

Cast Chosen by Director For Next CLOTA Musical

William R. Blanc, director of the Community Light Opera and Theatre Association's next production, "1776" announced recently that he has chosen the cast for this musical re-enactment of the events leading up to the signing of the Declaration of Independence.

"Script requirements called for so many men that we were afraid we wouldn't be able to fill all the roles," Blanc said. "Fortunately, we were able to assemble a strong and complete cast. I'm looking forward to creating this show with the help of some new talent, and some experienced people I've never worked with before, as well as with any of my old friends from last year's 'Mame' cast," he added.

Assisting Blanc with casting decisions were Russ Parker, musical director, and Sherry Parker, assistant director.

Alex Bellen will portray the leading role of John Adams. Bellen, familiar to local audiences as Teyve in "Fiddler on the Roof" and Sky Masterson in "Guys and Dolls," will duel in Congress with Herb Childers, who has been assigned the role of John Dickinson.

Childers, who has appeared in many local amateur productions, is best remembered perhaps for his direction of CLOTA's "Man of La Mancha."

Jim Rosolanka, who has been involved either onstage or behind the scenes in CLOTA's last four productions, will portray the role of Benjamin Franklin, while Greg Erdmann, as Edward Rutledge, will vocalize on the show's most difficult number, "Molasses to Rum to Slaves."

Erdmann, who was the featured vocalist for a concert presented recently at the All Faith Chapel, played the role of Nicely-Nicely in "Guys and Dolls."

Thomas Jefferson will be portrayed by Rick Menz and the role of his wife, Martha, has been given to Debbie Wood. Joan Renner will be seen as Abigail Adams.

Doug Blew, as John Hancock, will preside over a Congress that is helped in its day-to-day functioning by Charles Thomson, secretary, played locally by Ernie George, and Andrew McNair, custodian, played by Leo Barglowski.

Important musical roles will be filled by Mike Walker, as Richard

Henry Lee; John Wooldridge, as Roger Sherman; Carl Helmick, as Robert Livingston, and Rick Howell, as the courier.

Other members of the Continental Congress are Loren Russakov (Dr. Lyman Hall), Ralph Vuono (Stephen Hopkins), Wes Willett (Lewis Morris), Fred Stahlman (Samuel Chase), Mike Zaleski (James Wilson), Charles Guilmette (Caesar Rodney), Joe Farris (Col. Thomas McKean), Ken Anderson (George Read), John Pietras (Rev. Jonathan Witherspoon), Gene Richardson (Joseph Hewes), Jack Ahearn (Dr. Josiah Bartlett), and Bob McKee (Leather Apron).

CLOTA will present "1776" on March 9, 10, 16, and 17 in the Burroughs High School Lecture Center. Tickets for the coming season, which also will include "Hello Dolly," "A Lion in Winter," and "Star Spangled Girl," are now on sale. Further information about season tickets can be obtained by calling Annie Blanc at 446-7265.

Tryouts To Be Held Next Week For 'The Mikado'

Tryouts for Gilbert and Sullivan's "The Mikado," will be held next Tuesday, Wednesday and Thursday at 7 p.m. in the Burroughs High School multi-use room.

Pat Schwarzbach, director of speech and drama at Cerro Coso College, stated that all one needs to do to be in the operetta is to sign up for Theater 27, a class held at the college each Tuesday and Thursday from 7 to 10 p.m.

Those who wish to audition for a major role should be prepared to sing a solo number.

"The Mikado" is a well-known comic operetta that revolves around the emperor's son, Nanki-Poo, who wishes to marry a delectable girl named Yum-Yum. However, the Mikado has already promised the son to another woman, whom Nanki-Poo believes to be "a hag."

He flees the palace and winds up in the home of Yum-Yum, who is betrothed to Ko-Ko, the Lord High Executioner (who, by the way, has not executed anyone in "months"). Here, the plot gets rather involved, as Nanki-Poo is executed and then resurrected, all through guile, and winds up with his love.

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HAPPY THESPIANS — Chosen as the most outstanding actors and actresses of the 1972 season by the Community Light Opera and Theater Association, the four thespians above hold their trophies. They are (l.-r.): Fred Stahlman, best supporting actor; Suzanne Koerschner, best actress; Jim Feiser, best actor; and Marsha Burgner, best supporting actress. In the photograph at right, Vivian Childers was selected by CLOTA to receive the Jane Bugay Memorial Award for making the most outstanding contribution to CLOTA over the past eight years. Larry Sawyer, right, made the presentation.

CLOTA's 'Best' Thespians Singled Out at Banquet

For the second consecutive year, Florence Green was singled out as the best director of the year by the Community Light Opera and Theatre Association (CLOTA). Mrs. Green, who won in 1971 for "Fiddler on the Roof," was the director of "Guys and Dolls," judged CLOTA's best production in 1972.

Presentation of the best director award came at the third annual CLOTA banquet, held at the Chief Petty Officers' Club last Sunday evening. In addition to selecting a "best production," awards were given out for the best actor and actress and best supporting actor and actress from CLOTA's three 1972 productions "Guys and Dolls," "Mame," and "Plaza Suite."

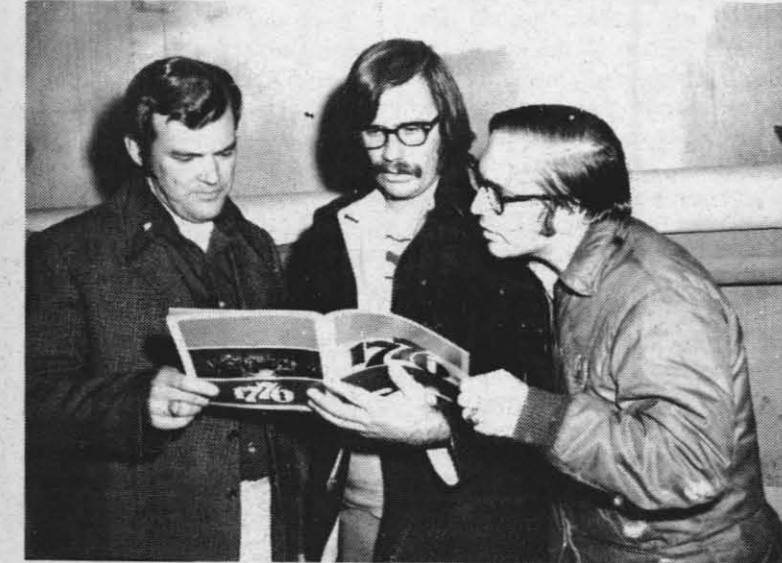
Jim Feiser, who portrayed Nathan Detroit in "Guys and Dolls," was selected best actor and Tickets Go On Sale for Talk By Hopi Indian

Tickets will go on sale beginning today at the Maturango Museum for another museum-sponsored program coming up on the evening of Monday, Feb. 26, at the Burroughs High School Lecture Center.

Featured at that time will be a talk by White Bear, a Hopi Indian chief, who will present an illustrated lecture on the Hopi Indian religion and the interpretation of petroglyphs.

Tickets to the 7:30 p.m. program, priced at \$1.50 each, can be purchased at the Maturango Museum or ordered by calling Ruth Pearson, 446-2925.

White Bear, an artist and member of the Bear Clan, was the source of information on the Hopi Indians' historical and religious view of life that can be found in "The Book of Hopi," written by Frank Waters.



LOOKING OVER BROCHURE — The three main leads in the upcoming CLOTA production of "1776," Alex Bellen, Herb Childers and Jim Rosolanka (left to right), study a brochure about this historically accurate musical re-creation of the birth of this nation. The three men will portray John Adams, John Dickinson, and Benjamin Franklin, respectively.

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 - Circumcise STD - Standard Movie Screen

- FRI. 2 Feb. "BLINDMAN" (CS 102 Min.) Ringo Starr, Tony Anthony... SAT. 3 Feb. "YOUNG BILLY YOUNG" (STD 89 Min.) Robert Mitchum, Angie Dickinson (G)... TUES. & WED. 4-7 Feb. "THE WRATH OF GOD" (CS 111 Min.) Robert Mitchum, Rita Hayworth... THURS. & FRI. 8-9 Feb. "ONE IS A LONELY NUMBER" (STD 97 Min.) Trish Van Devere, Monte Markham...

nwc rocketeer

Naval Weapons Center China Lake California Vol. XXVIII No. 5

Hiring Freeze Continues At Naval Material Labs

A previously announced freeze on the hiring and promotion of civilian employees within the Department of the Navy was lifted yesterday—EXCEPT at Naval Material Laboratories such as the Naval Weapons Center. A message received Wednesday from the Secretary of the Navy announced the end of the freeze on hirings and promotions which went into effect during the second week in December, noting that, effective Feb. 1, "hiring and promotions are authorized consistent with assigned employment targets and funds for Fiscal Year 1973, and the budget for Fiscal Year 1974 which reflect policy with respect to employment levels and promotions."



INVENTORS TEST SOLUTION — Ruth Tedrick, left, and Herbert Richter, inventors of the present Chemlite, test the catalyst by mixing it with the fluorescer to produce one of the convenient, handy little chemical lights. The two chemists invented the current model of Chemlite in 1970 after eight years of working with other types of chemically-formed lights.

NWC-Developed Chemlite Found To Be Valuable in Emergencies

A pair of successful rescues at sea late in 1972 have focused attention on Chemlites (short for chemical lights), the brightly colored, non-pyrotechnic lights developed at NWC. In the first incident, a crewman was washed overboard from the U.S.S. Iwo Jima (LPH 2) and Chemlites were dropped into the water to mark the position of the man and to enable a helicopter pilot to get a "fix" on the water and effect the rescue. In the second rescue, two men were in the water after problems with their aircraft forced them to ditch. A helicopter crewmember, wearing a green EX16 Mod 1 Chemlite attached to his wet suit, was dropped into the water near the two downed airmen. This enabled the crew members to swim to him. The pilot of a 'copter then centered his aircraft over the green light and lowered a recovery sling, to which was attached an EX 17 Mod 1 orange Chemlite. The two Chemlites served as both vertical and horizontal guides, enabling rescue team members to do their work in an expeditious manner.

600 Families Get Questionnaires About Housing

Mailed out this week to a sampling of 600 military and civilian families occupying Navy housing quarters was a copy of the annual Naval Weapons Center housing survey. Purpose of the survey is to obtain information needed in support of future housing improvement projects at China Lake. Those receiving the family housing questionnaire are asked to complete it as soon as possible and return it by mail no later than next Friday, Feb. 9.

High Speed Camera Expert Gives Help to Italians

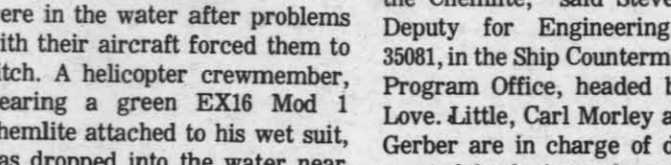
Gordon A. Greene, an explosives research physicist whose specialty is high speed cameras, recently journeyed to Italy to take part in a nine-day data exchange meeting between the Italian Ministero della Difese (Ministry of Defense) and America's Department of Defense. Greene, who made the trip at the invitation of the Italians, was accompanied by two other Americans — Dr. Martin F. Zimmer, project officer of the meeting, who is an explosives research expert employed at the Air Force Armament Laboratory, Eglin Air Force Base, Fla., and Robert L. Jameson, an explosives physicist at the Ballistics Research Laboratory, Aberdeen, Md. Greene provided information on two types of ultra high-speed

Filing Time At Hand for School Trustee Posts

China Lake residents interested in serving on the board of trustees of the local elementary school district have until Feb. 16 to file declarations of candidacy, according to information received this week from Vera K. Gibson, Kern County clerk.

Social Security

A representative of the Social Security office in Lancaster will pay another in his regular series of monthly visits to China Lake next Wednesday, Feb. 7. Persons wishing to obtain a Social Security or apply for Social Security benefits can do so at the Community Center between 8:30 and 11 a.m. cameras with which he is familiar—framing cameras and streak cameras—and acquainted the Italian experts with their use. The Italian government representatives were Dr. Enzo Brandimarte, inspector general in chief of the Ministero della Difese; Lt. Col. Dr. Marcello Busco, Dr. Lanciani, and an engineer known only as Laurienzo. The latter two men are employees of SNIA, an Italian firm that furnishes explosives and research facilities to



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CPO WIVES INSTALL NEW PRESIDENT—Jan Parker, left, past president of the CPO Wives Club, presents the gavel to newly-elected president Rena Schmidt, following ceremonies held Friday night during the annual installation dinner at the CPO Club.

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.

Mathematician, GS-1520-7, 9 or 11, PD No. 734010, Code 4064 — This position is that of digital systems programmer and digital operations consultant in the Center's Simulation Laboratory.

File applications for above with Elizabeth Sodergren, Bldg. 34, Rm. 204, Ph. 2676.



OUTGOING CHAIRMAN HONORED—A gavel and plaque bearing the Employee Services Board logotype was presented during the January board meeting to Jules J. Deffes (at right), who served as ESB chairman for the past year.

Theme of Afro-American History Week Announced

The annual observance of Afro-American History Week, which this year falls during the period of Feb. 11-17, will be centered around the theme, "Biography Illuminates the Black Experience."

This biography deals with people, and through people it is easier to understand movements, institutions, events and life-styles.

Patrons of the Center Library have shown a great interest in books about various aspects of the Afro-American experience.

The range of reading levels covered on this subject includes many recent books written for junior high and young adult readers.

In the magazine racks at the Center Library, readers also will find current copies of "Ebony," a high quality monthly publication which provides a well-rounded view of contemporary Afro-American life.

Lecture Slated On North Fork Of Kern River

Kern River's north fork will be the topic of a forthcoming lecture, sponsored by the Maturango Museum, to be held next Wednesday, Feb. 7, at 7:30 p.m. in the Richmond School auditorium.

Faye Couch will narrate the program and will show color slides she has taken of this geologically interesting, but seldom visited, area north of Lake Isabella.

The north fork lies in a 62-mile-long straight canyon running parallel to and west of the Sierra crest. Mrs. Couch will describe the geology of the area, identify the major types of trees and shrubs, and will show slides she has taken while flying over the entire length of the canyon.

Such keys can be checked out at the Community Relations Office (Code 0231), located in Room 25 of the Housing Office building. Use of McBride Park by large groups also is being scheduled by this same office.

Call Toll Free Phone Number For Tax Help

Local residents who desire tax information from the Internal Revenue Service may now dial a toll-free number to get answers to questions on federal income tax regulations.

The number, 0-800-332-4500, should only be dialed from the local area. Federal tax forms and special pamphlets may be requested and will be sent without charge.

Positive or negative comments on the service received by persons using this number are solicited by the Internal Revenue Service. Feedback should be sent to the IRS, 9050 E. Flair Dr., El Monte, CA 91734, marked to the attention of Dale Zemka, Chief, Taxpayer Service.

Agents from both the IRS and the California State Franchise Board will pay a visit to the China Lake Community Center on Wednesday, Feb. 21, from 9 a.m. to 4 p.m., to answer questions and help in completing federal and state income tax returns.



WHOO-EE THAT SMARTS!—This tiny Chihuahua was one of the 623 canine pets brought by their owners last Friday to the rabies vaccination clinic held on the Naval Weapons Center.

PROMOTIONAL OPPORTUNITIES

(Continued from Page 2)

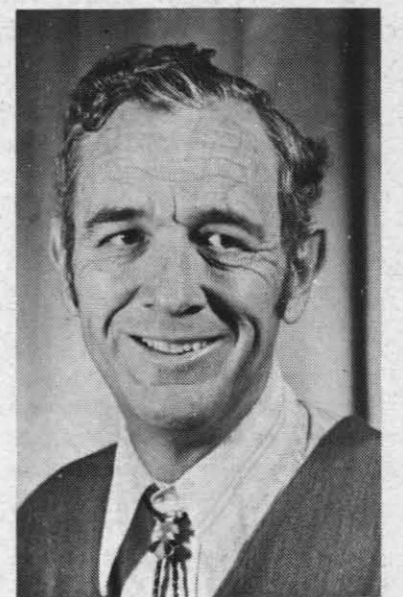
reproduction copy for any type of publication produced by Code 751; forms a synthesis of word and art by putting together galley copy, layouts, paste-ups, compositions, illustrations, and tables; copyeditors and marks for composition; operates MISC and performs editorial proofreading and copyholding.

File applications for above with Mary Morrison, Code 457, Rm. 212, Ph. 2371.

Clerk-Typist, GS-322-3, PD No. 7184023, Code 843 — Hours of work 0700 to 1700. May be required to work some weekends.

File applications for above with Charlotte Sieckowski, Bldg. 34, Rm. 204, Ph. 3118.

Employee In The Spotlight



Donald W. Moore

Don Moore has been around a long time, if you count the three summers he worked at NWC while he was a student at the California Institute of Technology in Pasadena.

Don was born in Los Angeles and was graduated from El Monte High School in 1945. World War II was still under way and he enlisted in the U.S. Navy "for the duration," which wasn't far off at that time.

Early in 1946, he was offered the choice of going home or staying in the Navy. "I went home," Don says, simply.

He entered CalTech and four years later (1950) he was granted a bachelor's degree in chemistry.

During the summers of 1947, 1948 and 1949, Don came to NWC to work under Dr. Bill McEwan in the Research Department's Chemistry Division. "I worked at a desk calculator," he explained.

After his graduation from CalTech, Don was hired as an analytical chemist with the Dow Chemical Co. in Midland, Mich. He worked there for nearly one year, then Dr. McEwan wooed him back to China Lake.

"I started work as a technician in X-ray diffraction under Dr. Lohr A. Burkardt," Don commented.

In 1956, the Chemistry Division installed its first nuclear magnetic resonance spectrometer and Don was placed in charge of the system, working under Dr. A. G. Whittaker, who was then head of the Physical Chemistry Branch.

"I've been doing essentially the same thing since that time," Don said. "However, we've recently installed a new machine that is several hundred times more sensitive and the work has really gained a new dimension for me," he added.

The new machine, which cost \$150,000, is half computer and, once set up, operates completely under computer control. Small wonder that Don is excited, as this gives his work greater scope.

Don met his wife, Patricia, while they were both students at El Monte High School. She waited for him until he had completed his education before they were married. Putting the time to good use, Patricia underwent nurses training at Huntington Memorial Hospital in Pasadena, and received her registered nurses' credentials. She is employed by Kern County as a public health nurse, and travels around the eastern section of the county on Health Department business.

The couple has three boys: Gregory, 19, a classics major at University of California, Irvine, where he is a sophomore; Chris, 16, a junior at Burroughs High School; and Tyler, 12, a seventh grader at Murray School. All three boys have been in the Boy Scout program and were also members of the IWV swim team.

Chris plays the trumpet and belongs to the Burroughs marching band and the stage band. Tyler plays the saxophone and is a member of Murray School band. Through the boys, Don has worked with Boy Scout Troop 41 since 1964. He has been the assistant Scoutmaster all this time and says he "... has no desire to move up."

For the past five years he has taken the Scouts on an annual 50 mile Sierra trip and three years ago began to accompany the boys on a 50 mile canoe trip in the springtime. "The canoe trip was born out of a Troop 41 project of building fiberglass canoes. The idea grew and now some 40 canoes can be found throughout the neighborhood," he said.

Don is an amateur naturalist and conservationist. He thoroughly enjoys the backpacking trips with the Boy Scouts and frequently takes his family and Scouts on nature trips to various points of interest on the Mojave Desert. He belongs to the Audubon Society (named for bird scientist J. J. Audubon) and the Sierra Club.

In addition, Don has been a Maturango Museum member for many years and frequently is called upon to be a guest lecturer for the group's presentations to elementary students in the local area.

Although Boy Scouts and the swim team have taken up a lot of his time over the years, Don has not neglected his community or the Naval Weapons Center. He served on the Community Council for four years, two of them (1957 and 1958) as president, and this year is a member of NWC's Recruitment Panel. While serving on the Community Council, he was one of the developers of the Employees' Health Insurance Program and as a member of Research Society of America (RESA) he was a collaborator on the development of the Work Experience Program that is still being carried out at Burroughs High School.

"Each year we get 8 to 12 of the students out of that program in the Research Department, so it was worth it," he stated. Don also was president of the local RESA chapter last year and this year he is chairman of the Mojave Desert Section of the American Chemical Society. "I'm a past member of the American Association for the Advancement of Science, too," he said.

Patricia has been in charge of the China Lake PTA's pre-school vision screening program for the past six years. This is a voluntary testing program aimed at finding visual defects in pre-school age children.

The entire family enjoys camping and beekeeping. "We've got seven hives in our backyard at the moment, but we'll be moving them soon," Don chuckled. "Be sure our neighbors hear that."

Library Lists New Books

LIBRARY HOURS: Monday-Friday: 2-9 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 Bailey—Trespases. Brautigan—Trout Fishing in America. Connolly—Deer Run. Curtis—Banlieu. Davies—The Alien. Edem—Speak To Me of Love. Gardner—Every Night's a Festival. Harrison—The Light Fantastic. Henle—Death Files for Congress. McClure—The Steam Pig. MacDougall—Cheerleader. Metville—A New Kind of Killer. Morrison—Treehouse. Whitnev—Snowfire.

The Rocketeer

Official Weekly Publication Naval Weapons Center China Lake Lake, California

RAdm. Henry Suerstedt, Jr. NWC Commander. H. G. Wilson Technical Director. C. E. Van Hagan Head, Technical Information Department.



DIVINE SERVICES

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

ROMAN CATHOLIC MASS Sat@day 1700 fullfills Sunday obligation Sunday 0700 0830 1130

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

CONFESIONS Saturday 1545 to 1645 Sunday 0800 to 0825 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. "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 Saturday Sabbath School 0900

UNITARIANS CHAPEL ANNEX 9S Sunday Services 1930

Phones 3354, 3355, 2247

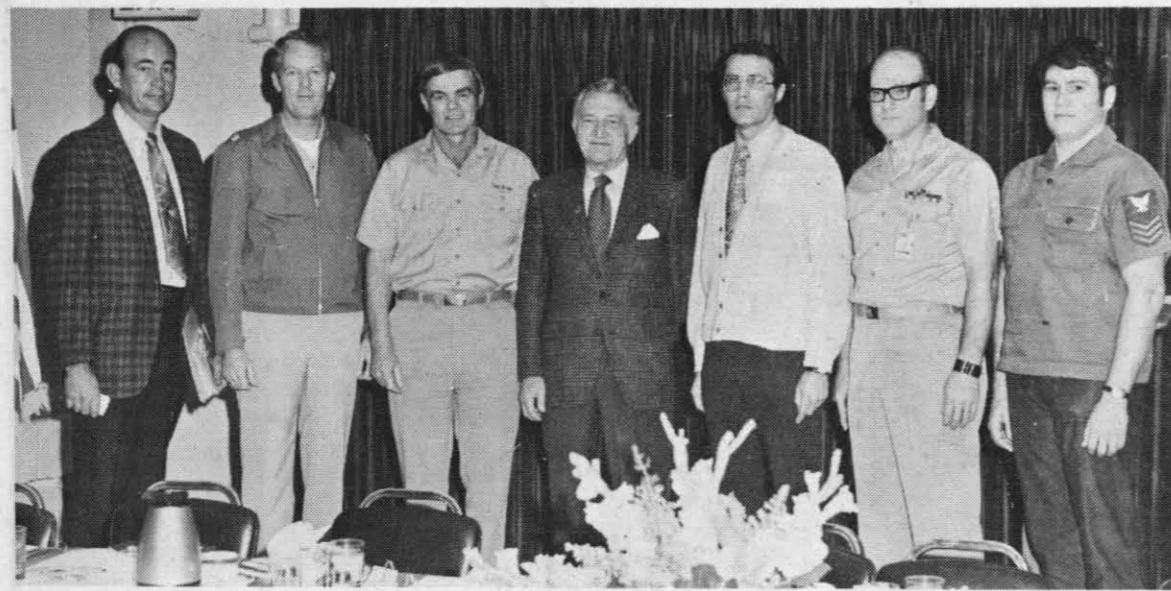


30-YEAR PIN—Robert Green, head of the Procurement Section in the Systems Procurement Branch of the Electronic Systems Department's Systems Sciences Division, was the recent recipient of a 30-year Federal Service pin that was presented by Leroy Riggs, department head. Green's Civil Service career, which has included employment at China Lake since June 1946, was preceded by active duty in the Navy from Dec. 3, 1941, to Oct. 13, 1945. In addition to working in Code 35, Green previously was employed as an aviation specialist in the old Aviation Ordnance Department.



NEGOTIATIONS CONCLUDED—Principals involved in recent labor negotiations between the Naval Weapons Center and Local 1781 of the American Federation of Government Employees gathered last week to witness the signing of their new contract by Rear Admiral Henry Suerstedt, Jr. (seated at left), NWC Commander. The current contract, which extends over a three year period, covers 62 Police Division personnel and 9 Civil Service guards.





PRAYER BREAKFAST PARTICIPANTS — This year's local observance of the National Prayer Breakfast was arranged under the leadership of Bob Forster (at left), chairman of the event. Among those who Forster called upon to handle various parts on the program were (from left) Army Lt. Col. Richard F. Boyd, Capt. Robert S. Moore, H. G. Wilson, the Rev. George Linstead, LCdr. Floyd R. Castillo and AT1 Ray R. Davis. —Photo by PHI D. C. Manderscheid

### Local Observance of National Prayer Breakfast Held Feb. 1

A message about tiredness of hearts and souls — something that cannot be relieved by vacations and more leisure time hours — and how to find relief by turning sincerely to the Lord was presented Thursday morning during the National Prayer Breakfast has become an annual event for the purpose of recognizing the moral and spiritual values upon which this nation was founded.

The inspirational address was given by the Rev. George Linstead, deacon of St. Michael's Episcopal Church in Ridgecrest. An NWC employee, Rev. Linstead heads the Technology Utilization Office in the Systems Development Department's Technology Development Division.

"Strength is not a question of character, nor is it a question of training. It is a matter of choice, a matter of your own free will," Rev. Linstead counseled his listeners.

"Today, during a moment of peace, let us stop to renew our strength, stop to collect our wits, stop to lift up our hearts, stop to love," Rev. Linstead urged those in attendance at the National Prayer Breakfast.

"They who wait for the Lord shall renew their strength. They shall mount up with wings like eagles. They shall run and not be weary, and they shall walk and not faint," the speaker quoted from the Bible.

"The secret of the renewal of strength is in learning to wait upon the Lord, to become responsive to Him. The secret is in a personal relationship with God. The secret is in the source of His power — love," Rev. Linstead continued.

"The real power which God uses to renew the strength of tired people is the power of His love. . . . No one is hopeless, for — especially in our time of what seems to be hopelessness — God is always near," Rev. Linstead said in closing.

Held at the Chief Petty Officers' Club, this local observance of the National Prayer Breakfast was attended by a capacity crowd of nearly 200 persons.

As master of ceremonies, Lt. Col. Richard F. Boyd, Army Liaison officer at NWC, introduced first LCdr. Floyd R. Castillo, Supply Department head of staff, and then AT1 Ray R. Davis, NWC's Bluejacket of the Year for 1972, who gave the invocation and led the pledge of allegiance to the flag, respectively.

In opening remarks, H. G. Wilson, NWC Technical Director, pointed out that prayer is something that has become a part of this nation's heritage, and it was in recognition of this fact that the National Prayer Breakfast has become an annual event for the purpose of recognizing the moral and spiritual values upon which this nation was founded.

He quoted a prayer once spoken by President Abraham Lincoln who petitioned: "Let us pray that the God of our fathers will not forsake us now."

Brief recorded messages from President Richard Nixon and Secretary of Defense Melvin Laird also were heard by those in attendance at the National Prayer Breakfast.

"Today there is no challenge greater than that to the spirit of America as we seek peace," the President noted in his remarks, while Laird stressed: "We can't expect God to honor our public

endeavors if we don't honor Him in private.")

The Secretary of Defense continued by calling attention to America's spiritual origin, and cited the importance of prayer as a bulwark of the spiritual values which the citizens of this nation have inherited.

A scripture reading from the Bible (Isaiah Chapter 40:26-31), which urges "Lift up your eyes to the Heavens," was read by Capt. Robert S. Moore, Commanding Officer of the Naval Air Facility. The reading was preceded by vocal music selections — duets sung by the Rev. Milton Martin, associate pastor of the Immanuel Baptist Church in Ridgecrest, and his wife, Mary, and followed by two songs by "The Impetuettes," a women's barbershop quartet harmony group composed of Mrs. Jan Arisman, Mrs. Janet Hamilton, Mrs. Eleanor Hartwig and Mrs. Paula Seewoster.

The benediction by Robert A.

### Camera Expert Aids Italians...

(Continued from Page 1) the Italian government.

Two topics of discussion highlighted the meetings, which took place at the explosives production plant and test facility of SNIA at Colleferro, and at a new test facility located near the town of Frascati. The principal subjects aired were the optics of explosives, and explosive research instrumentation.

According to Greene, the Italian test facilities are "not large," and they do not have the extensive range perimeters found at NWC. "However, they are going about the business of explosives research in a very professional manner," he said.

The Italian government only recently began to delve deeply into this type of research, Greene stated. "They haven't had the facilities until now," he noted.

The high speed cameras discussed by Greene have recently been purchased by the Italian government. They are capable of operating at a maximum rate of 5 million pictures per second and will give the user the means to resolve different detonation phenomena.

Greene explained the cameras in laymen's terms. "Suppose you had a light that was blinking on and off at a very high speed. The streak camera would record the light as a series of dots along the film, each dot representing one burst of light. With the streak camera it is possible to separate the dots, even if they were only three nanoseconds apart." (A nanosecond is measured as one light foot, or more simply, the time it would take light to travel one foot in distance.)

Leonard, senior electronic technician in the Radar Systems Branch of the Electronic Systems Department's Electronic Warfare Division, concluded the National Prayer Breakfast observance here.

Flash X-ray equipment, (which Greene also explained) allows scientists a look at what's happening inside something detonating. Greene's expertise also covered the use of flash X-ray and various other electronic instrumentation to record detonation data.

The typical exposure with flash X-ray is about 50 nanoseconds. "A classic use of this equipment is the recording (on film) of fragments inside a smoke cloud, which can not be observed by a camera," Greene explained. "When a weapon explodes, the case begins to come apart and black smoke pours out, obscuring fragments. Flash X-ray allows the user to see these fragments," he added.

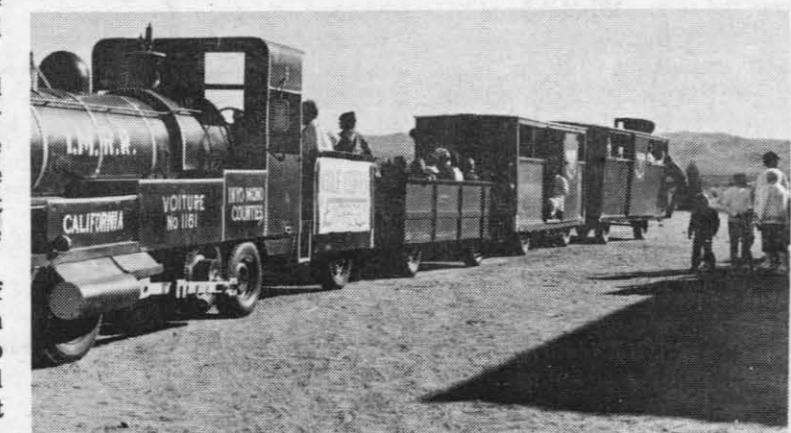
Greene was graduated from Bucknell University, Lewisburg, Pa., with a bachelor's degree in electrical engineering and joined Sandia Corporation in June 1957. He came to NWC as an electronics engineer with the Research Department's Chemistry Division in February 1964, and transferred to the Propulsion Development Department's Applied Research and Processing Division (called the Explosives and Pyrotechnics Division then) in 1968.

His job title was changed from electronics engineer to physicist in 1968.

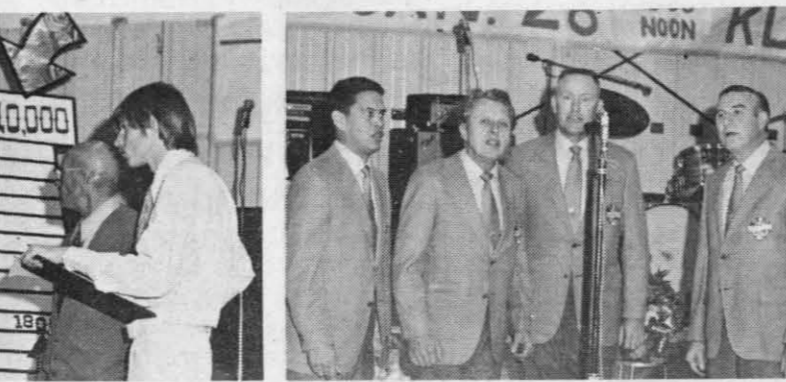
### Naval Scientists Can Now Study Crystal Growth

Scientists at the Naval Research Laboratory in Washington, D.C., have developed a holographic system that enables them to study crystal growth from the molten state.

A better understanding of crystal growth in molten metals is expected to enable metallurgists to find methods of producing stronger and more reliable metals for naval applications.



AN IMPORTANT FIRST STEP on the way to achieving the \$10,000 goal set for development of a golf driving range and miniature golf course in Ridgecrest was taken Sunday afternoon at the Desert Empire Fairgrounds. Joshua Community Hall was the setting for a 5-hour Radiothon, broadcast over Radio Station KLOA, which brought in cash and pledges totalling \$3,300. Visitors to the fairgrounds during this fund-raising event had the opportunity to ride an American Legion version of the World War I vintage French 40 and 8 trains on a short jaunt from the fair's permanent exhibit building to and from the nearby golf complex to inspect work that has already been completed on this new recreation facility. Among



entertainers who donated their time and effort to help in this Ridgecrest Improvement Committee community venture were the Burroughs High madrigal singers, directed by Alan Kubik (top right photo); Susan Rungo, Miss Ridgecrest-China Lake, shown vocalizing (lower left photo) with the backing of members of "The Iron Horse," a local musical group; and the Medallions (lower right photo), a barbershop harmony quartet composed of Clay Panlaqui, Ray Becker, Warren Stump and Henry Wair. Seen in another photo (lower center) are Councilman Rex Shacklett and Ted Edwards, RIC co-chairmen, and Blaine Davies, announcer for Station KLOA, as they reported on returns in the fund-raising drive.

## Highly Successful Air Show Held at Inyokern



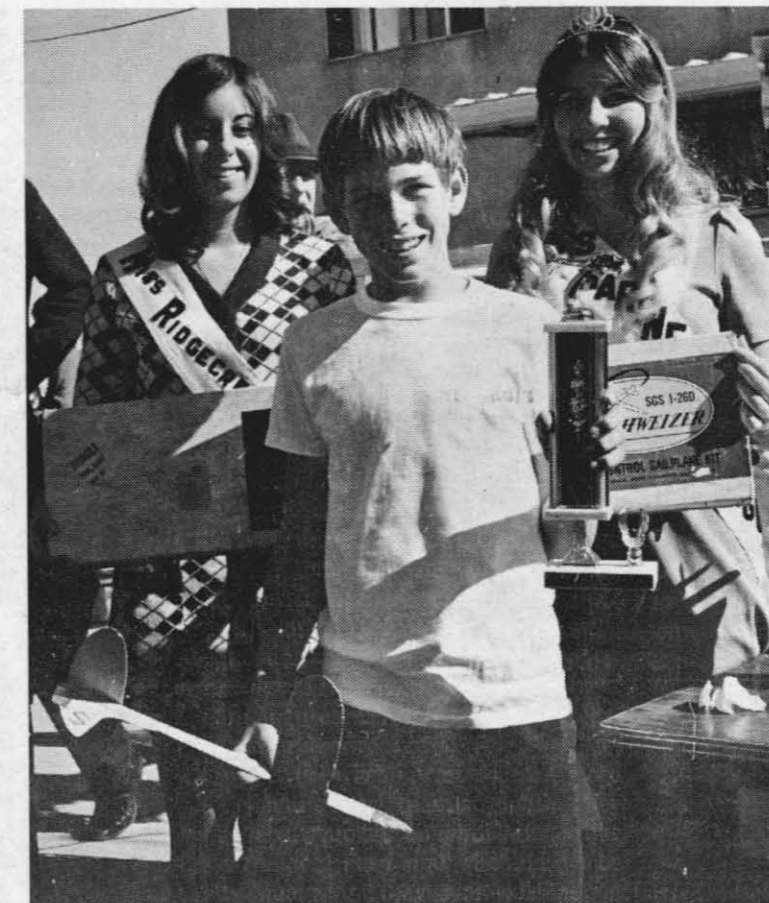
BULLSEYE! The nearby target panel was just a few feet away when this 'chutist, one of eight members of the Navy's Exhibition Parachute Team, landed.



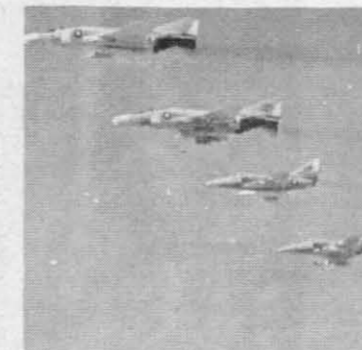
AMONG EXPERIMENTAL-TYPE aircraft on display at the 2nd annual Air Fair at Inyokern airport was the midget Mustang brought here by Charlie Lynn, of Lancaster. Just beyond it is a World War II model Corsair flown in by Bob Guilford of Beverly Hills. Also visible is one of two hot air balloons that were inflated, hovered over the air field and then drifted westward with the wind. The fearless balloon pilots were Ted Farrell, of Los Angeles, and Joe Sloan, of Lynwood.



COLORFUL CANOPIES designed especially for the exhibition drops were clearly visible in the desert sky. The parachutists also trailed smoke during a portion of their descent.



RICKY WRIGHT emerged as the grand champion of the model glider contest which preceded the air show portion of Saturday's Air Fair at Inyokern airport. Winner in the 13-14 year old class, young Wright's entry had the best overall flight time — a mark of 30 sec. — in the contest. He is flanked by Susan Rungo (at left), Miss Ridgecrest-China Lake, and Kathy Flynn, Miss Marine Corps League.



NAVAL AVIATORS from China Lake opened the air show with a demonstration of formation flying.



A POPULAR ATTRACTION at the Air Fair was this miniature helicopter, called the Scorpion One, which was put through its paces in the air by Al Newell, of the RotoWing Co.



A REAL CROWD PLEASER was Myra Slovak, one of the top aerobatic pilots in the country, whose inverted passes flown close to the ground thrilled onlookers.



A THrong estimated at more than 2,000 persons attended the Air Fair, sponsored by the High Desert Detachment of the Marine Corps League with assistance from the Civil Air Patrol, the China Lake Glider Club and the Experimental Aircraft Club. Money brought in by donations for attendance will help underwrite the expense involved in training a blind Marine and his canine companion at a school for guide dogs for the blind.



TOP ATTRACTIONS at last Saturday's Air Fair were members of the Navy's eight-man Exhibition Parachute Team from Coronado — two of whom are shown moments after landing.

Air Show Photos By PH2 D. W. Yeatts