



THE CHINA LAKER

Vol. 17, No. 4

Newsletter of the China Lake Museum Foundation

Fall 2011

CELEBRATING THE CENTENNIAL OF NAVAL AVIATION

EDITOR'S NOTE: 2011 marks the 100th anniversary of Naval Aviation, and the first use of air power in warfare. The later event is described in the article below.

AIRPOWER TURNS 100

By Micah Zenko



A replica of the Taube airplane similar to the model that Lieutenant Gavotti piloted in 1911.

Before humans were capable of heavier-than-air-powered flight, thinkers were already conceiving of ways that airpower could be used in warfare. Two years before the Wright Brothers conducted their first successful flights in December 1903, H.G. Wells published his bestselling work of futurology, *Anticipations: Of the Reaction of Mechanical and Scientific Progress Upon Human Life*. In chapter six, entitled, "War in the Twentieth Century," Wells presciently forecasted a number of near-term inventions that would be applied to the battlefield:

"A factor of primary importance in this warfare, because of the importance of seeing the board, a factor which will be enormously stimulated to develop in the future, will be the aerial factor...In the warfare that will go on in the highly-organized European

States of the opening century, the special military balloon used in conjunction with guns, conceivably of small calibre but of enormous length and range, will play a part of quite primary importance. These guns will be carried on vast mechanical carriages, possibly with wheels of such a size as will enable them to traverse almost all sorts of ground. The aeronauts, provided with large scale maps of the hostile country, will mark down to the gunners below the precise point upon which to direct their fire, and over hill and dale the shell will fly—ten miles it may be—to its billet, camp, massing night attack, or advancing gun.”

Initially, Wells conceptualized that “great multitudes of balloons will be the Argus eyes of the entire military organism, stalked eyes with a telephonic nerve in each stalk.” Eventually, however, airplanes would take their place:

“Few people, I fancy, who know the work of Langley, Lilienthal, Pilcher, Maxim, and Chanute, but will be inclined to believe that long before the year a.d. 2000, and very probably before 1950, a successful aeroplane will have soared and come home safe and sound. Directly that is accomplished the new invention will be most assuredly applied to war.”

While H.G. Wells was off the mark by four decades on when the first airplanes would take flight, he correctly predicted that the machines would soon be equipped to kill people from above.

This year marks the 100th anniversary of the first use of an aircraft as an instrument of warfare. In a morbid symmetry with this year’s NATO-led intervention into the Libyan conflict, back in 1911, the pilots were Italian and the targets were Libyan.

The first instance of airpower was a tactic employed in the Italo-Turkish War, fought between Italy and the Ottoman Empire. In 1911, Italy moved toward its longstanding goal of establishing a colony in North Africa when Germany deployed its *Panther* gunboat to Agadir, Morocco, to protect German firms that were seen as threatened by regional instability. Other European powers (particularly Britain and France) were perturbed by Germany’s gunboat diplomacy, because the port at Agadir had previously been closed to European warships. In the midst of the crisis, Rome capitalized on the uncertainty and announced that Italian interests were also threatened, specifically in the Ottoman provinces of Tripolitania and Cyrenaica (two regions that now comprise modern Libya). On September 29, 1911, Italy declared war on the Ottoman Empire.

That same day, Italy deployed a military force with a small aeronautical section named the First Aeroplane Flotilla to Derna and Tobruk and another air unit was deployed to Benghazi. The First Aeroplane Flotilla was made up of nine primitive machines, most of which were monoplanes, and eleven pilots under the command of Captain Carlos Piazza. On October 25, 1911, the Flotilla launched the first air reconnaissance mission of the war. Italian air patrols discovered advancing Turkish troops, enabling Captain Piazza to deploy ground forces that defeated the unsuspecting enemy.

(Cont. Page 4)

China Lake Museum Foundation

P.O. Box 217 · Ridgecrest, CA 93556-0217
760-939-3530 · clmf@ridgenet.net • 760-939-0564 (FAX)

Bob Campbell, President

Jack Latimer, Secretary
Milton Burford, Director Emeritus

Craig Porter, Treasurer
John DiPol, Director Emeritus

Wayne Doucette, Director Emeritus

Burrell Hays, Director Emeritus
Jack Russell, Director Emeritus

Bill Porter, Director Emeritus
Frank B. St.George, Director Emeritus

Trustees

RADM Bert Johnston, USN (ret.) **Dr. James E. Colvard** **CAPT Glenn Tierney, USN(ret.)**
RADM Bill Harris, USN (ret.) **Dr. Karen Higgins** **Franklin H. Knemeyer**
RADM M. G. Mathis, USN (ret.) **Stuart Witt** **Maj Gen Jon Gallinetti, USMC (ret.)**

Vice Presidents

Vacant, Membership **Pat Connell, Development** **James Manion, Facilities**
Vacant, Public Relations

Directors

Mike Benton **Clint Dougherty** **Larry Lincicum** **James Manion** **Susan Raglin, Education**
Charles Roulund **Robert Smith, Exhibits** **Beth Sumners** **Wade Tallman** **Charles White**
Dotsy Cronin *Volunteer Coordinator/Gift Shop Manager*

President's Report by Bob Campbell

Please read Pat Connell's report on the Campaign, as it discusses much of what I was going to say.

A few changes the BoD is implementing in 2012 include some cost saving and efficiency improvements in the office operations.

We will be changing the membership billing to a yearly basis for the calendar year vice the anniversary date process we have exercised until now. A more detailed explanation will be included when the bill is presented within the next two months.

We are also planning to cut the costs for the quarterly newsletter by delivering as many as possible electronically. We are requesting that you share your email address so that we can make this transition as smooth as possible. The option for a hard copy of the newsletter will remain for those preferring that media. If you share your email address, it will also give us the opportunity to inform you of educational events in which you might be interested in a more timely and cost effective manner.

We are looking forward to the New Year and planning for the establishment of the Museum in Ridgecrest in the Kern County Park area. The co-location with Maturango Museum will create a cultural and educational destination resource for the Community. Raising the necessary funds for the new building and exhibits along with educational outreach activities will continue to be our focus in 2012.

I want to wish you all a Merry Christmas.

Over the next several days, Italian pilots continued to conduct surveillance missions, although they grew increasingly creative; on several occasions, pilots dropped messages on Italian warship decks with enemy locations to correct the gunners' aim.

On November 1, 1911, a young Italian pilot named Lieutenant Giulio Gavotti was ordered to throw Cipelli grenades from his aircraft to strike enemy encampments in the oases of Ain Zara and Taguira. On the morning of November 1, Lieutenant Gavotti took off on his own from the Italian base in a Taube aircraft, heading towards the Turkish encampments. Flying three to four hundred feet above the ground, he circled the Turkish base two times. On the third run, Gavotti dropped four, five pound Cipelli grenades. According to reports, he pulled the security pins off the grenades with his teeth and tossed them out the window, all the while trying to avoid the wings of the aircraft. Most of the grenades exploded in the open desert, although others hit noncombatants.

Despite the fact that Lieutenant Gavotti's attack had few casualties, it marked a turning point in the war. Although the Turkish claimed that a military hospital outside the contested area had been bombed, Italian air forces bombed Ain Zara several more times in the following days. The Ottoman government condemned the attacks as violations of the Geneva Convention. On November 6, Italian General Staff issued the first communiqué on the success of aerial bombing, declaring "bombing had wonderful moral effect upon the Arabs." By early 1912, Italian aircraft conducted a wide variety of missions: bombing Turkish positions; locating, photographing, and filming enemy encampments; intercepting camel trains; and dropping pro-Italian propaganda leaflets, which offered Tripolitanian citizens a gold coin and a sack of wheat if they surrendered.

The Italian bombings elicited the first uses of air-defense guns, as well. Though the resistance originally only had small arms that were no match against superior Italian aircraft, in the spring of 1912, Turkish forces in Azzizia mounted a 90 millimeter Krupps gun on a high-elevation carriage to deter enemy attacks. Although the Krupps gun did not hit any aircraft initially, in subsequent battles it successfully hit several airplanes and wounded two pilots. In response, Italian pilots increased their standard height of operations from 2,000 to 4,500 feet in a nascent example of anti-aircraft warfare.

Ultimately, however, the Italian use of airpower had little impact on the Italo-Turkish War. Reportedly, the First Aeroplane Flotilla and their associated air units flew a total of 712 sorties and dropped a few hundred bombs. The British War Office estimated that between March and June 1912, the total Turkish losses from aerial bombing was twenty-six killed and seventy wounded. The Italians succeeded in forcing the Ottoman forces to surrender with the Treaty of Lausanne in October 1912, largely because the Italian military deployed 100,000 troops to North Africa, which were far better trained and equipped than their opponents.

Over the last century, airpower has witnessed two parallel developments. The first, accurately predicted by Wells, relates to the far reaching capabilities of airpower in terms of the scope of combat operations, real-time target acquisition, destructive capabilities, and remarkable precision. The second development is mental, namely an increasing faith in the ability of airpower to achieve a set of discrete military and political missions, which once also required boots on the ground. To quote Lieutenant General David Deptula, the Air Force Deputy Chief of Staff for Intelligence, Surveillance, and Reconnaissance in 2009: *"We've spent about the last hundred years as airmen trying to figure out how to hit any target, anywhere on the surface of the Earth, all weather, day, night, rapidly and with precision. We can do that today."*

The China Lake Museum of Armament and Technology is to become the China Lake Museum

When the museum moves to Ridgecrest, we will have a name change to the "China Lake Museum" and operate as an independent, 501(c) 3 (nonprofit) corporation under the laws of the State of California. Although the Naval Air Warfare Center (NAWC) at China Lake continues to support us, the museum has been declassified by the Naval Historian we will no longer be under the authority of the Navy. We have a signed agreement with the NAWC that ensures we will continue to be loaned aircraft, armament and artifacts at our new location.

These changes are important and represent significant opportunities for the museum. With the current museum facility located "inside the fence" of the secure Naval Air Weapons Center at China Lake, California, access is not always possible for the general population. Visitors not having government issued badges have an increasingly difficult and lengthy time getting the required passes to come onto the base to the current museum.

In addition, our current facility has grown inadequate with outdated heating and cooling, limited space for outside and inside static displays and inside interactive displays, and structural issues that prevent us from using the conference/meeting room. This facility does not have the physical capacity to provide educational programs to Military, Government or general public individuals, impacting our ability to host training sessions for the NAWC, provide on-site training sessions for the Rocket Science Camps, and expand our educational program. Administrative space for staff is extremely limited and the Museum would benefit by increasing the square footage of the Gift Shop.

The new China Lake Museum in Ridgecrest will allow us to expand and update exhibit space to educate current and future generations of scientists and engineers, Naval personnel, and the general public about the nation's achievements in Naval armament and technology. We will be able to develop interactive exhibits and educational outreach programs to inspire young people to study science, engineering, technology and aerospace to help keep our country secure and a leader in these fields.

We have located an ideal site to relocate the new China Lake Naval Museum. We are working with the Kern County staff and Supervisor McQuiston to secure a long term lease for the land and that they appear to be very supportive of this concept . The new facility will be adjacent to the Maturango Museum in Ridgecrest (to the east). Just across the street we will have additional acreage to set up a satellite display of Naval artifacts, to advertise this new "museum complex." We are very excited about this expanded partnership with Maturango and believe that it will greatly enhance the entertainment and educational experiences of both our local community and visitors to the valley. This will cost money of course. Although we have raised nearly \$300,000, we need \$3,000,000 before we can break ground for the initial phase of the new museum. We have embarked on a capital campaign – *From the Desert to the Fleet* – to raise these funds and more, the first two years for phase 1 and 10K sq ft facility, with growth to a 20K-25 sq ft facility within five years. For additional information about the China Lake Naval Museum, volunteering, or how to support the campaign, interested parties should contact Pat Connell at paconnell@hughes.net .

New Memberships received since Summer 2011 Newsletter:

Business Contributor Members (\$100.00 Annually)

IWV Insurance Agency - Ridgecrest CA

Lifetime Members (\$1,000.00)

Moore, David & Terry - Ridgecrest CA

Contributor Members (\$100.00 Annually)

McGowan, Robert & Tiana - Ridgecrest CA

Enlisted Military Members ("Free" from Sponsor Memberships)

Burnham, Samuel - Ridgecrest CA

Carathers, Jason - Ridgecrest CA

Kieffaber, Daniel & Kirsten - Ridgecrest CA

Korensky, Chet & Michelle - Ridgecrest CA

Leahy, Michael - Ridgecrest CA

McNeely, Megan - Ridgecrest CA

Michalski, Tony & Debbie - Ridgecrest CA

Rohrer, Dwayne & Sarah - Ridgecrest CA

Stoltenberg, Bradley & Denise - Ridgecrest CA

Regular Members (\$25.00 Annually)

Baldwin, James & Katherine - Ridgecrest CA

Johnson, Kevin & Aleta - Ridgecrest CA

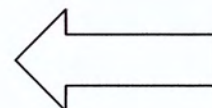
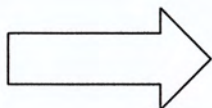
Little, Steven & Leah - Santa Barbara CA

Silva, Wayne & Katheryn - Ridgecrest CA

Visit the

China Lake Museum Foundation website!

www.chinalakemuseum.org



William Edgar "Bill" Davis Obituary
(Thanks to Larry Stensaas, W.E. Davis' son-in-law, who provided this eulogy)

Born March 15, 1921 - Passed away Nov. 14, 2011 He was 90.

Dad was born in Anderson, Indiana to William Glenn & Bertha Ada Davis.

Now let me share his "Dash"

Dad was a member of First Baptist Church in Anderson and after he arrived in Ridgecrest he attended All Faith Chapel, Immanuel Baptist Church and First Baptist Church. He attended Anderson High School and graduated in 1942 from Anderson College. He graduated from Butler University in Indianapolis with a B.A. and attended graduate school at the Harvard University School of Business Administration in 1944.

From 1937-1950 he was a Clerk, during summers, at J. C. Penney, worked Assembly line, night shift, Delco-Remy, was an Itinerant agent, Indiana Employment Service, all in Anderson, IN He worked as Assistant Office Manager, National Gypsum Co., in Alexandria, IN, and Office Manager, Anderson Mattress Co., Anderson, IN

He entered the Navy Reserve as an apprentice seaman in 1942 in the V-7 Program. In August of 1943 he entered Active duty attending Midshipman School, as a Line Officer in New York City. In October of 1943 he attended Midshipman School, as a Supply Corps Officer, in Boston. In 1945 he was assigned as Supply and Disbursing Officer aboard LSTs and LSD-6, Amphibious Forces, in Pacific and Atlantic areas.

Then in 1950 it was on as Squadron Supply Officer for Mine Sweepers, in the Pacific area. In March of 1953 he was assigned as Officer in Charge, Commissary Store, NOTS China Lake. In 1954 he became Head, Administrative Division, Public Works Dept, NOTS China Lake. In 1955 he moved to Associate for Administration, Propellants and Explosives Dept, NOTS In 1960 he became Head of Staff, Aviation Ordnance Dept., NOTS In 1971 he became Head of Staff, Electronics Systems Dept, Naval Weapons Center, China Lake and after one year he was selected as Director of Security, Naval Weapons Center, China Lake, CA

Then in 1976 he became Director of Safety and Security, Naval Weapons Center, China Lake, CA

Dad retired the "first time" in 1969. A big joke in the family.

Throughout his career he was active in all of these organizations and maybe some more that he didn't include in his personal information.

Honorary life member - Mount Moriah Lodge 77, Free and Accepted Masons

Life member - Rho Chapter, Sigma Chi Fraternity

Chairman, Employees Services Board, NOTS, China Lake, CA

Trustee, Kern County Joint Union High School District

Trustee, Kern County Regional Occupational Center

Honorary life member - Chapter 60, International Footprinters Association

Co-Founder, Prostate Cancer Survival Group, IWV Unit, American Cancer Society
Post 684, American Legion
Post 4084, Veterans of Foreign Wars
Life member - China Lake Museum Foundation –
Director, Retired Affairs Office, Naval Air Weapons Station

MAJOR AWARDS/HONORS

Fellow in Management, Michelson Laboratories Award, NOTS China Lake
Commendation by Resolution of Senate, California Legislature
Meritorious Civilian Service Certificate, Navy Department for service at China Lake
Commendation for Navy Retired Affairs Office, Naval Air Weapons Station, (NAWS)
Executive Secretary, Advisory and Action Committees for the China Lake 50th Anniversary
Celebration activities, NAWS, China Lake
Commander's Award, Naval Air Warfare Center, China Lake for China Lake 50th Anniversary
Celebration

Dad is survived by his beloved wife, Grethel Marie (see note, below) of Ridgecrest, son Lee Emerson Davis of Avila Beach, daughter Tomya Ann Stensaas of Ridgecrest and daughter Mary Kay Davis of Sonoma. He is preceded in death by his son Jeffrey Donald Davis, who passed in 2003. William is survived also by five granddaughters Rhonda Kay Rabensburg, Meegan Casabar, Heather Ann Drewrey, Nichole Serene Cynova, ReAnn Marie Siebert, a grandson Michael Stensaas, seven great grandchildren and two great-great grandchildren.

He leaves a legacy of honor, respect, work ethic, and a devotion to family and country that is seldom seen in today's world.

(Note: Grethel Marie Murphy Davis died Nov. 25, 2011, in Ridgecrest. She was 86.
Services were held at Immanuel Baptist Church on Thursday, Dec. 1, 2011)



John Pearson Obituary

John Pearson, a longtime employee of China Lake who achieved a towering international reputation in the area of explosives and materials research, died on October 31, 2011, at the age of 88.

Known as “the father of explosive forming and welding,” he had more than 200 patents, more than 100 technical publications and three books. His explosive-welding concepts are still in use worldwide today.

Pearson was born in Leyburn, England. At an early age he immigrated with his family first to Canada, then to Chicago, Ill.

As a member of the Army Corps of Engineers in World War II, he saw action and received a Purple Heart. Following his military service, he attended Northwestern University in Illinois, earning a BSME in 1949 and a MS in 1951.

He joined the Naval Ordnance Test Station in 1951 as a mechanical engineer in the Physics Division of the Research Department, and people who worked with and for him over the following three decades remember him as a strong down-to-earth, constructive leader, with a first-class technical brain and a caring approach to employee problems.

Early in his career he served as a branch head in the Ordnance Systems, Research and Aircraft Weapons Integration departments. For several years he managed explosive-ordnance test ranges and engineering support facilities in Area R.

Later he became the head of the Research Department’s Detonation Physics Division. He retired in 1980, but continued to serve as a rehired annuitant at China Lake for many years.

Pearson's recognized expertise as a scientist and engineer in detonation physics encompassed the behavior of explosive-metal systems, physical and metallurgical properties of impulsively loaded materials, stress waves and fractures, terminal ballistics, the dynamics of warhead behavior and the initiation and detonation processes of explosives.

He was known internationally as a pioneer in the field of explosive metal working for both military and industrial applications, and the results of his studies have been extensively used. His inventions for controlled fragmentation of warheads have been used by all of the military services and by many U.S. allies.

Two books of his books (co-authored with another NOTS pioneer, Dr. John Rinehart), "The Behavior of Metals Under Impulsive Loads" and "Explosive Working of Metals," remain classics in the field. His major works have been translated into many languages.

He served as a national lecturer for several professional societies, as an invited lecturer for the Academy of Metals and Materials, as a founding member of the Advisory Board for the Center for High Energy Forming at the University of Denver and as a lecturer in engineering for the University of California, Los Angeles and Santa Barbara.

He also served on various investigative committees including for the National Transportation Safety Board.

He was a registered professional engineer in California in both mechanical and metallurgical engineering. Professional affiliations included the American Society of Mechanical Engineers (Life Fellow), American Society for Metals (Life Member), American Defense Preparedness Association (Life Member), the Metallurgical Society, American Physical Society, New York Academy of Sciences, California Society of Professional Engineers, National Society of Professional Engineers, Tau Beta Pi (Honorary Engineering); Pi Tau Sigma (Honorary Mechanical Engineering), Sigma Xi (Honorary Scientific) and the Scientific Research Society of America (Honorary Scientific).

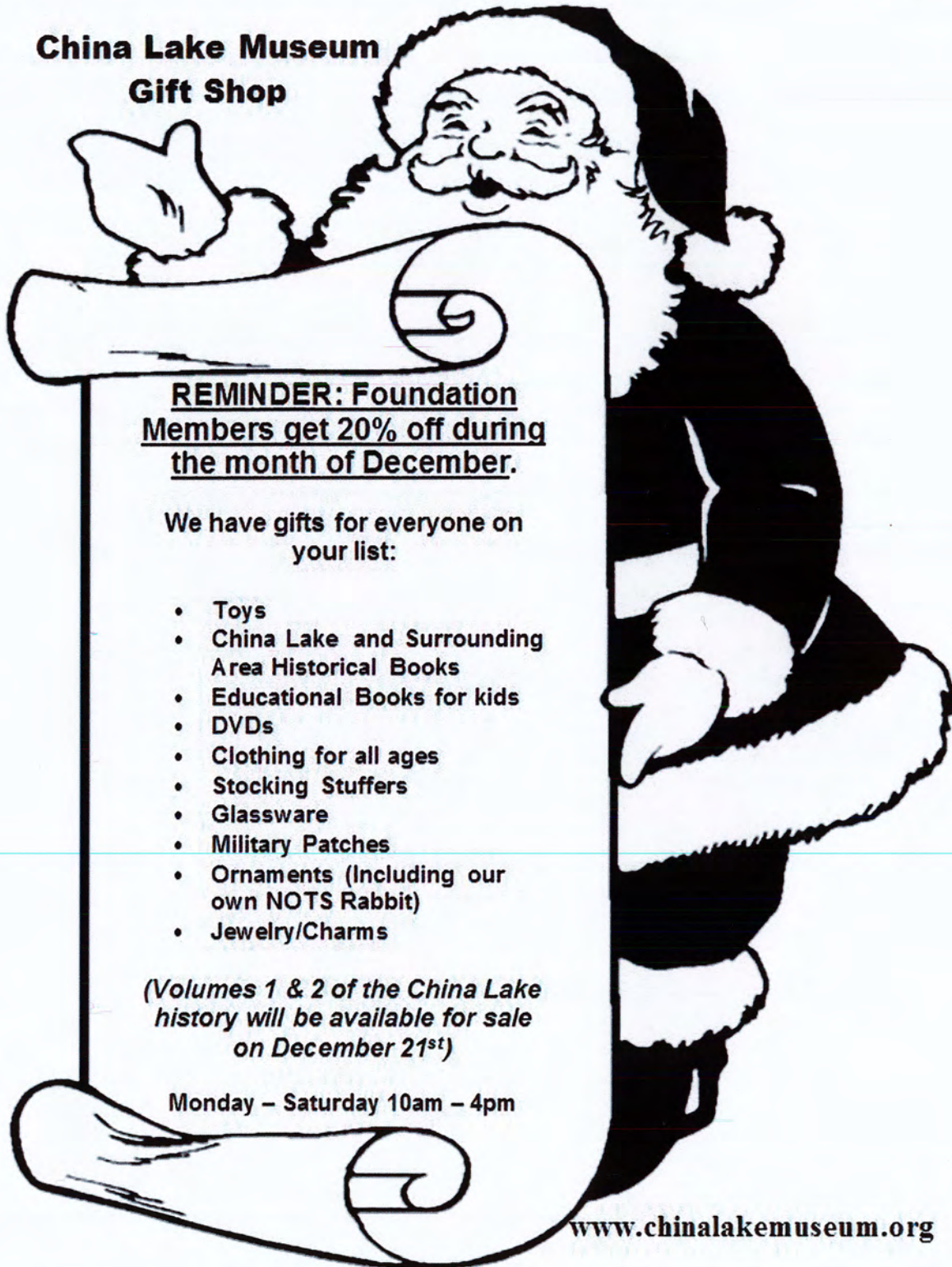
His awards included all of China Lake's top honors, including the L.T.E. Thompson Award (1965), the William B. McLean Award (1979) and the Haskell G. Wilson Award (1985). He earned a Navy Superior Civilian Service Medal in 1984, and in 1989 he was made the first Distinguished Fellow of the Naval Weapons Center.

The Pearson R&D Laboratory at China Lake was named for him.

He is survived by his second wife Sharoll Pearson of Ridgecrest; sons John Pearson of San Jose, Armin Pearson of Riverside and Roger Pearson of Riverside; stepsons James Chisolm and John Chisolm both of Ridgecrest; nine grandchildren and two great-grandchildren.

He was preceded in death by his first wife Ruth Pearson, brothers William Pearson and Edward Pearson, and sisters Emily Scott and Nellie Anderson.

**China Lake Museum
Gift Shop**



**REMINDER: Foundation
Members get 20% off during
the month of December.**

We have gifts for everyone on
your list:

- Toys
- China Lake and Surrounding
Area Historical Books
- Educational Books for kids
- DVDs
- Clothing for all ages
- Stocking Stuffers
- Glassware
- Military Patches
- Ornaments (Including our
own NOTS Rabbit)
- Jewelry/Charms

*(Volumes 1 & 2 of the China Lake
history will be available for sale
on December 21st)*

Monday – Saturday 10am – 4pm

www.chinalakemuseum.org

NONPROFIT ORG.
U.S. POSTAGE
PAID
RIDGECREST, CA
PERMIT NO. 48

RETURN SERVICE REQUESTED



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



Combined Federal Campaign