Growing Up Ignorant in China Lake -

The Don McLean Story

Editor’s Note: This article was written by Don as part of his Home Owner’s Association newsletter in Indo, CA.

I grew up at China Lake, California, a naval research and development lab with over a million acres of land and 20 million acres of airspace. It’s been known as NOTS (Naval Ordnance Test Station), Rocket City or Secret City because of what was and is still being developed there. Growing up ignorant means I had no idea of what was “really” happening around me as I grew up. For example, as I stepped out my back door I was in the Mojave Desert, and could see a white dry lake bed known as China Lake, and in another direction, scattered buildings known as the pilot plant. It would be 40 years before I knew that Fat Man’s fins (the second atomic bomb) had been ballistic tested on that lake, and the explosive lenses and wiring had been developed in those buildings, and these bomb components had been shipped out just days before I arrived.

China Lake was built from nothing in 1943 to a working town, with houses, stores, and schools for the families of military and civilians all living together. Most of the building occurred in 1944 when over 1000 homes were built. However, the base’s real... (con’t on pg 2)

President’s Message

Our 17th Annual Dinner Auction was great fun and as successful as ever. Our profits were close to the last few years’, about $80,000, so that was great news. We will continue to depend on that resource to help keep Operations going as we start up with our new building in Ridgecrest, so thanks to all of you donors and buyers this year!! We are hopeful that our unique Gift Shop venue will “take off” when we are in Ridgecrest. We expect to grow quickly with the ability to bring in bus tours into our new large parking lot. With the... (con’t on pg 6)
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(con’t from pg 1)  purpose was the laboratory, airfield, air space, ranges, machine shop, propellant shop, explosive development and instrumentation; all designed for quick turnaround of ideas, designs, building, testing, evaluating, redesigning and retesting -- sometimes within a day or two.

Our first house had no front yard; the backyard was the desert, with Death Valley 40 miles away. However I only went out about 1 mile, as we were not allowed to go on the base ranges. My early years were spent playing in the desert, and even the kindergarten’s playground was a sand box. There was plenty of space to hunt lizards and snakes. My earliest pet was a “Horned Toad” (a lizard that looks like a small dinosaur and eats insects). He was so tame; I could take him out, put him next to an ant hill and let him eat. We had plenty of ants.

Everything seemed normal. The husbands went to the lab, the wives stayed home, and kids played outside and went to school. Everyone socialized together. China Lake is isolated, so perhaps this is why there were many parties, clubs and activities for the adults and kids. We shared the base with the military, and we all went to the PX and the 10 cent movie. It was a very safe place, having only MP’s as police. Most did not lock their doors and left the keys in the car. Why was I ignorant? It was because everything that went on at the base was secret. Even the sign at the main gate (we lived inside a fence), said:

Remember,
What you see here,
What you do here,
What you hear here,
When you leave here,
Let it stay here.

The husbands could not tell their wives or kids what they were doing, and we were blissfully ignorant of what was happening. We knew something was going on with all the planes flying around and the bombs going off on the ranges, but we just thought that was normal. Those that worked in the lab did talk together outside the lab, in fact, that was one of the great assets of China Lake. They worked and played together and everyone was close. Often you see people step aside for a quick discussion, keeping those “not in the know” from listening. After these discussions, they sometimes went back to work. Things happened quickly in the lab. For the rest of us life was “normal”. However, the Nevada atomic tests (about 80 miles away) made the night sky light up like day as we slept outside. The spring rains brought the fairy shrimp to the dry lake beds, and the caterpillar invasions to the base. Caterpillars came by the millions, and cars skidded on the green bodies. The Navy tried everything to stop them. They dug ditches around the housing, filling them with water, DDT, oil, and burning oil. Nothing worked. The moths came out at night at our Little League baseball games, causing a near black out of the lights, as the burned bodies rained down on the spectators. As the base expanded, new schools were built and lawn and parks appeared along with rabbits and coyotes. The schools were excellent and challenging. It was the first job for many teachers, and they found themselves with a bunch of scientist’s kids as students. We challenged each other, and it turned out great. Besides school, bicycles, sports and other outdoor activities ruled the day.

By 1950, besides the Atomic Bomb parts, Rocket City had contributed Barrage Rockets, Mighty Mouse (contained in a pod), Holy Moses, Zuni, and Tiny Tim. Along with these airborne launch systems were fuzes (to set them off), explosives and shaped charges (to make them more effective). These bombs and rockets were
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(con’t from pg 2) helpful in ending World War II, and used by the millions in the Korean and the Vietnam Wars. An example is shown in the attached photo from the museum.

The invention, which came to define the base, started in 1947 when my dad (Dr. William B. McLean) sketched a design for a rocket which could follow a target without assistance, i.e. a self-guiding heat seeking missile. From this sketch, the work started in 1949 on a project, which would eventually become known as the “Sidewinder” (named for a local heat hunting rattlesnake). It was a project Washington had not asked for nor authorized. However, it developed a following of people who believed it was a very good idea and China Lake’s isolation helped keep it a “secret”! Starting with the Holy Moses rocket, the Sidewinder was built as a “fuze” project, and due to my dad’s creative financing it evolved into a complete functioning missile. Thus, Washington did not complain. The Sidewinder had its first successful test in 1953. It was no longer a secret, as the party at my house was hard to ignore.

The Sidewinder was sent to the fleet in 1956. It stopped a war between Formosa and China in 1958, and it remains today as the premier short range air-to-air heat seeking guided missile. In 1958, Dad was in the first group of people to receive “The President’s Award for Distinguished Federal Civil Service” from Dwight Eisenhower. The family went to the White House for the presentation.

I had a normal Junior High and High School, playing sports and outdoor activities in the Sierra Mountains; meanwhile, the base was exploding with projects and inventions of which we were again ignorant. Basic research was a large part of the China Lake Lab’s activities. Scientists were allowed the freedom to pursue new ideas and advance technologies in their areas of interest. I was able to participate, as some of the high school students were allowed to be lab assistants to the scientists. My work involved using liquid nitrogen, pure ethanol alcohol, Bunsen burners, vacuum tubes and a large electron magnet. I made “pure” vacuum sealed samples to put in a magnetic field. It was called Nuclear Magnet Resonance, today they are called MRI machines (fun toys to play with). The base could be dangerous, and explosions on the base in the testing direction were normal, but an explosion in another direction might mean someone’s parent was in danger.

The base areas of research seem endless, including computers, circuit boards, propellants, fuses, explosives, radar, night vision, drones, lasers, acoustics, fire control, systems integration, jamming systems, chemical reactions and many others. Many of these items would end up as displays in the pilot’s helmet. The base had its own 5 mile high speed railroad, where rocket sleds were used for tests. From the base came the ejection seats for jets, torpedoes, anti-submarine weapons, anti-radar missiles, TV-guided smart bombs, ground to air missiles and the Polaris sub launched continental ballistic missile concept. There are parts of the base near the ocean where scientists were talking to porpoises and training seals. They also did deep ocean research with Moray, Deep Jeep, and CURV. CURV was unmanned, and was used to go deep in the ocean to recover a nuclear bomb, lost in a plane crash off Spain.

I Left for College in 1962 and became even more ignorant of what was happening on the base. The Vietnam War era demanded huge needs to support our military, and China Lake

( con’t on pg 7)
LOGO CHALLENGE

by Laura Hickle

With the pending move to the new facility, we, the Board, decided to explore the possibility of having a China Lake Museum logo that would supplement the Foundation logo. The intent of this design was to brand the museum with a nod to the famous Rocket Riding Rabbit (of NOTS) on top of a Sidewinder, rocketing into the future. We would like Members to provide their opinion on the proposed logos outlined below, with or without the “EST 1993”. The silver logo would be used on our letterhead (along with the CLMF logo) and in applications where color cost would be prohibitive. The colorized logo would be used on advertisements and selected gift shop items. You may contact Laura Hickle, Hickleh@gmail.com, (760) 977-0460, with your comments both good and bad, concerning the logos. Thanks to Andrew Gatdula, our talented graphic artist volunteer.

FUNDRAISING/GRANTS

by Laura Hickle

The Annual Dinner Auction was a great success. It was great to see friends, and catch up on the news. Bettye Moody’s Dessert Table was a new and tasty Silent Auction option. As always Scott O’Neil’s handmade bowl was a hit along with an original Larry Zabel “Horse Gathering” donated by Nancy Sanders. Thanks to everyone who donated and purchased.

Thanks to Bob Campbell and his Auction TEAM for a great event. Hope to see you next year. Save the date May 19, 2018.

UPCOMING SCHEDULE OF EVENTS (2017):

<table>
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<tr>
<th>Date</th>
<th>Event Details</th>
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<tbody>
<tr>
<td>Jun 20</td>
<td>Board of Directors Meeting, 6:00 pm at Coldwell Banker Best Realty</td>
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<tr>
<td>Jul 18</td>
<td>Board of Directors Meeting, 6:00 pm at Coldwell Banker Best Realty</td>
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<tr>
<td>Aug 15</td>
<td>Board Meeting on Strategic Planning for Next FY Goals, Develop FY 18 Budget</td>
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**2017 ANNUAL DINNER/AUCTION**

CDR Matt Conliffe, Supervisor Mick Gleason and Yolanda Hayes living it up.

**Spotlight: Business Membership**

**BUSINESS $1000**
- Altaone Federal Credit Union
- The Boeing Company
- Coldwell Banker Best Realty
- Raytheon Company
- Jacobs Naval Systems Group

**BUSINESS CONTRIBUTOR $100**
- Ashley Furniture Home Store
- Cosner-Neipp Corporation
- Daily Independent
- Desert Valleys Federal Credit Union
- Electric Motor Works, Inc
- McDonald’s Sierra II Ridgecrest
- Ridgecrest Area Convention & Visitor Bureau
- Electric Motor Works, Inc
- Jacobs Naval Systems Group

**BUSINESS SPONSOR $500**
- C. Martin Company
- Precise Avian Company
- The Swap Sheet

**BUSINESS SPONSOR $500**
- C. Martin Company
- Precise Avian Company
- The Swap Sheet

**Harvey Stevens** - Auctioneer  
**Mark Storch** - Master of Ceremonies

Happy Winners !!!!

**Gift Shop News**

by Operations VP Alice Campbell

These days, Office Manager Nancy Kiren, is the duck in the pond that looks like everything is going great, while she is paddling like mad underneath the water! We lost our buyer Chris McKinley, but one of our Founders Terry Bellino has volunteered to fill the gap until we find a permanent Gift Shop Manager or Buyer. Terry learned about small business by handling our Gift Shop as one of our early Office Managers, then owned and operated the Sears Stores in Ridgecrest and Bishop until a few years ago, so she has lots of experience with the ups and downs of “small business” in CA. If you know someone who would love to run our Gift Shop or be our Buyer, let us know. Our salaries are low (zero if a volunteer!) but our commitment is outstanding for this great cause!! Any extra help in the Gift Shop will be appreciated, call Nancy (760) 939-3530.
President's Message

by Alice Campbell

(continued from page 1) Permitting now completed we are on our way to moving this Fall. Volunteer support, to prepare the gift shop furniture, is another way to get involved and help us move ahead. Let Nancy know if you want to be on our volunteer contact list (760) 939-3530. “Corporate Support” of the museum could use a significant boost as we move to Ridgecrest. Advertising could make a much bigger difference with the average tourist. If you have ideas of businesses to be on our TEAM, please let us know. Businesses that share our love of country and our ability to “Keep America Free With Peace Through Strength” are always welcome partners. For example Apple has a history with China Lake as a “Beta Test Site” for the Macintosh. It would be great if we could partner with Apple to tell this story as a win-win for all. Thank you to our Benefactors and Founders, most of whom have completed their pledge for Phase I. We are using these funds to complete Phase I and the infrastructure for the Phase II Museum Building.

PUBLIC RELATIONS CORNER

by Dr. Anthony Damiano

Since the last newsletter, the PAO, NAWCWD was asked to have a display at the Reaction Research Society, Rocket & Space Symposium (http://www.rrs.org/tag/rocketry-organization-of-california/). On Saturday, April 22, 2017 at the Ken Nakaoka Community Center, Gardena, CA. I was asked by NAWCWD employee, James Gross, if the China Lake Museum Foundation would represent China Lake history with a display. Forrest Lloyd and I volunteered and after visiting family on the same trip, we set up our display with several California University rocket teams and other rocket enthusiast groups. Matt Walker, NAWCWD employee, gave a presentation on air breathing rockets. We interacted with numerous visitors, including Niels Anderson, the son of Dr. Alfred Bernard Cornelius Anderson, who in 1944 designed the firing circuit for the Fatman (Nagasaki Bomb) on butcher-block paper. We hope Niels Anderson will allow us to copy the original design for our Manhattan Project Display in our new Museum.

On Memorial Day, Tom Faller, his wife Danielle and children were honored guests of NAWCWD. I volunteered to tour them through the Museum and Nancy opened the Museum for us, on this special holiday. We spent an hour and a half going through the Museum and they enjoyed shopping in the gift shop, buying many shirts and other memorabilia.


Jacob, Danielle and Tom Faller

Forrest Lloyd, at the Museum Display
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(con’t from pg 3) was called on to answer these needs. It was estimated that the base delivered a weapon a week to support the troops. This included big bombs like FAE (Fuel Air Exposives) to create a helicopter pad in a jungle using a large vacuum explosion, smaller bombs with retarding fins for low level drops, and cluster and penetrator bombs. Then came precision guided rockets and bombs using night vision, lasers and GPS. They also developed smaller items, such as non-irritating face paint, bio-illuminants (light sticks), insect repellants, weather modifications, and other needs for the foot soldiers or Special Forces.

I became less ignorant of China Lake activities in the late 1980’s, as projects became unclassified. We learned of its part in the Nagasaki atomic bomb and found out that Capt. Ashworth (an early Commanding Officer on the base) was the weapon’s officer on the B29 over Nagasaki.

The enlightenment continues today as we find out more and more of what was happening as we were kids in a very unique environment. New secrets continue to develop, as China Lake remains one of the premiere developers of weapons and systems for the Navy and a training facility for fighter pilots from all over the world. We recently learned they made bio jet fuel directly from bacteria used to power a jet over the ranges. Even with all its explosive activities, the Navy continues to support the environment on the base, such as the Native American Petroglyphs and a geothermal power plant on the ranges.

While it may seem like a lot, I’ve only lightly touched on the activities at NOTS, now called The Naval Air Weapons Center. There is so much more information on the Internet, but I recommend visiting the U.S. Naval Museum of Armament and Technology operated by the China Lake Museum Foundation (CLMF). It is currently on the base, but funding and building are underway to move it to Ridgecrest. The Museum contains lots of displays and details of the NOTS activities which are unclassified. However, with the classified development still happening, China Lake continues to be a “Secret City”.

Building Committee

by Wayne Doucette and Laura Hickle

The certification of the Mobile Modular building was received from the State of California. The Mobile Modular design information for the building was given to Houston/Tyner, architect who updated our data package drawings for Kern County building permit approval. These drawings were delivered to Bakersfield on 11 May 2017. On 16 May we received a letter from the County requesting corrections. This required a rework of some drawings and calculations by Houston/Tyner personnel. The update was received and delivered to Bakersfield on 1 June 2017. The final permits were received on 8 June 2017! Our Contractor, PVC Plumbing, has four months after permit signing to complete the work. The grading has started and the water and internet service under Las Flores is expected to be completed before the end of June. The modular building is completed and awaiting delivery as soon as we have the grading completed. Big changes will happen soon. Stop by and take a few pictures.

The first claim for expenses was submitted to the Museum grant administrator. Our first reimbursement is expected in the next four weeks.
CHINA LAKE MUSEUM FOUNDATION
P.O. BOX 217, RIDGECREST, CA 93556-0217

ELECTRONIC ADDRESS SERVICE REQUESTED

China Lake Museum Foundation
Preserving the Legacy of Naval Armament and Technology

Your gift is tax deductible to the fullest extent of the law for a 501(C)(3) organization.

I want to help support the Museum!
Online donation: www.chinalakemuseum.org

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Expiration Date: _________________________ CVC: _______
Signature: ______________________________

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