

Rodeo, Barbecue Highlight Gold Rush Days Festivities

Residents of the Indian Wells Valley will "strike it rich" during the third observance of "Gold Rush Days," which will begin Monday and continue through Sunday, May 6.

A wealth of entertainment will be provided during the week-long celebration, culminating in a parade and rodeo to be held on May 5 and 6.

Eight local girls are vying for the title of rodeo queen. The contest winner will be crowned on Thursday, May 3, at the Ridgecrest Plaza Shopping Center. The contestants are Susan Bryant, Beverly Glass, Nancy Grams, Jan Hines, Carol Miller, Judy O'Connor, Wendy Roberts and Laren Salisbury.

The girls' horsemanship will be tested tonight at the Bottom Acre Stables, beginning at 7 o'clock. Each girl will be judged on her skill as a rider in the Western Pleasure class.

Earlier, the rodeo queen candidates were judged on their personality and poise, and attractiveness. In addition, the candidates are selling queen contest tickets for \$1 each that will be counted as a vote for them in the contest.

Participants in the rodeo parade will assemble at the corner of

Balsam St. and Las Flores by 10 a.m. on Saturday, May 5, and head south on Balsam St. to Ridgecrest Blvd. The procession will then turn west on Ridgecrest Blvd. to Warner St. and disperse at the Ridgecrest park area.

The parade is the opening event of the rodeo, which is to be held at the Desert Empire Fairgrounds arena between 2 and 5 p.m. on both Saturday and Sunday, May 5-6.

The entertainment planned for Gold Rush Days will begin on Tuesday with an old-fashioned box supper at the Elks Lodge, 201 E. Church St. The festivities will get under way at 6 p.m.

Other events planned include a public gathering at the Ridgecrest Plaza Shopping Center, beginning at 7 p.m., on Thursday, May 3. Barbershop singing, band entertainment, a square dance exhibition, the first eliminations in the costume contest, and the crowning of the rodeo queen will take place that evening.

More barbershop singing, a professional fiddlers' exhibition and country and western music program, plus the second eliminations of the costume contest will take place at the Sierra Vista Shopping Center on Friday, May 4, beginning at 7 p.m. The newly-crowned rodeo queen will make



READY FOR GOLD RUSH DAYS — Capt. D. W. Alderton, NWC Deputy Commander, gets into the spirit of the upcoming western emphasis week in Ridgecrest by purchasing a "Strike It Rich" Gold Rush Days button from Ray Sinnott (at left), president of the Burros Booster Club. Ridgecrest merchants are joining in a week-long Gold Rush Days sales promotion, which begins Monday and will merge into the seventh annual Desert Empire Rodeo on May 5-6.

her first appearance at this get-together.

On Saturday, May 5, there also will be a barbecue at the fairgrounds. Residents will be able to eat all they want for \$2.50 per person. Musical entertainment will be provided during the barbecue, and the finals of the costume contest will be held at that time.

Gold Rush Days is the theme of a week-long sales promotion, sponsored by Ridgecrest merchants. Persons who purchase a "strike it rich" button will be eligible to

receive gift certificates from "gold rush marshalls," which are redeemable in participating stores.

Representatives of the Chamber of Commerce, the Desert Empire Fair and the Burros Booster Club, are already selling the buttons at \$1 each.

The Gold Rush Days campaign will kick-off at 3 p.m. tomorrow when the Golden Knights, a precision parachute team of the U.S. Army, will stage a free-fall demonstration of their skill at the Desert Empire Fairgrounds.

SHOWBOAT

MOVIE RATINGS
The objective of the ratings is to inform parents about the suitability of movie content for viewing by their children.
(G) - ALL AGES ADMITTED
General Audiences
(PG) - ALL AGES ADMITTED
Parental Guidance Suggested
(R) - RESTRICTED
Under 17 requires accompanying Parent or Adult Guardian
CS - Cinemascope
STD - Standard Movie Screen
Regular starting time — 7:30 p.m.
Matinee — 1 p.m.

FRI. — 27 APRIL

"PETE 'N' TILLIE" (50 Min.)

Walter Matthau, Carol Burnett (Comedy) Carol Burnett relates her story as Tillie. She meets Walter Matthau (Pete) in the early '60s through a friend. The outspoken Matthau and the repressed Burnett don't exactly hit it off right away. Eventually they have an affair which leads to marriage. Burnett gives birth to a son, Lee Harcourt Montgomery, and contends with Matthau's philandering. Matthau brings up Lee as a partner in his enjoyment of life. Tragedy strikes when the son, Lee, dies. This seriously affects the marriage of Pete and Tillie, and almost ruins it. (PG)

SAT. — 28 APRIL

—MATINEE—
"MAJOR DUNDEE" (STD 122 Min.)
Charlton Heston, Richard Harris (G)

—EVENING—
"BURRO" (STD 112 Min.)

Marlon Brando, Evaristo Marquez (Historical Drama) A British agent foments a revolution on the Caribbean island of Quelimada to further his country's commercial interests (PG)

SUN. & MON. — 29-30 APRIL

"THERE'S A GIRL IN MY SOUP" (STD 96 Min.)

Peter Sellers, Goldie Hawn (Comedy) Kookie girl moves in on a sophisticated gourmet columnist and disrupts his life. (R)

TUES. & WED. — 1-2 MAY

"TREASURE ISLAND" (STD 95 Min.)

Orson Welles, Walter Slezak (Adventure Drama) Orson Welles as the most colorful one-legged scorpion of a sea devil-pirate "Long John Silver" adds an entirely new dimension to Robert Louis Stevenson's classic adventure. Walter Slezak plays the "Squire," Lionel Stander as "Billy Bones" and young Kim Burfield as "Jim Hawkins." Everything is here — the death mark of Black Spot, the voyage to Treasure Island and the mutiny of Silvers' blood-thirsty crew (G)

THURS. & FRI. — 3-4 MAY

"SUMMER TREE" (STD 96 Min.)

Michael Douglas, Jack Warden (Drama) Reality confronts a college-age couple when their idyllic romance is interrupted by the war in Vietnam. (PG)

Advisory Bd. . . .

(Continued from Page 1)

employees who demonstrate exceptional creativity through significant inventions that are patented.

The awards will be presented during a luncheon to be attended by Advisory Board members, their special guests and the honorees that is to be held on May 3 at the Commissioned Officers' Mess, starting at 11:30 a.m.

Reservations which will be required for attending the luncheon may be made by contacting the office of the Technical Presentations Coordinator, phone Ext. 2634.

W. E. Fromm, executive vice-president of AIL, a division of Cutler-Hammer, will serve as chairman of next week's Advisory Board meeting.

In addition to the 11 Advisory Board members who are scheduled to attend, there will be two special guests. They are Rear Admiral L. A. Hopkins, Assistant Commander for Research and Technology, Naval Air Systems Command, and his Technical Director, Dr. F. I. Tanczos.

(Continued on Page 12)



MUSIC MAKER — The Art Depew Quartet will play for the annual WACOM Spring Dance, set for Saturday, May 5, at the Commissioned Officers' Mess. Reservations will be required. All those interested should call Mary Clinton, 446-7123, as soon as possible to insure getting a ticket. Tickets are priced at \$8 per couple.

From _____
TO _____
PLACE STAMP HERE



LAW DAY PROCLAIMED — A joint proclamation designating Tuesday, May 1, as Law Day was signed this week by Rear Admiral Henry Suerstedt, Jr., Commander of the Naval Weapons Center (seated, at left), and by Kenneth Smith, Mayor of the City of Ridgecrest. Present for the occasion were (standing, from left) Cdr. H. O. Brickson, NWC's Staff Judge Advocate, and G. E. "Tommie" Thompson, judge of the Indian Wells Judicial District Court. Law Day U.S.A. is set aside annually by both a Presidential proclamation and by a joint resolution of Congress. Theme of this year's observance is "Help Your Courts — Assure Justice." The proclamation signed by RAdm. Suerstedt and Mayor Smith places emphasis on this nation's legal heritage and the role of the courts in safeguarding individual rights.

nwc rocketeer
Naval Weapons Center
China Lake
California

New Instruments Developed To Aid Optical Evaluation Work

By Dr. Jean Bennett
The Physical Optics Branch, headed by Dr. Harold Bennett, has been developing new instrumentation with which to better characterize optical surfaces, in particular mirrors used in high energy laser systems and sensitive optical seeker systems. With these new instruments, extremely small amounts of light scattered by the mirrors can be measured (both in the infrared and visible regions of the spectrum), the properties of mirror coatings can be studied, and small changes measured when the coatings are subjected to different kinds of contamination. Finally, the actual mirror surfaces can be observed using a TV scanning system, and differences in height on the surfaces, which are only a very small fraction of a wavelength in size, can be measured. These are much smaller than can be observed directly with an electron microscope.

Optical Evaluation Facility
The Optical Evaluation Facility was designed by Dr. Harold Bennett of the Physical Optics Branch, and most of the parts of the instrument were built in the shops of Michelson Laboratory. Various members of the branch, particularly Phil Archibald, have assisted in its assembly and testing. The instrument uses a large hemispherical mirror, called a Coblentz sphere, to collect all the light scattered from the sample, (Continued on Page 5)

Next NWC Advisory Bd. Meeting Slated May 3-4

The semi-annual meeting of the NWC Advisory Board has been scheduled next Thursday and Friday, May 3-4. W. E. Fromm, executive vice-president of AIL, a division of Cutler-Hammer, will serve as chairman of next week's Advisory Board meeting.

In addition to the 11 Advisory Board members who are scheduled to attend, there will be two special guests. They are Rear Admiral L. A. Hopkins, Assistant Commander for Research and Technology, Naval Air Systems Command, and his Technical Director, Dr. F. I. Tanczos. (Continued on Page 12)

Question of School Unification Will Be Decided on Tuesday

Voters will go to the polls next Tuesday to decide whether or not public schools in this northeast section of Kern County will be combined into one unified district for grades kindergarten through twelve.

Polling places located at China Lake, in Ridgecrest, Inyokern and the Rand District will be open May 1 from 7 a.m. to 8 p.m.

Registered voters have been sent a pamphlet containing information about the school unification plan that has been prepared by the Kern County Committee on School District Organization, the Office of the Kern County Superintendent of Schools, and the Kern County Counsel.

In addition, this same pamphlet carries an argument against unification of schools in the Burroughs attendance area that was submitted by L. J. Osborn, a trustee of the Rand School District, and arguments in favor of unification signed by trustees of the China Lake, Indian Wells Valley and Rand School Districts.

Also prepared for mailing to registered voters are some 4,500 copies of the summaries of reports prepared by a citizen's fact-finding committee that was organized to look into all aspects of the school unification question and come up with impartial information on all phases of this complicated subject.

Date Set For Hearing On Annexation

The Kern County Board of Supervisors has set Monday, May 14, as the date for a public hearing on the proposed annexation of a portion of the Naval Weapons Center housing area to the City of Ridgecrest.

A total of 1,370 acres of Navy land, including Desert Park and the Bennington Plaza commercial area, are in the parcels being considered for annexation to Ridgecrest — a move that has been under consideration for a number of years.

The wheels were set in motion for proceeding with this proposal last November, when a letter urging affirmative action on the annexation was presented to the City of Ridgecrest by the China Lake Community Council.

Since then, the proposed annexation was reviewed and recommended for approval by the Kern County Local Agency Formation Commission and, earlier this month, the Ridgecrest City Council petitioned the Board of Supervisors of Kern County for approval of this addition to the city.

Eventual annexation of Desert Park homes, the Bennington Plaza shopping complex, the Burroughs High School campus and access road and vacant Navy land east of the Sandalwood Homes development would enable tax revenue that now goes to Kern County to be channeled instead to Ridgecrest.

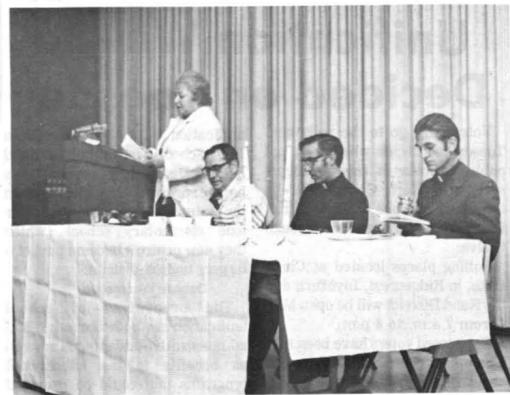
Such tax money is earmarked for use on development of the 106-acre regional park located adjacent to the Burroughs High School access road and campus, as well as for improvements to and policing of the high school access road.



JEAN BENNETT adjusts the interferometer to obtain sharp FECO interference fringes of a mirror surface. These fringes contour the micro-irregularities on a surface, and show details only a small fraction of a wavelength in size.



WILDFLOWER MURAL — Ida Davis, president of the Desert Art League, stands beside a three-panel, 8 x 12 ft. mural that she painted for the annual WACOM Wildflower Show. The painting depicts a sunrise over "B" Mountain, as seen from Sand Canyon. The Wildflower Show will take place tomorrow and Sunday at the Community Center. Other murals have been painted for the show by five other Desert Art League artists. They are Beth Allen, Vinnie Bodenburg, Maxine Booty, Ruth Mayer and Mary Polk. Hours of the show are from 1 to 10 p.m. Saturday and from 10 a.m. to 8 p.m. on Sunday.



INTER-FAITH EXPERIENCE SHARED — A Jewish Passover supper, sponsored by the Catholic congregation of the All Faith Chapel, was held at the Community Center on Holy Thursday (April 19) as an educational ecumenical event.

PROMOTIONAL OPPORTUNITIES

Applications for positions listed in this column will be accepted from current NWC employees and should be filed with the persons named in the ad.

Clerk-Typist, GS-323-3/4, PD No. 7150112, Code 5043 — This position is located in Development Division 11 of the Fuze Department.

Administrative Officer, GS-341-13, PD No. 7270023, Code 7002 — This position is Head of Staff for the Public Works Department and head, Administrative Division.

Supervisory Production Controller, GS-1152-11, PD No. 7370011, Code 7083 — This position is head of the Work Reception and Control Branch.

File applications for above with Carol Downard, Bldg. 34, Rm. 212, PH. 2371.

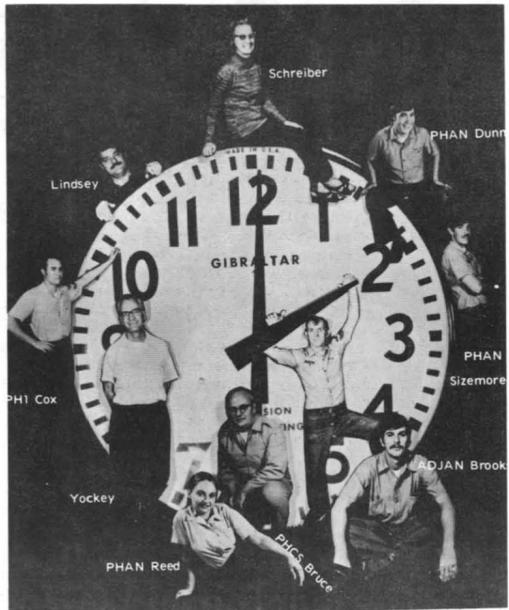
Clerk-Typist, GS-323-3 or 4 (1 vacancy) Code 95 — This position is located in the office of Patent Counsel.

File applications for above with Dora Childers, Code 497, Rm. 210, PH. 2032.

Clerk-Typist, GS-323-3 or 4 (WAE), Code 12 — This is an intermittent position in the Weapons Planning Group.

File applications for above with Charolte Sieckowski, Bldg. 34, Rm. 204, PH. 3118.

Administrative Officer, GS-341-13, PD No. 7270023, Code 7002 — This position is Head of Staff for the Public Works Department and head, Administrative Division.



REMINDER — Daylight Saving Time will begin at 2 a.m. Sunday and the staff of The ROCKETEER has taken over the office clock to remind local residents of the event.

Local Musicians To Solo In Annual Youth Concert

The annual Youth Concert, sponsored by the Desert Community Orchestra Association, will be held on Sunday at the Burroughs High School Lecture Center.

Three local students of music will be featured. Priscilla Richardson, on the piccolo, Kerry Shacklett, pianist, and Bart Moore, vocalist, will each perform solos during the concert.

Miss Richardson, a junior at Burroughs, has been a member of the Burroughs High School band since the first three years.

Naval POW Tribute Day To Be Observed

Naval Prisoner of War Tribute Day will be observed locally by a formal dinner this evening for military officers assigned to the Naval Air Facility, as well as during religious services to be held Sunday at the All Faith Chapel.

Referred to as a "dining out" affair, patterned after the British tradition of a "mess night" or "dining in," tonight's event will differ from the British version (which was strictly a stag affair) by being open to the wives or guests of the officers attending.

This evening's dinner, which is scheduled to start at 7 o'clock at the Commissioned Officers' Mess, will be preceded by a social hour and followed by musical entertainment and dancing to the music of the COMNAVIRPAC band from San Diego.

During services on Sunday at the All Faith Chapel, both Chaplain R. E. Osman and Chaplain Aquinas Smith will call upon members of the Protestant and Catholic congregations to join in prayers of thanksgiving for the return of U.S. prisoners of war and remember, as well, the servicemen still listed as missing in their families.

Labs Must Take Strong Role In Cost Analysis

While designing to cost has always been a critically important consideration at NWC, recent policy statements coming out of the Department of Defense and Navy Headquarters have made it evident that the laboratories must take an even stronger role in cost estimating and cost analysis.

In particular, an in-house ability to develop useful cost estimates — total program cost, and production-unit flyaway cost — even before the conceptual system has reached the advanced development stage will be needed.

In recognition of this, Center Management has reaffirmed support for a cost estimating capability at NWC, and has directed that resources devoted to this area be augmented.

The cost estimating function will be built up in the Central Staff under the direction of M. B. Sorge, head of Central Staff. Basic staffing procedures and definition of the functions of the cost group are well under way.

Code 17 welcomes comment on the mission and staffing of the cost estimating group, particularly since this group will ultimately serve, and influence, most of the larger technical development projects at the Center.

Such comments may be directed to Sorge by calling NWC ext. 3605.



AN 'AWARDING' EXPERIENCE — The four persons most responsible for making the prize-winning safety film, "Man From Lox," pose with some of the first prize awards the motion picture has garnered in the past year.

'Man From Lox' Keeps On Winning 1st Place Honors

"Man From Lox," the motivational safety film on the proper handling of liquid oxygen, produced by the Film Projects Branch of the Technical Information Department's Presentations Division, has added another first place award to its already long list of special recognition.

Entered in the "safety, welfare and insurance" category, in competition against similar films from such large firms as Shell Oil Co. and the Hartford Insurance Co., the local entry took the "Gold Camera Award" at the U.S. Industrial Film Festival.

The prize-winning film has also won first place awards at the San Francisco International Film Festival (first in class); the Information Film Producers of America's "Golden Cindy" award (first in class); the "Chris" award from the Columbus (Ohio) Film Festival, for best of category; and the "Indy," which was first place in the annual contest held by the U.S. Industrial Photography Magazine's award festival.

Marty Shelton, the branch head, who was the producer and director of the film, also did the editing. "This was a branch effort," Shelton pointed out.

"The excellent script by John Dunker and professional sound recording (on location) by Gail Falkenberg, and the outstanding location camera work, performed by Bill Beasley, are mostly responsible for the great reception to the film that we have encountered," Shelton elaborated.

Other branch employees who had a hand in the making of the film are Liz Babcock, who was a production aide, and Verla Pieper, film librarian.

Completed approximately one year ago, "Man From Lox" was produced as a motivational safety film to instruct enlisted Navy personnel on the proper handling of liquid oxygen.

More recently, the U.S. Air Force and Army have ordered prints of the film for presentation to liquid oxygen handlers in those services.

The film took approximately five months to complete and was shot on the NWC Ranges, at NAF and at Cine Sound Studios in Hollywood.

Married Local Girl

Rocky is married to a local girl, Sheila Williams. She was graduated from BHS in 1960 and the couple was married soon after.

They have three children — Kurt, 10; Bruce, 9, and Jennifer, 3. "We lost a lot of friendships in the Zero Population Growth group when Jenny was born," Bob kidded.

"I am in sympathy with ZPG, but I'm glad we have her," he said.

Bob, who was a Phi Beta Kappa at Berkeley, still enjoys reading and studying, but claims his first love is mountaineering. He is president of the China Lake Mountain Rescue Group and each day, during the lunch hour, can be seen running up "B" Mountain.

"That keeps my legs and wind in shape," he said.

He is a hi-fi "nut," dabbles in photography and loves to cook. "I do spend a lot of time researching the bio-medical field," Rocky noted.

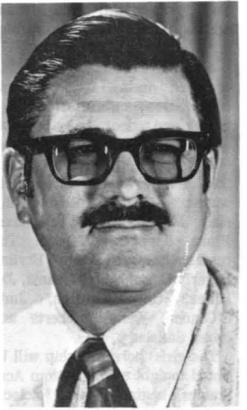
Sheila takes a strong interest in the schools and has served on various school committees over the years. With Rocky, she dabbles in the garden and yard of their new home in Ridgecrest.

High Post Goes To Ex-NOTS Employee

Lillian Regelson, a physicist formerly employed as associate head of the Weapons Planning Group at the Naval Ordnance Test Station, was appointed recently to fill the post of deputy assistant administrator for water planning and standards in the U.S. Government's Environmental Protection Agency.

The newly created post is a GS-17 position, making Mrs. Regelson the first female "supergrade" employee in EPA.

Employee In The Spotlight



Dr. Robert L. Rockwell

"I am probably the best example on the Center of a man who has progressed on the basis of educational support supplied by NWC."

"Rocky" Rockwell, a Burroughs High School graduate, WEPCOSE scholarship recipient, NWC Fellowship student, and a man who was allowed to take leave of absence for other schooling, was paying tribute to the fine educational programs available at NWC for those who diligently seek them.

Rocky is head of the Systems Simulation Branch of the Electronic Systems Department's Systems Sciences Division. That's a long way from a GS-2 mathematician aide. That's how he began his Civil Service career in 1954 for the old Test Department (now the Systems Development Department).

Returns to Berkeley Given leave of absence by NWC, Rocky returned to the University of California at Berkeley and completed the work for a bachelor's degree in physics. He then rejoined the Test Department, working as a physicist for Steve Lee, and then later on as a project engineer for Red Lattig.

In 1962, Rocky transferred to Code 40 and went to work on exterior ballistics connected with various free fall programs and Shrike. The lure of education made him apply for a WEPCOSE fellowship, which was granted, and in 1963 he entered Stanford University, at Palo Alto, to seek a master's degree. Rocky switched his field of study at that time from physics to aeronautics and astronautics.

After earning the degree he rejoined Code 40 as a systems analyst. In 1966 he returned to Stanford to work on his doctorate under a NWC fellowship. The degree was granted in 1970.

After switching to aeronautics and astronautics, Rocky took a bio-mechanics option for his Ph.D. research and this opened up a whole new life for him.

Blood Flow Study Begins He began a mathematical study of the human body's arterial blood flow while doing work for his Ph.D.

His research was the first by anyone to accurately model the entire arterial system by including the effects of blood viscosity, leakage of blood through side branches and elasticity of vessel walls.

Rock has associated himself with Dr. Max Anliker, a fellow scientist and former professor at Stanford for this work, which is purely theoretical. Dr. Anliker heads a bio-medical institute in Zurich, Switzerland, which has a medical school and medical data available that is useful in the study.

Rocky will journey to Switzerland next month for some intensive research in the bio-medical field. "My main purpose is to finish up work on a visco-elastic model of the arterial system. I will make the present model more realistic, and therefore more valuable as a research tool," he said.

Another purpose of Rocky's trip is to pass on his data to a student at Zurich. "I no longer have the time

Library Lists New Books

LIBRARY HOURS: Monday - Friday: 2:30 p.m. - 6 p.m. Saturday: 10 a.m. - 6 p.m. Readers are reminded that all employees, regardless of residence are most welcome to use the Center Library.

- FICTION Balke-Outpost. Douglas-Apostles of Light. Eggleston-Seven Days to Killing Gary-Gasp. Gores-Dead Skip. Hale-Promise of Tomorrow. Kempley-The Profitability Factor. Lotts-Nethergate. McGivern-Capritoli. Ross-Solomon's Palace. Seiferl-Doctor's Reputation. Wallop-Howard's Bag. NON-FICTION Birmingham-Right Places. Bradford-Easy Steps to Successful Decorating. Brooks-The World of Gwendolyn Brooks. Cote-Picture History of the Olympics. Courtney-The Eighth Sea. Dalrymple-Survival in the Outdoors. Dendel-Needleweaving. Fairlie-Kennedy Promise. Fairley-Corrupt Kingdom. Ferra-From the Nets of Salmon Fishermen. Marine-A Male Guide to Women's Liberation. Masfield-Sun Life in Nelson's Time. Montgomery-Born to Heal. O'Neil-Art of the Painted Finish for Furniture and Decoration. Paulson-The Great Land Hustle. Sleight-Home Book of Smokecooking Meat, Fish and Game. Sillman-Doctor's Quick Weight Loss Diet Cookbook. Watson-Nutrition and Your Mind. Randall-The Great American Auto Repair Robberly. Reader's Digest - Treasury of American Humor. Swenberg - Luce and his Empire. Thomas - Savior, Savior Hold My Hand. Viscott - The Making of a Psychiatrist. Vizzini - Vizzini. Wilkes - Nautical Archaeology. Yates - Sunday Driver.

The Rocketeer

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DIVINE SERVICES

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

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

BLESSED SACRAMENT CHAPEL MASS 1135 1700 Daily except Saturday 1635 1700 Daily during Lent 1135 1700 First Friday only

CONFESSIONS 1545 to 1645 Saturday 0800 to 0825 Sunday

CCD CLASSES Sunday Kindergarten thru 6th grades 1015 Wednesday Seventh and 8th grades 1900 Above classes are held in Chapel Annexes across from Center Restaurant. As announced Ninth thru 12th grades "In Home" Discussion Groups Monthly Youth Rallies Contact Chaplain's Office for specifics.

JEWISH SERVICES EAST WING - ALL FAITH CHAPEL Friday 1st and 3rd ONLY Sabbath Services 2000 Sabbath School 0900

UNITARIANS CHAPEL ANNEX 95 Sunday Services 1930

(Continued on Page 9)



By Jack Lindsey

Pat McDonald, currently competing on the Western Tournament Golf Association tour, picked up \$825 this week for a steady 73-73-146 score in the stop at Hesperia Country Club.

Pat's score was good for a fifth-place tie.

Jimmy Lee, superintendent of the China Lake Golf Course, is throwing a little tournament. Well, he's not really, but his peers are.

The Hi-Lo Desert Golf Course Superintendent's Association, or something like that, is sponsoring a tournament to be held at Mission Hills CC in Palm Springs this coming weekend, and Jim has invited a few of his friends to play as his guests. Forty of them have accepted.

They will all get together at the El Morocco Hotel in Indio, where it is rumored they will bash a bit, and during the daylight hours on Saturday and Sunday, they will repair to the course where a little friendly competition will take place.

If the goings-ons are anything like what occurs at the CPO Golden Anchor tournament here locally, nobody, repeat, no-body will shoot a dang thing.

Looking for action? Then troop on down to Hall Memorial Lanes Monday evening, beginning at 7 o'clock. Members of the Women's Scratch Bowling League are laying it all on the line as the final three games of the season find three teams knocking on the first-place door.

Trout Season Opens

California's general trout season will open Saturday and continue through Nov. 15 in most parts of the state.

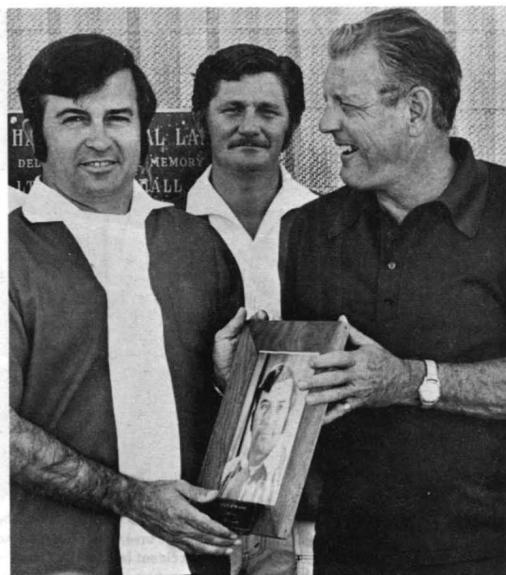
The limit is 10 trout per day, 10 in possession, but not more than 10 lb. and one fish.

Anglers 16 years of age and older are required to have a basic fishing license (\$4), an inland waters license stamp (\$1) and a trout and salmon license stamp (\$2).

While most lakes and streams in the High Sierras will be under ice and snow, Lake Crowley is expected to be ice-free and ready for an overflow crowd of anglers seeking some of the 150,000 rainbows planted there last August and now close to a pound in size.

The Department of Fish and Game has stocked all accessible roadside streams and lakes from the West Walker River in northern Mono County to Olancha Creek in southern Inyo County.

The Kern River has been open to winter fishing above Democrat Dam to Johnsondale bridge, and has received catchable-sized trout where water conditions are suitable.



ATHLETE RECOGNIZED — Gabe Imer, right, head of the Command Administration Department's Special Services Division, presents a plaque to Earle Roby, March "Athlete of the Month." Bill Driggs is seen in the background. The presentation took place at Hall Memorial Lanes at the same time trophies were awarded to those who finished in first place in the recently concluded Men's City Bowling Tournament. Driggs and his partner, Chuck Roulund, won the doubles event. John Revels, who took scratch all events, and Thad Brightwell, who recorded the scratch high game (268), were also honored. Roby won the singles category. Others present were Benny Whiteside, Pat Keegan, Maury Coleman and Tom Zurn, Roby's teammates, who won the team event in the annual tournament. —Photo by ADJAN Bill Brooks

Volleyball Results Reported

By Leo Rickmers

In last Tuesday night's action in the China Lake Intramural Volleyball League, the rich got richer and the second place teams fell farther back in the standings.

The Hatchetmen, currently swamping all Division A opponents, kept their undefeated match record intact as they belted the second place Yahoos, 18-16, 15-11 before losing one game, 7-15. Maharlika, leaders of Division B-2, faced the Snorts and dropped them to win the match, thereby taking over undisputed possession of first place with a perfect 5-0 record.

Playing in Women's Division-1, the Ifs remained undefeated as they swatted the Roach Pile squad, 17-15, 15-13 and 15-1.

The race in Division 2 remained close as Knee Knockers and the Net Climbers each won their matches to remain tied for first place. The Knee Knockers stayed in contention by defeating the Maybes and the Net Climbers trampled the Spaghetti Fingers. Other results during the past week follow.

Tuesday, April 24
The Bouncin' Boobs dropped three games to the Sweet Things in Division 1 play. Action in the mens' Division B-2 saw the Sandteas take three games from Central Staff.

Thursday, April 19
Division A
Loewen's lost three to the Yahoos; the VX-5 netmen took two from Loewen's; the Bouncers blanked the Cudobors all three games.

Softball Meeting Set

The High Desert Amateur Softball Association officials will hold a meeting on Monday at 7 p.m. at 403-C McIntire St. All ASA members are requested to attend.

The meeting also will be open to anyone interested in the rules and mechanics of softball.

ASA members who cannot attend are asked to call either Tom Fortney, 375-8536, or Lowell Radcliff, 446-7494.

NWC Sports Notes

Coming down to the wire in the Monday Night Women's Scratch League, Team No. 1 leads Crestline Motel by 1½ games.

The AV keglers, who are in third place only two games behind the leaders, will meet Team No. 1 this coming Monday in the final three games of the season. The outcome should be interesting. Crestline draws Nell's Belles, a squad that has won 42½ games this season, and resides in sixth place.

Last Monday, Sue Emde led the scoring with a 588 series that included games of 210 and 211. She was followed by Pat Brightwell, who recorded a 200-564. Doris Boyack notched a 560 set that included games of 201 and 202. Peggy Ames rolled a 530 series and a 211 game. Carol Andrew posted a 215 game.

Farm Team Tryouts

Tryouts for Little League Farm teams and T-Ball registration will take place tomorrow at 9 a.m. on Diamond 4.

Boys 8 to 9 years of age may sign up for these teams at that time. Proof of age will be required.

Camping Issue Hours

Effective Monday, May 7, the Camping Equipment Issue Room, located near the Electronics Hobby Shop on S. Lauritsen Rd., will be open for business Monday through Friday from 9 a.m. to 1 p.m., and from 2 to 5 p.m.

Military personnel are invited to check out equipment for camping and fishing trips from this facility.

Women's Softball

The women's softball program gets under way at Reardon Field on Wednesday, May 2. There are seven teams entered in the program this season. Game times are 6 and 8 p.m. each Wednesday.

Varsity Tennis

Tryouts are still under way for the NWC varsity tennis team. Interested persons should contact LCdr. Bob Castle, NWC ext. 5254 or 5214.

May 10 is the deadline for submission of team rosters to the Mojave Desert Inter-Service League, and all those wishing an individual tryout are welcome to apply.

This team will compete in the MDISL tennis tournament May 18 to 20 at Norton AFB in San Bernardino.

Last Call!

The final week to register in the NWC Intramural Softball program is coming up. Deadline for sign-ups is next Friday, May 4, at 4:30 p.m. in the Center gymnasium. Call Marty Denkin, NWC ext. 2334, for further information.

Pro Slates Clinic

Dennis Ralston coach of the U.S. Davis Cup team and tennis coach at Cal State, Bakersfield, and celebrated tennis professional, will bring his Cal State squad to Ridgecrest to give an exhibition and hold a clinic in singles and doubles play on Sunday.

The clinic will begin at 2 p.m. in the Burroughs High School gymnasium. A donation of \$1.50 for adults, \$1 for high school juniors and seniors, and 50 cents for all others, will be asked.

The gymnasium doors will open at 1:30. All are invited.

Support Little League



Season Begins for Local Little Leaguers

By Leo Rickmers

The opening of yet another China Lake Little League season was ushered in by brief, low-key ceremonies, held at Little League Diamond No. 4 last Monday night.

Following the introduction of Major Division players by Chuck Dye, league president, two games were played by that division's teams. The Minor Division, Farm Division and T-Ball teams will

begin their season later in the spring.

The Yankees and the Tigers staged a real barn burner at Diamond No. 3, where the Dodgers pulled away to win, 8-7. While not as decisive a victory as that of the Yankees, the Dodgers looked good enough to take it all this year.

Top-notch fielding was the key to the Dodgers' victory, although they employed a balanced hitting attack to keep the Giants off stride.



LITTLE LEAGUE SEASON OPENS — Officials of the China Lake Little League were introduced to a large crowd last Monday evening as the Major Division held its opening ceremonies. At the microphone is Chuck Dye, Little League president. The others are (l.-r.): Ray Schiltz, executive vice-president; Ray Caruso, umpire-in-chief; Joan Chartier, secretary; Peg Johnson, head of the women's auxiliary; Ed Parks, major division vice-president, and Les Saxton, minor division vice-president. Two games were played the first evening — the Yankees defeated the Tigers, 13-1, and the Dodgers edged the Giants, 8-7.

Hack Wilson Ends Notable Civil Service Career Today

Today marks the end of an active Civil Service career for H. G. "Hack" Wilson, a man who (in his own way) has had a profound and beneficial effect on the Naval Weapons Center, its operations and accomplishments for more than 20 years.

The legion of co-workers, friends and associates of the Wilsons will assemble next Thursday, May 3, at 6 p.m. at the Community Center to attend a farewell reception honoring the NWC Technical Director and his wife, Jane — making plain as they do their affection for the Wilsons and appreciation of the way Hack Wilson has handled his increasingly responsible duties since coming to China Lake in July 1950.

Born and raised in the small town of Ashdown, Ark., "Hack," as he likes to be called by everyone, displays an especially warm and human touch in his dealings with others that is exemplified by his knack of putting others at ease. He is at his best when it comes to conferring with his associates and co-workers on a one-to-one basis.

Not one to stand on ceremony, Hack possesses a vast fund of practical knowledge and is always ready to pitch in — offering his considered judgment on complex matters on any of a wide range of skills he has acquired in pursuit of an engineering career that began formally following his graduation from the University of Arkansas with a BS degree in chemical engineering in 1932.

A registered professional engineer, he worked during the '30s as an inspector and later assistant highway engineer for the State Highway Department in Arkansas before becoming involved in ordnance work as a loading engineer at the Arkansas Ordnance Plant in Jacksonville. That was in 1942.

Joined BuOrd in 1946

Two years later he became an ordnance engineer for the Army Service Forces and returned to work briefly as an assistant highway engineer for his home state following World War II — before joining the Navy's Bureau of Ordnance as an ordnance engineer for the Research and Development Division late in 1946.

Already singled out as a man of exceptional capabilities, Hack was the recipient in 1946 of a Meritorious Civilian Service Award for the work he performed as an employee of the Field Director of Ammunition Plants for the Army Service Forces in what was then called the Office of the Chief of Ordnance.

This wartime work, related to the engineering of fuzes, explosive components of fuzes, exploder mechanisms and firing devices, laid the groundwork for the many years in allied fields of endeavor that followed. Four years in Washington, D.C. preceded his transfer to China Lake in 1950 at the urging of then Technical Director Dr. L.T.E. Thompson. For Hack, the move filled a desire to get closer to the scene of action in the line of work that he had chosen for his lifelong pursuit.

Although slated for a scientific staff assistant post in what was then called the Technical Division of the Station Commander's Staff, Hack proved his versatility shortly after his arrival here by turning to as a draftsman in order to prepare some drawings that were urgently needed on a key project — the development of a new anti-tank rocket for use against Russian-built tanks in Korea.

This willingness to pitch in and help earned him the respect and admiration of the man he had been told to contact for what had been intended as a briefing on the RAM rocket program, and that feeling has persisted until this day — the NOTS pioneer who provided this thumbnail sketch of his first meeting with NWC's Technical Director was quick to confirm.



A SINGULAR HONOR — Hack Wilson, who retires as NWC's Technical Director today, is shown with his wife, Jane, nearly a year ago when he was awarded the Navy Superior Civilian Service Award. Mrs. Wilson is fixing the insignia to his collar. Their expressions tell all.



ABOUT THE ARTIST — Danny Jones, a visual information specialist in the Technical Information Department's Special Publications Design Section, came to work at NWC on Aug. 14, 1967. The artistic rendering of Hack Wilson is Jones' second for THE ROCKETEER. Previously, he did a similar sketch of Dr. Newton Ward. He is an instructor of illustration at Cerro Coso College.

The ladder of success which Hack Wilson climbed at China Lake included three years as associate head of the former Test Department, a year as head of Central Staff, and 15½ years (January 1955 to August 1970) as Associate Technical Director. During one six-month period (July 1967 to January 1968) Hack was the Center's Acting Technical Director — a post which he stepped into with full authority more than 2½ years prior to his retirement today.

Judgment Highly Valued

His proven knack for molding together the civilian and military components of the Center's research and development organization through sound leadership, wise delegation of authority and skillful cultivation of managerial talents in others earned Wilson the Center's L.T.E. Thompson award in 1957.

This exceptional ability was recognized again a year ago when he received the Navy Superior Civilian Service Award, as well as in 1971 when he was singled out to receive the Capt. Robert Dexter Conrad Award for outstanding achievement in the planning and administration of research and development, particularly in the field of air-launched weapons. The latter is one of the highest awards that the Navy can bestow on a civilian scientist or engineer.

It's the consensus that everyone connected with the Center valued Hack's opinion and wanted to know what his views would be prior to embarking on a particular course of action — so stated one former longtime administrator at China Lake. "When people wanted an answer in regard to a course of action they were pondering, they talked it over quietly with Hack, who was always available," was another's comment.

Good Hand at Helm

"He's the sort of fellow you can depend upon. You can be sure there's a good hand at the helm when he's in charge," stated a third top NWC official who added, "He's a tremendously talented man."

"Adjectives about Hack Wilson that come to mind are knowledgeable, able, unfluffed and cool under pressure. He knows when to be forceful and positive, and when to back off," stated still another. "You'll never see Hack lose his sense of what is apt to be the most effective step to take and become panicked into making the wrong move. These are the kind of things NWC will miss most when he departs," another longtime observer of the China Lake scene stated when asked to comment on Hack Wilson's retirement.

"Gracious, down-to-earth, a thoroughly understanding man" are the words yet another used to describe the NWC Technical Director. "His door has always been open to anyone and everyone — no matter how big or how small," yet another close associate added.

The respect and admiration co-workers and friends have expressed regarding Hack are equally matched by the affection that is felt toward his wife, Jane, who has been part and parcel of the China Lake community for nearly 23 years.

The Wilsons' two daughters Carolyn and Judy (both now married) were students in high school and elementary school when they accompanied their parents here in 1950, and are now parents themselves with youngsters (a boy and girl each) of their own.

Active in Community

Over the years, Mrs. Wilson has been active with the Women's Auxiliary of the Commissioned Officers' Mess. In addition to holding the post of vice-president, her WACOM participation revolved principally around the operation of the Thrift Shop and its philanthropic activities.

She also served as a Girl Scout leader, as president of the Ceramic Club, taught Sunday School classes, was a home service director for the Red Cross, and was one of the original members of the Ridgecrest Hospital's Pink Ladies Auxiliary. In addition, through Mrs. Wilson's leadership connection with the American Field Service program here, the Wilsons hosted the first foreign exchange student assigned to Burroughs High.

Membership in and support of the AAUW, Friends of the Museum and service on the Desert Counseling Clinic board also occupied a portion of Mrs. Wilson's time here over the years, and she was employed for 10 years by the China Lake Elementary School District as a teacher of primary grade level youngsters.

Reading and putting around in his workshop are the hobbies that Hack will have more time to enjoy in his retirement years. The Wilsons' principal abode will be in Oceanside, but they will be passing through the Indian Wells Valley from time to time enroute to their cabin in the vicinity of Bishop, where they hope to be able to get away from the heat during the warm, summer months.

The Wilsons' retirement plans also call for traveling to England and Europe — something they have (until now) been forced to postpone.

Nature at Its Finest on View in Panamint Mt. Area Trip

By Jack Lindsey

A leisurely four hour trip through Trona, over to Panamint Springs and up Highway 190 to Olancha can be very rewarding to geology buffs, amateur photographers, naturalists and desert lovers.

Along the way, side trips through Homewood Canyon to the Ruth Mine, or to the Minnietta Mine west of the Panamint Springs Rd., or east to Ballarat and Panamint City, may be taken.

The trip begins by taking the Trona Rd. east, past Trona and toward the Panamint Valley. Approximately 15 miles beyond Trona, a turnoff to the left into Homewood Canyon will take the sightseer through fields of wildflowers to reveal a small community that is not visible from the main road. The paved portion of this side road ends at the Ruth Mine, where reddish-colored tailings, taller than some buildings, give visible evidence of the age of the mine.

An interesting part of this side trip are the many old-time sluice boxes still to be seen standing at the edge of the large wash that runs down the middle of the canyon, where miners panned for gold many years ago.

Proceeding east, the traveler may elect to turn right up Wildrose Canyon to Emigrant Pass and Aguerreberry Point, both spectacular beauty spots. The turnoff to Panamint Springs may be found approximately 20 miles further east of Wildrose Canyon.

The road to Panamint Springs passes a dirt road on the left that will take the sightseer to the old Minnietta Mine, one of the first mines in the Panamint Valley. An unusual aspect of this part of the trip is the ground area, which is covered by a fine ash. The entire area looks as if it was the bottom of a lake many millions of years ago. The Panamint Mountains were formed by a volcanic

eruption during the Pre-Cambrian era and this area south of Highway 190 seems to be filled with the ash from that eruption.

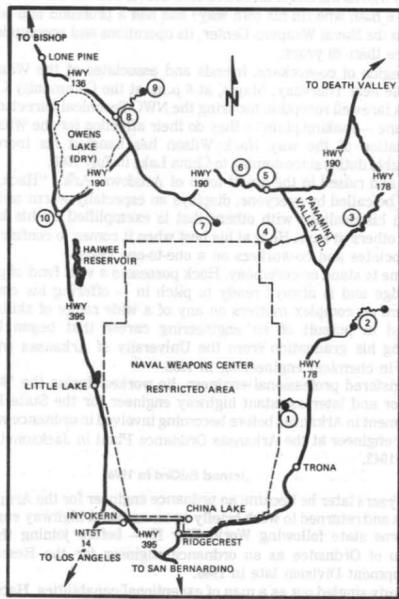
After reaching Highway 190, a turn to the left toward Panamint Springs is indicated. From this site, where gasoline, souvenirs and refreshments may be purchased, the motorist will travel steadily upward, through a series of switchbacks filled with scenic beauty.

During the spring, wildflowers are abundant and the colors of the volcanic rock, often covered with a light green moss, adds a wild beauty to the countryside. Many times during the trip a long valley, leading toward the Death Valley National Monument, may be viewed to the northeast. At the top of the climb is Father Crowley Point, a favorite spot for photographers. The lookout site is named for the Catholic priest who was killed in an automobile accident some years ago on Highway 6 (now Hwy. 14).

Three old towns with colorful pasts — Darwin, Keeler and Olancha — are to be found off Highway 190. Darwin is located 30 miles east of Olancha and there are many cabins, mine workings and a pumping plant still standing in the vicinity. A view of Panamint Valley, 12 miles away and 3,000 ft. below, is a rewarding part of the trip.

About eight miles east of Keeler is the old Cerro Gordo Mine. This mine has been idle since the early 1940s, however, in 1874 more than \$2 million worth of silver-lead bullion was hauled from the mine. There are still many buildings that can be seen from the road, although the mine itself is closed to the public.

Keeler was involved in the mining, milling, teaming, shipping, woodcutting and charcoal burning connected with operation of the Cerro Gordo Mine. There are still many photographable sights at Keeler, which is located on the north shore



of Owens Lake. Olancha is the western end of the trip. It was also the "other" end of the shipping from Keeler to Olancha across Owens Lake. Motorists may turn down Highway 395 (left) for home, or they may elect to turn right and travel to Lone Pine and the gateway to the Sierras. But, that's another trip.

Radiothon Scheduled As Golf Center Fund Raiser

Financial support is still needed in order to complete construction on the golf center, currently being erected east of the rodeo arena at the Desert Empire Fairgrounds. Architect George Pomeroy has estimated that the golf center, when completed, will be valued at \$175,000 when it is donated to the City of Ridgecrest. A pro shop and snack bar, connected by a covered breezeway, are nearing completion, but much work is yet to be done.

Planned for the 18-hole miniature golf course are replicas of Scotty's Castle, Lake Isabella and Mt. Whitney.

Residents of the Indian Wells Valley will be asked to donate needed funds during a Radiothon over Radio Station KLOA, which is to be broadcast Sunday from 2 to 6 p.m.

Volunteers for the Ridgecrest Improvement Committee, spearheaders of the golf center, will be stationed at the Bank of America, phone 375-1311; Security Pacific Bank, 375-4425, and at Ridgecrest City Hall, 375-1321, to take telephone pledges from donors. Staffing the telephones will

Unification . . .

(Continued from Page 1) something which administrators and trustees of the two local elementary school districts counter with reports that the opposite is true since they have found that (taking 1971-72 as an example) between \$200,000 and \$600,000 in tax revenue generated locally for Burroughs High was spent elsewhere in the Kern High School District.

be members of Altrusa and the Kern Desert Business and Professional Women's Club.

The Elks Lodge, in Ridgecrest, will be the Radiothon headquarters. Collection of phoned-in donations will be handled by the High Desert Citizens Band Radio group.

Roger Young, chairman of the Radiothon for the RIC, is inviting local youth groups to climb aboard the American Legion 40 and 8 train in support of the Radiothon. Blaine Davies, KLOA announcer, will be making live broadcasts from the train during the Radiothon.

On board the train will be Mr. and Miss Johnny Horizon, Jennifer Hignite and David Walsh. Others who will ride on the train as it makes scheduled stops on the Naval Weapons Center and in Ridgecrest will be Kenneth Smith, Mayor of Ridgecrest, and members of the Ridgecrest Improvement Committee, including Ted Edwards, chairman.

The train will enter the Center's Wherry housing site on Dorado St. at 12:40 p.m. Sunday and travel through the back gate and down through the Site B Capehart housing area.

It will then journey up Rodman and Rowe Sts. to S. Lauritsen Rd., east to the Bennington Plaza area where it will circle the block before proceeding along Halsey Ave. and out the main gate.

Boy Scouts, Girl Scouts, Camp Fire Girls, 4-H Clubbers, Little Leaguers, and others who would like to ride on the train during the Radiothon are asked to call Young at 446-5884.



NOW AT NAF--Ltjg. Robert C. Englehart reported for duty recently at the Naval Air Facility and has been assigned the duty of fuels and salvage officer. Ltjg. Englehart entered the Navy through the NROTC program at Illinois Tech in Chicago, where he received a bachelor's degree in mechanical and aerospace engineering, before reporting to Pensacola, Fla., for basic flight training. While at Pensacola, he also picked up a master's degree in aeronautical systems from the University of West Florida prior to moving on to Kingsville, Tex., for advanced flight training. Ltjg. Englehart, who came here from Kingsville, was accompanied to China Lake by his wife, Patricia.

Silent Film Program Slated Saturday at Lecture Center

A revival of interest in silent films is currently under way at large college campuses in the United States.

Not to be outdone, Cerro Coso College's Associated Student Body has engaged Chauncey Haines, internationally renowned organist and silent film scorer, to present a program at the Burroughs Lecture Center at 2:15 and 8:15 p.m. tomorrow.

Haines has brought three silent films with him. D. W. Griffith's unforgettable "Way Down East," a Laurel and Hardy comedy, and one of Harold Lloyd's silent classics. Haines has been associated with silent films and their scoring for 45 years. "This is entertainment the entire family can enjoy," said Sandee Schwarzbach, president of the student body. "Mr. Haines has met with great success everywhere that he has performed. He brings with him his own, old-fashioned theatrical organ and the scores that he has written are preceded by a brief verbal synopsis of the history of the film and stories of the silent film makers, themselves," Miss Schwarzbach noted.

Admission to see these classics of the "Golden Film Era" is \$1.50 for adults, \$1 for students, children and enlisted military men, and 75 cents for Cerro Coso student body cardholders.

Tickets can be purchased at the Gift Mart in Ridgecrest, the Station Pharmacy, from members of the China Lake Rotary Club, or from Student Council members.

Annual Meeting Set by Red Cross

Plans were announced this week for the annual Red Cross luncheon meeting, which is to be held on Wednesday, May 9, starting at 11:30 a.m. at the Chief Petty Officers' Club.

Guest speaker for this occasion will be Dr. Pierre St. Amand, head of the Earth and Planetary Sciences Division in the NWC Research Department. Dr. St. Amand, who was invited

to join a group of experts to inspect damage caused by the devastating earthquake that struck Managua, Nicaragua, last Dec. 23, will discuss earthquake preparedness.



The meeting is open to all interested persons. Reservations, which must be received no later than Friday, May 4, may be made by calling Mrs. Clarence Renne, at 446-2426, or by writing to the Red Cross, P. O. Box 5618, China Lake.

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BHS Dramatists Prepare For Opening of 'George M'

George M. Cohan, who billed himself as "The Yankee Doodle Kid," and "The Man Who Owned Broadway," will be brought to life on the local stage when the Burroughs Players present "George M!" on May 4, 5, 6, 11 and 12 in the high school's Lecture Center.

Acting, singing and dancing his way into the role of the title character, George White will lead an all-star cast of Burroughs High School thespians in the musical extravaganza.

White, who is a junior at BHS, made his dramatic debut in "Damn Yankees," produced in 1970. Last spring he played opposite his sister, Susan in "Once Upon a Mattress," and then recreated Tommy Steele's role in "Half a Sixpence." His most recent role was in "The Student Gypsy."

Other experienced high school dramatists in the show include Debbie Wood and Stacy MacGregor, as Cohan's parents; Nancy Miller, as Josie; Patti Farris and Angie Lindsey as Cohan's first two wives; Mike Walker, in the role of Sam Harris; and Pam Renner, as famed Broadway star Fay Templeton.

Judy O'Connor and Teresa Orr will play Miss Templeton's

Opportunities...

(Continued from page 2) visitors and scheduling meetings. Minimum Qualification Requirements: As stated in CSC X-118. Job Relevant Criteria: typing required.

Operations Research Analyst, GS-1515-9, 11 or 12 (2 vacancies), PD No. 41209, Code 12 — These positions are located in the Weapons Planning Group. The primary functions of the Weapons Planning Group are (1) weapons systems analysis, (2) study of new weapon concepts, and (3) injecting into weapons design studies predicted future state-of-the-art characteristics of weapon components. Incumbents will perform analysis on models and weapon systems, synthesizing models and relating them to the problem in a general conceptual framework. Incumbents will prepare written reports. Incumbents will be assigned responsibilities commensurate with their professional growth. Minimum Qualification Requirements: Minimum requirements as stated in CSC X-118. Job Relevant Criteria: (1) Applicants should have a background in engineering, physics, mathematics or other physical sciences and (2) experience in or demonstrated ability for operations research analysis.

File applications for above with Mary Morrison, Bldg. 34, Rm. 216, Ph. 2393.

Aerospace Engineer, GS-861-9, 11 or 12, or Mechanical Engineer, GS-830-9, 11 or 12, or Physicist, GS-1210-9, 11 or 12, PD No. 7345049, Code 4575 — This position is located in the Applied Technology Branch, Propulsion Systems Division of the Propulsion Development Department. The incumbent must investigate, devise and implement state-of-the-art pressurization systems into control sub-systems. This work requires a capability in the application of modern pressurization (solid and liquid gas generators and stored gas) systems, and a working knowledge in the areas of analog computer simulation, control theory and systems; actuators and power supplies. Job Relevant Criteria: Experience in the design and maintenance of solid and liquid gas pressurization systems; knowledge of analog computer simulation; experience designing control systems. Minimum Qualification Requirements: Four years general and three years of specialized experience in accordance with CSC Handbook X-118.

File applications for above with Linda Grossman, Bldg. 34, Rm. 204, Ph. 2925.

Computer Programmer, GS-334-7, PD No. 7340899, Code 4042 — Provides digital programming support for the Avionics Division programs, utilizing both large scale (UNIVAC 1108) and small scale computers. Programming efforts on small scale machines require the incumbent to act as both machine operator and programmer during program preparation, assembly, debugging, and assembly phases of typical assignments. Responsible for adequate documentation of programs in both source annotation and descriptive user instruction forms. Job Relevant Criteria: Experience in computer programming, including direct hands-on experience in operation and assembly level programming of small scale machines. Experience in magnetic tape handling and Univac 1108 job control language. Minimum Qualification Requirements: As defined in CSC handbook X-118.

File applications for above with Elizabeth Sodergren, Bldg. 34, Rm. 206; Ph. 2676.

mother, and maid, respectively. Alan Kubik will direct the show and Phyllis Boyd is the production pianist. Additional accompaniment will be provided by the BHS stage band, conducted by Michael Garrett. Miss Miller is the show's choreographer.

Tickets, priced at \$1.50 for general admission and \$1 for students can be purchased from cast members, at the Station Pharmacy, the Gift Mart, John's Pizza Parlor or at the box office prior to each performance. These ticket prices will be for the May 4, 5, 11 and 12 performances, slated to begin at 8:15 p.m.

A special matinee (for which all tickets will be \$1) will be presented at 2:15 p.m. on Sunday, May 6.

Golden West Air Flights Now Available to All

Beginning Monday, regular civilian travelers — in addition to those on DoD travel orders — will be able to book flights on Golden West Airlines planes traveling between Inyokern and Los Angeles.

The Public Utilities Commission has granted Golden West Airlines a certificate of public conveyance and necessity to transport passengers to and from Los Angeles and Inyokern on week days only.

The departure time Monday through Friday is 6:50 a.m. from Inyokern (Flight 903) — arriving in Los Angeles at 7:50 a.m.

Flight 904 departs from Los Angeles International Airport on weekdays at 8:25 p.m. and reaches Inyokern at 9:20 p.m.

Travel arrangements by those not traveling on government or Navy business may be made by calling either Hucek's Travel Service in Ridgecrest or the Scheduled Airlines Traffic Office at China Lake.



NOW REGULAR NAVY — Ltjg. James C. Richards (right) holds a certificate designating his augmentation into the Regular Navy while (l.-r.) Capt. D. W. Alderton, NWC Deputy Commander, Capt. T. R. Hendershot, Director of Supply, and Cdr. R. B. Nygaard, Deputy Director of Supply, look on. Capt. Alderton officiated at the ceremony during which Ltjg. Richards was transferred from the Naval Reserve into the Regular Navy. Currently the Food Service and Retail Clothing Officer at NWC, Ltjg. Richards reported here for duty in May 1971, after attending the Navy Supply Corps School at Athens, Ga. He enlisted in the Navy in September 1969 and was commissioned an ensign upon completion of Officer Candidate School at Newport, R.I., in April 1970. Ltjg. Richards and his wife, Verda, are the parents of three children — two sons and a daughter.



READY FOR SALVAGE YARD—Careless driving incidents, such as the one that produced the damage shown above, are putting a crimp in the Center's inventory of usable motor vehicles. Speed too fast for the conditions of the road led to a single car accident last week on the T range road. In this instance, the driver was fortunate to escape serious injury when excessive speed caused him to lose control of the pickup truck he was driving and the vehicle went off the road. The driver over-corrected in an attempt to get the machine back onto the pavement with the result that the vehicle went off the other side of the road and overturned. Three similar accidents in the first quarter of this year have resulted in injuries to five NWC employees, three of whom required hospitalization, in addition to the loss of the vehicles for which there are no replacements due to the scarcity of funds. Administrative action is pending against the driver who was responsible for damage to the vehicle shown above.

NWC Adopts Standard Decal System; Change To Be Effective on Tuesday

The NWC Director of Security has announced a change from the present system of issuing decals, to the new standard decal system established by the Department of the Navy.

This change will be effective on Tuesday, May 1. The new system will consist of four decals as follows:

BLUE — denotes officer personnel (active duty, ready reserve, retired)

RED — denotes enlisted personnel (active duty, ready reserve, retired)

GREEN — denotes civilians whose official duties create a frequent need for their vehicles to be driven on Department of Defense installations other

than NWC, China Lake BLACK — denotes all other civilians and individual corporate members of the public whose vehicles are authorized to be operated at NWC only and not other activities.

The present method employed at NWC requires an annual renewal of all decals other than those issued to active duty military.

The new system will permit decals to be effective for a three year period for NWC Civil Service employees. One year periods will be required for most other categories.

Procedures have been established which will permit an orderly changeover with the least disruption by issuing the new decals on a one-to-one replacement basis to coincide with the expiration of the decals currently used. In the majority of cases this will be accomplished through the mail.

During the changeover period the present renewal notices will

Visit Scheduled By USC Profs

Two professors from the University of Southern California are scheduled to visit NWC on Friday, May 11, to counsel currently enrolled and prospective students in the on-Center USC Graduate Program in Engineering.

The two advisors who will be here are Dr. Nasser Nahi, of the USC Department of Electrical Engineering, and Dr. C. R. Freberg, from the Department of Mechanical Engineering.

A general meeting is scheduled on May 11, beginning at 10:30 in Room 211 at the Training Center.

The afternoon of May 11 is being reserved for the counseling of individuals. An appointment for a counseling session with either advisor can be made by calling the NWC Education Office, ext. 2641, no later than Wednesday, May 9.

continue to be mailed to the registered owner(s). At the time individuals receive their renewal notice, they will be asked to enter any changes in registration information and mail the pre-addressed card as indicated. The new decal(s) will then be mailed to them.

Detailed instructions as to how the decal must be affixed, will be sent with the decal. Most decals will now be effective for a three year period.

Changes to the issuance requirements will result in a certification by the registered owner that his/her insurance policy meets the minimums established by the Department of the Navy, and/or the state or locality where the vehicle is operated.



AT GARDEN CLUB — A talk entitled "Herbs — the Plant and the Spice" was presented at a recent meeting of the Oasis Garden Club by Mrs. Maria Wilkes. A master flower show judge, Mrs. Wilkes, who is 80 years old, lectures extensively on many garden subjects and is a garden consultant and critic for many estates in the Los Angeles area. For her local talk, she brought along a large collection of herbs and explained the uses of each plant as a ground cover, garden plant, food and drink, as well as for medicinal purposes.

NAF Pilots Set 21,000 Hour Flight Safety Record



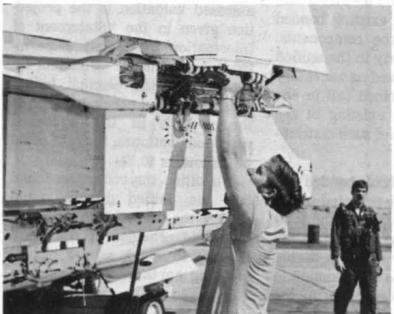
ADJ2 Robert Burch and ADJ1 Fred Mansfield (under engine) work on a jet engine in the Power Plants Shop.



Paper work is important in the Quality Assurance Shop. Here, AZAN Steve Mendenhall fills out some forms related to the shop's work.



AMS1 Larry Peck operates a lathe in the Airframes Shop. Structural damage is repaired at this facility.



ADJ3 Denny Callaway removes the wing locks on an A7 Crusader on the NAF Hot Line. Lt. Eric Vanderpohl, an NWC pilot, can be seen in the background after returning from a flight.



RECORD ESTABLISHED — Ens. Frank Santoni (in pilot's seat) is greeted by Capt. R. S. Moore, Commanding Officer of NAF, at the completion of the historic flight. ADRN Kenneth Bush, an A-4 plane captain, stands on the ladder.

On April 10, Ens. Frank Santoni, a pilot at the Naval Air Facility, took to the air in a TA-4F Skyhawk on a routine project flight.

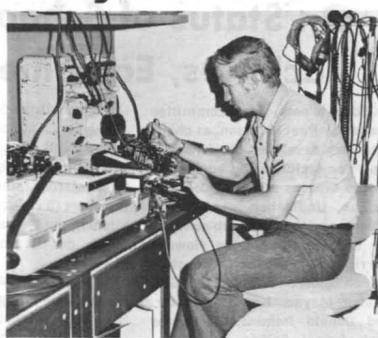
When he returned, he was greeted by Capt. R. S. Moore, Commanding Officer of NAF, and Lt. Truman D. Ware, NAF's Safety Officer. Ens. Santoni had flown the final increment of a 21,000 hour flight safety record that began in December 1970.

Since that time, NAF pilots, airborne between 600 and 700 hours per month, have flown their birds without a chargeable accident. According to an NAF spokesman, this is the highest number of accident-free flight hours yet to be compiled by personnel of the Naval Air Facility.

On this page are photographs taken in various shops (by no means, are all of the shops represented here) at NAF. According to Lt. Ware, the men who work in the shops are as responsible for the safety record as are the pilots, and it is these men and their supervisors that NAF salutes for this milestone safety achievement.



CELEBRATION CAKE — Ens. Santoni wields a saber to cut a special cake, baked for the occasion. Capt. Moore, left, and Lt. T. D. Ware, NAF's Safety Officer, look on.



AT2 W. B. Angle checks relays in electronic gear down for maintenance. Angle works in NAF's Electronics Branch.



ACAN Jeffrey Peterson gives landing instructions to an NAF pilot. Peterson's job in the control tower involves a knowledge of weather and ground conditions.



ADR3 D. R. Jones and ADJ1 Charles Malear (left and right, respectively) operate a tow truck, which pulls aircraft to parking positions on the apron.



AO3 Charles Souza (left) and AO3 Rodney Patterson mount a tail fin on a bomb in the NAF Weapons Shop. All ordnance for aircraft is handled by this shop.

New Program Encourages Civilian Exposure to Fleet

The Chief of Naval Material initiated a program last year for exposing volunteer CNM civilian employees to Fleet operations.

Called Face to the Fleet Cruises, the program was instituted with the concurrence of the Commanders-in-Chief of the Atlantic and Pacific Fleets.

"It is the intent of the subject program to give Naval Material Command civilian personnel with no previous exposure to the Fleet and its at-sea environment, the opportunity to observe and develop a basic knowledge in this area," states NAVMAT Instruction 5723.1A, which updates the program.

To date the program has been restricted to the Washington/Norfolk area, but expansion to the other areas is anticipated.

On the West Coast, the Commanding Officer of the Naval Supply Center at San Diego will aid as the CNM's West Coast liaison and control for the assignment of billets offered by the Commander, Third Fleet, who has been designated agent for the Commander-in-Chief Pacific Fleet for this program.

Volunteers are usually included on cruises of four to seven days in duration. During that time they are exposed to the daily workings of the ship. It is hoped that this exposure will give them an insight that may aid them and their commands to improve their support of the Fleet.

Since participants are volunteers, any travel is at no expense to the government and no per diem or other reimbursement is authorized.

NWC employees wishing to participate in a Face to the Fleet Cruise should contact Joan Taylor, Code 0232, for further information.

Talk on Auto Crash Safety Program Slated

Don Friedman, president of MINICARS, Inc., Goleta, Calif., will be the guest speaker at the next meeting of the Institute of Electrical and Electronics Engineers (IEEE).

The luncheon get-together is set for next Friday, May 4, beginning at 11:30 a.m. in the Mojave Room of the Commissioned Officers' Mess.

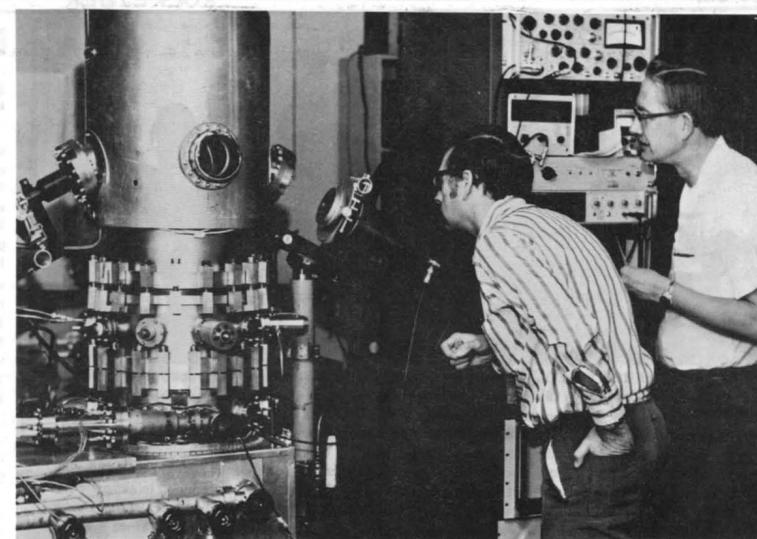
Friedman will describe the automotive crash safety program conducted by his firm for the Department of Transportation.

Because of MINICAR's extensive testing at their sled facility, the Department of Transportation has changed its emphasis from rigid, tank-type automobile protection to a softer, energy-absorbing structure which produces lower shocks and decelerations on properly restrained passengers.

This trend is particularly important in the case of very small cars.

If time permits, Friedman will also discuss the stratified engine concept and electric development for environmental cleanliness.

All interested persons are invited to attend.



HAL BENNETT (right) and Dennis Burge examine the Modulated Ellipsometer mounted right and left on an ultrahigh vacuum system.

Optics Lab Gets New Instruments...

(Continued from Page 1)

microns in the infrared. Currently, measurements are being made at the 0.6471 micron red krypton laser wavelength.

When fully operational the Optical Evaluation Facility should be a very versatile instrument and the most sensitive one of its kind in existence.

Since lasers are used as light sources, very small amounts of scattered light can be measured, making the instrument an extremely sensitive one.

In addition to being able to measure light scattered by very smooth mirrors, the Optical Evaluation Facility can also measure the amount of light reflected by the mirror being tested.

In particular, extremely high reflectances can be measured very accurately.

Both the scattering and reflectance measurements can be made at a whole series of laser wavelengths ranging from 0.35 micron in the ultraviolet to 10.6

microns in the infrared. Currently, measurements are being made at the 0.6471 micron red krypton laser wavelength.

When fully operational the Optical Evaluation Facility should be a very versatile instrument and the most sensitive one of its kind in existence.

Another unique optical instrument, called a Modulated Ellipsometer, has recently been assembled and put into operation in the Physical Optics Branch.

The original version was developed by Steve Jaspersen, a consultant at NWC who is currently teaching at Worcester Polytechnic Institute in Massachusetts.

The present instrument has been modified and improved by Dennis Burge and Bob O'Handley of the Physical Optics Branch, in consultation with Jaspersen.

The Modulated Ellipsometer automatically analyzes the state of polarization of a beam of light reflected from a sample.

When this is compared with the known state of polarization of the light before reflection, the effect of the sample can be deduced. Thus, valuable information about the optical properties of the reflecting material can be obtained.

Advantages Cited

The ellipsometer is mounted on an ultrahigh vacuum system so that it can make measurements on mirror coatings in situ, before they are exposed to the atmosphere.

The principal advantage of this new instrument is that once it is properly aligned, none of its parts have to be moved or adjusted. In conventional ellipsometers, at least one component has to be set in order to obtain the necessary information.

Because of a unique design employing a quartz transducer, the changes necessary to make two independent measurements are built into the light itself by modulating its state of polarization. This is part of the reason why the precision of this system is an order of magnitude better than that of unmodulated ellipsometers, and its accuracy is comparable.

Currently the Modulated Ellipsometer is being used to study the effects of small concentrations of contaminants (such as oxygen,

water vapor, hydrogen and carbon dioxide) on the reflectance of a freshly prepared mirror surface such as silver. Preliminary results of these studies suggest that even small amounts of water vapor may have quite a harmful effect on the reflectance of silver when the highest reflectance is desired.

The system is presently being modified to allow heating and cooling of the mirror either during or after the deposition of the reflecting coating. This modification will extend the capability of the system, particularly enabling studies of annealing and quenching effects to be made. Also, studies of the temperature dependence of the optical properties of materials, surface plasmon effects, and oxidation effects in amorphous semiconductors can be undertaken.

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INTEREST SHOWN IN NWC PROGRAMS — Two State of California officials were at China Lake earlier this week for a briefing on possible civilian applications of military know-how. Information about weather modification, fire protection and anti-pollution programs, as well as research on geothermal power was presented to A. Earl Davis (at left) Science and Technology Coordinator for the State of California, and Dr. Gordon Snow (second from left), assistant to the state's Secretary of Agricultural and Services Agency. The visitors are shown with Dr. G. W. Leonard, head of the Propulsion Development Department, and George Linstead (at right), head of the Technology Utilization Branch in Code 45. The arrival here of Davis and Dr. Snow followed up a recent visit to see Gov. Ronald Reagan in Sacramento that was made by Rear Admiral Henry Suerstedt, Jr., NWC Commander, in order to acquaint the governor and his staff with activities currently being carried out here that have a potential for civilian use.



TOP PERFORMANCE CITED — Employees in the Pipe Shop Section of the Public Works Department's Maintenance-Utilities Division were the recent recipients of a group superior achievement award that was presented by Cdr. James L. Uhe, assistant Public Works Officer. The award, for fiscal year 1972, was in recognition of the record time set and outstanding manner in which Pipe Shop employees carried out the task of acid flushing and changing heating valves in 106 old duplex buildings (all equipped with individual boilers), and changing heating valves in an additional 218 old duplex housing units and 29 JOQ buildings. New tools were manufactured and new methods introduced to expedite the work. The employees whose performances merited the group superior achievement award are shown with Cdr. Uhe. They are (l.-r.) Clarence Bartholemew, Don Rodgers, Loren Chadwick, James Branch, Myrl McClain, Cdr. Uhe, Max Norris, James Crista, leadingman on the project, and John Dollman. Two other Pipe Shop Section employees unable to be present for the photo are Jimmy Dabbs and Basil Church. —Photo by PHAN Jerry Sizemore

Committee Studies Budget, Financial Matters Pertaining to School Unification

(Editor's note: Budget and financial matters pertaining to school unification were studied by a sub-committee headed by Tony Squillace, as chairman. Others who served on this sub-committee and had a hand in compiling the following information were Patricia Kleinschmidt, Jim Heck, Mariana Vander Werf, Kenneth Holan, Miriam Martin, Lydean Garretson, Jackie Pappas, Walton Simmons, Charles Schultz and Sue Kinney. Burroughs High School liaison representatives were Alan Kubik and Michael McGrath.)

After an analysis of all available information the committee has attempted to clarify for the voter a very complicated situation in terms of all income sources as calculated by the various school districts involved in this unification vote. The figures reported represent the most

reliable projected State and local income figures available. Included are the funds which would be available locally from state, local, and federal support for unified and non-unified districts, with these exceptions:

(a) State and Local income projections used are from the State Department of Education and include only state basic, equalization, and supplemental aid, and local income from property taxes. They DO NOT include sources of income to school districts which are variable from year to year, such as federal grants for specific projects, state income for special education programs for physically handicapped, retarded, educationally handicapped, gifted, summer schools, driver training, vocational education, and transportation. These additional incomes will be

available to districts in both unified and non-unified situations on the basis of programs offered.

(b) Only Federal income projections for Public Law 874 funds for category "A" federally connected pupils (pupils whose parents both live and work on federal property) are used. No consideration has been given to income which might be received for category "B" pupils (whose parents work on but do not live on federal property).

Federal income from Public Law 874 is not as certain as income from state and local sources. The accompanying tables are designed to show these two sources separately so the voters may determine the impact of Public Law 874 funds.

No detailed analysis of projected expenditures has been made by this committee. All available information on expenditures for each of the component school districts includes expenditure of income from all available sources, and cannot be related to the income projections that were analyzed. The expenditures of a school district are limited to the revenue ceiling. These expenditures must be budgeted by the boards of unified or non-unified districts within these limits.

Property Tax Rates

In 1972-73, the taxable residents in the Indian Wells Valley, China Lake and Rand Districts will pay the following for elementary and high school education (including bonds): IWV, \$6.4060; China Lake, \$6.2066, and Rand, \$4.5562. The high school rate figured into each of those totals is \$2.6066.

In 1974-75 the projected rates (still subject to some minor changes) are IWV, \$4.9205; China Lake, \$5.6087, and Rand, \$5.0014. The high school rate figured into each of those totals would be \$2.4254. These rates would be in effect, according to projections, if unification failed.

If unification passed, the maximum allowable rate (including bonds) would be \$6.5293.

The projected rate if a unified district board decided to use one-half of PL 874 federal impact aid funds to reduce the tax rate would be \$3.7023.



LCDR. JAMES R. DARWIN reported aboard on March 1 to assume the duties of Point Defense Officer in Code 3009. The Albuquerque, N. Mex., native's last tour of duty was as the executive officer of the USS Hoel, a guided missile destroyer. LCDR. Darwin holds a bachelor's degree from Southern Methodist University, Dallas, Tex., and a master's degree in international affairs from George Washington University, Washington, D.C.

Employees' Rights Under School Unification Outlined

(Editor's Note: Answers to questions on salary level and employment rights of teachers and classified employees were dealt with by the School Unification Study sub-committee on organization and staffing headed by Eva Bien, as chairman. Others who assisted in preparing this report were Jenny M. Allred, Clara Erickson, Kathy Hayes, Jeanice Hofer, Mariam Lambert along with Paul Coulter and Myra Terheun, liaison for Burroughs High.)

Questions with Factual Answers

Q. What are the employment rights of teachers in the present districts if unification is approved?

A. A teacher of the elementary school districts who has tenure must be retained as a permanent employee of the unified district. A tenure teacher of Burroughs may choose between remaining with the Kern High School District or becoming an employee of the unified district.

Q. What are the employment rights of classified employees?

A. The Educational Code provides that classified employees are guaranteed employment for not less than two years. The governing board of the new district has the right to make reasonable reassignments. Elementary school district employees would become employees of the unified district. Employees regularly assigned to Burroughs would become employees of the unified district.

Q. How would unification affect salary, sick leave, and other benefits?

A. Teachers: Certificated employees of the elementary districts or Burroughs who transfer to the unified district would retain all sick leave, sabbatical leave, and other leave rights (including vacation) which had been accumulated by service prior to transfer. The governing board of a new unified district must recognize these rights as fully as though there had been no change in the

district.

Classified Employees: All employees would retain the salary, sick leave, and other benefits which they would have had had the reorganization not occurred.

Questions for which there are no factual answers. These answers are based on past experience of other unified districts and are speculative.

Q. What is the effect of unification on teachers' salaries?

A. The salary policy of a unified district would be decided by the school board which the people elect. Past practice, in new unified districts, has been to adopt a salary schedule equal to or better than the best schedule of the original districts. This has been accomplished in every unified district formed in the state.

Q. Who will decide who gets reassigned and what is the potential impact of reassignments?

A. The board of the unified district, like the present boards, would have the right to make reasonable reassignments. However, unification should create no new reasons for reassigning employees.

Q. Will the staffs be consolidated after unification?

A. The only consolidation that is certain is that there would be a single District Superintendent, where we now have one for the China Lake and one for the Indian Wells Valley Elementary Districts. The superintendent of Kern High School District is not affected. Rand District has no superintendent position.

Other areas which lend themselves to possible consolidation under one district are: Business office, maintenance service, supplies and warehouse service, food service, library service, transportation service, and special services. This list is not inclusive, nor should it be concluded that all these services would be consolidated.

Q. What happens to surplus employees?

A. Surplus employees are dismissed in the reverse order of their seniority. Past experience indicates that dismissals are usually not necessary, since attrition and reassignments take care of most of the need for personnel reductions.

Q. What is the effect of unification on teacher recruitment for the high school?

A. The recruitment policy will have to be determined by the new board. The question really becomes whether the drawing power of a smaller district (for secondary teachers) is equal to a larger district. Supply and demand affects the recruitment policy as much as district size and availability of funds. Presently the supply exceeds the demand, but it could change in the future. The high school teachers will lose the opportunity to transfer to other high schools in the district without any loss of benefits. On the other hand, with unification, high school teachers could have opportunity to transfer to either of the junior highs in the new district without any loss of benefits and junior high teachers (with full secondary credentials) could have opportunity to transfer to high school.

Subcommittee Reports On Status of School Facilities, Equipment

(Editor's note: A subcommittee headed by Paul Erickson, as chairman, has developed the following report on facilities and equipment for the Citizens Advisory Committee on Unification of Schools. Others serving on this sub-committee with Erickson were Howard Derrickson, Frederick Johnston, Joseph Cloonan, Robert McGill, Evelyn Mayne, Kenneth Weiser, and Donald Romine. Burroughs High School liaison representatives were Charles Humphreys and Sam Bogal.)

Population Forecast

It is fundamental to the question of school needs to anticipate the requirements in sufficient time to fund and construct the necessary facilities. The penalty for inadequate response is over-crowded classrooms, decreased morale, impaired quality of education. The need for facilities is based on present and expected population in the area served by the schools.

Rapid population growth has already had its effect on class size and scheduling in the Indian Wells Valley Joint Union School District and shortcomings in the distribution and location of classrooms have become apparent.

Population on Increase

Estimates from the City of Ridgecrest Planning Department indicate that the present population is 10,325, rising to 14,000 in 1976. Continental Telephone Co. projections coincide with this estimate of the 1976 City of Ridgecrest population. This company's estimate of the current population of the Ridgecrest, China Lake, Inyokern, and Randsburg areas is 24,800 currently, rising to 27,500 in 1976 and to 30,000 by 1980.

All of these areas are predicted to rise at the same rate, except for China Lake where the present population of 10,900 is expected to decrease to 9,900 by 1976.

It is apparent that the growth rate of the area, which is exceeding the state and county rates, will require remedy of the expected shortcomings in the distribution of school facilities and will require a continuing re-examination of the needs for school facilities.

Status of Existing Facilities

Rand School District: Construction will soon commence on a new 100 student capacity school building. Present enrollment is 63 students (March 1973).

China Lake School District: Major construction is being performed at present which includes complete rehabilitation of the existing buildings. This planning began before the current student population decrease began. This district now has vacant classrooms which are being rented to the Indian Wells Valley Joint Union School District. The outlook is for a continued decrease in students in the China Lake District. Present enrollment is 2,109 (September 1972).

IWV Union School District

Inyokern attendance area - An architect is preparing the plans for a new building and rehabilitation of another. Funds are available for construction. Inyokern attendance area needs for kindergarten

through sixth grade are being met.

Ridgecrest attendance area - Las Flores and Ridgecrest Heights Schools meet the earthquake safety standards. James Monroe has 5 buildings (5 classrooms, cafeteria, kitchen, and counseling offices) which do not meet earthquake standards.

A need for classrooms is indicated for Ridgecrest Heights School by population distribution (K-6). The greatest need for classrooms in the district is indicated to be specialized classrooms for the educational program at the 7th and 8th grade level (intermediate level). An intense and continuing study of population growth and its distribution is needed to arrive at good decisions.

Although the IWV School District is renting classrooms from the China Lake District, it has the disadvantage that this is an expense in the operating budget which reduces the amount available for the educational program. The outlook is for increase in student enrollment in the IWV School District, over the present (September 1972) total of 2,160.

Burroughs High School: Present facilities at Burroughs are in good condition and meet all standards. Needs include improved food service facility, additional gym locker room facilities, expansion of library and faculty room, replacement of shop machines, and additional vocational education facilities.

Present enrollment is 1,874 (October 1972). Outlook is for increase. Desired maximum size is 2,100 to 2,200 students at which time a second high school facility will be required.

Mesquite High School: One of the "continuation high schools in the Kern High School District classified as a "small high school" (less than 300). Located in two buildings recently purchased by the district (former church and church school buildings). There are some immediate construction needs.



PATENT AWARDS PRESENTED — Dr. Hugh Hunter (at left), head of the NWC Research Department, recently presented initial holding patent awards to (from left) Anthony San Miguel, Alan Woodman and Dr. Arnold Adicoff—all employees of the Chemistry Division. San Miguel's invention, "Analog Gun (Selection of Consumable Cartridge Materials)" provides a device for the selection of consumable cartridge materials by simulation of the condition of an actual gun. Woodman and Adicoff's invention entitled "A Method for Reducing the Viscosity of Aluminum-Gelled Fuels" is a method for degelling or lowering the viscosity (thickness) of a hydrocarbon fuel which has been gelled by an aluminum soap.



READY TO SERVE — Nineteen Red Cross hospital volunteers were graduated recently during a ceremony that took place in Ward 1 of the NWC Dispensary. Shown in the photograph are 13 of those who completed the 15-hour course. They are (seated, l.-r.): Mary Clinton, Gail Connell, Martha Levenberg, Rene Tate, Carol Morris and Barbara Hinman, and (standing, l.-r.): Maria Sediak, Shirley King, Mary Gibbons, Karin Hull, Mary Ann Kaufman, Myrna Covert and Kay Adams. Other graduates, unable to be present for the photograph, were Joan Ellefson, Lorrie Van Hagan, Sharon Carrell, Doe Keihner, Helen Koelman and Pat Becket. The women all received training that prepared them for volunteer work at the Dispensary — some as dental assistants and some in pediatrics. Pins and certificates were presented by Capt. Thomas Stephenson, NWC's dental officer, while Cdr. Frances Frazier, senior nurse at the Dispensary, distributed hospital certificates. The graduation ceremony was concluded by reading of the hospital volunteer service pledge by Mrs. William Sturman, chairman of hospital volunteers.

Present enrollment fluctuates from 36 to 45 students. Capacity is 80 students with certain remodeling.

Audio-visual, Other Equipment

There is considerable inequality in the availability of audio-visual and other teaching equipment when comparing the school districts. To correct this inequality will be an immediate funding requirement for the Unified School District if formed.

Equipment, warehouse material, stock district office equipment and other portable (non-built-in) assets of the Kern High School District are common property. If there is a yes vote on unification, these properties will be divided, based on a ratio of about 6.58 per cent to Burroughs and 93.42 per cent to Kern H.S. District (still tentative). Where division of property is not possible (single item), cash equivalent of the appraised value of the property will be prorated.

School construction programs of the future under non-unified or unified conditions are considered next.

Non-Unified

Rand School District: Has met immediate need. Bond issue of \$95,000 and State Aid of about \$84,500 (precise amount not yet available) was used to meet the \$134,583 low bid for construction (to

commence in near future). State Aid has been provided under Education Code Section 15518 to build new school so as to comply with earthquake standards.

China Lake School District: Outlook is for excess facilities. Has no bond indebtedness.

IWV Union School District: Needs facilities. Special need at the 7th and 8th (intermediate level). Could partially meet needs by renting from China Lake using operating budget funds.

In September 1971, the IWV School District's voters authorized the issuance of \$2,000,000 in bonds and in February 1972, they authorized the borrowing of \$2,000,000 from the State "Public School Building Loan Fund." The first issue of bonds was for \$1,160,000 and they were sold Dec. 1, 1971. Improvements and major repairs at Inyokern and James Monroe Schools are currently being designed using the bond sales proceeds. Estimated cost of all projects being planned to date is \$486,912. There are no firm plans for the remaining \$673,088.

High School Level — The Kern High School District is contemplating a bond issue question to be submitted to the voters in the Fall of 1973 or Spring 1974. Burroughs and Mesquite High Schools will be included.

Burroughs High School also has an approved project construction eligibility for \$956,000 in federal funding under Public Law 815 Section 5. These funds may become available in 3 to 5 years.

High School Level — The Kern High School District is contemplating a bond issue question to be submitted to the voters in the Fall of 1973 or Spring 1974. Burroughs and Mesquite High Schools will be included.

Bonded Indebtedness

Investigations by this committee project the following probable bond tax rates:

Non-Unified in 1974-75

China Lake - \$0.19 per \$100 assessed valuation

Rand - \$0.84

I.W.V. - \$0.55

Unified District

According to the terms of this election, the unified district would assume all of the existing bonded indebtedness of the components. All taxable property in the unified district will be taxed as necessary to meet the combined (all in one total) obligations existing at the time of formation of such district - (July 1, 1974).

Kern High School bonded indebtedness will be prorated to the new district on a ratio of the total assessed valuation existing in the three elementary districts during the year 1971-72 to that existing in the High School District during the same year.

The new district will then have legal limits of bonded indebtedness of 5 per cent at the elementary level and 5 per cent at the second-

ary level.

The 7th and 8th grades can be included at either the secondary or elementary levels whichever will establish the least overall costly funding program.

By having assumed the bonded indebtedness of the component districts, the new district may use all available bond funds anywhere within the new district.

With respect to the approved project construction eligibility of \$956,000 in federal funding under Public Law 815, Section 5, for Burroughs High School, assurance was given it would still apply in a unified district.

Alternatives for funding school construction in a unified district are:

1. "Pay as you go" with funds set aside in the operating budget. Has the disadvantage of requiring much time to create a sum large enough for a project of any considerable size. Has the advantage of not spending money for interest payments.

2. Continue to work for the \$956,000 Federal fund eligibility at the high school.

3. Meet the State requirements for planning and justification and enter the "Bond" plus "State Loan" program.

In addition, this committee found that the unified district would acquire the obligation to repay the State Aid provided to the Rand District to build a new school meeting earthquake standards. This would be in addition to the General Fund Tax Rate computed in accordance with Senate Bill 90. It is expected it would only be on the order of \$0.03 per \$100 assessed valuation.