

Museum-sponsored ecology field trip scheduled Tuesday

The first Maturango Museum-sponsored botany-ecology field trip for this season will be led by Mary Ann Henry on Tuesday, with additional trips in this series to follow on April 15 and May 1.

Those participating will meet at the museum at 8:30 a.m.; the outing is expected to last until mid-afternoon. There will be car pooling and sharing of gasoline costs.

Each participant should bring a knapsack containing a sack lunch, a snack, and drinking water. Also helpful would be a copy of Jaeger's "Desert Wildflowers" (available for purchase at the museum), and a hand lens. Participants should wear sturdy shoes, long trousers, a long-sleeved shirt and jacket, and a hat.

The ability to hike three miles is required, but the hiking will not be strenuous.

Those who would like to participate should contact the museum by calling 446-6900 to have their names placed on the trip reservation list.

Benefit car wash set at NEX service station

With the cooperation of Lt. Robert J. Boyd, Navy Exchange officer, and CPO Joe Pickens, manager of the NEX service station, members of China Lake Police Explorer Post 811 will hold a car wash at the service station tomorrow from 9 a.m. until 1 p.m.

Proceeds from the donations of \$4 for each car and \$5 for each van will be used to help the Explorer Scouts cover the cost of attending a training session March 29 through April 6 at the San Diego Police Academy.

As a further assist to the Explorer Scouts, the Navy Exchange will furnish all of the cleaning materials for the car wash.

Concert at college Sun. features young pianists

The Cerro Coso Community College/Desert Community Orchestra will present a concert Sunday afternoon at 3 o'clock at the Cerro Coso College lecture center.

Featured soloists for the concert are Teresa Wilkins and Yurko Afendykiw, who will be playing the "Concerto in C Minor for Two Pianos" by J. S. Bach.

General admission for the concert is \$2, with a \$1 charge for students, senior citizens and enlisted personnel.



SPRING FASHIONS FEATURED — Sixteen models, all volunteers from among WACOM's members and their families, did their part to add to the success of last week's spring fashion show held at the Commissioned Officers' Mess. Shown (top photo) as they prepared for this event, which was made possible by the cooperation of 12 local merchants who loaned clothing for the show, are (l.-r.) Isabel Gaines, Gunilla Giegerich, Vivian Wright, and Carol Benton. Two of the other models seen during their part in the show are (in lower photos) Marine West (at left) and Sherri Baker. During the show, the theme of which was "The Sweet Smell of Success," the coordination of clothing fashions and perfumes was highlighted. —Photos by PHAN Alan Emery



Commissioned Officers' Mess
The Commissioned Officers' Mess invites all members and guests to enjoy a special Sunday Buffet.

From noon until 5 p.m. on Sunday, the COM dining staff will set out a feast of at least three main entrees, a salad bar, and top it all off with champagne punch.

Prices for this Sunday delight are \$5.95 per adult, and \$3.25 for children under 12.

The two special dinner nights at the COM next week are King of Roasts night on Tuesday, and a two-for-one night, featuring half a boneless Cornish hen with wild rice, on Thursday, March 27.

Dinner will be served from 5 to 9 o'clock on both evenings.

Chief Petty Officers' Club
Tonight the Chief Petty Officers' Club will be serving a choice of prime rib of beef or Icelandic cod from 6 to 9 p.m.

The CPO Club management wishes to remind everyone that there is just one week left to make reservations for the annual CPO Military Ball scheduled on Saturday, March 29.

Sonora del Mar, the 11th Naval District's 8-piece dance combo, will provide musical entertainment during the evening, and a prime rib dinner with wine will be served starting at 7 p.m.

Reservations, which are a must, can be made by calling NWC ext. 3633. Attire for the evening will be semi-formal.

Enlisted Mess
"Newton," a rock-music band, consisting of four guys and a gal from the Los Angeles area, will appear this evening from 9 o'clock until 1:30 a.m. for the listening and dancing pleasure of Enlisted Mess patrons.

From 6 until 8:30 p.m. the EM dining staff will be serving a main entree of surf 'n' turf.

OWC offers scholarship to military dependents

Applications are now being accepted for a \$1,000 scholarship to be given by the Officers' Wives Club (OWC) to dependent children of active duty or retired military personnel. Deadline for applying is Wednesday, April 30.

The scholarship may be used in pursuit of either a college degree or vocational education; graduating seniors from Burroughs and Mesquite High Schools and Cerro Coso College students planning to further their education at another school may apply.

Anyone who has been appointed to a service academy of the Army, Navy, Air Force, Coast Guard or Merchant Marine is not eligible.

The applications, which may be obtained from school counselors, must be turned in to Mrs. A. B. Adams, 501 Essex Circle, China Lake. The recipient will be selected by the OWC Scholarship Committee on the basis of merit.



U.S. Government Printing Office
1980 - No. 1018

From: _____
To: _____
PLACE STAMP HERE

YMCA plans annual cleanup tomorrow in Kern Regional Park

The Indian Wells Valley YMCA will hold its annual cleanup project starting tomorrow morning at 9 at Kern Regional Park. The area to be cleaned up is the high school access road between China Lake Blvd., and Burroughs High School.

This year's cleanup is being organized by the newly-formed Trail Blazer group (a father-son organization for boys in the fourth through sixth grades). All YMCA Indian Guides, Indian Maidens, Trail Maidens, Trail Blazers and their families and friends are invited to participate.

Plastic trash bags for the cleanup and refreshments for all participants will be provided by McDonald's Restaurant.

'King of Kings,' silent film classic, slated March 29 at All Faith Chapel

As a Lenten gift to the community, the Protestant Congregation of the All-Faith Chapel is sponsoring a showing of the 1927 film classic "King of Kings" on Saturday, March 29, at 7:30 p.m. at the All-Faith Chapel.

Produced and directed by Cecil B. DeMille who considered it his greatest effort, the film depicts the events of the New Testament of the Bible. Since its release over 50 years ago, half a billion people have viewed this film and its subtitles have been translated into 23 languages. Missionaries have taken prints in canoes up the Ganges River in India and into the Congo region of Africa.

DeMille had become firmly established as the foremost director of spectacular films. He dared to invent new techniques, sometimes with unfavorable criticism. The most controversial aspect of "King of Kings" was DeMille's casting of a person (H. B. Warner) as Christ, rather than relying on light, shadows and camera tricks as had been done prior to that time.

Some of DeMille's critics felt that it was presumptuous of anyone to assume the role of a deity. Yet the film made an impact immediately upon its release.

The cast included many who would later become famous Hollywood stars. One is William Boyd, famous now as the cowboy hero "Hopalong Cassidy," who portrays Simon in the film. Boyd never forgot the part of Simon that he portrayed in this DeMille epic and credited the role as the start of his long film career.

Because "King of Kings" is a silent film,

many have never had an opportunity to hear and experience the effect of the theater organ in adding to the emotional impact. To provide this experience, Rex Koury of the Sacramento area will be present to play the Allen organ at the NWC Chapel during the showing of the film.

Koury has a wide musical background and at age 17 was billed as the "world's youngest professional organist."

No admission will be charged, but for those wishing to contribute a free-will offering will be taken. A reception for Koury is planned in the East Wing of the All Faith Chapel following the showing of "King of Kings."

nwc rocketeer

Naval Weapons Center
China Lake
California

March 21, 1980

Vol. XXV, No. 12

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Raby receives Tech Director Award for leadership role in soldering technology program

Establishment of a quality soldering technology program at the Naval Weapons Center — one that is recognized as the most comprehensive program of its kind to be developed in the Department of Defense — was the basis for the most recent presentation of the NWC Technical Director's Award.

Singled out to receive this special form of a Superior Achievement Award was Jim D. Raby, head of the Engineering Department's Soldering Technology Branch. In addition to a letter of commendation, Raby also received an engraved paperweight and a \$300 stipend.

The presentation was made by Bob Hillyer, NWC Technical Director, during the weekly Commander's meeting attended by department heads and other key NWC personnel.

Work Has Broad Impact
"I'm particularly happy to make this presentation," Hillyer said, "because the work that Raby has done has such a broad impact on hardware sent to the Fleet." The reliability of hardware is dependent on the quality of soldering, the Technical Director added.

Hillyer also pointed out that the success of the fourth annual Soldering Technology Seminar held recently at China Lake indicates that industry is paying attention to what is being done here — not just for military hardware but also for commercial products.

Raby was commended by Hillyer not only for his efforts as head of the Soldering Technology Branch, but also for taking total responsibility for conducting the annual

government/industry soldering technology seminar that recently attracted a total of 370 middle and upper management personnel to China Lake for an exchange of information and ideas about electrical electronic/equipment fabrication and assembly.

In addition, Raby was praised for having implemented here a High Yield, High Production Soldering training class that has been accepted by both government and industry as the finest of its type.

Nationally Recognized Expert
Raby was nominated for the Technical Director's Award by D. J. Russell, head of the Engineering Department, who noted that the latest recipient of the TD Award "is a nationally recognized expert in the field of soldering technology and is a credit to the Navy and the Department of Defense."

Because of the high regard that is held for Raby and the work that is done by the employees under his supervision at NWC, the head of the Soldering Technology Branch (Code 3681) often is requested to perform tasks at all levels of the Navy.

A current example of this is the response that has been made to a request from Willis Willoughby, Jr., Deputy Chief of Naval Material for Reliability, Maintainability and Quality Assurance for the Naval Material Command (NAVMAT), who asked for the help of Raby and other Center employees in the development of a NAVMAT publication on soldering.

In seeking approval for Raby's assistance in gathering the technical information for

(Continued on Page 5)



RECEIVES TECH DIRECTOR AWARD — Jim D. Raby, latest recipient of the NWC Technical Director Award, checks an ionograph used to measure contamination on a printed circuit board. The ionograph removes ionic contamination that can be caused by plating, etching or handling printed circuit boards. It is used in quality control work to measure the effectiveness of soldering technology cleaning processes. — Photo by PHAN Alan Emery

PH2 Tony Garcia selected as NWC's Bluejacket of Month

Photographer's Mate Second Class Anthony Garcia has won the Naval Weapons Center's coveted Bluejacket of the Month Award for February.

PH2 Garcia is assigned to the Applied Photography Branch of the Technical Information Department's Photographic Division, where he has proven himself exceptional in the abilities needed in a large production photographic laboratory.

As well as performing scientific and technical photography, PH2 Garcia serves as backup photographer for the ROCKETEER.

In the letter recommending him for the honor, A. E. Farrell, head of the Applied Photography Branch, notes that PH2 Garcia on his own has assumed responsibility for all photography involving military personnel and functions in addition to his normally assigned tasks.

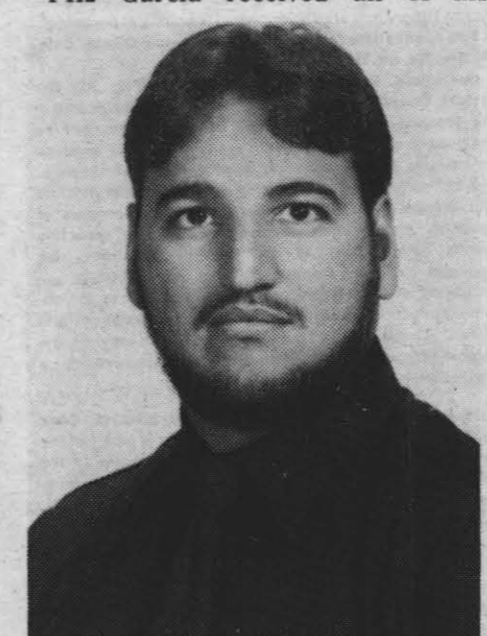
He has taken pictures of military functions and ceremonies and has compiled complete photographic layouts for the Enlisted Dining Facility and Bachelor Enlisted Quarters that had a part in the national awards won by both facilities.

He also provides passport, visa, and naturalization photos for military personnel and their dependents; this sometimes requires exceptional understanding and communications skills when dealing with people of other nationalities during periods of confusion and stress for them.

PH2 Garcia says that he enjoys his photographic work immensely, and pursues

photography as a hobby off the job as well. He has received awards for the excellence of his pictures. His favorite subjects, he says, are children between the ages of 2 and 6 "when they are still cute and before the monster period."

PH2 Garcia received all of his



PH2 Anthony Garcia

photography training after he entered the Navy nearly seven years ago from his home town of Newton, Kans. Following his graduation from Newton High School he had toured Kansas with a band, playing the

(Continued on Page 4)

Enlisted Dining Facility gains Ney Award competition finals

Good food, well prepared and served in pleasant surroundings—that's the aim of the Food Service Division in the NWC Supply Department.

Just how well this goal is being accomplished is attested to by the fact that for the second year in a row the Naval Weapons Center's Enlisted Dining Facility (EDF) has been singled out as the best in the 11th Naval District.

This year, the EDF has risen to even greater heights by its election as one of three finalists in the 1980 Capt. Edward F. Ney Memorial Award Program for excellence in food service.

Competing in the small shore category of the Ney Memorial Award Program, the Center's Enlisted Dining Facility is awaiting a committee on-site evaluation during the period between April 1 and May 30 that will determine how well it stacks up with two other small shore mess facilities finalists—those at the Submarine Base in Pearl Harbor, Hawaii, and at the Weapons Station, Charleston, S.C.

In announcing the finalists in the Ney Memorial Award Program, Secretary of the Navy Edward Hidalgo sent the following message: "My best wishes are extended to all finalists for continued success during the remainder of the 1980 Ney Award competition. To all nominees, my congratulations for outstanding achievement.

"While all could not be finalists, you can be justifiably proud of the efforts of your food service personnel for their outstanding performance toward improving your Enlisted Dining Facility operations and the Navy Food Service Program."

This is the first year that the Naval Weapons Center's EDF has been included among the finalists in the Ney Award competition.

Congratulations go to the Food Service Division (Code 254), headed by Lt. J. C. Messenger; to the three watch captains who are in charge of food preparation at the Enlisted Dining Facility and at the galley annex at Armitage Airfield; and to the more than 20 other Navy enlisted personnel assigned to Code 254.

The watch captains are MS1 James M. Andrews and MS1 Alejandro Quintana at the EDF, and MS2 Antonio Acosta, who is in charge at the Armitage Airfield galley annex.

Announcement of the winner among the three finalists in the small shore category mess facility is expected during the first week in June. All three finalists will receive plaques and certificates of commendation, but the first place winner also will be entitled to send a mess specialist to a special cooking school.



—Photos by Clare Grounds

FIRE COMMAND CLASS — Twenty firefighters from the NWC Fire Division and four other area fire departments recently completed the second Fire Command I class taught at the Training Center.



Wide interest shown in details of nominations for Commander's Award

The Commander's Award for Excellence in Mission Support, awarded for the first time last week, has aroused much interest and raised questions that either were not answered or were incorrectly described in last week's ROCKETEER.

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.

Interdisciplinary, GS-855/830/1310-7/9/11/12, PD No. 7806086, Code 0631 — This position is located in the Air Projects Office, Test & Evaluation Directorate.

Electronics Technician, GS-856-9/10/11, PD No. 8042012N, Code 62112 — This position is located in the Instrumentation Branch, Ballistics Test Branch, Ordnance Test & Evaluation Division, Range Department.

Supervisory Interdisciplinary Position: Electronics Engineer, Mechanical Engineer, Aerospace Engineer, Physicist, GS-855/830/861/1310-14, PD No. 8042018E, Code 622 — As head, Range Operations Division, incumbent is responsible for operations, maintenance, and instrumentation activities involved in the conduct of tests performed on the Center's ranges.

Electronics Technician, GS-856-9/10/11, PD No. 7742023N, Code 62213 — This position is located in the Radar Section, Air Operations Branch of the Range Department.

Supervisory Aerospace Engineer, GS-861-12, PD No. 794022E, Code 4012A — Section Head of the Maintenance Engineering Unit in the Avionics Systems Department's Product Support Branch.

General Engineer, GS-801-12/13, PD No. 8039014E, Code 39043 — The MAVERICK Systems Engineer is a part of the Laser MAVERICK Program Office, and reports to the NWC Laser MAVERICK Program Manager.

ment, repair and maintenance services, etc., through appropriate channels; performs other miscellaneous clerical duties as assigned.

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

Commander's Cup Volleyball Next event on the monthly schedule of Commander's Cup athletic competition will be volleyball matches to be played on April 9, 9 and 10 between teams representing NWC Blue (Code 612), NWC Gold and VX-5.

Supervisory Electronics Engineer/Aerospace Engineer/Physicist, GS-855/861/1310-15 (Interdisciplinary), PD No. 8035028E, Code 351 — As head, Systems Sciences Division, Electronic Warfare Department, incumbent is responsible for evaluation and review of primarily air launched weapons systems and development concepts for future systems through use of system simulation/analysis.

Management Analyst, GS-343-11, PD No. 7470629, Code 34021 — This job is located in the Public Works Department staff office. Incumbent is responsible for the Commercial/Industrial Program.

Computer Aid, GS-335-4, PD No. 8024025N, Code 24022 — This position is located in the Management Data Processing Office, Public Works Department. The incumbent plans equipment modifications needed for future tests and performs preliminary design to assist engineers when advanced design is required.

Operations Research Analyst, GS-1515-7/12, PD No. 7512012, Code 12 — (2 vacancies) This position is located in the Weapons Planning Group. The incumbent will be assigned to one of the program areas and will be involved in analysis studies covering a wide range of subjects.

Secretary (Typing), GS-318-3/4, PD No. 8039013N, Code 3956 — Part-Time Position. This position is in the Monopulse Design and Evaluation Branch, RF Division, Weapons Department.

Electronics Technician, GS-856-9/10/11, PD No. 8042012N, Code 62112 — This position is located in the Instrumentation Branch, Ballistics Test Branch, Ordnance Test & Evaluation Division, Range Department.

Administrative Assistant, GS-318-3/4, PD No. 8039013N, Code 3956 — Part-Time Position. This position is in the Monopulse Design and Evaluation Branch, RF Division, Weapons Department.

Recreation roundup . . .

(Continued from Page 6)

Dan Boudreau, Tim Carlson, Larry Rafael, Sonny Baure, Oly Rodriguez, Armando Amiana, Dave Burlin, Mike Hastings, Alan Emery, and Serafin Sabocor.

Women members are Candy Kasper, Sue Moffett, Gale Cormier, Teri McLaughlin, and Pat Hedrick.

Additional information about the Military Tennis Club can be obtained by calling Levitsky (NWC ext. 5518), Moffett (NWC ext. 5205), or Martinez, NWC ext. 5354.

MDISL Volleyball Tourney Set A 12-member team (six military personnel and six civilians) will represent the Naval Weapons Center in a Mojave Desert Interservice League (MDISL) tournament tomorrow and Sunday.

Jerry Kissick, the team's player-coach, was unable to announce the names of individual players prior to press time for this week's edition of THE ROCKETEER.

The MDISL volleyball competition will take place at the Marine Corps Logistics Center in Barstow.

Children's Swim Class Advance registration is now being taken for a children's swimming class that will be held on Saturdays for six weeks, beginning on April 12.

There is a fee of \$10 for the series of six lessons that will be offered. Registration is being handled at the Recreation Coordination Office, located next to the Center gym, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Burros baseball. . . .

(Continued from Page 6)

Kumferman got one of the two hits for BHS, and Joe Lalor, second baseman, picked up the other.

Next Golden League action will be a game this afternoon at 3:30 against the Saugus Centurions in Saugus.

Tuesday's loss to Palmdale was the fourth in a row for the BHS varsity nine, which also came out on the short end of the score in a double-header played here last Saturday against East Bakersfield.

The East High Blades defeated Burroughs 8-4 in the first game on Saturday, and tacked on a 2-0 shutout victory in the second tilt.

Inability to get hits with men on base was a big factor in the dual losses to East High. The Burros trailed 4-3 after five innings of play in the first game, but a 4-run outburst by the Blades in the fifth inning gave the Blades more than enough runs to clinch the win.

Jody Gaunt, relief pitcher for the Burros, ran into control problems in the sixth inning, when he walked six opposing batters. Two of them tallied on a single by Mike Agular and a double by Hector Amavisca drove in two more runs for the Blades from East High.

Kumferman pitched well for Burroughs in the second game of the double-header — striking out 12 and giving up just 5 hits — but the Burros, who rapped out 10 hits, left 11 men on base and lost the game by a score of 2-0.

C.L. Little League Major, Minor Div. final tryouts set Boys and girls between 9 and 12 years of age will have one more chance to participate in tryouts that will be the prelude to selecting players for China Lake Little League Major and Minor Division teams this season.

Registration and tryouts of prospective Major and Minor Division team players will be held tomorrow, starting at 9:30 a.m., at Little League diamond No. 4.

Since only 12 Major Division players will be returning this season, there are openings for 36 new ones. For this reason, 11 and 12 year olds especially are encouraged to participate in the final tryout session, Dan Vander Werf, China Lake Little League president, said.



PROMOTION NOTED — Mrs. Mary Jo Dargo joins Capt. W. B. Haff, NWC Commander, in pinning the insignia of his new rank on her husband, L.Cdr. Ronald S. Dargo. L.Cdr. Dargo, who is parachute test and evaluation officer in the Parachute Systems Department, has served in the Navy 11 years; he has been at China Lake since May 1979. He holds a B.S. degree in physical education and geography from San Diego State University.

Registration is now open for four craft classes offered by Special Services Div.

Registration is underway for four crafts classes sponsored by the Special Services Division that will begin in April and be taught in the hobby and crafts area back of the old Station Restaurant.

A class in china painting will be held each Friday from 5:30 to 7 p.m. starting April 25. Some artistic ability or experience is desirable. This class will be limited to five students, with a \$15 fee. Last day to register is April 18.

A lacramace class taught by Sherril Noble will be held on Thursdays for six weeks from 6 to 7:30 p.m., starting April 24. Cost of this course is \$10. The class will be limited to 10 students; deadline for registration is April 17.

An evening ceramics class taught by Ms. Bryant will begin on April 22 and will

continue each Tuesday for six weeks from 5:30 to 7 p.m. Again, there is a limit of 10 students, and a \$10 charge for the course. Deadline for registration is April 15.

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Promotional Opportunities

(Continued from Page 2)
Incumbent will enter data into the PW Computer Systems and Data bases via demand terminal; review output reports from these systems; validate the accuracy of the data and make corrections when needed; initiate runs to produce regular and ad hoc reports and is responsible for distribution. The incumbent is responsible for documenting maintenance procedures.

Machine, WG-3414, JD No. 302N, Code 2444 — This position is located in the Maintenance and Utilities Division, Public Works Department. Performs all types of general machinist work involving machine tool operation and the assembly, installation, and bench work required in the construction and repair of mechanical parts and assemblies.

Sheet and Plate Metal Worker, WG-380-11, JD No. 530N, Code 2453 — This position is located in the Field Support and Utilities Branch, Range Shop, Public Works Department. Incumbent is responsible for the layout, fabrication, assembly and installation of prototypes and experimental parts and equipment made from various types of ferrous and non-ferrous metal and alloys.

Secretary (Typing), GS-318-4/5, PD No. 8031046, Code 311 — This position is located in the Avionics Facilities Division, Systems Development Department. The incumbent provides clerical, typing and administrative support to the head of the division. Duties include establishing and maintaining division files, review of correspondence for format and assurance in the procedural requirements, and providing guidance and assistance to branch clerical personnel.

Supervisory Electronics Engineer/Supervisory Aerospace Engineer/Supervisory Mechanical Engineer/Supervisory Mathematician/Supervisory Physicist (GS-855/861/830/1320/1310), GS-12/13, PD No. 803948/803194, Codes 3111/21/3113/3114, (4 vacancies) — These positions are located in the Avionics Facilities Division, Systems Development Department.

Editorial Assistant, GS-1087-5, PD No. 7553080N, or Visual Information Assistant, GS-1001-6, PD 7823051N, Code 3442 — This position is in the Composition and Layout Branch, Graphic Arts Division, Technical Information Department. The incumbent composes and prepares ready material for publication. He/she records manuscripts on magnetic tape; proofreads typed copy; designs layouts, integrates line or half-tone figures; runs off galleys, and marks runs with instructions for print shop.

Visual Information Assistant, GS-1001-6, PD 7823051N, Code 3442 — This position is in the Composition and Layout Branch, Graphic Arts Division, Technical Information Department. The incumbent composes and prepares ready material for publication. He/she records manuscripts on magnetic tape; proofreads typed copy; designs layouts, integrates line or half-tone figures; runs off galleys, and marks runs with instructions for print shop.

Planner and Estimator (General), WD-4701-4, JD No. 718, Code 3254 — This position is located in the Process Engineering Branch, Process Systems Division. Incumbent plans for and estimates material and labor costs of repair, modification and improvement of mechanical systems and facilities used in processing explosive and propellants. This requires planning and estimating work performed by the following tradesman: pipefitters, equipment mechanics, machinists, sheet and plate metal workers and woodcraftsmen.

Secretary (Typing), GS-318-4/5, PD No. 8031046, Code 311 — This position is located in the Avionics Facilities Division, Systems Development Department. The incumbent provides clerical, typing and administrative support to the head of the division. Duties include establishing and maintaining division files, review of correspondence for format and assurance in the procedural requirements, and providing guidance and assistance to branch clerical personnel.

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estimates and technical direction on portions of weapons systems contracts; test coordination, involving managing missiles systems test programs; optical and infrared calibration of air-to-air heat-seeking missiles.

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The Rocketeer Official Weekly Publication Naval Weapons Center China Lake, California. Captain W. B. Haff NWC Commander R. M. Hillier Technical Director S. G. Payne Public Affairs Officer Don R. Yockey Editor Mickey Strang Associate Editor Beverly Becksvort Editorial Assistant Ron Allen Staff Photographer

DEADLINES Tuesday, 4:30 p.m. Photographs Tuesday, 11:30 a.m. The Rocketeer receives American Forces Press Service material. All are official U. S. Navy photos unless otherwise identified. Printed weekly with appropriated funds by a commercial firm in compliance with NAVSO P-35 revised May 1979. Office at Nimitz and Lauritzen. Information published in the Rocketeer does not necessarily reflect the official view of the Department of Defense. Information in the Rocketeer is authorized for public release by the Naval Weapons Center Public Affairs Officer, Code 003. Phones 3354,3355

DIVINE SERVICES PROTESTANT Sunday Worship Service 1000 Sunday School—All Ages 0830 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 Sunday 0830-1130 Nursery, Chapel Annex 1 0815-1245 Daily except Saturday, 1135. Blessed Sacrament Chapel. CONFESSIONS Daily 1115 to 1130 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 EASTWYND—ALL FAITH CHAPEL Sabbath Services every Friday UNITARIANS 1930 CHAPEL ANNEX 95 SERVICES—(Sept. May) 1930



Recreation Roundup

Tryouts announced for military slow pitch softball team

The first tryouts leading up to the selection of an NWC military slow pitch softball team will be held at 10 a.m. tomorrow at Knox field No. 1, followed by a second workout for the same purpose at 5 p.m. next Tuesday.

This team, which is to be led by Jim Tucker, as manager, is being formed for the purpose of representing NWC in 11th Naval District and Mojave Desert Interservice League competition, as well as in China Lake Intramural Softball League play.

All active duty military personnel who are interested in playing slow pitch softball are urged to attend the upcoming tryouts, or contact Tucker by calling NWC ext. 5490 or 5450 if they would like to play, but are unable to make it to the tryouts.

Military Tennis Club Formed

A Military Tennis Club that is open to all military personnel and their dependents has been organized.

The club's primary goal is to promote interservice competition and to develop and improve upon the tennis playing skills of members.

Ranking ladders for both men and women have been established by the Military Tennis Club's board of directors and are posted on the bulletin board at the Center gym.

Military men who have joined the tennis club are Willie Moffett, Bob Martinez, Roger DelParto, John Levitsky, Mike Kasper, Candie Martinez, Ted Narvaez, (Continued on Page 7)

Front runners now have 8 1/2 game lead in Premier League

The Triangle Mobile Homes team, which has been leading the pack nearly all season in the Premier League, now has an 8 1/2 game edge on the nearest runner-up team following Monday night's action at Hall Memorial Lanes.

While the Triangle Mobile Homes squad was ringing up a three-game sweep over the Hideaway, the Elks Lodge took care of The Place — a team that had begun crowding the league leaders — by a similar margin of three games to none.

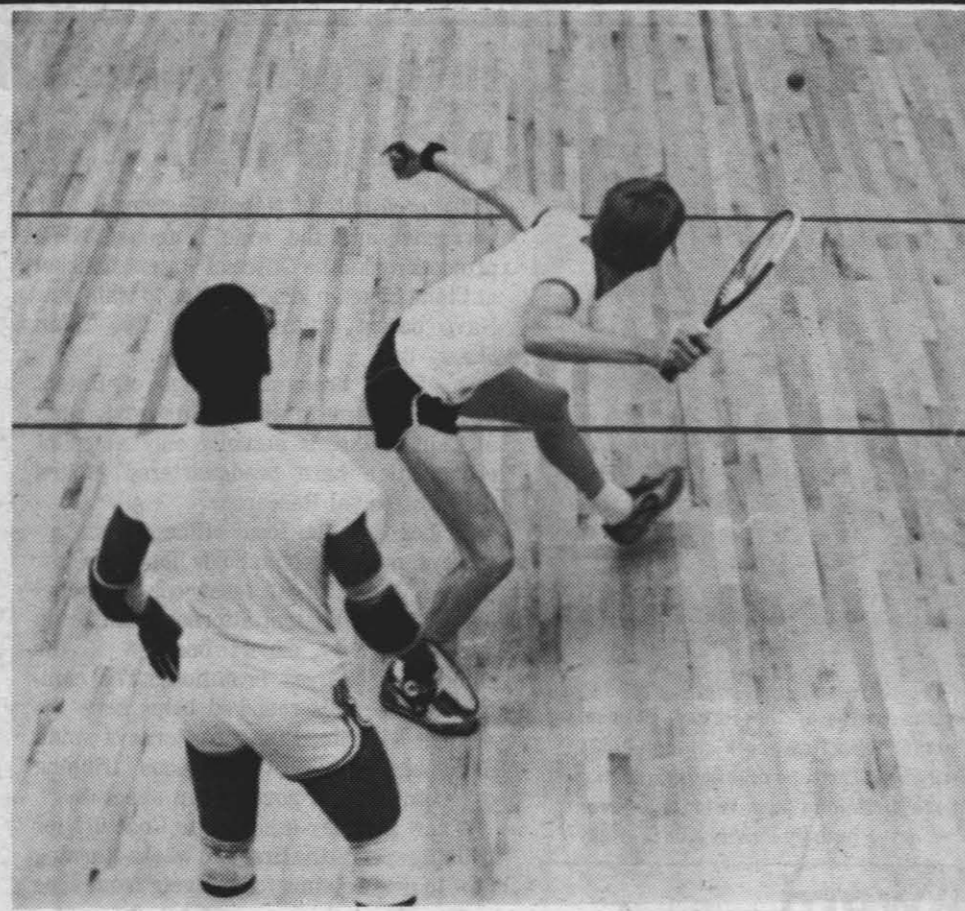
As a result, what had been a 5 1/2 game lead for the Triangle Mobile Homes kегlers is now an edge of 8 1/2 games over The Place. Tied for third, 9 games off the pace, are the Raytheon Sidewinders and the Buggy Bath teams.

High team game, a score of 1,015, was rolled Monday night by Clancey's Claim Co., and it was the league-leading Triangle Mobile Homes kегlers who came through with high team series for the night (2,917).

Warren Turnbaugh garnered individual scoring honors with a triple 200 series with games of 227, 200 and 221 that netted him a 648 series. Others who hit the 600 series mark or better were:

Ed Creer (621), Kim Duckett (620), Dick Furstenberg (612), Jim Wright (611), Ed Ranck (607), Pat Nally (603), Chuck Roulard (602), and Thad Brightwell (600).

In addition to Furstenberg, Premier League bowlers who rolled single game scores of more than 220 were: Furstenberg (246), George Barker (231), Roulard (229), Creer (228), Jim Dillon (226), and Duckett (224).



RACQUETBALL ACTION — Teams representing NWC Blue and NWC Gold battled to a 3-3 tie in Commander's Cup racquetball competition last week. As this photo was snapped, Alan Emery was about to take a cut at the ball, while his opponent, Steve Reed, looks on. Reed won this match for the NWC Blue by scores of 21-7 and 21-3. Other players for NWC Blue (Code 612) who won their matches were Joe Beachboard and Ricky Dean, while Colleen McKenzie and Don Freeman of NWC Gold knocked off their opponents from NWC Blue, and Dave Leady was the winner for NWC Gold on a forfeit. —Photo by PH2 Tony Garcia

Burroughs varsity nine suffers shutout loss in league opener

Burroughs High School's boys' varsity baseball team found itself up against one of the top teams in the Golden League on Tuesday afternoon, and dropped the league season opener to the Palmdale Falcons by a score of 5-0.

The shutout win was credited to Chris Sidwell, pitcher for the visitors, who struck out 12 and allowed just two hits by the Burros.

The game was a scoreless tie going into the top of the fourth inning, when the Falcons tallied 4 runs.

Goodman got things going with a single off Kevin Kummerman, pitcher for Burroughs, and Sidwell was safe at first on a bunt that enabled Goodman to advance to second. Both base runners then scored on a single to right field by Heathcote, the

Palmdale team's designated hitter.

Another hit, this one by Taube, drove in Heathcote and before the dust had settled at the end of the fourth inning Taube also crossed home plate on a sacrifice fly hit to right field.

The game's final run, in the top of the seventh, was the result of an error. With a teammate on third base and two outs, Sidwell drew a walk and ran to first base. Instead of stopping there, however, he romped on toward second.

When the play was made at second base to pick off Sidwell, the Falcon baserunner at third broke for home plate and a wild throw to the BHS catcher enabled him to score the fifth and final run of the game.

The Burros were outthit 11-2 by Palmdale.

(Continued on Page 7)

China Lake Youth Soccer League teams begin play tomorrow

The spring season of China Lake Youth Soccer League competition will get underway tomorrow with a slate of 14 matches to be played on three different fields.

This season, there are 28 teams, each with 15 players, for an overall total of 420 youngsters in grades one through nine involved in the youth soccer program.

The schedule of tomorrow's games is as follows:

Pacific Div. (1st & 2nd graders)

- At Schoeffel Field
- 8:30 a.m. — Rowdies vs. Chiefs
- 9:30 a.m. — Cobras vs. Sunshine
- 10:30 a.m. — Express vs. Sockers
- 11:30 a.m. — Apollos vs. Eagles
- 12:30 p.m. — Fury vs. Earthquakes

American Div. (3rd & 4th graders)

- At Davidove Field
- 8 a.m. — Strikers vs. Blizzard
- 9 a.m. — Aztecs vs. Sting
- 10 a.m. — Hurricane vs. Timbers
- 11 a.m. — Cosmos vs. Lancers
- 12 noon — Rogues vs. Drillers

National Div. (5th & 6th graders)

- At Davidove Field
- 1 p.m. — Surf vs. Roughnecks
- 2:15 p.m. — Whitecaps vs. Sounders
- 3:30 p.m. — Tornado vs. Kicks

International Div. (7th-9th graders)

- At Kelly Field
- 8:30 a.m. — Wolves vs. Red Devils



PREPARING FOR SEASON OPENER — During a pre-season practice drill, Jason Black of the Sting (back to camera), tries to control the ball, while Doug Truesdale of the Hurricane squad moves in on defense. The Sting won this American Division contest by a score of 4-1 last Saturday at Davidove Field. —Photo by PH2 Tony Garcia

Men's City Bowling Tournament has too many winners

The annual Men's City Bowling Tournament held on the weekends of March 8 and 9, and March 15 and 16 had an unusual problem — too many winners. For the first time in the history of the tourney, there were ties in both the singles and doubles events.

Tied for first place in men's singles were Bill Osborne and Dick Reymore, with scores of 701 each.

The teams of Pat Adams and Joe Jones, and John Johnson and Kevin McDonald jointly took first place in doubles with team scores of 1,315.

Three-game roll-offs to settle on final winners for both events will take place this Sunday afternoon.

Scoring a clear win in the team event were the Triangle Mobile Homes kегlers with a combined score of 3,229. Members of this team are Ed K. Creer, Kim Duckett, Vic Black, Warren Turnbaugh, and Dave Stein.

All Events winners (computed on the basis of pins in doubles, singles, and team bowling) were Creer with a total of 2,054 and Turnbaugh, 2,019, in the handicap division. The two men reversed their standings in the scratch division, with Turnbaugh taking the lead by posting a total of 1,935 and Creer scoring 1,892.

Two hundred men entered in doubles and singles events and more than 240 took part overall in this year's tourney.

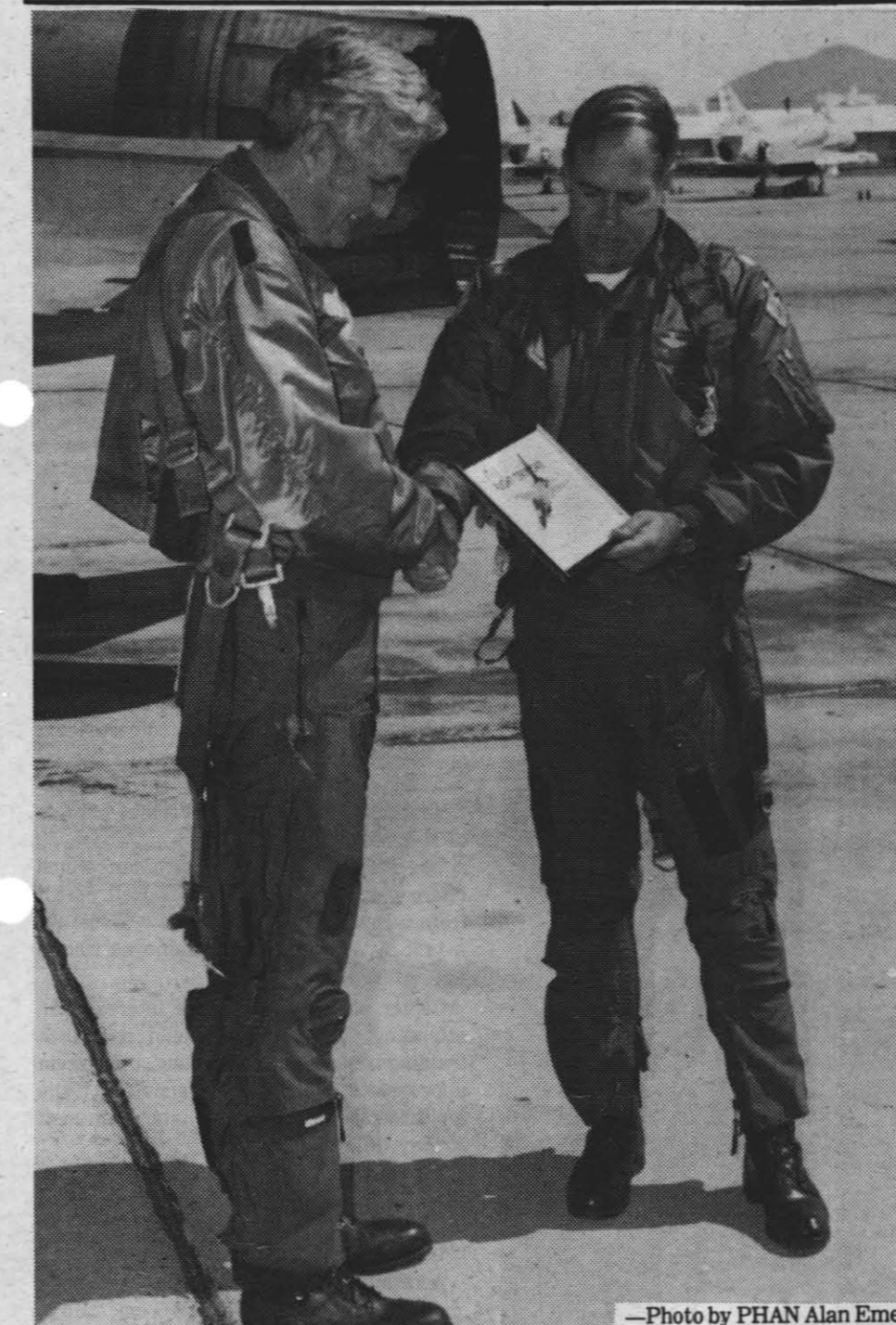
Boundaries waived for playing on T-ball teams

Participation in the T-ball Division of the China Lake Little League has been opened up this season to all 6 and 7 year old youngsters in the local area—not just China Lake.

Because the Ridgecrest Little League does not offer a T-ball program, regular area boundaries for Little League competition have been waived.

Registration and tryouts for boys and girls interested in the T-ball program who will be in the 6- and 7-year-old age group on July 31, 1980, will be held on March 29, and April 5, at China Lake Little League diamond No. 4.

Additional information about the T-ball program can be obtained by calling either Dan Vander Werf at 446-3641 or Bob Rodriguez at 446-7459 after working hours.



MEMORABLE FLIGHT — Dr. Walter LaBerge, former NWC Technical Director who is now the Principal Deputy Undersecretary of Defense (Research and Engineering), receives a certificate from Lt. Col. Robert C. Ettinger, USAF, upon completion of his first flight in an F-16 aircraft. The document gives the time, date, and duration of the flight. Lt. Col. Ettinger was the pilot of the craft that brought Dr. LaBerge from Edwards Air Force Base to NWC last week. Dr. LaBerge received a model of the aircraft as well as the certificate. —Photo by PHAN Alan Emery

Master control panel answers need at TV booster

A master control panel, designed and built by Doug Reid, a member of the board of directors of the Indian Wells Valley TV Booster, Inc., is now ready for use at Laurel Mt., where receiving antennas and translators for rebroadcasting television signals to local area residents are located.

Valuable assistance on this project was provided to Reid by Darrell Grandjean, who designed the special brackets needed for mounting hardware on the panel; by James Wilkie, who made the brackets used for mounting the many switches on the panel; and by Gary Maxwell, who helped by laying out the pattern for positioning of the switches on the panel.

Previously, on the rare occasions when local announcements were inserted during TV program commercials to advertise such activities as the Spay and Neuter Program Rummage sale or the IYW TV Booster membership drive, a maze of wires crisscrossed the control room at the TV Booster installation at Laurel Mt., and countless switches were scattered around.

Reid's master control panel is a vast improvement over having to attempt to operate in this fashion, officers of the TV Booster, Inc., board of directors are quick to point out.

Heretofore, attempts sometimes went awry when efforts were made to break into a TV commercial from Los Angeles in order to provide information of local interest. Now, however, thanks to the master control panel that will be used with what local TV Booster experts call the "anything-to-anything box," the uncertainty will be removed.

Not only will it be possible to cut into commercials with ease, but the master

control panel coupled with the "anything-to-anything box" will allow operators working at the TV Booster atop Laurel Mt. to divert or redirect signals in the event that there is a mechanical problem with one of the UHF translators.

An example of this, Jim Wooley, a TV Booster board member noted, the incoming signal for TV Channel 2 could be diverted to a less popular UHF channel and reception of Channel 2 programming continued for those whose home TV sets can pick up UHF reception.

Wooley also reported that the board is trying to raise enough money this year to enable it to purchase new UHF transmitting antennas for all channels received at Laurel Mt. The new antennas, which will transmit a wider beam, are expected to greatly improve UHF TV reception at China Lake and in Inyokern.

Plans call for installing a new UHF transmitting antenna for Channel 28 first, and then, as more contributions are received, provide new antennas for other Los Angeles TV channels as well.

This past week, some initial steps also were taken to improve the quality for TV reception on Channels 4 and 11 by making a number of electronic and wiring changes in the equipment at Laurel Mt. An additional modification (replacement of a transistor) that is to be made as soon as the parts arrive, will further increase the power output of UHF Channel 67 (VHF Channel 11).

Last week's modifications were made by Wooley and by John Piri, an NWC engineer, who also is a member of the IYW TV Booster board of directors.

Continued financial assistance is necessary to cover the operation, main-

Ltjg. Eric Darrow reports for duty as chaplain at China Lake

Ltjg. Eric L. Darrow, a recent graduate of the 8-week basic course offered at the Naval Chaplain's School in Newport, R. I., has reported to the Naval Weapons Center for his first tour of active duty as a Navy chaplain.

Ltjg. Darrow will be replacing LCdr. Rod Wallace, who is due to leave in mid-May for an unaccompanied tour on Okinawa with the 1st Marine Air Wing. While LCdr. Wallace is overseas, his family will be living in Texas.

Ltjg. Darrow, whose home town is North Augusta, S.C., served for two years (1968-70) as an enlisted man in the Marine Corps. A good portion of this time was spent in Vietnam with Headquarters Company of the 3rd Marine Division's Headquarters Battalion at Quan Tri, and he also served several months with the 3rd. Marine Amphibious Force at Danang.

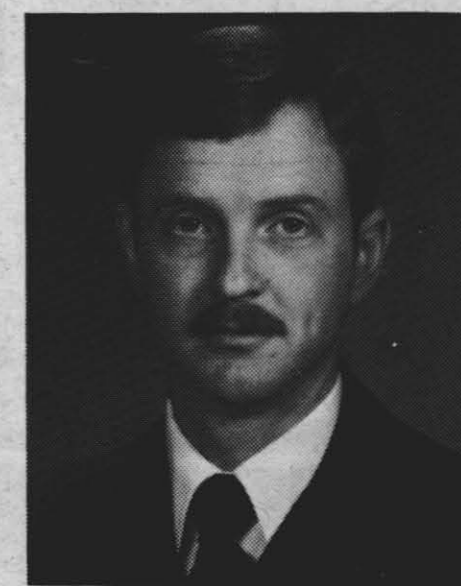
Firsthand Experience

"My experience in the Marine Corps showed me a great deal about the need for chaplains in the Armed Forces. I was helped by a couple of very good Navy chaplains," Ltjg. Darrow said in relating something about the events that shaped his life and headed him in the direction of a career in the Navy Chaplain Corps.

For two years prior to joining the Marine Corps and serving in South Vietnam, Ltjg. Darrow was a student at the University of South Carolina in Columbia. Following his discharge from the military service he enrolled at Toccoa Falls Bible College in Toccoa, Ga., where he was graduated with a BS degree in Bible study and theology in 1972.

In further preparation for the ministry and service in the Navy Chaplain Corps, he attended Trinity Evangelical Divinity School in Deerfield (near Chicago), Ill., and completed the requirements for a Master of Divinity degree in 1976.

Ltjg. Darrow is a member of the Christian and Missionary Alliance denomination—a group that was founded about 100 years ago for the purpose of spreading foreign



Ltjg. Eric L. Darrow

missions work and eventually grew into a church denomination.

His first pastorate was at the Sanford Alliance Church and Christian Missionary Alliance in Sanford, a small town outside Orlando, Fla., before he joined the Navy.

Ltjg. Darrow was accompanied to China Lake by his wife, Patricia, and their two children. They are Eric, Jr., who is 4 years old, and a daughter, Heather, who is 2 years of age.

Delamping program helps in effort to save energy, money

So far, the delamping program has resulted in an annual saving of nearly 5,000,000 kilowatt hours of electricity; the amount saved is nearly 5.6 percent of the total electrical load for the Naval Weapons Center.

Delamping involves removal of excess lights and replacement of current light bulbs and fluorescent tubes with more energy-efficient ones.

The lighting standards attained are those in an ALNAV directive: 50 footcandles for work areas and 30 for nonwork areas in a room.

A considerable cash saving is anticipated as well as the energy saved. At current rates, the anticipated annual saving for the areas already delamped is \$196,000; labor cost has been \$110,320 so a net saving will result even in the first year.

Delamping will continue until all Center work areas have been included.



MASTER CONTROL PANEL AT TV BOOSTER — Ready for use at the Indian Wells Valley TV Booster atop Laurel Mountain is a master control panel designed and built by Doug Reid (shown above). This will simplify the switchover from TV commercials aired from Los Angeles stations to announcements of local events, and also make it possible to divert or redirect signals when there is a TV signal translator equipment failure.



MEMORABLE AFFAIR — The Aviation Ordnance Department reunion held last Saturday at Joshua Hall in Ridgcrest produced some memorable moments such as the skit portraying the "Muscle-Guided Missile" starring former AOD Department Head Dr. Newt Ward (in the chariot, upper left). And what reunion would be complete without a chorus of "On the Road to Inyokern"? In the top right picture, Dr. Peggy Rogers is inspired by the singing of (l. to r.) Dr. Walter LaBerge, Dr. Frank Cartwright, Pete Nichols, and Dr. Howie Wilcox. A special guest at the party was LaV McLean, widow of Dr. Bill McLean, first head of AOD who later became Technical Director. She is seated next to Dr. LaBerge in the group photo second row from top. A highlight of the evening program was a discussion of whom the "AOD Party" should nominate for President and why. Those engrossed in this weighty subject are seated on stage in the second row photo at right. Thirty-one "plank owners" present received certificates attesting that they were in AOD when the department was first formed in 1950. In the lower right photo Dr. Ward hugs Louise Mitchell, whose idea the reunion was and who spearheaded all the work required to bring the party about. —Photos by Ron Allen and PH2 Tony Garcia

Registration open for Pre-retirement Planning Seminar

Naval Weapons Center civilian employees who are planning to retire within the next five years are invited to enroll in a Pre-retirement Planning Seminar that will begin on Wednesday, April 9, and continue through May 16.

Most of the sessions (except the one entitled "Planning for a Successful Retirement") will be 1½ hours long and will be held once a week. The "Planning for a Successful Retirement" segment will be an all day workshop.

The total amount of time that will be required to attend the seven week seminar is 15 hours. Spouses of those enrolled in this course also are invited to attend.

The seminar is designed to provide a wide range of information on such subjects as tax regulations, the Civil Service Retirement System, Social Security and Medicare, legal matters, health maintenance, and a special workshop designed around enrollee participation in planning for various aspects of retirement.

The final session of the seminar, which deals with "The Real World of Retirement from a Retiree's Perspective," will feature a talk by a former NWC employee who is now retired.

Center employees who are interested in attending this seminar should submit a training request and authorization form via appropriate department channels in time for it to reach Code 094 no later than next Friday, March 28.

The seminar will be limited to 50 employees. Those who hope to attend are asked to indicate the approximate date of retirement on their training request.

Additional information can be obtained by calling Nancy Cleland at NWC ext. 2018 or 2592.

Bluejacket . . .

(Continued from Page 1) drums, and had also tried his hand at other occupations. He sought a Navy career as a way to learn a trade and to see some of the world outside Kansas; the assured school billet proved to be the final enticement.

Listing basketball, racquetball and running as hobbies, PH2 Garcia adds that he also enjoys sharing cooking responsibilities with his wife Sharen, who works in the Acquisition Branch of the Technical Library. In fact, he adds, he's enjoyed cooking to such an extent that he and Sharen are now both enrolled in the Navy's weight reduction program carried on through the branch clinic of the Naval Regional Medical Center.

Decrease of 5 percent in rent for Old Duplex units approved

As reported earlier in an article published in The ROCKETEER, the Naval Weapons Center Commander requested a downward revision in shelter rents that went into effect at NWC on Feb. 1, 1980.

In a letter dated March 3, 1980, the Western Division, Naval Facilities Engineering Command approved a 5 percent decrease in the Old Duplex shelter rents. All other rents will remain unchanged.

The revised shelter rents will be reflected on paychecks beginning on Friday, April 11. In addition, all individuals who resided in Old Duplex units during any part of February and March 1980 are entitled to a refund based on this adjustment.

The revised shelter rents for the Old Duplex Units follow:

Type/Bedroom Size	Shelter Rent Per Month (Day)	Utilities Per Month (Day)	Total Month (Day)
Old Duplex w/Dining Rm 2 BR	\$222.30 (\$7.41)	\$79.20 (\$2.64)	\$301.50 (\$10.05)
Old Duplex 2 BR	193.80 (6.46)	77.10 (2.57)	270.90 (9.03)
Old Duplex 3 BR	232.20 (7.74)	93.30 (3.11)	325.50 (10.85)
Old Duplex 1 BR	132.60 (4.42)	67.80 (2.26)	200.40 (6.68)

New chapter of Juvenile Diabetes Foundation to meet Mon. evening

The new Ridgcrest Chapter of the Juvenile Diabetes Foundation will meet at 7:30 Monday evening at the Knights of Columbus Hall, 725 W. Ridgcrest Blvd., in Ridgcrest.

The meeting is open to all interested persons. Chapter president Tommy Hart emphasizes that membership is open to anyone, not just diabetics. Discussions at meetings include new developments in research, where help can be obtained for common effects of diabetes, and how local diabetics can be of help to each other.

The main purpose of the Juvenile Diabetes Foundation is to raise funds for research aimed at finding a cure for diabetes. Over 85 percent of the monies raised by this association go directly to research.

The Ridgcrest Chapter plans to raise money through memberships and special activities. Other local organizations, including the Elks Lodge, Women's Auxiliary of the Elks, and the American Legion also are assisting with fund-raising efforts.

More than 1,000,000 Americans are affected by diabetes. The disease can be controlled by use of insulin, but not cured

thereby; a cure is yet to be discovered. Further information about the organization can be obtained by telephoning Hart at 375-2185, or Ron Lloyd at 446-4184.

Housing has new phone number for emergency repairs

Starting Monday, March 31, all housing service and emergency calls during normal working hours will be taken on NWC ext. 3763. After hours, emergency calls should be made to NWC ext. 2917 or 2512. Tenants are asked not to place calls for routine repairs after working hours.

Emergency calls are defined as: any clear danger to government property or safety of personnel; coolers not working when the maximum outside temperature exceeds 85 degrees; heaters not working when the outside air temperature falls below 60 degrees; electrical power outages (but tenants are asked first to check the breakers in the house panel box before calling); plugged commode, when there is only one commode in the house; and flooding, roof leaks, or broken pipes.



INNOVATIONS DISCUSSED — Representing the Office of the Patent Counsel James Bechtel and Dr. Thom Skeer (on left) confer with Howard Fish and PRCS Ron Allen of the Parachute Systems Department about the type of innovations that can be patented and the patent process. Such briefings are held whenever requested by a department or group. —Photo by PHAN Alan Emery

Raby receives TD Award . . .

(Continued from Page 1)

such a publication, Willoughby wrote: "In my discussions with industry it has become apparent that many management officials do not appreciate the impact of poor soldering on corporate costs, schedules and equipment reliability.

"It is my desire to provide to industry a NAVMAT publication that provides data pertaining to soldering, repair rates and associated costs, as well as typical problems and suggested solutions."

The reason for seeking the help of Raby and the personnel of the Soldering Technology Branch that he heads, Willoughby wrote, is due to "the preeminent position of NWC in the field of soldering technology. The scientific work being done at China Lake makes NWC the logical technical leader for the development of such a publication."

A further basis for presenting the Technical Director Award to Raby was the leadership he provided to his co-workers that resulted in the development of a single set of tri-service coordinated specifications on the subject of material, solder and printed wiring boards.

Raby, who has been employed at NWC since June 1975, came here from Huntsville, Ala., where (in 1958) he landed a job with

February turns out to be banner month for reenlistments

The most valuable asset that the Navy has is the skilled men and women who are serving in uniform, which made February a banner month at NWC because five of these skilled individuals reenlisted for periods of four to six years.

Leading off the group was AD3 Ryan Keller, who will head for Jacksonville, Fla., for the start of his next four years of active duty. AD3 Keller signed up once more at a definitely un-Florida location: he was sworn in by LCDr. Larry Crume at the top of Olancho Peak.

The first reenlistment in the new Commissary Store took place when SN Oscar Paran signed up for another four years. With this reenlistment, SN Paran became eligible to become a United States citizen.

The selective reenlistment bonus offered rates that require an unusual amount of training or that are critical encouraged AQ2 Richard Newman to reenlist for another five years in the Navy.

Reenlisting has become a way of life for ATC John Kasimatis; he reenlisted for another six years, at the end of which he will have a total of 20 years of service in the Navy.

AZ1 John McElwain reenlisted on Leap Year's Day—Feb. 29—for another four years; with his reenlistment came orders transferring him to the Lemoore Naval Air Station, near Lemoore, Calif.

Inventors' work makes this ideal place to train Navy patent attorneys

The creativity of Naval Weapons Center personnel and the wide range of NWC projects make the Office of Patent Counsel at China Lake an ideal location to train new Navy patent attorneys, says Dr. Thom Skeer.

Dr. Skeer heads the Office of Patent Counsel (Code 012) which, although located at China Lake, is actually only a tenant organization here headquartered at the Office of Naval Research.

On board in the local office are six attorneys, each of whom holds not only a law degree, but also at least one technical degree. A good patent attorney must be an interdisciplinary expert because of the complexity of most inventions. The combination of skills required helps keep the number of trained patent attorneys small and necessitates a continuous training program to meet government needs.

A new attorney assigned to Code 012 for training spends the first two weeks learning how to draft claims for gadgets from shoe

Black invents hybrid gun system; patent disclosure announced

A new and more efficient gun system invented by Bill Black is the latest patent disclosure announced by the Applied Science Branch of the Ordnance Systems Department.

The gun is a hybrid, using both solid and liquid propellants to produce more uniform combustion of gun gases to improve weapon performance.

A .50 caliber test fixture was developed in order to test liquid monopropellant formulations proposed by Dr. Stanley Wood in the Applied Science Branch.

When the gun is fired, gun gases drive a differential piston against a liquid propellant annulus; this moves a shuttle valve that allows the monopropellant to be injected into the uncombusted solid propellant gun gases.

This oxidizer-rich liquid monopropellant completes the oxidation of the fuel-rich solid propellant to produce more effective and complete burning. Lower muzzle flash and high velocity is expected because the propellants are burned completely.

Overall performance of the strictly solid-propellant gun is expected to be enhanced by from 20 to 25 percent.

Work on the hybrid gun concept was performed under Naval Weapons Center Bid and Proposal funding.

trees to complex machinery; the wording on a claim must be descriptive enough to stand up in court. The next two weeks of training is spent on covering actual patent law material.

Then for a year or more the new patent attorney works under the close supervision of Dr. Luke Marsh, a senior attorney here. After training, the attorney may choose to remain at NWC or transfer to one of the 16 other patent field organizations.

The patent process is a lengthy one, with each of the government agencies having its own procedures.

Six Preliminary Phases

A patentable item goes through six phases: the idea is conceived, reduced to practice, a disclosure is written up, a patent is applied for, the application goes through filing procedures, and then is either granted or not granted.

An NWC inventor has already gone through the first two stages before contacting the Office of Patent Counsel; Code 012 then assists with the other phases.

When an invention is submitted to the Patent Counsel, it is sent to the Patent Department at the Office of Naval Research for a patent search to determine that it is indeed new and patentable. The searches are conducted by private patent attorney firms to ensure unbiased reports. (A special group conducts searches for classified inventions.)

A favorable report on the invention results in its being placed on the docket for a Code 012 government patent attorney to work on in order of authorization. How rapidly this can occur depends largely on how many staff members are currently in the office, and whether the item is of such a nature that it should be considered out of turn. Devices relating to energy or those previously published, for instance, might be considered immediately.

Lengthy Process Involved

Ordinarily the granting of a patent takes from 18 months to 2 years after the application is filed with the Patent Office, although, again, a "hot" patent can be granted in less than 90 days.

While patents are filed to protect the first inventor, basically the government files patents to protect itself as well as to develop patent portfolios so that it can license to industry the right to build or use the patented item and get royalties.

The government employees who developed the patented item receive half of the royalties collected by government for licensing that item.

About 250 items are under consideration by Code 012 at any time. In 1979 64 disclosures were made, 55 patent applications sent in, and 40 patents granted.

Navy Relief Society able to help with financial problems

The Navy Relief Society (NRS) is often able to assist with special loans for emergency car repairs needed by Navy and Marine active duty personnel and their families.

While NRS is not able to finance the purchase of a car nor able to help make monthly payments, it can help when a prolonged breakdown would cause serious problems to military personnel or their families.

Those who may need such assistance are asked to bring repair estimates and information about other outstanding bills to the local Navy Relief Society Office at Building 880 on King St. during office hours, Monday, Wednesday, and Friday from 11 a.m. until 2 p.m., and discuss the problem with a duty worker.

Anyone who wishes further information may telephone 446-4746 during office hours.



INVENTION TESTED — Dr. Stanley Wood (l.) watches Bill Black put together the component parts of a .50 caliber test fixture to test a hybrid gun concept. The gun combines liquid monopropellant and solid propellant to produce a more efficient propulsion system. —Photo by Ron Allen