ROCKETEER



SUMMERTIME FUN — Last Saturday more than 200 adults and melon eating contest, as young contestants gobble up their slices. judges about the size of his piece of watermelon in the water- provided music during the afternoon and into the early evening.

MONIES

"OH GOD II"

Starring

George Burns and Louanne

(Comedy, rated PG, 94 min.)

"STIR CRAZY"

Starring

Gene Wilder and Richard Pryor

(Comedy, rated R, 111 min.)

"THE RUNNER STUMBLES"

Starring

Dick Van Dyke and Kathleen Quinlan

(Drama, rated PG, 101 min.)

Starring

Dudley Moore and Julie Andrews

(Comedy, rated R, 122 min.)

2 p.m. Matinee

"SONG OF THE SOUTH"

Starring

Ruth Warrick and Bobby Driscoll

(Musical fantasy, rated G, 95 min.)

"FRIDAY THE 13th"

Starring

Jeananne Taylor and Robbie Morgan

(Horror-drama, rated R, 95 min.)

2 p.m. Matinee

"DANNY"

Starring

Janet Zarish and George Luce

(Drama, rated G, 89 min.)

FRIDAY

SATURDAY

SUNDAY

TUESDAY

WEDNESDAY

THURSDAY

ALL AGES ADMITTED

ALL AGES ADMITTED

R RESTRICTED

entor Adult Guardian

JUNE 19

JUNE 20

JUNE 21

JUNE 22

JUNE 23

JUNE 24

JUNE 25

an uncounted number of children attended the seventh annual All ages joined in playing volleyball and horseshoes, with a Fuze and Sensors Department picnic at McBride Park. In the scavenger hunt and egg toss being planned specifically for the upper left picture Bob Boot, department head, argues with the kids. The picnic was preceded by a softball game. Desert Express

IWV Concert Ass'n announces schedule, plans for new season

A series of six concerts will be offered during the 1981-82 season by the Indian Wells Valley Concert Association at the Center theater beginning next October.

Present Concert Association members are urged to return their season ticket renewal forms without delay, so that seat reassignments for renewing members can be completed before the sale of season tickets to new members begins. Seat changes for renewing members will be handled from July 1 through Aug. 15, with assignments for new members starting thereafter.

The new member sales campaign will begin on Aug. 17, and go into full swing in September.

The 1981-82 season is scheduled for a lively opening on Monday, Oct. 19, when Opera a la Carte presents "The Mikado." This fully staged Gilbert and Sullivan production with two-piano accompaniment is directed by Robert Sheldon, a noted Gilbert and Sullivan specialist from England.

Sheldon has delighted local audiences twice with sold out performances of "H.M.S. Pinafore" (1977-78) and "Pirates of Penzance" (1979-80). Now Opera a la Carte is returning with the ever-popular "Mikado" - full of many familiar songs and characters - to complete the Gilbert and Sullivan "big three."

On Tuesday, Nov. 17, "Calliope: A Renaissance Band," a quartet of four virtuoso musicians performing on over 40 instruments, will perform "some of the sweetest music this side of the 13th century." Since winning the Naumberg Chamber Music Award in 1975, Calliope has appeared in every major Renaissance music festival in the country and in many prestigious concert halls.

Gary Davenport, a 26-year-old pianist from California, will present a concert on Wednesday, Jan. 20, 1982. A graduate of the Juilliard School, he has concertized widely on the West Coast, both in recital and as a soloist with numerous orchestras.

On Tuesday, Feb. 23, the Warsaw Philharmonic Chamber Orchestra will perform under the direction of Karol Teutsch. This ensemble of 22 of Poland's finest musicians has performed to critical acclaim throughout its extensive tours of five continents and has received high praise for its numerous recordings and broadcasts.

Founded in 1962, the Warsaw Philharmonic Chamber Orchestra will be touring the United States for the third time, presenting a program encompassing varied periods and styles.

Coming to the Center theater on Monday, March 15, will be the Westwood Wind Quintet. Founded in 1959 by oboist Peter Christ, this group has been widely acclaimed for its thousands of concert performances and many recordings, and is recognized as one of the leading woodwind groups in the world.

The final concert of the 1981-82 season on April 29 will feature the AMAN International Folk Ensemble. This group of 16 to 20 dancers and musicians will present a program drawing from a multitude of cultures. Colorful costumes and authentic ethnic instruments will add to the enjoyment of those in attendance.

During the recent annual election of officers of the IWV Concert Association, Gene Younkin was chosen to serve another term as president, and Carl Morley was reelected as secretary. Other officers of the board are Douglas Sticht, vice-president, and Clara Erickson, treasurer.

June 19, 1981



Two popular menu items will be featured next week at the Commissioned Officers'

A two-for-one special of T-bone steak, baked potato, corn-on-the-cob, and hot biscuits and honey will be featured on Tuesday evening.

Oriental will be the theme for Thursday's dinner menu which offers of beef Mandarin, egg foo yung, sweet and sour spareribs, Mandarin vegetables, and Shanghai fried

Dinner on both nights will be served from 6 to 9 o'clock.

Coming up next Friday, June 26, is another COM Membership Night party.

On the buffet (slated from 6 to 9 p.m.) is a green salad, baron of beef, baked potato and vegetables

The evening's entertainment will be provided by Baaska and Scavelli, an oldies and goodies duo from the Los Angeles area. Music for the listening and dancing pleasure of COM members and guests is scheduled from 8 p.m. until midnight.

Cost of this evening of dining and dancing is \$5 for members and their spouses and \$6 for guests.

Reservations must be made no later than noon on Thursday, June 25, to insure sufficient time for food and seating preparations. Tickets can be arranged for by calling 446-2549.

Chief Petty Officers' Club

A choice of either prime rib of beef or Icelandic cod will be offered this evening in the Chief Petty Officers' Club dining room from 6 to 9 o'clock.

After dinner, members and guests are invited to stay and enjoy the country-rock entertainment of the Donna Thomas Quartet, a Los Angeles-based group that will perform for the listening and dancing pleasure of everyone in attendance from 8:30 p.m. until 12:30 a.m.

Annual Navy Night fete scheduled at Sea World July 4

A new, 4-act circus will be added to the many feature attractions at Sea World in San Diego for the 12th annual Navy celebration on the 4th of July.

Navy Night is open to all active duty and retired military personnel, civilian employees of the Department of Defense, and their dependents. This evening of fun begins at 8 p.m. and continues for five hours.

Tickets to the July 4th Navy Night fete will not be available at Sea World, but can be obtained locally at the Recreation Coordination Office located in Bennington Plaza. The cost is \$4.65 per person, with children under three years of age admitted free of charge.

Star performers during the circus part of the show will be the Chipperfield lions, who will share the spotlight with topflight high wire and trapeze acts. All of Sea World's exhibits will be open during an evening that also will include fireworks and music. U.S. Government Printing Office:

1981 - No. 30 From:_ PLACE STAMP HERE 0:

sacola, Fla.

Capt. Lahr, who will become the 22nd Commander of the Naval Weapons Center Capt. William B. Haff invites all civilian and military personnel to attend the change of command ceremony that will take place on the front lawn of the Headquarters Building on Tuesday, June 30, at 9 a.m.

A 1953 graduate of St. John's University in Collegeville, Minn., he entered the Navy via Officer Candidate School at Newport, R.I., and was commissioned an ensign in 1954. Shortly thereafter he reported for flight training at Pensacola, and was designated a naval aviator in 1955.

Capt. Lahr to succeed Capt. Haff as NWC Commander

A formal change of command ceremony during which Capt. William B. Haff, who is retiring from the Navy after 30 years of service, will be succeeded by Capt. John Jude Lahr as NWC Commander, will be held on Tuesday, June 30, starting at 9 a.m. in the Administration Circle.

Capt. Lahr, who is stepping into the post held by Capt. Haff for the past two years, is transferring here from a two-year assignment as Commander of Training Air Wing Six at the Naval Air Station in Pen-

and its forerunner (the U.S. Naval Ordnance Test Station), is a veteran of 27 years of service in the Navy.

Capt. Lahr's first duty after receiving his wings as a naval aviator was that of an A-1 Skyraider pilot with Attack Squadron 15 during a deployment to the Mediterraean on the aircraft carrier USS Forrestal.

After this tour of sea duty, he returned to Pensacola in 1959, where he joined the Training Command and served as a primary flight instructor and (from 1961-63) was the enlisted personnel officer on the Chief of Naval Air Training Staff before being sent to Albuquerque, N.M., for nuclear weapons training.

During the latter part of 1963 it was back to sea once again for Capt. Lahr as the advanced underseas weapons officer on board the aircraft carrier USS Hornet during a deployment in the western Pacific.

In 1965, Capt. Lahr became the operations officer of Attack Squadron 93 and subsequently flew 230 combat missions in Vietnam while serving for two WestPac deployments with VA 93 on the aircraft carriers USS Enterprise and USS Hancock.

Returning from the Vietnam War, NWC's next Commander joined Attack Squadron 44, the Atlantic Fleet A-4 Readiness Training Squadron, as operations officer and remained with VA 44 during 1967-68 before assuming command of VA 81 in 1969. While under Capt. Lahr's command,

Attack Squadron 81, which embarked for a Mediterranean deployment on the aircraft carrier USS Kennedy, won the Commander U.S. Naval Air Forces Atlantic Fleet Battle Efficiency Award for A-4 squadrons, and later became the first Atlantic Fleet squadron to make the transition from A-4 aircraft to the A-7E Corsair II.

In 1970 it was back to Albuquerque, N.M., ,



Capt. John Jude Lahr

June 19, 1981

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once again for Capt. Lahr, who served as Director of Aircraft Projects at the Naval Weapons Evaluation Facility for a year prior to being chosen as Commanding Officer of Attack Souadron 174 - the Atlantic Fleet A-7 Readiness Training Squadron.

Studies at the National War College in Washington, D.C., were next for Capt. Lahr, who then remained in the nation's capital from 1973 to '75 - serving as the tactical nuclear weapons plans officer on the staff of the Chief of Naval Operations.

Before his most recent assignment as Commander of Training Air Wing 6 at NAS Pensacola, Capt. Lahr was the Commanding Officer from 1977 to '79 of the Naval Weapons Evaluation Facility at Kirtland Air Force Base in Albuquerque.

Capt. Lahr's service medals and decorations include the Distinguished Flying Cross (four awards), the Meritorious Service Medal (two awards), the Air Medal (23 awards), the Navy Commendation Medal with Combat "V" (three awards), and the Vietnamese Gallantry Cross, in addition to various campaign ribbons.

He and his wife Janice Larson Lahr, formerly of Starbuck, Minn., have five children. They are a daughter, Christi, and four sons, John II, Mike (deceased), Nick and Tony.

Lost Bicycles Impounded4 New Public Works Officer 5

Navy Memorial Approved......7

Concert Ass'n Season Plans8



NAVAL WEAPONS CENTER

Establishment of ADP security measures basis for Commander's Award

Two Naval Weapons Center employees, Jerome L. Zaharias and Warren C. Sherard, Jr., on Monday morning became the latest recipients of the Commander's Award for Excellence in Mission Support.

This award was established in 1979 in response to the need to recognize Center employees whose achievements in missionsupport activities are comparable to those honored by the presentation to them of the Technical Director's Award for their technical and scientific achievements.

Zaharias, an employee in the Computer Sciences Division of the Research Department, is NWC's Automatic Data Processing System Security Officer, while Sherard is head of staff in the Safety and Security Department

All NWC employees are eligible to receive the Commander's Award, which consists of a pyramid-shaped paperweight inscribed with the recipient's name, specific missionsupport related achievement, signature of the Commander, and date of the award. Also included are a letter of commendation and a stipend, normally \$300.

Zaharias was singled out to receive the Commander's Award in recognition of his efforts that went into establishing the NWC Automatic Data Processing (ADP) Security Program.

Zaharias, who has held the post of ADP System Security Officer at NWC since December 1975, was instrumental in preparing and developing training material and conducting training sessions for department computer system security officers.

He was commended for bringing recognition not only to himself, but also to NWC, for authoring or co-authoring several publications on automatic data processing,

including "ADP Security Procedures for NWC," "ADP Security and Privacy Be Aware." "Automatic Data Processing Security Handbook," and "Processing Classified Data in a Controlled Mode on the Central Computing Facility."

Zaharias, who has a background in mathematics and physics, joined the work force at China Lake as a Civil Service employee in 1959 - after working here initially as a contractor employee for two years.

Assigned to the former Test Department, he was involved in computer programs, systems design, and also did some work for the Technical Library on automated search techniques designed to assist in the process of obtaining technical information from

(Continued on Page 3)

1981 Navy Relief Society fund drive ends today at NWC

Today is the last day of the Navy Relief Society fund drive for 1981.

Those who have not yet been contacted by their department representatives and would like to contribute to this worthy cause can call fund drive co-chairmen Lt. John Martin (NWC ext. 5838 or 3830) or LCdr. Chip Lancaster (NWC ext. 2167) to arrange for someone to pick up their contributions.

At the Fuze and Sensors Department's old fashioned picnic, held last Saturday, profits from the sale of wine coolers were contributed to the Navy Relief Society. A total of \$52 was given to NRS as a result of this fundraising activity.

CONGRATULATIONS EXTENDED - Capt. William B. Haff, NWC Commander, extends his congratulations to Warren C. Sherard, Jr., and Jerome L. Zaharias (at right), who were singled out to receive the Commander's Award for Excellence in Mission Support for their involvement in the Center's Automatic Data Processing Security Program. -Photo by Don Cornelius

Organizational changes made in Office of Commander announced Organizational changes were announced made that the IG recommendation be

earlier this month in the Office of the Commander, Naval Weapons Center. The Vice Commander is now Chief Staff

Officer, with the change reflected in functional statement for that office, and the Small Business Program Office and Commercial-Industrial Type Activities (CITA) Study Program Office have been added to the Commander's staff.

During the Naval Material Command Inspection held last year a recommendation was made that the Center should revise its Organization Manual to reflect a position of Chief Staff Officer in lieu of Vice Commander: NWC had the only Vice community.

Center again on April 3, the request was and the Department of Navy.

implemented. The position of Vice Commander is now retitled Chief Staff Officer and appropriate changes were made in the functional statement for that office.

The Small Business Program functions were realigned to reinforce the policy that the Small and Disadvantaged Business Utilization Specialist at the Center works independently of contracting personnel and reports directly to the appointing authority in accordance with Defense Acquisition Regulations.

The CITA Study Program Office is a new office established to oversee cost comparison studies of support functions in Commander position in the laboratory accordance with guidelines contained in OMB Circular A-76 and implementing When the Inspector General visited the directions from the Department of Defense

ROCKETEER

HAPPY OCCASION - PN2 Stephanie J. Lashuk flashes a big smile as she is congrafulated by Lt. Eric Darrow, an NWC chaplain who officiated at her recent reenlistment ceremony held at McBride Park. She signed over for four more years in the Navy. Assigned to duty with the Personnel Support Activity Detachment (PSD), PN2 Lashuk is responsible for providing a variety of customer services, including making out leave papers and verifying and issuing ID cards for military personnel and their dependents. PN2 Lashuk, who has been at the Naval Weapons Center for nearly 31/2 years, is awaiting orders transferring her to the Armed Forces Entrance Examination Station in Honolulu, Hawaii.

Steps to speed up training in computer science announced

Chico State University Computer Science Program pursuing either an undergraduate or graduate degree in computer science will be able to complete their program more hours per week per unit of class work taken rapidly due to the critical need for

20.7% enjoyed by **Commissary** patrons

A price comparison survey conducted by 12 Navy Commissary Stores in the Continental U.S. shows customers enjoy an overall savings of 20.7 percent when compared to average commercial supermarket prices.

The survey conducted in November 1980 checked the prices of 85 "market basket" food products and 15 non-food items. The survey showed that prices in produce departments savings were 22.4 percent and savings on groceries were 19.5 percent. Overall savings amounted to 20.7 percent.

Prices were recorded for identical items and included "specials" and promotions being offered by commercial supermarkets during the survey period. Local sales taxes were not included in the commercial prices reported.

Price co surveys are com missioned by the Navy Resale and Service Support Office in Brooklyn, N.Y., and are conducted twice each year by Navy Commissary Stores in different parts of the country.

Official Weekly Publication

Naval Weapons Center

China Lake, California

Captain W. B. Haff

NWC Commander

R. M. Hillver

Technical Director

S. G. Payne

Public Affairs Officer

Don R. Yockey

Editor

Mickey Strang

Associate Editor

Beverly Becksvoort

Editorial Assistant

Center employees who are enrolled in the personnel with computer skills. In order to accelerate the completion of this program, employees may be able to

qualify for on-the-job study time of up to two for undergraduate courses and three hours per week per unit for graduate level courses

In order to receive this study support, the student must have had at least one year of continuous employment on-Center, must have completed at least two on-Center Chico State core courses with a B average or better, and must be accepted for admission by Chico State University.

Most of the classes include some weekend time as well as on-the-job class time. The hours away from the job (both for study and class attendance) can total, for instance, 90 for a 10-week graduate level 3-unit class. Time away from the job should be negotiated by the student and the student's supervisor. The student then submits a memo via his or her department head to Code 01A2 requesting the support.

At the same time that the memo is submitted, an Individual Development Plan, proof of admission from Chico State and a grade report of completed Chico classes must also be submitted. The request must be submitted four weeks prior to the beginning of a class. This new Center egin in the fall

The Center will continue to pay 100 percent of the tuition for courses completed with a C grade or better. The only out-ofpocket expense to students enrolled is the

Promotional opportunities

Applications (Standard Form 171) should be put in the drop box located at the Reception Desk of the Per connel Department, Bldg. 34. Unless otherwise specified in an ad, applications for positions listed in this olumn will be accepted from current appointable (i.e., career/career conditional and VRA) NWC employees only. All others desiring employment at NWC may contact the Employment-Wage & Classification Division, Code 092, Ext. 2069. Ads will run for one week and will close at 4:30 p.m. on the Friday following their ap pearance in this column, unless a later date is specified in the ad. Advertising positions in the Promotional Opportunities column does not preclude the use of alternate recruiting sources in filling these positions. The filling of these positions through Merit Promotion is subject to the requirements of the DoD Program for the Stability of Civilian Employment. The minimum qualification requirements for all GS positions and positions subject to the Demonstration Project are those defined in OPM Handbook X-118; those for all wage system positions are those defined in OPM Handbook X-118C. Applicants will be evaluated on the basis of experience, training, education, and awards as indicated in a written record consisting of a SF-171, at least one supervisory appraisal if it can be obtained, and any tests, medical examinations, interviews, and supplement qualifications requirements that may be necessary. For managerial/supervisory positions, consideration will be given to applicant's support of the Equal Employment Opportunity programs and objectives. Applicants must meet time in grade and qualifications requirements by the closing date of the ad. The Naval Weapons Center is an Equal Opportunity Employer; selections are made without discrimination for any nonmer

cement-No. 24-035. Police Officer. GS-083-3/4 -The purpose of this advertisement is to solicit applications to be sent to the Office of Personnel Management in Los Angeles for inclusion on the register. Any person gualified to apply may do so. Status in Civil Service is not a requirement. This register will be used to fill current vacancies in the China Lake Police Division, Safety and Security Department. The incumbent will perform basic w enforcement duties under the direction of a field training officer or a police supervisor. Routine cases, traffic control, traffic citations and investigation of NWC histrative violations may be handled inde umbents must be available to work any one of three

ement No. 24-034, Police Officer, GS-083-2, PD No. 7824034N, Code 2413 - The purpose of this advertisement is to establish a register to fill temporary (not to exceed one year) police officer positions. This register will be used to fill vacancies as they occur during the next several months. Maximum time in an appointment of this type will be 12 months in any 24-month period. NWC will accept applications from reinstatement eligibles, in-dividuals currently on Civil Service Registers, and individuals not on registers who have skills necessary to qualify for this position. The position is located in the Patrol Branch of the Police Division, Safety and Security Department. Incumbent performs basic law enforceme duties under the direction of a field training officer or a police supervisor. Routine cases, traffic control, traffic citations and investigation of NWC administrative violations may be handled independently. The incumbent must be available to work any one of three shifts. Applicants will be required to take a written test.

ouncement No. 33-012, Administrative Officer Assistant, GS-341-5/7/9, PD No. 7831029E, Code 33802 This position is that of Administrative Officer to the ead, Survivability and Lethality Division, Fuze and Sensors Department. The incumbent is responsible for the administrative functions of the division with particular mphasis in the fields of budgetary planning and fiscal control, personnel policies, and procedures, staffing requirements, material and equipment, procurement, equipment management, and facilities. Job Relevant Criteria: Knowledge of NWC administrative practices and procedures; knowledge of accounting principles; ability to analyze financial data; ability to consolidate material from various sources into a cohesive report; ability to plan and organize work; communication skills - both oral and ability to work well with a wide variety of people. This ad was run October 1980; previous applicants need not reapply, but it is recommended that applications be up-dated. Promotion potential to GS-11. Supplemental Exrience Statement required, can be picked up from Sue Cross in Rm. 208, of the Personnel Bidg. Announcement No. 34-009, Editorial Clerk/Assistant,

GS-1087-4/5 PD No. 7553080N, Code 3442 - This position is In the Composition and Layout Branch, Graphic Arts Division, Technical Information Department. The incumbent composes and lays out repro-ready material for oublication. He/she records manuscripts on magnetic tape; proofreads typed copy; designs layouts, integrates line or half-tone figures; runs off galleys, and marks repro with instructions for print shop. Job Relevant Criteria: Skill in operation of magnetic tape input and output equipment; skill in proofreading; knowledge of technical menclature; skill in preparing layouts. Position could lead to Visual Information Assistant, GS-1001-7, but promotion is not guaranteed.

ment No. 3629, Engineering Technician, GS-802-12, PD No. 7736054E, Code 3653 - This position is located in the Engineering Drawing Branch of the Engineering Department. The incumbent is responsible for the technical design disclosure documentation and associated supporting lists to enable competitive procurement of all components comprising a complex Weapon System. He/she evaluates design changes proposed by Center and/or contractor personnel, evaluates al data packages for producibility Performs tolerance analysis of the mechanical hardware interfaces and coordinates drawing requirements with the

Training

opportunities

The Navy Scientist Training and Exchange Program (NSTEP) is designed to provide long term training opportunities for NWC employees grades GS-9 and higher. These training assignments are located in the Washington, D.C. area. The program is used for cross training and development of key nnel at the middle, senior and executive levels. The training varies from 6 months to 2 years depending on the assignment. The employee selected will go on the training assignment at his current grade level and position description. Applicants must be at the grade level listed in the notice. For information or to apply for the below listed training opportunities, contact Len Gulick or Donna Gage Code 035, Ext. 3793.

Interdisciplinary, DP-3 (Mechanical Engineer, Electronic Engineer, Aerospace Engineer, General Engineer). This is a NSTEP position located in the Harpoon Program Office, Air 5958, Naval Air Systems Command, Washington, D.C. The incumbent shall serve in a one-year training assignment which will provide him with on-the-job training in Systems Command functions, roles and procedures in the planning and management of a major systems acquisition program. He will be assigned, and be responsible for, a variety of duties including Harpoon guidance section, aft missile system, and testing and evaluation. He will also maintain an effective liaison between NAVWPNCEN and NAVAIRSYSCOM.

developing contractor, NWC and other DoD agencies. Job vant Criteria: Extensive knowledge of design and nentation evaluation processes of the branch; experience in procurement documentation maintena experience in liaison with contractors to ensure adequate formance; experience as a production documentation authority on development teams convened to respond to change or production requirements; ability to comnicate effectively orally and in writing

uncement No. 39-019, Secretary (Typing), GS-318-05, PD No. 8039015N, Code 394 - This position is located in Electro-Optics Division of the Weapons Department The incumbent provides clerical support to the division head, associate head, and administrative officer; advises and assists the secretaries of the project office and fou branches, and coordinates the clerical workload; receives visitors and phone calls to the division office; sorts, screens and distributes incoming mail; prepares outgoing correspondence; reviews all correspondence submitted for division signature; makes appointments for the head and associate head, and schedules meetings and conferences makes travel arrangements for division office staff maintains office supplies, files, and records. Job Relevant Criteria: ability to review, control, screen, and distribute incoming mail; ability to review outgoing correspondence; ability to compose correspondence and/or to prepare nonnical reports; ability to train clerical personnel and organize workload of clerical staff or processes; ability to plan and coordinate travel arrangements; ability to ntain and coordinate supervisor's calendar and to arrange conferences. Promotion potential to GS-6. Supplemental Qualifications Statement required in addition to the SF-171. Supplemental forms available from Kate in Rm. 100 of the Personnel Bldg. Prévious applicants need not reapply.

Announcement No. B-64-3, Secretary (Typing), GS-318-4, PD No. 8164003N, Code 6411 — This position is located in the Engineering Development Branch, Parachute Engineering Division of the Parachute Systems Department. Incumbent maintains calendar for the branch head; receives and directs visitors and calls; types from rough draft and reviews correspondence; receives an distributes incoming mail; maintains files. Job Relevant Criteria: Ability to perform receptionist and telephone ies; ability to review, control, screen, and distribute incoming mail; ability to review outgoing correspondence ability to plan and coordinate travel arrangements; ability maintain and coordinate supervisor's calendar and to arrange conferences. Applicants must fill out a Supplemental Qualifications Statement, available in reception area of the Personnel Bldg.

uncement No. GY840, Gardener, NA-5003-5, \$4.73 per hour plus benefits, permanent, full-time, Gymnasium .— This is not a Civil Service position. Duties: Operate equipment used in upkeep of athletic fields: applies fer tilizers, insecticides and grass seeds: utilizes a general knowledge of irrigation systems, thorough knowledge o athletic fields preparation; prepares fields and parks for

(Continued on Page 7)



DIVINE SERVICES

Sunday Worship Service Sunday School - All Ages 0830 Sunday School Classes are held in Chapel Annexes 1, 2, 4, (Dorms 5, 6, 8) located opposite the former Center Restaurant. Communion Service first Sunday of the Month. ECUMENICAL

Wednesday Noon Bible Study	1130
Thursday Men's Prayer Breakfast	0630
ROMAN CATHOLIC	
MASS	
Sunday	0830-1130
Nursery, Chapel Annex 1	0815-1245
Daily except Saturday, 1135 Blessed	Sacrament
in potision opening one of	Chapel
CONFESSIONS	
	1115 to 1130
Sunday	0800 to 0825

Sunday 1100 to 1125 RELIGIOUS EDUCATION CLASSES Sunday Pre school thru 11th grade Above classes are held in the Chapel Annexes across from the former Center Restaurant

Sunday afternoon 1630 12th grade "Home" Discussion Groups As announced and Youth Rallies Contact Chaplain's Office for specifics

JEWISH SERVICES EAST WING - ALL FAITH CHAPEL Sabbath Services every Friday UNITARIANS

1930

CHAPEL ANNEX 95 Sunday Services (Sept.-May)



Overall savings of

June 19, 1981

22 runners ignore heat to take part in Sunstroke Mile

In spite of gusty winds and high temperatures, a group of 22 runners took part in the Over-the-Hill Track Club's final event of the season - the annual Sunstroke Mile held on the late afternoon of June 11 at the Burroughs High School athletic field track. Pryor Bonner, a runner in the men's 16through 20-year-old age group, had the fastest time for the mile run. He was clocked at 5 min., 29 sec., which was 2 sec. better than the 5:31 turned in by Mike Hartney, tops in the men's 31-40 year age group

Other first place winners in the various age group categories of the race were: Men's Division

Under 10 years of age - Jason Furnish, 8:07.

10 to 15 years of age - Jan Barglowski, 5:41.

41 to 51 years of age - Ray Jacobson, 6:25. Over 51 years of age - Scotty

Broyles, 6:01. Women's Division

Under 20 years of age - Renee Barglowski, 7:16.

31 to 40 years of age - Jo Burdick, 8:50. Over 41 years of age - Sig Gallaher, 9:05. The end of the 1980-81 racing season will be celebrated by the Over-the-Hill Track Club at the group's annual party to be held next Thursday, June 25, starting at 6 p.m. at the Pizza Villa in Ridgecrest. Additional information can be obtained by calling Scotty Broyles after working hours at 446-2941.

Plans to construct Navy Memorial in Washington OKayed

Plans to construct a Navy Memorial to honor those who have served in the U.S. Navy have been approved for the downtown area of the nation's capital.

The memorial will feature an amphitheater, stage and a water park and will be built in Market Square Park on Pennsylvania Avenue.

Construction is scheduled to begin on the memorial in early 1982, and it will cost between five and ten million dollars. Funding will come entirely from donations.

The idea of creating a Navy Memorial dedicated not only to the historic, but to the continuing contributions and sacrifices , made by Navy personnel and Navy civilians to this country's welfare has been discussed for many years. The project moved beyond the idea stage in 1977 when the U.S. Navy Memorial Foundation was incorporated as a non-profit educational association.

Former chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer, and former Chief of Naval Operations, Admiral Arleigh A. Burke, along with former Navy William Middendorf and Senator John Warner, were primarily responsible for getting the project started. Congress authorized construction of the memorial on public land in the District of Columbia by enacting Public Law 96-199 in March of 1980.

Rifle team . . .

(Continued from Page 6) firing line. Only iron sights (no 'scopes) were permitted.

In the individual competition, Lt. Wilcox placed 21st in a field of 96 with a score of 732 (15X) out of a possible 800. Scores of the other NWC Rifle team members in the individual match were:

FTMC Jess Mattick, 30th place, 721 with 9X; FTMC Nelson Foucher, 36th place, 699 with 7X; ABHC Bill Moss, 48th place, 656 with 4X; and AT1 John Large, 55th place, 636 with 5X.

Energy conservation tip

Keep the outside exhaust of your clothes dryer clean. Check it regularly. A clogged exhaust lengthens the drying time and increases the amount of energy used.



"To be a good teacher you need three things," says Dr. Steve Lee, who is head of the Applied Research and Analysis Branch in the Ordnance System Department. "You need to have a thorough knowledge of the subject matter, a lot of enthusiasm - and you should be a bit of a ham."

Steve qualifies in all three areas. He's been in the field of mathematics and statistics during the 28 years that he's spent at China Lake. During one short Center fellowship, he acquired a master's degree in mathematics from UCLA, and following a onger NWC fellowship, he completed his doctorate in operations research at Arizona State University.

"I enjoy math and science more now than when I was younger," Steve says. "Maybe it's because it ties directly into my philosophy of life. And I try to share some of this enjoyment in the classes that I teach."

Rehired annuitant

He adds that although he is a rehired annuitant, having retired last January, he plans to continue to teach for as long as he remains in the area. "Maybe just one or two classes at a time," Steve adds, "because full-time teaching really wouldn't leave me much time for anything else since I devote a lot of time preparing for each class."

The "anything else" completes the third item of his requirement listing for a good teacher - that of being a ham. Steve's been the producer of a unique set of "backyard productions" since 1954 when he and friends put on a series of vaudeville skits.

Since that time, usually about once a year ("It takes me about that long to generate a show"), Steve has put together a production. The first few, he says, were pretty basic, but he then began to get the knack of character and plot development and $1 \vee : \mathcal{T}/c^{2}$

consequently each production became a little more elaborate. "What makes these fun is the involvement and working with others who are willing to get involved," Steve says. "I feel very fortunate that I can create these plays.'

The group spends about five weeks rehearsing in preparation for three performances. That audiences enjoy the productions is shown by the attendance. From an early effort at which about 75 people were in attendance, the average production now draws about 750 people over three nights. One particular year, in fact, the show drew an attendance of 900.

Place sought for next production

These performances have been held in Steve's back yard, in the old Anchorage, at Sandquist Spa, and recently in the backyard of one of the motel apartments on the Center, Currently Steve is looking for a spot for the next production (which still exists only in his head). He needs a place where scenery and costumes can be seen to best advantage, and where there's enough seating space for about 250 people; the space, he adds, is smaller than one might anticipate because a lot of people can be packed into a small space if the seats are placed properly.

Steve is an accomplished musician (drums) and has fielded several successful dance bands in the Indian Wells Valley. He has also played for a number of shows put on by the Community Light Opera and Theater Association.

Steve says that there's a lot of similarity between writing one of his backyard productions and preparing to teach a class. "You need to prepare so that the class will flow smoothly, have continuity, and have good interaction. In one case, this is between the actors, in the other, between the instructor and the class. And if you can come out half the time feeling high because it's all gone well, that's tremendous."

Slow Pitch Softball League results reported . .

(Continued from Page 6) in their lopsided win over CSC. It was "no contest" after two innings of play, as the Knights piled up to a 16-1 lead.

Vaughn's, the "punching bag" of the American Divison, took it on the chin by a final tally of 24-6 in a game played with High Desert Saloon. The victors were in command by a score of 18-2 at the end of two innings, and the game was called after 41/2 innings of play. Rod Lewis led the High Desert Saloon team at the plate with two home runs in three times at bat.

In another 5-inning game, the Knights held the upper hand as they defeated Stare Montagne 16-6. Stare Montagne ran out of gas after scoring six runs in the first three innings - allowing the Knights to win going away. Mike Stone and John Johantgen were the leading batters for Knights as they each had four hits in four times at bat.

Two more wins last week enabled the CSC team to keep a firm grip on first place in the Women's Division of the Slow Pitch Softball League. During the same time, the battle for second place shifted slightly in favor of the High Desert Home Center team, which edged its nearest rival (Kelly's Earthworks) 13-12.

Led by two homeruns by Abby Brandt, CSC clobbered the Foxtails 24-8 in an abbreviated 41/2-inning game. Against Rosas Roofing, however, the division eaders gave up six runs in the last three innings of play but, thanks to an early lead, emerged with a 10-8 win.

The High Desert Home Center vs. Kelly's Earthworks game was ended after four innings of play, with the Home Center team leading 13-12 on the strength of a 3-run surge during its last time at bat.

In total contrast, the second place Home Center team mauled the NWC Gatlin Girls 31-2 on the following night — this also was a 4-inning game. Linda Smith was the leading batter for the Home Center girls with a home run, three doubles and a single in five times at bat.

After losing by a 1-run margin in its first game of the week, Kelly's Earthworks

posted victories by scores of 12-4 and 31-3 over the IWV Dairy and Foxtails, respectively.

Scores of other games played last week in the Women's Division were Rosas Roofing 18, Home Town Realty 16; High Desert Imports 23, Hot Trotters 13; and Home Town Realty 31, NWC Gatlin Girls 6.

Rosas Roofing tallied 10 runs in its last turn at bat in the bottom of the fourth inning to edge Home Town Realty by two runs (18-16). Home run hitters in this game were Laurie Killilea for Rosas Roofing and Michelle Strawmyer for Home Town Realty.

Thirteen runs in one inning helped to pave the way for High Desert Imports' 23-13 win over the Hot Trotters. Jerry Marrer hit a home run in a losing cause for the Hot Trotters

The one-game win streak of the NWC Gatlin Girls was broken last week by the

Rid	igecres	t Recn	eation
Slow	Pitch S	offball	Leag

Ridgecrest Recreation	
Slow Pitch Softball League	
Standings as of June 12:	
Team · W	L
Men's American Div.	24
ARCS	1
Pizza Villa	2
Stare Montagne5	4
NWC O's	4
NWC O's	7
ERA Raiders1	5
Vaughn's0	7
Men's National Div.	
	0
Villains	3
Renegades	2
Knights	3
High Desert Saloon	5
Clancey's-Home Center1	6
Women's Division	°
CSC	1
High Desert Home Center7	2
Kelly's Earthworks	2
High Desert Imports 5	3
IWV Dairy4	4
Hot Trotters	5
Home Town Realty3	5
Rosas Roofing4	5
Foxtails1	8
NWC Gatlin Girls1	9
Military Division	
	1
Tigers	3
Oly's	5
019 5	2

Home Town Realty Team, which averaged nearly 8 runs per inning while defeating the NWC team 31-6 in four innings of play. It was the ninth loss in ten games for the Gatlin Girls.

In the three-team Military Division, the Tigers outscored the Oly's, 23-13, and also picked up a forfeit win at the expense of the Rippers

The Tigers had too much offense for the Oly's as they tallied 23 run on 24 hits in this six-inning tilt. The game's final outcome was settled when the Tigers outscored the Oly's 11 to 5 in the last two innings of play. Jeff Lane, of Oly's, was the game's leading hitter with a home run, two doubles and a single in four times at bat. Tony Musto's three hits in four times at the plate for the Tigers included a home run and two singles.

Opportunities . . .

(Continued from Page 2)

daily use; makes minor repair to gymnasium equipment. assists with upkeep and general maintenance of lawn and park areas at pools; maintains shrubbery and grounds around tennis courts; resets electrical timers; makes endation to supervisor on equipment and supply requirements for maintenance of athletic facilities; other duties as assigned. Qualifications: Able to work without more than normal supervision; able to schedule time to insure areas and parks are thoroughly prepared. Must have experience in upkeep and maintenance of athletic facilities, grounds and shrubbery; knowledge of plumbing as needed to repair and upkeep irrigation systems; able to use hand and garden tools. Must be in excellent physical condition and able to lift 100 pounds; able to follow direc tions and obtain a government driver's license.

Announcement No. C0841, Assistant Mess Manager, UA-1101-5, \$12,266 per annum plus benefits, permanent, full-time, Chief Petty Officers Mess (Open) — This is not a Civil Service position. Acts as mess manager on regular and recurring basis; when mess manager on duty, acts In a staff capacity for tasks such as consultation with food preparation department concerning menu preparation; acts in liaison capacity for parties, reviewing and recommending hiring and selection of personnel; draws up contracts for parties; arranges for details; other staf duties as assigned. Qualifications: Must have background in mess operations, including administration, cost ac-counting, food preparation, food and beverage control, and purchasing specifications gained through actual ex-perience or formal college degree in hotel/restaurant management. Must be alert for improvements, be factful, lependable, courteous and friendly, able to effectively and harmoniously work with superiors and patrons, willing and capable of assuming complete responsibility, and posses

Apply for non-Civil Service positions with Bettye Cheatam, Bldg. 21, Ph. 3387.

Page Seven

ROCKETEER

Page Six

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nwc rockelee

military men, women

Two athletic events, open to active duty

military men and women, will be held soon

at military installations in the San Diego

They are the Southern Pacific Regional

men's and women's swimming champion-

ships (July 16-17 at the Naval Station, San

Diego) and the Southern Pacific Regional

women's pentathlon (July 9 at the Naval

The swim meet will include competition

for men in the 100, 200 and 1,500 meter

freestyle, the 200 meter individual medley,

Men and women swimmers will compete

separately in the 50 and 100 meter freestyle,

the 50 and 100 meter butterfly, the 50 meter

NWC military personnel interested in

entering the Southern Pacific Regional

swimming championships can make

arrangements to do so by calling the athletic

director at NWC ext. 2334 no later than July

The women's pentathlon will consist of six

events. They are 100 vd. dash, 440 vd. run,

running broad jump, softball throw,

basketball free throw shooting, and the 50

Military personnel have until June 29 to

advise the athletic director of their interest

in vying in the women's pentathlon. Par-

ticipants must compete in at least five of the

six events, including the 440 yd. run.

meter swim

backstroke, and the 100 meter breastroke.

Training Center, San Diego).

and 400 meter medley relay.

slated in San Diego

Athletic events for

SPORTS

ROCKETEER

Villains' 6-game win streak ended by Raiders

A six-game win streak came to an end last week for the Villains, leaders in the National Division of the men's open Slow Pitch League softball competition, who were held to an 8-8 tie by the ERA Raiders . during an extra inning contest.

This feat by the Raiders, who prior to last week had won just a single game while losing five others, rates as the upset of the current season of men's open slow pitch softball play.

The tip-off that the Villains were in for trouble came when they let the Raiders build up a 6-1 lead after four innings of play. The division leaders tallied three runs in the

regulation 7-inning game.

After one more inning of play, in which each team scored twice, the game ended with the scored tied at 8-8. The Raiders, who outhit the Villains 13-8, were led at the plate and single. Dale Evans also hit a home run of the Villains.

Another tie game tightened up the race for the American Division lead, which is in a game played with the Renegades. After

SAFE AT THIRD BASE - Lee Meyer, a pitcher for the Dodgers, one of the Major Division teams in the China Lake Little League, ducks his head and gets ready to tag third base during this bit of action in last week's game between the Dodgers and Tigers. Going for the ball is Kyle Blecha (No. 7), short stop for the Tigers, who is being backed up by Dave Humphreys, third baseman. The Dodgers defeated the Tigers 9-2, thanks in part to four innings of shutout ball pitched by Meyer. The Tigers were trailing 9-0 in their last turn at bat, but capitalized on a pair of 3-base hits by Mike Hoelzle and Blecha to score twice.

New records set in 20-mile bike race held at Inyokern

one of the special events staged in via the Brown Road. connection with the Sunshine Festival at Invokern.

In the men's division, Ed Petkus covered the 20.9 mile course in the blazing time of 50 Kratz (59:23), Pete Wiley (1:00:27), and min., 52 sec. This was about 31/2 min. under Bob Pheysey (1:02). last year's time.

Petkus also came the closest to forecasting his time for the race - missing his pre-race prediction by just 8 sec. He averaged a speed of 24.6 miles per hour over the relatively flat course.

NWC rifle team gains experience at Pacific Fleet match

A four-man rifle team representing the Naval Weapons Center finished in eighth place in a field of 18 team entries in the 1981 Pacific Fleet Rifle Championship competition held last weekend at the Naval Air Station, Miramar (in the San Diego area.)

The China Lakers compiled an overall team score of 1,730 and 12 bullseyes out of a possible 2,000. The winning team, from a unit in San Diego, had a score of 1,881 with 44 X.

Lt. Denny Wilcox, NWC rifle team leader, was well pleased with the way the local rifle marksmen did in the Pacific Fleet event. "Next year we'll go back and win some medals," he said of the local group that has been competing in local and a few out-oftown matches for just a year.

M-14 military rifles were used, and the entrants fired in the offhand (standing), seated and prone positions at targets placed a distance of 200, 300 and 500 yards from the (Continued on Page 7)

Impressive new records were set in the Road 100 yds. east of the freeway section of men's and women's divisions of the second Highway 395. The 'cyclists pedaled north on annual 20-mile bicycle race that was held Highway 395 past Brady's Cafe and on the morning of Saturday, June 6, and was Greenacres, and then returned to Inyokern Runners-up in the men's division (those

who placed second through fifth), and their times, were: Chuck Lewis (56:18), Tony

In addition to placing second in the speed category, Lewis was just 1:18 off the mark in predicting the time it would take him to finish the race.

Brenda Petkus, who recently finished second in the women's division of the eighth The race began at a point on the Inyokern annual Death Valley to Mt. Whitney bicycle race, shattered the women's record for the Inyokern bike race - cutting more than 40 min. off last year's first place finish time as she was clocked at 1 hr., 6 min., 56 sec.

Ms. Petkus, who missed predicting her actual race time by 5 min., 4 sec., was the women's winner in this phase of the bicycle race competition as well.

Second through fifth place runners-up in the women's division of the Inyokern bicycle race, and their times, were: Elaine Wiley (1:11:31), Sam Shaffer (1:20:07), Marisa Lewis (1:20:22), and Martha Effinger (1:30:42). All of these marks were under last year's winning time for women. Two new divisions - one for boys and one

for girls under 17 years of age — were added to the 1981 Inyokern bike race. The winners and runners-up in each division, and their times, were as follows:

Boys' division - Blaine Wood (1:14:43), Scott Hannon (1:18:38), Russell Boyack (1:22), Dave Lewis (1:31:12), and Chris Marshall (2:28:15) finished in first through fifth places, respectively.

The girls' division was won by Laura Effinger, who was clocked at 1 hr., 18 min., 21 sec.



OUT AT FIRST - Kyle Blecha, of the Tigers, legs it toward first base, but is too late to beat the ball that is already in the glove of Robby Kruse, the Dodgers' first baseman.

Low income senior citizens entitled to free fishing licenses

Senior citizens with low incomes who have been residents of the state for the past five years are entitled to a free California fishing license.

Individuals qualify if they are 65 years of age or older and receive S.S.I. (Supplemental Security Income), or are 62 years of age or older, and have lived in California for the past five years with a total monthly income of \$420 or less, if single, or \$773 if married.

Applications for fishing licenses are available at the Kern Information and Referral Program for Senior Adults, 231 Station St., Ridgecrest, Monday through Friday from 8 a.m. to 1 p.m.

For more information about this program contact Cerro Coso College's Kern Information and Referral Program by calling 375-4322.

fifth and one each in the sixth and seventh to last week's action, ARCS retained a halftie the game at 6-6 at the end of the game lead over Pizza Villa in the American Division.

The ARCS vs. Renegades tilt started out to be a free-scoring affair that was tied at 9-9 after two innings of play. Two scoreless innings followed before both teams began to by Amos Blanche, whose three hits in four roll on offense and tallied six runs each to times at bat included a home run, a triple produce a 15-15 standoff. Bobby Brown got a home run for the Renegades.

Pizza Villa, the No. 2 team in the American Division standings, rolled to a clearcut 17-8 win over High Desert Saloon, still held by ARCS despite a 15-15 deadlock thereby winning its sixth game out of eight played prior to June 12. The score was tied 5-5 in the first inning, but the Pizza Villa players outscored their opponents 9-1 in their next two turns at bat to set the stage for a routine victory. Jim Bevan had three hits (all singles) in three times at bat for Pizza Villa. Steve Mendenhall pounded out a home run for High Desert Saloon.

SCORES OF OTHER GAMES

Results of other men's slow pitch games played last week were Stare Montagne 18. Renegades 10; NWC Varsity 19, Vaughn's 1; NWC O's 31, NWC Varsity 18; Clancey's-Home Center 24, CSC 13; Knights 32, CSC 4; High Desert Saloon 24, Vaughn's 6; and Knights 16, Stare Montagne 6.

Eight home runs were hit in the Stare Montagne vs. Renegades contest. Stare Montagne, which won the game 18-10, had six circuit clouts, including two each by Bennie Williams and Del Kellogg and one apiece by Greg Bell and Norm Stephenson. Four baggers also were tagged by Joe Lewis and Randy Johnson for the Renegades.

During games played on successive nights, the NWC varsity manhandled the winless Vaughn's team 19-1, but then dropped a slugfest by a score of 31-18 to the NWC O's. The NWC O's tallied 11 runs in the first inning and 10 in the sixth and final frame to wrap up the victory over the NWC Varsity.

CSC came out on the short end of the final score in two games last week - losing 24-13 to Clancey's-Home Center and 32-4 to the Knights. The Clancey's-Home Center squad racked up 7 runs in the fifth inning and added 9 more in the seventh to turn what had been a close game into a rout.

The Knights converted 20 hits into 32 runs (Continued on Page 7)

Results announced of Golden Anchor

Golf Tournament

Results were announced this week of the annual Golden Anchor Golf Tournament, which attracted a field of 52 teams - the largest ever in the 11-year history of this

In this partner's best ball competition the teams of Elmer Smith-Carmen Pannucci and Don Davis-Keith Manley were tied at 129 after 36 holes of play. Smith and Pannucci won the next hole to garner first place and thereby win the tourney championship \$300 gift certificate.

The runners-up, Davis and Manley, received a \$225 gift certificate for their efforts.

Smith and Pannucci also turned in the low net score of 62 on Sunday - the second day of the two-day tourney - thereby winning a \$75 gift certificate. A similar prize went to Al McDonald and Don Powell, whose 63 total for 18 holes was the low net score on the opening day of the Golden Anchor Golf Tournament.

In addition, \$50 gift certificates were won by Dick Rusciolelli and Bill Sorbo, whose drives from the tee on hole No. 8 (Saturday) and hole No. 17 (Sunday) stopped closest to the pin.

A variety of other gifts and prizes were given to participants in the tournament ranging from a 3-day, 2-night stay at the Showboat in Las Vegas that went to Chuck Manis, to dinners at military clubs on Center and at eating places in Ridgecrest.

The tournament committee expressed its appreciation to the donors of numerous gifts that added interest to this annual event.

the trap.

This operation was particularly uncomfortable when the steam traps lie in steam pits because the pit is about 8 feet deep, and pit temperatures range from 140 to 160 degrees in the summer (Maintenance on steam lines is done

Use of fireworks on board Center is prohibited

The use of fireworks by individuals anywhere on the Naval Weapons Center is prohibited. This requirement exists even though the City of Ridgecrest has permitted the sale and use of fireworks within the city limits.

The only exception to this regulation is that "Sparklers" may be ignited when youngsters are under the personal supervision of an adult.



June 19, 1981

Commander's Award . . . (Continued from Page 1)

QUICK CHECK - Leo Loth, Plumbing Shop supervisor, aims an infrared gun at a steam line to determine the temperature of the steam entering a steam trap. By checking the temperature of the condensate exiting the steam trap (also with the heat gun), he can then determine if any steam is leaking. —Photo by Don Cornelius

Plumbers use infrared gun to check for steam trap leaks

The Public Works Department is the during the summer so that lines will be infrared gun, that is.

Weapons Center, but is a heat sensing prepare for cold weather.) device that has paid for itself many times already (both in fossil fuel energy saved and human energy saved) during the few short months that it has been in the hands of the Plumbing Shop.

GUN'S PRINCIPAL USE

The main use of the light weight gun so far has been in checking steam traps to be sure QUICK, EASY TO USE that no steam is escaping. The gun is pointed at the piping entering the steam trap to determine the temperature of the entering steam (usually around 350 degrees Fahrenheit), and then at the condensate line leaving the steam trap (the steam is converted back to water in the heat exchanger and collected in the trap). If the trap is functioning properly, the temperature of the water leaving is about 165 to 170 degrees F.

existed was to climb down into the steam it is completely portable. pits or up to the ceiling where the steam lines hang, put a stethoscope onto the steam trap and listen for sounds of steam exiting

With the Fourth of July holiday fast approaching, this timely reminder has been issued by the NWC Safety and Security Department.

Consequently, all China Lakers are advised that (in conformance with OPNAV 11320.15 and Section 4045 of the Kern County Fire Regulations) the sale, storage or use of fireworks on the Center is not permitted.

happy owner of a most unusual gun - an ready for the heating season. With several thousand steam traps scattered throughout This IR gun is not at all the type of gun the Center needing to be checked, the normally associated with the Naval Plumbing Shop is now working full out to

> Steam leaks mean that the Center isn't. getting maximum use for its energy dollar, and the cost of extra fuel that even a few leaks in a system using thousands of steam traps would run already high fuel costs even higher. The \$1,522 price of the infrared gun has already been repaid in energy saved.

> The gun also has other uses throughout Public Works Department operations. For instance, if the temperature of a pump bearing rises, the bearing can be repaired or replaced before it breaks down at a critical time and interrupts service.

Temperature checks are quick and easy using the infrared gun. All that's required is to point the gun at whatever surface is being checked, push a button, and read the temperature (in either degrees Fahrenheit Before the advent of the infrared gun the or degrees Celcius) directly on the gun only way to determine whether a steam leak itself. The gun is also light in weight so that



Aviation Structural Mechanic Airman Robert L. Gallagher, Jr., has been selected as the Naval Weapons Center's Sailor of the Month for May.

He is assigned to the NWC Hot Line as an A-6 aircraft plane captain. In the letter nominating Airman Gallagher as Sailor of the Month, his supervisor, Lt. M. D. Backes notes that "Taking the job seriously" is the motto that Airman Gallagher lives up to, and his high ideals place him head and shoulders above his peers.

He also, the letter notes, can be counted on to pitch in and help his co-workers when needed, without having to be told to do so, and he works exceptionally well with others.

Airman Gallagher joined the Navy via the delayed entry program before he completed Peoria High School in 1979. Peoria, Ariz., that is. Both he and his wife, Lynn, attended the same high school, which is located in a small town near his native Phoenix.

The Navy was attractive to him because

open interature. He has, Zaharias said, remained with the same central computing facility group on Center through several personal career changes ranging from computer programming and systems design to his present emphasis on the ADP Security Program.

In addition to his work on Center, Zaharias is involved with a Navy laboratory-wide group that has helped to develop policies pertaining to ADP security Navywide.

Presentation of the Commander's Award to Sherard also was based on his part in the preparation and development of training material for department computer system security officers. In addition to his duties as head of staff in the Safety and Security Department, which he has held for the past four years, he also is the ADP Physical Security Specialist for the Center.

Sherard, who is a veteran of 20 years as a Civil Service employee, first came to China Lake in 1968 from Kodiak, Alaska, where he had been employed as administrative officer in the Public Works Department at the Naval Station in Kodiak.

For three years, from 1968-71, he was adminstrative officer for what was then the Turn in timecards early next Friday because of holiday

All Center Personnel who are responsible for the submission of employee timecards are reminded that because of the Independence Day holiday on Friday, July 3, timecards for the regular workweek ending on June 27 must be turned in by 8:15 a.m. next Friday, June 26.

This is necessary in order to meet the payday of Thursday, July 2. No timecards are to be held out, since failure to provide the Payroll Office with an accurate timecard by the June 26 deadline may result in a delay in pay for employees.

In order to meet the June 26 deadline, it will be necessary for departments to project or estimate what will occur on that Friday and turn in timecards by 8:15a.m.

If it is discovered on Friday afternoon that the timecard projections were in error as submitted, any mistakes can be corrected by sending department representatives to the Payroll Office to make the required changes between 2:30 and 4 p.m. on June 26.

Errors discovered later than June 26 should be corrected during the following week by sending a memorandum to the Payroll Office, Code 08641.

Any overtime worked on Friday night or Saturday, June 26 and 27, should be submitted on a supplemental timecard

Anti-Radiation Guidance Division in the Weapons Development Department, but left here in March 1971 to work at the American Embassy in Kingston, Jamaica. He was responsible for recruiting Jamaican workers for employment at the Guantanamo Bay U.S. Naval Base on the Island of Cuba

The Jamaican workers, Sherard recalled, were needed to replace aging Cuban employees at Guantanamo Bay. From the sition of administrative officer at the U.S. Embassy in Kingston, he moved in 1975 to Guantanamo Bay to head the Employment Development Training Branch with responsibility for the total training program needed to meet the needs of the naval base.

Sherard remained at Guantanamo Bay until he returned to China Lake in March 1977 to assume his present duties with the NWC Safety and Security Department.

He was the co-author with Zaharias of the publications entitled "Automatic Data Processing Security Handbook" and "Processing Classified Data in a Controlled Mode on the Central Computing Facility."

U.S. Savings Bond campaign to begin Monday on Center

The 1981 U.S. Savings Bond campaign will begin on Monday and continue through Thursday, July 2, at the Naval Weapons Center.

This year's campaign will be conducted a bit differently than those held in previous years. Pamphlets describing the value of Savings Bonds were distributed with civilian paychecks today (military personnel received this same literature on June 15);

All civilian employees and military personnel also received an enrollment card that may be used to sign up for the purchase of Savings Bonds or to increase a payroll deduction set aside for buying Savings Bonds.

U.S. Savings Bonds offer a convenient way for military and civilian personnel to conduct a savings program.

Savings Bonds return nine percent interest when held to maturity (now eight years instead of nine), and the interest accumulated is tax free until the bonds are cashed. This interest is never subject to state or local taxes.

Savings Bonds offer several other advantages, including a low minimum purchase price of \$25, a flexible allotment plan, and the right to redeem the bonds anytime after six months at the original issue price plus accrued interest.

The annual Savings Bond campaign is designed to increase participation by civilian employees and military personnel in the Payroll Savings Plan and the Military Bond Allotment Plan. These bonds can be purchased by regular deductions from

of the excellent career opportunities that it offered. Airman Gallagher says that he really likes what he is doing, and hopes to continue in an aviation career, either in the Navy or as a civilian.

He has been at China Lake since last September and thoroughly enjoys the location of the Center. "I was at Whidbey Island briefly before being sent here," he says. "It was beautiful there - but I'm used to the desert and nearly froze."

Spare time hobbies for Airman Gallagher include taking advantage of the weather by playing golf. Both he and his wife are also very active with their church and consider it a prime force in their lives.

As a result of his selection as Sailor of the Month, Airman Gallagher will receive a 96hour liberty and no duty status for 30 days. He will also receive an NWC plaque, and an official letter of commendation signed by Capt. William B. Haff, NWC Commander, will be placed in his service jacket.



AMHAN Robert L. Gallagher, Jr.

Page Four

Police impound area jammed with many lost, stolen bikes

Those who have either had bicycles stolen or have lost their bikes during the last two years might discover those straying wheels at the China Lake Police Department's impound area, says Sgt. T. A. McDermott, the Juvenile Officer, who has responsibility for lost or stolen bikes.

More than 22 bikes or parts of bikes are now residing in the impound area, awaiting their owners (if the owners can identify them), China Lake Police Division personnel have found these bikes in dumpsters, alleys, vacant housing, and other locations around the Center where they had been abandoned, or have recovered the bikes directly from thieves.

Any bikes that have not been reclaimed by July 20 will be taken to Warehouse 42 (Salvage) for eventual auction, according to Sgt. McDermott, so it is important that anyone who has lost a bike since 1979 check with him to determine if that bike is in the hands of the police.

Personnel who wish to check on bikes can contact the China Lake Police between 7 a.m. and 5 p.m. Mondays through Fridays.

The recent rash of bicycle thefts again shows the need for anyone who rides a bike to lock the bike securely whenever parking it anywhere. Particularly vulnerable areas for bike theft are school grounds, the athletic fields, and the area around Bennington Plaza.

Unlocked bikes in these areas are frequently "borrowed" by someone on foot who'd like to travel in greater comfort; these bikes are often then abandoned. Sgt. McDermott reminds "unofficial borrowers" that such "borrowing" can result in grand heft charges because many bicycles now cost well over the \$200 value that dif-'erentiates between petty theft and grand heft.

Seminar entitled 'Science and Occult' scheduled June 24

Professor Peter Walsh, an American Society for Engineering Education Summer Fellow in the Physics Division of the NWC Research Department, will present a seminar entitled, "Science and the Occult" on Wednesday, June 24, at 3 p.m. in the Michelson Laboratory auditorium.

In his presentation, Professor Walsh will discuss the relationship between science and the occult and explore: witchcraft, altered states of consciousness, extrasensory perception, parapsychology, reincarnation, and more topics as time permits.

Walsh is professor of physics at Fairleigh Dickinson University in Teaneck, N.J., and received his "Ph.D. from New York University in 1960. He has published more · han 50 technical papers and has served as a consultant to over a dozen laboratories.

He is the co-author of "The Dark Side of Knowledge," which attempts a scientific ook at the occult.

This seminar is open to all interested WC personnel.

NRS volunteers needed to work half day a week

The Navy Relief Society urgently needs volunteers who are willing to spend a half day each week serving either as interviewers or receptionists.

While experienced interviewers and receptionists are most urgently needed, the local group is also looking for new volunteers to train. Anyone is eligible to become a Navy Relief Society volunteer; it is not necessary to be the wife of either Navy or Marine Corps personnel.

Interested persons may contact the Navy Relief Office on Monday, Wednesday or Friday 11 a.m. and 2 p.m. by telephoning 446-4746 or by stopping by the office in Building 880 on King Street.

ROCKETEER

NO LOCK NEEDED - Vernon Kramer, who works in the Parachute Systems Department, is probably the only person on Center who does not need to lock his bike. Those who don't have a handy 42-foot pole to serve as a bike rack, however, should always use a chain and lock whenever they park their bikes.

Film about SEACON Wargame to be shown this afternoon

A short video film entitled "A Time to Prepare" will be presented this afternoon at 3 o'clock in the Management Center of Michelson Laboratory as a prelude to possible participation by NWC employees in / the next SEACON Wargame series.

The SEACON 81-1 Wargame will be conducted from Sept. 12 to 18 at the Center for Wargaming, U.S. Naval War College, Newport, R.I. This wargame will have a setting in the North Atlantic in the 1990s, and will include such warfare areas of interest to NWC projects as war at sea and Fleet air

Applications being taken for Marines'

Devil Pup program Applications are now being taken from is necessary.

boys 14 through 17 years of age who are This afternoon's video film, which is 18 interested in participating in the Marine min. in length, more fully explains the Corps Devil Pup program during a 10-day various roles of SEACON participants and is period this summer at Camp Pendleton.

This is a two-phase program involving participation in some activities and witnessing others.

program will be at Camp Pendleton from July 22 to 31 where they will receive timeframe. instruction in unarmed self defense, first aid, field sanitation, hiking, bivouacking, placed on obtaining highly qualifed Fleet and close order drill. There also will be personnel for all command centers, swimming and organized recreational activities.

During the time spent at this West Coast training center for the Marine Corps, the community to be represented from all CNM-Devil Pups will have the opportunity to commanded activities. observe the type of training the Marines themselves receive in weapon firing, tankfortifications, for example

Local youths interested in a preview of possible service in the Marine Corps are invited to make this interest known by in SEACON 81-1 will be informed by Aug. 10. calling Molly McKinney at 375-7587, or The deadline for submitting nominations is writing to her at 501 Drummond Dr., Apt. A- next Friday, June 26. Those interested are is July 10.

The purpose of this series of wargames, which are sponsored by the Chief of Naval Material, is to acquaint members of the research and development community with the operational aspects of naval warfare, and also to increase each participant's awareness of the impact of technological progress upon naval tactics and strategy.

In addition, wargames provide the Navy with a means for utilizing advanced systems in a simulated future environment.

SEACON 81-1 participants will be divided into one or another of two opposing groups, or placed in a control group, and assigned to various positions representing command elements of opposing forces. Since each command center or control position will have a cadre with operational experience, no previous warfare/wargame experience

recommended for the orientation of potential nominees

The wargame scenario for SEACON 81-1 will call for employment of opposing naval Those who qualify for the Devil Pup forces in the North Atlantic utilizing undersea, surface, and air systems in a 1991

> Because particular emphasis is being operational commands have been asked to participate in SEACON 81-1. There is a need also for the naval research and development

Since SEACON is a "hands-on" experience, attendance in an observer role infantry tactics, and building field will be strictly limited and will require the approval of the wargame sponsor. Participants must have secret clearance.

Individuals who are selected to take part calling NWC ext. 2419 or 2793.

June 19, 1981

Police

reports . . .

The daylight burglary of a residence in the Capehart B housing area was reported to China Lake police by the victim shortly before 6 p.m. Monday.

Stolen by a prowler who gained entry through an unlocked kitchen window were a camera, a half-dozen \$1 bills and assorted coins, and a bottle of liquor. The total loss was set at \$84.

The burglary occurred some time between 12:30 and 5 p.m.

VACANT HOUSE DAMAGED

Police were called Monday afternoon to investigate an incident of vandalism at a vacant residence in the Capehart A housing area.

There was no evidence of any forced entry by unknown persons who smeared ripe cherries on the walls of two bedrooms, a bathroom and in the hallway. In addition, apricots were dumped in the bathtub and squashed on the bathroom floor. Cost to repair the damage has been estimated at

ALL GUNS PROHIBITED

China Lake police responded Monday afternoon to a report received shortly after noon on Monday that a man with a rifle had been seen wandering around in a restricted area near the Document Destruction Building (vicinity of 14th and F Streets). Officers who arrived at the scene a short time later found a Center employee who had a BB gun, not a rifle, at his place of work. The man was informed of the ban on shooting (even a BB gun) in that location.

STOLEN BIKE FOUND

A bicycle reported stolen in Ridgecrest was found last Friday evening by China Lake police in a dumpster on the east side of the Pierce Elementary School.

The bicycle had been partially stripped and was missing a rear wheel. Value of the bike was reported to be \$50.

INJURY AT GAS STATION

An NWC employee suffered a leg injury as the result of being pinned between two vehicles at the Public Works Department gasoline station.

The accident victim was standing in the rear of a vehicle that was being gassed up, when a second vehicle rolled forward and struck him

Following the mishap, which occurred on the morning of July 11, the injured man was taken to the Ridgecrest Community Hospital for treatment.

ABANDONED CAR IMPOUNDED

Looking into a report, received last week, that there was an abandoned vehicle in the BEQ No. 3 parking area, China Lake police ran a check on the car (a 1978 Chevrolet Monte Carlo) and found that its license plates were for a vehicle with another registration number.

The car in question was placed in the police impound storage area pending further investigation.

Academy for senior, master chief petty officers approved

The Chief of Naval Personnel has approved plans for a new senior enlisted academy for senior and master chief petty officers. The goal of the academy is the preparation of senior petty officers for positions of greater responsibility.

The academy will convene its first pilot class this fall. Two pilot sessions will be held at the academy, one in September 1981 and one in January 1982. Sixteen students will be selected for each pilot class by the Naval Military Personnel Command.

Regular classes will begin in March 1982 at the Naval Education Training Center, Newport, R.I. There will be four classes per year, each of nine-weeks duration and limited to 30 students per class. Information 3, Ridgecrest. The deadline for applications asked to contact Jim Baird (Code 1201) by will be provided later on application procedures for the first regular class.

While in San Diego, he married his wife, Judy, and a short time later took the step that set the wheels in motion for a career in the Civil Engineer Corps (CEC) by enrolling as a student at the Massachusetts Institute of Technology in Cambridge. Eighteen months later (in January 1965)

Road area, from Inyokern, from Ridgecrest Anyone interested in forming a van pool

Heights, and from the Deeter tract. can obtain further information by calling the district office of CalTrans in Bishop. The telephone number is (714) 873-8411.



June 19, 1981

ROCKETEER

Page Five

Capt. Jerry Horacek takes over duties of Public Works Officer

Capt. Jerry L. Horacek, CEC, has taken over the duties of Public Works Officer and head of the NWC Public Works Department, replacing Capt. Jon R. Ives, who has been transferred to Yokosuka, Japan.

A graduate of the U.S. Naval Academy Class of 1959 and a veteran of 22 years of active duty as a commissioned officer in the Navy, Capt. Horacek reported here following a 3-year assignment as Executive Officer of the Public Works Center at Pearl Harbor, Hawaii.

As an ensign right out of the Naval Academy, NWC's new Public Works Officer



Capt. Jerry L. Horacek

began his military career with a tour of duty on a destroyer, the USS Richard S. Edwards, homeported in San Diego, and made two Western Pacific cruises before being assigned to shore duty at the Fleet Training Center in San Diego as a training coordinator for approximately a year.

he received a master's degree in civil

Buses at NWC not possible; subsidy

would be required

Buses are not going to be rolling at the Naval Weapons Center in the near future because the service would not pay for itself and no subsidy money appears to be available to provide the service.

A questionnaire was sent out last December to determine how many Center employees would be able or willing to use a bus to transport them to and from work or around the Center.

About 120 people indicated that they would like to use such a service - but that figure would be too low to support adequate transportation out of the revenue collected. A rule of thumb used by bus companies is that the yearly income per bus must at least equal the cost of the bus.

Probable income, charging a \$2 per day fare, from Center employees using a bus service, would be only about \$16,000. Since even many of the older buses available cost in excess of \$30,000, the service could not pay for itself.

Other problems involved routes. schedules, drivers and insurance.

What would be feasible, however, would be enough riders for additional van pools to be formed. Currently, two van pools bring Center employees from the Lake Isabella and the Walker Pass area.

The survey indicated that there would be enough riders for a van pool from the Brown

engineering and then attended the CEC Officers' School at Port Hueneme, Calif., before being designated a CEC officer.

Capt. Horacek's first assignment as a CEC officer was in the Philippine Islands, where he served for a year as a management officer assigned to the Officerin-Charge-of-Construction, Southwest Pacific, in Manila. He also was the assistant resident OINCC at Subic Bay on the Island of Luzon for a year before being transferred to the Naval Air Station, Kingsville, Tex., where (for two years, 1967-69) he held the position of Public Works Officer.

WITH SEABEES IN VIETNAM

Duty as Executive Officer of Naval Mobile Construction Battalion 10, homebased at Port Hueneme, took Capt. Horacek to Vietnam for a year that was followed by six months at the Armed Forces Staff College in Norfolk, Va., in preparation for an assignment as the Seabees' Operations and Support Officer with the Naval Facilities Engineering Command in Washington, D.C.

Since 1975, when he left the nation's capital. Capt. Horacek served in London. England, for three years as staff engineer to the Commander-in-Chief Eastern Atlantic prior to his most recent assignment as Executive Officer of the Public Works Center at Pearl Harbor.

Capt. Horacek and his wife, Judy, have two children - a daughter, Jeri Lynn, who is 18, and a son, Jimmie, who is 15.

He doesn't expect to experience any difficulty, he said, becoming acclimated to the local desert area, which has many of the same weather conditions he found earlier in his career at Kingsville, Tex.

Even though he is a native of the midwestern part of the United States, Capt. Horacek prefers warm weather to the extremes of cold that winter brings to the midwest and eastern parts of the U.S.

ENJOY OUTDOORS

The Horacek family likes camping, hiking and fishing - all pastimes that they can enjoy in the nearby High Sierra.

Both Capt. and Mrs. Horacek also are golfers and took up snow skiing during his tour of duty in London when they had the opportunity to visit Austria.

Another "plus" in favor of the China Lake community is the proximity of work to home. While on duty in Washington, D.C., he took a strong dislike to the daily drive to and from work in heavy traffic, and will appreciate not having to put up with that problem here, Capt. Horacek said.

Reassignment opportunities

This column will be used to fill only engineering and scientific positions through reassignment and through promotion to positions with equal promotion potential. For this reason, the Reassignment Opnents are separate from Promotion Opportunities column in the Rocketeer Applications will only be accepted from employe currently in scientific or engineering positions Applications will be accepted until the date stated in the announcement. Employees whose work history has not been brought up to date are encouraged to file an SF-171 or 172. All applicants must meet minimum qualification requirements established by the Office of Personnel Management. Information concerning the recruitment and placement program and the evaluation methods used in thes reassignment opportunities may be obtained from Personnel Management Advisors (Code 0% or 097). Applications should be filed with the person whose name is listed in the announcement. The Naval Weapons Center is an Equal Opportunity Employer.

Announcement No. 35028, General Engineer/Aerospace Engineer/Electronics Engineer, DP.3 PAC No. 8135525, Code 3523 — This position is located in the Avionics Branch, RF Development Division, Electronic Warfare Department. The incumbent serves as test engineer having responsibility for planning and conducting the test and evaluation (T&E) programs for the ALR-45F and ALR-67 radar warning receivers and similar systems. Efforts include planning, coordinating, and conducting bench checkout tests, flight tests, and evaluations in the branch's anechoic chamber and the Multiple Agile Radar Targe Simulator (MARTS) facility, installing systems in aircraft, and checking out the systems under test. Some travel is necessary to support contractor installations in various aircraft. Job Relevant Criteria: Knowledge of radar systems and electronic warfare principals; detailed knowledge of aircraft avionics systems and interconnections; skill in coordinating and dealing effectively with personnel in other NWC organizations contractors, and other government agencies; an ability to conduct tests and evaluations of electronic warfare or anti radiation missile systems. Contact Kitty Berry, NWC ext.



HONORABLE SERVICE - ATC Philip T. Dittmeier receives an American flag from Capt. J. E. Doolittle during his recent retirement ceremonies as his wife Linda watches. ATC Dittmeier, who spent 20 years in the Navy, was assigned to perform a variety of special projects during his assignment on Center. He and his family plan to remain in Ridgecrest where he will be working for PRC Ridgecrest -Photo by Don Cornelius Engineering.

Rocket motors used to conduct earthquake prediction studies

"boondocks" area west of Skytop at 1:01 p.m. Saturday, April 25, presented visible evidence of the Center's involvement with earthquake prediction studies.

The connection between the smoke and earthquake prediction may not be obvious - but it is direct. The smoke came from an explosion of two rocket motors that represented the equivalent of 100,000 pounds of TNT.

A total of 100 recorders measured the effects of that explosion, and these measurements, when interpreted, will tell seismologists from the U.S. Geological Survey (USGS) the density, layering, and substructure of the crust of the earth in this area (part of the Basin and Range Province).

Once a model of the substructure exists, then seismologists can determine accurately the meaning of microearthquakes here, and their possible relationship to magnetic changes found in the epicentral area

CLUES TO EARTHQUAKE

Prediction measures that have been studied by the Office of Earthquake Studies of the USGS include measurements of radon (a gas found in wells or drill holes that often seems to increase before an earthquake). magnetic anomalies, and other similar earth characteristics exhibiting changes that could be used to determine the likelihood of an oncoming earthquake.

Gary Fuis of the Office of Earthquake Studies at Menlo Park, Calif., heads the current study under the sponsorship of the Earth and Planetary Sciences Division of the Center's Research Department. Dr. Glen Roquemore of that division will assist in interpreting the data gathered during the April test.

In preparation for the test, 100 recording devices were placed at roughly half-mile intervals between the "boondocks," the ordnance disposal area west of Skytop, and the Borax quarry at Boron. A few recording devices were also placed south of Boron in the transverse ranges crossing the San Andreas Fault.

Each of these recorders has a programmed timing device that was set to record for three minutes at each half-hour interval for a total of five hours. The recorders switched on at noon Friday, April

That plume of smoke rising from the 24, to record the effect of the daily blast at the Boron quarry - the equivalent of 40,000 to 60,000 pounds of TNT. The instruments were then reset for the NWC blast the following day. They recorded for three minutes each half hour until 5 o'clock so that if a delay in the detonation time occurred the instruments could still operate in the next time block.

> This period of time was selected in case an inversion layer might delay the blast. An inversion layer would have forced the air shock back to the ground, possibly resulting in broken windows throughout the Indian Wells Valley. Fortunately, weather conditions were ideal, and most of the community did not even hear the blast, much less feel any ground vibration.

EOD PERSONNEL SET OFF BLAST

The two rocket motors that provided the force of the blast were placed in a trench dug 12 feet into the ground. The motors were oriented with the cannister ends against the edge of the trench to increase the energy coupling with the ground and to reduce the noise of the blast. Explosive Ordnance Detachment personnel used composition B (an explosive that comes in 50-pound cast blocks), primed with composition C-4 (a plastic explosive) and a timed fuze cord to set off the rocket motors. Their timing on fuze cord length was so superb that the blast went off one second from the scheduled

The recorders plot seismic waves (looking like earthquakes) on tape. By measuring these and comparing the measurements from the devices placed along a straight line, the thickness of the crust, its density, and discontinuities such as earthquake faults can be determined

With this knowledge of density, layering, and substructure of the earth's crust in an area as tectonically active as the local region, scientists can better understand what can be expected prior to and during earthquakes.

Preliminary data analysis indicates that the test was very successful. For instance, the Mohorovicic discontinuity (Moho) is a mere 30 kilometers beneath the surface of the earth here rather than the 50 or more kilometers thickness that usually separates the earth's crust from its mantle.

A complete analysis of the data is expected to take four to six months.

ENERGY "HOT TIP" - During periods of drought, water must be treated as a consumable energy resouce because it is used in the production of electric power. For example, the power needed to raise the temperature of two quarts of water by 25 degrees on an electric stove requires 26 gallons of water at the hydroelectric dam site.

CONSER V/E/NERGY