



TABLE TALK — Some of the attendees at the NWC All Hands picnic, held June 20 on the grounds of the Chief Petty Officers' Club, enjoy the opportunity for a friendly get-together. Seated in the foreground are (l.-r.) LCdr. Larry Crume, Capt. S. I. Stocking, Cdr. Michael J. McCarthy, AFM J. W. Hendry (with back to camera), and PNSA Monica Ruis. —Photos by PH2 Tony Garcia

Spectacular fireworks show to top off 4th of July fete at fairgrounds

A spectacular 45-minute fireworks display at 9 p.m. will climax the Indian Wells Valley public celebration of Independence Day on the Fourth of July at the Desert Empire Fairgrounds in Ridgecrest. The community-wide event will begin at 2:30 p.m. and will include games and activities for persons of all ages. Among the various contests that have been scheduled are a greased pole climb, pie eating, watermelon eating, and tug-of-war with prizes awarded to winners in various age groups. Food and beverages will be available to those attending at minimal prices. In addition, there is a shaded outdoor picnic area for the use of those who would like to bring their own picnic fare. There will also be charcoal-filled braziers heated and ready for anyone who wants to use them to barbecue hamburgers, hot dogs or other meat. For local residents who prefer being indoors during a summer afternoon, the air-conditioned Joshua Hall will be open, and there will be music and other forms of entertainment inside as part of the Fourth of July celebration. All entertainment, facilities and fairground employees are providing their services free for the celebration. This includes Bob Waters, a pyrotechnic expert, who will be donating his time to provide the community "with the best ever fireworks display."

Tony Martin, chairman of this year's celebration, stated that donations are still needed for the fireworks display. "Twenty clubs and organizations have given about \$1,100. We hope this will top \$1,500 so that we can make the display stupendous this year. Money donated to the Fireworks Fund is spent for fireworks only. None goes for salaries of employees. Their services are free for this community event," Martin emphasized.

Fireworks at the fairgrounds will be mostly an aerial demonstration with plenty of skyrockets. "People will be able to view the display from about anywhere in the local area," he said. Individuals are cautioned by Martin not to bring fireworks to the fairgrounds. Individual use of fireworks there is not allowed.

Chiefs plan family potluck picnic on 4th of July holiday

A potluck family picnic will be held at the Chief Petty Officers' (CPO) Club picnic grounds for all active duty chiefs and their dependents on the Fourth of July, beginning at 11 a.m.

All families planning to attend this outing are asked to bring their own food and beverages. Food brought to the picnic will be added to the potluck buffet; however, families may also use the barbecue grills for preparing steaks, hamburgers, hot dogs or other meats. Barbecue sauce will be provided for chicken and ribs. During the afternoon festivities, volleyball and softball games are scheduled for the picnic-goers.

CPOs desiring further information on the potluck picnic are asked to call OCSG G. L. Gillen at NWC Ext. 3314.

Gymnastics boosters to collect cans, bottles

The Boosters Club for the Ridgecrest Parks and Recreation Department's gymnastics program will be canvassing Indian Wells Valley for aluminum cans and returnable bottles on Thursday, July 5, from 5 to 7:30 p.m.

The money derived from the subsequent sale of the cans and bottles will be used to buy equipment for the gymnastics program.



PICNIC SERVING LINE — More than 300 military personnel and their dependents attended the NWC All Hands picnic held following last week's Admiral's Cup track and field meet. On the menu were hamburgers, hot dogs, baked beans, potato salad and potato chips. Standing line to get hamburgers right off the grill are (l.-r.) LCdr. Ed Biggs and his wife, Sharen Biggs and Sharon Scroggins. YNSN Paul Mackey (right) serves up the hamburgers, cooked to order.

Government auction of surplus property to be held July 19

Plans were announced this week for the next public auction of surplus government property, which will be held on Thursday, July 19, starting at 9 a.m. at the Community Center.

Among the more than 150 items that will be offered for sale are 39 pickup trucks, electric typewriters, oscilloscopes, voltmeters, lockers, work benches, clay pipe, shelving, drafting tables, a winch unit and a 50,000 lb. scrap wood pile.

Beginning on Wednesday, July 11, prospective bidders may examine the surplus government property that will be up for sale by visiting the Defense Property Disposal Warehouse, located at Sandquist Rd. and 10th St., on weekdays between the hours of 8 a.m. and 3 p.m.

Registration of bidders for the auction will begin at 8 a.m. on the sale date (July 19) at the Community Center. Bidders must be present and registered — no bids offered by mail will be accepted.

Items purchased may be removed on the sale date provided that full payment is made. Personal check's will be accepted. Successful bidders will have until July 25 to pay for and remove items before storage charges will be applied.

For additional information about the auction, interested persons should contact Gregory Berry by calling NWC Ext. 2502.



GOOD IDEAS — Two Public Works Department employees receive \$140 each for their beneficial suggestion about a "Temperature Alarm Control Box." John Klindworth (center), and Robert D. Philpott, both of Code 26453, are congratulated for their joint effort by LCdr. H. A. Wells, Jr., Assistant Public Works Officer. In addition, Arthur J. Martin, of Code 2671, who was unable to be present for the photo, also received a Beneficial Suggestion award of \$150 for devising an "Electric Truck Speed Control." — Photo by Ron Allen

Happenings around NWC

Astronomy Group To Meet

The China Lake Astronomy Society will meet Monday at 7 p.m. in its club house at 401-A McIntire St. to view live television coverage from Voyager 2, the space craft now on its way toward Jupiter.

In addition, Richard Pogge, who was graduated from Burroughs High School this year, will give a talk about his research on "The Application of Photometric Techniques to Infrared Sunspot Research." Pogge, who conducted the research as an entry in the Westinghouse Science Talent Search, will be entering California Institute of Technology in Pasadena in the fall.

The movie "Skylab and the Sun," which tells about some of the solar experiments on Skylab, will also be shown at the meeting.

Metal Trades Council

The Indian Wells Valley Metal Trades Council will hold its next regular meeting on Thursday, July 5, at 65-B Halsey Ave., China Lake. The meeting will get underway at 7:30 p.m.

The Council is the representative of a unit composed of the Center's nonsupervisory, ungraded civilian employees who are local at China Lake.



Enlisted Mess

"The Brass Knuckles", a five-piece rock music combo from the Los Angeles area, will be performing tonight from 9 to 1 a.m. for the listening and dancing pleasure of patrons of the Enlisted Mess.

Previous to the evening's entertainment, the Enlisted Mess will be serving a seafood plate in the dining room from 6 to 8:30.

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Naval Weapons Center
China Lake
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CNO to press for pay raise for Navy people

The pay scale for Navy people is not adequate today, according to Chief of Naval Operations Admiral Thomas B. Hayward, who says he will press his request for a pay raise in the coming months.

In a column written for the current edition of "Wifeline" magazine, the CNO stated he is not underestimating the difficulty in seeking the raise. "Pay raises are not a popular discussion item in Washington," he said; "but I will not be discouraged in the effort."

Although pay raises require support from outside the Navy, he said other things can be done within the Navy to improve the quality of life.

"For instance, we are pressing hard to identify activities and exercises that increase work without markedly enhancing readiness — and we're getting results," Admiral Hayward said.

He cited a 40 percent reduction in inspections, elimination of many reporting requirements, and shortened deployment lengths as examples.

"These actions may account for only a few days each," he said, "but we intend to keep chipping away until those days add up to additional weeks at home."

The CNO noted the lump sum Selective Reenlistment Bonus (SRB) as one way the Navy is trying "to put more money in a lot of people's pockets faster."

In discussing the all-volunteer force, Admiral Hayward said he is opposed to a

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Aircraft navigation system using laser gyro is adapted for use on commercial airliners

A boon to technology transfer between government and private industry was recently underscored when Honeywell received a contract in excess of \$100 million from the Boeing Company for the installation of laser gyro inertial reference systems (IRS) in all Boeing 757 and 767 aircraft as their main navigation device.

The inertial reference system developed by Honeywell is a spin off from the Advanced Tactical Inertial Guidance System (ATIGS) under development at the Naval Weapons Center since 1968.

NWC was interested in the laser gyro for use as a sensor in mid-course guidance systems for medium- and long-range guided missiles.

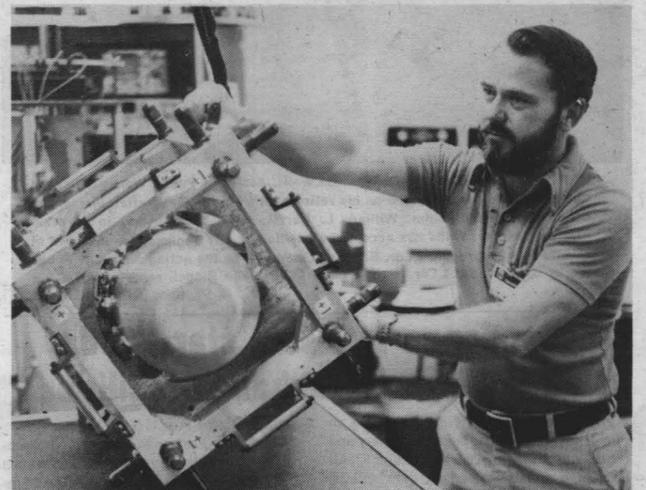
Advantages of Laser Gyros

The laser gyro has distinct advantages over the conventional mechanical or gimbal gyros because there are no moving parts, it is less likely to break down, has the ability to withstand high "g" forces, and has a long shelf life without needing recalibration.

The basic component of the ATIGS system, a ring laser gyro, was developed by Honeywell, then Navy personnel at China Lake integrated the first functional laser gyro navigation system, and both organizations worked together to develop the resulting applications of the new technology.

A laser gyro uses two beams that are reflected with mirrors or prisms in opposite directions in an enclosed area to produce a ring configuration.

During rotation there is a difference in the



INSTRUMENT PACKAGE — Clarence H. Chumney of Honeywell rotates the ATIGS instrument package to a new position during test runs in the laboratory at China Lake. This is done to collect data for calibration of the unit from six different positions. This package contains the ring laser gyro and a miniature computer, and is suitable for strapdown mechanization instead of being attached to a platform with gimbals. — Photo by Ron Allen

path length the laser light must travel around the ring in the two opposite directions which leads to a difference in the signal outputs of the beams, telling the angle that the gyro has rotated.

William F. Ball, associate head of NWC's Avionics Division in the Systems Development Department, says the first real break-through in laser gyros came in 1972 when the first good mirrors and a new block material to contain them were introduced.

Since then miniaturized computers capable of solving the in-flight problems

Improved method for measuring fuel supply in use

Under the impact of the present energy shortages, material balance and measurement have become increasingly more important to the Public Works Department at the Naval Weapons Center.

Lee Barkley, head of the Transportation Division in Code 26, stated this week that Code 267 is staying abreast of the times by using improved methods of fuel measurement under the direction of the Metrology Branch in the Engineering Department's Product Assurance Division.

Metrology Branch personnel have used metrology engineering techniques to improve the accuracy, speed and precision of the fuel measuring system in use at China Lake.

Barkley said that the unaccountability rate had been about seven percent. However, new regulations going into effect will require accountability accuracy down to 1/4 of 1 percent for diesel fuel and 1/2 of 1 percent for gasoline.

Under the new fuel measurement system devised by Metrology Branch engineers, the dip stick measurement of fuel in storage tanks will be replaced by the Bell Prover System. This system uses the principle of fuel displacement by accurately measured weights. One weight falls until it hits the fuel in the storage tank and as it falls the other weight travels up a scaled tube, stopping when the other weight reaches the fuel level.

"The dip stick method was never very accurate," Barkley continued, "If the stick was warm, fuel would evaporate from the stick before the attendant could get an accurate reading. We are very excited about the new measurement system devised by the Metrology Branch."

The other part of the system consists of a salvaged turbine and meter. This is actually

the heart of the new validation system. With an accurate measurement can be made not only from gasoline delivery trucks to storage tanks, but also from the gasoline pumps to vehicles being fueled. The validation system can be inserted into practically any fuel delivery system to validate or monitor the system as a whole.

Restoring the turbine instead of purchasing a new one for use with the laboratories' flow meter resulted in savings of about \$3,000.

Mike Toth, head of the Transportation Division's Production Control Branch, stated that the increased accuracy and speed of data-recording are expected to greatly assist the fuel accountability program at China Lake.

Ed Nelson, head of the Metrology Branch, believes that other military installations will be interested in NWC's new fuel measurement system since all activities have the same problems of fuel accountability.



PREPARED FOR OPERATION — Doug Clayton (left) an engineering technician, and Bill Weiss, a metrology engineer, prepare the "Bell Prover System" to measure the amount of gasoline in the storage tanks at the Public Works service station. The square box in the background contains the new validation system for giving accurate measurements of oil or gasoline as it flows from one source to another. It can also be used to calibrate fuel measurement meters.



TEST RESULTS — Barbara Hayes, a data technician from Computer Sciences Corporation, gets the graph machine ready for the print out of a test run in the Advanced Technology Development program. The purpose of this laboratory testing of the Advanced Tactical Inertial Guidance System is to evaluate performance of the system in order to determine if the ring laser gyro can be produced at a reasonable cost.

were developed and coupled with the system to automatically take information and calculate a course direction for the aircraft or missile it was being used in.

By 1978 the second generation of ATIGS or the X-2 system was ready for captive flight testing. The size of the system had been cut almost in half from its forerunners, the X-0

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MOVIES
Regular starting time — 7:30 p.m.
For synopsis information call Code O-Phone 939-2411
FRIDAY "TIME OF THE EAGLE" Starring Stuart Culpepper (Drama, rated PG, 105 min.)
SATURDAY "SLOW DANCING IN THE BIG CITY" Starring Paul Sorvino (Drama, rated PG, 117 min.)
MONDAY "SAME TIME NEXT YEAR" Starring Ellen Burstyn and Alan Alda (Romantic drama, rated PG, 126 min.)
WEDNESDAY HAPPY HOLIDAY
FRIDAY "SCALPEL" Starring Robert Lansing and Judith Chapman (Drama, rated PG, 102 min.)
SATURDAY "KING OF THE GYPSIES" Starring Eric Roberts and Brook Shields (Drama, rated R, 119 min.)
There will be no Saturday matinee's until further notice.



RETIREES ON TWENTY — Lt. Col. William L. Harris, Assistant Public Works Officer at China Lake, is congratulated on his retirement from the Navy after 20 years of active service by RAdm. William L. Harris, NWC Commander, in a recent ceremony. Lt. Col. Ringel has accepted a position as city engineer for the town of Grants Pass in Oregon. Lt. Col. Bruce Jackson will be the acting Assistant Public Works Officer until Lt. Col. Ringel's relief, Cdr. Duane Ringel, reports to NWC in August. — Photo by PH2 Tony Garcia

Independence Day sale starts today at all local Navy Exchange facilities

The Navy Exchange (NEX) will hold an Independence Day sale beginning today and continuing through Tuesday, July 3. All Exchange outlets and snack bars will be affected, with sale items marked 10 to 30 percent off regular prices. Retail merchandise available at the Main Store and the Annex will include cameras, stereos, shoes, clothing, luggage, household appliances, tennis rackets, camping gear, and much more.

In addition, today and tomorrow, there will be a special sidewalk sale at the retail store, featuring over \$2,000 in merchandise which has been marked down as low as 50 percent off the original price.

Each NEX snack bar will be promoting an Independence Day sandwich at an attractive low price, and for the duration of the sale, holiday-priced beer and soda pop will be available at the Annex.

The NEX service station will offer for sale numerous automotive accessory specials, including battery chargers, fog light sets, socket wrench sets, car stereo speakers, and various car care products. Also, the NEX mechanic will be on hand to aid patrons whose vehicles need any major or minor auto maintenance.

Not to be left out, the Personalized Services Center, located next to the service station, will offer 10 percent discounts on all laundry and dry cleaning charges. More selection is now available in giftware, greeting cards, and house plants sections at the Personalized Services Center, where the latest new service is the availability of Steamax rental carpet cleaners that are designed to simplify carpet cleaning and

shampooing. All Navy Exchange patrons are encouraged to visit the various NEX locations and take advantage of the numerous Independence Day bargains. The sale ends on Tuesday, and all Navy Exchange facilities will be closed on the Fourth of July.

Rules announced for examining fed'l job applicants

The Office of Personnel Management (OPM) has given agencies ground rules for getting authority to examine applicants for Federal jobs.

This is another step in OPM's policy, authorized under the Civil Service Reform Act, of delegating as many of its powers as possible, thus giving individual agencies more say in their personnel decisions.

Where an agency is the sole or predominant employer for an occupation, OPM encourages it to ask for the examining authority for that occupation. OPM will delegate full or partial authority.

Under full delegation, an agency would do all the examining, certifying, developing rating schedules, evaluating applicants, deciding rating appeals, acting on objections to eligibles or passover of veterans, and answering inquiries.

Under partial delegation, OPM would continue to examine, but agencies would maintain competitor inventories and issue certificates of eligibles.

Delegations can include blue-collar and white-collar occupations up to GS-15.

Promotional opportunities

Unless otherwise specified in the ad, applications for positions listed in this column will be accepted from current NWC employees and should be filed with the person named in the ad. All others desiring employment with the Naval Weapons Center may contact the Employment-Wage and Classification Division, Code 092, Ext. 2069. Ads will run for one week and will close at 4:30 p.m. on the Friday following their appearance in this column, unless a later date is specified in the ad. Employees whose work history has not been brought up to date within the last six months are encouraged to file a Form 171 or 172 in their personnel jacket. Information concerning the Merit Promotion Program and the evaluation methods used in these promotional opportunities may be obtained from your Personnel Management Advisor (Code 096 or 097). Advertising positions in the Promotional Opportunities column does not preclude the use of alternate recruiting sources in filling these positions. As part of the rating process, a supervisory appraisal will be sent to the current supervisor and the most recent previous supervisor of those applicants rated as basically qualified. The Naval Weapons Center is an equal opportunity employer and selection shall be made without discrimination for any nonmerit reason. The minimum qualification requirements for all GS positions are defined in CSC Handbook X-118, while those for all WG, WL and WS positions are defined in CSC Handbook X-118C.

Clerk-Typist, GS-322-3/4, PD No. 7829944N, Code 3954 — This position is in the Monopulse Design and Evaluation Branch, RF Division, Weapons Department. Incumbent acts as receptionist, screening visitors and incoming telephone calls for the branch; provides clerical and typing duties for branch personnel; maintains files; makes travel arrangements; performs timekeeping duties; procures supplies, equipment, repair and maintenance services, etc. through appropriate channels; performs other miscellaneous clerical duties as assigned. **Job Relevant Criteria:** Ability to type accurately and efficiently; ability to get along with others in the work group; ability to meet deadlines under pressure; knowledge of Navy correspondence and local filing procedures.

Public Information Specialist, GS-181-5, PD No. 790013N, Code 0031 — This position is located in the Office of the Program Coordinator for Official Visitors. Incumbent assists the coordinator by planning itineraries for official visitors, planning and executing programs and presentations. He/she will be required to work unusual hours and weekends. **Job Relevant Criteria:** Ability to speak before individuals and large groups; ability to plan itineraries and arrange accommodations; ability to meet and deal. **Promotion potential to GS-11.**

Electronics Technician, GS-856-7/8/9, PD No. 7929959, Code 3954 — This position is in the RF Systems Branch, RF Division, Weapons Department. The incumbent participates in the design, development, test, and evaluation of RF guidance systems, subsystems, and special-purpose test equipment and directs operation and maintenance of an electronics laboratory. **Job Relevant Criteria:** Through knowledge of electronic fundamentals; basic radar concepts/principles; electronic/RF test equipment. Experience with digital systems as well as RF/microwave systems and equipment; ability to perform progressively more responsible and complex tasks in electronic system assembly, operation, test, and maintenance.

Electronics Technician, GS-856-7/8/9, PD No. 7929959, Code 3954 — This position is in the RF Systems Branch, RF Division, Weapons Department. The incumbent provides electronics technical support for RF guidance system development tasks. He/she assists in design, development, test, and evaluation of RF guidance system components, subsystems, and test equipment and in electronics laboratory maintenance and repair. **Job Relevant Criteria:** Knowledge of electronics fundamentals and basic RF concepts/principles; ability to perform progressively more responsible work in electronics/RF systems assembly, operation, test, and maintenance; experience with test equipment/consols; digital experience is desirable.

File applications for the above with Kitty Berry, Bldg. 34, Rm. 206, Ph. 2723.

Electronics Engineer, GS-855-9/11/12, PD No. 7925561, Code 3553 — (2 vacancies) This position is located in the Land Threat Evaluation/Development Branch, Countermeasures Division, Electronic Warfare Department. Incumbent analyzes and designs radar circuitry required to integrate major subsystems into functioning radar systems; provides technical support for RF guidance system development tasks. He/she assists in design, development, test, and evaluation of RF guidance system components, subsystems, and test equipment and in electronics laboratory maintenance and repair. **Job Relevant Criteria:** Knowledge of electronics fundamentals and basic RF concepts/principles; ability to perform progressively more responsible work in electronics/RF systems assembly, operation, test, and maintenance; experience with test equipment/consols; digital experience is desirable.

Mechanical Engineer/Electronics Engineer/Aerospace Engineer/Physicist, GS-830/855/861/1310-9/11/12, PD Nos. 7835044/7835125/7835126, Code 3551 — This is an interdisciplinary position in the EW Projects Office, Countermeasures Division of the Electronic Warfare Department. The duty station is in the Randsburg Wash Test Area. The incumbent serves as a project engineer for specific flight tests and is responsible for the design and development of testing techniques and procedures. He initiates test plans and detailed specifications and provides cost estimates for the customer. He monitors data reduction activities and performs analyses of test results of the reduced data. He is required to interface with representatives of various companies and military activities. **Job Relevant Criteria:** Knowledge of electronic warfare and related fields; knowledge of ground-based radar systems; knowledge of data analysis and reduction; ability to communicate effectively, both orally and in writing; ability to work effectively with people of widely differing personalities. Status eligibles accepted.

Interdisciplinary - Electronics Engineer/Physicist, GS-855/1310-9/11/12, PD No. 7835182, Code 3522 — This position is in the RF Development Division, Advanced Technology Branch, Electronics Warfare Department. A major portion of the branch effort is concerned with advancing the state-of-the-art of broadband radar absorbing materials and of broadband direction-finding systems. The position supports the development of all-weather standoff missile guidance involving synthetic aperture radar (SAR) carried by naval aircraft. The incumbent serves as one of the principals in an evolving technology project to determine how best to use the capabilities of a SAR, and subsequently to demonstrate the feasibility through captive and freestanding testing; works out basic designs for missile guidance components to make it receptive to accurate control by a remote SAR; analyzes system errors to determine and to improve guidance accuracy; participates in technical reviews and evaluation of SAR equipment. **Job Relevant Criteria:** Background in missile guidance and related avionics systems; knowledge of analog and digital circuit techniques. Status eligibles accepted.

Electronic Engineer, GS-855-12, PD No. 7525567, Code 3512 — This position is located in the Electronic Warfare Analysis Branch, Microwave Development Division, Electronic Warfare Department. The incumbent performs electronic warfare modeling and analysis of interaction between foreign threat systems and U.S. electronic warfare systems. Investigates electronic warfare equipment

requirements and operational employment. **Job Relevant Criteria:** Must have had progressively responsible experience in the field of military electronic systems. Substantial familiarity with procedures involved in obtaining and analyzing unprocessed data. Ability to communicate effectively orally and in writing. Status eligibles accepted.

Budget Technician, GS-501-4, PD No. 7708047N, Code 0032 — (part-time) This position is located in the Office of Finance and Management, Budget Division. Incumbent provides continuous on-site financial staff expertise; prepares and continuously monitors budgets; clarifies financial system requirements to administrators of the department served; prepares special reports on financial expenditures and assures accuracy of all charges to department served. **Job Relevant Criteria:** Knowledge of Navy and NWC budgeting and accounting procedures; ability to exercise tact and good judgement; and ability to work under pressure. **Promotion potential to GS-7.**

Accounting Technician, GS-525-4, PD No. 7908016-2N, Code 9842 — This position is located in the Cost Accounting Branch of the Office of Finance and Management. The incumbent is a trainee in the Cost Accounting Branch performing tasks on a rotating basis within one of the three sections — major contracts, Government orders and F/C, and commercial orders. Incumbent codes and processes purchase documents, files and maintains files of purchase documents, posts entries on reconciliation sheets, assists in monitoring control log of transactions. **Job Relevant Criteria:** Ability to work with figures; ability to perform routine clerical duties; ability to maintain a high level of accuracy in work requiring close attention to detail. **Promotion potential to GS-5.**

Travel Clerk, GS-232-3, PD No. 7708075N, Code 6842 — This is a training position in the Travel and Transportation Branch of the Office of Finance and Management. Incumbent reviews travel orders; verifies entitlement; secures information from sources such as Official Airline Guides and Train Guides; advises travelers of routes, accommodations, travel advances and related matters; issues transportation requests and meal tickets; obtains reservations and tickets; provides estimates and computes per diem, mileage and other transportation costs; issues orders and gives information for boarding military aircraft and performs other related duties. **Job Relevant Criteria:** Ability to type, ability to research and comprehend guidelines; and ability to deal tactfully with people. **Promotion potential to GS-5.**

File applications for the above with Terry George, Bldg. 34, Rm. 206, Ph. 3118.

Equipment Specialist, GS-1670-9, PD No. 7325024-3N, Code 25731 — Applications will be accepted from status eligibles. This position is located in the Technical Section, Stock Control Branch, Control Division of the Supply Department. Incumbent provides technical guidance on a Center-wide basis for the identification, procurement and repair of a variety of commodity classifications. The work involves advising on substitution of items, developing commercial purchase descriptions for items, review of drawings and blueprints, interpretation of federal or military specifications and development of maintenance policies and procedures for new equipment. **Job Relevant Criteria:** Basic knowledge of general equipment main-

tenance. **(Continued on Page 5)**



DIVINE SERVICES

PROTESTANT
Sunday Worship Service 1000
Sunday School—All Ages 0845
Sunday School Classes are held in Chapel Annexes 1, 2, 4, (Dorms 5, 6, 8) located opposite the former Center Restaurant.
Communion Service first Sunday of the Month.

ECUMENICAL
Wednesday Noon Bible Study 1130
Thursday Men's Prayer Breakfast 0630

ROMAN CATHOLIC
MASS
Saturday 1700 fulfills Sunday obligation 0830-1130
Sunday 0815-1245
Nursery, Chapel Annex 1 0815-1245
Daily except Saturday, 1135, Blessed Sacrament Chapel

CONFESSIONS
Daily 1115 to 1130
Saturday 1615 to 1645
Sunday 0800 to 0825

RELIGIOUS EDUCATION CLASSES
Sunday Pre-school thru 11th grade 1000
Above classes are held in the Chapel Annexes across from the former Center Restaurant.
Sunday afternoon 12th grade 1630
As announced "In Home" Discussion Groups and Youth Rallies
Contact Chaplain's Office for specifics.

JEWISH SERVICES
EASTWING—ALL FAITH CHAPEL
Sabbath Services every Friday 1930
UNITARIANS
CHAPEL ANNEX 95
Sunday Services—(Sept. May) 1930

Intramural Softball League results . . .

(Continued from Page 6)

Sports Etc., and Byrd later scored on a single by Drew Martin.

In the fifth inning, the Sports Etc. team went on a hitting spree that included successive singles by Billy Brown and Ray Taves, a walk issued to Cliff Payne, singles by Wayne Wooten and Jim Byrd, and back-to-back doubles by Drew Martin and Mark Stevens.

Brown, the winning pitcher, tossed a 2-hit shutout for Sports Etc. over Nelson Auto.

The Ridgecrest Merchants last week maintained their unbeaten record in the women's fast pitch division of the China Lake Intramural Softball League with a 16-3 win over Mary Sue's.

Scores of other women's division games were Pizza Villa 30, CSC 5; while the Flower Shop defeated the Charlie Browns 13-5 and Mary Sue's 12-6.

Mary Sue's was no match for the Mer-IWV swim team to compete in 3-way meet in Ridgecrest

Members of the Indian Wells Valley swim team will compete tomorrow at 9 a.m. at the John Pinney Memorial Pool in Ridgecrest in a three-way meet with their counterparts from the Hi-Desert and Bishop swim teams.

Coached by Elaine Mikkelsen, who is assisted by Elena Vitale, Christi Fawkes, Adrienne Swinford and Tracy West, the IWV swim team — a group of 60 swimmers ranging from 4 through 16 years of age — holds practice sessions regularly at the NWC gym indoor pool and at the Commissioned Officers' Mess swimming pool.

This has been a season of preparation for next year, Coach Mikkelsen reports, since the Indian Wells Valley swim team currently is composed principally of those who are newcomers to swimming competition.

Individuals who have emerged as the top contenders in the various age groups on the team are:

Six years of age and under — Bernard Jain, who has been beaten just once this season and swims all four strokes — butterfly, backstroke, breaststroke and freestyle.

Seven- and eight-year-olds — Suzy Burt, whose best events are the backstroke and individual medley, and Will Freeman.

Nine- and ten-year-olds — Erica Freeman, backstroke.

Eleven- and twelve-year-olds (girls) — Karrie Raglin, who is a strong competitor in four strokes at 100 and 200 yd. distances; and Barbara Archuleta, whose best event is the butterfly stroke.

Eleven- and twelve-year-olds (boys) — Arun Jain, Eric Young, Kevin Featherston, Bill Stout, Scott Swinford and Mickey West lead what is one of the strongest groups of swimmers on the Indian Wells Valley team. Fifteen years of age and over (boys) — Greg Raglin, tops in butterfly and freestyle. Fifteen years of age and over (girls) — Tracy West and Mary Harris.

Soccer team . . .

(Continued from Page 6)

porting position for the China Lake attack. In the second half of the game, a momentary lapse on the part of the China Lake defense permitted Heiler to break away and tally his second goal for Tehachapi. This effort was matched later in the game when topnotch midfield work by Al Caturini paid off with a pass to Birthead, who scored his second goal of the game for the China Lakers.

With the score tied 4-4 late in the match, Heiler worked his way through the fatigued China Lake defensive backs and skid the ball into the local team's net for the game-winning score.

After a bye this weekend, the China Lake Soccer Club will travel to Lancaster on July 8 for a 2:30 match against the strong Casa de Miguel squad.

chants, who scored 7 runs in the first inning and had an 8-0 lead before their opponents (who were limited to 1 run each in the second, third and fourth innings) could score.

Leading 8-1 after two innings of play, the Merchants scored 2 runs each in the third and fourth innings and 4 more in the fifth to win by a lopsided score of 16-3.

Line Scanlon and Jo Maschoff, who pitched two and three innings, respectively, for the Ridgecrest Merchants, gave up just one hit each to Mary Sue's.

As for the Merchants, three of their players — Sandy DePew, Jo Maschoff and Pat Brightwell — had 3 hits in 4 times at bat, and Dawn Wood was 2 for 3. Extra base hits included a triple by Wood, two doubles by DePew and a 2-bagger by Maschoff.

In their win over the Charlie Browns, the Flower Shoppers found themselves trailing 4-3 after two innings of play, but then broke the game open with an 8-run rampage in the top of the third to take over the lead, 11-4.

The victors tallied 2 more runs in the sixth inning for a total of 13, and gave up 1 additional score to their opponents in the bottom of the third to make the final score 13-5 in favor of the Flower Shop. The game was halted at the end of six innings of play because of the time limit rule.

Leading hitters for the Flower Shop in this game were Cindy Duwell and Linda Radcliff, who each had 3 hits (all singles) in 4 times at bat.

In an earlier contest played last week, the Flower Shop romped to a 10-2 lead in the first three innings of a game with Mary Sue's and then coasted to a win by a final score of 12-6 by scoring 1 run each in the fourth and fifth innings.

In this game, Mary Sue's tallied 2 runs in the second inning, 1 more in the fourth and 3 in the last half of the fifth, when the game was ended due to the time limit rule.

Debbie Beercoff's 3 hits in 5 trips to the plate for the Flower Shop made her the game's leading hitter.

It was strictly "no contest" between Pizza Villa and the CSC women's fast pitch softball teams. Pizza Villa scored 5 runs each in its first two times at bat, and added to what was then a 10-2 lead by scoring 13 more runs in the top of the third inning.

Before the game was mercifully ended at the end of five innings of play because of the 10-run lead rule, the final score was 30-5 in favor of Pizza Villa.

Leading hitters for Pizza Villa were Myrna Martin and Char Spencer, who had a field day at that plate — getting 5 hits in 6 times at bat. Two of Martin's hits were triples, the others singles. In addition, Karen Kirschieper was 3 for 5 at bat as she got a home run and 2 singles.

Promotional Opportunities

(Continued from Page 5)

Clerk-Typist, GS-322-3, PD No. 7929944N, Code 3954 — This is a part-time position of approximately 22 hours per week. The position is located in the Conventional Weapons Division, Ordnance Systems Department. Incumbent types letters, test data, project reports, statistical data, etc. Incumbent also receives telephone calls and visitors; receives, logs and distributes mail; prepares travel orders and itineraries; receives, safeguards and returns classified documents, etc. **Job Relevant Criteria:** Ability to use Magnetic Card Typewriter; knowledge of grammar, punctuation, spelling, and Navy format; ability to deal effectively with a variety of people.

Mechanical Engineer, GS-830-11/12 or Aerospace Engineer, GS-861-11/12, PD No. 793111, Code 3183 — This position is located in the Systems Survivability Branch, Survivability and Lethality Air Targets Division, Systems Development Department. The incumbent uses new methods and techniques to advance the state-of-the-art in support of new aircraft system concepts. The incumbent is responsible for the design, development, fabrication, and assembly of mechanical systems, sub-systems, and components. The incumbent is responsible for the preparation of detail plans for test programs to evaluate aircraft system parameters affecting performance, susceptibility, and vulnerability. The incumbent will be responsible for the design and production of test hardware and test equipment. **Job Relevant Criteria:** Ability in the design and analysis of mechanical systems, subsystems and components; ability in testing mechanical systems, subsystems, and components; ability to coordinate program requirements.

Clerk-Typist, GS-322-3, PD No. 7929944N, Code 3954 — This is a part-time position of approximately 22 hours per week. The position is located in the Conventional Weapons Division, Ordnance Systems Department. Incumbent types letters, test data, project reports, statistical data, etc. Incumbent also receives telephone calls and visitors; receives, logs and distributes mail; prepares travel orders and itineraries; receives, safeguards and returns classified documents, etc. **Job Relevant Criteria:** Ability to use Magnetic Card Typewriter; knowledge of grammar, punctuation, spelling, and Navy format; ability to deal effectively with a variety of people.

File applications for the above with Pat Gaunt, Bldg. 34, Rm. 212, Ph. 2514.
Electronic Engineer, GS-855-11/12, PD No. 7655042E.



ENTERED IN YACHT RACE — The Tahuna, a 36-ft. Columbia class sloop owned and skippered by Ruel Cameron, an NWC employee, will compete in a Los Angeles to Hawaii yacht race, starting on June 30 off Pt. Fermin. Four local men will be among the 6-member crew of the Tahuna on the run to Diamond Head near Waikiki Beach on the Island of Oahu.

Desert yachtsman to enter boat in annual L.A. to Hawaii race

A yachtsman who refuses to remain landlocked even though he works and lives in the Mojave desert will be off for another adventure on the high seas on June 30.

Ruel Cameron, a budget analyst in the Advanced Business Systems Division of the NWC Office of Finance and Management, has entered his 36-ft. Columbia class sloop, Tahuna, in the annual Los Angeles to Hawaii yacht race.

Official distance of the race, which will start off Pt. Fermin near San Pedro and finish off Diamond Head on the Island of Oahu, is 2,225 miles, but winds and currents could add to that, Cameron said.

Heavier sails have been added to the Tahuna in order to make her more competitive in this race, and if everything goes as planned, the yachtsmen expect to reach their destination in 12 days, or on July 12. The Tahuna was the last boat to cross the finish line in this same event two years ago.

The Tahuna will be one of 82 entrants in the Transpac yacht race. The largest ship scheduled to participate is Her Majesty's Canadian Ship Oriole, a 90-ft. ketch.

On the race to Honolulu, Cameron, owner and skipper of the Tahuna, will be accompanied by four local men as crew members. They are Fred Bien, an operations research analyst in the Weapons Planning Group (Code 12) at NWC; Dan Lydon, an electronics technician in the

Weapons Department; RAF Squadron Leader Peter Harris, who is attached temporarily to Air Test and Evaluation Squadron Five (VX-5); and Geoffrey Nutting, an employee of Computer Sciences Corp. in Ridgecrest. Other crew members are Damon Swank and Kevin Wood, of Long Beach and Newport Beach, respectively.

Both Lydon and Bien have previously raced with Cameron but on shorter hauls, such as the race from Newport Beach to Mazatlan, Mexico.

On the return trip to California, the Tahuna will be entered in a yacht race from Hanalei Bay on the Island of Kauai to San Francisco. Nutting is the only one of the six crew members who will be remaining in Hawaii and returning on the race to San Francisco.

The other five members of the crew on the return run will be Don Ruff, also an operations research analyst in Code 12; Mike Murphy, an electronics technician, who works in the Foreign Technology Branch of the Electronic Warfare Department; and Sel Ramsy, Bob Phinzy, and Bill Haynes, of Anaheim, Yorba Linda and Garden Grove, respectively.

On the race back to California, an event sponsored by the St. Francis Yacht Club of San Francisco, the Tahuna will be the communications vessel for the race, and will be in contact by radio with both the race committee in San Francisco and ham radio operators at China Lake.

Instrumentation/Avionics Branch, Aircraft Maintenance Division, Aircraft Department. The purpose of this branch is to provide the Aircraft Maintenance Division with aircraft instrumentation and modification capability in support of flight test operations at NWC. Duties of the position cover responsibility for the design of all aircraft modifications, review of all system designs brought to the aircraft modification and installation group; resolution of instrumentation and installation problems with branch staff and project engineers; redesign of proposed modifications to assure safe installation; and provide technical direction to aircraft modifications. **Job Relevant Criteria:** Knowledge of aircraft system instrumentation and design; ability to communicate effectively both orally and in writing; ability to work with all levels of NWC personnel.

File applications for the above with Bonnie Owens, Bldg. 34, Rm. 204, Ph. 2577.

Recreation Specialist, UA-0188-07, PD No. 7955103, Code 0891 — Community Center, permanent full-time, promotion potential to UA-09, closing date 8-8-79. This is not a Civil Service position. Incumbent establishes plans, policies and procedures for the Community Center, theater and youth programs; plans, supervises and directs a comprehensive schedule of program activities; promotes competition and develops esprit de corps; maintains records; public relations; selects, maintains and repairs equipment; selects, trains and supervises employees; prepares budgets. **Qualifications:** Four year course in an accredited college or university with major study appropriate to the field of recreation or three years of experience which demonstrated. An understanding of the goals, principles, methods and techniques of recreation; and, an understanding of the interests and motivations of individuals and groups. One year of specialized experience in administering a diversified recreation program or one full year of graduate study in recreation.

File applications for the above with Cheryl Hartley, Bldg. 21, Ph. 3287.

The Rocketeer

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Ernest Sutton
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Phones 3354, 3355, 2347



Recreation Roundup

Team being formed to compete in 11th ND tennis tourney

Active duty military personnel at China Lake are eligible to compete on a tennis team that will represent the Naval Weapons Center in the 11th Naval District's Northern Area Tennis Tournament that will be held here during the week of July 23 through 27.

The top four singles players and two doubles teams will be selected from among local military personnel interested in taking part in this event.

Tennis players from among the ranks of military personnel at China Lake who would like to vie in the upcoming tennis tournament are asked to contact Bob Kunding, assistant athletic director, by calling NWC Ext. 2334 or 2571 no later than Saturday, July 7.

Women's Softball Tourney

The dates were announced this week for the first women's slow pitch softball tournament at China Lake, which is to be held on July 20, 21 and 22.

Entries will be limited to 12 teams and accepted on a first come, first served basis. The deadline for receipt of team rosters, which can be turned in at the Center gym office, is Thursday, July 12.

This is a two-division round robin tourney in which the teams in each division will play each other once, and the winners of each division will then vie for the tourney title. Additional information can be obtained by calling the gym office at NWC Ext. 2334 or 2571.

China Lake Soccer Club loses close match to Tehachapi

An undermanned China Lake Soccer Club (forced by absenteeism due to vacations to take the field two men short of the regulation number of 11 players) lost a hard-fought High Desert Soccer League match by a score of 5-4 to the Tehachapi town team on Tuesday night.

The game, which had been postponed from an earlier date, was played under the lights at Edwards Air Force Base.

Despite being short-handed, the China Lakers held their opponents, who had 11 players on the field plus reserves on the bench, to a tie score of 3-3 at halftime.

Chris Wagner, a 15-year-old seeing his initial action as a player for the China Lake Soccer Club, tallied the first goal for the locals, following a scramble for the ball within close range of the Tehachapi net.

Also in the first half, Steve Lee of China Lake blasted a shot into the net from his right wing slot, and Roy Birkhead accounted for the third China Lake goal.

Tehachapi matched the local team with one goal each by Mike Segal, Rich Heiler and Mike MacKenzie. The latter, a former youth player for the world-famed Tottenham Hotspur Club in London, demonstrated his skill and experience as a soccer player by booting in a goal low and to the right of Tom Veatch, goalkeeper for China Lake.

That brought an instant switch in defensive assignments for China Lake, and Karl Kauffman took on the job of guarding MacKenzie. While this stymied any further scoring attempts by MacKenzie, it also took a player (Kauffman) out of a key spot.

(Continued on Page 7)

Fuller Masonry stops Raiders winning streak

An 11-game winning streak came to an end last week for the Raiders, leaders in the men's fast pitch division of the China Lake Intramural Softball League, who were upset, 3-1, by the third place Fuller Masonry team.

After two scoreless innings of play in this contest, Fuller Masonry tallied three times in the last half of the third inning, and then shut out the Raiders in every inning except the sixth when the division leaders scored

their only run of the game.

During Fuller Masonry's turn at bat in the third, Dan Fuller and Bud Harbin got on base with walks, and a single by Harlan Hershey drove in Fuller with the game's first run.

Warren Turnbaugh also drew a walk which set the stage for a hit by Chuck Fava that enabled both Hershey and Turnbaugh to score as Fuller Masonry jumped out in front by a score of 3-0 over the Raiders.

The Raiders' only run of the game was scored by Randy Radcliff, who walked and then advanced to second on a hit by Marty Stoner. A wild pitch moved Radcliff to third base and he came home to score on a ground ball when the play was made at first base to put out Mike Stoner.

Dan Branson, winning pitcher for Fuller Masonry, limited the Raiders to five scattered hits.

In other men's fast pitch division softball action last week, the Raiders defeated Nelson Auto 3-0, and Sports Etc. won two games at the expense of Fuller Masonry and Nelson Auto by scores of 8-7 and 8-0, respectively.

Raiders Post Shut Out

Even though they outthit the Raiders 6-4, the Nelson Auto team came out on the short end of a 3-0 final score as the Raiders tallied once in the first inning and two more times in the last half of the sixth.

A sacrifice fly by Bob Beecroft brought in Marty Stoner with the Raiders' first run in their game with Nelson Auto. Stoner was walked, advanced to second on an infield out and stole third in order to be in scoring position when Beecroft lofted a fly ball to the outfield.

A double by Mike Pangle with two men on base accounted for the Raiders only other runs in their 3-0 win over Nelson Auto.

In the game between Sports Etc. and Fuller Masonry, Sports Etc. scored 2 runs each in the first and second innings and had a comfortable lead of 4-0 until the Fuller Masonry squad came to bat in the bottom of the third.

7 Runs Cross Plate

Before the final out had been chalked up to end the third inning, Fuller Masonry players had scored 7 runs. The damage was done by Don Branson, Bud Harbin and John Smith, who each hit singles; Don Connell and Dan Fuller came through with doubles, and the Fuller Masonry team also took advantage of a walk, a fielding error and a stolen base to tally seven times.

The game was ended after five innings of play, but not until the Sports Etc. team bounced back to score 4 runs in the top of the fifth and win the contest by a final score of 8-7.

Frank Mayer singled and scored on a 3-base blow by Ray Taves. Taves tallied on a hit by Wayne Wooten and this hit was followed by another single by Jim Byrd. With two men on base and Sports Etc. trailing 7-6, Stan Spurgeon pulled the game out of the fire for Sports Etc. with a hit that drove in both base runners.

The Nelson Auto vs. Sports Etc. game was a scoreless stand-off for the 3¹/₂ innings of the 5-inning fracas. In the last half of the fourth inning, however, the Sports Etc. team tallied 3 runs and added another 5 in the fifth inning to salt away an 8-0 victory.

A triple by Jim Byrd with two men on base produced the game's first two runs for

(Continued on Page 7)



TROPHY CHANGES HANDS — Rear Admiral William L. Harris, NWC Commander, presents the Admiral's Cup athletic trophy to Roy Tefft (at right), who accepts it on behalf of the NWC Blue team. NWC Blue (personnel of the Aircraft Support Division) was tops with 46 points in the Admiral's Cup standings, compared to 28 for VX-5, last year's winner. — Photos by Tony Garcia

NWC Blue team wins track, field meet, Admiral's Cup athletic trophy

A track and field meet, the final Admiral's Cup athletic competition event for 1978-79, was held last week at Kelly Field on the Murray Junior High School campus.

The NWC Blue team, composed of personnel from the Aircraft Support Division (Code 612), was an easy winner in this event with a total of 36 points, compared to 14 for NWC Gold and 12 for VX-5.

The victory in track and field also clinched the Admiral's Cup for the NWC Blue athletes, who outdistanced their rivals by piling up a year-long total of 46 points. NWC Gold was second with 34 points and VX-5 trailed with 28.

Entrants representing the NWC Blue team won five of the seven track and field meet events and placed second in three. The individual results were as follows:

Men's 100 yd. dash — Brad Domine and Robert Hendricks, both of NWC Blue, 1st

Swimming lessons

to begin on Monday at CPO Club pool

The Chief Petty Officers' Club swimming pool will be the location of swimming lessons, offered by the Special Services Division, that will begin on Monday, July 2, and continue on Monday, Wednesday and Friday through July 20.

Classes for beginners, each 30 min. in duration, will be held starting at 8, 8:30, 9 and 9:30 a.m.

There is a fee of \$8 for the series of nine lessons, which will be taught by lifeguards on duty at the CPO Club pool. Registration and payment of fees is being handled at the NWC gym office.

Monday is the deadline for signing up for these classes. Additional information can be obtained by calling NWC Ext. 2334 or 2571.

At the same time that the above mentioned swimming lessons are in progress, a class for advanced beginners also will be held at the CPO Club swimming pool.

It, too, will begin on July 2, and be held from 8 to 8:30 a.m. on Monday, Wednesday and Friday through July 20. The deadline date and registration fee for it is the same as for the other classes that are to be held.

and 2nd, and Rudolph Looney, of NWC Gold, 3rd.

Women's 100-yd. dash — Karen Hutchinson of VX-5, 1st; Sheree Domini of NWC Blue, 2nd, and Flo Moran of VX-5, 3rd.

Mile run for men — Andy Price and Mike Hosmer, both of NWC Blue, 1st and 2nd; and Jerry Bannister, of NWC Gold, 3rd.

Softball throw for men — Jim Carr of NWC Blue, 1st; Marshall Hagger of NWC Gold, 2nd; and K. S. Mason of VX-5, 3rd.

Softball throw for women — Karen Hutchinson of VX-5, 1st; Cheryl Gros of NWC Gold, 2nd; and Robin Gillen of NWC Blue, 3rd.

In both the shuttle race (six runners per team) and the 10-man tug-of-war events, NWC Blue was the winner, and the NWC Gold team placed second.

The perpetual Admiral's Cup trophy was presented following the track and field meet at an NWC all hands picnic that was held on the grounds of the Chief Petty Officers' Club. There was free food and drinks for all NWC military personnel and their dependents.



CLOSE FINISH — In the 100 yd. dash for women, Karen Hutchinson, of VX-5, placed first by a step ahead of Sheree Domini of NWC Blue (hidden in background). Third place went to Flo Moran of VX-5.

AD2 Gary Harper singled out as VX-5 Sailor of Month for May

Aviation Machinist Mate Second Class Gary L. Harper was selected as Sailor of the Month for May by Air Test and Evaluation Squadron Five (VX-5).

The letter of commendation to AD2 Harper, signed by Capt. P. D. Stephenson, Commanding Officer of VX-5, noted that "your (Harper's) appearance is consistently outstanding. Your knowledge of your specialty is apparent from your recent selection to first class petty officer." The letter continues, "While assigned to the Power Plants Branch of the Maintenance Department, you have exhibited the highest degree of professionalism and leadership. You have demonstrated your eagerness and initiative by qualifying as a collateral duty inspector, C-1A aircrewman, and turn-up qualified on the A-6E, TA-7C, A-7E and C-1A aircraft."

It noted also that AD2 Harper was one of the dominating forces in the Power Plants overall production and training efforts.

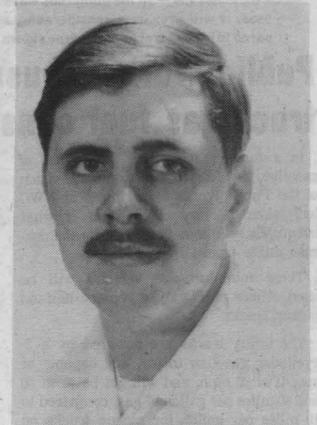
AD2 Harper has been stationed at China Lake since October 1977 when he was transferred here from the Naval Air Station at Cubi Point in the Philippine Islands. Before that he had been assigned to Fleet Transport Squadron 21 at the Naval Air Station, Barber's Point, Hawaii, for three years.

The VX-5 Sailor of the Month calls Wichita, Kans., home. He was graduated from high school there in June 1971 and then entered the Navy two months later.

AD2 Harper says he enjoys riding motorcycles and fishing at Lake Isabella. He has also been spending some of his off duty hours attending an Airframes and Power Plants class at Cerro Coso Community College.

"I am really enjoying my tour of duty with VX-5 because the variety of aircraft has given me the opportunity to gain mechanical experience with a number of engines," Harper said.

As a result of successfully passing the



AD2 Gary L. Harper

February 1979 Navy-wide examinations for advancement in rate, Harper will be advanced to first class petty officer later this year.

He and his wife, Myrna, live in quarters aboard the Center.

Because of his selection as VX-5 Sailor of the Month, AD2 Harper will enjoy one month without standing duty watches, receive a 72-hour special liberty and have the use of a reserved parking space near the entrance to the squadron's hangar.

He will also receive a plaque, and his photo will be displayed along with those of other squadron Sailors of the Month.

Laser gyros . . .

(Continued from Page 1)

systems.

Besides being used in commercial jetliners, the Navy is testing the ring laser gyros for use in its new AV-8B, vertical takeoff and landing aircraft and is considering it as a replacement for the system presently being used in the A7 Corsair II.

Other advantages of laser gyros, besides their compactness, are improved reliability, ease of maintenance, lighter and smaller, easier to use, rapid alignment time, and no need to warm up as is the case with a conventional gyro.

Some of the other applications being considered for the ring laser gyro are high speed ship navigation, remotely piloted vehicle guidance and control, ship radar and launcher stabilization, small submersible vehicle navigation and control, and torpedo guidance and control.

A triangular block made of Cer-Vit, a ceramic material, about the size of a piece of Mom's apple pie, contains the mirrors and lasers, with a miniature computer tied into it to solve the inflight problems.

Another advantage of the laser gyro is its stability. Mechanical gyros need to be recalibrated every 10 to 100 hours of use, whereas laser gyros can go up to 5,000 hours without being checked. The present goal is to advance this recalibration time to three to five years, Ball said.

The X-2 technology is now being considered for inclusion in the Navy's newest missiles such as the Tomahawk, just as Honeywell's ATIGS relative, the IRS, is being included in plans for new aircraft such as the Boeing 757 and 767.



OAK LEAF EXCHANGED FOR EAGLE — A silver eagle, the insignia of a Navy captain, was pinned on the collar of John R. Ives, new Public Works Officer at the Naval Weapons Center, during a frocking ceremony conducted last Friday by Rear Admiral William L. Harris, NWC Commander.

Capt. Ives is new head of Public Works Dept.

Capt. John R. Ives, CEC, has taken over the duties of Public Works Officer and head of the NWC Public Works Department, following the retirement on May 31 of Capt. Robert B. Wilson.

Having been selected for promotion to the rank of captain, the new NWC Public Works officer was a participant last Friday in a frocking ceremony conducted by Rear Admiral William L. Harris, NWC Commander.

Frocking is the process whereby an officer receives all the rights and privileges of the next highest rank without receiving a raise in pay. It is implemented when an officer has been selected for promotion but has to wait for a promotion date. He must also be filling a billet normally held by the next highest rank.

"I'm faced with an interesting and challenging job here, and am looking forward to the construction work responsibilities it entails," Capt. Ives said.

Since 1973, Capt. Ives has been stationed in Washington, D.C., where he has held successive assignments as a member of the staff of the Construction Operations Division, Office of the Secretary of Defense (Installations and Housing), in the Pentagon (1973-75); and with the Naval Facilities Engineering Command (NAV-

FAC). While in Puerto Rico, Capt. Ives earned a bachelor's degree in civil engineering (1961) from Rensselaer Polytechnic Institute in Troy, N.Y.

Duty with the Naval Facilities Engineering Command (NAVFAC) in Washington, D.C., followed Capt. Ives' tour

of duty in Puerto Rico. For a year (1964-65) he was the assistant inspector general for NAVFAC, and from 1965 to '67 he served as head of the Civil Engineer Corps Education and Training Branch.

Capt. Ives then traveled cross country to the Naval Construction Battalion Center, Port Hueneme, to assume the duties of Executive Officer of NMCB 3, after first receiving a Master's degree in civil engineering (majoring in engineering economic planning) at Stanford University.

He was at Port Hueneme for two years (1968-70) before being sent to Philadelphia, Pa., to serve in the post of acquisition coordination officer for the Northern Division of the Naval Facilities Engineering Command. This also gave him the opportunity to attend the Command and Staff Course of the Naval War College in Newport, R.I., which he did in 1971.

From Philadelphia, he moved to NAVFAC in Washington, D.C., for his three most recent duty assignments prior to coming here to replace Capt. Wilson as head of the NWC Public Works Department.

Capt. Ives was accompanied to China Lake by his wife, Ann; their two daughters, Kimberly, 18 and Kirsten, 16; and a son, Jonathan, who is 13 years old.

Car wash service now being provided for gov't vehicles

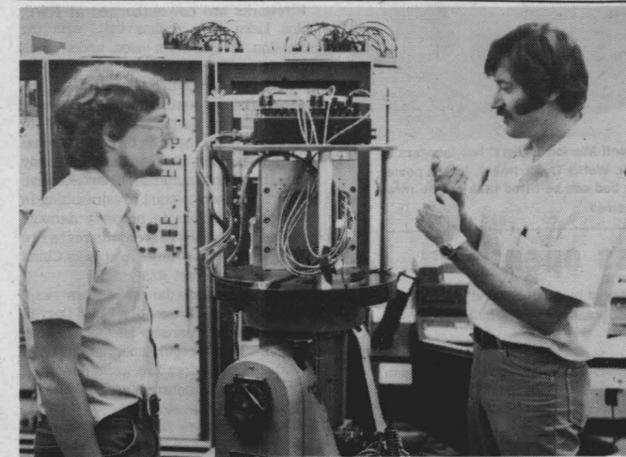
The Transportation Division of the Public Works Department at the Naval Weapons Center will wash government vehicles by appointment during the summer months.

The service, which includes exterior wash, interior vacuuming, and window cleaning, will be performed by summer hires.

Vehicle washing will be accomplished on an "assembly line" basis, a Transportation Division spokesman said, with the time required to clean a vehicle, depending on its size.

Drivers are warned to remove all cargo that is not waterproof, and trash, before delivering their vehicles to the washing apron south of Building 01197 at the Public Works transportation compound. Operators must remain with their vehicles during the cleaning process.

Appointments are also being taken for waxing government sedans through the summer months. Individuals are asked to call NWC Ext. 2353 to make appointments for either service.



EVALUATING PERFORMANCE — Chuck Jones (right), the Advanced Technology Development program project engineer, explains how a particular test validation on the ring laser gyro (foreground) will be run in Code 3141's laboratory at China Lake to Richard Finney, an electronics engineer in the Avionics Division. — Photo by Ron Allen

Military comptrollers group to install charter officers July 12

Charter officers of China Lake Chapter of the American Society of Military Comptrollers (ASMC) will be installed during a dinner meeting to be held at the Commissioned Officers' Mess on the evening of Thursday, July 12.

The installing officer and guest speaker for the evening will be Rear Admiral David Frost, Deputy Comptroller of the Navy, and national president of ASMC.

As the featured speaker of the evening, RAdm. Frost will discuss "The Role of Comptrollership in the Navy Today."

Charter officers of the China Lake Chapter of ASMC are Arthur Zepeda, president; John Simpson, vice-president; Linda Collins, secretary, and Paul Copeland, treasurer. The local chapter was established officially on May 24 at the national ASMC symposium held in Denver, Colo.

Zepeda and Simpson are both systems accountants in the Financial Operations Division of the NWC Office of Finance and Management; Ms. Collins is an accounting technician in the Cost Accounting Branch of Code 08; and Copeland is acting head of Internal Review (Code 0807).

Tickets to the ASMC installation dinner, priced at \$10 per person, can be ordered by calling Zepeda at NWC Ext. 2144, Simpson at NWC Ext. 2141, or Charlotte Paulsen at NWC Ext. 2151 by the reservation deadline date of Friday, July 6.

A social hour starting at 6 p.m. will precede the dinner, which is to be followed by the installation of new officers and the talk by RAdm. Frost.

The American Society of Military Comptrollers is a professional organization composed of individuals whose work is primarily in the field of comptrollership, financial management and related areas, within the Department of Defense and the U.S. Coast Guard.

ASMC was established in 1949 and now has 66 chapters and a total of more than 5,600 members. Membership in this group is open to all persons who have an interest in the field of finance. Those interested in joining the local chapter can obtain additional information by contacting Zepeda or Simpson.

Prime purposes of the group are to serve the public interest by promoting the education and training of its members; supporting the development and advancement of the profession of military comptrollership; sponsoring research in military comptrollership subjects, and publishing the results; encouraging a free exchange of techniques, approaches, and problem solving; and providing a means of communication to keep members abreast of current events in the field of military comptrollership which can be beneficial to them, the organizations for which they work, and the public.



FUEL SAVER — In the numerous ways in which this Cushman utility truck can be used, it will provide a considerable savings in gasoline fuel consumption, compared to pickup trucks of the type shown at left. —Photos by PH2 Tony Garcia

Public Works to use small utility trucks as fuel conservation measure

In a move to conserve on the use of gasoline, the Maintenance-Utilities Division of the Public Works Department at NWC has taken delivery of the first of what eventually will be a fleet of several Cushman utility trucks.

These miniature-size vehicles will be used, where practical, to replace half-ton pickup trucks.

The utility trucks are powered by a 2-cylinder gasoline motor, are capable of speeds of 20 mph, and will get between 50 and 60 miles per gallon of gas, compared to 10 miles per gallon for pickup trucks on short runs within the business and housing area on the Center.

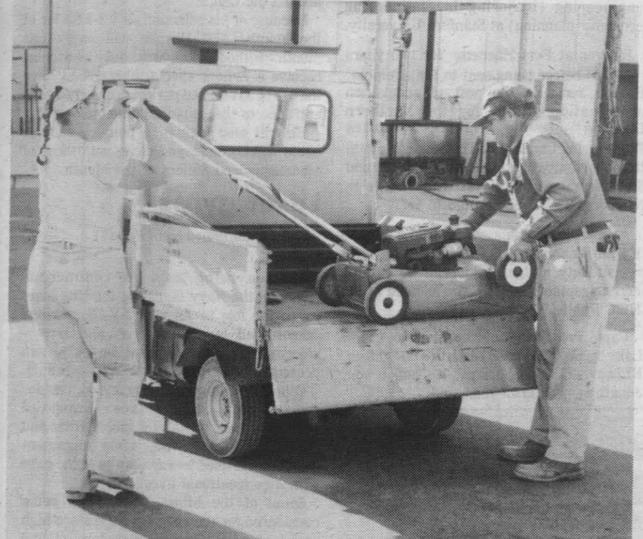
One such utility truck will be loaded with equipment needed for making small repairs and handling utility maintenance work in the complex that includes Lauritsen

Laboratory, the nearby Stran Steel huts and the AEC trailers situated at the north end of the lab.

Plans also call for utilizing the miniature trucks to transport power lawn mowers or hooking them up to trailers that are used by the gardening crews for spreading fertilizer and lawn seed.

According to Jim Crista, director of maintenance and utilities for Code 26, over a period of time, it is anticipated that the Public Works Department will be able to replace 30 larger vehicles with the utility trucks.

As another fuel conservation measure, several bicycles also have been acquired by the Public Works Department's Maintenance-Utilities Division for use by supervisors who must go from shop to shop within the Public Works compound as a part of their daily routine.



READY TO GO — Susan Cavaliere (at left) and Marion Egbert, two laborers in the Maintenance-Utilities Division of the Public Works Department, load a power mower on a Cushman utility truck. The truck bed can be tilted making the mini-sized vehicle useful as a small dump truck if desired.

Recreation facilities open Wed.

The following hours of operation will be observed by business and recreational facilities at the Naval Weapons Center during the 4th of July holiday on Wednesday:

| Facility | Hours |
|-----------------------------|------------------------|
| Bowling Alley and Snack Bar | 11 a.m. to 11 p.m. |
| Navy Exchange Annex | 11 a.m. to 7 p.m. |
| Golf Course | 6:30 a.m. to 8:30 p.m. |
| Gymnasium | 11 a.m. to 7 p.m. |
| Youth Center | 1 to 5 p.m. |
| Indoor Pool | 12 noon to 6 p.m. |
| Minvielle Park | 11 a.m. to 8 p.m. |
| COM Swimming Pool | 11 a.m. to 7 p.m. |
| CPO Swimming Pool | 11 a.m. to 7 p.m. |

Facilities not listed above will be closed all day next Wednesday.

Hazards of fireworks spelled out in safety tips offered by firemen

From the Fire Division
Count the number of fingers you have. Are they all in place? Are your eyes, nose or any of your toes missing? Now look at your children. Are they missing any of these parts?

If your inventory reads 100 percent and if your 4th of July is a safe one, you'll find that on July 5th everything will still be in the same place.

Fireworks are not authorized at NWC, China Lake. This means that, with the exception of sparklers used under adult supervision, the sale, storage and use of all fireworks on the Center is prohibited.

Fireworks can maim or even kill. Every year, at least ten people are killed and 4,000 others injured in the U.S. through careless use of fireworks. Furthermore, like any highly flammable material, fireworks have been often known to start fires resulting in thousands of dollars in property damage each year, especially in areas where the fire danger is extremely high, as it is in China Lake and Ridgecrest this year.

"The Number One danger of fireworks," according to Fire Prevention Chief Darrell Johnson, "is that parents let their children use them without proper supervision. That's why all these children are losing eyes and being burned, sometimes seriously, over the Fourth of July weekend.

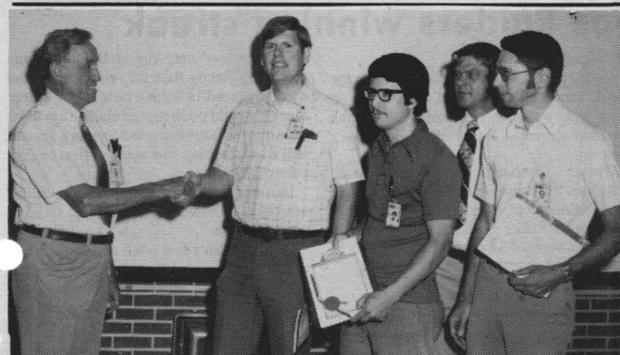
"The Number One hazard is always the user, naturally, and the other hazard," Johnson continued, "is that they contribute to vegetation fires — dry grass, trees, things like that. If you get a brush fire going, any structure nearby stands a good chance of catching on fire and possibly being destroyed.

"In addition," he said, "during the winter season there was a tremendous amount of rain and this has helped to promote the growth of vegetation. Now that summer is here, the vegetation has dried out causing a serious fire hazard."

The NWC Fire Division recommends that fireworks users (in the City of Ridgecrest) follow the guidelines established by the Consumer Product Safety Commission. They are:

1. Always read directions and precautions on fireworks.
2. Make sure an adult is present to set off the devices.
3. Never experiment by taking fireworks apart or mixing anything with their contents.
4. Always light fireworks outdoors in a clearing away from buildings and flammable materials.
5. Light fireworks one at a time, moving away quickly once lit.
6. Keep water handy for dousing misfired devices. If fireworks malfunction, do not try to relight them or pick them up — rather, douse them with water.
7. Store fireworks in a dry, cool place. Avoid handling that could damage fuses or handles.
8. Never ignite fireworks in metal cans or glass containers.

For a truly safe, fireworks-filled Fourth of July, the Fire Division recommends that you take your family to a community fireworks display such as the one to be held at the Desert Empire Fairgrounds in Ridgecrest, beginning around 9 p.m. If you do this, your family's July 5 inventory will certainly be no different than today's.



PATENT AWARDS — Bob Boot (left), head of the Fuze and Sensors Department, presents patent awards to Code 33 employees (l.-r.) Steven Fowler, Gregory Roush, Bennie Macomber and Carl Lindsey during a recent ceremony. Roush, an electronics engineer, received an additional award for developing a "Time Delay Computer Using Fuze Doppler for Air-to-Air Missiles." This is a new method of generating time delay based on doppler from fuze intercept at the target. Roush also teamed up with Lindsey and Macomber to receive an initial patent award for a new technique of determining the linearization of a voltage control oscillator to provide continuing dynamic corrections for the oscillator. Fowler received an additional patent award for his invention of an "Electronic Delay Defonator."

Earned income credit available to some in advance

A recent change to the Internal Revenue Code provides that military personnel with family income of less than \$10,000 who have a child at home can receive their Earned Income Credit (EIC) in advance during the year instead of waiting to claim the credit on the annual income tax return.

A change made by the Revenue Act of 1978, which will become effective July 1, 1979, provides an eligible taxpayer a refundable tax credit of 10 percent of the first \$5,000 of earned income, or a maximum amount of \$500.

The credit is reduced, however, by 12½ percent of the amount by which adjusted gross income or earned income, whichever is larger, exceeds \$6,000. Therefore, the credit is eliminated if adjusted gross income or earned income reaches \$10,000.

Under the recent change, military personnel who wish to receive advance EIC payments must file Form W-5 (Earned Income Credit Advance Payment Certificate) with his/her local disbursing office. An eligible serviceman or woman who does not file Form W-5 will not receive any advance payment. However, eligible military personnel who choose not to get advance payments will still get the full benefits of the EIC. Form W-5s, currently available at Internal Revenue Service offices, will be available at local disbursing offices before July 1, 1979. After filing, the

employee qualifies for unmarried head of household filing status because of the child. If the service member qualifies for unmarried head of household filing status, the child need not be claimed as a dependent unless the child is married as of the end of the year.

Eligible military personnel must file a new certificate each year and whenever necessitated by a change in circumstances. For example, when expected adjusted gross income increases beyond \$10,000, due to marriage to a working spouse, accepting additional employment, etc. Key eligibility criteria follow:

Eligibility Criteria

- A. The taxpayer's expected earned income and adjusted gross income must both be less than \$10,000.
- B. A household must be maintained in the United States for the entire year which is the home of the serviceman or woman and a child.
- C. If married, the serviceman or woman must file a joint return.
- D. If not married, the serviceman or woman must pay over half of the cost of maintaining a household in the United States.
- E. The serviceman or woman must have a child living with him or her full time, who is under 19 years of age or a student.
- F. The child must be claimed as a dependent by the service member unless the

Congressman Brown to discuss role, utilization of federal laboratories

All Centerites are invited to hear Congressman George E. Brown, Jr., D-Calif., discuss the role and utilization of the federal laboratories at a luncheon meeting of the East Kern County Chapter of the American Society for Public Administration on Tuesday. The meeting will be held in the Mojave Room of the Commissioned Officers' Mess.

Congressman Brown is Chairman of the House Subcommittee on Science, Research and Technology — a group that is currently holding hearings on the utilization of federal laboratories. This subcommittee has jurisdiction over all scientific research and development applications and programs and national science policy. Agencies under the specific jurisdiction of the SR&T Committee include the National Bureau of Standards and the National Science Foundation.

Congressman Brown has a degree in physics from UCLA and has served in engineering positions as well as in ad-

ministrative roles. He represents California's 36th District, which includes parts of both March and Norton Air Force Bases. Prior to being elected to the House of Representatives in 1962 he was mayor of Monterey Park, Calif., and was a California State Assemblyman.

Brown, who is a member of ASPA, addressed the local chapter in 1968.

Reservations are required for the luncheon meeting. They may be made by calling Steve Kaupp, at NWC Ext. 2892; George Linstead, NWC Ext. 2306; or Fred Nathan, NWC Ext. 3871, before noon on Monday. Menu choices are chef's salad, \$3.25, or baked ham, \$3.50.

Essay contest sponsored by Naval Aviation Foundation

The Naval Aviation Foundation, in conjunction with the Association of Naval Aviation, has announced an essay contest on the subject of "The Requirements of a Viable Military Career."

The contest is open to active duty members of all services, including the Coast Guard, either regular or reserve, officer and enlisted personnel. However, for officers it is restricted to lieutenants and below.

The essay should be no longer than 2,500 words and entries must be submitted by Aug. 1, 1979, to the Naval Aviation Foundation, 5205 Leegburg Pike, Suite 502, Falls Church, Va., 22041.

The winner will receive a cash prize of \$500 and the essay will be published in "Wings of Gold," the official magazine of the Association of Naval Aviation. Winners will be announced at the association's convention in Jacksonville, Fla., Oct. 18-21.

Pay raise . . .

(Continued from Page 1)

return to the draft. "I don't believe a draft is consistent with a peacetime military force, and I don't believe the American people want it." But, the CNO continued, the American people must realize that a volunteer military is not cheap.

"If they want it to work, if they want to avoid resorting to the draft, they must be willing to pay the price — a reasonable price," he said.

Promotional Opportunities

(Continued from Page 2)

Secretary (Typing), GS-318-4, PD No. 7632063N, Code 3336 — Previous applicants need not reapply. Applications will be accepted from status eligibles. This position is secretary to the Phoenix Ordnance Components Technical Manager, Fuze Systems Division, Fuze and Sensors Department. Duties include receiving and screening correspondence, making travel arrangements, establishing and maintaining files, frequent personal and telephone contacts and office management. Job Relevant Criteria: Ability to plan and organize work and establish priorities; ability to deal tactfully and effectively with Center personnel and others; ability to gather, assemble and verify information; knowledge of proper English usage, spelling, grammar and punctuation. This position has promotion potential to the GS-5 level.

Supply Clerk/Supply Technician, GS-2005-5/6/7, PD No. 7625019N, Code 25732 — Applications will be accepted from status eligibles. This position is located in the inventory Management Section, Stock Control Branch, Control Division, Supply Department. Duties involve responsibility for complete inventory management of a position of the items which have been designated for control by the Job Center. This responsibility is executed through review, evaluation and adjustment of computer generated inventory management data and includes stock level maintenance, record maintenance and quality control, procurement authorization and administration of Navy Development Department. Incumbent conducts analysis to define performance and design requirements for the AV-8B Weapon System Support Facility (WSSFF). A prime consideration of the analyses and design effort is to ensure the development of a comprehensive integration facility for evaluation of all software and hardware performance/test aspects of the AV-8B aircraft. Job Relevant Criteria: Knowledge of digital computer based systems with experience in the area of real time computer simulation facilities; knowledge of design, fabrication, test and integration of hardware/software requirements info

Physicist, GS-1310-12, PD No. 7932059E, Code 3237 — Applications will be accepted from status eligibles. This position is located in the Short Range Missile Fuze Branch, Fuze Systems Division, Fuze and Sensors Department. Duties include design and development of electronic components and circuits for target detecting (TD) systems; analysis and evaluation of electronic circuits, optical assemblies, microwave assemblies and total TD systems; designs electronic equipment or test sets for use in testing components, assemblies, or complete TDs. Job Relevant Criteria: Knowledge of microwave, optical, digital and analog fields; knowledge of production support activities; ability to work well with others.

Electrician Engineer, GS-855-9/11/12, PD No. 7932059E, Code 3237 — Applications will be accepted from status eligibles. This position is located in the Short Range Missile Fuze Branch, Fuze Systems Division, Fuze and Sensors Department. Duties include design and development of electronic components and circuits for target detecting (TD) systems; analysis and evaluation of electronic circuits, optical assemblies, microwave assemblies and total TD systems; designs electronic equipment or test sets for use in testing components, assemblies, or complete TDs. Job Relevant Criteria: Knowledge of microwave, optical, digital and analog fields; knowledge of production support activities; ability to work well with others.

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