NOTS - The Early Days: Naval Air Facility Inyokern

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. There were two problems with the Goldstone test site: CalTech had to get permission from the Army to test there and the area could only accommodate rockets with less than 8 miles range. As each new rocket kept increasing in range, Lauritsen went looking for an area where the Navy could test on its own facilities and which had greater range capability with little population nearby.

While flying in a small aircraft scouting out possible locations in the northern Mojave Desert, they flew over the remote Indian Wells Valley and much to their surprise the area contained a paved airfield with no apparent activity nearby, and in much the same spirit as Brigham Young exclaimed on seeing the Salt Lake, Utah.

Airfield at Inyokern 1943

Inyokern Airport, 1943, detail

President’s Message

by Alice Campbell

The Big Day has come!! Come to our Groundbreaking Ceremony Oct 14 for our Phase 1 Building, followed by refreshments and our Annual Membership Meeting. Founders who have made a pledge and are able to complete their pledges now are encouraged to do so. As we complete the Phase 1 building and Phase 1 and 2 infrastructure (parking lot, utilities) we plan to work quickly to move to the Phase 2 building. We also need those funds and more pledges for additional grants which require matching funds. In order to save funds we also have several projects that need “in-house labor”, assuming you are “strong and able people” and can make yourselves available. Please call the office at 760-939-3530 if you would like to help or need information about starting or completing your pledge.

The Navy Ball is the evening of the Groundbreaking, if you want to make the day a full “Navy Day”. Call RP2 Benjamin Sheets at 760-939-3506 for tickets, the public is welcome; the speaker will be Navy leader, RADM Michael Manazir. Be aware, Retiree Appreciation Day Nov 10, email EvaBien@aol.com for info.
area as a place to establish a Mormon community, “It is enough. This is the right place,” Lauritsen exclaimed on seeing the remote Indian Wells Valley “I want it; this is it!”

A critical component of the area was the existing airfield. But, in addition, there was a nearby railroad that had been built when the Los Angeles aqueduct was under construction; a nearby highway (Highway 6 at the time, now designated Highway 14); plus electricity and telephone lines.

‘I want it; this is it!’ Dr. Charles Lauritsen

ANNUAL GOLF TOURNAMENT

If you love the outdoors and can hit a golf ball, don’t miss our Annual Golf Tournament Oct. 22. We play with crazy and fun rules, and the result is lots of laughs, good food, and great prizes too for only $80! Call the office and we will send you a flyer and help you get a Base Pass. Deadline for Base Pass Oct 11, 2016.

Annual Membership Meeting

When: Oct 14 immediately following the Groundbreaking Ceremony
Where: at our new address 130 E Las Flores adjacent to the Park, or if inclement weather, at Maturango Museum

The new building is our first step in the move to Ridgecrest. Please join us on October 14, 2016 as we mark this special occasion, our Groundbreaking Ceremony!
## Conflicts

<table>
<thead>
<tr>
<th>Major Contributions of NWC China Lake:</th>
<th>Cold War, Vietnam War</th>
</tr>
</thead>
</table>

**Problem:** Beginning in the 1960s the Soviets started an unprecedented buildup of its Navy, primarily because of the USSR’s embarrassment over the Cuban missile crisis. By the 1970s the Soviets had a formidable number of ships equipped with anti-ship missiles posing a serious threat to the U.S. Navy. The U.S. had little understanding of the modern Soviet ships and what it would take to render them unable to perform their missions.

**Solution:** Starting under President Nixon and continuing under President Ford, the Navy began the multi-year Soviet Ship Vulnerability Program (SSVP) to generate detailed descriptions of major Soviet ships, create de-activation diagrams for each ship type, and do weapons effectiveness analysis calculations. China Lake was chosen to manage the multi-laboratory program. By 1976 the SSVP had prepared an anti-ship weaponry handbook for the major Soviet warships and its work had been incorporated into the DOD-wide Munitions Effectiveness program.

**Problem:** The Soviet military not only built up its Navy, but also built increasingly capable fighter aircraft. The U.S. needed more sophisticated target drones to more closely simulate Soviet jet aircraft to use in testing the effectiveness of air-to-air missiles.

**Solution:** QF-86H Target Program was created to simulate Soviet jet aircraft. China Lake converted 29 F-86H Sabre jets into drones to use for testing of air-to-air missiles. The F-86H closely resembled the Soviet MiG-17 still being encountered in the Vietnam War. Most tests were with missiles without warheads, so the drones could be used again and again, unless a contact hit caused catastrophic damage.

**Problem:** The Vietnam War created a need for improved air-to-ground attack accuracy. Upgraded aircraft computer subsystems for targeting, sensors, displays and communication/navigation avionics and weapons were developed to address the attack requirements. The new aircraft and weapons subsystems required subsystem software development, integration, and test. It was important to meet system accuracy and carrier deployment schedules.

**Solutions:** With the success of China Lake’s A-7C/D. Software Support Activity (SSA), created under President Nixon, China Lake was chosen to create a Weapons System Support Activity (WSSA) for the A-7E/F, A-6E and Navy’s newest F/A-18 aircraft. The WSSA responsibility included development, integration, test, and deployment of the contractor’s hardware and software mods.

**Problem:** The nature of the jungle and riverine War in Vietnam required many special warfare items for Navy Seals.

**Solution:** China Lake worked with the Seals to produce special items to help them achieve their missions. Examples include the Mark 9 Swimmer Delivery Vehicle—a two-person underwater craft used as an attack craft for attacking ships; an Underwater Explosive Unit; an Actuation Mine Simulator; night vision devices and signals, and support equipment. One member of Navy Seal Team 2 stated: “There were very special kinds of things available, and the engineers, especially at China Lake – God bless them – made us goodies that just shook [the enemy’s] cage.”
The China Lake Museum Foundation cordially invites you to the Groundbreaking Ceremony for the Phase 1 Ridgecrest Relocation of the US Naval Museum of Armament and Technology

Friday, October 14, 2016 at 10 AM
at 130 E. Las Flores
(adjacent to the Maturango Museum and park)

Special invited guest speakers include: RDML Brian Corey, Commander, NAWCWD and Ms. Joan Johnson, Executive Director NAWCWD

A reception, followed by the Annual Members meeting, will follow the groundbreaking ceremony.

Please RSVP to chinalakemuseum@mediacommb.net
or (760) 939-3530