



ERIC JOHNSON

Mr. Eric Johnson, landscape consultant, was guest speaker at the Oasis Garden Club's meeting held January 9 at the clubhouse on the Center.

Johnson is landscape consultant for the California City Corporation and also directs the operation of the Corporation's research nursery at California City. In addition, he writes a garden column and landscape information articles for the Los Angeles Times.

A highlight of Johnson's discussion, and of particular interest to desert dwellers, was his report of successful experiments conducted at the research nursery in California City with verdant ground covers. He described a 50-50 combination of birdsfoot trefoil and white clover that appears to be highly adaptable for the desert. It is planted in the same manner as when sowing grass seed for a new lawn and during the hot dry summers it will need plenty of water.

The birdsfoot trefoil has small yellow flowers with clover-shaped leaves and stays fairly green all winter. However, you won't get many power-mower rides on this lawn, for the real beauty of this ground cover is that it requires mowing only occasionally. California City experiments have found that the rabbit population helps with this chore, too. Johnson stressed that the first step in landscaping is to have a plan that includes sufficient water, future maintenance, and a continuing program of soil renewal and fertilizing. He feels it is futile to begin a landscaping project if these considerations cannot be met.

Then the speaker emphasized the importance of considering color when planting in desert areas. Five good perennials that he suggests for summer-long blooms, year after year, with relatively little care, are: gaillardia, gazanias, hollyhocks, shasta daisies, and dusty miller. Shrubs he considers suitable for tree-lined streets are: oleanders, pampas grass, poinciana, and pyracantha.

Johnson pointed out the special effects gained by remembering to include flowering deciduous trees and shrubs in landscaping. Flowering plum trees, forsythia, Scotch broom, spirea, and lilacs were mentioned as shrubs that would be suitable in this area.

The best spring-flowering bulbs are those which multiply and continue blooming year after year, such as narcissus, daffodils, muscari (grape hyacinths), crocus, and bearded iris, he advised.

Seabees Have Billets For Eleven More

Lt. Cmdr. Richard Malone, CEC, USNR-R, commanding officer of the China Lake Naval Seabee Reserve Unit, has received information that 11 recruits may be added to his command in the near future. These are the first recruits authorized to be added to the unit in nearly three years.

According to Lt. Cmdr. Malone, men must be at least 18, but not over 21, in excellent health, either high school graduates or in their senior year of high school, and display above average mechanical ability. A Naval Reserve recruit enlists for six years to fulfill his military obligation, and must attend one weekend drill each month for at least one year.

He then reports for active duty with the regular naval construction forces for a period of two years. The last three years of the enlistment may be spent drilling one weekend a month, again.

All young men interested in becoming members of the famed "Can Do" Seabees are urged to phone Chief Phil Nelson at NWC ext. 77704 or Petty Officer Cy Ebersberger at NWC ext. 76612.

Veterans still may join the Seabee Reserves, too. A few billets are open for equipment operators, mechanics, and carpenters who may enlist in the unit as high as petty officer second class if qualified. Veterans earn pay, promotion, and retirement by attending weekend drills.

If you're a new employee remember that you learn how to stop a machine before you learn how to start it.

LAW IN ACTION

BOUNDARY LINES

Both Jones and Smith, neighboring farmers, had bought their land from Brown some ten years before. The land descriptions were general, then. Jones' deed described the land lines by following the highway center.

They went something like "800 feet more or less from a section line, then parallel to the highway more or less 720 feet," and then along a line running back to the highway. Smith's deed was just as vague. A survey showed discrepancies in both deeds as well as overlapping areas.

Smith said that when he bought his land, Brown took him to a tree and cut a mark saying that the tree was the corner of his lot. Jones disagreed: He said the boundary ran along the lines marked by some logs Brown had placed there.

The boundary difference was about 25 feet.

Experts said that the tree mark had been put on the tree recently, most likely by Smith, and not by the seller, Brown.

Although the boundary was vague, neither Jones nor Smith did anything to settle it. Finally, Smith strung barbed wire along "his" boundary to the mark on the tree. When he built a garage on the disputed ground, Jones sued.

The court divided the over-



SOUNDS OF TIME — That's the name of this local musical group which has been gaining in popularity at various functions around the Center. They are shown here performing at the COM where they will be appearing Friday night, January 24. The folk-rock group, led by Ron Thompson have a sound for all ages.



Aetna Agent At Community Center
Friday, Jan. 24

The Aetna Insurance Representative, Mr. Howard Keenan, will be at the Community Center next Friday, January 24, from 9 a.m. until 4 p.m.

China Lake PTA Features Panel

The China Lake Elementary PTA meeting scheduled for 7:30 p.m., January 23, at the Vieweg School will feature a panel discussion on "testing" — trying to explain district and state testing in the schools, advises Margaret Freeman, publicity chairman.

Panel members will be: Carl Barker, assistant superintendent in charge of curriculum; David Seppich, district and county psychologist; Ron Rossi, district guidance counselor; Richard Halen, principal of Groves School; and Stanley Kus, principal of Vieweg School.

The panel will present an overview of testing, explain state and district scores and comparisons, and individualized testing. A question and answer period will follow.

The meeting is open to all persons interested in learning more about the testing program in the schools.



NEW COMMODORE — Don Romine (r) receives the Commodore banner from past Commodore, Gary Bird, who is now the club's parliamentarian. All new officers were installed at the January 9 meeting.

From _____	STAMP
TO _____	

SHOWBOAT

FRIDAY JANUARY 17
"FOR LOVE OF IVY" (101 Min.)
Sidney Poitier, Abbey Lincoln, Beau Bridges
7:30 P.M.

(Comedy) When the family's beloved maid decides to get a better job the group inveigles Sidney to stir up her romantic interest so she'll stay. The conviving is hilarious, and don't miss his pet Piranha! Here's a real howl! (Adult, Mature Youth.)
Short: "Bunny and Claude" (7 Min.)

SATURDAY JANUARY 18

MATINEE
"TEXAS ACROSS THE RIVER" (101 Min.)
Dean Martin
1:00 P.M.

Shorts: "Goose in the Rough" (7 Min.)
"Ghost Riders" (No. 8, 13 Min.)

EVENING

"FROM RUSSIA WITH LOVE" (116 Min.)
Sean Connery, Daniela Bianchi
7:30 P.M.

(Adventure) suave 007 deliberately walks into a trap baited by pretty Daniela. The goal—to procure a highly secret Russian decoder also desired by SPECTRE. Sinister spies and gorgeous women are taken in stride by Bond! (Adult.)

SUNDAY-MONDAY JANUARY 19-20

"THE HELL WITH HEROS" (103 Min.)
Rod Taylor, Claudia Cardinale
7:30 P.M.

(Adventure) From North Africa to Paris—his cargo was danger as he and his wartime buddy flew contraband in a battered old bucket of bolts. It was more action than they wanted! And Claudia is as exotic as the rare scenery. (Adult, Very Mature Youth.)
Short: "Swade'n Lovely" (9 Min.)

TUESDAY-WEDNESDAY JANUARY 21-22

"THE GRADUATE" (106 Min.)
Anne Bancroft, Dustin Hoffman
7:30 P.M.

(Comedy/Drama) The most talked about picture of the year tells of a college grad who rebels at the laid-out future planned for him. His affair with an older woman becomes mayhem when he falls for her daughter. Superbly made film done by a stellar cast to depict that "generation gap" with modern wit. (Adult, Very Mature Youth.)
Short: "Flying Circus" (7 Min.)

THURSDAY-FRIDAY JANUARY 23-24

"DUFFY" (101 Min.)
James Coburn, Susanah York, James Mason
7:30 P.M.

(Adventure/Comedy) Two brothers plan a crime-for-kicks in rebellion against their father and they recruit a pair of hippies to help them. High voltage laughs result as the plot twists. Wait'll you see Jim's pod! Like Wow! (Adult.)
Short: "Sports A-Go-Go" (10 Min.)

New Secretary To Reappraise Defense Dept.

A "Blue Ribbon" commission to examine the Nation's defense policies is among the initial plans of Secretary of Defense designate Melvin R. Laird.

Mr. Laird, in his first meeting with the press since being named to the Defense post, said, "I feel that we must set up a top level committee or commission to reappraise the Defense establishment and Defense policy, and the organization of the Department of Defense."

At the Pentagon news conference, Rep. Laird, R-Wisc., said he was hopeful that such a review could be set up in the not too distant future. He said the report from such a body would take from six months to a year.

Rep. Laird expressed hope that the war in Vietnam could be ended by next year and that he would give his enthusiastic support as Defense Secretary to this end.

He said he hoped he could come up with more satisfactory defense spending estimates, "but I would first hope that by the time we get to the preparation of our first budget, we could end the war in Vietnam."

When asked if he would define nuclear superiority and whether he believed in it, the secretary designate said, "Well, I have discussed that in the past. Certainly I believe that this country — and I don't want to limit it to that area, because the area is important as far as our conventional weapons are concerned—I believe that the United States should maintain a superior position as far as its defense forces are concerned. But this is, again, getting into the broad general area that I believe we should limit to my first press conference after assuming the role of Secretary of Defense."

He said that naming of the Service Secretaries and the Assistant Secretaries and the Deputy Secretaries is an important task and "one that I shall not take lightly, and I will take my time." He did say it would be ideal to name them in time so that they can have some transition period with the present secretaries.

When asked if his lack of administrative experience might hamper him in the Defense Secretary job, Mr. Laird said, "I would agree that I have not had administrative experience. I believe, however, that I have other experiences that would qualify me for this job, and I have no lack of confidence that I can perform as Secretary of Defense."

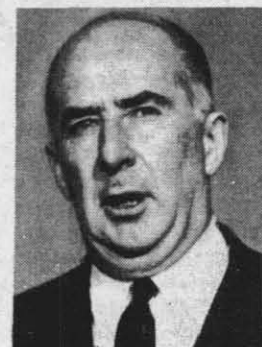
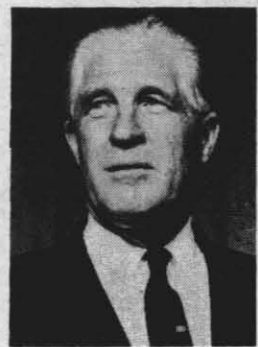
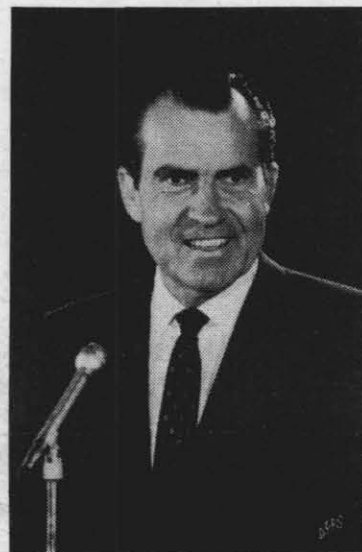
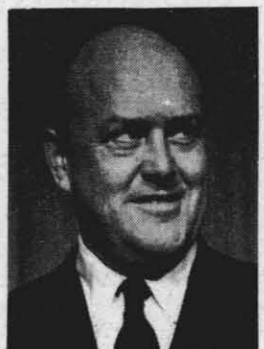
Forty-Niners To Meet Here

The Naval Weapons Center will play host to the regular bi-monthly meeting of the Death Valley '49ers organization this weekend, January 17, 18. The '49er group, which is dedicated to perpetuating pioneer and historic observances in the Western United States will be feted at no-host cocktail party at the Commissioned Officers' Mess (Open) Saturday night, beginning at 6 p.m.

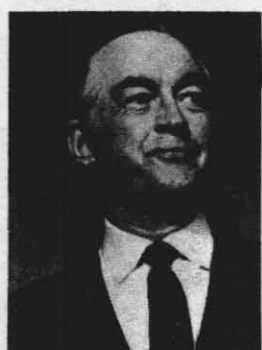
The event, which comes just two months following the 19th gala Death Valley encampment, (See November 29 issue of the Rocketeer) will feature plans and discussion regarding future activities of the renowned organization.

Vol. XXIII, No. 2 Naval Weapons Center, China Lake, California Fri., Jan. 17, 1969

President-Elect and New Cabinet Prepare To Take Oaths of Office

ROBERT FINCH
HEWJOHN MITCHELL
Attorney GeneralGEORGE ROMNEY
HUDWILLIAM ROGERS
StateRICHARD M. NIXON
President-ElectCLIFFORD HARDIN
AgricultureGEORGE SHULTZ
LaborWALTER HICKEL
InteriorMELVIN LAIRD
Defense

INAUGURAL MEDAL

WINTON BLOUNT
Postmaster GeneralDAVID KENNEDY
TreasuryMAURICE STANS
CommerceJOHN VOLPE
Transportation

OBSIDIAN
MOUNTAIN
Pages 4, 5

Inaugural Ball Features Gaiety And Tradition

30,000 embossed invitations will be picked up at the door on Monday, January 20, signifying the beginning of the very grand (white-tie) Inaugural Ball in Washington, D.C. The event will cap a fantastic day of parades, speeches, hymns, and hand-shaking that will permeate the swearing-in of the 37th President of these United States, the Honorable Richard Milhous Nixon. The official theme of the occasion is said to be "Forward Together," and dignity, tradition and gaiety are to be the Inaugural's bywords.

The Inaugural medal (left), which is said to be about twice the size of a half-dollar, will show the new President in three-quarter profile, while the other side will feature a sculptured version of the crewel-work Great Seal of the U.S. that the President-elect's daughter, Julie, embroidered for her father as a victory present.

The official 1969 medal will set a precedent to the extent that no other man in history has been depicted on the Inaugural memento as both the President and the Vice President. (Mr. Nixon was also portrayed on the reverse side of the Eisenhower medal on the occasion of the 1957 Inauguration.)

The President-Elect will attend the rites clad in tailless morning coat and striped trousers, and bareheaded. The Inaugural concert will feature the Mormon Tabernacle Choir and the National Symphony Orchestra. Of course, all of the TV networks will cover the event which is scheduled to begin at about 7 a.m. (PST).

Airdevron Five Changed Name December 31

On December 31, 1968 Air Development Squadron FIVE secured for the last time. On January 1, 1969 Air Test and Evaluation Squadron FIVE came into being.

The new name was ordered by the Chief of Naval Operations in order to reflect more accurately the mission of the squadron. AIRDEVRON FIVE's mission is primarily one of testing and evaluating existing systems and equipment — not development; therefore the new name better expresses the mission.

Since the mission of AIRDEVRON FIVE remains in the experimental field, the shorter name, "VX-5" can still be used.

Social Security Rep.
At Community Center
Wednesday, Jan. 22

CHAPLAIN'S MESSAGE

Environmental Hazards

CHAPLAIN JUDE R. SENIEUR



"UNANTICIPATED ENVIRONMENTAL HAZARDS RESULTING FROM TECHNOLOGICAL INTRUSIONS."

That was the title of a symposium held by a group of scientists in Dallas a couple Saturdays ago. They were pointing up various unexpected consequences of man's interference with his natural environment. For example, the pumping of waste material into a 12,000 foot well near Denver caused an earthquake in 1962. Detergents used to break up oil spilled in the Atlantic Ocean off the coast of England killed marine and bird life for miles and miles around. Insecticide sprayed in the San Joaquin Valley has affected the frogs in the Sierra Nevada Mountains.

The Scientists were presenting their data, not as a new discovery but rather as an affirmation of a long and well-known fact. Nature is not a toy at the disposal of man's whim and fancy. They cautioned against solving an immediate problem with measures that might have devastating, long-range effects. While technical scientists were reaffirming the facts, other men in the field of psychology, morality, philosophy and theology were insisting on playing Santa Claus with man's mind and morals.

The need of the hour seems to demand change, concession, and criticism. The ancient structure of authority must be reversed. The student must have the right to teach the teacher how to teach the student. The shackles of law must be broken and let order rise spontaneously from the emotion of the moment. And certainly man must be freed from the burden of Judeo-Christian culture.

The "law of nature" they say, is a figment of man's imagination and the fruit of social agreement. It can be changed at man's bidding. Morality, they insist, is a matter of custom and has no basis in man's nature.

Judeo-Christian culture distinguishes clearly between what is a law of custom and a law of nature.

The law of custom can swing with each generation. But the law of nature is the stable beacon that guides man to fulfillment. We change the law of custom precisely for the greater fulfillment of the law of nature. When we attempt to change the law of nature we find ourselves faced with "unanticipated hazards," or to put it less profoundly, we can foul up the whole operation.

Our present "earthquake" of violence in society would seem to prove the point.

CENTER LIBRARY LISTS NEW BOOKS

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

Fiction

Halberstam—One Very Hot Day.
Kaufman—Diary of a Mad Housewife.
Rock—The Extraordinary Seaman.
Silverberg—Voyagers in Time.
Thomas—Cast a Yellow Shadow.

Non-Fiction

Dulles—Great True Spies.
Goudge—A Book of Peace.

Howard—The Telescope Handbook and Star Atlas.
Hunter—Southeast Asia.
Jay—Management and Machinery.

Ley—Rockets, Missiles, and Men in Space.
Majdalany—The Fall of Fortress Europe.
Robinson—Under Fire.
Untracht—Metal Techniques for Craftsmen.

Merliss—Consider the Season.
Moskowitz—Science Fiction by Gaslight.
Sanford—Rising River.

The Rocketeer

Official Weekly Publication
U. S. Naval Weapons Center
China Lake, California

Capt. M. R. Etheridge, USN
NWC Commander

"J." Bibby
Public Affairs Officer

Joan Raber
Asst. Public Affairs Officer

William P. Valentine, Jr.
Editor

Ed Rank
Sports

Lucille Edwards
Editorial Assistant

PH1 Gary D. Bird, PH2 Delmar E. Hart,
PH3 Michael F. Krause, AN Maurice Dias,
Staff Photographers

DEADLINES: Tuesday, 4:30 p.m.
Photographs Tuesday, 11:30 a.m.

The Rocketeer receives Armed Forces Press Service material. All are official U. S. Navy photos unless otherwise identified. Printed weekly with appropriated funds in compliance with NAVJCS P-35, revised July 1958. Office at Nimitz and Lauritzen.

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 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, 95 King Ave.—Sundays, 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.

Clerk-Typist, GS-322-03/04, Code 258 —

This position is located in the Aviation Supply Division of the Supply Department. Major duties and responsibilities include typing, routing and filing, and other miscellaneous duties such as answering telephones and is responsible for maintaining adequate supplies required for in his work. Is required to type rapidly and accurately. Must also possess personal characteristics which will enable him to get along well with others in the Division.

Clerk-Typist, GS-322-03, Code 2573 —

Responsible for the preparation of all outgoing documents, the subsequent processing, routing and/or mailing thereof and the daily distribution of all incoming papers pertaining to the branch.

Clerk-Typist, GS-322-03/04, Code 252 —

Personal and telephone contacts with individuals at all levels of the naval establishment and the representatives of business and industry. Collects and presents data concerning contracts and related areas. Typing of correspondence and preparation of charts and graphs.

Voucher Examiner, GS-540-03/04/05, Code 2575 —

Reviews bills, checks for accuracy against status, prepares a summary of accounting data; files stubs and maintains constant follow-up of current stubs to monitor timely and proper receipt of ordered material.

File applications for the above with Carole Cadle, Bldg. 34, Rm. 26, Ext. 71648.

Supply Clerk (Typing), GS-2005-03, Code 2552 —

The incumbent is responsible for maintaining stock records, receiving and processing requests for ordered material, ordering material, and reconciling records of daily movement of ammunition with physical inventories.

Clerk (Typing), GS-301-03, Code 8412 —

The purpose of the position is to assist the Head, Visitor Control of controlling access of official visitors to the Center insofar as security clearances are a factor. Duties include meeting official visitors, making various contacts, making up of books, etc. A general knowledge of typing is required.

Clerk-Typist, GS-322-03, Code 2575 — The incumbent types various kinds of reports, letters, requisitions and other documents for the Branch, which is responsible for maintaining all paperwork regarding the Receipt of material at this Center.

Clerk-DMT, GS-4, Code 4022 — This position is located in the Anti-Radiation Guidance Division, Advanced Guidance Branch, Weapons Development Department.

Incumbent will provide a variety of administrative and secretarial functions to the Branch. Types reports and technical material from rough draft and/or recorded dictation. Performs miscellaneous clerical duties as required.

Clerk-DMT, GS-4, Code 4051 — This position is located in the Guidance Systems Branch, Infrared Systems Division, Weapons Development Department. Incumbent will perform secretarial duties for the Branch which includes: 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, Phone 72676.

Mail and File Clerk, GS-305-3 or 4, Code 8514 — Position located in Mail, File and Records Branch, Command Administration Department. Routing of incoming correspondence, filing, and record searching. GS-3, 1 year of general experience. GS-4, 1 yr. general and 1 yr. specialized.

File application for above with Sue Proslowitz, Bldg. 34, Rm. 28, Ext. 71577.

Clerk-Dictating Machine Transcriber, GS-4, Code 4561 — Incumbent performs secretarial type duties for the Branch Head, types from handwritten rough drafts or transcribing machine. Incumbent performs a variety of clerical and secretarial - type duties for the branch such as: obtaining travel info, typing travel itineraries and reports, keeping time records, distribution of mail, telephone questions, Branch files, and all clerical duties for the Branch.

File applications for above with Jan Bixler, Rm. 24, Personnel Department, Phone 72723.

EDITORIAL

The Intangibles

All enduring structures are built on firm and lasting foundations comprised of many elements. Our American military establishment is such a structure — built of strong material, remodeled and modernized when necessary, and resting solidly on a foundation of honor and integrity.

These words represent standards of conduct and performance of duty spanning the history of our nation as well as the history of each branch of the armed forces.

Unfortunately the ideals represented by these two words — honor and integrity — are too often overlooked, sometimes misunderstood and frequently ridiculed. Far too many people look upon these ideals as outmoded — useless carry-overs from a past era.

Too many Americans have adopted the "hooray for me, the devil with you" outlook. They are more interested in feathering their own nests at the expense of others than in performing honorable service in their particular jobs or professions.

Fortunately, the hallmark of the military man is his honor and integrity. If there is any doubt, leaf through the pages of history and recall such places as Valley Forge, Gettysburg, Belleau Wood, Midway, Bastogne, Iwo Jima, Chosin Reservoir, Hill 881 and Khe Sanh.

It is not in the makeup of a military man to gain personal advantage at the expense of his comrades, to shirk his duty or to seek the easy way out at the expense of his assigned mission.

The greatness and success of America's armed forces do not lie solely in our superior weapons, logistic capability or masses of men. The greatness and success have come from the individuals who have served with honor and integrity.

For as long as we have men wearing the uniform of our country to whom honor and integrity are a way of life rather than mere words, our military structure will remain strong and secure.

Your honor and your integrity are your most cherished possessions — the mark of a true man. Guard them well and never let them be compromised. (AFPS)



SHAKESPEARE AT THE COM — Rev. Michael W. Egan, Associate Pastor at Saint Francis' Parish in Bakersfield, entertained WACOM members at their recent luncheon with dramatic recitations on portions of the works of the poet, William Shakespeare. His presentation is said to have been magnificent. Special guests at the luncheon were Mrs. Geo. Whaley, Chaplain Harold MacNeill, Chaplain Jude Senieur, and Chaplain Thompson.

EMPLOYEE SERVICES BOARD QUARTERLY AUDIT

The quarterly audit of the Employee Services Board accounts provides the following financial status reports as of December 31, 1968.

ASSETS	
Cash on Hand	\$ 300.00
Cash in Bank (Checking Account)	532.70
Cash in Bank (Savings Account and Reserve)	61,208.17
Accounts Receivable	123.82
Notes Receivable	5,646.75
Equipment & Facilities Inventory	\$38,860.76
Less: Accumulative Depreciation	13,193.29
Prepaid Expense	354.79
TOTAL ASSETS	\$93,833.70
LIABILITIES	
Accounts Payable	\$ 323.58
Payroll Taxes Payable	1,535.31
NET WORTH	91,974.81
TOTAL LIABILITIES & NET WORTH	\$93,833.70

Operating Statement for Six Months Ending December 31, 1968

INCOME	\$98,245.04
Operating Expense	93,526.85
NET OPERATING PROFIT	\$ 4,718.19

During the fiscal year, six checks amounting to \$37,500.00 were given to the Joint Navy-Civilian Recreation Council to be used in support of the Center's recreation program.

USC Professors Counsel Here



VISITING PROFESSORS — Nasser Nahi (r), and Melvin Gerstein (c), of USC's School of Engineering, are currently making periodic trips to the Center for the purpose of advising students in the USC graduate program. Dr. Hoyem (r) is shown explaining some of NWC's work.

PLANE AND BUS SCHEDULE

Effective February 1, 1969

CHINA LAKE—INYOKERN—INT'L AIRPORT—PASADENA

Air West Schedule (TR's or Tickets Required)

Northbound (Daily)		Southbound (Daily)	
Flight No.	Leave	Arrive	Leave
461	0445 (Except Sun.)	0616	0630 (Sun.)
463			
333	1345	1543	
340			1600
364	2100	2205	1800
363			2215
			2313

(NOTE: All flights stop briefly at Lancaster except 333/340 which stop briefly at Bakersfield.)

Airport Shuttle Bus Schedule — China Lake

Passenger transportation will be provided between Inyokern Airport and China Lake daily, Monday through Friday (except holidays) for morning and night flights. Shuttle bus pickups will be as follows:

Flight No.	BOQ-A	Center Rest.	Adm. Bldg.	Mich. Lab.	Arrive Inyokern
463	0545	0546	0548	0550	0610
363	2130	2131	2133	2135	2155

Travelers using flights 333/340 and week-end departures should make prior arrangements for transportation to the airport through the Travel Branch, Code 8517, Ext. 71378 or 71321. For further information, please call the Travel Branch.

Lecture Features UCLA Professor Friday, Jan. 24

"Some Recent Developments in Very High-Speed Digital Computer Components" is the title of a lecture to be presented by Dr. Antonin Svoboda at an open meeting in the Community Center Friday, January 24, 1969 at 10 a.m.

Dr. Svoboda, who is Professor of Engineering Computer Sciences in the Department of Logic and Systems Design at the University of California at Los Angeles, has presented numerous computer-science-oriented lectures in the United States, Europe, and China on such subjects as "The Residue Number System" and "The Boolean Analyzer."

His lecture will cover the philosophy of high-speed computing techniques and the design and operation of the hardware used in the computations. Dr. Svoboda, who has designed some of the hardware presently being used in high-speed computing, holds several patents in this field.

The technical lecture is one of a series featuring well-known national and international authorities on computer research and development, presented at the Naval Weapons Center under the joint sponsorship of the Office of Naval Research and the Center.

After receiving his Ph.D. from the Prague Technical University, Dr. Svoboda did post-doctoral work at the Charles University in Prague until interrupted by WWII. During the war he worked at Massachusetts Institute of Technology Radiation Laboratory and, from 1950 through 1960, he served as Director of the Research Institute of Mathematic Machines at the Academy of Sciences in Prague.

While at MIT he authored Radiation Laboratory Series Book No. 27, "Computing Mechanisms and Linkages." As Director of the Research Institute in Prague, he was responsible for the development of a large automatic computer with multiprogram and self-correcting features.

RM Purple Heart Winner



RECEIVES PURPLE HEART — RMSN Gary Weisz was presented the Purple Heart Medal by Cdr. Weigle, Commanding Officer of the Naval Communications Station, Puget Sound, Washington, for wounds received July 23, 1968 in the Mekong Delta, Viet Nam. Weisz was attached to River Assault Squadron Nine, River Division 91, operating in Southeast Asia. A recent arrival at NWC, Weisz is assigned to the Communications Division.

Trujillo Logs 10,000 Hours



PINNACLE OF EXPERIENCE — NAF's Chief Trujillo (c), one of the few remaining non-commissioned officers to wear Navy wings of gold, is shown receiving a plaque from Mort Bergren, Douglas Aircraft Representative, in recognition of Trujillo's 10,000 logged flying hours in multi-engine piston transports. Trujillo was also congratulated for his feat by NAF Commanding Officer, Capt. L. A. Dewine.



ADVANCED IN RATE — Capt. M. R. Etheridge, NWC Commander, congratulates (l-r) FTG-2 Robert A. Belousek and PH3 Michael F. Krause upon their advancement in rate. The certificates of advancement in rating

were presented during recent ceremonies in the Commander's office. Belousek is on TAD from USS Walker and Krause is a Rocketeer staff photographer. Krause hails from Sacramento.

THE LOCKER ROOM

Basketball Team's Chances

BY ED RANCK



China Lake's varsity basketball team opened its annual mini-schedule last weekend, losing a pair of games to George AFB. The Lakers lost by eight at Victorville on Friday evening, then regressed a bit, dropping a 90-79 decision on their home floor on Saturday afternoon.

Actually the second game was a lot closer than the score might indicate. The lead had changed hands at least a dozen times throughout the game, but an unanswered 13 point outburst by George in the final three minutes made the difference.

The loss had to be particularly disappointing to China Lake's coach Dwight Bartlett, who has been trying to put a quality varsity team on the floor for the past two seasons. Not that it's all over now that the local club is 0-2, but the manner in which the games were lost, most notably the second one, went a long way toward pointing out the coach's problems.

NOT MUCH HEIGHT

"We are just too small," Bartlett lamented after Saturday's game, and then went on to recall how George had been able to take "four and sometimes five shots by controlling the rebounds." Bartlett had hoped to unveil Ace TV's high flying Ted Bailey this year in order to neutralize the superior height that most of the MDISL teams possess. Unfortunately, Bailey accepted a position as a private in the U.S. Army last week, so now he will have to resort to a run and gun strategy.

Still, Bartlett has high hopes as he sends his team on another trip to the Land Of The Giants this weekend. Tonight China Lake will host Barstow at 7 p.m., tomorrow there will be an afternoon game on the Marines' home floor. After that the team will make final preparations for the MDISL Tournament which begins here on Thursday the 23rd. "We have plenty of good ballplayers," e says, "but I don't know if we can get them playing together as a team before the tournament starts. Some of our guys played well in the first two games and I think a few others will get better as we go along."

Clearly, Bartlett does have good material. To name a few he's got Gary Ellwanger and Terry Atkinson of VX-5 plus Gary Jacobs and Henry Coates of the Falcons. All are proven intramural ballplayers but the tallest of the group is about 6'1". His biggest men are Don Yorges, Kit Carson, Ken Burke and Ken Cappell but all four may lack the height to control the boards in varsity competition. Most of his players are accustomed to the fast breaking style of ball, but there is a question as to whether they can put it together as a team in a few practice sessions.

Most of the team has been playing on clubs that use the fast break, but they haven't played together enough to make the style effective on the varsity. In fact, during the first two games there weren't many who played up to their potential. "The lack of practice has really hurt," Bartlett said, "everyone is playing in the intramural league and about the only time we can get the whole team together is when we play a varsity game."

As the 1969 MDISL Tournament draws near, there hasn't been too much speculation as to the eventual winner. Norton AFB, the club that won last year is reported to be back with the same team. There have been rumors that Norton may have one of the best teams in the Air Force this season. With such an obvious overdog in the tournament, the question that will be debated next week will concern the second best team in the MDISL.

Despite a fairly gloomy outlook that may prevail, we would have to agree with what Bartlett says about his team's chances. "We have the potential, and if we can put it all together we will do pretty well."

China Lake may finish as high as second or they may finish last. As ridiculous as the statement may sound, the team is that far from being a known quantity. In the game against George you got the impression that man-for-man China Lake had the better club, and George usually has a contender in the MDISL. One way or another, the proof of China Lake's potential should come tonight in the Barstow game.

Club Chaparral Features Caramel Covered Popcorn

"The Caramel Covered Popcorn" will furnish music for dancing at Club Chaparral this Friday, January 17 from 9 p.m. until 1:30 a.m. The "Popcorn" musicians are from Lancaster, California.

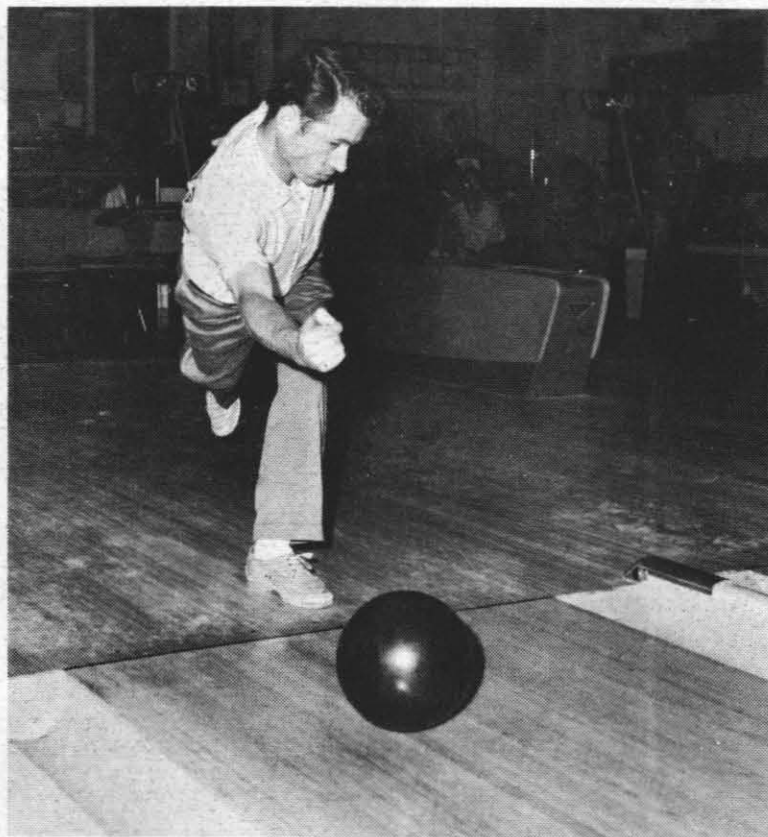
Club Chaparral announces a "Reduced Sale Party" for Tuesday, January 21, beginning at 4 p.m., reported managers Mike Weinberg and Joe Sheets.

Pro-Bowl Game

By special arrangement between the TV Booster Committee and KBAK, Channel 29, the NFL Pro Bowl Game will be rebroadcast over Channel 2 in the Indian Valley.

The game will be seen live and in color on Sunday, January 19 at 1 p.m., according to the Center's Community Relations office.

Local Lanes See New Series Record



BIG NIGHT — Bill Esch, bowling in the Premier League at the China Lake Bowl, rolled a whopping 765 series total recently, breaking a long standing record and setting a new one that should stand for some time. Esch had 27 strikes out of a possible 36.

Cagers Highlight Gym Action



CAGERS BATTLE — The action is hot and heavy each Tuesday and Thursday night at the Center Gym as members of local basketball teams hit the clappboards in earnest. Shown above is part of the action that took place last Tuesday evening. Centerites should plan to attend the games.

The NAF Hawks won three games and moved into the thick of the battle for first place in the China Lake Basketball League as action resumed following the Christmas holiday period. The Hawks rolled past OMD and the Hustlers scored a 47-45 victory over previously unbeaten Ace TV. Despite the loss, Ace clung to a half-game lead over second place Loewen's.

Jerry Hine hit 12 points and Don Yorges had 10 in the Hawks' victory over Ace. NAF held a two point lead at the half, then upped the margin to 38-35 at the end of the third period. The Hawks then withstood a late Ace rally to win their third game of the year. Tim Higgins led the scoring for Ace with 18 points and Ken Burke had 11.

Don Williams and Kit Carson each had 13 points as the Hawks downed the Hustlers, 58-45. Don Kinney and Gary Ziegler had led a third period charge to pull the Hustlers to within three points, but Williams hit 8 points in the fourth period as the Hawks outscored the Hustlers 23-13. Kinney was high man for the game with 15 points.

NAF won their fifth game of the year, downing OMD, 61-49. Carson led the Hawks in this one hitting 14 points while Hine had 11. Ken Gipson was high for OMD with 19 points. Gipson scored 26 points in a losing effort as the Hustlers won their first game of the year, downing OMD, 52-51. The 26 points was the highest single game performance in the league this season. In other action, Tim Higgins scored 24 as Ace defeated the Hustlers, 59-42.

It was a long time in coming, but the first 700 plus series to be rolled at the China Lake Bowl this season should be remembered for a long time. Bill Esch, who carries a 178 average in the Premier League, not only broke Al Herbert's old record of 715, he set a series mark that may stand for a long time.

Esch had 27 strikes out of a possible 36, rolled single games of 269-240-256, and finished with a 765 series. It was the highest series ever rolled since the formation of the China Lake - Ridgecrest Bowling Association, and possibly the highest ever in the area.

Esch had five spares during the series and only one bad frame when he missed an easy one pin spare. The 269 single game also placed him in the number three position of the Bowl's single game honor roll.

Other Pin Action

In other Premier action during the past two weeks, Earl Roby had the second high series with 236-613 while Bob Sickles rolled 234-609. Other top series included Warren Schad 235-611 and Allen Smith, with 217. Top individual games were rolled by Bob Owens with 246; Cliff Moss at 233 and Craig Rae with a 227.

Fred Dalpiaz led the Friday Foursome last week, posting the second highest series in that league this season. Dalpiaz hit games of 219-243-217 to finish with a 669 series. Bob Owens rolled games of 202-207-208 to lead the Desert League with 617 and Royce Fisher hit 236-611. Stan Ziegler also broke the 600 mark in the Desert League hitting 214-608. Top single games included Andy Cook with 235; Andy Petach with 234 and John Ito with 232.

In the Women's Wednesday Handicap League, Willie Johnson led the parade with 227-568 and Betty Kirwin had 200-544 on the final evening prior to the Christmas holidays. In league action last week Lil Galovic and Estella Paine each hit 506 and Doris Bruce had high game with 219.

Dotty Duncan led the Women's Monday Scratch League with 538 and Erma Erickson was next, hitting a 214 en route to a 537 series. Top series included Cynthia Schoenhals 528; Maggie Branson 526; Mary Schmuck 200-520; Doris Boyack 519 and Sue Haack 515. In the Thursday Afternoon Trio, Wanda Magars led the way with 192-508.

In the Junior and Senior Mixed Leagues, Mike Dowd was high with 234-155-226 and a 616 series. Don Branson also broke the 600 mark hitting 180-192-233 and a 605. Patty Dalpiaz was high for the girls with 160-457.

Statistics

BASKETBALL STANDINGS			
	W	L	
Ace TV	5	1	
Loewen's	4	1	
VX-5	3	1	
NAF	5	3	
OMD	1	6	
Hustlers	1	7	

SCORING			
	Points	Avg.	
Higgins, Ace TV	105	17.5	
Kinney, Hustlers	99	12.4	
Gipson, OMD	92	13.1	
Carson, NAF	80	11.4	
Ziegler, Hustlers	79	9.8	
Gist, OMD	74	14.8	
Hine, NAF	72	9.0	
Johnson, OMD	71	11.7	
Bailey, Ace TV	70	17.5	

NEXT WEEK'S SCHEDULE
January 21—Loewen's vs. Ace TV; Hustlers vs. VX-5.
January 23-25—1969 Mojave Desert Inter-league League Tournament.



LT. JAMES S. WARSON, native of St. Louis, Missouri, is serving his first Navy duty as physician - surgeon at the Center's Dispensary. He has an A.B. from Tulane University and received his M.D. from Vanderbilt University. He was commissioned in December 1965 through the Berry Plan. Warson has played collegiate and semiprofessional soccer and still considers it his favorite sport. Hometown for Warson is Sarasota, Florida. He, his wife and Joseph, age 1 1/2, and Elizabeth Ann, age 2 1/2, live at 1818-B Young Circle.

Navy Initiates Aggressive New Safety Program

The Navy has initiated an aggressive new safety program for all Navy personnel — military and civilian. The program also is designed for dependents who travel on or visit naval ships or aircraft and Navy or Marine Corps installations.

Co-ordinating the safety program is a new branch of the Navy Department called OP-98.

Capt. G. J. Davis, acting Assistant Chief of Naval Operations (Safety) (OP-98), said that prior to an investigation and report by RADM. R. L. DuBois, Deputy Navy Inspector General, each command ran its own safety program. The success of these depended largely on the enthusiasm and support of personnel. Due to a lack of a central source, statistics and other important safety information were hard to obtain.

Accident information will be sent to OP-98 from the Navy's four major function areas — aviation, submarine, surface ship and shore activities. After compiling and studying the material, OP-98 will make recommendations for the prevention of similar accidents.

OP-98 will centralize some 18 programs, which previously have been conducted independently. Hopefully, its recommendations should result in an effective accident prevention program designed to reduce deaths and injuries to personnel and loss or damage to Navy material.

Wacom News

The Thrift Shop, which is sponsored by WACOM, recently made its semi-annual contribution to the Navy Relief Society and the United Fund. All income from the Shop, except for operating expenses, is equally divided between the two organizations for local distribution only. The Shop is open on Tuesday mornings from 9 to 11 and Thursday evenings from 7 to 9. At present there is a selection of evening finery on hand. Anyone wishing to help in the Shop, who is not included among the volunteer wives from already scheduled departments and organizations may call the Chairman, Mrs. Henry Hoxie, at 375-2694.

A planting party is in the offing for WACOM volunteers who will be asked to assist in the enhancement of the exterior of the Officers' Club by planting 200 daffodil bulbs in the planters at the entrances and in the flower beds. Mr. David H. Chapman has drawn up landscaping plans for the entrance to the Barefoot Bar and pool area. A hedge of oleanders around the parking lot is also planned. WACOM's gift to the Club, a new outdoor display case, will be erected soon on the left side of the front entrance. It was designed by Mrs. J. T. Cobb and is being constructed by Mr. Lawrence Ellefson.

WACOM membership recently voted to spend the profits from the sale of desert wildflower and wild life stationery at the April Wildflower Festival on colorful plantings on the Center. A hedge of 80 pink and white oleanders was planted around a vacant lot on Bandy. Spring flowers soon will replace the chrysanthemums in the planters at the Main Gate. The stationery bearing the beautiful water color drawings of the well-known desert artist Henry Mockel will be on sale at WACOM daytime meetings and at the '69 Wildflower Festival on April 26 and 27.



PME-118 VISITS — Capt. Noah W. Gokey, Head of PME-118 of the Naval Electronics System Command, visited the NWC VHF Telemetry facilities recently as part of a tour that includes several other facilities involved in the Navy's UHF Conversion program.

Above, Jack Billups (r), Head of SHRIKE Instrumentation, talks about the missile to Capt. Gokey. The tour included an inspection of NWC's 50 - foot Automatic Tracking Antenna which was built by Code 306 out of surplus, discarded radar parts.

SecNav Commends Center

I am pleased to advise you that the U.S. Naval Weapons Center, China Lake, California has been cited for Meritorious Achievement in support of the Department of Defense Natural Resources Program during 1967. Also, I have been requested to pass along to you the appreciation and hearty congratulations of the Secretary of the Navy for your achievement in this program.

Conservation of our Natural Resources cannot be over-emphasized in this day and age of concentration on technical and scientific advancement. Part of the Defense job is the safeguarding and wise use of those priceless natural resources which are entrusted to our care.

For your efforts in developing programs for the conservation, enhancement, and management of natural resources during 1967, I am forwarding to you a citation (enclosure (1)) signed by the Secretary of Defense.

You and the personnel of your Command are commended for a job "well one."

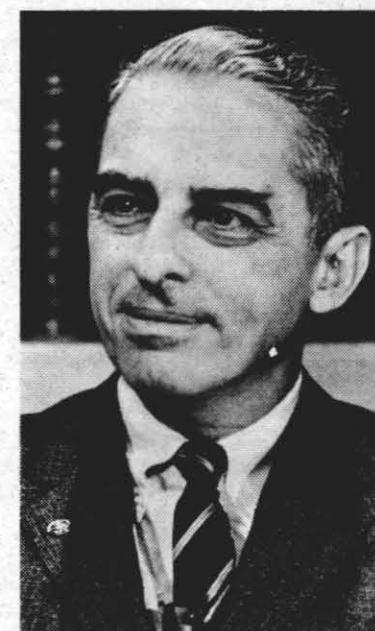
(s) B. A. Clarey
Vice Chief of Naval Operations

Corona Honored With Safety Award



SINGULAR HONOR — G. E. Mosman, Safety Administrator for NWC Corona Laboratories (1), and three members of the Advisory Committee beam happily at receipt of SecNav Safety Award. The members (l-r) are: J. F. McKelvey; M. A. Axelson, and

B. N. Stout. The Corona Labs were the only activity in the entire Naval Material Command to be so honored. The award represents achievement in all aspects of safety (except flight safety) at a shore establishment.



Charles F. Duchene

The President of the Navy League of the United States, Major General Charles F. Duchene, USMC (Ret), will be visiting in Bakersfield, briefly, on Monday, January 20, 1969. While here he will give two addresses, the first at noon to the Kiwanis Clubs at Freddie's Top-O-the-Hill, and the second at the Bakersfield Council of the Navy League Banquet at 7:30 p.m. at the Royale Palms. Advance word indicates that he is a dynamic speaker with a potent message.

Prof. Svoboda Featured Speaker At ASPA Lunch

The American Society for Public Administration (ASPA) will hold a sit-down luncheon in the Mojave Room, Commissioned Officers' Mess at 11:30 a.m. Friday, January 24, stated Bruce Wertenberger, publicity chairman.

Dr. Antonin Svoboda, Professor of Engineering Computer Sciences in the Department of Logic and Systems Design at the University of California at Los Angeles, will discuss his experiences as technical director of a research institute in Czechoslovakia.

A cordial invitation to attend this interesting talk is extended to all ASPA members and interested persons by Dr. Robert Rowntree, president of the China Lake Chapter of ASPA.

OBSIDIAN — Local Glass Mountain Possible Ancient Weapons Forge

Local historians may find it necessary to change the records of the Naval Weapons Center. It is quite possible that NWC scientists and engineers at China Lake were not the first to produce effective weapons within the confines of the Center.

Long before the White man arrived in the area, prehistoric inhabitants and Indians saw vast outcroppings of black obsidian (volcanic rhyolitic glass) at Sugarloaf Mountain in the northwest section of the Center's Coso bombing range near Coso Hot Springs.

Also known as "Glass Mountain," the area provided an abundance of raw material from which the prehistorics fashioned their weapons and tools, some reported to have survived the elements for 3,000 years. Obsidian arrowheads, spearheads, bird points, scrapers and knives found at old abandoned Indian campsites throughout the West could have originated at the Sugarloaf quarries, one of the largest sites in California.

Historic data of the early inhabitants is scarce, but one thing is surely evident at the Sugarloaf quarries — "weapon development" was a tremendous operation throughout the centuries. It is also thought, and in many cases substantiated, quantities of the rough obsidian was used as barter between the Coso, or Panamint Indian tribe, and the Uto-Aztecan peoples in the western states.

Actual methods and tools used by the Indians in chipping or shaping obsidian, and other materials such as jasper, quartz and flint, into tools and weapons is still highly debatable. Anthropologists interested in the subject includes Dr. Earl H. Swanson, Director, Idaho State University Museum, who declares that Don E. Crabtree of Kimberly, Idaho, is one of the few specialists in the ancient prehistoric art.

In 1966, Red Lake Laboratories, Inc., Santa Clara, California, recorded flintknapper Crabtree's technique with high-speed photography as part of Dr. Swanson's documentation program. When Crabtree

viewed the film projected at reduced speed, he was surprised to find, after 30 years of research, "some of the actions taking place were considerably different in detail than he had always supposed."

One of the finest local collections of obsidian arrowheads, spearheads, bird points and various tools is owned by Tom and Virginia Boyd of China Lake. All the items were found within a 135-mile radius of the Center. Unique to this collection are a number of rare Pinto man arrowheads found in the Little Lake complex.

Rockhounds and lapidaries have come to know obsidian as one of the most popular and readily obtainable materials used for many types of jewelry, figurines and objects of art. Reported to be an ideal carving medium, obsidian is considerably tougher than ordinary glass, withstanding grinding and sanding, and polishing well. Indians depended upon obsidian's characteristic conchoidal fracturing to create a knife-like edge.

While much of the obsidian at Sugarloaf Mountain contains cristobalite (silicon dioxide), there is an unlimited amount of the solid, unblemished variety for lapidary use.

Two rockhounds who have followed the obsidian trails around California for many years are Marce "Frenchy" Brissaud, owner of Searles Valley Rock Shop, Argus, and Henry C. "Hank" Wittenmyer, past president of the Indian Wells Gem and Mineral Society and former Range Officer at NWC. Frenchy, one of the best lapidaries in the West, has lots of advice on working volcanic glass. He points out that many beginners shy away from shaping and carving obsidian because it is glass, but after a few trial runs find the results are outstanding and a praiseworthy.

There are two routes for driving directly to the obsidian outcroppings and the Indian quarries. The first is through the Coso Hot Springs NWC security gate about eight miles east of Coso Junction (Gil's Oa-



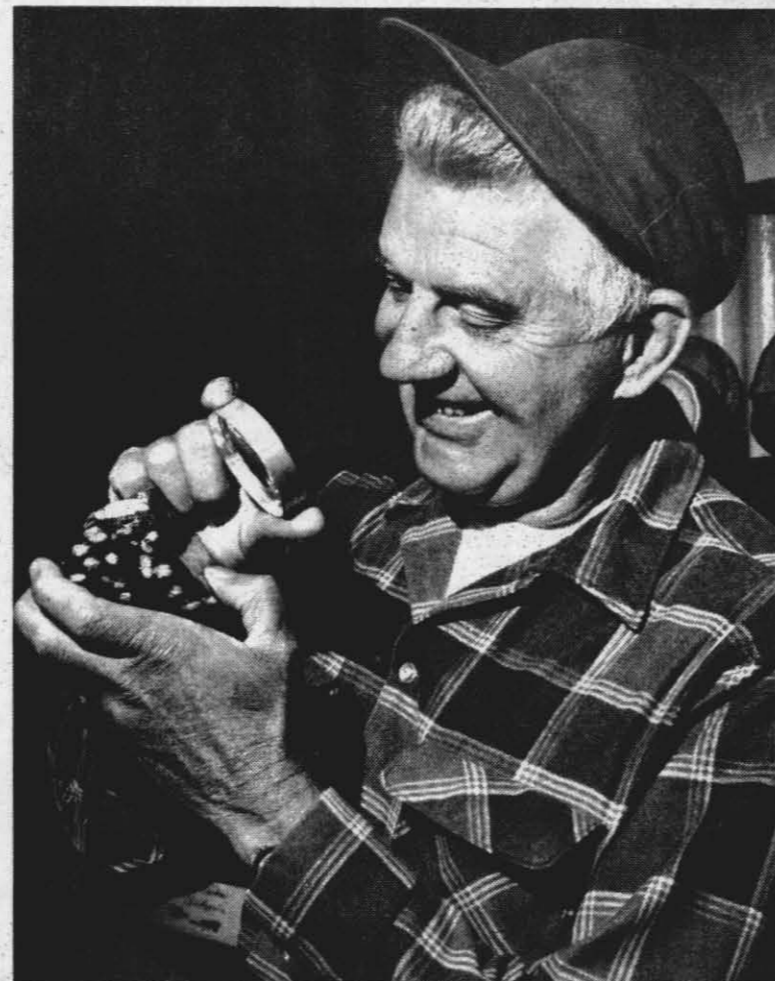
OBSIDIAN OUTCROPPING in Sugarloaf Mountain, NWC north range, was the weapons forge for prehistoric man. One of the largest volcanic glass sites in California, it

is significant to the history of the Indian culture of this area. The rockhound shown here is Henry "Hank" Wittenmyer, former Naval Weapons Center Range Officer (ret.).

sis Cafe) from Highway 14.

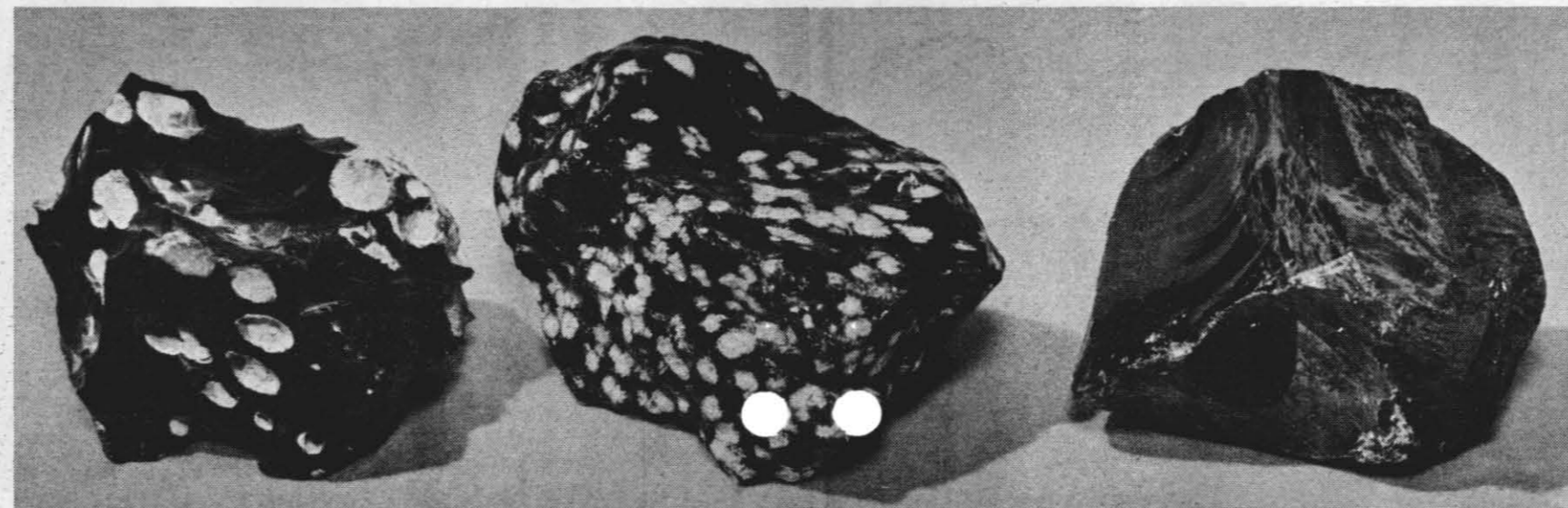
The second route is shorter and more direct. Turn east from Highway 14 at the red cinder cone operation about three miles north of Little Lake Hotel.

The road leads to the base of Sugarloaf Mountain then turns southward and gradually winds up the mountain to the outcroppings. Both routes cross into restricted Government range areas and require the sanction of NWC Security Office and an official escort for persons not attached to the Center.

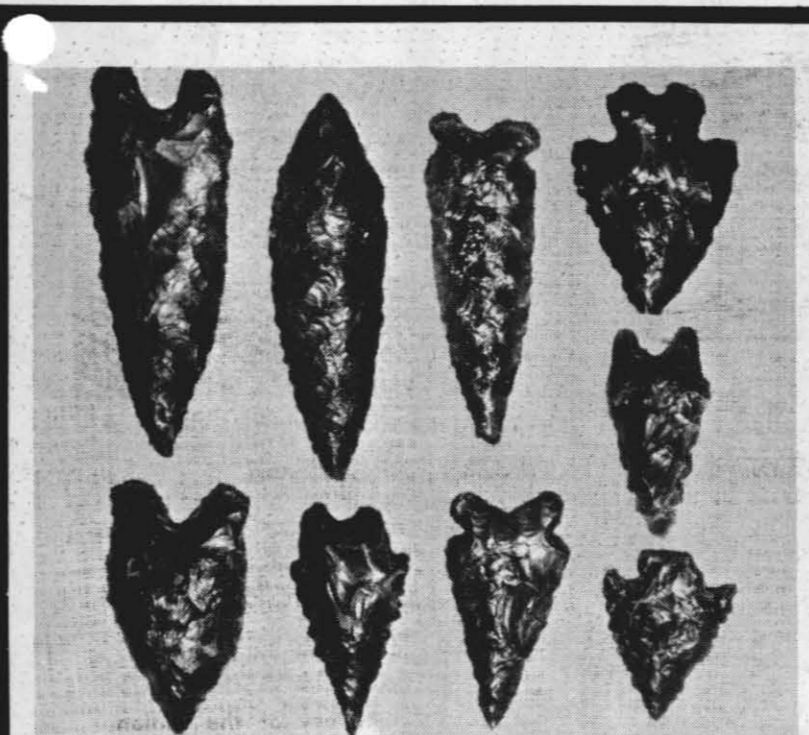


INSPECTING THE SURFACE of a snowflake obsidian specimen he has just polished as Marce "Frenchy" Brissaud, owner of Searles Valley Rock Shop and expert lapidary. Brissaud encourages rock artisans to try carving obsidian.

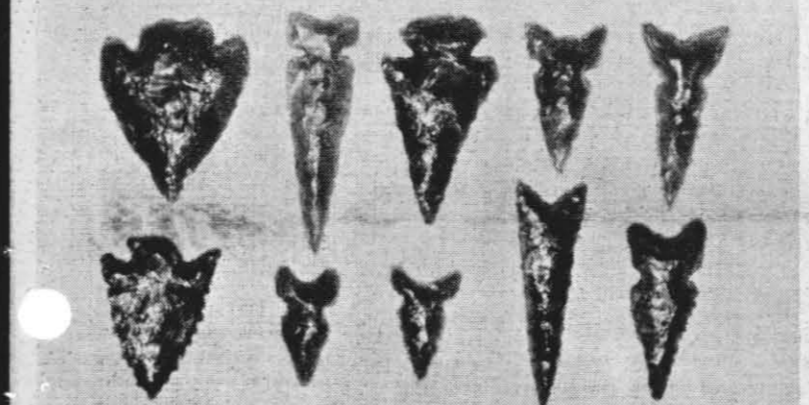
*Story
and
Photography
by
Fred
Richards*



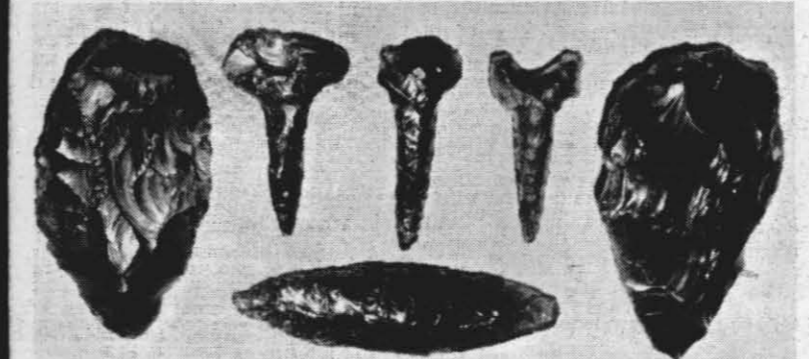
ROUGH OBSIDIAN SPECIMENS supplied by Searles Valley Rock Shop are (l-r) obsidian with cristobalite from Sugarloaf Mountain, snowflake obsidian from Black Rock, Utah, and gold sheen obsidian (cinnamon and black color) from Davis Creek, Alturas, California. These hard glassy rocks



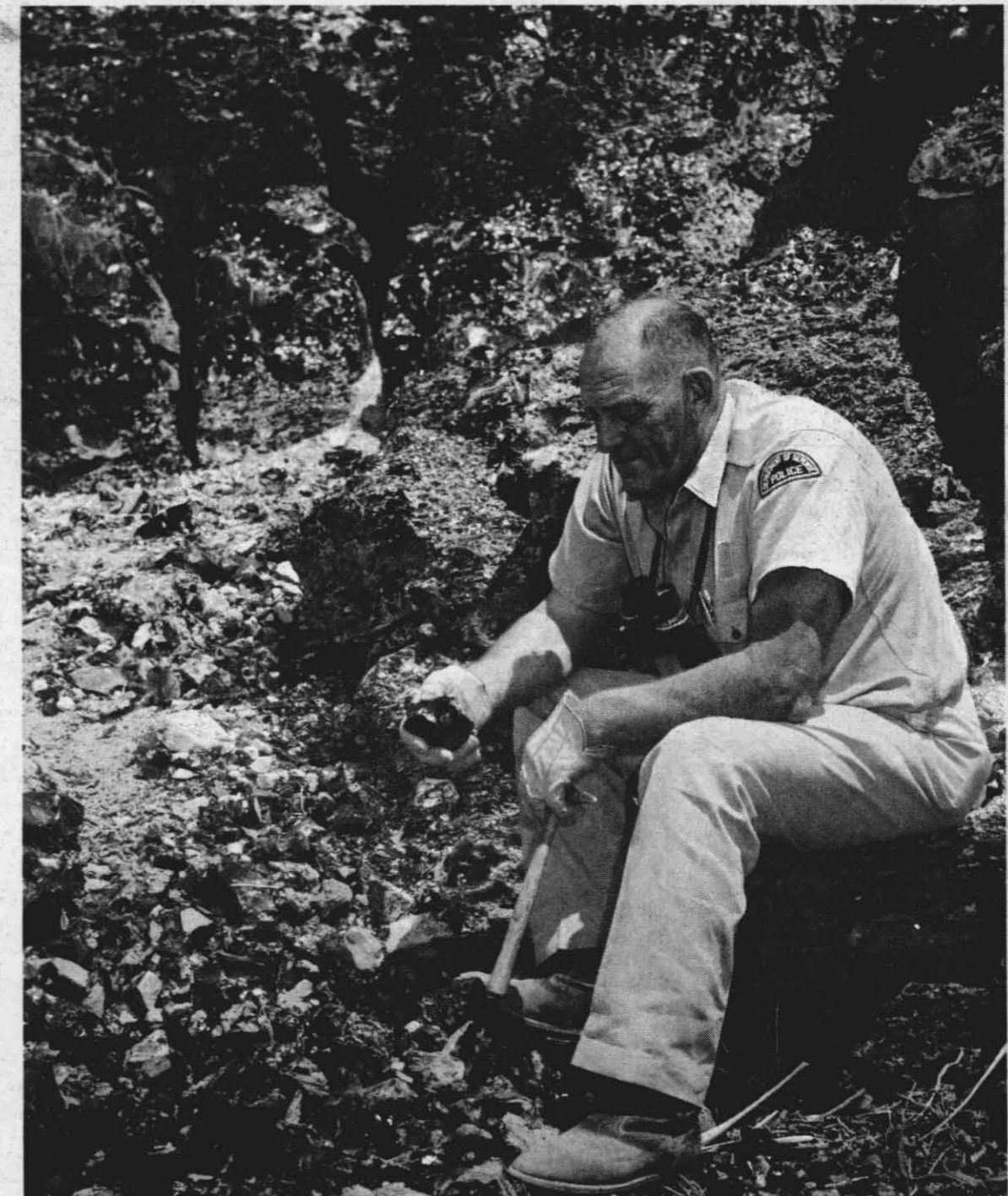
ARROWHEADS AND SPEARHEADS shown here and made of black obsidian are typical of this area. These points were attached to shafts made from willow stalks and shot from bows or thrown with amazing accuracy. Spearhead at top, left, is 3½ inches in length.



DELICATE WORKMANSHIP is evident in these obsidian bird points used by Indians for small game. Shown here in actual size, the points represent a few of many hundred in the Tom and Virginia Boyd collection.

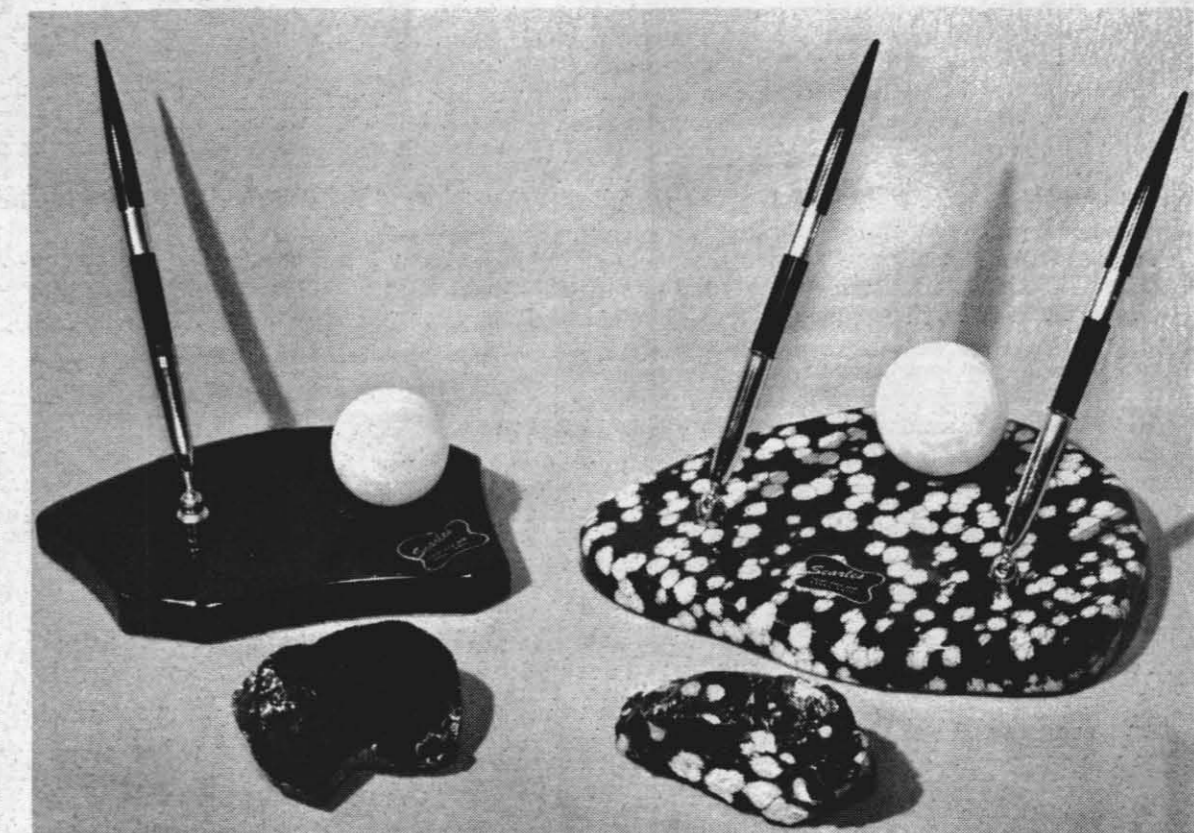


PREHISTORIC TOOLS are found in abandoned campsites and include obsidian drills (center), scrapers and knives.



OBSIDIAN QUARRY in Sugarloaf Mountain provided prehistoric man with raw material for fashioning weapons and tools. Here, modern man, former NWC Range

Officer Henry "Hank" Wittenmyer inspects a likely glass rock for use in pursuing his lapidary hobby. With an unlimited source at hand, Indians bartered the glass rocks.



OBSIDIAN AND ONYX PEN SETS that should delight the heart of any rockhound shows the artistry of Frenchy Brissaud, Argus, California. The black obsidian base, left, was cut and polished from material found at the Sugarloaf Mountain quarry, then topped-off with a honey onyx sphere. The set at right is made from the popular

snowflake obsidian and also is enhanced with an onyx sphere. The pens are standard items available through lapidary supply houses. Items like the pen sets, book ends, paper weights, ash trays, and countless creations in jewelry for men and women are all within the working capabilities of the Earth's natural glass — obsidian.



SUGARLOAF MOUNTAIN, also known as Glass Mountain, is located four miles east of Highway 14 and near Coso Hot Springs on the Naval Weapons Center north range. Long known for its outcroppings of obsidian (volcanic rhyolitic-glass) the mountain

benefitted prehistoric man in his development of weapons and tools. Today, rockhounds and lapidaries find it a ready source of material for esthetic creations.