

Desert Community Orchestra's Pops Concert set Oct. 24

The annual Pops Concert of the Desert Community Orchestra will be presented on Sunday, Oct. 24, at 3 p.m. in the Cerro Coso Community College lecture hall.

This concert, the first under the baton of Lauren Green, is especially designed for family listening. Since music for this occasion is sponsored by a grant from the Music Performance Trust Funds of the recording industries, the concert will be free.

Opening with the "La Belle Helene Overture" by Offenbach, the orchestra will also play Bizet's "Carmen Suite," "Divertissement" by Jacques Ibert, and Sousa's "Stars and Stripes Forever." Soprano Rosemary Matthews, director of the college choir, will be featured in the Carmen number and will also sing selections by Ginastera.

Concertgoers are reminded to get there early—in recent years the orchestra has usually played to a full house. Annual memberships for the remaining four concerts of this season will be on sale at the door before the concert and during intermission. Prices are \$10 for families, \$5 for single memberships, and \$1 for student or enlisted military memberships.

Art League meeting set

Anita Wolff of Placerville will present a still-life demonstration in oils using glazes for the Desert Art League at its regular program meeting on Monday. The meeting, held at the NWC Community Center, will begin at 7:30 p.m.

Mrs. Wolff's background includes study at the Otis Art Institute in Los Angeles. She has been a student of such well-known artists as Frederic Taubes, Sergei Bongart, Rex Brandt, and Robert Brackman. She has won numerous awards for her work.

Desert Art League membership is open to all who are interested in art. Student memberships are available for junior high and high school students.

Country Blues at COM

Jim Gentry and the Country Blues, a country and western group from Los Angeles, will perform for the listening and dancing pleasure of Commissioned Officers' Mess patrons tonight — membership night — from 9 until 1 a.m.

Also entertaining this evening will be Mike Caldwell, a comic and magician from the Magic Castle, a well-known Los Angeles night club. His floor show will begin at 11 o'clock.

Dinner special for the evening will be a steamboat round buffet, served from 6 until 9.

American Heritage Celebration due soon

The eagerly-awaited American Heritage Celebration, whose proceeds will be donated to the Maturango Museum building fund, will get underway in just one week at the Burroughs High School lecture center



BRAZILIAN SAMBA — Maria Pery practices dancing the samba for her upcoming American Heritage Celebration performance. Mother of six children, she has found time for a career as a model, an interior decorator, and has appeared in the theater. —Photo by Stan Sanders



SOUNDS OF EBONY — Pete Larsen sings to Dawn Atkinson (above) during the recent performances of "Sounds of Ebony," a Bicentennial tribute to black composers and musicians written and directed by Every Jo McClendon, shown singing a solo. The production involved a group of more than 60 persons, including singers, dancers, and backstage help at the Burroughs High School lecture center.

Harpichordist to appear Oct. 28 for IWV Concert Association

A change of pace from the New Orleans-style jazz concert that opened the 1976-77 season of the Indian Wells Valley Concert Association will be provided for local music lovers on the evening of Thursday, Oct. 28, at the Naval Weapons Center theater.

The featured artist for this next program will be Susanne Shapiro, an accomplished harpichordist who has just returned from a European tour that was culminated by a recital in London's Wigmore Hall.

Miss Shapiro, who is head of the harpichord departments at Pomona College and at California State University in Northridge, has spent a major portion of her life concentrating on perfecting her playing of the harpichord—beginning with her early studies at the Royal Academy of Music in London through her graduation from the Juilliard School of Music in New York.

Miss Shapiro has been scheduled regularly for concert appearances at New York's Lincoln Center, the Gardner Museum in Boston, the Kennedy Center in Washington, D.C., at the Martha's Vineyard Summer Festival, and with the Los Angeles Philharmonic Orchestra.

The harpichord that she will be bringing here for the concert on Oct. 28 was built by Eric Herz of Boston, and is modeled after

and Joshua Hall on the Desert Empire Fairgrounds.

On Friday, Oct. 22, the lecture center stage will come alive with a continental flavor as Heritage '76 begins the celebration. People dressed in costumes of their native lands will entertain with singing and dancing.

Joshua Hall will be the site for the second phase of the celebration, Festival U.S.A., on Saturday, Oct. 23. From 1 until 5 p.m. an international food fair, a display of arts and crafts, and live entertainment can be enjoyed for just 50 cents per person, a price redeemable on food purchases.

The third and final phase, Horizons '76, will end the celebration that evening at the lecture center. Beginning at 8:15, a colorful multi-media program will span the life of America through slides, narration, skits, song and dance.

Tickets for the Heritage '76 and Horizons '76 shows can be purchased individually or as a package. The prices for each individual performance are: adults \$2.50; students (through high school age), senior citizens and military (in uniform) \$1.25. The package prices for both performances are \$4 and \$2, respectively.

Tickets are on sale at Lilly's Dress Shop and the Gift Mart in Ridgecrest, and the Maturango Museum and the Station Pharmacy at China Lake.

fine instruments of the "North European School" of the 17th and 18th centuries. It has unusual depth and fullness of tone and surprising clarity even in the extreme highs and lows of its range.

Reserved seat tickets for Miss Shapiro's concert are available now and can be ordered by calling the Indian Wells Valley Concert Association at 375-5600 at any time for reservations and information. Prices, depending on location of the seats, are \$5, \$4 or \$3 for general admission. In the case of



Susanne Shapiro youths under 21, enlisted military personnel and senior citizens over 65 years of age, single admission tickets can be purchased at half-price.

Season tickets at reduced rates are also available for the program by Miss Shapiro and the remainder of the 1976-77 concert series that includes William Mallory, lyric baritone, on Nov. 30; the Trio Flamenco, a blending of two master guitarists and a talented dancer, on Jan 19; the 85-member Utah Symphony Orchestra on March 3, and the piano artistry of Daniel Pollack on April 18.

Tickets available for Disneyland attraction

Special discount tickets are now on sale at the Community Center for Navy Night at Disneyland.

The tickets are available to all military personnel, both active duty and retired, Department of Defense employees and their dependents. The supply is limited, and they will be sold on a first come, first served basis.

Disneyland's Navy Night is scheduled on Saturday, Oct. 23, from 8 p.m. until 1 a.m. The ticket price of \$4.50 per person includes admission and unlimited use of all attractions (except shooting galleries), including dancing, entertainment, bands, shows and free parking. Children two years and under are free.

SHOWBOAT

MOVIE RATINGS

The objective of the ratings is to inform parents about the suitability of movie content for viewing by their children.

- (G) - ALL AGES ADMITTED
General Audiences
- (PG) - ALL AGES ADMITTED
Parental Guidance Suggested
- (R) - RESTRICTED
Under 17 requires accompanying Parent or Adult Guardian
- CS - Cinemascope
- STD - Standard Movie Screen
- Regular starting time—7:30 p.m.

Program subject to change without notice — please check marquee.

FRI. 15 OCTOBER

"KING OF THE MARVIN GARDENS" (104 Min.)
Jack Nicholson, Bruce Dern
(Drama) The game of Monopoly is the key to the plot of this drama which concerns a radio monopolist who is taken in by his smooth-talking, high-living brother and his fantastic scheme to build a gambling casino on Waikiki Beach. (R)

SAT. 16 OCTOBER

"THE END OF THE GAME" (104 Min.)
Jon Voight, Jacqueline Bisset
(Suspense Drama) Study of the relationship between a tired but crafty, slowly dying police commissioner and a smooth-talking rich, all powerful businessman and crook. Their mutual secret goes back 30 years.

SUN. 17 OCTOBER

"DON'T OPEN THE WINDOW" (90 Min.)
Arthur Kennedy, Ray Lovelock
(Drama) This film focuses around a team of agricultural specialists who are engaged in a special project constructing a complex sound machine which should rid farm-lands of all insects. Instead of ridding the land of pests, the machine backfires and bizarre happenings take place. (R)

MON. 18 OCTOBER

"RANCHO DELUXE" (93 Min.)
Jeff Bridges, Sam Waterston
(Comedy Western) A series of vignettes about two modern-day, small-time cattle rustlers who steal one steer at a time and, eventually, wind up at Rancho DeLuxe, a prison camp. (R)

TUE. 19 OCTOBER

"THE MISSOURI BREAKS" (126 Min.)
Jack Nicholson, Marlon Brando
(Western Drama) Set in the Montana badlands during the 1880s, this film centers around a gang of horse rustlers which suddenly finds its days numbered when a local ranch baron calls in a hired gunman (Marlon Brando) to wipe out the rustlers once and for all. (PG)

WED. 20 OCTOBER

"TNT JACKSON" (72 Min.)
Jeanne Bell, Stan Shaw
(Action Drama) Jeanne Bell (TNT Jackson) arrives in Hong Kong to learn that her brother has been murdered. The murderer is a member of a drug combine. "TNT" Jackson, using her Kung Fu skill, helps break up the drug ring and at the same time avenges the death of her brother. (R)

THURS. 21 OCTOBER

"SPARKLE" (98 Min.)
Irene Cara, Philip M. Thomas
(Drama) A lively musical score by popular Curtis Mayfield enhances this melodramatic screenplay which details the rise and fall of the Supremes-like singing group. Set against the backdrop of the Harlem tenements, this film is the story of three sisters whose lives and fortunes are at stake in the competitive world of pop music. Their lives are pictured from their winning of a talent contest in a sleazy local club to the group's breakup and the final success of one member of the group. (PG)

FRI. 22 OCTOBER

"BADGE" (116 Min.)
Robert Duvall, Verna Bloom
(Crime Drama) This story is based on one of the many true life experiences of a former New York City detective, Eddie Egan ("French Connection"), and centers on uncovering a conspiracy to deliver rifles for a revolution. (R)

The Rio to play tonight

The Rio, a seven-piece soft rock band from Los Angeles (including two female vocalists) will perform at a Chief Petty Officers' Club dance tonight from 8:30 until 1 a.m.

U.S. Government Printing Office: 1976 - 442 / N0410

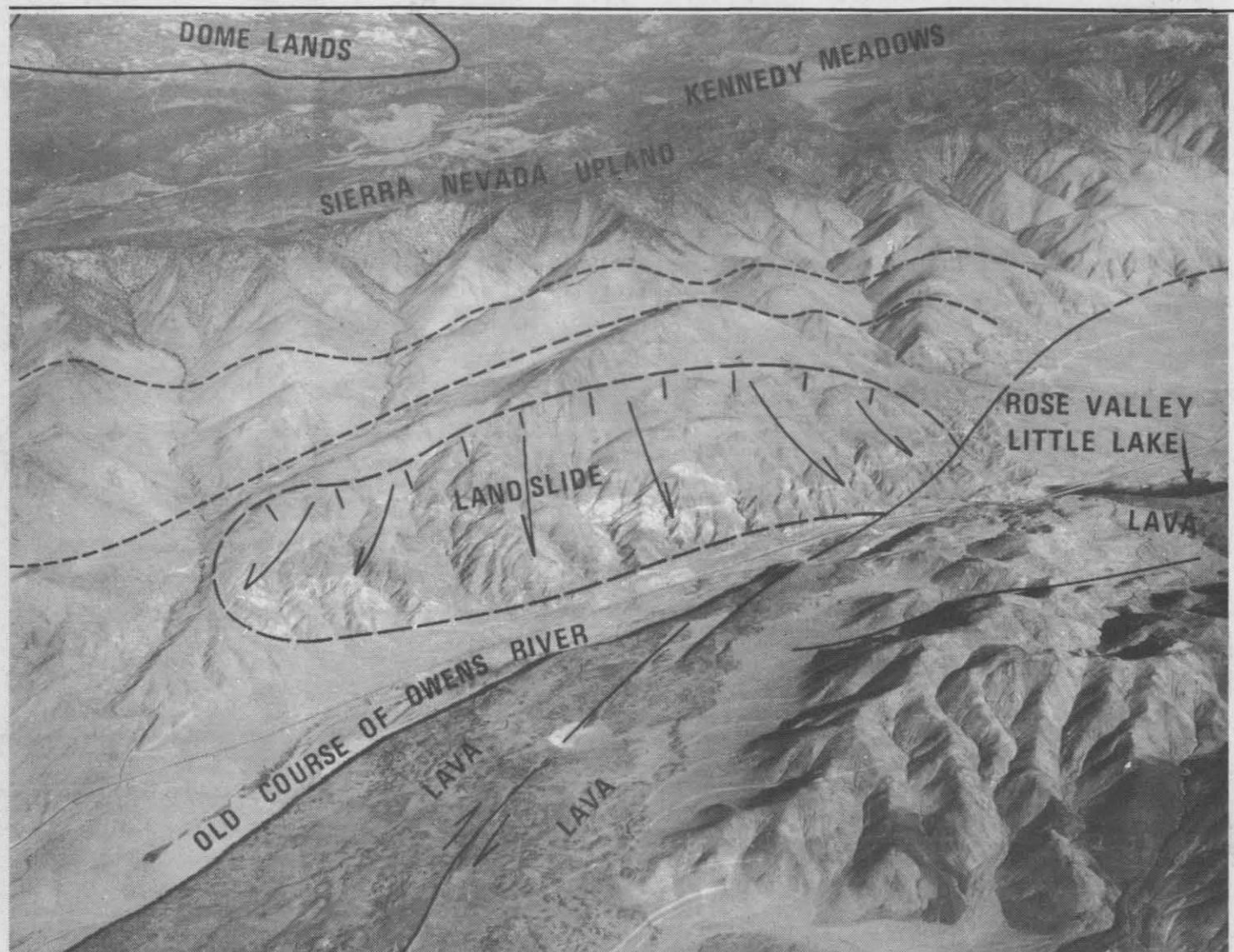
From: _____ PLACE STAMP HERE

To: _____



Naval Weapons Center
China Lake
California

Oct. 15, 1976
Vol. XXXI, No. 39



STILL ACTIVE — A fault which runs across Indian Wells Valley and joins the frontal fault of the Sierra Nevada is marked in this aerial photo beginning at lower left and continuing upward toward Rose Valley. This still-active fault is about 20 miles long, and other faults are indicated by lines to its right and above the area labeled "landslide." The direction of movement along the 20-mile long fault is indicated by arrows visible near lower left. Earthquakes occur along slipping fault faces.

Earthquake prediction still not a full-fledged science, declares well-known NWC expert

Editor's note: residents of "earthquake country" — otherwise known as California — have been bombarded of late with news, predictions, warnings and theories concerning the temblors to which their state is subject. In an effort to sort some of these ideas out, **THE ROCKETEER**, with this issue, begins the first of a three-part series about earthquakes — their probable causes, their likelihood of occurrence in the Indian Wells Valley, and some courses of action which people can take to alleviate their effects.

Ancient Greeks attributed earthquakes to the moods of Poseidon, god of the sea; when this trident-wielding deity became angry, he shook the earth. Some early American Indians, on the other hand, believed that a tortoise supported the earth, and that the

earth trembled when the creature took a step.

"Earthquake prediction still hasn't gotten to the point where it is yet a science, although, particularly for the last 20 years, people have been working awfully hard at it," according to Dr. Pierre St. Amand, head of the Research Department's Earth and Planetary Sciences Division and an internationally-recognized expert on earthquakes.

Most quakes occur, Dr. St. Amand explains, within 100 miles on all sides of the Pacific Ocean. There is speculation that this localization is caused by the fact that the continents are moving over the ocean basins, a process which pushes the material of those basins underneath the land masses.

What causes earthquakes? "There are

breaks in the earth's crust called 'faults,'" says Dr. St. Amand, "and blocks of land on either side of these faults or fractures are in continual motion with respect to one another. But they don't slide smoothly, and a certain amount of strain builds up in the rock as a result of their movement. When the strain becomes great enough, the fault faces slip, and in so doing cause land on either side to vibrate, radiating earthquake waves."

Along the road of progress from sea gods and tortoises to faults in the earth, modern scientists have not only advanced their own explanations for causes of quakes, but have even suggested how these events may be predicted. As there are a fair number of such scientists, there are a fair number of prediction techniques.

One is called "integrating the strain." It contends that quakes occur at a nearly constant rate over a large period of time in any given region, and that if for some reason there are no such occurrences at about the time one is "due," then the next earthquake will be a bit larger than average to "make up the difference."

There is another statistical method that estimates from past experience the number and magnitude of earthquakes to occur per 1000 sq. kilometers (an area about the size of the Indian Wells Valley). It predicts, for instance, that one 4.5 magnitude quake can be expected along the notorious San Andreas fault every 100 years in an area about 35 kilometers on an edge.

A third technique measures the amount of slippage — the change in the shape of the landscape — which results from quakes and

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AVCM Birkinsha to represent Navy as enlisted woman of yr.

Master Chief Avionics Technician Italia Birkinsha, of Air Test and Evaluation Squadron Five, has been selected to represent the U.S. Navy as the enlisted woman of the year at the Navy League Ball to be held at the Beverly Hills Hotel tomorrow night.

AVCM Birkinsha has completed more than 30 years of active service and is the senior ranking enlisted woman on active duty in the Navy. Assigned to VX-5 since May 1970, she is the special assistant for five electronic warfare project officers engaged in the prosecution of Chief of Naval Operation-assigned operational tests and evaluations.

Additional Duties
In addition, she is the Command Classified Material Custodian, the counselor-ombudsman for the squadron's enlisted women and a past president of the Chief Petty Officers Club Advisory Board.

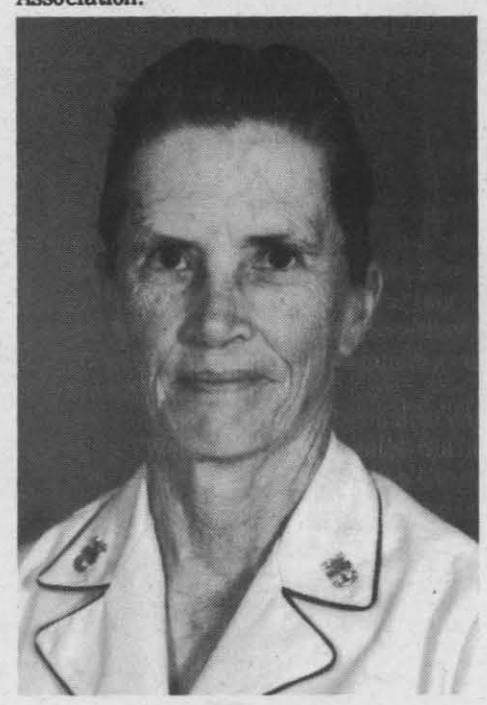
There will be a total of seven women in uniform representing the sea services who will be honored at the ball. In addition to AVCM Birkinsha, a Naval officer, an officer and enlisted woman from both the Coast Guard and Marines and a third officer in the U.S. Merchant Marines have been singled out at the national level to appear at this function sponsored by the 11th Region of the Navy League of the United States.

In the letter of nomination signed by her skipper, Capt. R. N. Livingston, she was praised for her "professional attitude and attention to detail," through which she has made "significant contributions to this command. Her day-to-day influence has streamlined routine office functions, allowing the Electronic Warfare Test Directors to devote undivided attention to the critical issues at hand."

Kansas Native
Prior to entering the Navy in 1943 and serving until the end of World War II, AVCM Birkinsha, a native of Wellington, Kan., had earned a B.A. degree in zoology from the University of Arkansas in Fayetteville. She re-entered the service in March 1949 and has been on continuous active duty ever since that time.

In November 1966 she was promoted to her present rank, the highest enlisted rate possible.

In her off duty hours, she is an active supporter of the Maturango Museum and a member of the Eastern California Museum Association.



AVCM Italia Birkinsha

CLMRG member assists stranded scout

Experience he has gained as a member of the China Lake Mountain Rescue Group since 1971 enabled Don Harris, an NWC employee, to help a local Boy Scout out of a sticky situation last Saturday afternoon at the Great Falls Basin a few miles north of Trona.

Don Harris, a mechanical engineer in the Weapons Department's Surface Systems Division, had gone to the Great Falls Basin with his brother, Glenn, who is a Bureau of Land Management ranger assigned to the Ridgecrest Resource Area.

The project being undertaken was a cleanup of this outdoor recreation area by volunteer members the Searles Valley Gem and Mineral Society, members of the four-wheel drive clubs, Boy Scouts and other

(Continued on Page 5)

(Continued on Page 3)



GOOD IDEAS PAY OFF — A group of five employees of the Public Works Department were the recent recipients of Beneficial Suggestion awards totalling \$735 that were presented by Cdr. James Uhe (at left), assistant Public Works Officer. Along with his congratulations, Cdr. Uhe presented checks to (from left) George Perrige, Ray Hammond, Donald Braem, Britt Hartzell and Rufin Sz-manski. His idea for a security alarm was worth \$500 to Braem, a telephone mechanic, while Hammond, an air conditioning mechanic, garnered \$135 for suggesting an improved means of air conditioning conservation. A \$50 award was presented to Hartzell, an equipment mechanic, for developing better electrical connections for pumps, and \$25 awards each went to Perrige, also an equipment mechanic, and to Szymanski, a water treatment plant operator. The latter two awards both had to do with improved methods of controlling water pressure and water usage.

—Photo by Ron Allen

'Navy Appreciation Day' dinner set by Chambers of Commerce

Joshua Hall, the Desert Empire Fair's permanent exhibit building, will be the setting for a special dinner that has been planned as a way for the residents of the Indian Wells Valley to express their appreciation collectively to the U.S. Navy. This event, which is being co-sponsored by the Ridgecrest and Inyokern Chambers of Commerce, will be held on the evening of Wednesday, Oct. 27, starting with a no-host social hour at 6:30.

The Burroughs High School band, directed by Don Wilkinson, will provide musical entertainment during the social hour, and organ music will be played while a roast beef dinner is being catered by Mr. P's Playhouse.

Highlight of the evening will be the presentation of a plaque from the City of Ridgecrest, the Ridgecrest and Inyokern CoCs and the people of Indian Wells Valley to Rear Admiral R. G. Freeman III, NWC Commander, who will accept it on behalf of the Center.

According to Audrey Nelson, manager of the Ridgecrest CofC, this will be "an opportunity for local area residents to gather together and express their appreciation to the Navy for providing an economic base for the area, and for the multitude of services that have been contributed over the years by the Navy to its neighboring communities."

Dr. Rex Shacklett, a long-time resident of Ridgecrest and former mayor of the city, will be master of ceremonies for the evening, and a number of persons will be called upon to cite examples of the many and varied ways the Navy at China Lake has been a good neighbor to all of the residents of Indian Wells Valley. Co-chairmen of this "Navy Appreciation

Day" dinner are Bud Eyre, an automobile dealer in Ridgecrest, and Dorothy Stapp, vice-president of the Inyokern CofC. All those planning to attend this affair are asked to make reservations and pick up their tickets no later than next Wednesday, Oct. 20. The tickets, priced at \$5.50 per plate, can be obtained in Ridgecrest at the city hall, Chamber of Commerce office, and at the Bud Eyre Chevrolet agency. In Inyokern they are available at the Mayfair Motel and the Inyokern Market.

Sharing the spotlight with the master of ceremonies and the honored guests of the evening from the Naval Weapons Center will be Dave Henderson and Paul Burns, presidents of the Ridgecrest and Inyokern CofCs, respectively.

Special dinner set for Oct. 30 Salute

As a part of the Naval Weapons Center's Bicentennial Salute to the Armed Forces, a special dinner will be served at the Enlisted Dining Hall on Saturday, Oct. 30, from noon to 5:30 p.m.

Tickets, which are being sold on weekdays from 11 a.m. to 2 p.m., can be obtained at the Food Service Office, and are priced at \$1.40 for officers and civilians, \$1.15 for enlisted personnel on Comrats, and 75 cents for children under 12 years of age. Attendance is restricted to military personnel, their dependents and guests.

A maximum of 400 tickets will be sold. Those interested in attending are advised to make sure they pick up their tickets as soon as possible.

A complete prime rib steak dinner is to be served, including soup, a variety of salads, baked potatoes, hot rolls or bread and butter, cake, ice cream and beverages.

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 personnel office in the ad. All others desiring employment with the Naval Weapons Center may contact the Employment-Wage and Classification Division, Code 452, Ext. 2049. 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 454 or 457). 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 (Typing), GS-301-3/4, PD No. 7423081, Code 2341, (Intermittent) — This position is located in the Illustration and Design Branch, Technical Information Department. The incumbent will maintain filing/retrieval system of original illustrations and art work, photographs and visual aids of view-graph and 35mm slide art; prepares letters, memos and stub requisitions; assists visual information specialist in the development of illustrations and designs for technical publications, brochures, view-graph and slide presentations, and exhibit projects. Job Relevant Criteria: Knowledge of the processes involved in the production of illustrations for publications and/or presentations; knowledge of filing systems and format for Naval correspondence; and the ability to type efficiently.

Aerospace or Mechanical Engineer, GS-9/11/12, PD No. 7423085, Code 3273 — This position is located in the Applied Technology Branch, Propulsion Systems Division, Propulsion Development Department. Incumbent is responsible for conducting design, hardware fabrication and testing of gas sources for missile propellant pressurization, aerodynamic and thrust vector controls. Incumbent will participate in planning for future requirements and formulating applicable technology programs. Job Relevant Criteria: Knowledge of gasdynamics, fluid mechanics, hardware design materials. Servosystem knowledge desirable. Ability to plan and execute technology and application programs.

Mechanical or Electrical Engineer, GS-9/11/12, PD No. 7423086, Code 3275 — This position is located in the Applied Technology Branch, Propulsion Systems Division, Propulsion Development Department. The incumbent is responsible for conducting design, hardware fabrication and testing of electrical power sources for a wide variety of missile applications, utilizing existing technology in turboalternators, thermoelectric generators and other nonbattery electrical sources. Incumbent will also participate in determining future requirements and formulating needed technology programs. Job Relevant Criteria: Knowledge of electromechanical devices and basic electrical or electronic circuitry; ability to plan and execute technology and application programs.

File applications for the above with Mary Morrison, Bldg. 34, Rm. 210, Ph. 2293.

Machinist Foreman, WS-3414-10, Code 34453 — This position is located in the Engineering Department, Engineering Prototype Division, General Machining Branch, Numerical Control Machining Section. This position has responsibility for the immediate supervision of approximately six craftsmen whose functions are to set up and operate various numerically controlled machines such as lathes, mills and drill presses. Incumbent is required to become familiar with the fundamental rules and regulations involved in the administration of Navy personnel and fundamentals of leadership. Incumbent is required to supervise those employees assigned to him and guide and advise them in the performance of work and see that work accomplished by subordinates meets required standards. Incumbent shall also see that necessary materials and equipment are provided on the job and that, within the limits of authority, completion dates are met. Incumbent is required to confer with a superior regarding any problems or situations beyond his immediate control. Applicants must possess enough knowledge and abilities in the following elements to perform the duties of the position in the trades supervised: ability to supervise, technical practices, ability to interpret instructions, knowledge of materials, knowledge of pertinent tools and equipment.

File SF-172 and supplemental wage grade supervisory information sheet with Code 092 to be received or postmarked not later than 1 November 1976. Forms may be obtained in the Personnel Bldg., Rm. 100.
For additional information contact Sue Prasolowicz.

Bldg. 34, Rm. 103, Ph. 2657.

Mechanical Engineer, GS-9/11/12, PD No. 7436163N, Code 3613 — Position located in the Environmental Engineering Section, Environmental Branch, Engineering Services Division, Engineering Department. The incumbent will serve as an environmentalist and is responsible for the establishment of environmental requirements (natural and dynamics) for weapons development and its interface with its launch platform. Incumbent assists program managers with the solution of environmental problems that arise during design, development and production of systems. Job Relevant Criteria: Ability to develop engineering evaluation criteria/methods for environmental factors and ability to deal effectively with program managers when recommending changes due to environmental considerations.

Logistics Management Specialist, GS-3401-1, PD No. 7436163, Code 3444 — This position is that of a Logistics Management Specialist in the Integrated Logistics Support (ILS) Branch, Fleet Engineering Division, Engineering Department. The prime responsibility of this branch and major duties/responsibilities which the incumbent will get involved in are the coordination and application of ILS to NAVAIR development projects at this Center and other activities (government and contractor) as assigned. The incumbent will implement ILS principles and requirements during the development phase and for the life cycle of the NWC cognizance system/equipment. Job Relevant Criteria: Knowledge of integrated logistics support (ILS) principles and policies; and knowledge of the management of weapons systems, subsystems and components as it relates to ILS. Promotion Potential: GS-12.

Clerk-Typist, GS-322-3, PD No. 7436164N, Code 34401 — This position is located in the Engineering Prototype Division, Engineering Department. Incumbent provides clerical and typing services to branch heads and other division personnel. Duties include composing and typing reports and informal memoranda, maintaining filing systems, keeping posting cards for job orders up to date, answering phones, and keypunching computer input cards for the numerical control programmers. Job Relevant Criteria: Ability to type efficiently and accurately, to meet deadlines under pressure, and to get along with others in the work group; knowledge of keypunch operations. Promotion Potential: GS-4.

File applications for the above with Janet Thomas, Bldg. 34, Rm. 204, Ph. 2295.

Procurement Clerk (Typing), GS-1104-4, PD No. 7025014-4N, Code 2522 — This position is in the Purchase Branch, Procurement Division, Supply Department. Incumbent types, assembles and distributes purchase orders, delivery orders and other paperwork involved in small purchase and government contracts; furnishes information regarding procurement status to customers and vendors; receives salesmen; and maintains files and records pertaining to procurement. Job Relevant Criteria: Ability to meet and deal with others; ability to deal effectively with outside contractors; typing proficiency; ability to make decisions; familiarity with the functions of government procurement operations; and the ability to function under minimum supervision. Promotion Potential: GS-4.

(Continued on Page 3)

DIVINE SERVICES

PROTESTANT
Sunday Worship Service 1015
Sunday School — All Ages 0900
Wednesday Noon Bible Study 1130
Sunday School Classes are held in Chapel Annexes 1, 2, 4 (Dorms 5, 6, 8) located opposite the Center Restaurant. Communion Service first Sunday of the Month.

ROMAN CATHOLIC MASS
Saturday 1700 fulfills Sunday obligation
Sunday 0700 0830 1130

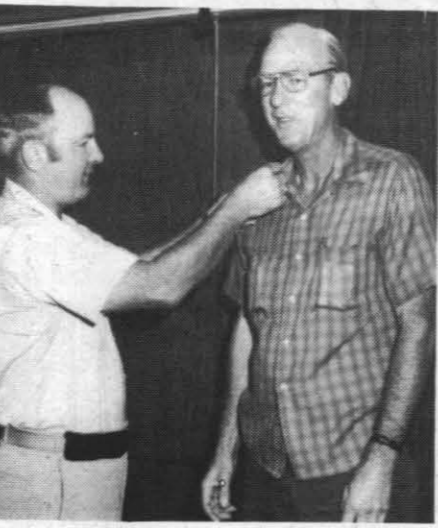
BLESSED SACRAMENT CHAPEL MASS
Daily except Saturday 1135

CONFESSIONS
Daily 1115 to 1130
Saturday 1530 to 1645
Sunday 0800 to 0825

RELIGIOUS EDUCATION CLASSES
Sunday Pre-school thru 6th grades 1015
Wednesday First thru sixth 1530
seventh & eighth 1900
(Junior High)

Above classes are held in Chapel Annexes across from Center Restaurant. As announced Ninth thru 12th grades "In Home" Discussion Groups Monthly Youth Rallies Contact Chaplain's Office for specifics.

JEWISH SERVICES EAST WING — ALL FAITH CHAPEL
Sabbath Services every Friday 1930
UNITARIANS CHAPEL 35
Services — (Sept.-May) 1930



35-YR. PIN PRESENTED — Kenneth D. Schubert, motor vehicle operator foreman in the Public Works Department, was the recent recipient of a 35 year Federal service pin that was presented to him by Cdr. James Uhe, assistant Public Works Officer. Schubert's lengthy period of Federal service began with four years of duty with the Army Air Corps during World War II. Following his discharge from the Air Corps on Oct. 20, 1945, he began working as a chauffeur at the Swan Island Naval Shipyard in Portland, Ore., but then transferred to China Lake in April 1947 and has been here ever since. —Photo by B. J. Beckman

DEADLINES
Tuesday, 4:30 p.m.
Tuesday, 11:30 a.m.
The Rocketeer receives Armed 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 NPP-R P-35, revised January 1974. Office at Nimitz and Lauritzen. Information published in the Rocketeer does not necessarily reflect the official views of the Department of Defense.
Phones 3354, 3255, 2347

The Rocketeer
Official Weekly Publication
Naval Weapons Center
China Lake, California
RAdm. Rowland G. Freeman III
NWC Commander
Dr. G. L. Hollingsworth
Technical Director
C. E. Van Hagan
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Technical Information Department
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Nancy Webster again winner in China Lake women's golf tourney

A repeat win as champion of the China Lake Women's Golf Club was posted by Nancy Webster in a three-day tournament held over the Columbus Day holiday weekend at the local golf course.

Mrs. Webster, an 8-handicapper, shot 18-hole rounds of 86, 82, and 83 to retain her title with a total of 251 for 54 holes of play. Runner-up in the tournament was Doris Cosner, whose three rounds of 98, 94, and 95 gave her a 287 total.

The first low net honor went to Helen Eyre, who, with a 28 handicap, shot 72, 75, and 75.

Second low net was Helen Brooks, a 38-handicapper, who posted a 72, 78, and 76.

The tournament chairman, Billie Robinson carrying a 33 handicap, placed third low net with scores of 81, 72, and 81.

The perfect playing weather brought out a total of 13 entries.

The tournament winner, Mrs. Webster, was also the runner-up for the 1976 Invitational. She placed third in the Kern County Championship, and was 1975 runner-up for the Western American Golf Association Championships.



Nancy Webster

NWC team ahead in race for Admiral's Cup after 2 sports

The team representing the Naval Weapons Center won the second event in the Admiral's Cup competition by posting a team total of 535 on the golf links.

Lowest score for the day was shot by LTJG Bill Wright with an 81.

The team from Air Test and Evaluation Squadron 5 (VX-5) placed second with a 604 total, and the Naval Air Facility Team did not score because only three played instead of the requisite six-man team.

The NWC team leads in total scoring with 10 points (based on a 5 points for a first, 3 for a second place, and 1 for third place award). NAF and VX-5 have 4 points each.

The competition so far has included bowling and golf; the next event scheduled will be flag football.

NWC gridders . . .

(Continued from Page 6) they had possession of the football in the first half. "Moreover," he said, "our defense was just outstanding. We limited the opposition to just five first downs for the whole game."

The NWC team was scheduled to meet their counterparts from the U.S. Coast Guard, Long Beach, during the next round of play on Wednesday night. The winner of this tilt was due to compete in the championship game scheduled for Thursday night.

Employee in the spotlight



Syble Cope

Although Syble Cope's job is "pretty nearly perfect," it comes second to her family.

A Naval Weapons Center employee since 1974, Syble has been supervising the accounting section of the Public Works Department's Occupant Support Branch for about a year. This section keeps track of all rents collected from civilians occupying Navy housing, a job which also entails making sure these tenants pay for the number of days their dwellings are occupied, and also maintaining records of military occupants.

"This is an interesting job," said Syble, "because everything has to balance out, 1675 tenants and \$293,000 in rent per month. When things don't balance — like days of occupancy with the money — its fun searching for the reason why. I guess you have to like working with figures."

There's satisfaction, she says, in seeing her section's balanced records go to Washington, D.C. each month, and she enjoys the people she works with in the office. "And the general public — they're nice, too, even when they come in to us with problems. We don't get very irate types in here. All in all this job is pretty nearly perfect, as far as I'm concerned."

Career Began Recently

Because Syble is "not one for leaving the kids when they're little," she began working rather recently, first as an instructional aid clerk at Burroughs High School and later in her family's pool supply business in Ridgecrest, which has since been sold. "So many of our country's problems today," she muses, "result from the fact that so many women work."

Syble began her China Lake career as a WAE clerk in the Security Department, and later joined her present office in the Housing Division of the Public Works Department. "Zipper," as she is known to her co-workers ("probably because they wish I'd shut up") quickly moved through the section's other four positions — receptionist, records desk clerk, and two grades of accounts maintenance clerks — before taking over the top spot there.

According to her division head, Calvin Falgatter, "I'm pleased Syble is working in

Bike paths meeting set

The Indian Wells Valley Youth Council will host a public meeting on bike paths at 7:30 p.m. Monday at the Ridgecrest Elks' Lodge, 201 E. Church St.

Members of the Youth Council have chosen a site for their kick-off project, which will fit in with existing bike paths in Ridgecrest. The site will be discussed, and further plans will be explored.



POWER LINE HOOKUP COMPLETED — After years of operation using a sometimes balky portable generator as the source of supply for electricity at the Naval Air Facility swimming pool and recreation area, an underground electric power line has been extended to the site. Following its recent completion, Capt. Conrad B. Olson, NAF Commanding Officer, threw the switch that activated the new electric power supply. At left is Larry McGrath, high voltage electric power foreman from the Public Works Department, who represented the men responsible for hard work that went into the completion of this project. McGrath expressed his thanks to the crew of seven high voltage electricians who installed some 3,500 ft. of electric power line and to the two heavy equipment operators who dug the trenches for the underground lines. A 4,800 volt line runs to a transformer bank that is above the switch box. Taking off from it is a 208 volt line that provides electrical power for the entire swimming pool area and recreation compound.

Calif. State University at Fresno; Lynda ("With a 'y', not an 'i' because we wanted her to be different"); and Marc, 12.

"Ours is a very close-knit family," says Syble, "and we do practically everything together: camping in the surrounding mountains and along the coast, backpacking, and whatever the kids are involved in, whether it be Little League baseball or competitive swimming, for instance."

When her family was living in Santa Maria before making the move to China Lake in 1967, Syble began her long-term involvement with community service organizations — in this case, the Junior Women's Club.

In Ridgecrest, for the last four years, she has been associated with the Chi Alpha chapter of the Beta Sigma Phi sorority, one of the group's seven chapters in the local area, which is involved in numerous social, cultural and charitable community service projects.

These projects have included helping the Leukemia Fund, the Maturango Museum, and, through a Thanks-for-Giving Ball to be held Nov. 6, the Senior Citizens of Ridgecrest. Syble is now vice president of the sorority's "city council," a body composed of representatives from each chapter.

"Why am I involved in Beta Sigma Phi?" says Syble. "Well, it's a way of enriching my life culturally and, mostly, because I enjoy it."

Promotional opportunities . . .

(Continued from Page 2)

Potential: GS-5.
File applications for the above with Terry Rowell, Bldg. 34, Rm. 210, Ph. 2271.

Secretary, GS-318-05, PD No. 7400015N, Code 0031 — This position is that of secretary to the program coordinator, Public Information Office. The incumbent obtains and presents information for use by supervisor at special meetings, conferences and discussions; maintains supervisor's calendar and sets up appointments at own initiative; routes information requests to the proper individual when not able to provide such information on own; acts as hostess to official visitors from on- and off-Center. The visitors represent all levels of industry and government. The incumbent performs other duties such as establishing and maintaining files, preparing outgoing correspondence and providing clerical support. Job Relevant Criteria: Knowledge of the Center's mission and organizations; ability to deal tactfully with people; to type accurately and efficiently, to work under pressure, and to perform the duties of the position with a minimum of supervision.

Computer Technician, GS-355-4/5, PD No. 743007N, Code 0031 — This position is located in the Air-to-Air Systems Synthesis, System Engineering and Synthesis Division, Weapons Department. Assisting professionals in the branch, the incumbent runs and makes changes to computer programs. This involves reducing data to tabular form, evaluating it for completeness, maintaining data files. The incumbent is also responsible for translating a computer manual into computer language and assisting mathematicians and physicists in and out of the branch. Job Relevant Criteria: Experience working with computers, demonstrated accuracy and aptitude for

working with numerical data, experience or education in mathematics, data processing, science or related fields, and the ability to work independently.

Secretary, GS-318-5/4, PD No. 7390025N, Code 07 — This position is secretary to the head, Systems Acquisition Office. Incumbent is responsible for the efficient operation of the office and performs a variety of secretarial and administrative duties which include, but are not limited to typing memoranda, letters, itineraries, etc.; opening, screening and routing mail; handling and controlling classified material; filing; answering and screening phone calls; greeting and assisting visitors; scheduling appointments and conferences; maintaining calendars; performing personnel, budget and other administrative functions in support of Code 07. Job Relevant Criteria: Comprehensive knowledge of Center organization, policies and procedures; reliability, adaptability, accomplishment of work with minimum supervision; ability to type accurately and efficiently, and to communicate and deal tactfully with people at all levels. Promotion Potential: GS-4.

Information Receptionist, GS-304-3/4, PD No. 7400010, Code 0031 — This position is located in the Office of the Program Coordinator for Official Visitors Office. The office functions as staff assistant to the Commander, Naval Weapons Center in preparing programs for visitors to the Center and acts as Center host. The incumbent is responsible for personally receiving visitors and coordinating the arrangements for visitors wishing to contact members of the NWC Technical Staff. The range of visitors includes distinguished representatives from all DoD activities, contractors, other laboratories and many foreign governments. Incumbent schedules the projectionist and assists Center employees in checking out projection equipment. Job Relevant Criteria: Ability to deal tactfully with people, to work under pressure and to type. Previous applicants need not re-apply. Promotion Potential: GS-4.

File applications for the above with Marge Stanton, Bldg. 34, Rm. 206, Ph. 2272.

JOB OPPORTUNITY

Budget Analyst, GS-460-5, Navy Regional Finance Center, DON Centralized Financial Management Training Program — (1 Vacancy at Naval Weapons Center, China Lake, Ca.). This is not an NWC position. The Department of the Navy's Civilian Financial Management Career Program seeks to select and develop trainees with the ability and potential for future assignments to its senior and executive positions. Selectees to this program will be given two years of intensive on-the-job training and some formal education. The on-the-job training will include both rotational assignments at the primary duty station (NWC), assignments to other field activities, and one 45-day assignment in Washington, D.C. The on-the-job training is designed to provide experience to the selectees in a variety of budget analyst functions (i.e. budget formulation, budget presentation, budget execution, cost budgeting and industrial fund budgeting). Selectee will be required to sign a mobility agreement during the two year training period. In addition, the mobility agreement commits the selectee to accepting a permanent assignment anywhere within the continental United States, upon completion of the two year training period, although NWC will generally be the permanent assignment. Selectee into this program will be promoted to the GS-7 level upon the successful completion of one year of training, and will be eligible for promotion to the GS-9 grade level upon the successful completion of the second year of training. Job Relevant Criteria: Ability to utilize various manuals and instructions in the performance of duties; ability to learn basic budget administration concepts, functions and procedures; ability to use good judgment (i.e. grasp essentials and reach logical workable sound conclusions); and ability to work on own initiative.
File applications for the above with Tina Lowe, Bldg. 34, Rm. 206, Ph. 2676.

Burroughs varsity scores second victory

The Burroughs High School varsity football team made it two wins in a row in Golden League play last Friday by defeating their counterparts from Victor Valley High, 23-20, in a hard-fought game.

For the second week in a row, the Burros emerged victorious by a 3-point margin, and again it was the educated toe of Jay Kovar that made the final difference between a win or possible tie.

This time Kovar's fourth quarter field goal from the Victor Valley 25-yd. line gave the Burroughs High gridders the edge in the final score, while the week before Kovar's three successful PATs enabled the Burros to post a 21-18 win over Palmdale.

Tonight on their own turf, the Burros will face their stiffest test yet in 1976 Golden League competition when they will host the Kennedy High Spartans from Barstow. The Spartans proved their mettle last week by battling the Antelope Valley High gridders, the team picked to repeat as league champs, to a 7-7 standstill. Kickoff time is 7:30 p.m.

In the bruising contest last Friday at Victorville, Ken Charlton, the Burros' battering ram, scored two touchdowns and passed for a third. In the ground gaining department (142 yds. in 32 carries) he had some stiff competition, however, from the Jackrabbits' Randy Noble, who broke loose for scoring jaunts of 74 and 65 yds. to keep his team in the game.

First Score of Game

Burroughs High scored first following a pass interception that gave the locals possession of the ball on the VV 25 yd. line. The tough defense thrown up by the 'Rabbits gave ground grudgingly, holding the Burros to short gains on a drive that was finally climaxed by a fourth down smash into the line by Charlton, who plunged over from the 1 yd. line. Kovar booted the PAT to make it 7-0 with a little more than 2 min. left to play in the first quarter.

The 'Rabbits then took over on offense and drove 80 yds. in 10 plays to tally their first touchdown. Brian Haskins rambled in from the Burroughs High 12 yd. line for the score, but the try for the extra point failed and the Burros found themselves clinging to a 7-6 lead.

That turned out to be all of the scoring in a penalty-ridden second period of play that was highlighted by another ball-control



—Photo by Al Wilson

STELLAR PERFORMANCE—Ken Charlton (No. 35), Burroughs fullback, rips off some impressive yardage against the Victor Valley High School gridders at the Jackrabbits' home field last Friday night. All in all, the Burros' battering ram scored two touchdowns and passed for a third while gaining 142 yards in 32 carries.

drive by Victor Valley which began on the 'Rabbits 21 yd. line and was stopped by another pass interception by Jon French, who was dropped on the Burros' 23.

As the second half got under way, the Burros found themselves in good field position after a short punt gave them the ball on the Victor Valley 43. Charlton picked up a first down on the 33 and Quarterback Randy Jaramillo then connected with Justin Cowles, wide receiver, for a first down on the 'Rabbits 10 yd. stripe.

A penalty called after the pass completion cost the Burros 15 yds., however, and it was 1st down and 25 to go for the score. It came two plays later when Charlton lofted a pass over the heads of the surprised defenders and Mike Mullins, wide receiver, pulled it

down and ran unmolested for a touchdown. The try for the PAT failed to make the score Burroughs 13, Victor Valley 6.

On the second play following the kickoff, Noble broke loose for 74 yards around right end to tally for the Jackrabbits and cut the Burros' lead to 13-12 as the Victor Valley try for 2 points after the touchdown failed.

Instead of folding under the pressure, however, the Burros pounded right back down the field with a drive that carried from their own 31 yd. line to paydirt in the Victor Valley end zone. Charlton and Rudy Muro alternated as ball carriers on this push, and Jaramillo hit Mullins, his favorite receiver, for a crucial first down.

Burros Increase Lead

The final 18 yds. to the goal line was covered in three blasts through the line by Charlton—the last one from 5 yds. out—and the PAT by Kovar boosted the Burros' lead to 20-12 with 35 sec. left in the third quarter.

The fourth quarter had barely begun before Jon French popped up to nab his third pass interception for the night. This turnover gave the ball back to Burroughs on the VV 22 yd. line. Even though the penalty bugaboo cost the locals another touchdown on a 15 yd. run by Charlton, the Burros were close enough to the end zone to enable Kovar to kick a fourth down field goal from the 25 yd. line.

The Burros' more comfortable 23-12 lead was short-lived, however, when once again the locals let down enough on the first play following the kickoff to enable Noble to break loose for a 65 touchdown run. A pass completion for 2 points after the touchdown by Victor Valley reduced the Burroughs High lead to 23-20 with half of the fourth quarter still left to be played.

Drive Stymied

That turned out to be all of the scoring in the game, although Muro broke loose for a 21-yd. gain which gave some momentum to a drive by the Burros that was stymied by a fumble that the 'Rabbits recovered three plays later.

Starting from their own 46, the Victor Valley gridders (aided by a pass interference penalty) soon had a first down on the Burroughs High 29. At that point, however, the Burros' defense stiffened and the 'Rabbits had to relinquish control of the ball when, on a fourth down play, they came up just short of the yardage necessary to maintain possession of the ball.

After that, the Burros were able to run out the clock and win the hard-fought ball game by a final score of 23-20.



Wilt's Corner

C.L. golf tourney canceled because of lack of support

The 15th Annual China Lake Men's Invitational Golf Tournament scheduled for this weekend has been cancelled because of non-support from the local membership.

A general membership meeting at the China Lake Golf Club has been set for 7:30 a.m. tomorrow to discuss the general tournament disinterest and future efforts in local tournaments.

Ladies' Water Exercise Classes

Water exercise classes for women will begin Monday at the indoor pool and will continue each Monday and Wednesday afternoon from 3:30 to 4:30 through Nov. 17.

The fee for the ten sessions is \$7. For additional information, call ext. 2334.

Tennis classes

Fred Hagist announced recently that a new session of 6-week classes will begin Tuesday, Oct. 26, at the NWC tennis courts.

Beginner and intermediate classes will be offered on Tuesday and Thursday mornings from 10 to 11 a.m. Another intermediate class will be taught from 5 to 6 p.m. on Tuesdays and Thursdays, and a beginning class is also offered each Wednesday from 5 to 6 p.m.

The Tuesday and Thursday classes offer 12 sessions for \$14; the charge for the Wednesday class is \$7 for six sessions.

Potential students must sign up with Sue Dick, Gymnasium secretary, between 9 a.m. and 2 p.m. Monday through Friday.

Adult League Basketball Meeting

A pre-season basketball meeting will be held at 4:30 Tuesday afternoon at the Joshua Room of the Community Center.

Items to be discussed include types of leagues desired, cost of officials, kinds of awards and length of season. All teams interested in competing should have at least one representative at this very important meeting.

NWC gridders win 1st game in 11th ND flag football tourney

The Naval Weapons Center gridders put on an impressive display of power and defense last Tuesday night to win their first game in the northern area playoffs for the 11th Naval District flag football crown at the Naval Support Activity, Long Beach.

Final score was NWC 34, and their opponents from the USS Bronstein, Long Beach, 16. The Bronstein had been ranked second among all the Long Beach teams entered in the tournament.

All of the game's scoring occurred in the first half of play, and began when NWC's Greg Robbins scampered half the length of the field to paydirt on a well-engineered run.

Additional China Lake touchdowns took place as quarterback Bob Jackson threw a 10-yard pass to Ron Penny; Ed Timmons intercepted an opposition pass and returned it 65 yards to the end zone; Jackson hit Ian Refo with a beautifully-thrown 20-yarder; and Kelvin McSwain returned a kickoff 65 yards to score. Two PAT attempts by the NWC team were successful.

The footballers from the USS Bronstein were limited to just two touchdowns on a combination of run and pass plays.

In summing up the night's action, Doug Nelson, NWC Athletic Director, pointed out that the China Lakers scored every time

(Continued on Page 7)

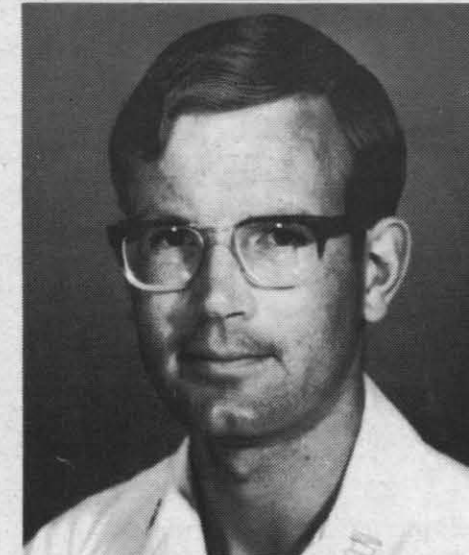
Earthquake prediction. . .

(Continued from Page 1)

estimates the amount of strain which causes it. This movement is directly related to earthquakes of particular intensities, and may be evident, for instance, in the displacement of fences or the rising of the ground. The San Francisco area, which averages 20 ft. of slippage per century, experienced an immediate slippage of 18.5 ft. during the disastrous earthquake of 1906.

Some scientists, particularly in Japan, think that portions of the earth actually tilt just before an earthquake, and employ various "tilt meters" to detect this. Dr. St. Amand says that the results of studying these so-called tilts over large areas of ground are, so far, inconclusive.

The indigenous method of the Chinese is another, and one which has received widespread publicity in the wake of the successful prediction of a major quake by scientists there in 1975. It employs the efforts of virtually thousands of peasants in making observations — sometimes with instruments, sometimes not — and reporting (without necessarily explaining) such things as changes in the water level in wells and "strange" animal behavior.



Capt. Hugh Helmick

AF Capt. Helmick is assigned to AIM-9L program office here

The most recent addition to the complement of U.S. Air Force officers on duty at the Naval Weapons Center is Capt. Hugh Helmick, who has been assigned to the AIM-9L program office.

Now involved in systems design and modification work on the AIM-9L Sidewinder missile, Capt. Helmick was transferred here from Vandenberg Air Force Base, near Lompoc, Calif.

During a four year tour of duty at Vandenberg's Space and Missile Test Center, he was an Air Force launch controller at an Atlas missile launch site. His responsibilities included directing the countdown prior to the launching of research satellites.

He also accepted the Atlas missile for the Air Force after checkout by civilian contractor employees prior to each launch.

A veteran of 9½ years in the Air Force, Capt. Helmick joined the military service through the Reserve Officer Training Program at the University of Washington.

Following his graduation with a bachelor's degree in mechanical engineering, he was sent to Edwards Air Force Base where, for five years, he was involved in systems engineering work. When he left Edwards AFB he was transferred to Vandenberg AFB, and subsequently was assigned to duty here.

A single man, Capt. Helmick is a glider pilot enthusiast and for this reason alone feels that he will enjoy this area very much. He has a single-seat, 52-ft. wing span glider that he keeps at the Inyokern airport, and has flown it around Mt. Whitney while on a flight from Inyokern to Independence.

In addition to glider soaring, Capt. Helmick's hobbies are machine shop and electronics work. He has made some of his own electronic instruments for use on gliders and also carried out some basic experimental work along this same line.

Strange behavior might mean dogs barking for no good reason, insects migrating, or snakes coming out of the ground. According to Dr. St. Amand, "This method is in part a political maneuver on the part of the country's leadership to make the peasant feel he's making a contribution to his nation's science. Let it be said, too, that the Chinese also use all the methods developed in other parts of the world, too, and, from my examination of translations of technical Chinese papers on the subject, it is obvious that their scientists are very competent. But we don't know how they reached their conclusions when they successfully predicted the quake they did."

Animals Gassed?

Two Naval Weapons Center scientists with the Earth and Planetary Sciences Division — Fred Davis and Glenn Roquemore — think that sightings of snakes and other animals rising from their burrows may be explained by the hypothesis that under sufficient pressure, rocks crack and allow certain gasses to escape from the ground, thus making affected animals uncomfortable enough to move away.

There has indeed been some Russian verification that argon, radon, ethane and methane are released before earthquakes occur, and so this constitutes our sixth method of prediction.

Changes in elevation of the land surface would be indicative of the rising or falling of the continents, or fault movement, either one, and under the Coast and Geodetic Survey of the Department of the Interior, tide gauges — technique number 7 — have been set up to measure the average value of sea level with respect to markers on the shore.

The theory of dilatancy gives us our final method of predicting earthquakes, and according to Dr. St. Amand, "one which has great potential."

Propounded by Amos Nur of Stanford University in 1972, it holds that when rock gets strained to a certain point (as may happen in earth movement associated with faults) it will develop tiny cracks and swell with water. The rock is weakened, and the rate at which earthquake waves pass through it has changed. Such changes may be detected, and two or three small earthquakes have been "quite accurately predicted" as a result of this method, says Dr. St. Amand.

Theory of Dilatancy

The theory of dilatancy also says that the earth should swell up when a quake is about to hit, and one scientist announced recently that this type of swelling is responsible for the much-publicized "Palmdale bulge."

Dr. St. Amand, however, contends that there could be perfectly valid reasons other than dilatancy which explain why the land goes up or down, and that there have been recorded cases of substantial rise unaccompanied by quakes.

In the case of the Palmdale bulge, says Dr. St. Amand, although that area was shaken by an earthquake in 1957, there is no evidence that connects the rise with the tremor. Although quantitative evidence of the bulge has been available since 1930 and simple observation of the land involved indicates that uplift has been going on there for a long time, he added, the science is so new that we do not know the rate at which such changes normally occur. It appears, however, that the earth's risings and fallings occur at a faster rate than were previously thought.

Ridgecrest's 1st swine flu shots to be given Sat.; future clinics planned

The first swine flu shots to be administered in the local area will be given tomorrow at the Drummond Medical Center in Ridgecrest between 9 a.m. and noon.

"High risk" persons such as senior citizens are asked to come in for the first shots. Vaccinations have not yet been perfected for children under the age of 18. Additional clinics are planned.

Shots will eventually be given to nearly everyone over the age of 18 at the free, public clinics. However, persons who are allergic to eggs, currently running a fever,



HIGH HONOR — Cdr. Melvin D. Munsinger (l.) is congratulated by Capt. R. E. Breen, USN (ref.) of the Vought Corporation for achieving 3,000 air hours in the A-7 Corsair II. Watching are RAdm. R. P. McKenzie, Commander Light Attack Wing, Pacific Fleet, and (far r.) Capt. R. N. Livingston, Commanding Officer of Air Test and Evaluation Squadron 5. —Photos by Terry Miles

VX-5 aviators honored for milestone flights in Corsair IIs by Navy, Vought Corporation

During a recent visit to the Naval Weapons Center and Air Test and Evaluation Squadron Five, RAdm. R. P. McKenzie, Commander Light Attack Wing Pacific, presented two VX-5 pilots with mementos commemorating milestone achievements in the A-7 Corsair II.

In presenting Cdr. Melvin D. Munsinger, VX-5 executive officer, with a plaque for being the first aviator to achieve 3,000 hours of air time in the A-7, RAdm. McKenzie commented that it had taken him nearly 22 years of flying to gain that amount of time in all types of aircraft combined.

Cdr. Munsinger also holds other distinguished aviation records in being one of the few aviators who has flown more than 500 combat missions and has surpassed the 1000 carrier arrested landing mark.

Cdr. Munsinger, a native of Los Molinos, Ca., first flew the A-7 in 1967, and his squadron tours in A-7s include VA-97, VA-122, VA-192, VA-113 — this as executive officer and then commanding officer — and most recently as VX-5 executive officer. He lives in Navy housing with his wife, Mary, and two daughters, Carrie, 12, and Kimberly, 10.

RAdm. R. P. McKenzie also presented a mug commemorating 1,000 hours in the Corsair II to Lt. Joseph P. Connellan. Lt. Connellan reported to VX-5 in June, 1975. He lives in Navy housing with his wife, Sandy, and son, Andrew.



MUG PRESENTED — Lt. Joseph P. Connellan is presented a mug in honor of his having completed 1,000 hours in an A-7 Corsair II by a A. W. Vang, senior base representative at NWC for the Vought Corporation. Lt. Connellan, formerly homeported at Naval Air Station Lemoore, has been attached to Air Test and Evaluation Squadron 5 since June 1975.

or were vaccinated within the previous two weeks with some other immunization will not be vaccinated.

Persons with egg allergies should contact their own doctor to determine if their allergy prevents them from receiving the vaccination. Those with a fever or recent vaccination should postpone getting the shot.

According to LCdr. Jess Hays, administrative officer of the local branch clinic of the Naval Regional Medical Center, Long Beach, the Naval Weapons

Center expects to receive its shipment of swine flu vaccine in the latter part of this month. It will be made available to active duty and retired military personnel and their dependents, dependents of deceased military personnel, Civil Service employees, and dependents of those employees who live on-center.

At approximately the same time, said LCdr. Hays, Hong Kong flu vaccine will be made available to the above categories of persons, with the exception of dependents of Civil Service employees.

Gary Haugen Memorial Tennis Tourney draws total of 91 competitors; \$400 raised for fund

A total of 91 players representing localities from San Diego to Arlington, Va., as well as China Lake took part in the first annual Gary Haugen Memorial Tennis Tournament last weekend at the Naval Weapons Center and Cerro Coso College courts.

The tournament raised \$400 for the Gary Haugen Memorial Scholarship Fund, established in the memory of the young tennis player from the China Lake community who recently died of leukemia.

The scholarship will be awarded to a Burroughs High School graduate, chosen by a five-person committee comprised of the Burroughs tennis coaches, Mrs. Leonard Haugen, mother of Gary Haugen, and a representative of both the Burroughs boys' and girls' tennis teams.

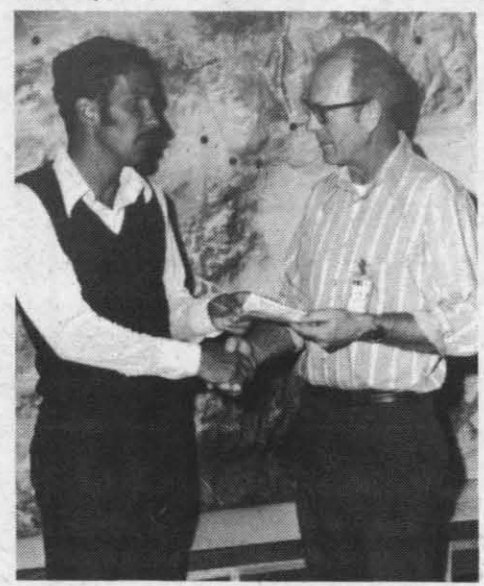
A five-person contingent from Quartz Hill, Ca., made the strongest showing per person in the tournament with Roy McQuown, a "teaching pro," winning the men's open singles and teaming with Becky Glascock to win the mixed doubles. Barbara Henneberger, daughter of McQuown, swept the women's intermediate field.

The women's open singles was won by Ruth O'Neil, women's doubles by Sherry Miller and Jackie Hoff, men's doubles by Dick Boyd and Wilt Wyman, and men's intermediate singles by Billy De Haas, all of China Lake.

A strong showing was made by the Edwards AFB contingent represented by the mixed doubles team of Todd Lemen and Joan Bauer and the women's doubles team

of Joan Bauer and Carol Collins. Both teams took home second place trophies.

Biggest upset of the day was scored by Gary Ochman of Tom's Place, Ca., when he recorded a first round win over number one seed Dick Boyd in the men's singles event. Ochman went on to the finals before losing to McQuown.



TOURNAMENT PROCEEDS — Steve Lyda (at left) director of the Gary Haugen Memorial Tennis Tournament, gives Leonard Haugen, father of the honored player, a check for \$400 raised through the tournament for a scholarship fund. The scholarship will be used to encourage and stimulate interest in tennis in high school students of the Indian Wells Valley area.

Another career advancement avenue opens to Centerites . . .

Another avenue for career advancement by Naval Weapons Center employees has been opened up by the recent decision to permit Department of Defense civilian employees who meet the academic requirements to attend the Naval Postgraduate School (NPS) at Monterey, Calif.

According to Frank Reed, head of the NPS Coordinating Committee at NWC, this is a three phase program of career development that starts with background preparation aimed at bringing Center employees "up to speed" so they can move on to further studies at Monterey.

The second phase is a year's study at NPS to complete all course work for either a master's or Ph.D. degree, and the final part of this program is a work-related thesis or dissertation supervised jointly by an NPS advisor and a scientist or engineer at NWC. During a meeting held last week, Prof. Donald Kirk, chairman of the Electrical Engineering Department, and Prof. Allen Fuhs, chairman of the Department of Mechanical Engineering, were here from NPS to present information about courses in electrical, mechanical and aeronautical engineering, physics, meteorology and oceanography that are open to civilian employees who have aspirations of earning either a master's or doctor's degree.

Professors Kirk and Fuhs discussed the qualifications of NPS faculty members, including their extensive contributions to various fields of research, scientific honors they have won, and books they have written that are widely used at other universities. The visitors also stressed the flexibility of

the graduate program for civilian employees coming to Monterey from China Lake. It was noted that educational programs can be tailored to the individual's needs or requirements and, since NPS operates on the quarter system, there is an opportunity to enroll at the beginning of any quarter instead of having to wait until a new school year rolls around.

Phase one or background preparation for enrolling at NPS can be accomplished locally by attending extension courses that are offered as part of the Naval Weapons Center training programs and taught by either NPS professors or local scientists and engineers. Another possibility is personal instruction with the help of a local tutor.

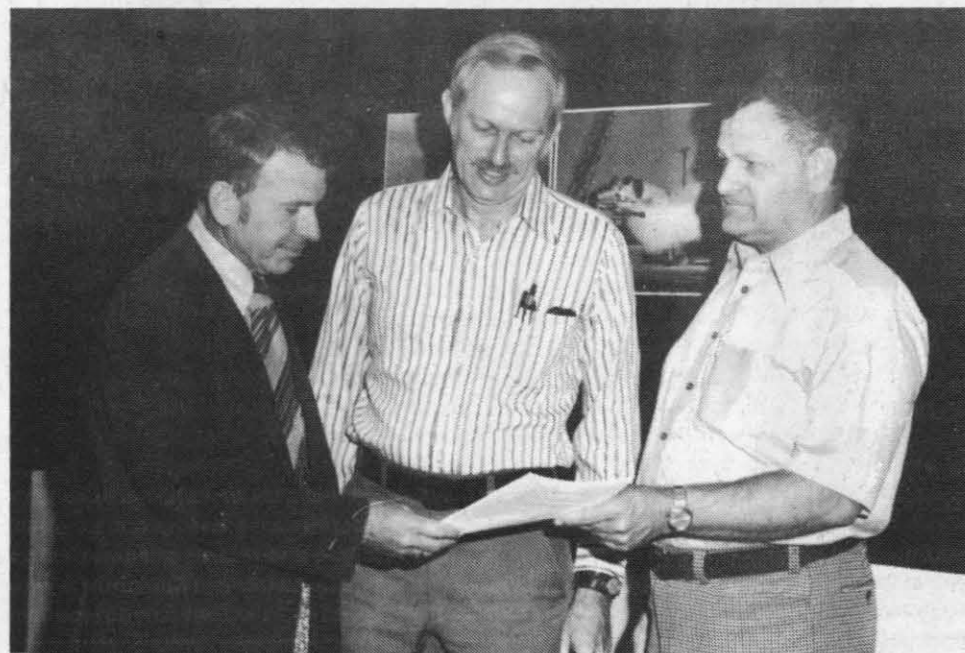
Phase Two Requirements

The normal procedure for satisfying the phase two requirements would be to apply for an NWC Fellowship, Reed explained. Center employees who are contemplating applying for a college fellowship should seriously consider the opportunities at NPS, he suggested.

Phase two time can be reduced by taking courses that are offered here by either the University of Southern California or NPS.

When it comes to the third phase (preparing a thesis or dissertation) there is considerable freedom in the selection of these topics at NPS, and every attempt will be made to relate them to the individual's particular job.

This is important, Reed pointed out, since the employee who takes time off from his work to obtain an advanced degree doesn't have to fall behind in his knowledge of what's transpiring on the job in his par-



POSTGRADUATE SCHOOL PROGRAMS DISCUSSED — Two faculty members from the Naval Postgraduate School (NPS), at Monterey, Calif., were here last week to discuss the wide range of advanced studies now open to Naval Weapons Center employees who meet the necessary requirements for enrollment. Shown conferring with Frank Reed (at left), head of the NPS Coordinating Committee at NWC, are Prof. Donald Kirk (in center) and Prof. Allen Fuhs, who are the chairmen of the Electrical Engineering and Mechanical Engineering Departments at NPS, respectively. —Photo by B. J. Beckman

ticular field of interest.

Heretofore, the Systems Acquisition Management Program at NPS has been open to civilian employees of the Department of Defense, but now the whole postgraduate school at Monterey is open to such civilians.

Those interested in learning more about the opportunities for study at NPS can do so

by contacting Reed, at NWC ext. 3427; Terry Mitchell in the Training Center, NWC ext. 2675; or the following NPS instructors: Cdr. Al Crosby, of the Administrative Science Department, Autovon No. 878-2966; Prof. Russell Richards, of the Operations Research Department, Autovon No. 878-2643; Professor Kirk, Autovon No. 878-2082; or Professor Fuhs, Autovon No. 878-2588.

close touch with the Navy and current Navy issues.

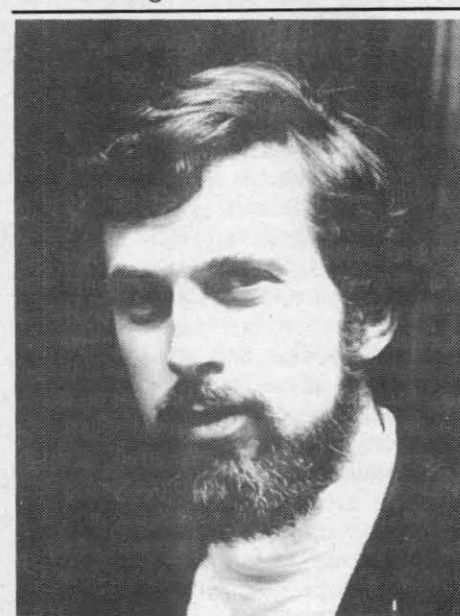
The Center has been making use of this resource for the past two years on an exception basis. Joseph DiPasquale and Thomas Hamilton are currently attending the Systems Acquisition Management Course, and Ernest Solberg is enrolled in the Administrative Science (Financial Management) Program. All three are scheduled to complete their studies and return to NWC sometime during the first three months of next year.

DiPasquale has been employed as a supervisory general engineer in the Engineering Department's Harpoon Production Office, Hamilton is the former head of the Weapons Department's Simulation Dynamics Branch, and Solberg was head of the Management Data Processing Division in the Office of Finance and Management.

Catalogue Available

NWC employees considering long-term training are encouraged to examine the Postgraduate School Catalog (available at the Training Center), and to give consideration to NPS as the location for graduate level training before other institutions are selected.

The Center's Long-Term Training Committee, headed by Bernie Connelly, also will review future applications for long-term training with this in mind.



required of the acquisition manager. An appreciation of the forces at work in industry and within the executive and legislative branches of the government, and how these forces impact on systems acquisition policies and procedures, is presented throughout the program.

Elective courses also are available to enable students to gain additional knowledge in acquisition areas of particular interest. Classroom instruction stresses theoretical concepts as well as real world problem solving through lectures, case studies, problem exercises and computer simulation exercises.

Field trips to industrial and military activities also are utilized to reinforce and further develop classroom concepts.

Wide Range of Courses

The courses offered range from Introduction to Systems Acquisition, Fundamentals of Project Management, and Systems Effectiveness Concepts and Methods, to Systems Engineering Management, Public Expenditure (Policy and Analysis), Procurement Planning and Negotiation, Contract Administration, and Logistic Support.

There has been a recent change in policy authorizing NPS to accept civilian students. Attendance at the Postgraduate School enables civilians to pursue graduate level studies in areas of significance to their careers while permitting them to remain in

classes can be your gift to the community," Mrs. Jacks stated. "Choose morning, afternoon and evening classes to suit your schedule," she added.

Registration will take place on Monday, from 4:30 to 5:30 p.m., and next Wednesday, Oct. 20, from 1 to 2 p.m. and 5 to 6 p.m., at 303 Blue Ridge Rd., China Lake.

RENOWNED CELLIST — Wolfgang Herzer of Vienna, Austria, will perform at the Cerro Coso lecture hall tonight at 7:30. The cellist will feature sonatas by Beethoven, Shostakovich, and Sammartini in this program; he will be accompanied on the piano by Sylvia Jenkins. Tickets for the program are priced at \$2 for the general public and \$1 for student body card holders. They will be on sale at the door.

Armed Forces Bicentennial Salute set as open house October 30

The Army and Air Force will join with Navy and Marine contingents in celebrating the Naval Weapons Center's Bicentennial Salute to the Armed Forces.

Aerial demonstrations by the Blue Angels, the Army's 10th Special Forces Group (Airborne), and the Navy Parachute Team West will headline the events of the day on Saturday, Oct. 30. All area residents, both civilian and military, are invited to attend.

Air Force, Army, Navy, and Marine aircraft and equipment will be on display at the Naval Air Facility before the flight demonstrations, while the Third Marine Aircraft Wing Band from El Toro provides a backdrop of music.

Blue Angels' Birthday

The Blue Angels this year are celebrating their 30th year of operations. Since their first demonstration on June 15, 1946, they have demonstrated their precision techniques of naval aviation to nearly 150 million spectators throughout the world.

While the basic airmanship requirements of the Blue Angels are taught to every naval aviator, the demonstration team has perfected these to a breathtaking aerial ballet that encompasses flight from treetop level up.

The Blue Angel flight demonstration consists of six aircraft which perform a prescribed sequence of maneuvers. The aircraft are seen in three components which consist of a diamond of four aircraft, two solo aircraft that oppose each other along the line of flight, and all six aircraft in a delta formation.

Parachute Team Performance

The aerial demonstrations will begin with the Navy Parachute Team West showing a variety of parachuting skills. The Team will come up from its Coronado Amphibious Base for this special day.

Next on the program will be the Army's 10th Special Forces Group (Airborne) demonstrating techniques of rappelling from a helicopter.

The Special Forces qualified soldier is cross-trained in a minimum of two basic special forces skills, which are communications, weapons, engineering, medicine, and operations and intelligence. Further training in military free-fall parachuting, underwater operations (SCUBA), mountain, ski and amphibious infiltration techniques, is also given to certain detachments. Many of these skills will be demonstrated in their part of the air show.

The Air Force will have on display its most advanced fighter, the F-15 Eagle. Other aircraft displayed will include the F-

105 Thunderchief, the F-4 Phantom, and the F-104 Starfighter. Air Force pilots will be on hand to answer questions about their displayed aircraft.

Rockwell will talk to STC on desert survival techniques

Featured speaker for the October meeting of the Society for Technical Communication (STC) will be Dr. Robert L. Rockwell, who will talk both about survival in desert heat and communication during mountain rescue operations.

Rockwell, head of the Systems Simulation Branch of the Electronic Warfare Department, is a past president of the China Lake Mountain Rescue Group. He holds degrees in aeronautics and astronautics, with his special area of interest being theoretical modeling of bloodflow.

He will also show a film entitled "Thermal Wilderness".

This STC dinner meeting will be held in the Chart Room of the Commissioned Officers' Mess on Thursday, Oct. 21. An attitude adjustment hour begins at 6 p.m., dinner will be served after ordering from the menu at 7, and the program will begin approximately an hour later. Those who wish to attend are asked to call Chet Creider, ext. 3672, by Monday, to make dinner arrangements.

The meeting is open to the public.

Good start made in first week of CFC

The 1977 Combined Federal Campaign is off to a good start, according to co-treasurers Bill Shaner and Don Bridges.

By the end of the first week \$19,500 in pledges and \$1,400 in cash had been turned in by CFC department coordinators. This is nearly twice the amount collected during the first week of last year's campaign.

"With enthusiasm like this," added the co-treasurers, "we should be able to reach our goal of \$120,000."

Those who have questions about how the money is used are reminded that the United Way multi-media presentation about the local agencies will be shown continuously in the Sidewinder Room of the Community Center on Tuesday, from 9 to 11:30 a.m. and 1 to 3 p.m. This same presentation can be scheduled for showing in the Training Center or can be checked out for showing to individual groups by calling scheduler Carol Corlett at ext. 2675 or 2574.

Scout rescued . . .

(Continued from Page 1)

remained nearby to direct the rescue party to the exact location where its help was needed.

Don Harris rappelled down the east side of the Great Falls Basin, starting at the top, while his brother, Glenn, was joined by Kevin Reese and young Nicholson in descending the west side of the rocky waterfall with ropes and other paraphernalia that eventually was used to get them all to the bottom safely.

The CLMRG member rigged up a seat sling, hooked a rope onto it and fashioned a braking system for the rope. From that point on, it was a matter of gradually (one at a time) lowering not only Barsaloux but all of the others on the rocky ridge to the bottom — a time-consuming task that took more than two hours.

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Enlisted Club dances set

Orange, a rock and soul band from Los Angeles, will perform: at an Enlisted Club dance tonight and tomorrow night from 9 until 2 a.m.

Dinner special for the evening will be a seafood plate, and that for tomorrow night will be prime rib. Both will be served from 6 until 8:30.

On Monday night, beginning at 9 o'clock, the club will host a disco hop emceed by Ted Mason.



BLUE ANGEL DELTA — A superb illustration of aerial teamwork is shown when all six of the aircraft rendezvous into a delta formation and perform looping and rolling maneuvers. Each pilot must offer his complete mental and physical concentration to the task at hand in these demonstrations. Teamwork, precision, and discipline are the hallmark of Blue Angel operations.

Auctioneer's gavel will be heard at NWC surplus government property sale Thurs.

The sound of the auctioneer's gavel signalling another successful bid will be heard next Thursday, Oct. 21, at the Community Center, which will be the setting for an auction sale of surplus government property.

Prospective bidders, meaning anyone who is 18 years of age or older and has no connection with the Federal government's Property Disposal Office, will be registered beginning at 8 a.m. and the sale will begin at 9.

Included in the wide variety of items that will be auctioned off are furnishings and equipment from the former Station Restaurant, such as chairs, dining booths, tables, a beer keg tapper, chilled water

dispensers, refrigerators and carpeting.

Also up for bid will be vehicles, household furniture, typewriters, calculators and electronic test equipment.

Those interested in doing so can inspect the surplus government property that is slated for sale either at the former Station Restaurant or at Warehouse 41 (on 10th St., just off the Naval Air Facility Access Rd.).

Successful bidders on Oct. 21 will have until Oct. 29 to pay for and remove their purchases.

Additional information about the auction and the manner in which it will be conducted can be obtained by calling Bill Giuliani at NWC ext. 2502 or 2538.

Past and future of Owens Lake slated as subject of tonight's Civil Engineers' mtg.

A talk about the Owens Lake, its past and future, will highlight the next meeting of the Desert Area Branch of the American Society of Civil Engineers.

The speaker will be Dr. Pierre St. Amand, who will address a dinner meeting that is scheduled tonight at the Hideaway in Ridgecrest. A social hour will precede the meal, and the talk by Dr. St. Amand will begin at 8 o'clock.

Dr. St. Amand, who is head of the Earth and Planetary Sciences Division in the Naval Weapons Center's Research Department, is deeply involved in projects in the fields of geology and atmospheric research.

Last week, he was one of the experts called on to speak at a public hearing held in the Mammoth Lakes area by the Great Basin Air Pollution Control Board — a group that is considering regulating the extraction of underground water from Inyo, Mono and Alpine Counties as a means of alleviating dust storms from the north that

are becoming more and more common in the Indian Wells Valley area.

Dinner reservations are requested from those who wish to attend tonight's meeting. They can be made by calling John Cox at NWC ext. 3538 or after working hours at 375-2870.

Quality Controllers, Contract Managers slate joint meeting

The Sierra Sands Section of the American Society for Quality Control and the China Lake/Ridgecrest Chapter of the National Contract Management Association will co-sponsor a meeting on Thursday, Oct. 21, at the Hideaway Steak House.

Guest speakers will be John Cebanic, Professor of Claims from George Washington University, and Lt. Col. Ben W. Swett from the office of the Deputy Director for Research, Development and Evaluation. An informal question and answer session will follow.

Dinner will begin at 7 p.m., with the program scheduled for 8:30. Dinner tickets will be \$6.95 by advanced sale or \$7.95 at the door.

For tickets or information, call Phil Wehle or Chris Peterson at ext. 3395, Gene Kotchick at ext. 2766, or Mike Demcak at 446-3110.

The meeting is open to anyone interested in Quality Assurance and Claims.

Star party planned Sat.

The China Lake Astronomical Society (C.L.A.S.) will conduct a free public star party in conjunction with the Maturango Museum tomorrow night.

At 7 o'clock, C.L.A.S. member Jim McMahon will present a lecture and slide film program entitled "Objects in the October Sky" at the museum auditorium.

After the lecture, weather permitting, members and their friends will adjourn to the Sandquist Spa, where astronomy club members will have telescopes set up.

Turn in timecards early next Friday because of holiday

All personnel who are responsible for the submission of employee timecards are reminded that because of the Monday, Oct. 25, Veterans Day holiday, timecards for the regular work week ending on Oct. 23 must be turned in by 11:30 a.m. on Friday, Oct. 22.

This is necessary because the processing of timecards must be completed by next Friday evening. No timecards are to be held out, since failure to provide the Payroll Office with an accurate timecard by the Oct. 22 deadline may result in a delay in pay for the employee.

Any overtime for Friday night, Oct. 22, or Saturday, Oct. 23, should be submitted on a supplemental timecard for payment covering the subsequent pay period.