

'Curious Savage' to be presented by BHS dramatists

The Burroughs Players, directed by Alan Kubik, will present "The Curious Savage" at the high school lecture center tonight and tomorrow night, and next Friday and Saturday, Feb. 10 and 11. All four performances will begin at 8:15 p.m.

The plot of this 1950 play by John Patrick revolves around the inmates of "The Cloisters," a "home" in a small Massachusetts town, and the changes wrought in their lives by the arrival of the eccentric Mrs. Ethel Savage.

The lead role of Mrs. Savage will be played by Julie Standard, with Stan Caine in the role of Senator Titus Savage, Brett Battles as Judge Samuel Savage, and Juli Pinney as the socialite, Lily Belle Savage.

The curators of "The Cloisters," Dr. Emmett and Miss Wilhelmina, will be played by Bob Schwarzbach and Cheri Knight.

Residents of "The Cloisters" are Marsha Strayer as Florence, Rus Stedman as Hannibal, Dalene Howard as Fairy May, Gunnar Andersen as Jeffrey, and Dave "Crash" Craddock as Mr. Paddy.

Assisting Kubik as the student director of the production is Bob Schwarzbach. The technical director and stage manager is Jon McArtor, assisted by Pat Wright. Lighting will be under the direction of John Ball, with assistance from Matt Doig. Properties will be handled by Noretta Barker, Randi Thompson and Gwyn Standard. The costume coordinator is Ruth Ellen Alger. Cindy Doig will be in charge of photography for the production.

Tickets for the play are priced at \$1.50 for general admission, and \$1.25 for students, military personnel, and senior citizens. They may be purchased in advance from members of the cast and crew, or at the lecture center box office prior to each performance.

Western singer helps raise stadium improvement funds

A standing room only crowd estimated at around 750 persons packed Joshua Hall on the Desert Empire Fairgrounds last Saturday night for a country and western music and dance program featuring Ernest Tubb and his Texas Troubadours.

This event, staged as a fund-raiser for the benefit of the Burroughs High School football stadium fund, resulted in a profit of approximately \$1,750, according to LCdr. Ed Brooks, president of the Indian Wells Valley Century Football Association, the group which sponsored this program.

Tubb, who has been a regular performer on the "Grand Ole Opry" program for the past 35 years and is a member of the Country Music Hall of Fame, took over at the microphone between rounds of dance music played by the Texas Troubadours.

Handling his own guitar accompaniment, Tubb's renditions of five or six songs on each of his three appearances, drew rounds of enthusiastic applause from his many fans in the Indian Wells Valley. Best known for his hit record, "I'm Walking the Floor Over You," Tubb has recorded more than 250 songs and at least 30 million of his records have been sold.

In view of the success of last Saturday night's program, the board of directors of the IWV Century Football Association would like to bring other country and western musical entertainers here to raise money needed to help pay for additional seating and other improvements at the BHS football stadium.

CPO Club special dinner

The Chief Petty Officers' Club will serve a special prime rib dinner tonight from 6 to 9 for \$6.25. Musical entertainment will be provided by "Ransom" a four-piece band from the Los Angeles area, from 9 to 1 p.m.

Tickets for the annual CPO Military Ball, which will be held on Saturday, Feb. 25, will go on sale at the CPO Club office on Monday.



READY TO POP — Sid Richison, Student Council Advisor at Burroughs High School, helps Carol Boyd, Burroughs Associated Student Body Commissioner of Activities (center), and Dori Johnson, Associated Student Body Vice-President, hold a box of the popcorn which will go on sale today. The second annual Burroughs popcorn sale will run from today through Feb. 12, with boxes selling at \$1.50 each. Each box contains four packages of popcorn and a coupon from Uncle Tom's Foster Freeze. Popcorn will be sold by members of the Burroughs PTA and 12 high school clubs. Proceeds from the sale will be used to purchase items for the school and to finance club activities. Anyone interested in purchasing popcorn may call 446-4215, 446-4350, or 375-8783. Popcorn will also be sold today until 6 p.m. in front of Fazio's, the Bank of America, the Community National Bank, and the Credit Union on the Center.

Awards presented, plans for '78 outlined at annual CLOTA meeting

An overflow crowd gathered last Friday evening at the Chief Petty Officers' Club for the annual meeting of the Community Light Opera and Theatre Association.

Highlights of the occasion included a brief summary of plans for the construction of a new building, introduction of directors for the theatrical season coming up, election of new members to the CLOTA board of directors, and presentation of "best of the year" awards.

CLOTA's top honor, the Jane Bugay Memorial Award, went to Ridgcrest Councilmember Florence Green, who not only has directed a number of award-winning plays for CLOTA but also has worked behind the scenes in numerous plays directed by others. For the past two years, she has included coordination of the CLOTA-KLOA Radiothon in her busy schedule.

Winning the coveted "production of the year" award was Ken Austerman, director of "On a Clear Day You Can See Forever." An employee of Code 6211, Austerman shared the award with his assistant director, Jack O'Guin, who is just finishing a year as president of CLOTA.

CLOTA President Honored
In recognition of his hard work during the past year, O'Guin was given a "purple heart award" by his board and a standing ovation by those present at the banquet.

Top acting honors went to Nancy Hawthorne, who portrayed the dual role of Daisy/Melinda in "Clear Day" and Tom Lehmann, who was Witchboy in "Dark of the Moon." Best supporting actor and actress honored were Bill Altieri and Elena Vitale, both of whom had significant roles in "Dark of the Moon."

A special achievement award went to the "strippers," Peggy Westfield, Suzanne Koerschner, and Shirley Tescier, who performed the crowd-pleasing "You Gotta Get a Gimmick" in "Gypsy."

Another very special award went to Radio Station KLOA for the outstanding support provided CLOTA for the past two years during the CLOTA-KLOA Radiothon. Sharing the honors was Bud Eyre Chevrolet, another local business that has

been supportive of CLOTA in this fund-raising endeavor.

Two awards were received by Ralph Vuono, who provided outstanding technical direction and set design for "Clear Day." The award for outstanding lighting effects went to Ralph Schwarzbach, also for "Clear Day." Additional awards garnered by the "Dark of the Moon" production went to Sally Erickson for outstanding choreography, Vivian Childers for outstanding costume design, and Laurie King for outstanding musical direction.

In a much-appreciated gesture, Rip Fang and the Sidewinders, a local musical group which provided music for dancing following the banquet, donated back to CLOTA its check for the evening's entertainment. This group, led by Ronnie Thompson, is currently appearing at Crumville Station, and has donated its services to CLOTA for two other fund-raisers during the past year.

Other activities during the evening included election of new members to the CLOTA board and a skit directed by Florence Green entitled "The Clear Day that the Gypsy Could See Forever on the Dark of the Moon." Written by Elena Vitale and Mrs. Green, the skit spoofed the three productions of the preceding season.

Elected to the board were Herb Childers, Tim Connaghan, Peggy Westfield, Sally Erickson, Gary Fisher, Pat Vernon-Cole and Len Finney. They join holdover members Jim Werle, Clyde Irvine, and Dorothy Tirk.

L.A. area band booked for dance at Shuttle

The Art Wheeler Band, a six-piece group from the Los Angeles area, will be playing for the dancing and listening pleasure of patrons at the Shuttle tonight from 9 p.m. to 1:30 a.m.

There will be a minimum service charge on all band nights at the Shuttle beginning tonight. An ocean perch seafood platter will be served during the dinner hour from 6 to 8 p.m.

The hotline buffet lunch continues in operation at the Shuttle Monday through Friday from 11 a.m. to 1 p.m.

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

Regular starting time—7:30 p.m.
Program subject to change without notice.
-For further information call NWC ext. 2259

FRIDAY 3 FEBRUARY

"GOD TOLD ME TO" (90 Min.)
Tony Lo Bianco, Sandy Dennis
(Horror Drama) Lo Bianco is a deeply religious New York policeman who gets involved in investigating various mass killings in which all the perpetrators said that God told them to do it. Lo Bianco puts the pieces together and finds that the same long-haired young man is seen talking to all of the murderers before they commit the crime. (R)

SATURDAY 4 FEBRUARY

"FUN WITH DICK AND JANE" (96 Min.)
Jane Fonda, George Segal
(Comedy) Segal and Fonda star as a high-paid aerospace engineer and his lady of leisure spouse whose efforts at keeping up with the Jones' are shattered by Segal's sudden unemployment. Reduced to stalking the unemployment lines dressed in a designer's outfit or suffering through a qualifying interview for the food stamp program while sipping champagne and munching prime rib, they soon stumble onto an absurd solution: they become hold-up persons — hilariously setting the stage for grand larceny to support their once luxurious lifestyle. (R)

SUNDAY 5 FEBRUARY

"SIDEWINDER I" (113 Min.)
Marjoe Gortner, Alex Cord, Michael Parks, Susan Howard
(Action Drama) Wealthy industrialist Alex Cord hires motorcycle racer Michael Parks to test his new cycle, the Sidewinder I, and build up interest in the bike before it is marketed. Cord is struck and killed by two bikers. Parks then decides to find the killers. Marjoe Gortner joins Parks to test the bike before its entry into a national motocross race. Susan Howard, as Cord's sister and partner, watches their endeavor and a romance develops between Parks and Howard. The Sidewinder I wins the race and the romance blossoms. (PG)

WEDNESDAY 8 FEBRUARY

"SILVER STREAK" (114 Min.)
Gene Wilder, Jill Clayburgh, Richard Pryor
(Comedy) This film features Wilder as a mild-mannered publisher in dire need of rest on a three-day train journey from Los Angeles to Chicago which proves to be anything but restful. Instead, he becomes energetically immersed in a dangerous art swindle, several murders, an FBI manhunt, a train-board romance, and the destruction of a Chicago railroad station. This is all combined with the zany humor of Pryor and Clayburgh for a hilarious comedy. (PG)

THURSDAY 9 FEBRUARY

"BATTLE CRY" (148 Min.)
Van Heflin, James Whitmore, Dorothy Malone, Raymond Massey
(War Drama) An all star cast enacts this outstanding drama of the romances, the training, and the battles of a group of U.S. Marines during World War II. This film was the top box-office grossing picture of 1955 and was nominated for an Academy Award in that year.

FRIDAY 10 FEBRUARY

"NO DEPOSIT, NO RETURN" (111 Min.)
David Niven, Barbara Feldon
(Comedy) Two youngsters are faced with the unpleasant prospect of spending another vacation with their grandfather (Niven) while their mother manages business affairs in Hong Kong. They concoct a scheme to fake their own kidnapping and demand a ransom from their wealthy grandfather. Part of the ransom money is to go toward plane tickets to the Orient where they hope to meet their mother and the rest will go to two unlucky gents who were conned into helping them. This Disney film provides fast moving high links which should prove totally entertaining family fare. (G)

U.S. Government Printing Office: 1978-111

From: _____ PLACE STAMP HERE

To: _____

nwc rocketeer

Naval Weapons Center
China Lake
California

February 3, 1978

Vol. XXXIII, No. 5

Observance of Black History Week to begin Saturday night

Black History Week, which will be observed this year during the period from Feb. 4 through 10, will get off to a lively start with a music and dance program tomorrow night at the Cerro Coso Community College lecture hall.

Featured entertainers during this program, which will begin at 7:30 p.m., will be the Nairobian Wranglers, a group of black cowboys, who will present a black western cultural show which consists of narrative and songs about legendary figures and historical issues of the old West.

Also to be featured on Saturday night at the Cerro Coso College lecture hall will be Les Williams, a 59-year-old tap dancer, who is recognized as a leading exponent of jazz dancing in this country, and Ava McClendon, talented local actress, who will serve as mistress of ceremonies.

A variety of activities has been planned in order to include as many local area residents as possible in this week-long

During his early years in show business, he met all of the great stars of the dance field, but the highlight of his career was a guest appearance with Arthur Fiedler during a pop concert in San Francisco in 1972.

Miss McClendon, the mistress of ceremonies tomorrow night, has won a number of talent show awards, including a top spot on the popular television "Gong Show." She will present one of her award-winning skits, in addition to handling the MC duties.

On Sunday afternoon at 3, the setting for the local observance of Black History Week will shift to the Center theater, where a gospel music concert will be presented.

Following an introduction by Mrs. Cubit and welcoming remarks by NWC's Deputy EEO Officer, the program will get under way. Vocal music groups scheduled to

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Les Williams, Talented Tap Dancer

reminder of the contributions of black people to this nation's history.

Preparation for this week of education and entertainment has been made by a committee led by Glenda Cubit, who has been assisted by Grant Williams, the Naval Weapons Center's Deputy Equal Employment Opportunity Officer. Among the purposes of Black History Week is to call increased attention to efforts being made, both in government and in the private sector, to insure equal opportunity for black people in all facets of American life.

Tickets on Sale

For Saturday night's kick-off event, there will be an admission charge of \$2 for general admission, or \$1 for holders of Cerro Coso Community College student body cards. Tickets will be on sale at the lecture hall tomorrow night prior to the 7:30 performance, or can be purchased in advance at the college business office, at the Gift Mart on Balsam St., or from Sports Etc., in the Sierra Vista Shopping Center.

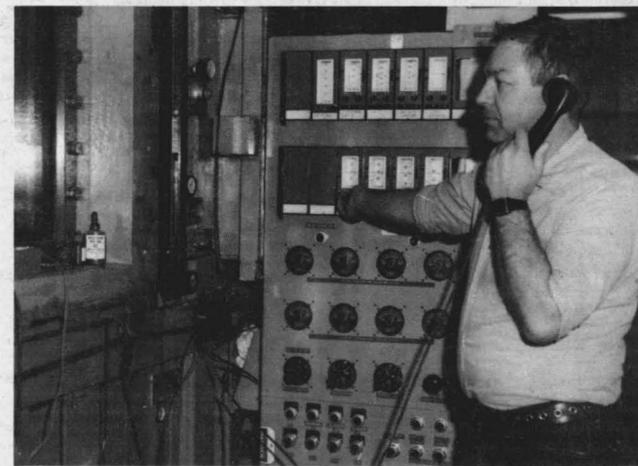
The Nairobian Wranglers are led by Cecil Williams, a guitar-plunking, story-telling cowboy, who often is referred to as the "black Gary Cooper." By his numerous writings and by the publication of a book which he has written, "Blacks in the Osage," he is keeping legends of the black West alive.

Joining Cecil Williams in this black western cultural show will be guitarists Oscar Clark and Joe Duncan.

Les Williams' part in the program will include stories and illustrations on the history of jazz dancing in the United States.

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READY TO GO — Ed Johnson, an engineering technician in the Environmental Engineering Branch, monitors the control panel of the altitude chamber while he watches the progress of a test through one of the ports. —Photo by Sam Wyatt

During 3 decades' use, wide variety of tests conducted at NWC altitude chamber

By Mickey Strang

Aircrew members, spacemen, and science fiction writers are all familiar with altitude chambers — but not like the one in Michelson Laboratory at the Naval Weapons Center. More accurately termed the environmental simulation chamber, it has had wide and varied use during its nearly three decades of operation.

Tests have been conducted in it of everything from missiles and missile system components through a caterpillar tractor, jeeps, countless gas turbine engines, to a submersible, Deep Jeep.

Not that anyone planned to fly either the tractor or the submarine.

The vehicle tests (including the jeeps as well as the tractor) were conducted to determine whether the winterized vehicles could withstand Arctic temperatures and remain functional.

The submarine's battery system was checked to see how long it would be effective at the low temperatures that Deep Jeep would encounter in the ocean depths. A far more realistic test of the battery system

was obtained because the whole submarine could be subjected to low temperatures.

Missiles and missile components, as well as aircraft parts and auxiliary power plants, have "flown" thousands of missions in the chamber. The gap between design and production of the Sidewinder missile was lessened by at least a year because of such laboratory simulation tests.

Exposing military equipment to combinations of various test environments has always been accepted as being desirable; however, just a few months ago the Department of Defense released a new triservice reliability testing standard (MIL-STD 781C) that mandates simultaneous combinations of environments. This standard emphasizes the reproduction of these environments in real time as they are actually encountered during service use. This is commonly called mission profile reproduction.

An example of mission profile reproduction would be to simulate the flight of a fighter aircraft taking off from ground conditions of 85 degrees Fahrenheit and 100

percent relative humidity, arriving at a cruise altitude of 40,000 feet and air temperature of 65 degrees below zero within 15 minutes, flying a patrol for one to two hours, and then descending to land within ten minutes while (during the whole "flight") subjecting the test hardware to actual flight vibration levels.

Farsighted engineers more than 30 years ago designed this environmental simulation chamber with capabilities to achieve mission profile combined environmental/reliability testing which has just

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Geothermal test drilling work in Alaska checked

Four employees of the Naval Weapons Center spent nearly a week during the first half of last month in the frigid climate on the Alaskan island of Adak.

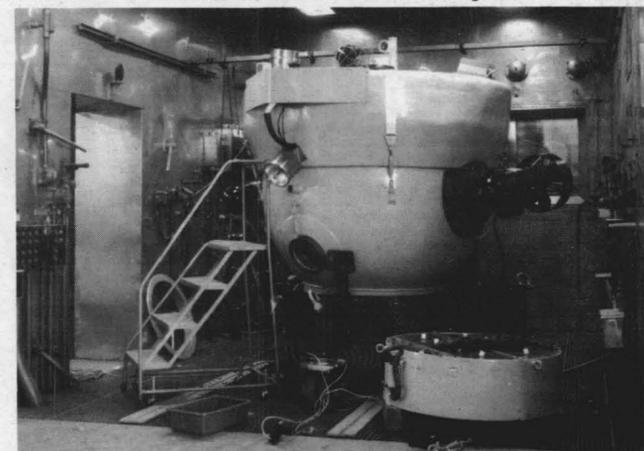
The four men, who were led by Carl Halsey, head of the Geothermal Operations Branch in the Public Works Department's Geothermal Utilization Division, were Jack Neffew, a heavy duty driver; Ron Clodt, an equipment operator, and M. H. "Red" Hass, a rigger.

They were sent to Adak to take the first temperature measurements from two geothermal exploration observation holes that were drilled last summer by the Hamilton Drilling Co. of Anchorage, Alaska. One hole is 1,000 ft. deep and the other is 2,000 ft. in depth.

The heat flow data was obtained by lowering temperature probes down the drill hole and recording the temperatures at various depths, as well as at the bottom of the hole.

As had been suspected, the mud in the deeper well had solidified and packed in. Consequently, a good temperature reading could not be obtained. Equipment is being made ready to wash out the well, and this work will proceed as soon as the island contractor (Aleutian Corp.) returns to operational status, and the Navy can rent the crane required to lower sections of pipe

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GOING DOWN — The tiny submersible "Deep Jeep" received its thermal conditioning tests in the environmental simulation chamber in mid-1964. The batteries for the submarine (front right) were tested to determine how well they would hold up in the cold to which they would be subjected under water when the whole submersible was equally subjected to cold.

James Brown, 'King of Soul Music,' to entertain Feb. 21 at Center theater

James Brown, whose distinctive vocal music style and tremendous popularity have earned him the title of "The King of Soul Music," will be here for two performances on the evening of Tuesday, Feb. 21, at the Center theater.

Brown, accompanied by a back-up group of singers, dancers and other supporting acts, will be the featured performer during shows that are scheduled at 6 and 9 p.m. on Feb. 21.

Ticket sales began today for this Special Services Division-sponsored event. The price of admission is \$4 each for active duty military personnel and their dependents, and \$5 for all others.

The tickets can be purchased at the Commissioned Officers' Mess, Chief Petty Officers' Club, the Shuttle (Enlisted Club), the Youth Center, bowling alley, golf course pro shop, and at the Special Services office in Bennington Plaza.

They also will be on sale at the theater box office during regular movie hours, as well as in Ridgcrest at the Gift Mart and at Deboni's Ice Cream Parlor.

Popularity Is Worldwide

The popularity of Brown as a singer has spread from the heartland of America to Europe, Asia and Africa. The patented James Brown sound is described as "the low-down funk of blues and high-flying emotion of gospel coming together in one volatile mixture."

Propelled by honest feeling, musical versatility and supercharged energy, the different elements that go into making up Brown's distinctive style have resulted in an incredible 44 gold (million sales) records, including seven gold albums with

an aggregate of one billion records sold. His is a distinctively American success story which began with his birth to a poverty-stricken family in Augusta, Ga., and has seen him surge to the top in the highly competitive show business and musical recording industry.

Blessed with a performer's instinct which he first put to use as an 8-year-old youngster who danced for nickels and dimes at a National Guard camp outside his home



James Brown

town, Brown had some hard times growing up (including a brush with the law that led to reform school) before he decided to channel his talents and energies into music.

After forming his first group, James Brown and the Famous Flames, he attracted the attention of a record company owner in 1956 with his rendition of the song, "Please, Please, Please." Since then, his has been a rapidly-paced rise to the top.

It has been nearly 20 years since his first million-seller gold record, but recording activities are just a small portion of his incredibly busy and far-ranging career. It is as a live performer that Brown has really spread the word throughout the world in the same way that he will be doing during his upcoming performances at the Center theater.

Tech Information Center reports change in hours

A change in the hours of operation at the Technical Information Center (formerly the Technical Library) will go into effect on Monday.

Henceforth, the Technical Information Center will be open for the use of authorized persons Monday through Thursday, from 9:30 a.m. to 5:30 p.m., and on Friday from 9:30 to 4:30 p.m.

It will be closed on weekends and holidays.

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 97, 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 094 or 097). Advertising positions in the Promotional Opportunities column does not preclude the use of alternate recruiting sources in filling these positions. As part of the rating process, a supervisor 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.

Technical Publications Writer/Editor (PSAE), GS-1083-9/11, PD No. 7823003, Code 324 — This is a WAE (intermittent) position. Applications from status eligibles will be accepted. Position is located in the Advanced Technology Division, Ordnance Systems Department. Incumbent initiates and coordinates the project data management program for the division. This responsibility includes insuring that all narrative documentation requirements pertinent to the division's programs are scheduled and completed in a timely manner and requires that the incumbent work closely with appropriate technical personnel. Incumbent further prepares management briefs of analytical and experimental programs, script drafts for technical presentations, and edits or writes final reports in technical project areas as assigned. Serves as chairperson of the Department Review Committee, which reviews all department technical publications. **Job Relevant Criteria:** Knowledge of data management for physical science and engineering programs; knowledge of current Navy and NWC technical report format and procedures; ability to work tactfully but effectively with both NWC technical personnel and contractors.

Laborer, WG-3500-2, JD No. 589, Code 3272 — This job is located in the Explosives Propellants Branch, Propulsion Systems Division, Ordnance Systems Department. Incumbent performs manual labor incidental to the cleaning of buildings and docks, polices roads and surrounding grounds for trash and prepares salvageable items for pickup. Work involves moderate to arduous exertion, usually outdoors. Incumbent works with, and around, processing materials for propellants and explosives and rocket motors. Frequently operates equipment such as vehicles, forklifts, transporters, and dollies. Incumbent of this position will be given the opportunity to acquire knowledge which may later qualify him for competitive appointment to the pre-journeyman program as an Explosives Worker, WG-4 Job Relevant Criteria: Reliability and dependability as a laborer; ability to follow directions; knowledge of related lines of work, equipment, and tools; dexterity and safety; ability to do the work without more than normal supervision.

Electronics Technician, GS-856-9/11, PD No. 7823002, Code 3252 — (Known promotion potential to GS-11) This position is located in the Explosives Technology Branch, Conventional Weapons Division, Ordnance Systems Department. Incumbent prepares, adjusts, and calibrates high-speed electronic instrumentation for use in explosives measurements. Prepares drawings and diagrams of instrumentation setups used in the conduct of explosive tests. Incumbent designs test fixtures, devices, and electronic circuits; maintains all electronic equipment used in the branch test area for both accuracy and safety; participates as member of firing team in the setup and firing of explosive devices and experiments; as firing officer, is responsible for the safe conduct of all explosive operations in the 254 Area. **Job Relevant Criteria:** Knowledge of electronic instrumentation, digital timing circuits and general control systems; ability to construct electronic prototype circuits and devices; ability to use both common shop machine tools and precision measuring devices (micrometers, etc.); ability to create electronic and mechanical drawings for documentation purposes.

Secretary (DMT), GS-318-4/5, PD No. 7845042, Code 3285 — This position is located in the Propulsion Technology Office, Ordnance Systems Department. Incumbent is secretary to the Propulsion Administrator. Serves as receptionist for both telephone callers and visitors, gathering background material concerning both as appropriate; answers questions concerning office administration matters or concerning the projects or work assigned to the various divisions. Incumbent is responsible for the typing of documents as well as typing official letters, maintaining files, and performing other various clerical duties for the branch and division. **Job Relevant Criteria:** Ability to use dictating machine transcriber; ability to type with speed and accuracy; knowledge of correct spelling, punctuation, and English usage; ability to deal tactfully but effectively with all levels of NWC personnel.

File applications for the above with Mary Morrison, Bldg. 34, Rm. 210, Ph. 3293.

Printing Clerk (Typing), GS-351-4, PD No. 7823005, Code 224 — Applications from status eligibles will be accepted.

This position is located in the Graphic Arts Division, Technical Information Dept. The incumbent is responsible for preparing printing reports from detailed numerical records concerning printing and duplication work at NWC. Prepares job ticket for incoming work assignments and answers inquiries concerning their status. Prepares all forms for printing jobs sent off center, including instructions to printer; makes cost estimate on each job; advises customers on Navy printing standards in such matters as proper paper, size, color, margin set-up, distribution, etc.; ensures that printing jobs meet deadlines. Performs various clerical functions, such as typing official correspondence, memoranda, etc. and ordering supplies for the division. **Job Relevant Criteria:** Demonstrated ability to compile numerical and statistical reports; ability to work tactfully but effectively with all levels of NWC personnel; ability to perform a variety of clerical functions.

Librarian (PSAE), GS-1410-9/11, PD No. 7823002, Code 233 — Applications from status eligibles will be accepted. This position is located in the Acquisitions Branch, Information Science Division, Technical Information Department. Incumbent must possess substantial knowledge in a physical science or engineering field appropriate to the mission of NWC (physics, chemistry, electronics, mechanical engineering, etc.). Incumbent selects and acquires library media in his or her specialty field, balancing selection against available resources; assesses client needs in the subject matter field; develops, operates, and maintains both an automated control system for selection and acquisition and an automated cataloging system; performs descriptive and subject cataloging. **Job Relevant Criteria:** Knowledge of library acquisition processes, knowledge of cataloging; ability to automate library technical processes; skill in interpersonal relationships (working harmoniously with others, facilitating compromises, etc.); knowledge in an appropriate physical science or engineering field.

Secretary (Typing), GS-318-4/5, PD No. 7708000, Code 08A — This position is secretary to the deputy head, Office of Finance and Management. The incumbent is responsible for providing administrative/clerical support to the supervisor; maintains calendar, files, etc.; reviews and directs incoming mail to the appropriate office; prepares routine correspondence, schedules meetings and conferences, and arranges travel. **Job Relevant Criteria:** Must be familiar with Navy correspondence format and files; knowledge of Center organization and policies; must be proficient typist; must be able to screen inquiries and solve problems with limited amounts of guidance.

File applications for the above with Tina Rockdale, Bldg. 34, Rm. 204, Ph. 2474.

Secretary, GS-318-4/5, PD No. 7355163AJMIN, Code 3066 — This is a temporary position not to exceed one year, however it may become a permanent assignment. This position is located in the Harpoon Production Office, Engineering Design Division, Engineering Department. Incumbent provides secretarial assistance to the program manager by screening visitors and calls, making appointments, reading and distributing correspondence, compiling and summarizing statistical and informative material, and editing and typing technical letters, papers, and reports. **Job Relevant Criteria:** Knowledge of the

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DIVINE SERVICES

- PROTESTANT**
- Sunday Worship Service 1015
 - Sunday School — All Ages 0900
 - Sunday School Classes are held in Chapel Annexes 1, 2, 4, (Dorms 5, 6, 8) located opposite the former Center Restaurant.
 - Communion Service first Sunday of the Month.
- ECUMENICAL**
- Wednesday Noon Bible Study 1130
 - Thursday Men's Prayer Breakfast 0630
- ROMAN CATHOLIC**
- MASS
 - Saturday 1700 fulfills Sunday obligation
 - Sunday 0700 0830 1130
 - Nursery, Chapel Annex 1 0815-1245
 - Daily except Saturday, 1135, Blessed Sacrament Chapel
- CONFESSIONS**
- Daily 1115 to 1130
 - Saturday 1615 to 1645
 - Sunday 0800 to 0825
- RELIGIOUS EDUCATION CLASSES**
- Sunday First thru 6th grades 1015
 - Sunday Pre-school & kindergarten 1115
 - Sunday seventh & eighth (Junior High) 1900
 - Above classes are held in the Chapel Annexes across from the former Center Restaurant.
 - Sunday evening Ninth thru 12th grades As announced
 - "In Home" Discussion Groups Youth Rallies
- Contact Chaplain's Office for specifics.
- JEWISH SERVICES**
- EAST WING—ALL FAITH CHAPEL**
 - Sabbath Services every Friday 1930
 - UNITARIANS**
 - CHAPEL ANNEX 95**
 - Services—(Sept.-May) 1930



LENGTHY SERVICE NOTED — William A. Mitchell (I.), an electrician in the Maintenance-Utilities Division of the Public Works Dept., receives a 35-year federal service pin from Capt. R. B. Wilson, Public Works Officer. Mitchell has been at China Lake for 27 years. He worked previously as a civilian employee of the Air Force.

Lead in Premier Bowling League changes hands

First place in the Premier Bowling League switched hands again, following Monday night's action at Hall Memorial Lanes.

As the result of winning two of their three games from The Place, the Raytheon Sidewinders are currently a half-game in front of the Elks Lodge keglers and 1½ games ahead of the Fisher Plastering squad, which is in third place.

The Sidewinders were the pace setters Monday night as they rolled both the high team game (904) and high team series (2,867).

High individual series for the night was racked up by Ron Williams, whose score was 652. This was just 2 pins better than the 650 posted by Ernie Lanterman, who had a triple 200 series with games of 233, 212 and 205. One other Premier League bowler, Al Smith, also topped the 600 series mark with a 615 total.

In addition to Lanterman, bowlers who turned in single game scores of more than 220 were: Smith (279), Doug Fisher (247), Williams (246), Warren Turnbaugh (225), and George Bowles (224).

Playoffs set . . .

(Continued from Page 6)

matched the two teams that are at the bottom of the heap, but it was the Jokers who emerged victorious by a scant margin of 2 points (39-37) over Team "X," which up until last week had only a single victory in seven games to show for its efforts.

Although regular season play has ended in both Divisions A and B, the eight teams in Division C have games scheduled through Thursday, Feb. 23. Next week's slate in Division C is as follows:

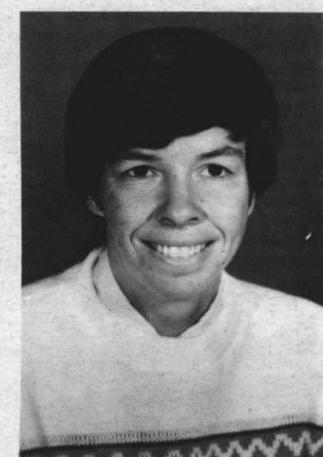
- Tuesday, Feb. 7 — Medicine Men vs. Lobos, 8:30 p.m.
- Wednesday, Feb. 8 — Team "W" vs. Jokers, 6 p.m., and Renegades vs. Jokers, 8:30 p.m.
- Thursday, Feb. 9 — Team "X" vs. Gasbags, 6 p.m., and Team "X" vs. Wild Bunch, 8:30 p.m.

Rec Round-up . . .

(Continued from Page 6)

scheduled at 5 p.m. on Monday, Feb. 13, at the Community Center, the league will be organized to include teams and doubles competition, a division for women, or mixed teams of men and women.

Employee in the spotlight



Dr. B. J. Holden

"You really ought to take advantage of the area in which you live," says Dr. Barbara Jeanne Holden (better known as "B. J."), an electrical engineer in the Simulation Services Branch of the Systems Development Department.

And that she has been doing, especially since she has become interested in soaring. Says she, "We've got one of the best soaring sites in the world. With the mountains to the west and the Owens Valley to the north, the conditions for both thermal and mountain wave soaring are excellent. The flying weather is so consistently good that last year I was able to log about 340 hours in the air. My longest soaring flight in both distance (245 miles) and duration (8 hours, 23 min.) was from Inyokern to Yerington, Nev., and the highest was to 30,000 feet in the Sierra wave above Walker Pass."

Has Earned Gold Badge

B. J. not only soars herself (and has the gold badge issued by the Soaring Society of America, given for achieving an unpowered flight of more than 186 miles), but is a flight instructor with Sierra Soaring in Inyokern, and also flies the tow plane for other glider pilots. Last year she made 630 tows, about half of all those begun at Inyokern.

She's a qualified flight instructor for power flight, too, and about 1,200 of her more than 1,500 air hours, are logged in power craft.

B. J. learned to fly in powered craft the summer that she was graduated from Pius X High School in Lincoln, Neb., but spent the next few years much more active in parachute jumping as a sport.

She has made 730 jumps, and holds U.S. Parachute Association ratings as jumpmaster and instructor, and an F.A.A. rating of master parachute rigger. ("I'm really looking forward to the El Centro Parachute Center personnel coming here," she adds. "Maybe we can get a really active group of jumpers going again.")

Cal-State Bakersfield advisors to visit NWC

Dr. James Vigen and Dr. Roy Dull, advisors for the Cal-State Bakersfield program in business administration, will be here on Thursday, Feb. 9, to counsel anyone now enrolled or interested in enrolling in this program.

An appointment to confer with either of these two men can be made by calling the Training Center, NWC ext. 2359.

Nebraska in Lincoln ("I entered that field because of my hobby of amateur radio in high school, but then I got interested in flying and I haven't done a thing with radio since.")

B. J. came to China Lake a little over six years ago. "Not," she says, "because I knew much about the Naval Weapons Center or what was done here, but because jobs at the Ph.D. level were darn scarce then. But I'm very glad that I did. The people here are the greatest and the work has been fascinating."

The fascination, she notes, has been due in large part because of the variety of work she does in the Simulation Laboratory with its mix of analog and digital computers and support equipment. "It's fun to find new ways to help people use the equipment and to write 'diagnostic' for it. I'm also looking forward to more work with microprocessors to control aspects of hybrid computation."

Applied for Astronaut Training

Her combination of interests in flying and her technical work led her to apply for one of the Astronaut training openings as a mission specialist. B. J. was one of the final 208 (out of more than 8,000 applicants) who were sent to Houston for a week of interviews and physical testing, but was not one of the 35 finally chosen.

"One of the most appealing aspects of becoming an Astronaut was the prospect of extra vehicular activity, much like free fall with a parachute, only with a more spectacular view," B. J. says. "I guess I'll have to settle for a view of the Sierra from 30,000 feet instead."

"But," she adds, "that's pretty beautiful, and I think I can be happy with that."

Promotional Opportunities

(Continued from Page 2)

NWC and Naval Correspondence Manual, security regulations, travel, supply, editorial and security procedures; ability to operate a Magnetic Card II typewriter; ability to use fact and diplomacy in dealing with people; ability to operate on own initiative with a minimum of supervision.

Supervisory Technical Manuals Editor (General), GS-1083-12, PD No. 7736051B, Code 3655 — This position is head, Logistics Documentation Branch, Technical Data Division, Engineering Department. Incumbent is responsible for providing technical documentation production management and logistics/supply support management to the Engineering Department and other NWC codes. Includes planning, managing, and conducting quality assurance checks on technical manuals and provisioning documentation; directing and monitoring technical efforts of on-center and contract groups who prepare technical manuals, provisioning documentation and associated technical data and maintaining liaison with other Navy and Air Force commands on technical manuals, provisioning documentation and associated specifications. Directly supervises all branch personnel. **Job Relevant Criteria:** Broad knowledge of in-service data

and logistics requirements. Broad technical knowledge of mechanics, electronics, explosives, aerodynamics and propulsion systems. Thorough knowledge of DoD, military and commercial specifications and demonstrated ability to interpret the requirements of the specifications. Ability to technically and administratively supervise the work of technical manual editors. Former applicants need not reapply. Promotion Potential: GS-13.

File applications for the above with Janet Thomas, Bldg. 34, Rm. 204, Ph. 2925.

Secretary (Typing), GS-318-4/5, PD No. 7862003, Code 425 — This position is located in the Ordnance Division, Range Department. The purpose of the position is to provide, or obtain, a variety of services essential to the direction and operation of the division. Major duties include screening correspondence, maintaining files and records, typing technical reports and correspondence, receiving telephone calls and visitors. **Job Relevant Criteria:** Ability to handle a variety of situations concurrently; ability to deal effectively and tactfully with all levels of personnel; ability to work with a minimum of supervision; knowledge of Navy correspondence procedures and Center and Navy policies and regulations.

File applications for the above with Jan Nieberlein, Bldg. 34, Rm. 204, Ph. 3118.

The following positions are organizationally and physically located in the Joint Cruise Missile Project Office Washington, D. C. These positions are temporary in nature and are not expected to last beyond two years (but may be extended beyond this time with approval of the Civil Service Commission). Selectees will have return rights to their current agency and/or other Federal agencies.

Aerospace Engineer, GS-841-13 — This position is located in the Missile Integration Branch, Sea Launched Cruise Missile Project in the Joint Cruise Missile Project Office. The incumbent is the airframe engineer and is responsible for directing the integration of the development, production and performance of the Sea Launched Cruise Missile (SLCM) airframe structure (materials, strength, weight, center of gravity, etc.) and the stability and control system (aerodynamic control surfaces, airframe actuators, altitude reference assembly, and autopilot). Incumbent monitors related airframe research, attends design and performance review, prepares plans for airframe performance tests, originates and reviews contract specifications and evaluates contractor performance. **Job Relevant Criteria:** Knowledge of aerodynamics and missile stability and control system design; ability to direct the efforts of weapons systems development contractors; ability to communicate correctly and concisely, both orally and in writing; skill in interpersonal relationships (maintaining harmonious relationships with individuals of diverse backgrounds and interests, reconciling differences, facilitating compromises).

Aerospace Engineer, GS-841-13 — This position functions as the fuel system and engine integration engineer in the Missile Integration Branch of the Sea Launched Cruise Missile Project, Joint Cruise Missile Project office. Responsibilities include the integration of the sustainer engine fuel system and the sustainer engine into the Sea-Launched Cruise Missile. Incumbent originates and monitors related fuel system and engine installation research and development programs; attends performance and design conferences with contractor and government personnel; prepares plans for performance analyses and tests; originates and reviews contract specifications and evaluates contractor proposals; monitors the technical performance of contractors. Managerial duties include the planning of analyses performed by contractors and government agencies; resolving problems between contractors and government field activities in regard to schedules, objectives, and priorities; and presenting, defending, and interpreting technical characteristics and program aspects of Sea-Launched Cruise Missile fuel system and engine installation development. **Job Relevant Criteria:** Knowledge of missile engine and fuel-system design; ability to direct the efforts of weapons systems development contractors; ability to communicate correctly and concisely, both orally and in writing; skill in interpersonal relationships (maintaining harmonious relationships with individuals of diverse backgrounds and interests, reconciling differences, facilitating compromises).

File applications for the above with Pat Gaunt, Bldg. 34, Rm. 212, Ph. 2514.



STARTING YOUNG — Adrienne Swinford, who teaches the tiny tot swim classes at the Center gymnasium pool, shows her four-month-old son Douglas that being in the water is fun. A new group of classes will start on Tuesday, with tots from 6 to 18 months old being taught from 9:30 to 10 a.m., 19 months to three years at 10 to 10:30, and 4 and 5 year old pre-schoolers scheduled for classes in the afternoon starting at 1. Cost of six lessons is \$6 for tiny tots and \$8 for pre-schoolers. Either the mother or the father must be in the water with the tiny tot since that program is designed to acquaint parent and child with the water and the skills and techniques for swimming in a way that is fun for both. Signups are being handled in the Center gymnasium office. —Photo by Ron Allen

The Rocketeer

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DEADLINES

News Stories Tuesday, 4:30 p.m.
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Phones 3354, 3355, 2347

Intramural League basketball playoffs to begin Tuesday

Playoff games that will wrap up the 1977-78 season of play in Divisions A and B of the China Lake Intramural Basketball League will get under way at 6 p.m. Tuesday at the Naval Weapons Center gym.

The five teams in Division A will be joined by the Foremost Boys, undefeated quintet from Division B, in the playoffs. In addition to the opening contest, there will be a second tilt at 7:15 p.m. on Tuesday, a single game at 7:15 p.m. next Wednesday, Feb. 8, and the semi-final contest has been scheduled at 7:15 p.m. on Thursday, Feb. 9.

Schedule Not Available

Which teams will be competing against one another in the initial rounds of playoff action wasn't known as The ROCKETEER went to press. Also undecided was the date and time of the Intramural Basketball League championship game.

There was another flip-flop last week in the Division A standings as the result of an upset 48-41 win by the Desert Motors quintet over the former league-leading Loewen's hoopers.

The loss by Loewen's coupled with a pair of wins by the Devils Guns enabled the Devils Guns to reclaim first place in Division A as they blasted the Clansmen, 52-37, and then outscored the F.A.C. team from Trona, 57-52.

Undefeated Team

In Division B action last week, the Foremost Boys made it 12 games in a row without a defeat as they crunched the Bebops and Short Horns by scores of 57-49 and 52-26, respectively.

In the only other Division B tilt scheduled last week, the Worms, who are in second place, held off the Bebops, who are a game behind in third, to win by a score of 33-28.

The Renegades, who drew a bye last week in the Division C schedule, now find themselves in a tie for first place with the Wild Bunch, who corralled the Lobos, 46-33. Both teams have records of 6 wins and 1 loss.

Hot on the heels of Division C leaders is Team "W," which is just a game behind with 5-1 after knocking off the Medicine Men, 33-29, in another close game played last week.

Final game last week in Division C

(Continued on Page 7)

NWC South team wins Admiral's Cup rackets tournament

The NWC South team, organized by LCdr. H. A. Wells, won the Admiral's Cup rackets competition staged last week at the Center's rackets courts.

The NWC South (mainline) rackets team, composed of LCDrs. Wells and Bill West, Lts. Bob Jackson and Charles Schneider, Ltjg. Dean Benedix and HM1 Mario Lopez, edged the NWC North (airfield) squad 4-3 on Wednesday night of last week, and then outscored the VX-5 racketsballers 5 matches to 2 on Thursday night.

Both nights, the NWC South team had to forfeit one match because it lacked a woman member.

The VX-5 team, which opened the Admiral's Cup rackets tournament with a 7-0 shutout over NWC North, managed just one win by Lt. Marc Phillips and a forfeit win by AMHAA Nancy Sharp in its 5-2 loss to the NWC South team.

The VX-5 Vampires, whose second place showing in rackets earned them 3 more points in the overall Admiral's Cup standings, are still in the lead with 25 points, while NWC South is in second place with 19, and NWC North trails with 18.

Various Admiral's Cup athletic events are staged each month, with first, second and third place being worth 5, 3 and 1 point in the standings.

The next Admiral's Cup event will be basketball, which is scheduled later this month.



WRESTLER WINS TROPHY — Capt. L. E. Giuliani, Commanding Officer of Air Test and Evaluation Squadron Five, extends his congratulations to AOOA Morris Schultz, a member of his command, who returned home with a trophy for winning the 114½ lb. weight class in the 11th Naval District's freestyle wrestling tournament held last Saturday in San Diego. AOOA Schultz pinned both of his opponents — the first (Tim Campbell) in 50 sec. of their match. Going against Gerald Swicegurn, the NWC representative in the 11th ND tourney won by a fall in 3 min., 57 sec. AOOA Schultz is now slated to return to San Diego on Feb. 18 to compete in the 11th Naval District freestyle wrestling championships. Grapplers who finish first or second in this event stand a chance of being invited to participate in a training camp to prepare for interservice wrestling competition that will be held later in Quantico, Va.

—Photo by Ron Allen

Burros basketballers crunched by Canyon, Saugus High School teams

Basketball teams representing two of the new entries in the Golden League — Canyon and Saugus High Schools — put the crush on the Burros varsity hoopsters this past week.

Last Friday night, the Canyon High Cowboys trounced the Burroughs High hoopers, 77-54, during a game played on the Cowboys' home court, and Tuesday night at home it was the Burros' turn to take their lumps from the Saugus Centurions, who overpowered the locals 74-43.

Tonight the Burroughs High varsity squad will be on the road for a game in Newhall against the Hart High School Indians. Tip-off time is 8 p.m. for the varsity tilt, which will be preceded by freshman, sophomore and junior varsity contests at 3:30, 5 and 6:30 p.m., respectively.

Low Scoring Effort

Except for a 38-37 non-league loss in mid-December to East Bakersfield, the 43 points tallied by the Burros against Saugus on Tuesday night was the varsity team's lowest scoring effort of the season. The local high school quintet played the visitors on nearly even terms in the first quarter, which ended with the Centurions in the lead, 14-11.

After that it was downhill for the Burros, who were outscored 22-9 in the second period, when the Centurions went into a full court press on defense and turned loose Jerry Tucker, a guard, who tallied 8 points, to lead the visitors on offense.

There was little change in the tempo or style of the game in the third quarter, which opened with the Burros trailing, 36-20, and ended with the locals on the short end of the score, 56-32.

Reserves See Action

With a victory practically assured, Saugus Coach Fred Crummett was able to work some of his reserves into the game in the final period, but two of the Burros' starters fouled out and the Centurions continued to maintain the upper hand as they outscored the BHS varsity, 18-11, to win by a final tally of 74-43.

Gary Luster, a forward, was the game's high point man with 16 for Saugus, and the Centurions also had four other players in the double-figure scoring column. They were Tucker (15), Bob Skophammer (14) and Rick Walsh and Harry Cribbs (10 points each).

The leading scorer for Burroughs was Steve Motte, who tallied 11.

Burroughs High School's varsity cagers found the height advantage and scoring ability of the Canyon High Cowboys too much to cope with last Friday night in the game played at Saugus.

His team had never before been out-rebounded by such a substantial margin, Larry Bird, coach of the Burros varsity hoopers, stated. In the first half, the Cowboys grabbed off 41 caroms to just 16 for the Burros.

Burros "Never In It"

"We were never in it" (the game), Coach Bird added. The taller front three for the Cowboys weren't particularly sharp in their shooting, but they were successful at running good offensive patterns and then kept tipping the ball up until it finally dropped in for them.

The Canyon High team scored 20 or more points in three of the game's four periods of play. The Cowboys broke on top with a 22-10 first quarter lead, and left the floor at halftime out in front by a 10-point margin of 32-22.

Coach Bird felt that his team, which outscored Canyon High 12-10 in the second quarter, had a chance to cut into the Cowboys' lead but failed to connect on some easy shots. The Burros switched defensive tactics several times during the game, but to no avail as their opponents continued to overpower them.

Canyon Coasts to Win

By the end of the third period, the locals trailed 52-30, and the Canyon High team (despite a 24-point scoring effort by Burroughs in the fourth quarter) was able to coast to a 77-54 victory.

The game's high point man was Terry Kalphusal of Canyon, who tossed in 16. Not far behind for the Cowboys were Jeff Barrett and Dino Giacomazzi, who tallied 14 and 13, respectively.

Top scorers for Burros were Steve Motte (14) and Will Levy (12). They also were the leading rebounders for Burroughs with 10 and 8. At the free throw line, the Burros, who have shown improvement in this part of the game as the season has progressed, cashed in on 12 out of 17 opportunities.



Recreation Round-up

NWC, Cerro Coso cagers to play at gym Saturday

Tim Cornelius, captain and coach of the all-military basketball team that represented the Naval Weapons Center in the 11th Naval District's northern area elimination tournament earlier this week in Long Beach, will lead the NWC cagers against the Cerro Coso College Coyotes in a game to be played on Saturday night at the Center gym.

Tip-off time is 7:30 p.m. for this game, which will help to better prepare the China Lakers for the Mojave Desert Inter-Service League basketball competition that is coming up Feb. 24-26 at Norton Air Force Base in San Bernardino.

Price of admission for tomorrow night's game is 75 cents for military personnel and children, and \$1.25 for adults.

In addition to Cornelius, other players on the NWC team are Tony Bolden, Greg Robbins, Charlie Barrows, Bob Bailey, Tony McCray, John Spells, J. D. Neidigh, Andy Price and Kelvin McSwain.

The Coyotes, who are led by Louis Raymond, their high-scoring guard, will be represented by a team that will include Steve Parham, a 6 ft., 7 in., center from Chicago; Eddie McGee, 6 ft., 4 in. center-forward and Daryl Blackman, 6 ft., 2 in. forward, both from Bakersfield, and Glenn Polk, a 5 ft., 10 in. guard from Los Angeles.

Water Exercise Class

A new session of the women's water exercise class, taught by Nancy Branch, will begin at 3:30 p.m. next Wednesday, Feb. 8, at the indoor swimming pool.

Instruction in aerobic and yoga-type exercises will be offered on Mondays and Wednesdays from 3:30 to 4:30 p.m. until the 10-session course has been concluded.

There is a registration fee of \$10 per person which is to be paid in advance at the gymnasium office.

Volleyball Season Coming Up

Plans were announced this week for a meeting of all those interested in taking part in intramural volleyball competition this spring.

Depending upon the wishes of those who turn out for a meeting that has been

(Continued on Page 7)

Special instruction in soccer available to local youngsters

Coaches who helped direct the youth soccer program at China Lake during 1977 and members of the China Lake Soccer Club will begin a series of "sandlot soccer" sessions this weekend at Davidove Field.

This program is designed to teach proper soccer skills to young players and their parents as well, by involving them in father-son games for practice.

Soccer instruction for players in grades two through four will begin at 10 a.m. on Saturdays, and a similar session for seventh and eighth graders is planned on Sundays, starting at 1 p.m.

Fifth and sixth graders will be welcome at either or both of the soccer instruction sessions.

Parents especially are encouraged to participate in preparation for assisting later as coaches, referees or linesmen when the Youth Center spring soccer league gets under way in mid-March.

Black History Week events...

(Continued from Page 1)

participate are the East Barstow Baptist Church Youth Choir, the High Desert Community Choir, the choir from the Seventh-day Adventist Church in Ridgecrest, the Union Baptist Church (Ridgecrest) Youth Choir, and the True Love Baptist Church (Ridgecrest) Choir.

Songs by three soloists — Mrs. Cubit, Jeannie Clay and Every Jo McClendon — also will be included on the gospel music concert.

On Monday, Grant Williams, NWC's Deputy EEO Officer who has taught Afro-American history at both the Department of Defense Race Relations Institute in Florida and at Fillmore University in Buffalo, N.Y., will present the first of a two-part program on Afro-American History. That portion from 3000 BC to 1865 will be covered on Monday from 8 to 11 a.m. at the Joshua Room in the Community Center. Then Williams will pick up on the period from 1865 to the 1978 during a similar presentation on Tuesday from 1:30 to 4 p.m., also at the Community Center.

Two Films Scheduled

Interspersed between these two history-related programs will be the showing of two films and group discussion on Monday, from 1 to 3 p.m., at the Community Center.

The movies to be shown are (at 1 p.m.) "Black History: Lost, Strayed or Stolen," narrated by TV and motion picture star Bill Cosby. This film points out major contributions made by blacks in the development of America that are omitted from history books or courses.

At 2:30 p.m. Monday, an Encyclopedia Britannica film entitled "Heritage in Black" is to be presented. It stresses the struggle of black Americans for freedom, as well as their many contributions to this country.

Emanuel Dunn, an active member of the Indian Wells Valley Chapter of the National Association for the Advancement of Colored People, who is employed at NWC as acting head of the Range Department's Frequency Management Office, will introduce each film and lead the discussions that will follow their showing. One of Dunn's collateral duty assignments is that of an EEO trainer.

Art Exhibit Slated

Coming up next Wednesday at the Community Center is a day-long art exhibit and a series of employee development opportunity seminars. Tommy Williams and Debbie Taylor, a young servicewoman assigned to duty at the Naval Weapons Center, are two local artists whose work will be displayed throughout the day. In addition, the exhibit will include African art work made possible through arrangements with owners of the Importium in Ridgecrest. A member of the Ashanti tribe

(Continued on Page 1)

Geothermal test...

Measurements were taken from the shallower 1,000 ft. deep well. A temperature of 75 degrees Fahrenheit was obtained at 990 ft., indicating a temperature gradient of about three times normal.

A snowstorm and sub-zero temperature winds prevented the four China Lakers from proceeding any further with their temperature measurements, but the work will be continued in the spring when the weather moderates and other support equipment becomes available on the island.

During the time he and his co-workers were on the Island of Adak, there were only 2 hrs. of clear sky. At all other times during their six-day stay it was either raining, snowing or sleeting, Halsey noted, and (at times) the chill factor from 40 to 50 knot winds dropped the temperature to below zero.

This effort is part of a continuing investigation of the feasibility of harnessing geothermal energy as a source of space heating and electric power production for military installations and other facilities on the Island of Adak. The project is being funded by the Naval Facilities Engineering Command.



BLACK HISTORY WEEK RESOLUTION SIGNED — Symbolizing the community's support for Black History Week (Feb. 4 through 10), a joint resolution signed by Rear Admiral William L. Harris, NWC Commander, and Ted Edwards (at left), Mayor of Ridgecrest, was presented to Glenda Cubit, chairperson of the Black History Week committee. The local observance of Black History Week will begin Saturday night with a black western cultural show at Cerro Coso Community College and be concluded by a dinner and dance next Friday evening, Feb. 10, at The Shuttle. Other special events also are planned throughout the week. Black History Week, which has been observed in many American communities since 1926, is celebrated during the month that also marks the birthdays of two great champions of freedom and equality — George Washington and Abraham Lincoln.

—Photo by Ron Allen

New officers installed, awards presented at annual meeting of United Way of IWV

A report on the past year's activities, the presentation of awards for outstanding effort during 1977, and the installation of officers for this year highlighted last week's annual meeting of the United Way of Indian Wells Valley.

On behalf of the board of directors and

member agencies, Jackie Reed, president of the group, expressed appreciation for the support provided by local area residents during the recent United Way and Combined Federal Campaign fund-raising drives.

Corena Terral received a new award (the President's award) in recognition of her outstanding performance as secretary to the United Way board of directors for the past two years.

Outstanding service awards were also presented to Lois Baer, Bonnie Andes, Doris Burnett, Jackie Reed, Susy Rafal, Doris Wilson and Dorothy Carlo.

Jackie Reed was installed as president of the board of directors of the United Way for the new year. She is joined by Lois Baer, as first vice-president; Bonnie Andes, second vice-president; and Tom Mulvihill, who is serving as treasurer for the second year. The office of secretary is not yet filled.

Although six new members of the board of directors were installed, six more board vacancies exist. Anyone in the community who would be willing to serve as a member of the board for one to three years is asked to contact Mrs. Reed by calling 375-1321.

She emphasizes also that all interested local residents are invited to the monthly meetings of the United Way board of directors, which are held during the lunch hour on the second Tuesday of each month. Since the place of the meeting changes, those wishing to attend are asked to call Mrs. Reed to inquire about the location of each meeting.

Reported misuse of government vehicles to be investigated

There have been recent reports of the unauthorized and/or improper use of official government vehicles.

Government vehicles are to be used only for official, authorized purposes and their use for personal purposes or convenience is strictly prohibited by DoD Directive 4500.36.

Police officers have been instructed to identify and report those government vehicles noted parked in areas such as family housing, Credit Union, bank, Bennington Plaza and Navy Exchange. Cognizant department heads will be advised and requested to investigate.

Also any reports of government vehicles parked in suspect locations off the Naval Weapons Center will be reported to the cognizant department head. Should an unauthorized use of an official vehicle be established, action will be taken (including disciplinary action), if appropriate.



GEOTHERMAL EXPLORATION IN ALASKA — As this photo was snapped, four NWC employees were getting ready to lower a temperature probe into a 2,000 ft. deep geothermal exploration observation hole on the Alaskan island of Adak. The China Lakers are (l.-r.) Carl Halsey, Jack Neffew, M. H. "Red" Hass, and Ron Clodi. The probe is attached to a steel cable, which was lowered by using equipment prepared especially for this purpose that was fabricated here and then transported by air to Adak. The special gear was moved to the drill site on the trailer shown at left.

from Ghana will be on hand to answer questions about any of the art work or other items on display.

Topics to be covered during the employee development opportunity seminars, the speakers, and the times of the presentations in the Joshua Room at the Community Center, are:

"How to Get a Government Job," Evelyn Hughes, 9-10 a.m.; Filling out the SF 171," Ethel Burge, 10-11 a.m.; "The Upward Mobility Assessment Process," Terry Mitchell, 1-2 p.m.; and "The Pre-Journeyman Program," Nick Curran, 2 to 3 p.m. With the exception of Mrs. Burge, who is involved in the Eastern Kern County Regional Occupational Program, all of the speakers are NWC employees.

Poetry Readings Planned

On Thursday, Feb. 9, the poetry of a few notable black authors will be read during a program entitled "I Am the Darker Brother" that will be presented from 1 to 3 p.m. at the Community Center. Featured will be the works of such black authors as Paul Lawrence Dunbar, Langston Hughes, Frederick Douglass and Martin Luther King, Jr., which will be read by Florence Green, Glenda Cubit, Nona Celestine, John Hayward, Ava McClendon and Milt Ritchie.

The grand finale of Black History Week on Friday, Feb. 10, will be highlighted by the appearance here of William Haley, whose father, Alex Haley, wrote the book "Roots," which has won him international acclaim — particularly after its adaptation and showing on television.

William Haley, who is a career Army man specializing in human relations, will speak



DINNER TICKETS PRESENTED — In order to make sure that Rear Admiral William L. Harris, NWC Commander, and Mrs. Harris, won't miss Tuesday's deadline for obtaining tickets to the Black History Week dinner and dance on Feb. 10, Mabel Hawley, NAACP secretary, presented tickets to the Skipper earlier this week. Featured speaker at this event will be William Haley, who is the son of Alex Haley, author of "Roots." during a program open to youth of the community from 1 to 3 p.m. next Friday at the Center theater.

He also will be the guest speaker at a dinner and dance on the evening of Feb. 10 at The Shuttle (Enlisted Club). This event will begin at 6 with a social hour during which Willie Gene Jefferson, a popular black magician from Bakersfield, will entertain. Dinner will follow from 7 to 8 and Haley will then speak.

The evening will be rounded out by dancing to music of the Federal Choice, a musical group from the Los Angeles area.

Tickets to the Feb. 10 dinner-dance are priced at \$5 each and can be purchased at The Gift Mart in Ridgecrest, or ordered by calling any of the following NWC employees:

Ralph Carter, 201-A Wasp Rd., China Lake, ph. 446-4878; Brandi Williams, Rm. 207, NWC Administration Bldg., phone NWC ext. 2281; Mabel Hawley, Dorrn 15, Rm. 11, ph. NWC ext. 3508, or Lucille Dunne, 526 Snyder St., Ridgecrest, phone 446-4086.

The dinner-dance tickets must be ordered no later than next Tuesday, Feb. 7.



RE-OPENING — Rear Admiral William L. Harris, Naval Weapons Center Commander, cuts the ribbon to re-open the Intelligence Library in its new location, assisted by Jack Latimer, who is Program Director for Intelligence/Current Operations. The library has moved across the hall from its former location to permit expansion of its top secret vault area. It is open for the use of any NWC employee who has a "need to know" and appropriate clearances. Those who are not familiar with the operations of the library and wish a tour may call Wayne Melton, ext. 3944, to arrange for a look at the new facility. —Photo by Ron Allen

Altitude chamber used for variety of tests. . .

(Continued from Page 1)
 become a mandatory DoD requirement. Tests can be made with temperatures ranging from -100 to +165 degrees Fahrenheit, with as much as a 200 degree Fahrenheit free air change in the chamber in less than five minutes. Humidity can be varied from above 95 percent to less than 20 percent. Altitudes can be simulated from below sea level (despite the Center's actual elevation of 2,283 feet) up to 95,000 feet. The chamber can simulate a climb to 50,000 feet in about five minutes — about the rate of climb of an F-4 aircraft — and dive from 50,000 feet to sea level in 30 seconds. It is both large enough (18 feet long by 12 feet wide by 10 feet high) and sturdy enough to be able to hold large equipment (up to 10,000 pounds) while providing 7,500 pounds of sine/random vibration force. The sine vibration is representative of the kind of vibration created by propeller-type aircraft, while the random would represent jet aircraft.

Most important of all, all of these variables can be controlled simultaneously for accurate weapon system mission profile reproduction.

Tests Monitored
 A television camera and two observation ports permit monitoring of tests by engineers outside the chamber. Each of the windows is made of six panes of 1-in.-thick tempered glass.

"Stuffing tubes" permit passing cabling from the outside to the inside of the chamber when it is operational.

A personnel lock beside the main chamber allows up to four people at a time to enter or leave the test area without disturbing the environmental conditions.

A giant door rises from the floor to serve as the fourth side of the chamber when it is to be used. Pressure seals the door. It can sink to the basement of the laboratory building out of the way to permit totally free access to the chamber at all other times.

The massive size of the chamber called for innovative construction, especially since it was built nearly 30 years ago. The walls of the chamber, for instance, are insulated with air trapped by 14 layers of stainless-steel reflective sheets spaced 1/2 inch apart

by redwood strips. The laboratory area containing and surrounding the chamber was literally built around the chamber rather than having the building built first. A two-story cooling tower rising between Wing 1 of Michelson Lab and the machine shop area primarily supports the chamber's cooling water requirements and secondarily supports part of the laboratory's refrigeration system.

The laboratory's steam system is used in addition to a small heater to heat methylene chloride brine when needed for heating air. Four to six hours of lead-time is initially



PIPES AND MORE PIPES — Engineering Technician Jack Thompson closes one of the many valves used with the massive support network of pipes, storage tanks, and machinery needed to "fly" the altitude chamber through an assortment of environments. —Photo by Sam Wyatt

Film slide show about African safari to be presented Sunday by museum

A three-image slide show about an African adventure will be presented Sunday evening free of charge as part of the Maturango Museum's continuing series of public-interest programs.

The show, entitled "The Truck and Tent Safari Through Kenya," has been assembled from slides taken by Janet and Bob Westbrook during their trip to Africa last summer. The Westbrooks will also narrate the show, which will begin at 7:30 p.m. in the Cerro Coso Community College lecture hall.

Employee assistance group holds weekly lunch-hour seminars

The Naval Weapons Center's Employee Assistance Program has initiated a series of weekly lunch-hour seminars that are being held on Thursdays from 11:30 a.m. to 12:30 p.m. in Rm. 103 of the Training Center.

The seminars, which are being conducted by Dr. David Stewart, an Employee Assistance Program counselor, consist of lectures and discussions of interest to problem drinkers, substance abusers, and supervisors of problem employees.

Spouses or families of troubled employees also are welcome to attend, as are employees with personal or job performance problems such as anxiety, depression, lack of motivation, or loneliness.

The seminars are open to all civilian and military personnel. Those planning to attend are reminded to bring a sack lunch with them.

During their month-long trip to Africa last summer, the Westbrooks spent a large part of their trip in the national parks of Kenya. They shot photos of lions, giraffes, many species of birds, and a wide variety of other wildlife that will be shown during Sunday evening's show.

Also featured will be pictures of the village life of the Masai and Samburu tribes, as well as film slides of Nairobi and Mombasa, and of a climb up Mt. Kilimanjaro.

The Westbrooks are active members of the China Lake Mountain Rescue group, and also have given much time and energy to the Maturango Museum.

Mrs. Westbrook is an associate professor of biology at Cerro Coso Community College, and serves on the museum's board of trustees. She has been a local resident for 11 years.

Westbrook has worked for four years at NWC, where he is head of the Systems Development Department's Software Engineering branch. He was employed previously by the Control Data Corp. in Ridgecrest.

Volunteers sought by Sierra Sands schools for bilingual program

Beginning with the 1977-78 school year, new legislation which has a bearing on the instructional program of every public school district in the State of California went into effect.

This legislation was the State Bilingual Education Act of 1976 (AB 1329), commonly called Limited-English Speaking/Non-English Speaking (LES/NES) legislation. It required that a survey be made in every school district to determine whether there are students who are either limited English speaking or non-English speaking.

This program provides a number of methods of instruction for these students, one of which is an individualized tutorial approach in which the school district is allowed to utilize volunteer adults and high school age tutors to teach these students English. These volunteers function under the direction of a certificated teacher, as instructors in this program.

In order to accommodate those students who need assistance, the Curriculum Services Department of the Sierra Sands Unified School District is seeking the names of individuals who would be interested in assisting with this program on a volunteer basis. At the present time the district is in need of individuals knowledgeable in Spanish and Tagalog.

Any person interested in participating in this program may call the office of James C. Georgeou, the Sierra Sands School District's curriculum coordinator, phone 446-4487.

State Franchise Tax Board representative to visit China Lake

A representative of the California Franchise Tax Board will be at the Community Center next Friday, Feb. 10, to assist local residents who have problems or questions regarding the filing of their state personal income tax return.

A temporary office will be set up in the Yucca Rm. of the Community Center, and the Franchise Tax Board representative will be available there between 9 a.m. and 4 p.m.

Taxpayers who plan to seek information or assistance are reminded by Martin Parachou, manager of the Bakersfield District office of the State Franchise Tax Board, to bring with them the state forms they received in the mail, as well as all pertinent records and documents when they go to the Community Center on Feb. 10.



JOYOUS OCCASION — Wielding shovels during ground breaking ceremonies for the new Desert Counseling Clinic building on Norma St. in Ridgecrest are (l.-r.) Robert Alexander, architect for the new building; J. Webster, vice-president of the DCC board of directors; David Biggar, general contractor, and Bruce MacIntosh, board president. Speakers for the brief ceremonies included Capt. F. H. M. Kinley, Vice-Commander, representing Rear Admiral William L. Harris, NWC Commander; Mayor Ted Edwards of Ridgecrest; Beth Quigley, vice-president of the Ridgecrest Chamber of Commerce; Larry Meeks of the California Department of Health Facilities Construction; Dr. Dan Grabski, Director of Kern County Mental Health; and Florence Green, who has chaired the DCC building fund drive. Mrs. Green noted that the drive to raise a total of \$150,000 in matching funds in the local community is still in progress. Guests present for the ground breaking included Robert Hillyer, NWC Technical Director; Charles Porter, judge of the East Kern Municipal Court; and many representatives from NWC and Ridgecrest who have served on the DCC board of directors throughout the 27 years since it first began in a small office in the dispensary at China Lake. The clinic moved its offices to trailers in Ridgecrest in December 1976. —Photo by Ron Allen

Naval Reservist submits claim for sailplane record

Naval Reserve Waves occasionally find their participation nets a diamond ring. On Jan. 15, Cdr. Donald M. McEligot, USNR, earned waves — mountain lee waves — to earn a diamond to add to his Federation Aeronautique Internationale (FAI) gold badge for soaring while on liberty during his annual active duty for training at the Naval Weapons Center.

A tentative claim has also been submitted for the California state record for altitude gain in a 15 meter wing span sailplane. It was accomplished with the aid of Sierra Soaring of Inyokern — a commercial operation and club composed mostly NWC employees.

Badges Awarded by FAI
 The FAI awards soaring badges and badge "legs" for sailplane distance flights, altitude gain and duration. In sequence of difficulty are the silver, gold and diamond badges. For the diamond badge, a gain of altitude of 5,000 meters (about 16,400 ft.) must be made.

A mountain lee wave is a stable atmospheric flow downwind of mountains when there are favorable wind and temperature profiles aloft. The mountain range sets the airflow in oscillation.

Near the ground a turbulent rotating or recirculating flow may be set in motion below the crest of the waves. If moisture conditions are right, these flows will be marked by smooth long lens-shaped "lenticular" clouds at the crest of the wave and/or a turbulent rotor or roll cloud underneath.

These clouds are relatively stationary in position. The sailplane can climb in those regions of the rotor or the wave where there is an upward flow.

Check Flight Made
 On his first weekend at NWC, Cdr. McEligot had a field area check with B.J. Holden, an electrical engineer in the Systems Development Department's Simulation Services Branch (Code 3134), who also is an instructor for Sierra Soaring. He then refamiliarized himself with the Schweizer 1-34 (single seat sailplane) by an hour-long ridge flight over the Sierra range west of the Inyokern airport.

On the second weekend, the Naval Reservist donned an odd assortment of bulky clothing in order to be fully prepared for the low temperatures aloft, and was stuffed into the Schweizer 1-34 sailplane with the help of two China Lakers (Cliff Chandler

and Bob Clouser), while Bertha Ryan, an aerospace engineer in the Aerothermodynamics Branch of Code 31, acted as official observer for the Soaring Society of America.

From a slight lift initially, the sailplane caught a stronger current of rising air and began climbing at 500 to 1,000 ft. per minute until it reached an altitude of about 7,000 ft. The lift then subsided and the sailplane, with Cdr. McEligot at the controls, began to drop almost to the landing pattern altitude when it again encountered a region of strong lift.

About 1 1/2 hours later, after some climbs and descents at up to 1,500 ft. per minute,



Cdr. Donald M. McEligot

Cdr. McEligot joined another sailplane being flown by B. J. Holden at an altitude of about 16,000 ft. over Owens Peak and, a bit later, with his altimeter showing 24,000 ft. (a gain of 20,700 ft.) and assured of having achieved several thousand feet beyond the altitude gain required for earning the FAI diamond badge, Cdr. McEligot returned to the Inyokern airport to land.

Two days later, he was told that his flight exceeded the California record for altitude gain in a 15 meter wingspan sailplane (like the Schweizer 1-34). The current world altitude gain record of 42,300 ft. for open class sailplanes was achieved a few miles south of Inyokern in 1961.

In civilian life, Cdr. McEligot is professor of aerospace and mechanical engineering at the University of Arizona, specializing in convective heat transfer and turbulent flow and dabbling in atmospheric fluid

Karen Altieri summarizes her views on International Women's Year Conference

Karen Altieri, Federal Women's Program Coordinator for the Naval Weapons Center, recently reported to members of the local chapter of Federally Employed Women (FEW) about the International Women's Year Conference in Houston, Tex., which she attended.

According to Mrs. Altieri, news coverage of the conference was biased and tended to emphasize the sensational issues rather than the majority of the business covered. During the four-day conference, she noted,

Barber shop is again taking appointments

Once again, appointments for service are being taken at the barber shop in Bennington Plaza.

Since a second barber (David Chapman) has joined David Patin, manager of the shop, it is possible to resume taking appointments. Those interested can do so by calling 446-5321.

Appointments for service are not required, however, but are for the convenience of those with limited time. Hours of operation at the barber shop are 9 a.m. to 6 p.m. Monday through Friday.

Services offered at the barber shop including hair cutting (both regular and long hair), styling, razor cuts, shampoos, and beard trims.

The barber shop is open to NWC military and civilian personnel and their dependents.

mechanics. As a Naval Reservist, he is designated an aeronautical engineering duty officer and drills monthly with Naval Weapons Support Unit 0594, NAS North Island, San Diego.

While at NWC, Cdr. McEligot assisted Dr. William H. Thielbahr, of Code 31's Aerothermodynamics Branch, in the study of pressure exchangers for improving the efficiency of gas turbine cycles and fluidized bed heat exchangers for waste heat recovery.

Soaring Is Family Activity
 Soaring is a family activity for Cdr. McEligot, whose two sons, ages 15 and 19, are soloed student glider pilots. The pilot members of the family belong to the Tucson Soaring Club and Cdr. McEligot has visited prospective "wave sites" in the Colorado and New Mexico Rockies, Scotland, Arizona, Mexico, and Austria since 1969 in search of his altitude diamond.

He says Inyokern and the Sierra must be among the most superb soaring regions in the world, year round. On the day of his flight at least four altitude gains of 17,000 feet were made at Inyokern. On two of the four days after his flight, the clouds showed evidence that these could be exceeded.

When the wind blows moderately, sustained flights can be made along the Sierra ridges and, in the spring and summer, the rising, heated air over the desert and mountain peaks makes long distance flights of 200 to 600 miles possible.

If Cdr. McEligot's record is approved, he does not expect it to last long at Inyokern.

Late enrollment at Cerro Coso continues

Registration for classes offered by Cerro Coso Community College during the spring semester will continue until tonight at 7 and also on Monday between the hours of 9:30 a.m. and 7 p.m.

For all classes that are not already filled to capacity, enrollment will be accepted during the above-mentioned times at the Office of Admission and Records.

All residents of the Kern Community College District are eligible to enroll if they are high school graduates, non-graduates 18 years of age and over or high school juniors and seniors with the written approval of their principal.

A copy of the schedule of classes listing more than 300 courses being offered in 47 subject areas, may be obtained by calling 375-5001.

only 25 minutes was spent on the sexual preference issue and a relatively short time on the issue of abortion, yet both of these received about 90 percent of the media coverage.

Mrs. Altieri also emphasized that debate on all sides of an issue was sought, and all speakers were respectfully heard. Facilities were also provided for several anti-ERA groups that did not attend.

The differences of opinion presented by attendees at the conference — of whom a full ten percent were men — are viewed by her as a sign that the group was not being politically manipulated.

The next meeting of the Indian Wells Valley Chapter of FEW is scheduled on Tuesday, Feb. 14, at 11:30 a.m. in the Community Center. All Federal employees are welcome to attend.

Burroughs Adult School enrollment is now under way

Registration for spring semester classes offered by the Burroughs Adult School will continue for the next two weeks on Monday through Thursday evenings.

Enrollment is handled in each classroom at the time listed in the schedule of classes — copies of which have been mailed to all departments on the Naval Weapons Center and are also available at the Center library and at the county library in Ridgecrest.

In addition to offering the required classes for high school graduation credit such as algebra, English, government, and history, the Adult School includes a complete program of open-entry, open-exit business courses consisting of typing, abc shorthand, secretarial letter writing, office machines, and bookkeeping.

These classes are designed to provide students with job entry level skills and a certificate of completion.

A new addition to the business curriculum is School Office Skills which covers procedures specifically used in school offices such as the maintenance of attendance records. This class is taught by Ethel Burge, East Kern County Regional Occupational Center business instructor.

Registration of those wishing high school credit will continue for the next two weeks. Registration is open throughout the semester for those who wish to attain a completion certificate in the business curriculum.

Registration for university extension courses still open

Late registration for four extension courses — two each in Electrical Engineering and Computer Science — offered for degree program credit is currently under way and will continue on week days through Feb. 10 in Rm. 109 of the Training Center.

The Master of Science program in Electrical Engineering at Cal State Northridge offers Engr. 561B, Microwave Networks (3531C8), from Feb. 22 through June 14 on Monday and Wednesday from 4 to 5:15 p.m. The instructor is Dr. Wade Swinford.

Also as part of this program, Dr. Richard Bednar will teach Engr. 562A, a class in Digital Filters (3531D8), from Feb. 21 through June 13 on Tuesdays and Thursdays, also from 4 to 5:15 p.m.

The two courses in computer science are offered in conjunction with the Cal State Fullerton Master of Science program in Computer Science. Dr. William Alltop will instruct CS 471, Automata Theory (5150F8), from Feb. 22 through June 14 on Mondays and Wednesdays from 4 to 5:15 p.m., and Dr. Richard Wolff will offer CS 512, Compiler Design (5150G8), from Feb. 22 through June 13 on Tuesdays and Thursdays from 4 to 5:15 p.m.

Additional information can be obtained by calling Vicki Ayers at NWC ext. 2359.