

## Baritone Frank Guarrera In Concert Here Tuesday

Metropolitan Opera baritone Frank Guarrera will present a concert Tuesday, February 6, at the Center Theater, for the third of the China Lake Civic Concert Association's 1968 concert series.

Since his meteoric rise to fame after winning the Metropolitan Auditions of the Air at

as Omnibus and Voice of Firestone. His recordings for Columbia, RCA Victor and the Metropolitan Opera Record-of-the-Month Club have enlarged his audience still further.

Guarrera has sung nearly 30 operatic roles, including the title roles in "Rigoletto" and "The Barber of Seville."

Possessed of a natural acting ability and an easy, masculine grace on stage, his great success in these roles may also be attributed to the fact that, as part of his preparation, he does a thorough motivational study of each character he portrays.

For the role of Escamillo in "Carmen," he studied bullfighting from such experts as Barnaby Conrad and Sidney Franklin—minus the bulls, of course. The result has been an overwhelming success.

The board of directors of the China Lake Civic Concert Association has announced that individual seats will be sold for the Guarrera concert on Tuesday.

The box office at the Naval Weapons Center Theater will be open at the following times to sell tickets:

Friday, February 2, and Monday, February 4 from 11:30 a.m. to 1 p.m. and from 4:30 to 6 p.m.

Tuesday, February 6 from 11:30 a.m. to 1 p.m. and after 7:30 p.m. to concert time.

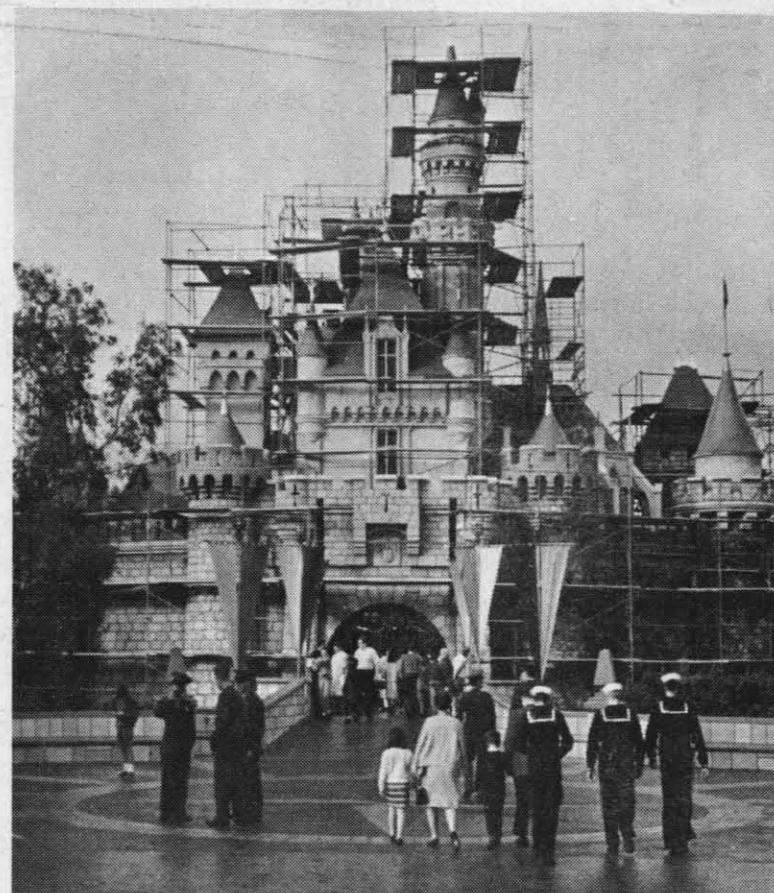
Individual tickets for the concert Monday night are priced at \$3, \$4, and \$5, depending upon location at the NWC Theater. Elementary and high school students may obtain tickets at half price and service-men may obtain their tickets for \$1.50.



FRANK GUARRERA

the age of 21, Guarrera has become one of America's most sought-after performers. He has in the past 11 years not only appeared more frequently at the Metropolitan than any other baritone, but is also a regular guest star with the opera companies of San Francisco, Cincinnati, New Orleans, and Philadelphia.

Concert tours have taken him across America many times and to Puerto Rico, Mexico, South America and Canada. Radio and TV listeners know him through such shows



**DISNEYLAND, USA** — The main entrance to Fantasyland is approached by members of the Navy and Marines taking advantage of the entertainment at Disneyland. During special "Armed Forces Weekend" planned this spring, military personnel may purchase a single ticket good for both Saturday and Sunday, including a 12-ride book for any attraction — a \$15 value for \$5. Only active duty and retired military personnel and their families will be eligible for "Armed Forces Weekend Passes." Uniform not required. Get your Magic Kingdom Club card at NWC Community Center or call Mrs. Ann Seitz, Ext. 72010 for additional details. This will be an outstanding opportunity for military families to take advantage of special values.

## Color Slide Talk Headed by Former German Physicist Dr. W. Spilger

Dr. Werner Spilger, a former German physicist in the field of aeronautics, will present a lecture with color slides

to the China Lake Astronomical Society February 5, 1968, at the club house at 401 McIntire, China Lake, at 7:30 p.m.

Dr. Spilger was engaged in the study of air currents using gliders to observe the effects. As he studied, he became interested in atmospheric conditions and the weather and the need for planning ahead to control the weather.

Also, a 30-minute color movie "To The Moon" will be shown. This film illustrates how lunar colonies might be established, developed and supplied, and how the moon might be utilized for "farming" or for observing stars in deep space.

Jim McMahon of the China Lake Astronomical Society will present an illustrated lecture and lead a "Star Party" field trip Friday, February 2. This will be the first field trip and lecture of the Maturango Museum year.

The lecture will begin at 7:30 p.m. at the Weapon Exhibit Center auditorium, followed by a caravan trip to Haystack Mountain, where telescopes will be set up to view the great spiral galaxy in Andromeda, the winter Milky Way, and other star clusters of interest.

The public is invited to both of these presentations.

## SHOWBOAT

FRIDAY FEBRUARY 2  
"AN AMERICAN IN PARIS" (113 Min.)  
Gene Kelly, Leslie Caron  
7:00 P.M.

(Musical/Drama) Gershwin's lilting tunes background a story of an ex-GI who becomes a ditsy Parisian painter. A newly found "patron" affectionately sets him up in a new studio, but he falls in love with a dancer. It's a classic. (Adult, Mature Youth.)  
Short: "Rodeo to Stardom" (7 Min.)

SATURDAY FEBRUARY 3

MATINEE  
"THE LONG SHIPS" (125 Min.)  
Richard Widmark  
1:00 P.M.

Shorts: "Zoo's Company" (7 Min.)  
"King of Carnival" No. 9 (13 Min.)

EVENING  
"THE SEA PIRATE" (83 Min.)  
Gerard Barry, Terence Morgan  
7:00 P.M.

(Adventure) A privateer breaks the English blockade on the Isle of France in the Indian Ocean and captures ships and booty. Deprived of any of the spoils he sets out with blazing sword to conquer again and win lady fair. (Adult, Youth, Children.)  
Shorts: "Clips Away" (7 Min.)  
"High Steel" (15 Min.)

SUNDAY-MONDAY FEBRUARY 4-5

"MAROC" (92 Min.)  
Gene Barry, Cyd Charisse  
7:00 P.M.

(Crime/Adventure) Editor of a fancy fashion magazine uses her fame as access for stealing fabulous jewels and an undercover policeman blackmails his way into her set-up. Crime and fashions mix well with pretty girls and intrigue. (Adult, Mature Youth.)  
Shorts: "Cool Cat" (7 Min.)  
"Press on Regardless" (12 Min.)

TUESDAY FEBRUARY 6

COMMUNITY CONCERT SERIES  
Frank Guarrera, Baritone  
8:00 P.M.

WEDNESDAY FEBRUARY 7

"GENTLE GIANT" (93 Min.)  
Dennis Weaver, Vera Miles  
7:00 P.M.

(Adventure) Here's the fore-runner of TV's famed Gentle Ben series about a young lad and the bear cub he fights to keep. Poachers try to snatch the cub and the game warden tries to catch the villains. It's a load of fun in Florida. (Adult, Youth, Children.)  
Short: "Texas Today" (19 Min.)

THURSDAY-FRIDAY FEBRUARY 8-9

"BATTLE OF THE BULGE" (140 Min.)  
Henry Fonda, Robert Ryan  
7:00 P.M.

(War Drama) Suspicions of a Lt. Col. that something is being planned by the Germans in Ardennes Forest are over-ruled by high command and then come the Tiger tanks and infiltration. This is the big one, hard-hitting, realistic. (Adult, Very Mature Youth.)

## Junior Bowler

(Continued from Page 7)

Ed Albright rolled 257-217-158 for a 632 to lead the Midway League. Steve Stephenson was second with 200-227-192 for a 619. Maury Coleman rolled 226; Bill Ascroft 215 and Don Tucker 212-200 in other high-lights.

Cynthia Schoenkals rolled 209-533 to lead the Monday Women's Scratch League. Royce Dowd and Alice Cutsinger each had 508 while Charlotte DeMarco hit a 504. The 200 games included Cutsinger, 210, and Patty Maxwell, 201. In the Thursday Afternoon Trio, Wanda Magars led the way with 476, and Connie Evens had high game with 185.

Work: Something that when we have it we wish we didn't; when we don't we wish we did; and the object of which is to be able to afford not to do any someday.

From _____	STAMP
_____	
_____	
TO _____	
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## ROBERT B. HALL M.S. Earned By Robert B. Hall, Research Engineer

Robert B. Hall, a materials research engineer in Code 4513, is a recent recipient of the UCLA M.S. degree in engineering which was awarded on the basis of course work completed in the UCLA Off-Campus Program at China Lake and on his thesis, "Molten Flow Through Porous Media."

A graduate of Union College, Schenectady, New York, Hall became a Junior Professional in the Underwater Ordnance Department at Pasadena in February, 1960. Upon completion of his tour, he joined Code 5516 at China Lake, and in October, 1965, moved to his present assignment in Code 4513.

Hall is married to the former Carol Elwood who, prior to their marriage in 1964, was a teacher in the local elementary schools. Now residing at 405-A Thompson Street, the Halls have two children, Robert, Jr., two years old, and Jennifer, 11 months.

## CBS-TV Will Air North Pole Story Next Wednesday

CBS-TV Network will present an hour-long documentary titled "Destination North Pole" Wednesday, February 7. It includes fine coverage of "Operation Birdshe."

The basic story is that of the Plaided Polar Expedition's ill-fated attempt to be the first since Admiral Byrd to transit the Arctic ice to the pole. Plaided will set out in late February on his second attempt.

A book on the expedition, written by CBS correspondent Charles Kuralt, will be featured in the April 1968 issue of Reader's Digest.

Viewers are advised to consult local listings for time and station. The television production will be shown in San Diego on KFMB-TV, Channel 8, at 7:30 p.m., February 7.



Vol. XXIII, No. 5

Naval Weapons Center, China Lake, California

Fri., Feb. 2, 1968

# New Mass Spectrometer Brings Great Range to Chemical Study

## Speed, Accuracy Are Advantages Over Old System

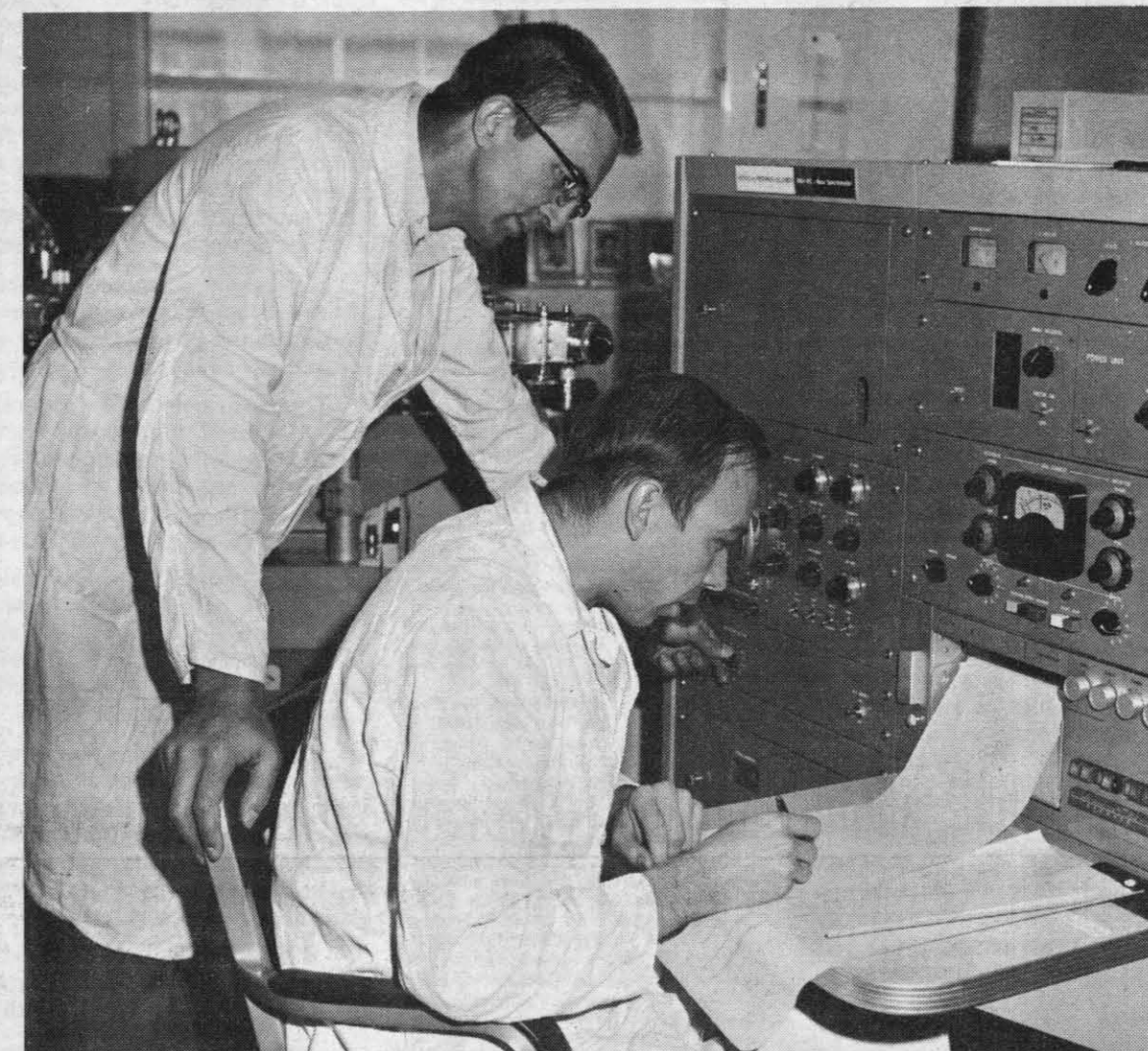
BY JOHN R. McCABE

A powerful new analytical tool of the Research Department in Michelson Laboratory is now well along the way to proving its worth in a variety of studies.

The Department's new mass spectrometer system, installed in the chemistry wing of the Lab last November, is proving itself to be quicker, more accurate and more reliable than any previous system for analyzing the elemental constitution and molecular structure of solids, liquids and gases, according to Dr. Alvin S. Gordon, head of Chemical Kinetics Branch.

The new system is a Hitachi RMU-6D mass spectrometer. Its over \$70,000 worth of equipment allows the various ions of parent molecules to be measured with great accuracy, in the same experiment with measurement of the fragment ions of the molecule. This mass spectrometer is able to resolve ion particles as little different from each other in mass as one part in 20,000.

The department's old spectrometer, with a resolution of one part in 400, is now in use (Continued on Page 3)



**FAST, ACCURATE NEW INSTRUMENT** — Physical science aide Joe Johnson (standing) and Dr. Wayne Carpenter of Code 50's Organic Chemistry Br. check wide photographic chart paper as it comes out of elec-

tronic circuitry console with analysis results. Johnson works with the new mass spectrometer full-time, and Dr. Carpenter is now working with it on project. Instrument can resolve to one-in-20,000 difference.

## Civil Defense Supplies Added in New Delivery

With all but a fifth of the emergency shelter spaces planned for all Indian Wells Valley residents now in hand, IWV Civil Defense people this week set aside in readiness another shipment of emergency supplies.

Additional civil defense supplies consisting of food, medical and sanitation kits were recently delivered to the Indian Wells Valley to augment existing stocks. The new deliveries are the result of an updating shelter survey in the valley.

According to H. G. Wilson, Director of Indian Wells Valley Civil Defense, these additional supplies add 67,500 "meals" to the 270,000 "meals" already stock-piled. The shipment also includes first aid and sanitation supplies.

### Mobile Stockpile

The stocks were loaded into one of the two civil defense boxcars set aside to be dispatched in case of national emergency. The "train" being readied will include, besides the stockpiled food supplies in the

boxcar, an electric generator, additional sanitation and other convenience supplies as well as two water tank cars. This "train" will be dispatched to the Searles Station Civil Defense Staging Area to care for approximately 7,000 Valley residents.

Wilson also announced that we are rapidly closing the gap and now have 80 percent of the shelter spaces required for valley residents, and negotiations are underway for the balance. He emphasized, however, that assignments to individual shelters will not be made until we have enough for every person in the valley.

In answer to what interested persons can do to help civil defense preparedness, Wilson encouraged all to assist in building up the auxiliary police force. The civil defense police are needed to assist in an emergency to direct traffic, control crowds, prevent riots and looting.

The first step in volunteering for this important function (Continued on Page 3)



**SUPPLIES FOR CIVIL DEFENSE** — H. G. Wilson, IWV Civil Defense Director, supervises loading of additional supplies for local civil defense shelters. The supplies include food, medical aid and sanitation kits, ready for use in case of emergency.

## Winter Displays A Snow Blanket at Walker Pass



**SCENIC BEAUTY**—Taking a trip to Walker Pass last weekend, the photographer happened upon this scene of magical beauty. Trapped in the lens of his camera, this

fairlyland of quietness covered with a blanket of fresh snow and guarded by the majestic pine tree sentinels which contributes to a pleasant photographic composition.



## CHAPLAIN'S MESSAGE

## Charity And Politics

CHAPLAIN JUDE R. SENIEUR



With enthusiasm I endorse the opinion that clergymen should stay out of politics. In their private lives they certainly may and should have political, even party-line convictions. Neither the pulpit nor the pew, however, is a place to air subjective political preferences. Politics simply is not our business.

But charity is. And when a politician, in his enthusiasm to win votes, begins to judge an opponent's motives and malign his character in pointing up his mistakes, he needs to be reminded that politicians are not exempt from God's law of love and the respect for the rights of others.

We may question a man's talent, his wisdom, his ability to make the right decisions. We may challenge his methods, his judgements, his attitudes, his thinking. But when we start judging his motives we are on very dangerous grounds.

To accuse a man of malicious malintent is to do little more than condemn ourselves. In judging a man's motives we are simply saying "If WE did that, this is why WE would be doing it!" It is next to impossible to judge a man's motives for an action unless the man explicitly describes those motives himself.

When journalists repeat in print and the public accepts these uncharitable attacks on the personal integrity and motivations of a political opponent, we are contributing to and cultivating malpractice in politics.

We encourage our young people to take an interest in the operation of our self-determining government. With the publicized display of unchristian and ungodly attacks on the personal character of candidates for public office or on those already holding public office, these young people can hardly help but come to the conclusion that politics is a cut-throat racket in which all principles of morality are set aside in an effort to win an election.

How can they respect a man who gets into office by such malignant methods? How can they accept him as a leader dedicated to the pursuit of freedom, liberty, and justice when he ignores the basic law of charity?

The ideals on which our American democracy was founded can exist only in an atmosphere of true love and respect, an atmosphere that is created not by a governor's mansion or the White House, but by the man who resides there.

## CENTER LIBRARY LISTS NEW BOOKS

A complete list of new books is available in the library.

## Fiction

Ayrton—The Maze Maker.  
Baker—The Making.  
Dutton—Thorpe.  
Early—The Tigers Are Hungry.  
Van der Post—The Hunter and the Whale.  
Snider—Edgar Henry.  
Wilk—One of Our Brains is Draining.

## Non-Fiction

American Heritage—Pictorial Atlas of U.S. History.  
Asprey—The First Battle of the Marne.  
Clark—Sea Power and Its Meaning.  
Eckert—The Frontiersmen.

Reston—The Artillery of the Press.  
Sinclair—The Better Half.  
Choate—Creative Casting.  
Mao Tse-Tung—Basic Tactics.  
Pearson—The Life of Ian Fleming.  
Schecter—The New Face of Buddha.  
Spraggett—The Unexplained.  
Thiel—Freehand Drawing.  
U.S. Navy—United States Navy Occupational Handbook.  
California Information Almanac, 1967.  
Fine—Underachievers.  
Fredette—The Sky on Fire.  
Fromm—The Heart of Man.  
Hezlet—The Submarine and Sea Power.  
Miller—The Birds and the

## The Rocketeer

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NWC Commander

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## DEADLINES:

News Stories—Tuesday, 4:30 p.m.

Photographs—Tuesday, 11:30 a.m.

The Rocketeer receives Armed Forces

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Navy photos unless otherwise identified.

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Phones—71354, 71655, 72082



## DIVINE SERVICES

Protestant—(All Faith Chapel)—  
Morning Worship—8:15 and 11 a.m.  
Sunday School—9:30 a.m., Chapel Annexes 1, 2, 3, 4 (Dorms 5, 6, 7, 8) located opposite Center Restaurant.

Roman Catholic (All Faith Chapel)—  
Holy Mass—7, 9:30 a.m., and 12:30 p.m. Sunday.

Daily Mass—11:30 a.m. in Blessed Sacrament Chapel. Saturday, 8:30 a.m.

Confessions—7 to 8:00 p.m. Saturday.

NWC Jewish Services (East Wing All Faith Chapel)—8 p.m. every first and third Friday.

Sabbath School—10 a.m. to noon, every first and third Saturday.

Unitarian Fellowship—(Chapel Annex, 95 King Ave.)—Sunday, 7:30 p.m.

## PROMOTIONAL OPPORTUNITIES

Present Center employees are encouraged to apply for the positions listed below. Applications should be accompanied by an up-to-date Form 58. The fact that positions are advertised here does not preclude the use of other means to fill these vacancies.

Secretary (Steno), PD No. 100001A2, GS-318-5, Code 0001 — This position serves primarily as secretary to the Commander's Administrative Aide. Personal and telephone contacts, takes and transcribes dictation, originates correspondence, screens mail, maintains files, and miscellaneous duties.

File application for above with Sue Prasolowicz, Bldg. 34, Rm. 26, Phone 71577.

Project Engineer, GS-12 or 13, Code 4563 — Position with fuel-air explosive (FAE) project. Incumbent will have the responsibility for the advanced and engineering development of an air-launched, free fall FAE weapon. He will direct the activity of other engineers in participating field activities (PFA) assigned to the project. A BS Degree in Engineering from an accredited 4-year college is required.

File application for above with Jan Bixler, Bldg. 34, Rm. 24, Phone 72723.

Electronics Technician, GS-7 or 9 (One vacancy), Code 40053 — This position is located in the Weapon Development Department, Shrike Program Office. The incumbent is one of a group of technicians responsible for the assembly and checkout of missiles which are to be used for test and evaluation on the Shrike Program. Clerk-DWT, GS-4, Code 4055—Incumbent will perform secretarial duties for the Branch. Duties will include transcribing and typing correspondence and memoranda, travel orders, clearance requests, etc.; screening telephone and office callers; receiving and distributing incoming mail; and maintaining Branch files.

File applications for above with June Chipp, Bldg. 34, Rm. 26, Ext. 72676.

Card Punch Operator, GS-36-2 or 3, Code 1781 — This position is located in Central Staff, Operations Staff. A basic knowledge of the operating methods for the electric accounting machine key punches, verifiers, and sorters. Performs clerical functions (auditing, coding and checking) needed to prepare source documents for use on data processing equipment.

File application for above with Sue Prasolowicz, Bldg. 34, Rm. 26, Phone 71577.

Clerk-Typist, GS-32-03 or 04, (Three vacancies), Code 7212 — This position is located in the Graphic Arts Branch, Presentations Division of the Technical Information Department. The duties will consist of: retyping, proofreading, paste-up and composition.

File applications for the above with Carole Cadle, Bldg. 34, Rm. 28, Phone 71648.

Mechanical Engineer (Applied Mechanical), GS-830-11, PD No. 655086, Code 5566—Incumbent is assigned the more complex problems requiring considerable judgment in making sound engineering decisions and compromises. Makes solution of special/unique weapon control problems and determines the required cushioning to protect the item. Performs applications of new materials to weapon containers, provides liaison and technical consultation with contractors, engineers, and scientists.

Mechanical Engineer, GS-830-9, Code 5542 — This position is located in the Engineering Design Branch, Engineering Prototype Division, Engineering Department. The incumbent works under the direct supervision of the Head, Engineering Design Branch. His special task consists of the design and drawing of tooling, special semi-automatic machines and/or devices which are used in the fabrication, testing, and inspection of prototype ordnance material.

File application for above with Loretta Estep, Bldg. 34, Rm. 34, Phone 71514.

Clerk DWT, GS-4, Code 3067 — Responsibilities are those of secretarial and clerical duties assigned with the operation of the Branch; preparing, handling and channeling of all types of correspondence and reports, personnel actions, timekeeping, plant account records and miscellaneous management of the office.

File application for above with Fawn Haycock, Rm. 34, Bldg. 34, Phone 71514.

Clerk-Typist, GS-3 or 4, Code 3002 — This position is located in the Editorial Branch, planning and Administrative Staff, System Development Department. Incumbent must be a qualified typist, preferably with some experience in report formatting. Position requirements include the performance of general office work and miscellaneous duties in support of editorial functions.

Technical Writer-Editor, GS-7, 9 or 11 (two vacancies), Code 3002 — These positions are located in the Editorial Branch, Planning and Administrative Staff, Systems Development Department. Incumbents are expected to have experience in writing and editing and a basic technical background. Work consists of writing and editing technical documents related to research, systems development, and testing and evaluation programs, based on interviews with workers in the field, notes and background files of technical personnel, and independent reading.

File application for above with Fawn Haycock, Bldg. 34, Rm. 34, Phone 71514.

- ★ SHARE IN FREEDOM
- ★ U.S. Savings Bonds
- ★ New Freedom Shares

## 'DESERT PHILOSOPHER'

## Just Horsing Around

By "POP" LOFINCK



The ideal way to get the fullest enjoyment of the adjacent Sierra Mountains and to get full impact of the beauty of landscape is on horseback.

Ask Ken Miller and his wife, Elaine. They are both saddle enthusiasts. Elaine is an authority on horses. She has studied horses all her life. Her father was a big game guide in Montana and she started riding when she was two years old.

They have a two-horse trailer they tow with their camper truck to where they want to start and then mount their horses to enjoy the thrilling beauty of the landscape, dark green forests against the background of purple mountains. There are places where even a four-wheel drive vehicle can't go. Up some canyons, for instance, and there are trails in the forest where motorized vehicles are forbidden. So you can only hike and carry your camera gear or ride a horse, which is more fun. A vehicle must be steered — it won't steer itself. On horseback you can give your undivided attention to the scenic beauty of the landscape and your dreams. That's the way to relax.

There are numerous boarding stables in Ridgecrest. Last afternoon you can mount your horse and ride up over the top of the Wagon Wheel Cafe, for example, and look at the strange formation of rocks.

There are probably several hundred saddle horses in this valley — but I'm surprised that there aren't a lot more, as this area is ideal for this sport, which has been neglected.

There are several boarding stables in Ridgecrest that charge \$30 a month when they furnish the feed and take care of the horse. If you furnish the feed the cost is \$15 a month.

Bill Chappell teaches basic riding at the "Bottom Acres Stables." He will teach you how to ride for \$4 an hour, if you've never been on a horse. He also breaks and trains horses at Bob and Lorry's Arabian Stables in Ridgecrest. Chappell has special horses that are very docile for this training and he has turned out some expert riders.

The idea is to teach you how to manage a horse in an emergency. There are hazards such as a ground owl flying up suddenly scaring a horse. Or a rattlesnake causing the horse to make a quick jump that might dump the rider if he is not trained how to manage his horse. When a horse knows his rider the horse learns to accept surprises without panic. The horse gains confidence in his rider.

When a horse knows his rider and the rider falls in love with his horse — there is no danger. There is also a proper way to sit in the saddle — with the right length of stirrup—etc.

The Bottom Acres Stables take out small groups in outlying areas for \$2.50 an hour. There is a Valley Riders Club that go out overnight camping in a group — for sociability — if that's what you like.

Personally I'd rather commune with nature alone or with one other person.

In the next column—the mid-west Indians and their horses, brought in by Cortez.



**HE TRAILS ACHIEVEMENT** — Tim L. McClendon, retired last November from Civil Service as a Code 3043 instrument maker, demonstrates his improved dial engraving jig to (left) Dr. I. E. Highberg, head of Systems Development Dept., and F. M. Ashbrook, head of Instrument Development Div. Dr. Highberg then presented Tim with a \$250 Beneficial Suggestion award. A patent on the device has been applied for. Now a machinist at Arrowsmith Tool Manufacturing Corp., Tim lives in Inyokern. In March last year he received a certificate of commendation from the Secretary of the Navy, in addition to his 40-year Federal Service pin. Tim became a China Lake craftsman in 1950, three years after retiring from the Navy as a CWO.



**BOWLING CHAMPS** — Awards were presented to champion women bowlers of 1967 at the executive board meeting of the Indian Wells Valley Women's Bowling Association by Dotty Duncan, president. Mrs. Dun-

can (l) awards Lee Fox a 600-plus series trophy. Neola Crimmins holds her 600-plus trophy and another trophy for her High Series of the Year; Winnie Stanton earned High Game of the Year honors.

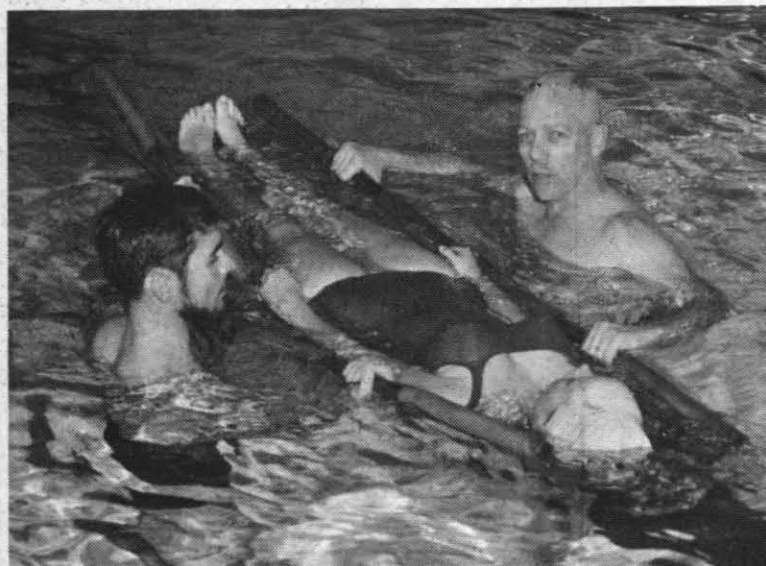
## Junior Bowler Leads Lakers With 638 Mark

Charles Goff led all bowlers at the China Lake Bowl last week, hitting a 638 in Junior Mixed League. Goff rolled games of 209-224-205 to post one of the highest series rolled this year in the League. Bob Nelligan had high game in the league hitting a 230. Patty Dalpiaz rolled a 467 to lead the girls, while Connie Clark had high game with 167.

Chuck Cutsinger rolled 194-203-237 for a 634 to lead the way in the Friday Mixed Four-some. Ray Freascher had high game with 267 and second high series with 628. Alice Cutsinger led the ladies with 484 while Margaret Branson had high game with 196. Other 200 games included Jack Leininger 247; George Barker 244; George Mullett 224; Jack Herbstreit 213; Fred Dalpiaz 209; Bob Owens 211-202 and Dan Branson 200.

In the Desert Handicap League, Ken Dalpiaz led the way with 232-170-222 for a 624 series. Norm Rump had high game with 245 while Alex Ribaultan had 223-215; John Dowd had 214; Craig Rae 211; and Dura Pinkerton and Don Farnham each had 210.

(Continued on Page 8)



**WATER SAFETY CLASS** — Robert Westbrook (l), American Red Cross First Aid Instructor; Terry Chatterton, Water Safety Aide, and Fred Scaffar, First Aid and Water Safety Instructor from Bakersfield, Calif., demonstrate the latest safety techniques during the January 21 water safety class held in the Center pool. Scaffar has been a volunteer teacher for more than 40 years and spent part of his time at NWC updating first aid information to his students.

## THE LOCKER ROOM

## Volleyball Returns

By ED RANCK



After an absence of nearly two years, volleyball will return to the China Lake intramural sports agenda — in a few weeks. The first call for team entries was made this week by Athletic Director Ray Gier, and it is expected that the season will begin on February 20.

Until now, the game hasn't been particularly well received here. In past seasons only a minimum amount of clubs have entered the competition, and attempts to organize teams to enter Class A competition have been only moderately successful. Possibly one of the reasons for this is that there may be a certain amount of confusion as to how the game is actually played.

Volleyball is a game that may have more variations of style and a broader interpretation of the rules than any other sport known to man.

On one hand, the game is one of the fastest team games around, requiring highly developed skills, speed, stamina and many hours of team practice. On the other, it is a game that is sometimes played with all the aggressiveness of a fast round of pattycake.

## WHO PLAYS THE GAME

Depending on who is playing the game, both examples go a long way toward giving a reasonably clear explanation of the game. At the Olympic level, the first example is correct. On the athletic field of the average Southern California nudist colony, example number two tells the story. Because of the fact that there are no Olympic volleyball players here at China Lake, and the number of nudists is unknown, neither interpretation would be exactly correct when applied to the game as it is played here.

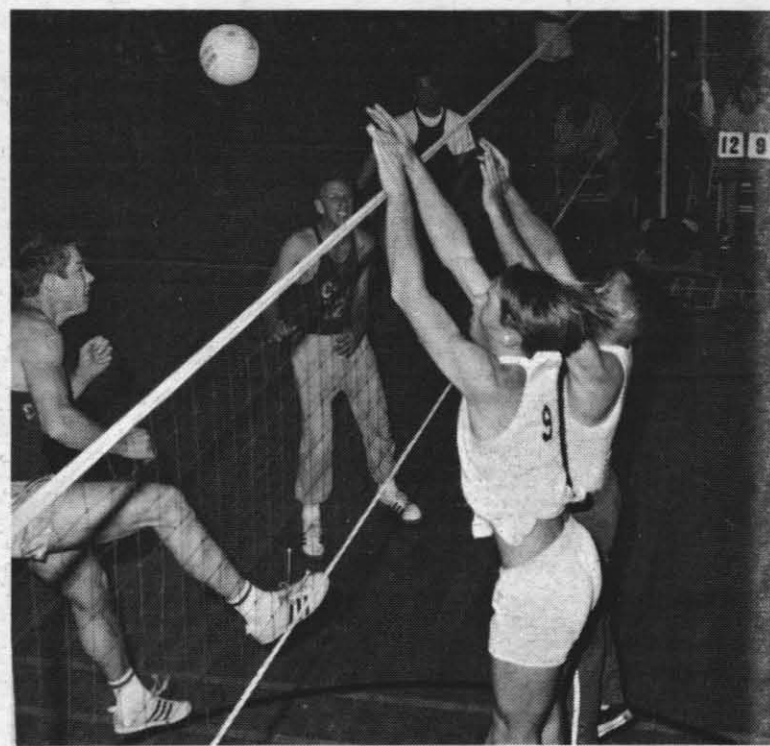
Volleyball as played at the intramural level isn't an extremely hard game to master. Although the necessity of teamwork and skill is there, the interpretation of certain rules is such that most people with a reasonable amount of coordination can enjoy the game. The basic rule which is usually relaxed a bit concerns the manner in which the ball is hit. According to volleyball rules, any hit that comes vaguely close to a throw is illegal.

## A PREMIUM ON DEXTERITY

Learning to control a volleyball effectively without actually handling it is a skill that takes many hours of practice. It is this rule that usually discourages those that would otherwise like to play the game. In intramural competition, the players are usually given the benefit of the doubt in borderline cases.

Although an actual throw is strictly illegal, a little bit of finger tip control is usually allowed. This slight modification of the rules serves two purposes. It keeps the game moving by eliminating frequent whistles for minor infractions and it also encourages those who are new to the game to give it a try. With sensible officiating, intramural volleyball can be a fast and exciting game available to all who enjoy good team competition.

The season will open on February 20 and should extend until mid-April. Entries are being taken now, with the deadline set at February 9th. As usual, a pre-season clinic for players will be scheduled prior to the opening game. All departments interested in entering teams in the league are requested to contact Ray Gier at Ext. 71334.



## STANDINGS

	W.	L.
Loewen's	11	0
NAF	9	1
VX-5 Rebels	6	5
Genge Industries	4	5
NWC	4	7
VX-5 Vampires	1	8
Special Services	1	10

## SCORING

	Pts.	Avg.
Ellwanger, Rebels	155	14.1
Barnes, NAF	141	14.1
Klotz, NWC	136	15.0
Allen, Loewen's	133	12.1
Blue, Genge	119	14.8
Lyons, Rebels	116	10.6
Tyler, Genge	113	12.6
Atkinson, Rebels	110	12.2
Peterson, Spl. Ser.	108	9.8
Berry, Genge	107	11.9

**FAST, TRICKY PLAY** — In China Lake Invitational tournament play last spring, 10 civilian and military teams showed the speed, skill and endurance necessary to win in an active volleyball league. China Lake's Intramural Volleyball League is set to start play February 20 this year with teams of 10 players each, maximum. Rosters should be submitted to Special Services, Code 855, no later than Friday, February 9, for each team entered.



## Automatic Phone Dial System, A Future Plan

Agreement by the Navy to sell to California Interstate Telephone Co. certain distribution facilities and station equipments related with providing unofficial telephone service to residential areas of the Naval Weapons Center, China Lake, was reported here today.

A joint statement by Captain M. R. Etheridge, commander of the Naval Weapons Center, and A. S. Taylor, vice president and general manager of the Continental subsidiary, announced the agreement committing the local utility to the construction of a modern telephone plant, including development of an automatic dial central office and modifications and reinforcements to outside distribution facilities.

Negotiations have been carried out between the company and the Southwest Division, Naval Facilities Engineering Command, San Diego, and with the Naval Weapons Center, at China Lake. Terms of the agreement were recently officially consummated, gaining Defense Department and Congressional approval.

Generally, Continental's California Interstate operating subsidiary will purchase the existing plant now providing unofficial telephone service to the housing areas, the value of which remains to be specifically determined, with the Navy to defray certain construction costs in bringing the outside plant up to state safety code requirements. However, it is estimated that the total investment by the telephone company will exceed \$2 million.

A portion of the base housing is presently served by the company. The agreement relates to providing telephone service to the balance of the base residential units. Some 2,300 stations are involved, the preponderance of which are currently provided four-party telephone service.

Transfer of service obligations from the Navy to the local telephone company cannot be carried out immediately, but is scheduled to coincide with completion and turn up

of the new plant. An 18 month construction period has been projected, placing tentative transfer of the facilities in August of 1969.

Plans call for California Interstate to operate the new Naval Weapons Center Central Office as a satellite office within the company's Ridgecrest Exchange.

Several modern service features will be available to many on - Center residents for the first time. The company will be able to provide one-party service for all base residents, however, other grades of service also will be available. One service feature includes access to the nation's distance - dialing network, allowing direct dialing of long distance calls.

## Officers for New Term Installed At CPO Club Meet

The installation of the 1968 officers and committee chairmen of the CPO Wives Club was held January 19 at the CPO Club. Special guests included Lt. and Mrs. Ken May and Chaplain Paul Romantum who acted as installing officer.

A prime rib dinner was served, after which the committee chairmen were installed. They are: Publicity Chairman, Mrs. Billy Ellis; Hospitality Chairman, Mrs. Verne Tracey; Membership Chairman, Mrs. Robert Beech; Entertainment Chairman, Mrs. Paul Menges; Sunshine Lady, Mrs. Frank DeLeon, and Telephone Chairman, Mrs. Bruce Griffin.

Newly elected officers include: President, Mrs. Robert Packard; Vice-President, Mrs. Harold Schmeer; Secretary, Mrs. Robert Campbell, and Treasurer, Mrs. Dan Harrington. Mrs. Packard will be serving her second consecutive term as president.

The club's plans for this year include a membership drive and raising money for future charity projects. Members also plan to get together and make stuffed toys for the children in the hospital.

Outgoing officers were: Mrs. Robert Packard, Mrs. Lloyd Versteeg, Mrs. Archie Young, and Mrs. George Beatty. The installation meeting was concluded with a benediction by Chaplain Romantum.



**CPO WIVES ELECTED** — Newly elected committee chairmen of the CPO Wives Club are back row (l-r) Mrs. Frank DeLeon, Sunshine Lady; Mrs. Verne Tracey, Hospitality Chairman; Mrs. Robert Beech, Membership Chairman; Mrs. Paul Menges, Entertainment Chairman; and Mrs. Billy Ellis, Publicity Chairman. Officers installed are front row (l-r) Mrs. Robert Campbell, Secretary; Mrs. Harold Schmeer, Vice-President; Mrs. Robert Packard, President; and Mrs. Dan Harrington, Treasurer. Not pictured is Mrs. Bruce Griffin, Telephone Chairman.



**McLEAN'S FETED AT FAREWELL** — Mrs. LaV McLean (l) prepares to lift out a silver tray while her husband, Dr. William B. Mc-

Lean observes her efforts. The silver tray was presented to the McLeans' by Capt. M. R. Etheridge, NWC Commander.



**FAREWELL** — LCdr. Fredrick H. Elliott, Commanding Officer of NWC Enlisted Personnel since June 1965, passed his command last Friday morning to Cdr. W. P. Baker. Retiring after 20 years of Navy service, Commander Elliott said, "This has been a really enjoyable tour for me."

## New William B. McLean Award Unveiled at McLeans' Farewell

Dr. and Mrs. William B. McLean were the special guests of honor during a farewell party for them held in the Naval Weapons Center Officers' Club, Friday evening, January 26.

Doctor McLean had been Technical Director of the Naval Ordnance Test Station prior to the official change of name for this Center. He and his wife, departed for a new assignment on Saturday, January 27, as Technical Director of the Naval Undersea Warfare Center located at San Diego, California.

During the farewell ceremonies, in which more than 250 guests turned out in honor of the occasion, Doctor McLean was privileged to read for the first time the New William B. McLean Award.

The first award, presented to Doctor McLean, read in part: "In recognition of outstanding creativity as evidenced by patents granted to you that contribute to the mission of the Naval Weapons Center, and thus of the forces of the United States Navy..."

The idea for the award evolved from a previous meeting between Capt. M. R. Etheridge, NWC Commander; Capt. R. Williamson II, NWC Executive Officer, and H. L. Wilson, NWC Associate Technical Director.

Captain Etheridge presented the McLean's an inscribed silver tray. Also presented were gifts from friends including the Dust Devils and Purple Sage Scroll and a NOTS plaque and plastic desk set.

Captain Williamson presented the McLean's a collection of color photographs portraying the Center facilities and general geographical areas around China Lake.

The Engineering Department gave two desk sets of native polished rock, to include a pen and pencil set and a model of "Hikino," Doctor McLean's Undersea Jeep. Mrs. Etheridge gave Mrs. McLean a gold road runner pin, while Dr. Thomas Amle's model of the "Moray," the two-man underwater submarine, was a surprise gift.

Hack Wilson provided the McLean's with a 40-foot painted canvas depicting a full-sized "Moray."

An oil painting of Argus Mountain, painted by Margaret Mack, was another gift and Dr. Newt. Ward presented an aerial photo of the valley along with a tinted bristle cone pine photograph.

The evening's activities were highlighted with a slide show of various Center personalities titled with "goofy captions."

## Pony, Colt League First Meeting Set

There is an urgent need for adult volunteers to help form the annual Indian Wells Valley Pony-Colt League. First organizational meeting is slated for 7:30 p.m., Thursday, February 8 in Room "C" in the Community Center.

League play will begin when local schools are dismissed for the summer vacation.

Additional information may be obtained by calling Bob Nelligan at Ext. 72690.

Series E U.S. Savings Bonds purchased between May 1941 and May 1949 have been granted two 10-year extensions — giving them a "life expectancy" of 30 years. All are still earning interest — now at the increased rate of 4.15 per cent.

## Group Life Insurance Protection Plan May Effect Employees Checks

The new Postal Revenue and Federal Salary Act of 1967 makes important changes in the group life insurance protection plan for Federal Civil Service employees working at Naval Weapons Center.

According to officials of the Employee Management Relations Division at NWC there are some interesting changes and effects in employees pay checks that is of personal concern to them.

One change under the new act announces that an employee now has \$10,000 regular insurance if his annual pay is \$8,000 or less or regular insurance equal to his annual pay rounded to the next higher \$1,000, plus \$2,000 (but no more than \$2,000) if his annual pay is more than \$8,000.

There is no immediate effect on the employees pay check unless a pay raise moved the person into a higher \$1,000 salary bracket. If it did or will in the future, life insurance deductions from the pay check will be increased to cover the new \$1,000 of regular insurance.

Furthermore, in the first pay period beginning on or after February 2, 1968 the employee starts paying at a biweekly rate of 27½ cents (instead of 25 cents) for each \$1,000 of regular insurance he has.

Another change reflects an additional \$10,000 optional insurance good until February 14, 1968. There is no effect on the employees paycheck regarding this change. This is free until February 14.

Employees also have a decision to make, no later than April 14, 1968, about continuing the \$10,000 additional optional insurance. There is no effect on the pay check if an

employee decides not to buy. If a decision is to buy, the premium (deducted from the pay) will vary by age and will increase as the employee moves from one age group to another. Initially, deductions will be: \$3 biweekly for those under 35; \$6 biweekly if between the ages 35-54; \$20 biweekly when the 55th age is reached. No deductions will be withheld unless the employee specifically authorizes them.

Only employees who have regular insurance are eligible for optional insurance. Employees who have waived regular insurance will be given a chance to cancel the waiver.

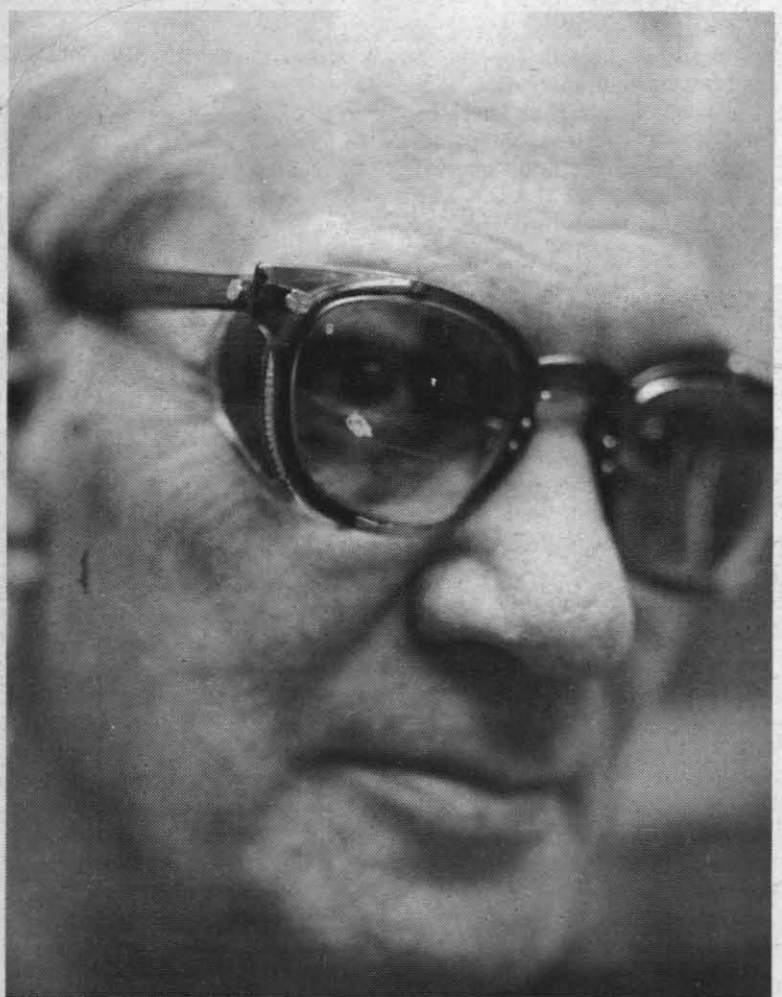
As soon as supplies of appropriate forms of election, declaration, or waiver of life insurance coverage are received at NWC, they will be distributed to all employees.

## Red Cross Offers Life Saving At Pool Saturdays

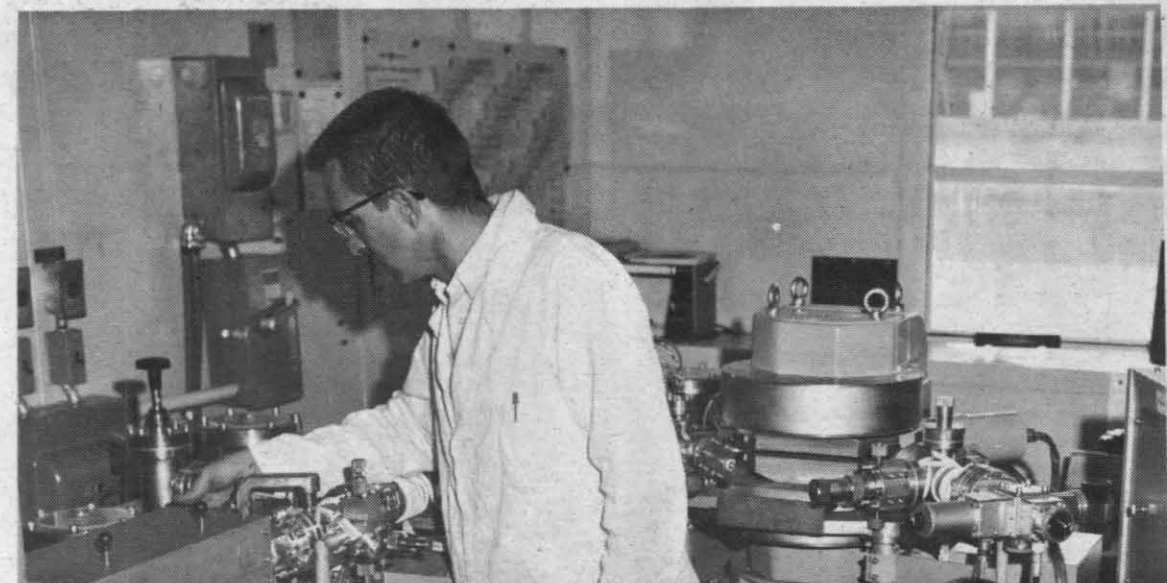
A Red Cross Senior Life-saving course will be offered at the Center swimming pool on Saturday mornings from 8 to 11 a.m.

Enrollment and qualification information will be given on Saturday, February 3, at 9 a.m. The actual instruction will begin on Saturday, February 10. Classes will convene at the Center swimming pool and will continue for six weeks.

Applicants must be at least 16 years old or in the 11th grade. Further information can be obtained by calling Kel Bennett at Ext. 71386 (work) or 375-7448 (home).



**DEAD CENTER** — An unexpected surprise astounded machinist Earl Suladie (Code 5545) recently when at work. A steel missile the size of a silver propelled itself into the right eye glass directly in front of Suladie's eyes. Always safety conscious on the job, Suladie had the fore-thought to wear his safety glasses thus preventing a possible loss of an eye. He is also now eligible for membership in the exclusive Wise Owl Club at the Center.



**FINE ADJUSTMENTS** — Joseph H. Johnson adjusts sample introduction control of new mass spectrometer. Ions from sample are

accelerated, separated and focused onto collector plate by 220-volt, 50-ampere pole magnet (right).

## Mass Spectrometer Helps Research

(Continued from Page 1)

at the Naval Postgraduate School in Monterey.

Dr. Gordon, who is in charge of the instrument's use, points out that it will be available to any researcher of the Naval Weapons Center.

"It can be used in a tremendous variety of research as a basically analytical instrument," he says. It has already been used by Corona members of the Research Department. In Michelson Laboratory, Joseph H. Johnson, physical science aide, works with the mass spectrometer regularly. Some four others at China Lake are now able to use the instrument, including Dr. Wayne Carpenter of the Organic Chemistry Branch, now working with it on a project.

The new mass spectrometer system is made up of three basic sections. The inlet system provides for introduction of very small sample amounts, of which only a negligible amount is used up in the analysis process.

The analyzer unit features a 220-volt, 50-ampere pole magnet which separates ions radiating from the sample into separate streams. The un-

its magnetic field is varied, while an electrostatic field is kept constant. This feature enables the various mass fragment ions to be successively focused on a collector plate.

The electronic circuitry console provides excitation, control and recording functions. Recording is done by a photographic process on wide, light-sensitive chart paper, or onto an oscilloscope. So precise is the recording system that the "mass defect," or difference from nominal molecular weight, of any ion can be determined, thus exactly identifying the ion.

In addition to the three main units, an existing vacuum pump unit is used to serve the new instrument's inlet system.

"It is true to say," according to Dr. Gordon, "that if today we were to find a new element, its atomic weight could be measured more accurately with this instrument than in any other way. In addition, each isotope of the element would be clearly seen as well as its relative distribution. We have also made an adaption to the mass spectrometer to improve its analytical capability with gases."

## Machinist Wears Glasses, Saves Eye

Earl Suladie is an experienced machinist. He knows his business. Give him a piece of metal and tell him what you want and he turns out the finished piece. He has been turning out finely machined products for Code 5545 for almost 20 years and is well aware of the eye hazards of his trade. He is interested in safety too and has taught first aid at the Naval Weapons Center for about 12 years. He is a firm believer in eye protection when the job requires safety-first precaution.

Recently the NWC Safety Department ordered a replacement lens for Suladie. He also joined a new club. There was no need of buying him an artificial eye. His old eye is just as good as it has always been to sight along an edge and check a micrometer. He can see his wife and family and especially enjoys seeing his 13 grandchildren.

He was wearing safety glasses when a chip from a metal cap he was working on scored a bull's eye on the right lens of his glasses striking with sufficient velocity to leave a

small, deep crater in the eye-glass.

Suladie is now eligible for the exclusive Wise Owl Club. This club takes only members who have been safety-minded enough to wear eye protection when the accident might otherwise have taken their sight.

## Aid Civil Defense

(Continued from Page 1)

is to complete Police Science 76. Registration for the current class beginning Wednesday, January 31, is now being conducted by the Desert Division, Bakersfield College.

Vital first aid skills are also available through comprehensive courses taught by China Lake Red Cross people and at the Desert Division.

## Reefers Installed

New 12-cubic-foot refrigerators are being installed in three-bedroom Old Normacs and three and four-bedroom Hawthornes. A spokesman for the Housing Office said tenants will be notified in advance.

## China Lake Navy Flying Club Sets Wednesday Meets

The China Lake Navy Flying Club has set aside 8 p.m. Wednesday nights for their weekly series of lectures by Floyd Kinder on Instrument Flight Procedures. The initial meeting began January 24 in the Community Center.

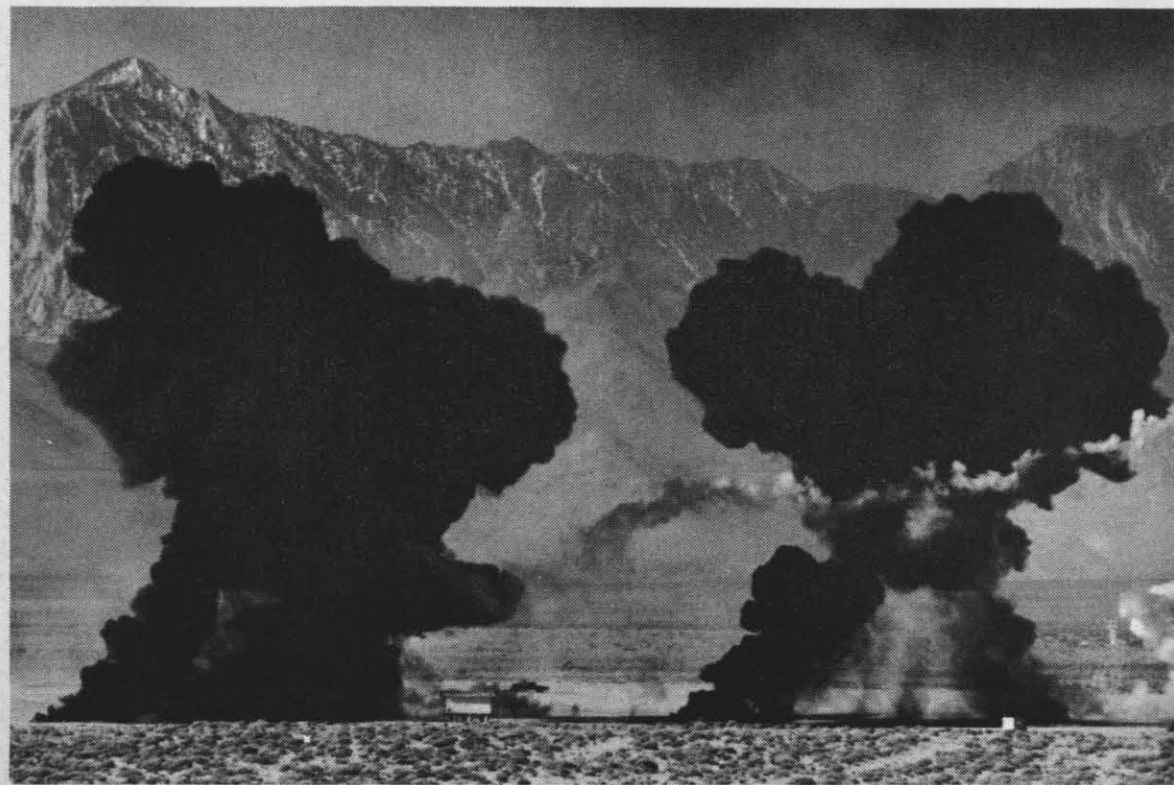
The lectures are supplemented by films and guest lecturers. Purpose of the series is to acquaint pilots and students with some of the procedures of instrument flight. Discussions on air traffic control and instrument landing service are a part of the agenda.

According to club officials, if sufficient interest is shown, the Federal Aviation Administration's class at Palmdale will be considered as a future field trip for class members.

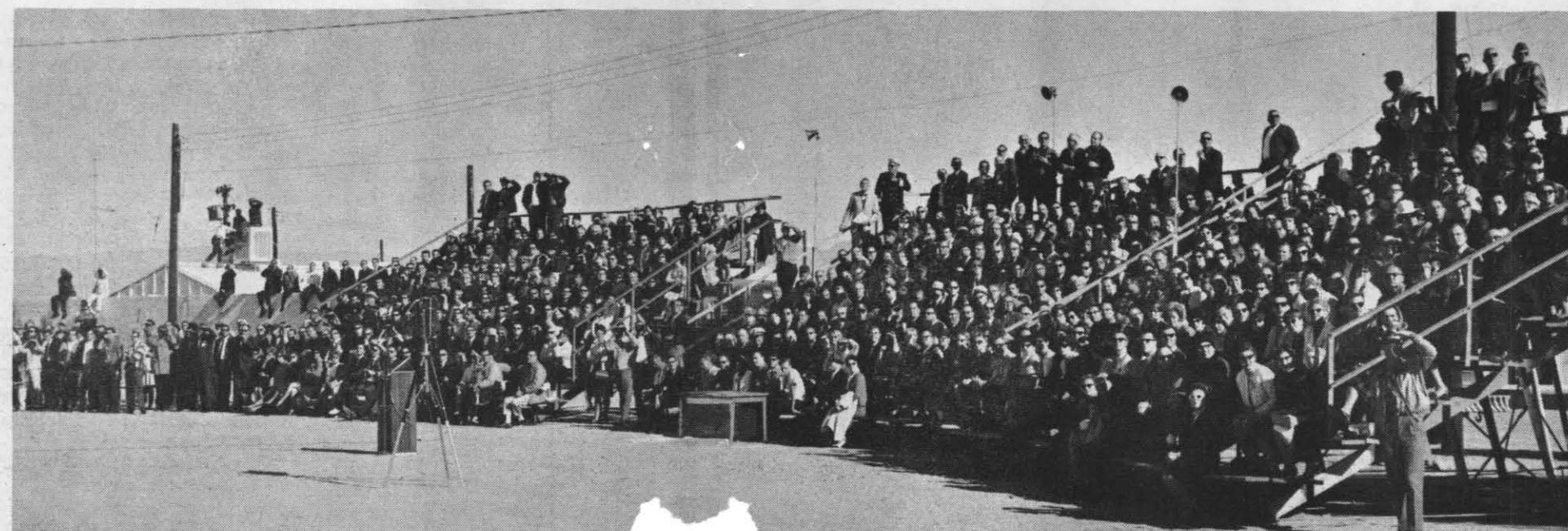
All persons interested in flying, either as a student or a pilot who might be caught "on top" sometime, who desire to know more about the requirements for an instrument ticket are invited to attend these weekly meetings.



# Firepower Show Demonstrates Weapons Effectiveness



AFTER EFFECTS OF INITIAL NAPALM DROP BY F4 PHANTOM ATTACK AIRCRAFT.



MORE THAN 600 PERSONS WATCHED AS PILOTS OF [REDACTED] SKILLFULLY MANEUVERED THEIR AIRCRAFT OVER CHARLIE RANGE.

## Firepower Demo Shows Air Punch At Charlie Range

Perfect timing and the complete success of each of 15 aircraft passes marked the combined NAF - VX-5 firepower demonstration viewed by over 600 people Thursday morning last week.

The remarkable coordination of the event was engineered by Cdr. Bryson Van Gundy, NAF Operations Officer, and USAF Major James O'Brien, VX-5 Operations Officer. Demonstrations of weapons and techniques, some of them constituting parts of regular evaluation programs, ranged from shallow dive and loft bombing, to refueling, to a perfect hit on a flare target by a Sidewinder missile.

Groundlings filled three sets of bleacher stands for the 45-minute demonstration, and were watching from surrounding areas and nearby camera towers. They included over 150 outside guests of the Center and numbers of NAF and VX-5 wives.

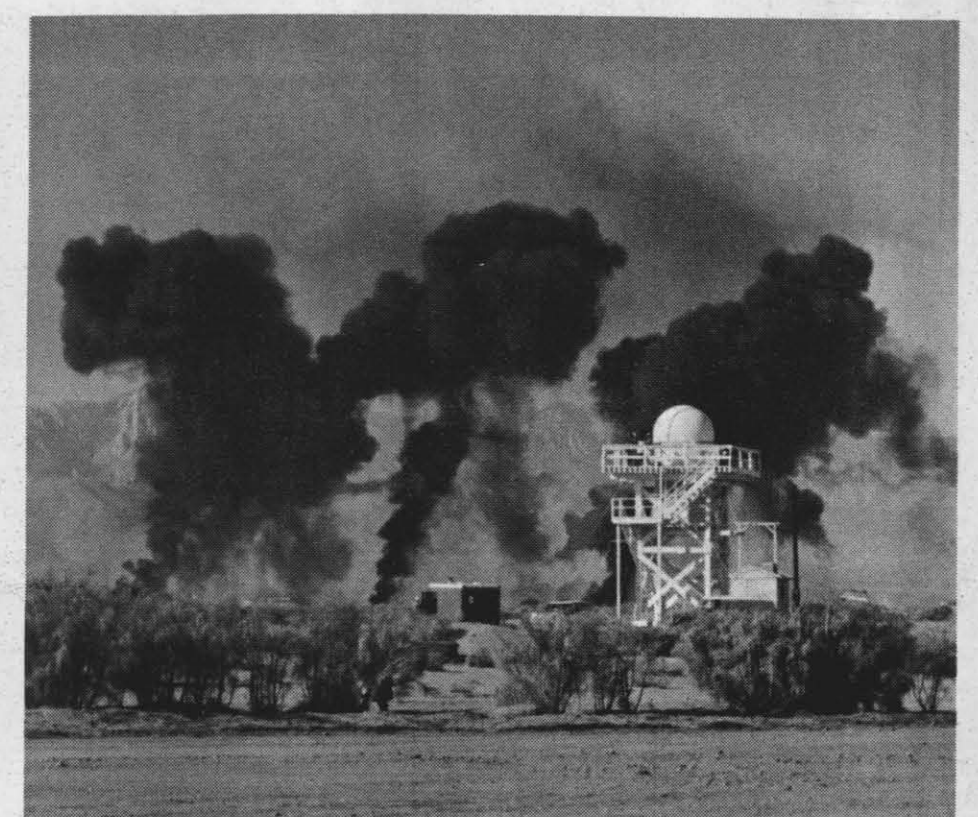


AN F4 FLYS-BY IN SERIES OF LANDING CONFIGURATIONS SHOWING LANDING HOOK.



RESCUE DEMONSTRATED BY MARINE CORPS H-34 SEAHORSE HELICOPTER.

PHOTOGRAPHS BY  
CLARE R. GROUNDS  
PH1 GARY BIRD  
PH1 GERALD BURGESS



NAPALM SMOKE CLOUDS FORMING IN FRONT OF ASKANIA CAMERA.



AN A4 WITH EXTERNAL "BUDDY-STORE" REFUEL SYSTEM REFUELS F8 CRUSADER.

## Display of High Speed Multiple Rocket Firing -- Napalm Initial Impact From F4 Phantoms

