classes held at the NWC Gym annex. Sponsored by the NWC Youth Center, the classes teach self-discipline and the proper way to kick, block and punch. Photo by PH3 Cary Brady

Tae Kwon Do class teaches self-defense

How many children can really defend themselves? At least 15 are learning to in Gunnery Sgt. Wood's Tae Kwon Do class for children at the Naval Weapons Center's Gym annex. Monday through Thursday, children from 5 to 11 years old are learning how to kick, block and punch.

"We're just beginning to put the kicks, blocks and punches together for some basic self-defense techniques," said the instructor. "The kids are working hard on learning proper form and the self-discipline

needed to master the martial arts."

Eventually, Wood hopes to enter the children in competition. On August 22, Wood, some of his adult students and the children will put on a demonstration at the Youth Center, starting at 9 a.m. The Ninja Turtles will also be there showing their moves. Don't miss out; the public is invited to attend.

For more information, call the Youth Center at NWC ext. 2909.

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Drug Abuse: Abusers do not always fit the stereotypical image of a druggie

Everyone knows the image of the stereotypical alcoholic or drug abuser, i.e., as a strung-out, dead-beat, skid row bum. Unfortunately, the stereotype often serves to blind us to the existence of a co-worker's drug or alcohol problem. Not all people with a substance abuse problem fit the stereotype. For example, a serious cocaine user is typically:

- well-educated (14 years of education),
- employed (77 percent),
- well-paid (37 percent earn over \$25,000),
- engaged in illegal activities to support the drug habit (56 percent).

Even though billions of dollars are being spent to prevent substance abuse in this country, nearly every worker knows someone who uses drugs or alcohol on the job. If your co-workers are using drugs or alcohol on the job, there are three good reasons why you should be concerned:

- (1) Your health and safety may be at risk.
- (2) Drug and alcohol abuse costs you money.

(3) Drugs and alcohol create a negative work environment.

Workers at the Naval Weapons Center have a right to a safe work environment. But, your health and safety may be at risk when someone is using drugs or alcohol on the job.

Think of it this way: Would you want to be on a weapons test with a co-worker who is using cocaine? Would you want to be

workforce are 3.6 times more likely to injure themselves or another person in a workplace accident. The Employee Assistance Society of North America indicates that up to 40 percent of industrial fatalities and 47 percent of industrial injuries can be linked to alcohol abuse and alcoholism.

Your safety - and perhaps even your life - could be threatened by



on travel sharing a car with a co-worker who is high on alcohol or drugs?

Recent studies indicate that typical drug users in today's

co-workers using drugs and alcohol.

According to the National Institute on Alcohol Abuse and Alcoholism, drugs and alcohol on

the job cost society an estimated \$102 billion a year. The U.S. Chamber of Commerce claims that drug abusing employees incur 300 percent higher medical costs and benefits. Since most of this cost is passed on to you in the form of higher health insurance rates or in the prices you pay for things, drug and alcohol use on the job costs you and your fellow workers.

Drug and alcohol abuse is not just an employer's problem; it directly affects your pocketbook. Workers who use drugs and alcohol don't function at their full potential. Drug-using employees are three times more likely to be late for work and 2.5 times more likely to have absences of eight days or more.

Absenteeism among problem drinkers or alcoholics is greater than normal. If your fellow workers don't come to work, you may have to do their jobs in addition to your own. How many times has your work been adversely impacted by the undependable fellow worker who has frequent unscheduled absences.

Everyone has a role to play in getting a job done. When fellow workers use drugs or alcohol, others may have to do their jobs.

No matter what your position, is there something you can do to fight drug and alcohol use on the job? A starting point is learning the facts about substance abuse and how the abuse of drugs and alcohol can affect your life. You can encourage and support your supervisor to help co-workers who have drug or alcohol problems. You should not attempt to counsel troubled co-workers. Free professional counseling is available to NWC employees through the Employee Assistance Program. Additionally, you should not "enable" a troubled co-worker to continue using alcohol and drugs by:

- ignoring the problem,
- lying or covering up for a worker in any way,
- doing the worker's job,
- lending money or offering other financial assistance to support substance abuse.

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Thompson, McLean awards luncheon

Individual achievement and individual creativity are recognized when Naval Weapons Center employees receive the L.T.E. Thompson and William B. McLean Awards. The awards luncheon honoring the 1991 recipients is set for Tuesday, Aug. 6, in the Seafarer Club. These are the Center's highest forms of recognition for individual efforts.

Reservations for the awards lunch can be made by calling NWC ext. 2018 or 2592 no later than 4:30 p.m., Friday, Aug. 2. The menu is chicken salad, served on a croissant, fresh fruit, ice tea or

coffee. Lunch is \$6.50 per person.

The L.T.E. Thompson Award, the Center's highest form of recognition, was established in 1956. This award recognizes outstanding individual achievements.

The William B. McLean Award, established in 1968, honors employees for their outstanding creativity in furtherance of the Center's mission through significant inventions.

For more information on the awards or the luncheon, call Mia McKenzie at NWC ext. 2592.

Coyotes seen in Center housing area

HOUSING SAYS... Coyotes have been observed in the Naval Weapons Center's housing area. Residents are cautioned not to leave their pets' food sitting out

for any extended period of time. It is also advisable to keep garbage cans secured. Because of lack of food in the desert, the coyotes might attack small animals. All Center residents should be aware of the potential danger posed by these wild animals and take the necessary precautions around the home.

EAP office offering debt counseling

Having problems paying the bills? Don't let them snow you under. The NWC Employee Assistance Office has arranged for a representative from the Consumer Credit Counselors of Kern County, a non-profit community service agency from Bakersfield, to come to the Naval

Weapons Center to offer debt counseling. Your financial situation will be reviewed by a trained counselor. This service is being offered under the Employee Assistance Program free of charge. Just call NWC ext. 2574 to arrange for an appointment.

If you can't do something

about your bills now, you may be in trouble. The trouble can spill over into your work and family life. You can receive late payment notices, letters from attorneys and unpleasant telephone calls.

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DoD investigates using propfan propulsion technology for future generation standoff weapons systems

(Continued from Page 1)

Overall sponsorship of the effort came from the Cruise Missile Project through NWC's Standoff Weapons Office in Code 35 as part of the now-cancelled LRCSW pro-

pitch propeller blades, the placement of the engine in line with the missile airframe and the placement of deflectable control fins either in front or aft of the propfan blades. Also, any military application would require

to compare aerodynamic and performance characteristics between the DoD-NASA model and the Tomahawk.

Krzycki recalls, "we were well into the assembly of the model in the wind tunnel test

into engineering format output in the wind tunnel coordinate system and at model instrumentation locations from use in design and data analysis work.

"Dave Whitefield and Frank Mansfield did a brilliant job for us," notes Krzycki. "The unsteady nature of the flow through the counter-rotating props and the examination of the complete missile system with wings and deflected control fins was an outstanding piece of work." He added, "Frank's post-processing took what I call 'pretty pictures' and put them in a format engineers can use."

A contract with Analytical Methods, Inc., was awarded to see if a simpler aerodynamic model could handle the propfan missile requirements. The contractor did analysis of the same missile configuration as used in the CFD work, but using the Vortex Separation Aero Prediction Program (VSAero). Larry John of the Aerodynamics Branch, also ran the VSAero code on NWC computers. VSAero calculates the non-linear subsonic aerodynamics of arbitrary shapes using a panel method. The computer model resulting from VSAero work is simpler and less computationally demanding version.

Krzycki said, "a comparison of results from different levels of analytic modeling with the wind tunnel experimental efforts was a primary goal of the project." He added, "It's rare for a complex flowfield CFD analysis of a complete vehicle to be duplicated in hardware, tested and results available for code validation."

"The wind tunnel model was an exceptionally complex and an excellent product," said Larry Strutz, the project's technical manager and head of the Aerodynamics Branch in the Attack

Weapons Department. The model was built by MicroCraft, Inc., of Tennessee to government specifications and concept sketches.

"The propeller hubs, were a real design challenge," commented Strutz. "They rotated at speeds in excess of 15,000 revolutions per minute with high stresses on the many openings and recesses required for prop mounts. In fact, the final test rotation speed was 20,100 RPM," he added.

Extensive instrumentation on the powered model included data from the hubs and props. Strutz noted the telemetry system in each hub used small transmitters, operating in a steady-state 16,000 g gravity field,

to broadcast the data to an antennae about 40 thousands of an inch away on a static part of the model. "It's called a wireless data transfer system," he added.

Tech Development Co. of Dayton, Ohio, designed and built the air turbine motor to drive the propeller hubs. This is a six-stage turbine. Main air flowing through the first three stages powers the forward props in one direction. The same air, flowing through the final three stages powers the aft rotor in the opposite direction, straightening out the airflow before it passes over the control fins aft of the props. The aft rotor could be differentially controlled for speed matching. Krzycki noted, "we mostly operated the air turbine at above 400 horsepower - it's a real hummer."

For the wind tunnel test, the large powered model was installed in a 14-foot transonic tunnel at the NASA Ames Research Center. Krzycki noted one reason for joining with NASA on the project was to get access to NASA expertise gained from tests of turbo-prop engines and earlier tests of propfan aircraft model engines. He also said Ron Smith, NASA Ames project manager for the test, made especially valuable contributions to the project. "Ron's experience and enthusiasm were absolutely essential to the success of this project. Powered model design and testing is much more complex and demanding the normal aerodynamic testing."

A series of tests were done before the first powered test of the full-up model. This preliminary work included testing in a build-up fashion (that is, body alone, then with wings, then with control fins, etc.) in two non-powered configurations, providing baseline data for comparison with later powered tests.

Next, a series of safety-related tests were run and finally, a series of power runs to find the right pitch setting on the two rows of blades. Two different propeller designs were tested. Both were designed and built by NAS Lewis Research Center personnel in Cleveland, Ohio. The blades were designed specifically for the model configuration and for high efficiency and high speed. The blades made use of the extensive NASA data base from the propfan aircraft work (for which NASA and industry won the Collier Trophy) and a continuing propeller research program. They were made from layered composite material for safety reasons in the event of a thrown blade (which did not happen).

Jim Netzer, Larry Strutz and Larry John shared wind tunnel duty along with Krzycki. NWC Aerodynamic Branch personnel operated a computer data analysis center in the wind tunnel control room for on-site analysis capability to complement the more extensive software capabilities for the data which they had developed at NWC. Other China Lakers involved in the test were George Fields, Don Whiteman, Jr. and Johnny Sidebottom of the Aerosystems Telemetry Technology Branch, who supported instrumentation and telemetry operations during six months of rotation duty at the wind tunnel.

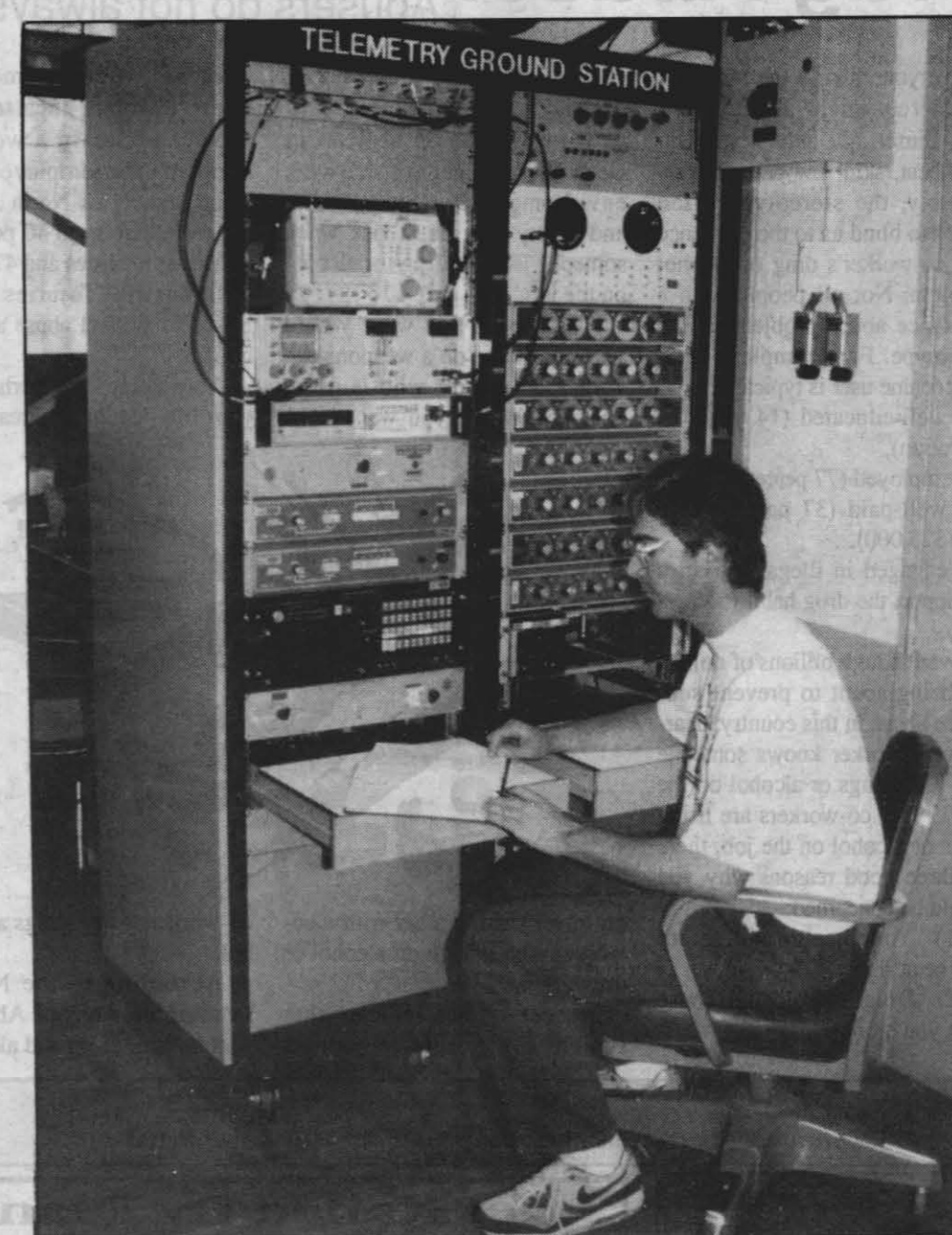
Test parameters included varying the airflow from Mach 0.45 to 0.8; an angle of attack ranging from -4 degrees to +16 degrees, control fins in front and aft of the props; two prop designs and non-circular airframe test using chines bolted to the circular body. "LRCSW airframe contractors helped us decide on the chines shape," noted Krzycki. He added, "non-circular body tests were

important because future cruise missile may have shaped airframes for stealth purposes."

Instrumentation data was received from the wind tunnel, the missile model, control fins, model base, air turbine engine, motor nozzle exit, propeller hub and propeller blades to mention just some of the instrumentation points.

Krzycki said he had tremendous cooperation from all Center employees involved in the effort. He also commended Larry Strutz, for his original work on the project and his support as technical manager. Other Aerodynamics Branch personnel who participated, some as part of a JP tour, were Clint Housh, Arun Jain, Mike Salazar, Garrett Stone and Art Wu.

Jack Minton, on the staff to the Ordnance Systems Department's associate department head, did the PERT charts which



GROUND STATION—Don Whiteman of NWC operated a telemetry ground station on the receiving end of hardline signals from the propfan missile model's TM system. Data recorded included thrust and propeller strain gage signals from each prop hub. NWC Photo by Leroy Krzycki

allowed Krzycki to maintain control of the complex nation-wide project. "Jack is just down the hall from me and his expertise and knowledge of complex project interior structuring was of great help," noted Krzycki.

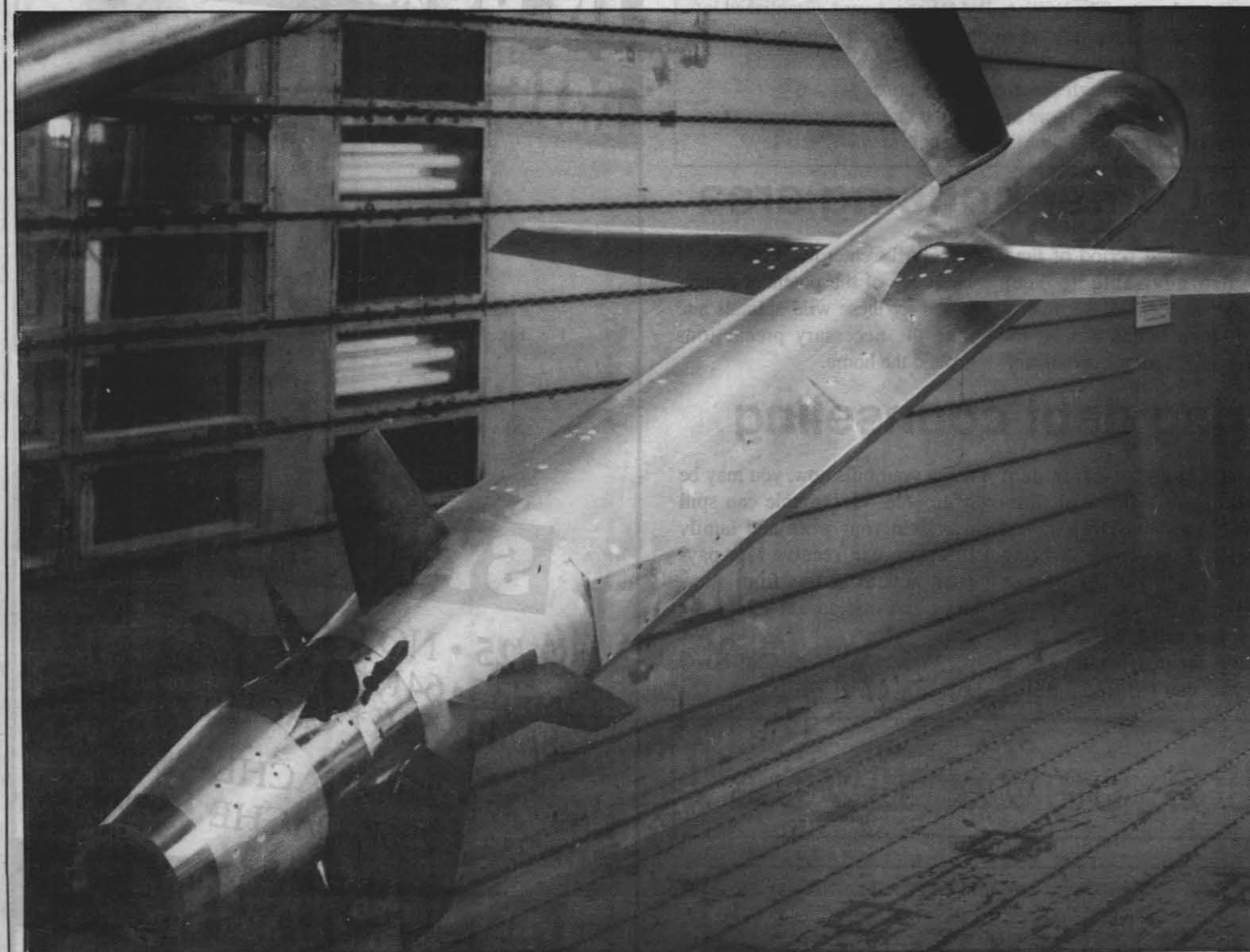
The contribution of Bill Kirkpatrick of TID's Video Projects Branch, was also praised by Krzycki who noted, "Bill did an incredible job of providing single-handed video coverage of the project's many and varied activities ranging from laser holography at NASA Lewis to the challenges of the 14-foot wind tunnel at NASA-Ames. Besides, I loved his fishing stories. The project video is now being edited by Bill Carroll of the Video Projects Branch."

The bottom line, says Krzycki is, "data analysis to date indicates counter-rotating propfans are a very attractive propulsion technique from cruise missile in terms of propulsive efficiency and very beneficial on vehicle aerodynamics. The propfans appear to accept a wider range of flow distortion and off-design operation from all the different configurations tested, while maintaining

high efficiency." He added, "there is still a great amount of data to be processed and analyzed by the Aerodynamics Branch and the NASA Lewis personnel."

For Leroy Krzycki, completion of the Propfans Missile Interactions Project marks the end of a 32-year China Lake career. It's a career that includes a world first in rocket magnetohydrodynamic electric power generation, magneto-fluid experiments with the country's largest (at the time) superconducting magnet and pioneering work in very high angle of attack thrust vector control (VTC) tactical flight vehicles. (He originated and managed the Project QuickTurn advanced development flight demo at NWC from 1968 to 1972. That became the Agile missile airframe and propulsion steering.)

He's back in the same room in the same building at the China Lake Propulsion Lab (CLPL) he began in 1959. He says he's come full circle and its time to retire to his home and shop on the Oregon coast. One of his first retirement projects, a radio-controlled, variable-thrust rocket-propelled hydroplane!



MODEL—In the NASA Ames wind tunnel, a propfan model awaits testing. Photo by J.T. Heineck, NASA Ames

gram. While the weapon system itself was cancelled, Krzycki noted, the propulsion project, already in wind-tunnel test phases, was continued as a technology investigation.

Propfan engines produce thrust by moving very large quantities of air external to the engine's combustion chamber and the vehicle's airframe, with a corresponding large gain in efficiency. Additional efficiency is obtained by counter-rotation of the two rows of props. The second row of props in this engine straighten the airflow from the first row, thus reducing swirl and associated drag.

DoD isn't the only entity interested in the technology. NASA and commercial aircraft builders and turbofan engine producers have done extensive investigation of the propfan engine. Indeed in the late 1980s, two aircraft powered by propfans flew as test beds. One even flew across the Atlantic for an international air show.

However, while fuel efficiency was dramatically demonstrated, not enough commercial airline support was generated for full-scale qualification and production.

Krzycki noted the NWC-led use of a propfan engine in a missile is very different from its use on aircraft. Major differences include the use of fixed-pitch vice variable-

props to fold so missiles could be carrier in launching canisters or rotary launchers.

A joint Navy and Air Force coordination team selected the model configuration for analytical studies and experimental testing.

The selected configuration represented a 55-percent scale general LRCSW with a simple, circular cross-section which could be easily modeled and understood. "We were laying the first data base of propfan missile interactions and we needed something realistic but simple," Krzycki noted.

The model's powerplant was a 365-horsepower counter-rotating air turbine. Each propeller hub mounted six non-folding composite props with manually adjusted and locked pitch. Control fins were instrumented and could be mounted forward or aft of the props. Two chines could be attached to the airframe to make it non-circular. The wings could be mounted in high, low or mid positions on the airframe and spacing between wings and control fins could be varied by changing fixed-length body sections.

The model was 12.1 inches in diameter, about 130 inches long with a wing span of about 55 inches. The resulting model resembled a Tomahawk cruise missile at about 60 percent of full size. This allowed researchers

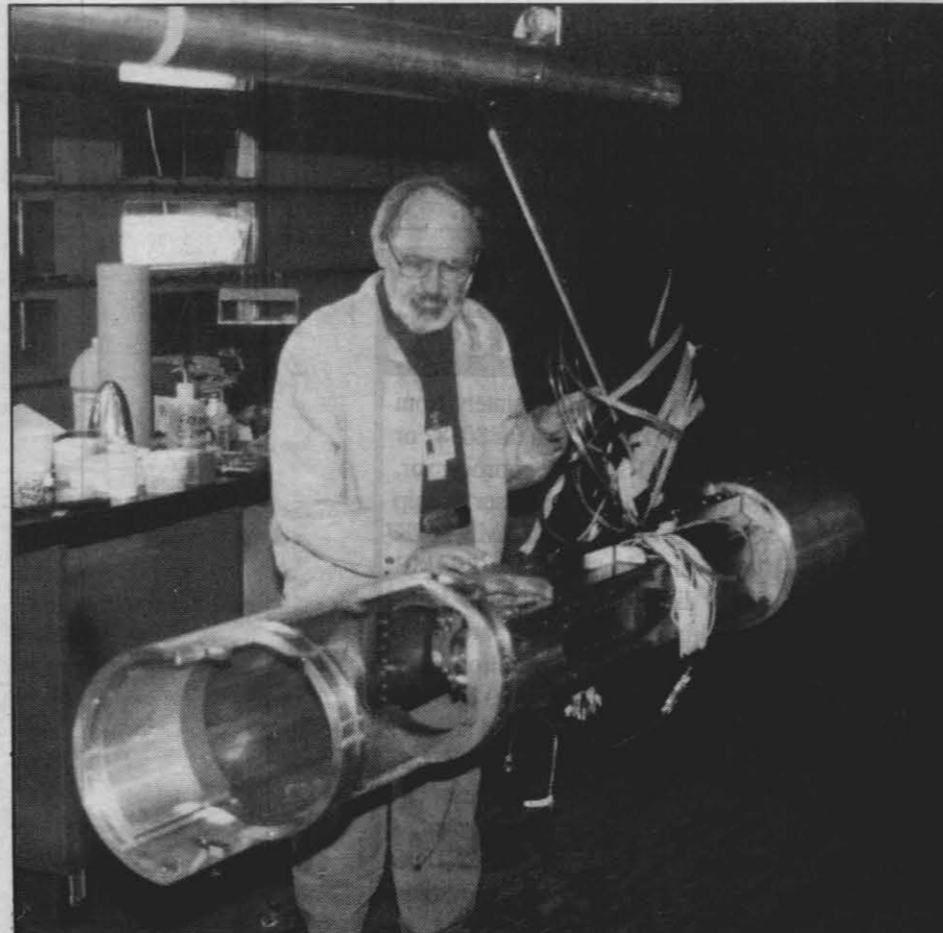
section when the first night's raid on Bagdad occurred. Tomahawk's excellent performance was quickly mentioned in newscasts and we had a lot of NASA Ames workers from other tunnels over to see what a Tomahawk looked like."

While wind-tunnel testing was a crucial part of the project, researchers also enlisted the aid of the computer modeling of the missile configuration used in the wind tunnel.

NWC awarded a contract to The National Science Foundation's Engineering Research Center for Computational Field Simulation at Mississippi State University (MSU) for a Computational Fluid Dynamic (CFD) analysis.

Led by national authority, Dr. David L. Whitefield, MSU participations set up computer codes to numerically solve the three-dimensional unsteady Euler equations about the complete missile configuration with individual counter-rotating props and the vehicle in transonic flow at angle of attack with deflected control fins. This was the first time an outside agency made use of NWC's then-new CRAY X-MP supercomputer.

Dr. Frank Mansfield from the Aerodynamics Branch of the Attack Weapons Department post-processed the CFD files



ASSEMBLY WORK—Leroy Krzycki of NWC looks over a partially assembled wind tunnel test model of the propfan missile before putting it in the NASA Ames wind tunnel. TID Photo by Bill Kirkpatrick.