

College to present variety show by Mother Lode Troupe

A variety program reminiscent of the rough and ready entertainment demanded by the lonely, woman-starved '49ers of California's gold rush days will be presented tomorrow night at 7:30 at the Cerro Coso College lecture hall.

The entirely authentic musical and theatrical representations of the mid-1890s runs the gamut from Rossini's "Variations on Non Piu Mesta" and "La Cenerentola" to "Oh, You Naughty, Naughty Men" and a number of selections about kissing and drinking.

The Mother Lode Troupe, an ensemble of talented actors and singers, led by Corinne Swall, soprano, will present "Divas of the Golden West," a program that has won much popular acclaim.

Miss Swall will be joined by Linda Purdey, mezzo-soprano; Howard Malpas, a graduate of the Royal Academy of Dramatic Arts; and Monroe Kanouse, pianist-conductor.

General admission tickets are priced at \$2, while Associated Student Body cardholders will be admitted for \$1. They are available at the college business office, the Gift Mart in Ridgecrest, and the Station Pharmacy at China Lake. Tickets will also be sold at the lecture hall door tomorrow night.

Today is deadline for turning in DEF exhibit entry forms

Completed entry forms are due no later than today from everyone who will be submitting entries in the various categories of competition at the 1976 Desert Empire fair, which is coming up Sept. 29 through Oct. 3 at the fairgrounds in Ridgecrest.

The entry forms can be turned in from 4 to 7 p.m. today at Bennington Plaza on the Naval Weapons Center, and during the same hours at the Ridgecrest Plaza, corner of China Lake and Ridgecrest Bldgs. in Ridgecrest.

There will be judging of entries in both junior and adult divisions in art work, handicrafts, ceramics, models, sewing, needlework, cooking and baking, Mrs. Willie Johnson, chairman of the competition committee, stated. In addition, 4-H Club divisions and classes have been revised for this year's fair in an effort to provide competitive categories for as many 4-H youngsters as possible.

Rule books and entry forms can be obtained at the Community Center and library on board the Naval Weapons Center, or in Ridgecrest at the city hall, Chamber of Commerce office, Fabritique Shop, Buttons and Bows, Eve's Yarn Shop, and at the DEF office on the fairgrounds.

The finished items to be entered in the Desert Empire Fair competition are to be brought to Joshua Hall, the permanent exhibit hall on the fairgrounds, on Friday, Sept. 24, from 5 to 9 p.m., and on Saturday, Sept. 25, from 9 a.m. to noon.

The only exception to this is in the case of cooked or baked goods, which will be accepted on Monday, Sept. 27, from 5 to 9 p.m.



ON STRIKE — Getting their act together for their performance tomorrow night at the Cerro Coso Community College lecture hall are these performers of the Mother Lode Troupe, who will present their show entitled "Divas of the Golden West" at 7:30 p.m. These highly-acclaimed professional entertainers have impressive credentials in their respective fields of opera, conducting, directing and acting.

Volunteers needed to help with American Heritage Celebration

Volunteers are still needed to participate in the Horizons '76 American Heritage Celebration—the Ridgecrest Bicentennial Committee's only fund-raising event of the year.

Proceeds from this event, which is scheduled on Oct. 22 and 23 at the Burroughs High School lecture center, will be added to the Maturango Museum building fund.

Opening the gala weekend affair will be a program entitled "Heritage '76" at the lecture center at 8:15 p.m. From 1 to 5 p.m. the next day at Joshua Hall on the Desert Empire Fairgrounds in Ridgecrest another program, "Festival U.S.A." will be presented, featuring entertainment and an exhibition of mementoes from many lands.

In addition, an International Food Fair will be held at Joshua Hall during that time. Bringing the festivities to a close that evening at the Burroughs lecture center will be a musical show entitled "Horizons '76."

According to Rose Varga, chairman and coordinator of the American Heritage Celebration, individuals who will be representing numerous countries are scheduled to take part in the program, but many more are wanted. "We are appealing to all nationalities to be represented in whatever framework would be most comfortable to them," she stated.

Mrs. Varga said that men, women, children, musicians, singers, dancers, magicians, cooks and bakers, plus ethnic costumes and historical memorabilia are needed. She asked that persons interested in participating call her as soon as possible at 446-3939, or Alice Dubin, the Horizons Committee chairman, at 446-6900.

Youngsters' ballet program scheduled by Special Services

A continuing program in ballet will be offered by Special Services for youngsters 8 through 14 years of age beginning in October. The course will be divided into six-week sessions at a cost of \$15 each, to be paid in advance.

Terrie Jacks, professional ballet dancer and instructor, says she is offering these classes at this special rate in order to give children who could not otherwise afford the cost a chance to study ballet. The classes are open to boys as well as girls and she will gear her teaching to the abilities of each youngster.

Miss Jacks has trained at the Ballet Russe de Monte Carlo, American Ballet Theatre and the June Taylor School of Dance — all based in New York City. Her professional career began in 1968 with the Philadelphia Lyric Opera, and she has also danced with the Ballet Russe de Monte Carlo and American Ballet Theatre.

Miss Jacks has seven years experience as an instructor teaching company classes for Ballet Arts Theatre, is a member of the American Guild of Musical Artists, and is artiste-in-residence of Ballet Arts Theatre. Registrations will be accepted at the China Lake Youth Center, NWC ext. 2909, weekdays from 12:30-4:30 and 6:30-9:30 p.m.

Dance set at CPO Club

Ronnie Thompson and the King Max, a local rock 'n roll group, will perform at the Chief Petty Officers' Club tonight from 9 until 1 a.m.

Dinner special will be prime rib, served from 6 until 9 o'clock.

According to CPO Club manager George Barnard, "We will be closed for recarpenting on Sunday and Monday. The inconvenience is regretted, but we know our patrons will appreciate the added sparkle to the club when this improvement is completed."

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. 17 SEPTEMBER

"COTTER" (90 Min.)
Sherry Jackson, Rip Torn
(Drama) A young man by the name of Cotter is thrown out of the rodeo for failure to protect a bronco rider. He was intoxicated at the time and his job as a clown was to attract the attention of the animal when a rider fell off. Cotter heads for his home town. Although in familiar surroundings his troubles still stay with him. No rating available.

SAT. 18 SEPTEMBER

"COUNTDOWN AT KUSINI" (100 Min.)
Ruby Dee, Ossie Davis
(Drama) The setting of this tale of intrigue is urban Africa. Against this backdrop, a threat to freedom appears in the form of a discreetly unnamed but ruthless national industry with a lot of money at stake in Africa and a desire to quietly remove an increasingly influential champion of people's rights. (PG)

SUN. 19 SEPTEMBER

"FAMILY PLOT" (120 Min.)
Karen Black, Bruce Dern
(Comedy Mystery) A fake medium (Barbara Harris) and her cab driver-boy friend (Bruce Dern) track down the missing heir to a family fortune. It looks like an easy way to make \$10,000, but the heir turns out to be a master jewel thief-exortionist-kidnapper who is assisted on the job by his wife (Karen Black). Dern and Harris are unaware of the heir's shady dealings, while he and Black have the mistaken impression that Kern and Harris plan to blow their cover and collect the reward. (PG)

MON. 20 SEPTEMBER

"SAVAGE MESSIAH" (100 Min.)
Scott Anthony, Dorothy Tulin
(Drama) An aging Polish woman writer and younger French sculptor who find they love each other are separated permanently by his death in World War I just as his works are being recognized. (R)

TUE. 21 SEPTEMBER

"VIGILANTE FORCE" (98 Min.)
Kris Kristofferson, Jan Michael Vincent
(Action-Drama) This action drama centers around a small town that falls victim to a reign of terror when Vietnam veteran Kris Kristofferson and some combat-scarred buddies form a vigilante police force appear. An oil refinery is reopened and prosperity results. However, vice and violence run rampant, profiting the vigilante force, whose members forget their original objective to bring about law, order and decency. (PG)

WED. 22 SEPTEMBER

"SHEBA BABY" (90 Min.)
Pam Grier, Austin Stoker
(Action Drama) Pam Grier plays a female private eye who returns to her home town in Louisville, Ky., when her father's loan company business is threatened by hoods. Although made up as a fashion model, she packs a magnum revolver and uses it with authority along with her own brand of karate to round up the hoods. (PG)

THURS. 23 SEPTEMBER

"THE WHITE HORSES OF SUMMER" (92 Min.)
Renato Casale, Frederick Seaford
(Drama) This film is the story of a family brought closer together as a result of a tragedy when one member of the family is involved in an almost fatal automobile accident. No rating available.

FRI. 24 SEPTEMBER

"BOOK OF NUMBERS" (91 Min.)
Raymond St. Jacques, Freda Payne
(Drama) Two former waiters establish a black-operated numbers game in a small town during the depression era. (R)

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From: _____

PLACE STAMP HERE

To: _____



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Civilian employees encouraged to undergo aviation physiology training at NAS Lemoore

(Editor's note — The NWC Fleet Operational Support Office is interested in encouraging civilian employees to undergo the aviation physiology training offered at Naval Air Station Lemoore as a necessary prerequisite to flight in high-performance project aircraft. It is felt that project engineers, managers up to and including department heads, and other NWC personnel working on programs of importance to the Navy pilot would gain valuable insights from this training whether or not a need exists for these civilians to fly. In order to encourage such personnel to enroll for this training, this first-person account has been written.)

By Elizabeth Babcock
Being a Navy pilot is not an easy job. In addition to keeping track of all the details of flying today's sophisticated high-performance aircraft, the pilot must stay constantly aware of his own physical symptoms. Such physiological conditions as vertigo or hypoxia may deprive the pilot insidiously of the extra measure of alertness necessary for safe flying.

Furthermore, the pilot must get used to flying encased in a cocoon of clothing and gear — all necessary for emergency survival but uncomfortable, restrictive, and distracting for routine operations.

Recently I had a chance to experience first-hand a few of the complications and contingencies a pilot must be trained to anticipate. Along with a group of experienced Navy pilots who were undergoing a refresher training course for the A-7 aircraft prior to reassignment in the Fleet, I participated in training exercises in the low-pressure chamber at Naval Air Station



WHICH WAY DID YOU SAY? — HM2 John Vaughn (left), an aviation physiology technician at Naval Air Station Lemoore, effectively demonstrates how pilot vertigo is brought on by the motion of the fluids in the semicircular canals of the inner ear. The volunteer subject, deprived of visual and audio directional cues, here indicates with a "thumbs up" sign that he believes his swivel chair has stopped, when actually the chair is rotating slowly to the left.



READY TO EJECT — In the interest of learning first-hand about aviation physiology training, Elizabeth Babcock, a TID employee, recently experienced this training at Naval Air Station Lemoore. Here she prepares to pull an overhead loop on an ejection seat that will initiate a simulated ejection from an aircraft. George Banky, an employee at Lemoore who operates and maintains the experimental devices, stands by to offer tips on the safe operation of the ejection seat.

—Photos by PH3 Larry Warsh
Lemoore.
Completion of these exercises is required by Naval Air Training and Operating Procedures Standardization (NATOPS) every three years for anyone who plans to fly in naval aircraft at an altitude of 10,000 ft. or higher. "But even if you never get in an airplane, it's a valuable educational experience in itself just to go in the chamber," emphasized Captain W. B. Haff, NWC Technical Officer.

Uncomplicated Procedure
Necessary first steps to be taken before an NWC employee participates in Lemoore's aviation physiology training are agreement by the employee's department head that this training should take place at the expense of departmental training funds and a simple, routine physical check that can be accomplished at NWC's Dispensary or at the NAF Sick Bay. This ear, nose, and throat check, accomplished within 24 hours before the training, includes an electrocardiograph reading for personnel over 35 years of age.

Nobody who has a cold or hay fever should enter the low-pressure chamber because of the stress on the ears and sinuses caused by rapid pressure changes. Personnel with any history of heart failure should also stay out of the chamber.

Regular Schedule
Capt. Haff stressed that participation in aviation physiology training at Lemoore is easy. A C-131 aircraft flies personnel from NAF to Lemoore on the third Tuesday of every month for this purpose. Each traveller must have either travel orders in hand or a boarding chit, obtained from the Travel and Transportation Branch. In addition, a Non-Transport Flight Request/Permit (11ND-NWC-4631/1) is necessary, but the applicant does not need a signature on this form from the NAF Projects Officer if flight after the training is not planned.
"We'd like to encourage broad par-

Meeting of NWC Advisory Committee slated Sept. 23-24

Members of the Naval Weapons Center's Advisory Committee will meet and confer here next Thursday and Friday, Sept. 23 and 24, with representatives of the Center's top management.

The meetings with the Advisory Committee, which is now headed by Dr. C. J. Pings, Vice Provost and Dean of Graduate Studies at the California Institute of Technology, will be held in the Management Center of Michelson Laboratory.

Status reports about NWC technology, organization and planning will be presented during the two days of conferences.

A no-host reception and dinner in honor of the Advisory Committee also has been scheduled next Thursday, starting at 6 p.m., in the Mojave Rm. of the Commissioned Officers' Mess.

A prime rib dinner will be served and those planning to attend are asked to make reservations by calling NWC ext. 3379 by next Wednesday, Sept. 22. During the evening, there will be a showing of the NWC environmental protection film entitled "Desert Stewardship."



CONVERSATION PIECES — A variety of artwork will go on sale Oct. 23 from 1 to 5 p.m. at Joshua Hall on the Desert Empire Fairgrounds as part of the "Festival U.S.A." portion of the Horizons '76 American Heritage Celebration. Kimi Legg (left) and Aiko White (center) are shown creating one example of the sale items: mobiles made of ribbon. Both ladies will also demonstrate the origami art of paper folding. At right is Janis Stehr, who is shown creating flowers from various materials. They also will be on sale. —Photo by Ron Allen



NEW OFFICERS OF WACOM — A new slate of officers, headed by Dixie Miller (at left), as president, is directing a busy season of WACOM activities that began with a membership coffee this past Tuesday. Other officers of the Women's Auxiliary of the Commissioned Officers' Mess are (l.-r.) Lorna Moore, vice-president; Nancy Hawkins, secretary, and Marta Knight, treasurer, as well as Tina Knemeyer, parliamentarian, and Ditty Riggs, historian, who were unable to be present for the photo. In addition, Jean Hollingsworth is serving as supervisor of the Thrift Shop, with the assistance of Martha Faron and Helen Maroon, who are handling the duties of co-chairman of this major WACOM fund-raising activity for the next six months. One special event, a family swim night that was held on Tuesday, Sept. 21, has been cancelled. —Photo by Ron Allen

Impact of alternate energy sources on the environment to be discussed

A talk by Dr. Edwin B. Royce, head of the NWC Research Department, will be presented at a meeting to be held next Thursday, Sept. 24, starting at 8 p.m. in the Murray Junior High School auditorium.

During this meeting, which is being cosponsored by the museum and the China Lake Chapter of the American Society of Public Administration, Dr. Royce will discuss "Some Aspects of the Environmental Impact of Alternate Energy Sources."

Dr. Royce came to the Naval Weapons Center last May from the Environmental Protection Agency (EPA) in Washington, D.C., where he served as Acting Associate Deputy Assistant Administrator for Energy, Minerals and Industry in EPA's Office of Research and Development.

He also had been involved in a research and development and technology demon-

stration program, aimed at the control of pollution during the extraction and processing of industrial raw materials. This meeting is open to all interested persons. Special event procedures will be in effect at the Center's main gate in order to enable those who go to not have NWC passes to attend.

New student rabbi to conduct Hebrew services here tonight

A new student rabbi, Sol Goodman, from the Hebrew Union College in Los Angeles, will begin conducting services of the NWC Hebrew Congregation this evening at 7:30 in the East Wing of the All Faith Chapel.

This regular Friday night sabbath service by the Hebrew Congregation will include placement of the mezuzah — usually a case made of olive wood or metal which contains a hand-inscribed parchment scroll upon which is written the watchword of the Jewish faith and paragraphs from the book of Deuteronomy.

The proper location for the mezuzah is on the right entrance doorpost of the chapel. It is placed at eye level as a constant reminder of God's divinity and the moral duties of Judaism.

An Oneg Shabbat, or social gathering, during which traditional bread (Challah) and wine will be served, will follow this evening's Hebrew service.

According to Sidney Busch, president of the NWC Hebrew Congregation, preparations also are being made for the local observance of the Jewish High Holy Days of Rosh Hashanah and Yom Kippur, on Sept. 24, 25 and 26 and Oct. 4.



Dr. Edwin B. Royce

The Rocketeer

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RAdm. Rowland G. Freeman III

NWC Commander

Dr. G. L. Hollingsworth

Technical Director

C. E. Van Hagan

Head,

Technical Information Department

Don R. Yockey

Editor

James J. Stansell

Associate Editor

Terri Jacks

Editorial Assistant

Ron Allen

Staff Photographer



DEADLINES
News Stories Tuesday, 4:30 p.m.
Photographs Tuesday, 11:30 a.m.
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Promotional opportunities

Unless otherwise specified in the ad, applications for positions listed in this column will be accepted from current NWC employees and should be filed with the person named in the ad. All others desiring employment with the Naval Weapons Center may contact the Employment-Wage and Classification Division, Code 652, Ext. 2069. Ads will run for one week and will close at 4:30 p.m. on the Friday following their appearance in this column, unless a later date is specified in the ad. Employees whose work history has not been brought up to date within the last six months are encouraged to file a Form 171 or 172 in their personnel jacket. Information concerning the Merit Promotion Program and the evaluation methods used in these promotional opportunities may be obtained from your Personnel Management Advisor (Code 455 or 457). Advertising positions in this column are promotional opportunities and do not preclude the use of alternate recruiting sources in filling these positions. As part of the rating process, a supervisory appraisal will be sent to the current supervisor and the most recent previous supervisor of those applicants rated as basically qualified. The Naval Weapons Center is an equal opportunity employer and selection shall be made without discrimination for any nonmerit reason. The minimum qualification requirements for all GS positions are defined in CSC Handbook X-118, while those for all WG, WL and WS positions are defined in CSC Handbook X-118C.

Clerk-Typist, GS-322-3/4, PD No. 7350006, Code 3332 — This position is located in Development Division I and provides secretarial and clerical support to Fuze Project Branch II. Major duties include typing technical reports and articles, letters; preparing correspondence, maintaining records and files; scheduling appointments, receiving visitors and telephone calls. Job Relevant Criteria: Must be a qualified typist, be familiar with Navy correspondence and have the ability to meet deadlines under pressure.
File applications for the above with Terry Rowell, Bldg. 34, Rm. 210, Ph. 2371.

Mechanical Engineer or Physicist, GS-400/1310-9/11, PD No. 7460022, Code 402 — This position is in the Detonation Physics Division of the Research Department. It is in the field of solid mechanics and structural dynamics. The incumbent conducts mathematical analyses of structural response to transient loads. This requires both formulation of the governing equations and development of solutions based on either analytical or numerical techniques. General problems of projectile impact and target response to warhead damage mechanisms are investigated. Primary interest is in failure conditions and past failure structural response. Job Relevant Criteria: Experience with digital computer usage.

Secretary (Typing), GS-318-5, PD No. 7040060E, Code 404 — This position is that of division secretary in the Avionics Division of the Systems Development and Design Division. The incumbent maintains the supervisor's calendar; receives and screens on and off-center office visitors and telephone calls; receives and screens incoming correspondence; and arranges supervisor's travel. Job Relevant Criteria: Must have receptionist abilities, be reliable and dependable, must have telephone answering skills and have the ability to work rapidly and accurately.
Electronics Engineer, GS-855-11/12, PD No. 7460100, Code 4084 — This position is located in the Survivability/Lethality Facilities Branch, Systems Development Department. Incumbent's responsibilities will include facility instrumentation systems design and development, instrumentation evaluation and investigation, and special test instrumentation design and development. Job Relevant Criteria: Graduate degree in instrumentation systems design, digital and analog circuit design experience, and the ability to communicate effectively.

File applications for the above with Janet Thomas, Bldg. 34, Rm. 204, Ph. 2925.
Information Receptionist, GS-304-3/4, PD No. 7460010, Code 9021 — This position is located in the Office of the Technical Presentations Coordinator. The office coordinates technical presentations made to visiting groups and individuals and functions as staff assistant to Command at Center host. The incumbent is responsible for personally receiving visitors and coordinating the arrangements for visitors wishing to contact members of the NWC Technical Engineering Design Division. The incumbent also assists Center employees in checking out projection equipment as well. Job Relevant Criteria: Ability to deal tactfully with people, to work under pressure and to type.
File applications for the above with Marge Stanton, Bldg. 34, Rm. 206, Ph. 2723.

Job Opportunities
Bartender, NA 7441-1, \$2.74 to \$2.19 p/h, Commissioned Officers Mess — This is not a Civil Service job. Applicant must be 21 years of age or older. Incumbent mixes alcoholic/non-alcoholic drinks to order; delivers drinks, receiving payment or appropriate charge to (Continued on Page 4)

Bldg. 34, Rm. 206, Ph. 2577.
Accounts Maintenance Clerk, GS-520-3/4, PD No. 7117031 or 7117030-2, Code 0862 — (2 vacancies) Position is located in the Cost Accounting Branch, Incumbent receives and processes purchase documents and validates outstanding vouchers and outstanding accounts payable for assigned segments of accounts. Job Relevant Criteria: Knowledge of accounting clerical methods and procedures, ability to meet deadlines and to work rapidly and accurately.
Promotion Potential: GS-5 Accounting Technician, Bldg. 34, Rm. 210, Ph. 2371.

File applications for the above with Tina Lowe, Bldg. 34, Rm. 206, Ph. 2676.
Clerk (Typing), GS-301-3/4, PD No. 7460003N, Code 88 — This position is located in the China Lake Branch Clinic of the Naval Regional Medical Center, Long Beach. Incumbent maintains in current status approximately 4,000 records of Civil Service personnel, acts as office receptionist, receives all telephone calls and routes them to proper personnel, schedules physical examinations, prepares and types letters, notices, reports and correspondence. Job Relevant Criteria: Understanding of medical terms, ability to type and to compose single letters.
File applications for the above with Mary Morrison, Bldg. 34, Rm. 210, Ph. 2393.

Engineering Technician, GS-802-7/8/9, PD No. 7455048, Code 5521 — Position is located in the Mechanical/Special Equipment Branch, Engineering Design Division, Engineering Department. Incumbent assembles, repairs, tests and inspects optical gyros and S.R. seekers. Incumbent also works with miniature assemblies requiring use of a microscope. Work operations are frequently performed in a Class 100 clean room. Job Relevant Criteria: Knowledge of optical gyros and S.R. seekers; knowledge of dynamic balance machines, basic electronic test equipment and mechanical assembly fixtures; ability to communicate effectively both orally and in writing.
Promotion Potential: GS-10. Previous applicants will be considered without reapplying.
File applications for the above with Janet Thomas, Bldg. 34, Rm. 204, Ph. 2925.

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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
BLESSSED SACRAMENT CHAPEL	
MASS	
Daily except Saturday	1135
CONFESSIONS	
Daily	1115 to 1120
Saturday	1530 to 1645
Sunday	0800 to 0825
RELIGIOUS EDUCATION CLASSES	
Sunday	Preschool 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 ANNEX #5	
Sunday	Services — (Sept.-May) 1930

Results of Incentive Awards Program reported

Results of the Naval Weapons Center's Incentive Awards Program for the period from July 1, 1975, through June 30, 1976, were made available recently by the NWC Personnel Department.

The various categories of awards covered in this report are Beneficial Suggestions, inventions, Superior Achievements (mostly

group awards), Sustained Superior Performance Awards and Outstanding Performance Awards.

A total of 186 Beneficial Suggestions were submitted, of which 59 were adopted that resulted in estimated tangible savings of \$9,173 during the first year of use. Em-

ployees received \$3,200 for their Beneficial Suggestions.

In the field of inventions, a total of 129 were presented during the past fiscal year to employees whose ingenuity netted them \$22,700 in awards, while \$24,110 was divided among the recipients of Superior

Achievement Awards.

Additionally, 266 employees who were presented Sustained Superior Performance Awards pocketed \$77,030 for their exceptional efforts.

The various awards presented, and the names of the recipients (by department) were as follows:

OFFICE OF FINANCE AND MANAGEMENT — Roland D. Burks and Eleanor L. Semore.
SUPPLY — Walter J. Sulek and John D. Whittaker.
FUZE — Maurice H. Johnson and Albert W. Lipinski.
WEAPONS — Arthur E. Clayton.
PROPULSION DEVELOPMENT — Forest A. Seaman.
ENGINEERING — Kenneth B. Akins.
PUBLIC WORKS — Hope D. Adams, Gerald L. Austin, R. J. Babines, J. A. Cast, H. M. Linsea, W. Martin, Michael P. Thorpe, Frank A. Brewer, Jimmie E. Donathan Jr., Vincent J. Esposito, G. Frazer, Cathy S. Hansen, Britt L. Hartzell, Edward L. Marquez, G. N. Jones, T. A. Wilson, P. H. Weeks, Gerald N. Jones, Robert A. Kahley, Donald L. Kennedy, Ed Larosche, Donald W. Lee, Martin H. Leon, Leo W. Maki, Jerry L. Morrison, Ron R. Clodt, Jack R. Nefew, Max Norris, George Perrige, William T. Pierce, Marvin L. Plunkett, Scott C. Pockrandt, Frank L. Portillo, George K. Schulz, Roger W. Weakley, Albert S. Raney, Bill Richardson, Wayne A. Sands, James W. Semore, Delbert A. Sweeney Jr., Rufin Szymanski, Jack L. Tipton, Albert R. Wickware and Abe B. Valdez.

SYSTEMS DEVELOPMENT — Edwin Allen, Dennis Bishop, Jay Bornfleth, John Keen, John Owens, Darwin Rice, Douglas Savage, Harold Schmeer, Dan R. Branson, Eugene Foust, Clinton Hill, Donald Jones, Lyle Rickets, Douglas Sticht, Ronald G. Stoumeyer and William O. Alltop.
SYSTEMS DEVELOPMENT — Robert L. Beyer, Larry L. Collins, Floyd S. Hall, John A. Knecht, James P. Lee, Toshio Nakashima, Michael W. Pullen, Heinz J. Roesser, Dan R. Watke, Richard R. Bruckman Jr., Woodrow D. Charlier Jr., Charles H. Hill, James D. Ross, Francis L. Thomson, Robert E. Westbrook, C. E. Burkley, L. G. Shantler, D. W. Elliott, C. E. Owen, O. L. Davis, R. D. Berry, J. R. Basden, R. B. Seeley, A. L. Russell, A. C. Koch, Goro Fujiwara, V. E. Thomas, L. L. Kielman, R. E. Fryer, F. K. Ikenoyama, J. E. Loper, William N. Haworth, Leland L. Law, Craig W. Post, John Murphy Jr., Alvin D. Riedler, Robert J. Sellers, James K. Takahashi and Henning H. Thorpe Jr.
PROPULSION DEVELOPMENT — Arthur C. Black Jr., Samuel P. Holladay, Scott M. O'Neil, Howard H. Payne, George F. Seig, Warren M. Erickson, Amos S. Etheridge, Nick Kleinschmidt and George S. Ofedal.
TECHNICAL INFORMATION — Elizabeth C. Anderson, James M. Koch, Johnnie A. Lopez, Doris R. Quick, Sharon A. Scoles, Alma M. Barber, Clyde E. Parker, Richard L. Zurn, Theodor J. Horn, Clifford C. Newton, Daniel L. Zurn, Eloy J. Dominguez, Donald K. Moots, Edna B. Jenkins, William P. Feltkether, Nicholas C. Curran, Bruce A. Simolon, Barbara A. Neal and Wanda L. Stahlman.
ENGINEERING — Dan W. Butler, Marvin E. Backman and Harold E. Cronin.
PUBLIC WORKS — Walter J. Burfeindt, Howard W. Collins, Benjamin Huff, Dorothy J. Mekker, Brian L. Reese and Eddie Wallace.

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WEAPONS PLANNING GROUP — Steven R.

Hall and E. R. Towson.
SUPPLY — Wesley R. Stewart and Eddie J. Valerio.
FUZE — James V. McVay, Patrick A. Yates, Eugene P. Breitenstein and Melvin H. Keith.
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FUZE — Sandra K. Mangrum.
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CONGRATULATIONS IN ORDER — Dr. E. B. Royce (at right), head of the Research Department, recently presented patent awards to two of the employees in his department. The recipients are Dr. Melvin H. Miles (at left) and Carl C. Halsey. Dr. Miles, a research chemist who is here as an intermittent employee from Middle Tennessee State University, was awarded a patent for developing a method of providing a rechargeable silver sulfide cathode for liquid ammonia batteries and fuel cells. Halsey, a mechanical engineering technician in Code 60's Detonation Physics Department, shared in a patent for his work with Robert G. S. Sewell on a terrain clearing device. Sewell, who is a physicist, was unable to be present for the award ceremony. Also absent at the time the photo was taken was Dr. William P. Norris, a research chemist in the Organic Branch of the Chemistry Division, who invented a new chemical compound that is useful as a burning rate modifier for rocket propellants.

Homestead maintains undefeated record in flag football play

By Doug Nelson

The undefeated Homestead flag football team continued its winning ways with victories over the Naval Air Facility Cruisers and Air Test and Evaluation Squadron Five.

Playing against the Cruisers on Sept. 8, Homestead gained an early lead in the first half on a 60-yard touchdown run by Tony Cozzucoli and another run of 55 yards by Mike Machowski. A 37-yard run by Mark Wooten concluded the scoring before the half-time intermission, with the tally 20-0 in favor of Homestead.

The second half opened with Homestead scoring again, this time on a three-yard touchdown run by Rich Lasell. The winless Cruisers finally got on the scoreboard with a pass interception by Jim Ross, who ran it in for the score. After a final touchdown by Homestead, the game ended with the league leaders on top, 32-6.

In the second game played that night, the NAF Hawks defeated their foes from the Dispensary, 20-6.

The scoring began as Bob Jackson of the Hawks scampered 50 yards for a touchdown, and his teammate Ken Rogers soon afterwards caught the Dispensary quarterback in his own end zone for a safety, making the score 8-0, Hawks. After the Dispensary scored 6 points on a three-yard touchdown run, the Hawks connected on a touchdown pass from Jackson to Charles Barrows to end the first half of play.

The Hawks scored the only tally of the second half on a 65-yard pass interception by Ed Timmons. Final score was Hawks, 20, Dispensary, 6.

Last Monday night, Sept. 13, the Homestead team continued its dominating style of play by posting a convincing, 22-6, win over VX-5.

Homestead scored on its first possession of the game on a pass from Cozzucoli to Steve Quinton, and added two more points on a successful two-yard conversion run by Lasell. VX-5 pushed across the only other score in the first half on a pass interception.

A 40-yard touchdown pass from Cozzucoli to Dan Fuller and a successful PAT broke the game open for Homestead gridders in the second half, and they then closed out the scoring on a 40-yard pass from Cozzucoli to Lasell.

The second game of the evening matched the Dispensary against the Cruisers.

A run by Rich Schlehuber, followed by a PAT, put the Dispensary gridders on the scoreboard first. The speedy Schlehuber also scored on another dazzling run to conclude the first half and make the tally 14-0.

After the halftime break, the Dispensary machine struck again on a pass from John Morgan to Mike Fitzgerald, and Morgan soon connected again on a touchdown toss to Tim Cooksey. The conversion attempt was successful. Morgan closed out the scoring with a six-point throw to Mike Cannon, and the Dispensary left the mangled Cruisers in the dust, 23-0.

Bowling for Admiral's

Cup slated tomorrow

Admiral's Cup competition for the 1976-77 year will begin at 10 a.m. tomorrow with bowling at Hall Memorial Lanes between teams representing the Naval Air Facility, Air Test and Evaluation Squadron Five (VX-5), and the Naval Weapons Center.

Six man teams have been chosen, and each entrant will roll a three-game series. Final results in the bowling competition will be based upon the highest singles, doubles and overall team scores.

Bob Kauffman will lead an NAF team composed of Stan Dewald, Sam Goode, Rick James, Bill Jordan and Mike Zych.

The keglers who will represent VX-5 are Teofilo Boleros, Bud Denton, Aurelio Lingad, Harland Johnson, Dominador Mendoza and Terry Miles.

Bowlers for NWC will be Ed Brooks, Jim Erdman, Jess Hays, Bob Humes, Dick Schweitzer and John Salyers.



COMPLIMENTARY STUDENT BODY CARD PRESENTED — Capt. R. D. Franke, NWC Deputy Commander, this week was the recipient of a complimentary Burroughs High School student body card that was given to him along with an invitation to attend local high school activities starting with tomorrow night's sophomore and varsity football games that will get under way at 5 and 8 p.m., respectively. The presentation was made by Sidney Richison, supervisor of activities at Burroughs High, and Liz Knemeyer, student body president.

Burroughs varsity gridders to open season Saturday against Chino High

Burroughs High School's varsity football season will begin tomorrow evening (not Friday night as previously-released schedules have stated) at the Burros' home gridiron.

Kickoff time between the local high school varsity eleven and their counterparts from Chino High School will be at 8 p.m. A sophomore game, which will get under way at 5, will precede the varsity tilt.

The Burros, with Bruce Bernhardt again at the helm as head coach, will be fielding a 60-man squad that has a scattering of experienced players on both offense and defense, but is lacking in depth.

Assisting Bernhardt (who handles the offensive backfield) with the coaching chores are David Bens, who is in charge of the offensive line; while John Higdon, the defensive coach, is being aided by Arnell Bazemore, as line coach, and Gene Vejtas, who is working with the defensive secondary players.

On offense, the Burros line is anchored by Mark Alden, center, who at 235 lb. is the heaviest player on the team. Also back are Ernie Bell, who was an all-league guard last year, as well as Rick Green, at tight end. Ken Charlton is returning for another year at fullback and the Burros also have an experienced tailback in the person of Steve Cordle.

Veterans on the defensive platoon are Brian Carle and Ken Hays, at the tackle

Entries now accepted for memorial tennis tourney Oct. 9-11

Entries are now being accepted for the Gary Haugen Memorial Tennis Tournament, which will be held on the courts of the Naval Weapons Center and Cerro Coso Community College on Oct. 9-11.

Net proceeds of the tournament will be donated to a tennis scholarship fund established in the memory of young Haugen, a local tennis enthusiast who died recently of leukemia. The fund will benefit deserving Cerro Coso College students in order to stimulate their continued interest in the sport.

The tournament will include competition in men's and women's open and intermediate singles, men's and women's doubles and mixed doubles. Trophies for the first and second place winners will be presented on the afternoon of Oct. 11.

It is anticipated that as many as 40 out-of-town tennis players will enter the tournament, which also is open to all Indian Wells Valley residents.

Entry forms and fees must be returned to the tournament director by midnight on Oct. 4. The required forms, plus further information on the tournament, are available at the NWC gymnasium.



Wilt's Corner

Winter softball league play begins; 13 teams involved

Winter softball action began this week at Reardon Field among 13 teams.

All games will be held at that location, Monday through Thursday nights at 6 and 8 o'clock. The season schedule will run through the end of next month.

The teams participating in the league are the Navy Hawks, Gamecocks, Tuff Stuff, Fire Department, Red Hots, City Slickers, Mama Bears, Dingbats, Desert Rats, Heat, James Gang, Rounders and Grunts.

Tourney Reminder

Entries are still being accepted for the Naval Weapons Center's racketball tournament which will determine players in that sport who will represent NWC in the Mojave Desert Inter-Service League minor sports carnival at March Air Force Base on Oct. 22-24.

Deadline for entering the Sept. 24-26 tournament is next Wednesday. The NWC handball tournament, also designed to select MDISL competitors, will begin tonight and continue through Sunday.

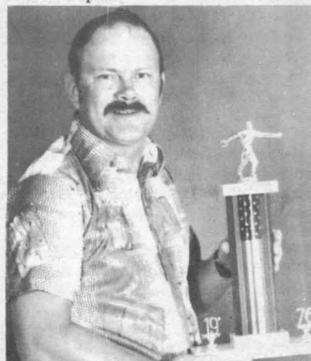
NWC representative places 2nd in 11th ND horseshoe match

Second place honors in the singles division of the recent 11th Naval District Horseshoe Championships held at Naval Air Station North Island were won by the Naval Weapons Center representative, Danny G. Carlson.

In this double-elimination event, Carlson played a total of seven matches, each of which was decided by the winner of two out of three games. In the final match he came up against the eventual tourney champ — Bob Morrison, the representative of the Commander, Naval Air Forces Pacific — and lost two tough ones by scores of 21-18 and 21-15, even though 75 per cent of his shots were ringers.

Carlson and Morrison both will go on to represent the 11th Naval District in the fourth annual West Coast Navy Horseshoe Championships to be played at Naval Shipyard, Mare Island in Vallejo, Calif., on Sept. 20-24.

A native of Deer River, Minn., Carlson has been pitching horseshoes since the age of 5, and last year won the first place singles and doubles competitions for the Western Pacific Admiral's and Captain's Cups, the Commander Naval Forces Philippines Cup and the All Western Pacific Cup. In the last three years of Navy competition, he has won 11 trophies.



Danny G. Carlson

Ace drone controller commended...

(Continued from Page 1)

War II), and the QF-86H and the QT-38A (drone versions of the Air Force's F-86 Sabrejet and T-38 Talon aircraft, respectively). In addition, within the past month, he was at the controls when the first flight was made at China Lake of the QH-50 drone helicopter. With the exception of the QH-50, he first flight-tested each of the man-rated aircraft to make sure they were capable of being flown by remote control.

While still on active duty as a lieutenant commander in the Navy, Reep reported to the Naval Air Facility at China Lake in February 1970 as the targets officer.

Following his retirement from the Navy in June 1972, he went to work for Systems Consultants, Inc., in Ridgecrest as a drone specialist and was a contractor employee hired by the Targets Department to continue handling the same duties he performed during his final tour of active duty in the Navy.

After a year, he joined the ranks of Civil Service employees and has been with the NAF Targets Department ever since.

Referring to Reep, Capt. Haff stated: "He's almost a rare or unique asset to the Naval Weapons Center. He's our only controller and is probably the finest and foremost controller of drones in the Navy."

TV-Type Control Used

The NWC Technical Officer noted that Reep was in on the beginning of the television-type control that is used here in operating drones. It's a much more professional approach than was possible in the past when the drone was controlled from the air by a companion aircraft and then landed by someone on the ground who had visual contact with the pilotless craft.

A man who is highly dedicated to this specialized type of work, and highly motivated toward doing a good job, Reep insists that before any drone aircraft is flown it is in good enough condition to warrant putting a pilot into it.

Reep has a lot of pressure on him when he runs a test, because he's responsible for drone safety and making sure that none of his pilotless aircraft come near any populated areas. There is a destruct mechanism aboard that can be activated if there is any loss of control of the pilotless aircraft and to date the safety record of the NAF Targets Department has been very good.

Stated briefly, the conversion of a manned aircraft to a drone requires the addition of actuators to move the control stick, the installation of transmitter-receivers that enable command control, and the addition of an on-board television for takeoffs and landings.

From the TV camera that is mounted in the nose of the aircraft, Reep, in the remote control ground station, has a view similar to that he has in the cockpit of the aircraft and can operate these targets to any point on the NWC range area that is within line of



DEAN OF NOLO AIRCRAFT FLIGHTS — With Capt. W. B. Haff, NWC Technical Officer, looking on, Harlan Reep goes through a simulation of the various operations involved in piloting a drone aircraft from the Naval Air Facility Targets Department's remote control ground station. —Photo by Ron Allen

sight of the ground control station.

Earlier this year, a team of Naval Weapons Center civilian and military personnel (aided by contractor employees) delivered to the NAF Targets Department the last one of a group of Air Force Sabrejet airframes that were successfully converted into 29 subsonic target drones (the QF-86H).

At the present time, according to Jay Bornfleth, an employee of the Systems Branch in the Weapons Department's Weapons Development Division who is the QF-86H program manager, NWC is providing engineering support for the operation of this target system both here and at the Pacific Missile Test Center, Point Mugu.

Has Yet To Miss a Test

Reep handles all of the remotely-controlled flight operations at the Center and must be here whenever there is a test. He's never missed one in five years, Bornfleth added, noting that Reep has gone far beyond his duties of operating drone aircraft by assisting in their development as well. In addition, he has aided in the training of other remote control pilots for the QF-86H system at Point Mugu.

John Keen, program manager for the QT-38A drone program, is equally enthusiastic about the way in which Reep, who is a qualified pilot of the T-38, has contributed to this program.

"I feel if he hadn't been such a professional at what he does, we would have been a lot longer in the development phase of the first QT-38A drone," Keen said.

AME3 Wenner selected as NAF's Sailor of Month

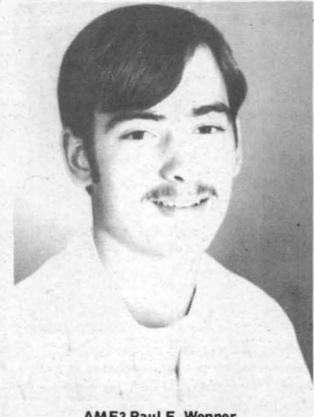
Aviation Structural Mechanic Third Class Paul E. Wenner has been named the Naval Air Facility's Sailor of the Month for September.

For the last three months — ever since he arrived at China Lake — AME3 Wenner has been a member of the Safety and Survival Shop, where he does scheduled maintenance on aircraft ejection seats and oxygen safety equipment.

"This is a good job because it's interesting to work on aircraft systems. Besides, what I do can save a pilot's life," says September's Sailor of the Month. Although he's not sure at the moment about making the Navy a career, he is impressed with the "training, money and education" of the service thus far.

According to AME3 Wenner's division officer, Lt. Dean M. Hendrickson, "Although he has been on board only a short period of time, he has already established himself as a valuable asset to the work center. Having limited experience in naval aviation, Petty Officer Wenner has demon-

strated a great degree of self-motivation and initiative in learning all aspects of his rate."



AME3 Paul E. Wenner

Technical Director to address two professional gps.

Dr. G. L. Hollingsworth, NWC Technical Director, will be the featured speaker at meetings of two local professional groups that will be held on Monday evening at The Hideaway in Ridgecrest, and during the lunch hour on Tuesday at the Commissioned Officers' Mess.

On Monday night, Dr. Hollingsworth will discuss "Some Future Requirements in Quality" during a meeting of the Sierra Sands Section of the American Society for Quality Control (ASQC).

This meeting, which is open to all interested persons, will begin with a social hour, followed by dinner at 7 p.m. The talk by Dr. Hollingsworth is scheduled at 8 o'clock.

Reservations for ASQC's "Management Night" dinner can be made by calling Tony Miller at 446-3501, or Floyd Towner, at NWC ext. 3701.

The NWC Technical Director also will be the speaker at the Tuesday luncheon meeting of the China Lake Section of the Institute of Electrical and Electronics



Dr. G. L. Hollingsworth

Engineers (IEEE), which will be held in the Chart Rm. of the COM, starting at 11:30 a.m.

Dr. Hollingsworth will present a talk entitled "New Directions in Computing" during which he will provide new insight into the proper role of the computer in modern day technology.

The question of what should and what should not "be subject to the ravages of the computer" will be discussed by the Technical Director, whose extensive experience in corporate level management of engineering centers has led him to be concerned about the tendency for the computer user to worry more about getting the "right" mathematical results than whether the results were "rightly needed" to begin with.

Insurance man to visit
Loni Kivett, the Aetna Insurance representative, will be at the Community Center next Friday, Sept. 24, from 10:30 a.m. to noon.

Vacancies filled on Community Council board of directors

Election of two new members-at-large and a change in the slate of officers highlighted Tuesday night's meeting of the China Lake Community Council board of directors.

The recent departure of Jim Walden, who had held the office of vice-president, and the resignation of Rudy Shepard, a long-time member of the local civic group, created two vacancies on the council's board of directors.

They were filled Tuesday night by election to the board of Joel Halop, head of the Public Works Department's Maintenance Control Division, and Glenda Yu, an electronics technician in the Soldering Technology Branch of the Engineering Department's Product Assurance Division.

Bob McCarten, former secretary of the Community Council, was chosen to replace Walden as vice-president, and Woodrow Chartier is the council's new secretary.

Preservation Hall Jazz Band program to open Concert Ass'n '76-77 season

Musical sounds, the likes of which have seldom been presented live from the stage of the Naval Weapons Center theater, will mark the opening of the Indian Wells Valley Concert Association's 1976-77 season on the evening of Monday, Sept. 27.

Featured on stage, starting at 7:30 p.m., will be the Preservation Hall Jazz Band of New Orleans, led by Percy G. Humphrey, a 71-year-old trumpet player whose father and grandfather were both deeply involved in the development and preservation of New Orleans-style jazz.

In addition to Humphrey, other members of the band who will play here are Cie Frazier on drums, Willie J. Humphrey on clarinet, Narvin Henry Kimball on banjo, James E. "Sing" Miller at the piano, and two "youngsters," Allan Jaffe and Frank Demond, who play the tuba and trombone, respectively.

Season Memberships

Season memberships for all six programs of the 1976-77 season of the IWV Concert Association will be on sale up to the day of the jazz band concert on Sept. 27. These reserved seat tickets are available to the general public at a cost of \$20, \$17 and \$14 (depending upon their location in the theater). In addition, there are reduced rate season tickets on sale for youths under 21, enlisted military personnel and senior citizens (65 years of age and over) that can be purchased for \$10, \$8.50 or \$7.

Purchasers of season tickets not only will be assured of guaranteed seat locations for the variety of outstanding musical programs that have been scheduled, but also will be giving an assist to the Maturango Museum. Money from the

NAACP to produce program in honor of black musicians

Rehearsals will begin at 7:30 p.m. Monday in the old Kern County Building on W. Ridgecrest Blvd. for a program to be staged by the Indian Wells Valley Chapter of the National Association for the Advancement of Colored People as a Bicentennial tribute to black composers and musicians.

Written and directed by Every Jo McClendon, the program will include songs and dances from the plantation days of early America up until the present time.

Ava McClendon is in charge of choreography and Alex Bellen is directing the music for this production, which is to be presented on the evenings of Oct. 8 and 9 at the Burroughs High School lecture center.

A group of some 60 local singers, dancers and backstage help is involved in preparations for this show, but more help is still needed to assist with the costuming and makeup, Mrs. McClendon said.

Music by composers James A. Bland and Henry T. Burleigh, opera selections of the type sung by Marian Anderson, Paul Robeson and Leontyne Price, and other music made famous by Louie Armstrong, Duke Ellington, Pearl Bailey, Lena Horne, Nat "King" Cole, Billy Holiday, Roberta Flack, Aretha Franklin and Ike and Tina Turner will be included in the program, in addition to excerpts from "Porgy and Bess."

Opportunities . . .

(Continued from Page 2)

members' credit cards may be required to serve catering parties, stock service bar, prepare garnishes, wash glasses and other bar equipment. Job Relevant Criteria: Must have ability to do simple arithmetic and make proper change, be able to follow instructions and deal effectively with people, and have experience in preparing alcoholic beverages.

Cook, NA 7484-5, \$3.19 p/h. Enlisted Mess (Open), Code 0822 — This is not a Civil Service job. incumbent prepares, seasons and cooks soups, meats, vegetables, desserts and other foods; adjusts thermostat controls to regulate temperature of ovens, broilers, grills and steam kettles; carves meats, portions food on serving plates, adds garnishes, gravies and sauces to fill orders; assists in preparation of all special parties. Job Relevant Criteria: Ability to understand oral and written instructions, ability to work safely, and knowledge of food service equipment. File applications for the above with Tina Lowe, Bldg. 34, Rm. 204, Ph. 2466.



Percy G. Humphrey,
Jazz Band leader

Season subscriptions will be contributed to the museum's building fund on a sliding scale that increases with the number of such memberships that are sold.

Other programs coming up during the coming concert season, and the dates they will be presented, are Susanne Shapiro, harpsichordist, Oct. 28; William Mallory, lyric baritone, Nov. 30; the Trio Flamenco, a blending of two master guitarists and a dancer, Jan. 19; the 85-member Utah Symphony Orchestra, March 3, and Daniel Pollack, pianist, April 18.

Between now and Sept. 24, season tickets may be ordered by mail by writing to the IWV Concert Association, P. O. Box 1802, Ridgecrest, or calling 375-5600. The Center theater box office will be open for the sale or pick up of season tickets on Friday, Saturday and Sunday, Sept. 24, 25 and 26, from 4:45 to 7 p.m., and on Monday, Sept. 27, from 4:45 to 7:30 p.m.

Single Admission Tickets

Also available are single admission tickets to the Preservation Hall Jazz Band program that are priced at \$6 each for the general public, or \$3 for youths under 21, enlisted military personnel or senior citizens.

These tickets also can be ordered by calling 375-5600, or purchased at the Station Pharmacy at China Lake, or in Ridgecrest at the Gift Mart or The Studio. In addition, they will be available at the theater box office at the times listed above.

The Maturango Museum will receive a major share (two-thirds) of the proceeds from the single ticket sales for the jazz band program.



MARINE CORPS OFFICER RETIRES — A military career that covered more than 22 years of service in the U.S. Air Force and Marine Corps was concluded by the presentation of a certificate of retirement to Maj. Dan Baker, USMC, by Rear Admiral R. G. Freeman III, NWC Commander. The retirement ceremony was held Aug. 31 in RADM. Freeman's office. —Photo by Ron Allen

Happenings around NWC

Presentation of a portrait demonstration in oils by Dorothy Hoyal, of the Antelope Valley area, will highlight the September meeting of the Desert Art League. The meeting, which is scheduled at the Community Center, will begin at 7:30 p.m.

Mrs. Hoyal, who has been painting or teaching art since she was a teenager, taught art at a private high school in Burbank for ten years and currently conducts painting workshops for adults. Her work both in portraits and landscapes has won a number of firsts in competition and is on display in galleries from San Francisco to La Jolla.

This is the first meeting of the Art League year and guests are invited to attend.

Enrollment still open in seminar on national affairs

Enrollment will still be accepted next Thursday, Sept. 23, at 7 p.m. for a series of seminars on national and world affairs that is being offered by Cerro Coso Community College.

This non-credit course (Social Science 100) will be held on Thursdays from 7 to 9:50 p.m. in Rm. 212 of the Training Center at China Lake.

The seminars, which will cover a variety of timely, social subjects such as poverty, the food crisis, health, crime and justice, ecology, air pollution, politics and propaganda also constitute the meetings for members of the 6303rd U.S. Army Reserve Study Group.

Several guests speakers with expertise in the subjects to be presented will address the class.

Enlisted and commissioned members of the reserve components of any branches of the military service are eligible to join this Army Reserve Study Group — a non-pay unit whose members are entitled to retirement point credits and Navy Exchange privileges.

Additional information about the 6303rd Army Reserve Study Group can be obtained by calling Col. Fred Nathan, USAR, at NWC ext. 2304, or at 446-2147.

Maj. Dan Baker, USMC, retires after 22 yrs. of military service

A retirement ceremony that marked the

conclusion of more than 22 years of military service was held for Maj. Dan Baker, USMC, on Aug. 31 in the office of Rear Admiral R. G. Freeman III, NWC Commander.

Most of Major Baker's military career (15 years) was spent in the Air Force, which he joined in 1955 as an enlisted man. After spending four years in the ranks, he qualified for the Aviation Cadet Program and (in September 1959) received his pilot's wings at Greenville Air Force base in Mississippi.

As an Air Force pilot and officer, he was assigned to the Strategic Air Command and, for 4½ years, flew as B-47 co-pilot with SAC. Another two years of Air Force duty was spent as a C-47 pilot with an Air Commando unit homebased at Howard AFB in the Panama Canal Zone.

Prior to transferring to the Marine Corps 6½ years ago, Major Baker was a T-37 pilot for the Air Training Command at Laredo AFB in Texas.

During his service as a Marine Corps flier, Major Baker, whose home town is Moundsville, W. Va., was assigned to the El Toro Marine Corps Air Station in Santa Ana, Calif., and left from there with Marine Attack Squadron 311 for a tour of duty that took him to DaNang in South Vietnam as an A-4 jet aircraft pilot and to Iwakuni, Japan, where he was the logistics officer for Marine Air Group 12.

This overseas assignment was followed by his transfer to the Amphibious Warfare School at Quantico, Va., prior to coming to China Lake.

Membership in the Art League is open to all those who are interested in art. Junior high and high school youths may join the league as student members.

Social Security Agent Due

A representative of the Social Security office in Lancaster will pay another of her regular series of monthly visits to China Lake next Thursday, Sept. 23.

Persons wishing to apply for a Social Security number or obtain information about Social Security benefits and Supplemental Security Income claims can do so at the Community Center between 9 and 11:30 a.m.

This same type of assistance also is available at the Social Security office located at 337 W. Ridgecrest Blvd. in Ridgecrest. Office hours there are Monday through Wednesday of each week, from 9 a.m. to 3:30 p.m.

Comic To Entertain at COM

Las Vegas comic Bobby Monohan will entertain at the Commissioned Officers' Mess tonight, membership night, from 11 until midnight.

Dinner special for the evening will be New York steaks, served from 6 until 9 o'clock. Saturday evening will be gourmet night, featuring lobster and Alaskan king crab legs.

Reservations are still being accepted for the Sept. 25 appearance of the George Holmes' Inkspots, the offspring of the famous 1940s singing group. A roast turkey dinner with all the trimmings will be featured that night for \$6.50 per person.

Dance Set at Enlisted Club

The Caleb Band, a local group formerly known as the Take Five, will play its own brand of rock music at an Enlisted Club dance tonight from 9 until 2 a.m.

In addition, Bobby Monohan, a well-known comic from Las Vegas, will perform from 9:30 to 10:30 that evening. Dinner special will be shrimp tempura.

On Saturday, the annual Navy Wives Club Night will be held from 8 until midnight. T-bone steak will be the featured entree of the dinner menu.

Aviation physiology training offered at NAS Lemoore . . .

(Continued from Page 1)

training opportunities, which must be financed by training funds of the requesting department, to phone ext. 3793 for further information.

Experienced Staff

The experienced flight training staff at Lemoore includes two aviation physiology officers who have specialized in the stresses placed on the human body when it is taken out of its normal atmosphere. The aviation physiology technicians participating in the training have gone through 12 weeks of specialized aviation physiology training in addition to hospital corpsman training. The group performs flight physicals and other medical tests, as well as aviation physiology and water survival training.

My group of 18 aviators and one novice was greeted by Lt. Bill Evans, aviation physiology officer. In his introductory lecture, Lt. Evans stressed the critical need of aviators for a good sense of balance, for excellent vision, and for quick reflexes. "Aviators by the nature of their trade are remarkably sensitive to any energy fluctuations in the body," he reminded his attentive audience.

Lt. Evans stressed the dangers of flying at high altitudes without an oxygen mask. Describing the physical state of hypoxia, or oxygen deficiency, he reminded us that this condition begins with slight dizziness and minor, almost unnoticeable, impairment of the peripheral vision and rapidly progresses to functional unconsciousness.

Avoid False Sense of Security

"Don't let cabin pressurization lull you into a false sense of security—it's a luxury afforded you when things are working properly," he said.

There was only one cigar smoker in my training group. Lt. Evans was pleased. "Smoking, gents, is on its way out," he said, adding that in addition to the danger of a cockpit fire caused by lighting a forbidden cigarette, the smoker has already lost some ability to function in low oxygen situations through damage to his lungs.

Before we entered the chamber, Lt. Evans cautioned us about other perils associated with high-altitude flying. "You're going to undergo a phenomenal change in pressure today—from sea level to 40,000 ft.," he said. "But since you're going to be doing it gradually—no problem."

Decompression sickness or the bends, a sudden release of the dissolved nitrogen in the body, are symptoms of rapid depressurization. Another common condition is hyperventilation, often caused when a person under stress breathes rapidly.

Breathing Techniques Taught

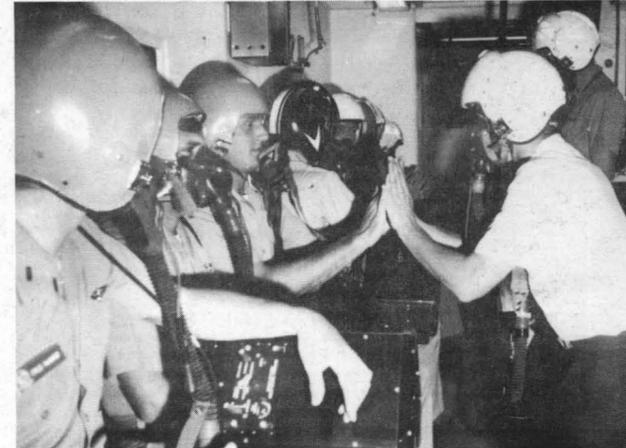
HM2 Bob Gatlin explained that in the chamber our group would experience pressure breathing conditions at a simulated 40,000 ft., then chamber pressure would be adjusted to a condition like that encountered at 25,000 ft. "That's where you'll take off your masks and have a little fun," he said.

After we were shown a nose-pinching technique to use in order to clear ear or sinus blocks, we donned helmets and oxygen masks and entered the chamber.

Watching old war movies on TV never prepared me for the discomfort of an oxygen mask. John Wayne or William Holden didn't seem to have any difficulty speaking or breathing but I certainly did. "Now you understand the temptation to take our masks off in the cockpit," said the pilot next to me.

We had been cautioned to remove jewelry, watches, anything that might have air trapped inside it. One such container, of course, would be the human body. "Leave your inhibitions in the classroom. You're in the chamber to survive," HM2 Gatlin said. As the pressure in the chamber was lowered at the rate of 6,000 ft. every minute, we watched a rubber glove expand as pressure imbalance increased between the air trapped inside the glove and the atmosphere around it.

At about 35,000 ft., the pressure outside



GETTING A LITTLE GOOFY — Pilots undergoing altitude training in Lemoore's low pressure chamber learn to recognize the effects of hypoxia, or oxygen deficiency, by experiencing them under controlled conditions. At a simulated altitude of 25,000 feet, pilots playing patty-cake without oxygen masks soon experience difficulty in mustering the coordination for even this simple game. It is important for these pilots of high-performance jet aircraft to recognize the early symptoms of hypoxia so that they may take immediate steps to obtain additional oxygen and avoid a "functional unconsciousness" that leads to fatal accidents.

the body became so low that we actually had to push the oxygen out into our face masks and control oxygen intake—a reversal of our usual method of breathing. Since this "pressure breathing" makes it difficult to talk, we were required as part of the training to state our names and states of birth while the chamber was at a 40,000-ft. atmospheric condition.

Here was where we had to be especially careful to guard against hyperventilation—a sense of panic when it becomes difficult to accomplish a function as natural as breathing often leads to rapid, shallow breathing—and the dizzy disorientation of hyperventilation. This is one reason why it is important for pilots to practice pressure breathing techniques under controlled conditions.

At 25,000 ft., we took off our masks and played patty-cake. This childhood game was easy at first—then I realized that it was becoming harder to hit my partner's hands. I was surprised that the air in the chamber seemed perfectly adequate. The first signs a pilot has that he is experiencing hypoxia are blueish fingernails, tunnel



LIGHT PROTECTION — The blinding flash of a 16,000-volt strobe light simulates a nuclear explosion for subjects experiencing the effects of "flash blindness" during Naval Air Station Lemoore's aviation physiology training. Protected by a gold-plated visor, this pilot finds he can read his instrument panel after 3 to 5 seconds. Without eye protection, the same pilot needed 45 seconds after the flash to recover his eyesight.

vision, and a tingling feeling—a "cheap drunk."

Insidious Condition

"It's very insidious—you feel a loss of muscular coordination but you can't quite understand why," said a pilot who had been practicing writing his name at 25,000 ft. and had found that his handwriting noticeably deteriorated as his brain reacted to oxygen deprivation. Others described their condition at that altitude as "euphoric" or "lightheaded."

Another common pilot hazard is vertigo, a disorientation caused by conflicting sensations fed the brain by the motion of the fluids in the semicircular canals of the inner ear. "The pilot is especially prone to this condition at night, in fog or clouds, or in other low-vision conditions," said HM2 John Vaughn. Pilots experiencing vertigo may enter "graveyard spins" as they desperately correct for conditions that they experience as the opposite of reality.

"Vertigo has increased with aircraft performance and now causes 4 percent of aircraft accidents," HM2 Vaughn warned.

To demonstrate vertigo, HM2 Vaughn put a blindfold and earphones on a volunteer and slowly turned him in a swivel chair. As the chair spun to the right, the subject indicated he felt the chair stop and turn to the left. Since he had been deprived of visual and audio cues, he had to depend on the very undependable sensations of his inner ear.

Vaughn recommended relying on instruments in low-visibility conditions. "Guard against yourself in such conditions," he warned. "You can't always trust your own judgment."

Further Demonstrations

Further demonstrations in Lemoore's day-long training session included an experience in "flash blindness" and a chance to try out the ejection seat trainer.

In the blindness demonstration, we went through an extreme version of the sensation often experienced by subjects of flash photography. As a strobe light, powered by four 4,000-volt capacitors, flashed in my eyes, an impenetrable curtain of white light seemed to descend. "Can you see the instrument gauge?" asked Lemoore employee George Banky. For a seemingly interminable 40 seconds, all I could see was the white curtain, with tantalizing glimpses of my surroundings along its sides.

"The rods and cones of your eyes have been bleached out and, try as you might, you won't be able to see until your eyes physically recover," Banky explained. With the protection of a gold-coated visor, I was able to read the gauge 4 seconds after the flash.

The last training experience of the day was an ejection seat demonstration, supervised by HM2 Charlie Miers. We were

instructed on the proper way to sit in order to avoid injury. Since the seat is rocket-propelled out of the aircraft at a force of 12 to 14 Gs, the pilot must be very careful where he puts his arms and legs.

As I adjusted my torso harness preparatory to the ejection test, HM2 Miers told me about the gear an ejected pilot takes with him. "He has 70 to 85 lb. of gear, including his seat pan," he said. "He wears a flightsuit, survival vest, life preserver, and torso harness—plus, if he's flying over cold seas, a wet suit. "You can imagine the hassle of putting all that on," Banky added.

After the seat flies from the plane, a radio beeper begins sending distress signals and a parachute automatically opens. The chute is instrumented to open only at an altitude of 14,000 ft. or lower, thus allowing free fall through the cold, hostile upper atmosphere.

Contains Necessities of Life

The seat pan contains such necessities as drinking water, high-energy food, a life raft, signals, and flares. "These things can be used for survival in the snow and on the desert as well as in the water," Banky said. He explained that the life raft and parachute, for example, can be rigged for shelter against desert heat and mountain cold until help arrives. "This gear is designed, above all, to bring the aviator back alive," he stressed.

In the ejection seat test, I was propelled rapidly along a vertical track for a short distance. The main objective of the test was to accustom the aviator to keeping arms and legs in and head back as he pulled the handle initiating ejection.

Lemoore's friendly and helpful aviation physiology staff is anxious to see more NWC engineers and project people in their program. "The more communication and understanding there are between the aviator and the engineer the better it is for the Navy," concluded HMI Leroy Epley.

Fall membership luncheon of PWOC to be held Monday

An invitation has been extended by the Protestant Women of the Chapel (PWOC) to all interested women to attend the group's fall membership luncheon. This event will be held on Monday, starting at 11:30 a.m., in the East Wing of the All Faith Chapel.

Members of the PWOC are committed to Christian fellowship, study, and help to others through their contributions to world missions and participation in All Faith Chapel activities.

A highlight of the luncheon will be a presentation by a representative of Teen Challenge—a program of rehabilitation for drug users.

Present PWOC members are asked to bring a salad to the luncheon on Monday, and rolls, dessert and a beverage will be provided. Nursery care will be available in Chapel Annex No. 1.

Additional information can be obtained by calling Ginny Fulmer, PWOC president, at 375-4649, or Carole Lindemann, membership chairman, at 446-5430.

Toastmasters to hear talk about visual aids

A talk entitled "Whatever Happened to Visual Aids?" will be presented at the next meeting of Toastmasters Club No. 853.

The meeting will be held next Thursday, Sept. 23, starting at 6:30 p.m., at the Commissioned Officers' Mess, and the speaker will be Donald Moote, head of the Presentations Development Branch in the Technical Information Department's Presentations Division.

Moote will present samples of and discuss the numerous ways in which visual aids can be used to improve upon a speaker's presentation.

Those wishing to attend the Toastmasters Club meeting are asked to call either Ravindra Jain, the president, at 375-7802, or Roland Robbins at 375-2971.