



# THE CHINA LAKER

Vol 22 NO 5

January 2017

### Special points of interest:

- What Was NOTS - The Early Days
- President Jimmy Carter
- Holiday Pictures

### SAVE THE DATE

**17th Annual Dinner  
Auction  
May 13, 2017**

### Important Dates

**Feb. 23** - IWV Economic Outlook Conference

**Feb 28** - BOD Meeting

**Mar 18- 19**  
Blue Angel's Airshow

**Mar 28** - BOD Meeting

**Apr 25** - BOD Meeting

**May 13** - 17th Annual Dinner Auction

### Inside this issue:

What Was...	1
President's Message	1
Presidential Timeline	3
Donations/Members	6

Newsletter Editor - Bettye Moody

## WHAT WAS: NOTS - The Early Days: Naval Air Facility Inyokern

by Jack Latimer, Director Emeritus

**"I want it, this is it!"**

**Needed: A Place to Test Aircraft Rockets.** How did the Naval Air Facility Inyokern, the original headquarters of the Naval Ordnance Test Station (now the Naval Air Warfare Center Weapons Division) come to exist? The easy answer is that Dr. Charles Lauritsen of the California Institute of Technology (CalTech) Pasadena—who was in charge of an aircraft rocket program for the Navy during World War II—was looking for a remote area in which to test aircraft rockets. The Navy began rocket testing at an Army facility at Goldstone Lake near Barstow, California. The Goldstone site couldn't accommodate the longer range requirements of improved rockets, and the Navy needed its own facility. While scouting out another location, Lauritsen flew over the remote Indian Wells Valley's paved airfield with no apparent activity nearby and said "I want it, this is it! Nearby was a railroad, built for construction of the Los Angeles aqueduct, and a nearby Highway 6 (now Highway 14), plus electricity and telephone lines.

**How did the airport get there and to whom did it belong?** Trans-Sierra Airlines applied to establish a route from Fresno, California to Phoenix, Arizona in the mid 1930s. The Civil Aviation Authority (CAA) granted the request for an emergency landing field would be built in the Mojave Desert. Kern County purchased land and the CAA and the Works Project Agency (WPA)



**Inyokern Airfield, 1943**

built a paved runway one mile northwest of the small town of Inyokern. Part of a countywide system of airports, the airfield was named Kern County Airfield #8. (cont. page 2)

## President's Message

by Alice Campbell



Best wishes to you all for a happy and prosperous 2017! A special thanks to our Donors of both time and treasure who keep the Museum operating on Base and raise funds to get us moved to Kern Park this coming Spring, a major effort that is finally bearing fruit. Ground-breaking in October was a great event with very inspiring words from

NAWCWD speakers Executive Director Joan Johnson. and RADM Brian Corey.



(cont. page 7)

## WHAT WAS: NOTS - The Early Days: Naval Air Facility

It was dedicated in 1935. Only private pilots used the Inyokern Airport. As World War II intervened, in the fall of 1942, the airfield was assigned to the Army's Fourth Air Force located at Muroc Bombing Range Air Base (now Edwards AFB) located 50 miles south of Inyokern. The Inyokern airfield was primarily used for cross-country training flights.

**Navy Acquires Airport.** The Navy acquired the property in late 1943 to serve as an airbase for testing aircraft rockets being developed by the Navy's CalTech program. The new base was named the Naval Ordnance Test Station Inyokern.

The Navy built a hangar and other support facilities at the airfield and acquired 900-square miles of territory nearby to the east of Inyokern at which to test aircraft rockets. The Vice Chief of Naval Operations ordered 6,000 naval aircraft to be equipped to fire aircraft rockets. In January 1944 Carrier Aircraft Service Unit (CASU) 53 was formed at NOTS with 31 officers and 617 men to support rocket training for fleet squadrons.

**Harvey Field Commissioning.** The first Commanding Officer of NOTS, Captain Sherman E. Burroughs, Jr., suggested the airfield at Inyokern be named after deceased Navy Lieutenant Commander Warren W. Harvey. Harvey and Burroughs had been classmates at the Naval Academy. In his letter of recommendation Burroughs stated:

“The late Warren W. Harvey was a brilliant post graduate in Aviation Ordnance. He contributed materially to the development of ordnance for aircraft during his life. He commanded Fighting Squadron Three shortly before the war started and was to a large extent responsible for the development of fighting plane tactics now in use.”

Burroughs' recommendation was accepted and Harvey Field was dedicated on June 28, 1944. Harvey's widow attended the ceremony. But the air facilities soon became inadequate and a larger airfield was needed.

**Armitage Field.** In June 1944 work began on a new air station east of Inyokern near the main base under construction at China Lake. By June 1945 the Navy opened the new airfield, commissioning it as Armitage Field, named after Lieutenant John Armitage who was killed after test-launching a Tiny Tim rocket, which damaged his aircraft causing it to dive into the ground. A shock wave from the rocket's blast caused a jam in his launch aircraft's flight controls.

**Harvey Field Closed.** After NOTS opened the new Armitage airfield, Harvey Field remained in use by drone utility and fleet units. The Navy closed Harvey Field in April 1946, but for NOTS' first years of existence it served as the main airfield supporting aircraft rocket testing and aircraft crew rocket training. As the NOTS in-house newspaper—*The Rocketeer*—noted on April 30, 1946:

“Ringing down the curtain on a 22-month career, Harvey Field was stripped of its remaining facilities and reduced to an intermittent operational status last Friday . . . The remaining 55 men . . . moved to China Lake Friday, and bus service was discontinued to the desert air station.”

Many of the Quonset huts and other buildings that the Navy built were moved to the new Armitage Field, demolished, or sold to local townspeople. The Kodiak hanger, fuel pits, and ammunition bunkers, and the runways remained. It was renamed Kern County Airport #8.

By 1952 commercial passengers could fly from Kern County Airport #8 to Burbank for a fare of \$5 each way on a DC-3, with a stewardess. The Navy's control tower at Inyokern was removed in 1959 and the hangar became the airport terminal. In 1985 the Indian Wells Valley Airport District was formed. By 1988 Skywest Airlines, UPS, FEDEX and others used the airport daily and many new facilities have been added.



Kodiak Hangar Under Construction



## COMMANDER - IN - CHIEF SUPPORT

FOR

Jimmy Carter

1977 - 1981



### Conflicts

### Cold War, Gulf of Sidra Incident, Iran Hostage Crisis

#### Major Contributions of NOTS China Lake:

**Problem:** As U.S. weapon systems became more effective, enemy forces started moving men and equipment under cover of darkness to escape detection. New systems were needed to detect, track and attack enemy targets at night and in bad weather.

**Solutions:** China Lake integrated a **Forward Looking Infrared Reconnaissance (FLIR)** pod, developed by Texas Instruments, into the Navy's A-7E Corsair aircraft. The pod was also linked to a heads-up display for improved night attack capability. The first Navy squadron received the FLIR-modified aircraft in July 1979. Twenty-two Navy squadrons eventually received this night/bad-weather targeting system.

China Lake integrated an **Angle Rate Bombing System (ARBS)**, designed by Hughes Aircraft, to improve day and night bombing accuracy when operating in the close air support role into the Marine Corps' AV-8B Harrier and the A-4M Skyhawk. The ARBS allowed the pilot to identify and lock on to ground targets. The system then gave steering instructions to the pilot to maneuver into position to launch weapons at the target.

China Lake integrated the **Target Recognition and Attack Multi-Sensor (TRAM)** system into the A-6E Intruder. Beginning in 1979 all A-6Es were fitted with TRAM allowing the A-6E enhanced detection, target identification, target designation, and attack capabilities.

**Problem:** Improvements in potential enemy fighter aircraft created a requirement to improve the capability of the Sidewinder missile to be able to attack the aircraft from all aspects. Earlier versions could only attack from behind the target aircraft. Also the Navy and Air Force had developed separate versions. The Defense Department ordered the Navy and Air Force to develop a common version.

**Solutions:** China Lake applied advanced technologies in aerodynamics, infrared detectors, and other areas to develop the multi-service **AIM-9L** version of Sidewinder. The AIM-9L was very effective at all aspect attack profiles. However, the Soviets learned that they could decoy the Sidewinder by launching flares when under attack. China Lake responded with the **AIM-9M** version which had flare counter-counter measures as well as better performance against cloud and terrain backgrounds

**Problem:** In 1973 Libya claimed the Gulf of Sidra as part of its territorial waters. The U.S. began conducting Freedom of Navigation operations in the Gulf since the gulf did not meet the criteria of territorial waters established by international law. Libya often confronted U.S. forces during these operations. In August 1981 two Libyan aircraft fired on two U.S. Navy F-14s on patrol in the Gulf. The Libyan missiles missed.

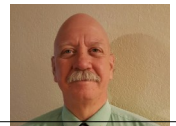
**Solution:** The Navy F-14s were equipped with China Lake's AIM-9L version of the Sidewinder missile. Each of the F-14s fired their missiles and shot down the Libyan aircraft.

**Problem :** In 1979 Iran stormed the U.S. embassy in Tehran and took and held 52 Americans hostage. The U.S. planned and attempted a rescue mission in 1980.

**Solution:** In preparation for the rescue mission China Lake examined Iran's weapons systems that might pose a threat to the mission. Finding that Iran possessed several U.S. air defense systems against which our weapons had no capability China Lake modified some Shrike and Sidewinder missiles and proved their capability against the Iranian systems. While the mission failed due to bad weather, it is not clear that any of the modified weapons were used in the rescue attempt.

## PUBLIC RELATIONS CORNER

by Dr. Anthony (Tony) Damiano



### China Lake Air Show

Saturday & Sunday, March 18-19 Celebrating 73 Years of Naval Weapons Testing at China Lake – The Blue Angels will fly the skies of NAWS China Lake! Visit [www.chinalakeairshow.com](http://www.chinalakeairshow.com) for more information.

Semper Fidelis,

Dr. Anthony (Tony) Damiano

### HELP WANTED!



#### GREETERS & DOCENTS

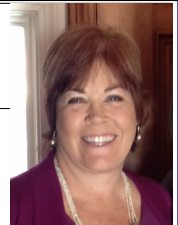
No specific skills are required, just a willingness to be a friendly face to greet museum visitors! Call (760) 939-3530.

#### AIRSHOW VOLUNTEERS

**NEEDED:** Call Nancy Kiren to volunteer at the CLMF booth (760) 939-3530 or email [chinalakemuseum@mediacombb.net](mailto:chinalakemuseum@mediacombb.net)

## FUNDRAISING/GRANTS

by Laura Hickle



The China Lake Museum Foundation was approved for this year's Combined Federal Campaign and recently submitted an application for the yearly United Way program. Calculation of administrative overhead of only 8% brings the foundation well below the recommended goal of 20% or lower.

We really appreciate the members who were able to add to or complete their Founder's donations by the end of 2016 and new Founders in January 2017. If you would like more information about how your donations are used, or our upcoming Phase 1 and Phase 2 building projects please feel free to contact me for a personalized presentation [hicklelh@gmail.com](mailto:hicklelh@gmail.com) or phone (760) 977-0460.

The quarterly report for the \$250,000 Museum grant has been completed and submitted to the state. The CA Natural Resources Agency administers the grant program and we provide detailed quarterly updates on progress and expenditures.

Planning for the May 13, 2017 Dinner Auction is underway and Bob Campbell has agreed to chair this important fundraiser. He will be assisted by volunteers and you are encouraged to help out as well as attend. This Dinner Auction is the main event for covering all Operations and Maintenance costs for the museum. As we move off base these funds will be extra critical to cover increased utility costs and personnel to staff the Ridgecrest Museum and provided some continuing access to the China Lake location.

**CHARITABLE IRA ROLLOVER-** For those of you 70 1/2 years and older with an IRA, the Charitable Rollover is worth doing to meet the IRS required minimum distribution and benefit the CLMF for tax-free purposes. Stock gifts should be directed to CLMF account at Edwards Jones (760) 371-1271. **In summary:**

- You must be 70 1/2 or older at the time of your gift.
- The transfer must go directly from your IRA to the CLMF.
- Your total IRA gift(s) cannot exceed \$100,000.
- Your gift must be outright.

Contact your IRA Financial Advisor for more information.

## Holiday Volunteer / Founders Luncheon



John Freeman &amp; Mike Cash

Russ and Linda Bates with Jack Latimer

Charlie White &amp; Jack Latimer

## Building Committee

by Wayne Doucette and Laura Hickle

The contract with Mobile Modular was signed and a check for 50 per cent of the amount, \$107,129.06 was forwarded to Mobile Modular on December 12, 2016. On December 21st representatives from Mobile Modular, Ryan Swindell, Sales Manager, Joe Sanchez, Project Manager, and Lou Escanuelas, Sales Representative, conducted a site visit in Ridgecrest and were given a tour of the Base Museum. Pictures of the site were taken, and questions regarding delivery, and entry and exit routes to the site, were discussed. We can now expect to get the drawings of the Phase 1 Building by the end of January for our review before they are finalized and sent to the State of California for approval. Houston/Tyner can then finish our drawing package for submittal to Kern County for their review. We expect building permit to be issued at that time. PVC Plumbing and Mechanical, Inc. in Ridgecrest was selected as our general contractor through a competitive bid process.

We are looking forward to construction starting in February 2017 with completion scheduled for four months later.

The Foundation was recently able to secure store fixtures from the old Wal-Mart building for the Phase 1 Gift Shop. Due to the enlarged Gift Shop square footage and these fixtures, we will be able to carry a larger selection of merchandise. Many thanks to the helpers who moved all of the furniture to storage: Bruce Bartels, Bob Campbell, Wayne Doucette, Art and Laura Hickle, Paul Homer, and Ian and Megan Rawson.

## Gift Shop News

by Acting Operations VP Alice Campbell

The Gift Shop Committee meets monthly. Sarah Mercer is our most recent volunteer, assisting Chris McKinley on researching new items for the Gift Shop. Let us know if you would like to join us to provide wise Gift Shop advice and/or help find good Gift Shop items, particularly if you have retail experience. Since the recent Las Vegas Buyers Convention, we have new items for sale including Navy themed home decor items, striped China Lake hoodies, stained glass Patriotic Stars, Ladies Patriotic Scarves, Mouse Pads featuring the China Lake EA-18G Growler and F/A-18 E/F Super Hornet Ordnance Load Out, leather holders for badge and ID, 3D printed "NEVER QUESTION THE ENGINEER", 3D wooden puzzles and many more. Much of our infant wear is 30% off. We are close to finishing the online Gift Shop on our

## DONORS

### NEW FOUNDERS CLUB MEMBERS

#### FOUNDERS

Kathleen Armstrong  
 Ken and Nani Banks  
 Russ and Linda Bates  
 Fred and Marianna Camphausen  
 Jack and Pat Connell  
 Jay and Nancy Crawford  
 Dr. Anthony and Cynthia Damiano  
 Brian and Sandra Danielsson  
 Cornelia and Jan Flora  
 John and Charlotte Freeman  
 Monte and Tina Frisbee  
 Roy Johanboeke  
 Allen and Bonnie Jones  
 Charlene Newmyer  
 Chris and Maureen Toftner  
 Bill and Barbara Underwood  
 Bill and Nancy Webster  
 Bernard and Janet Whalen

#### BENEFACTORS

Vincent and Gloria Avalos  
 Stephen Chapman  
 Art and Laura Hickie  
 Ray and Minnie Miller  
 Naomi Norris  
 James Weimholt  
 Joe "JD" Williams  
 CAPT Tom Wimberly, USN (Ret.)



Member Agency 13086

Combined Federal Campaign

The newsletter is sent via USPS.

If you wish to receive the quarterly newsletter via email, please call (760)939-3530 or email us at [chinalakemuseum@mediacombb.net](mailto:chinalakemuseum@mediacombb.net). Place "Electronic Newsletter" in the subject line.

### NEW ENDOWMENT DONATIONS

Thomas Boggs  
 Bob and Alice Campbell  
 Wayne and Pat Doucette  
 Sterling and LaVonne Haaland  
 Ed and Carol Jeter  
 Sheldon Simonovich  
 John and Judith Ward

### ADDITIONAL BUILDING DONATIONS

Pat Brown-Berry  
 Dell Hledik

### GOLF TOURNAMENT DONATIONS

Ridgecrest Regional Hospital  
 Ridgecrest Area Convention & Visitor Bureau  
 Warren's Automotive

### BUSINESS MEMBERSHIP

#### BUSINESS \$1000

Altaone Federal Credit Union  
 The Boeing Company  
 Raytheon Company  
 Jacobs Naval Systems Group

#### BUSINESS SPONSOR \$500

The Swap Sheet

#### BUSINESS CONTRIBUTOR \$100

Ashley Furniture Homestore  
 Cosner-Neipp Corporation  
 Daily Independent  
 Desert Valley Federal Credit Union  
 Electric Motor Works, Inc.  
 McDonald's  
 Ridgecrest Area Convention & Visitor Bureau  
 Ridgecrest Automotive, LLC  
 SpringHill Suites and Hampton Inn  
 TOSS and Service Master  
 Warren's Automotive

## BOARD OF DIRECTORS

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 Alice Campbell  
 -----

Vice President Development/Fundraising  
 Laura Hickie  
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Vice President Public Relations  
 Dr. Anthony 'Tony' Damiano  
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Vice President Building  
 Wayne Doucette  
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Vice President Operations  
 Alice Campbell (acting)  
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Vice President Memberships/  
 Webmaster/Face book  
 Megan Rawson  
 -----

Treasurer  
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Secretary/VP Education/VP Exhibits/  
 Curator  
 Dr. Bob Smith  
 -----

Building Fundraiser  
 Bob Campbell  
 -----

Newsletter  
 Bettye Moody  
 -----

Suzette Caufield	Mick Gleason (ExOfficio)
Elsa Hennings	Jim Sanders
Charlie White	Dave Maxwell

### TRUSTEES

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Dr. Jim Colvard, NAVMAT (Ret.)  
 MajGen Jon Gallinetti, USMC (Ret.)  
 Dr. Karen Higgins, ED (Ret.)  
 RADM Bert Johnston, USN (Ret.)  
 RADM Mike Mathis, USN (Ret.)  
 Don McLean  
 VADM David Nichols, USN (Ret.)  
 VADM Mark Skinner, USN (Ret.)  
 CAPT Glenn Tierney, USN (Ret.) CDR  
 Stu Witt, Test Pilot USN (Ret.)

# President's Message

by Alice Campbell



(cont. from page 1)  
The two appeared again at the Annual Hoover Gourmet Pizza Dinner auctioned off at the 2016 Dinner Auction to participating couples, again including Congressman Kevin McCarthy's Aunt and Uncle and the Cliftons who are family friends from Bakersfield.

Hoover Gourmet Pizza Dinner



Crazy Fun! Join us at the 2017 Golf Tournament!

Thanks to our Hole Sponsors & Participants.

Volunteers and Founders Club members celebrated the holidays at our Annual Christmas Luncheon at the Museum. These pictures show how we love to work hard and play hard!



Ron and Sam Clodt

## SAVE THE DATE!

### 17th Annual Dinner & Auction

*Celebrating the Presidential Eras of Eisenhower and Kennedy and A New Beginning!  
Join CLMF as we move into Ridgecrest*

**Saturday, May 13, 2017 at 4:30 pm**

**Kerr McGee Center**

**Program Sponsors and Auction/ Raffle Donations Appreciated Now!**

Call the museum now to make a donation.

***Dinner Tickets sold at the Museum or Ridgecrest Chamber of Commerce starting 3/1/17.  
Call (760) 939-3530 for more information***

**Dinner Auction Team Help Needed:** Help is needed for a variety of tasks including advertising, publicity, program planning, invitations, decorations, soliciting and organizing donations, storage of donations, computer entry, setup and tear down on May 13, 2017 and manning stations during the auction. If you can help please contact Nancy Kiren at the museum [chinalakemuseum@mediacombb.net](mailto:chinalakemuseum@mediacombb.net) (760) 939-3530 or Laura Hickle [hicklelh@gmail.com](mailto:hicklelh@gmail.com) (760) 977-0460 and we will find a task that matches your time, area of interest and expertise.

The China Lake Museum Foundation is a 501 3(c) corporation. Donations are tax deductible to the fullest extent of the law. Tax ID #77-0340083

CHINA LAKE MUSEUM FOUNDATION  
P.O. BOX 217, RIDGECREST, CA 93556-0217



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**Preserving the Legacy of Naval Armament and Technology**

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**I want to help support the Museum!**

**Please accept my payment of:**

**YES!**

\$10     \$200     \$500  
 \$1,000     \$5,000     \_\_\_\_\_

For checks intended for the new building "Founders Program", please note on your check "Founders Program"

Enclosed is my    Check    Visa    MasterCard    Other \_\_\_\_\_

Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ CVC: \_\_\_\_\_

Signature: \_\_\_\_\_

Or call (760) 939-3530 to make your credit card donation.