



THE CHINA LAKER

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President's Message

by Laura Hickle, hickleh@gmail.com

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It has certainly been a busy time around the China Lake Museum for the last two months, culminating in our grand opening on March 16, 2018. It was great to see over 160 people at the event catching up with

each other and eating the great tri-tip provided by Chuck Cordell and PVC Plumbing and the other dishes provided by participants. Our wonderful exhibits were primarily due to the efforts of Scott Millett, Bob Smith, Bob Campbell and Megan and Ian Rawson. If you haven't been by to see the museum please do so. Dedicated volunteers came out to help in a variety of capacities over the last few months but we have plenty of activities remaining including the rehab on our auxiliary trailer behind the museum. Charlie May is heading that effort up so give him a call at (760) 793-0047 if you can help.

The 18th Annual Dinner Auction is fast approaching (May 19, 2018) and we are still in need of donation items as well as your attendance. You should have received an invitation by mail and more details are in this newsletter. Now that we are located off base it is critical to keep our Operations budget built up for water, trash, electricity, personnel costs, cleaning costs and the Dinner Auction is an important way to make that happen.

CLM is once again participating in the Give Big Kern Campaign. This annual event provides another avenue for mak-

ing donations to the museum for operations and its education programs. Go to www.givebigkern.com and look up the China Lake Museum Foundation before midnight on Tuesday, May 1, 2018.

It is raining planes at the museum! Currently the F-11 Super Tiger resides in the front display area. This plane has quite a history and is the only Super Tiger in existence. A placard on the north side of the plane provides you the history. Thanks to NAWS, NAWC-WD and Jimmy Price for making this happen for the museum.



Jimmy and his dedicated crew of volunteers are working on an F/A-18, a SNORT track/ A-7 cockpit, and an A-4 cockpit to join our outdoor exhibits. In addition we were recently awarded the VX-31's T-39D through the National Naval Aviation Museum in Pensacola. Each display requires around \$1,000 in paint, decals and other supplies. If you want to help sponsor these exhibits please consider a donation for that purpose. Donations of \$1,000 or more will be acknowledged with your name on a brass plaque at the plane. Lots of other surprises coming to the museum over the next year!

Now that we have completed Phase 1 with our first building, **(Con't page 6)**



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Ridgecrest, CA 93555
www.chinalakemuseum.org
(760) 677-2866

<https://www.facebook.com/ChinaLakeMuseum/>

<https://chinalakemuseum.org/>



Commander-in-Chief Support For Barack Obama 2009 – 2011*



Conflicts

War on Terrorism, Iraqi Freedom, Afghanistan

Major Contributions of the Naval Air Warfare Center Weapons Division (NAWCWD):

Problem: Conflicts such as in Iraq and Afghanistan created the need for a small, low-cost, man-portable guided missile for use in urban warfare.

Solution: China Lake conceived the need for such a missile and new technologies provided the materials to build such a missile. **Spike** is the smallest guided missile in the world at 25-inches long and 5.3 pounds with electro-optical imaging guidance and is the lowest cost guided missile in existence. It can be fired from a shoulder launcher or a Unmanned Aerial Vehicle (UAV). It has been integrated into the U.S. Army's Vigilante UAV.

Problem: New threats involving "swarm" tactics to attack U.S. targets, particularly ships, with fast-moving attack boats were evolving, creating the need for quick-reaction weapons to respond to these attacks.

Solution 1: The **Advanced Precision Kill Weapon System (APKWS)**, begun by the U.S. Army, encountered problems and was taken over by the Navy. As a result in 2010 technical problems were solved and the weapon (a variant of the China Lake 2.75-inch rocket with a new laser-seeking guidance and control system) passed successful operational assessment and entered initial production.

Solution 2: A variant of the China Lake 2.75-inch rocket with a low-cost thermal imaging kit designed to improve accuracy, called **LOGIR**, allows aircraft to attack large numbers of targets in a single sortie, while reducing pilot exposure. The weapon demonstrated its potential effectiveness to counter swarm tactics and the program has moved into new development phase and will be eventually integrated with the MH-60 helicopter.

Problem: New weapons systems maturing into fleet operational status required integration of these new systems into fleet aircraft.

Solutions: The EA-18G Growler received improved electronic jamming capabilities and the first HARM missile was fired from the Growler. Video downlinking capability was added to the MH-60 helicopters. Fleet training with the SLAM-ER missile was accomplished. The first live firing of the Joint Air-to-Surface Standoff Missile-Extended Range (JASSM-ER) from the F/A-18 was accomplished. The first test flight of the Joint Strike Fighter (JSF) was achieved. AIM-9X Sidewinder missile production reached 4,000 units and aircraft achieved over 1 million flight hours with the missile.

*Note: Data was only available for the period 2009 through 2011 in the NAWCWD timeline.

China Lake Museum Foundation



18th Annual Dinner & Auction

Saturday 19 May 2018

Kerr McGee Center 4:30 PM

Honoring the Past – Building for the Future

Tickets Sold at the China Lake Museum, 130 E. Las Flores Ave
and Ridgecrest Chamber of Commerce

\$35 Single

\$60 Couple

\$250 Reserved Seating for 2

Tables for 8 – Dinner Tickets, Wine, Name in Program

\$1,000 Family/Small Business

\$1,500 Corporate - Banner Displayed

\$2,500 Corporate – Prominent Banner Display

Gluten Free Meals Available – Call Museum at (760) 677-2866

Want to see your business in our program? Be a Program Sponsor

Call the China Lake Museum at 760-677-2866
for more details.

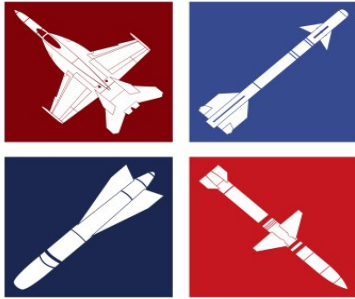
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Call the museum for more information or to make a donation.

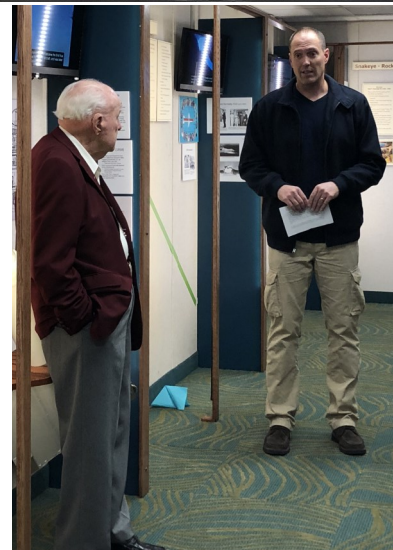
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GRAND OPENING:



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(con't from page 1) infrastructure for Phase 2, block wall and wrought iron fencing/gates. It is time to focus on Phase 2. The Phase 2 concept is 16,000 sq. ft. of entry, office, archival space, Gift Shop and display area to be located to the East of Phase 1. The design will have historical elements related to the first NOTS hanger at Inyokern and Hanger 1 at the Naval airfield. It will allow for large open space as well as more intimate exhibit areas. If you would like to be involved in this important Phase 2 committee and its work please email me at hicklelh@gmail.com.

If you have not become a Founder (\$5,000) or Benefactor (\$6,000+) I hope you will consider doing so. Although larger corporate gifts will expedite our fundraising, every donation is essential and appreciated. Obtaining the first \$250,000 for grant matching is critical. We have a goal of \$1,000,000 to start the process on Phase 2 with a total of \$2,000,000 to complete the inner spaces. Due to the physical condition of the Base museum it is critical to get

the remaining items out of their current space into our new space ASAP as well as have space to expand our STEM educational efforts.

Finally, help us celebrate the 75th Anniversary of NOTS as well as the 25th Anniversary of the China Lake Museum this year. At the Community Day on Saturday, April 28th the base museum will be open at the end of Blandly from 10-2. Joining us at that location will be Maturango Museum, Historical Society of the Upper Mojave Desert, Ridgecrest Area Convention & Visitors Bureau and the NAWC-WD Command Artifacts with additional displays. We have additional plans in the works for other events between June and November 8th, 2018 (the actual anniversary). Keep an eye out for future announcements.

Remember that paid museum members get into the museum free. Hope to see you soon.

Gift Shop News

by Jenn Cobbel chinalakemuseumstoremanager@gmail.com

I'd like to take a minute to thank all of the volunteers that helped the Museum and the Gift Shop get ready for our Grand opening on March 16th. Without your support and dedication to our Museum and Gift Shop the Grand Opening would not have been possible. The Gift Shop is open, bright, inviting and easy to shop in with more room and we are able to spread out the large inventory.

April 13th is our FIRST CLMF Members shopping day from 10-4 for in store shopping and call in orders. Get an extra 10% off that day. Member shopping days take place every month and on a different day and will be posted on Facebook page. We have updated and added additional items to our Website Shop. I think you'll be surprised at all of the items on there. Our website is www.chinalakemuseum.org

On Community Day, Saturday 28 April; the Gift Shop will have 75th Anniversary goodies available on the base and in our store while supplies last.

Thank you to everyone for your continued support for our Museum and Gift Shop!!

Board of Directors

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China Lake Grenade Launcher

By Jack Latimer, CLMF Historian

During the Vietnam War Navy SEAL teams were not happy with the existing grenade launchers. The M79 and XM148 were single-shot weapons and the magazine-fed, repeating, T148E1 grenade launcher proved unreliable. Seeking a better weapon, the engineers at the China Lake Naval Weapons Center were approached to find a solution. Development work began in 1967 in the Special Projects Division and the new design was attributed to Alfred F. Kermode. China Lake came up with a cross between a grenade launcher and a shotgun.



The user could cycle new rounds into the chamber similar to a pump-action shotgun. The weapon could carry three 40x46 mm grenade rounds in the magazine tube and one in chamber. The operator could fire multiple fragmentation rounds in just seconds. The weapon proved suitable to the SEALs for conducting their operations against the enemy.

The weapon was never given an official designation and was simply referred to as the “China Lake,” named after the China Lake Naval Weapons Center. It never evolved past its experimental stage, because of the development of revolver-style grenade launchers that had more ammo capacity than the shotgun style.

The China Lake grenade launcher was very lightweight due to its many aluminum components. The external configuration was very much in line with a shotgun in that it had a solid wooden shoulder stock with integral handgrip, an oblong trigger ring loop large enough for a gloved finger, and a squared off, boxy aluminum receiver housing the internal working components. A trained and experienced operator could fire up to 15 rounds-per-minute and lay down indirect or direct suppression fire against a target or target area at range. Effective range was within 350 meters and muzzle velocity was rated at 250 feet-per-second. The pump-action grenade launcher had leaf iron sights. The front sight was a fixed square notch. Depending on if the leaf is folded or not, the rear square notch is either fixed or adjustable from 75 to 400 meters in 25 meter increments. While developed for the SEAL teams, several were used by Marine Force Recon and Army 5th Special Forces Group.

Sources differ as to the number produced, ranging between 20 and 30 units, with one source claiming only 16 units. The highest original receiver number found is 50, but it may never have been a functional weapon. Navy records confirm 22 completed weapons were carried on Navy inventory. At present, only four originals remain under US Navy control. All four are on display in museums. Serial number 4 is at the UDT/SEAL Museum in Fort Pierce, Florida; serial number 13 is on display in the War Remnants Museum in HCMC, Vietnam; serial number 2 is stored at the US Navy Museum in Washington D.C.; and the fourth weapon is on limited display at the US Navy facilities at NSWC Crane.

A short video of the China Lake Grenade Launcher in action is available for viewing on YouTube at the following Internet dress: <https://www.youtube.com/watch?v=aMQ1VVvjO0I>

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