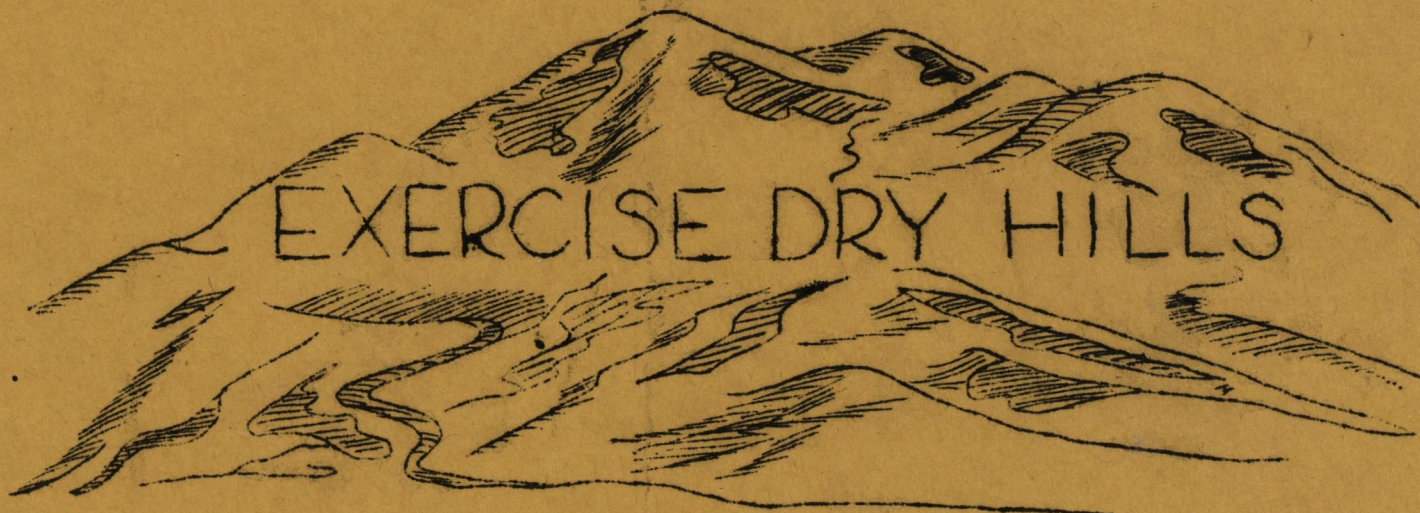


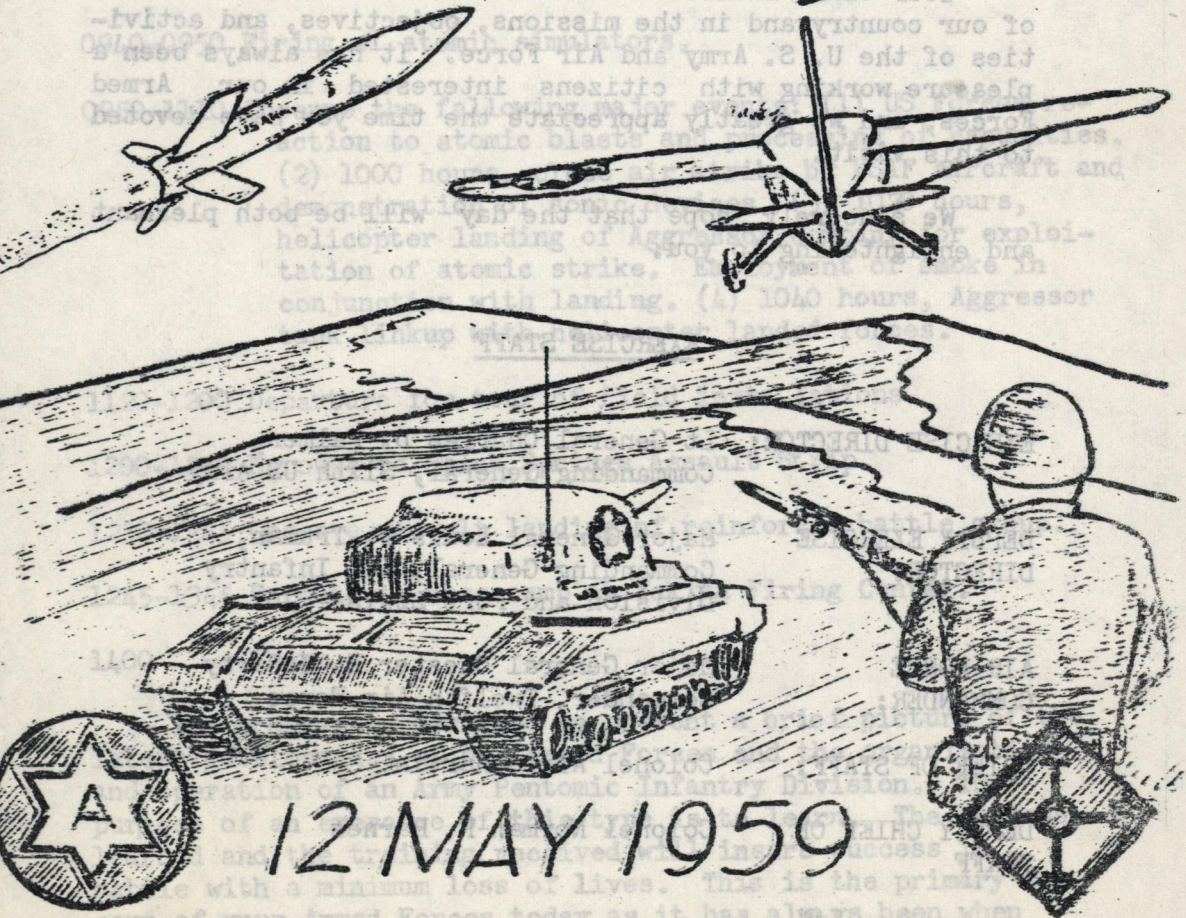
VISITORS DAY



PRESS KIT



# Visitors Day Exercise Dry Hill



12 MAY 1959

YAKIMA FIRING CENTER  
WASHINGTON



## W E L C O M E

The Commanding Generals, Sixth US Army, Twelfth Air Force, 4th Infantry Division, and troops participating in Exercise DRY HILLS welcome you to the Yakima Firing Center.

Your visit indicates an active interest in the defense of our country and in the missions, objectives, and activities of the U. S. Army and Air Force. It has always been a pleasure working with citizens interested in our Armed Forces, and we greatly appreciate the time you have devoted to this visit.

We sincerely hope that the day will be both pleasant and enlightening to you.

## EXERCISE STAFF

EXERCISE DIRECTOR:	Lt General Charles D. Palmer, Commanding General, Sixth US Army
DEPUTY EXERCISE DIRECTOR:	Major General Louis W. Truman, Commanding General, 4th Infantry Division and Fort Lewis
AIR FORCE COMMANDER:	Major General Chester E. McCarty Commander, Twelfth Air Force
CHIEF OF STAFF:	Colonel Alfred Martin
DEPUTY CHIEF OF STAFF	Colonel Norman P. Barnes

## SCHEDULE OF EVENTS

0730 Arrival of visitors at Yakima Firing Center briefing room. Coffee and rolls served to 0800 hours.

0800-0830 Welcome by Exercise Director or by Deputy Exercise Director and briefing on general situation and planned action for the day.

0830-0930 Enroute to observation point.

0930-0940 Terrain orientation by briefing officer.

0940-0950 Firing of atomic simulators.

0950-1110 Observe the following major events: (1) US Forces reaction to atomic blasts and processing of casualties. (2) 1000 hours, close air strike by USAF aircraft and demonstration of sonic devices. (3) 1020 hours, helicopter landing of Aggressor Company for exploitation of atomic strike. Employment of smoke in conjunction with landing. (4) 1040 hours, Aggressor tank linkup with helicopter landed forces.

1120-1200 Departure for tour of field installations.

1200-1230 Enroute to Selah Springs Assault Strip.

1230-1245 Observe assault landing of reinforced battle group.

1245-1345 Enroute to base camp at Yakima Firing Center.

1400 Lunch.

The program is designed to present a brief picture of the latest developments of our Armed Forces and the organization and operation of an Army Pentomic Infantry Division. The purpose of an exercise of this type is to learn. The lessons learned and the training received will insure success in battle with a minimum loss of lives. This is the primary concern of your Armed Forces today as it has always been when called upon to defend these United States against aggression.

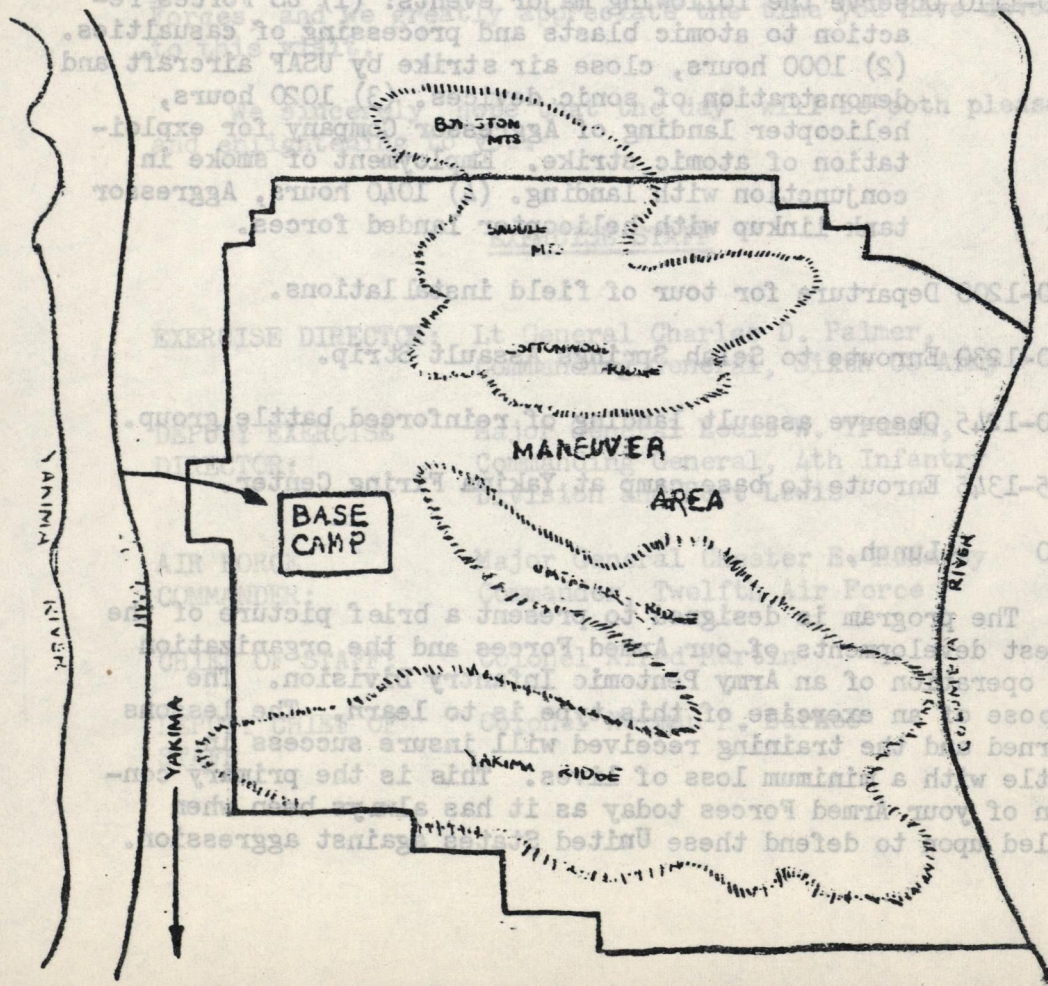


# YAKIMA FIRING CENTER

The Yakima Firing Center Military Reservation, a subsidiary post of Fort Lewis, Washington and one of the largest military installations in the United States, spans an area of more than 280,000 acres. The Base Camp is located five miles north of the city of Yakima, just east of Highway #97.

Its steep canyons and draws, sharp mountain ridges and desert areas reflect a wide range of elevation, varying from 500 feet to more than 4200 feet above sea level.

Army Reserve and Army National Guard units assemble at the firing center during the summer months to conduct their annual field training. The remainder of the year finds Active Army units sharpening up their marksmanship on the numerous firing ranges at the Center.





## BIOGRAPHY

### LIEUTENANT GENERAL CHARLES D. PALMER

Commanding General Sixth US Army, Presidio of San Francisco  
Exercise Director, Exercise Dry Hills

Charles D. Palmer was born in Chicago, Illinois, February 20, 1902. He was graduated from the US Military Academy and appointed a second lieutenant in the Field Artillery June 12, 1924. His first assignment was at Fort Meyer, Virginia, as assistant executive, reconnaissance officer and executive of Battery A, 16th Field Artillery.

In September 1928, General Palmer entered the Field Artillery School, Fort Sill, Oklahoma. He completed the battery officer course in August 1929 and was assigned to Schofield Barracks, Hawaii, as battery commander and later as plans and training officer of the 11th Field Artillery.

General Palmer became a Reserve Officers' Training Corps instructor at Harvard University in June 1932 and also was Assistant Professor of Military Science and Polo Coach. In August 1937, he entered the Command and General Staff School, Fort Leavenworth, Kansas, and in October 1938 joined the 82d Field Artillery at Fort Bliss, Texas, where he was battery commander, battalion commander, and adjutant, successively.

In April 1941, General Palmer became supply officer of the Trinidad Sector and Base Command, British West Indies. In July 1942, he was assigned to the 11th Armored Division, then at Camp Polk, Louisiana, which he accompanied as chief of staff to Camp Berkeley, Texas, Desert Training Center, California, and Camp Cooke, California.

General Palmer, in March 1944, became chief of staff of 2d Armored Division in the European Theater of Operations, and in September 1944 assumed duty with the V Corps. In October 1944, he became chief of staff of the VI Corps. In June 1945, he returned to the United States as chief of staff of the Fourth Service Command and a year later was named chief of staff of the Seventh Army at Atlanta, Georgia. He was appointed chief of staff of the Third Army at Atlanta in January 1947.

In December 1947, General Palmer went to Japan as artillery commander of the First Cavalry Division with station at Osaka. In July 1950, he accompanied the 1st Cavalry Division to Korea. He assumed command of that Division February 19, 1951.

General Palmer went to Europe in April 1954. He became chief of staff of the United States European Command in May 1954.

General Palmer was serving as Deputy Commanding General, Eighth US Army, and Commanding General, US Army, Japan, when announcement of his assignment as Commanding General, Sixth US Army, effective mid-March, 1958, with headquarters at the Presidio of San Francisco, was made by the Department of the Army on January 15, 1958.

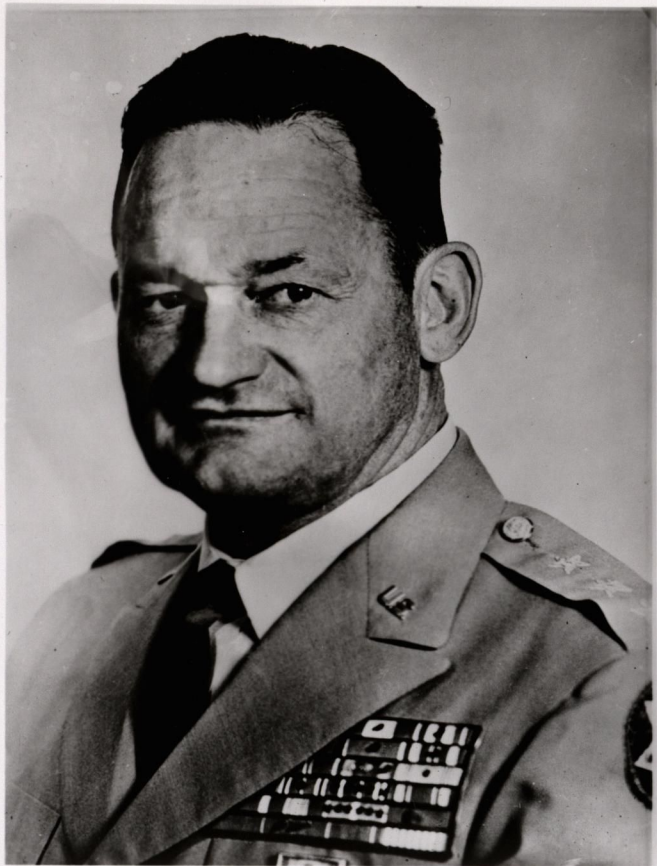
General Palmer has been awarded the Distinguished Service Medal, the Silver Star, the Legion of Merit, and the Distinguished Flying Cross, each with one Oak Leaf Cluster, the Bronze Star Medal, and the Air Medal with twelve clusters.



His foreign decorations include the French Legion of Honor (Officer and Chevalier) and the French Croix de Guerre.

General Palmer was promoted to first lieutenant January 6, 1929; to captain August 1, 1935; to major January 31 1941; to lieutenant colonel December 24, 1941; to colonel July 22, 1942; to brigadier general January 13, 1945; to major general February 13 1951, with date of rank from April 9, 1949; to lieutenant general August 9, 1955.







## BIOGRAPHY

MAJOR GENERAL LOUIS W. TRUMAN

Commanding General, 4th Infantry Division and Fort Lewis  
Deputy Exercise Director, Exercise Dry Hills

Major General Louis W. Truman, Commanding General, 4th Infantry Division and Fort Lewis, was born in Kansas City, Missouri, on 20 June 1908.

He graduated from Springfield High School, Springfield, Missouri, in 1925. General Truman attended Springfield Teachers College, Springfield, Missouri, for two years prior to his appointment to the United States Military Academy.

His military career began when he enlisted in Company "M", 140th Infantry Regiment, Missouri National Guard, on 20 June 1926. Through the Missouri National Guard, he received his appointment to the U.S. Military Academy in 1928.

He graduated from the Academy on 10 June 1932, and was assigned to duty with the 6th Infantry Regiment, at Jefferson Barracks, Missouri.

In 1936-1937 he was a student at the Infantry School Regular Course and in 1937-1938 he attended the Tank Course. Both of these schools were at Fort Benning, Georgia.

General Truman was then assigned to the 14th Infantry Regiment, Fort Davis, Canal Zone, from August 1938 to August 1940. Returning to the United States in September 1940, he was assigned to the 14th Armored Brigade Headquarters, 2d Armored Division at Fort Benning, Georgia.

In February 1941, he was assigned as Aide-de-Camp to Lt General Walter C. Short, Department Commander, Hawaiian Department, Fort Shafer, Hawaii. He was present there during the Japanese attack on Pearl Harbor on 7 December 1941. He continued in this assignment until 28 February 1942.

General Truman then was assigned to Headquarters, Army Ground Forces, Washington, D. C., in April 1942. There he served with the General Staff in the G3 Section. In February 1943 he was assigned as Secretary, General Staff for Lt General Lesley J. McNair until April 1944.

At that time, he was assigned as Chief of Staff of the 84th Infantry Division. He served with that Division in Europe from August 1944 until December 1945, when the Division rotated to the United States.

From 1946 until 1948, he was Secretary of the United States Delegation to the United Nations Military Staff Committee stationed in New York.

He attended the National War College at Fort Lesley J. McNair, Washington, D.C., as a student during the 1948-1949 school year.



Following graduation from the National War College, he was assigned to the Joint Chiefs of Staff from August 1949 until May 1952. During this time, he served with the Joint Strategic Plans Group on the Joint Staff.

In July, 1952, he arrived in Korea and was given command of the 223d Infantry Regiment, 40th Infantry Division.

Upon his return to the CONUS from Korea in July 1953, he was assigned as Chief of Staff, Headquarters, Third US Army, Atlanta, Georgia. In May 1954, he was assigned as Deputy Army Commander of Third Army, which position he held until October 1954, when he reverted to Chief of Staff.

In August 1955 to August 1956 he served as Assistant Chief of Staff, Plans and Operations, Allied Forces, Southern Europe with stations in Naples, Italy.

He was assigned as Chief, MAG, Pakistan, Karachi, Pakistan, from August 1956 to June 1958. He was recently transferred from that position to Fort Lewis, arriving there on 3 August 1958.

General Truman has been awarded the Silver Star with one Oak Leaf Cluster, the Legion of Merit with one Oak Leaf Cluster, the Bronze Star with three clusters, the Combat Infantry Badge with one Star, the American Defense Medal, the National Defense Service Medal, the American Theater Ribbon, the Asiatic-Pacific Campaign Medal with one Star, the European-African-Middle Eastern Campaign Medal with three stars, the Korean Service Medal with three stars, the World War II Victory Medal, the Army of Occupation Medal (Germany) World War II; in addition, he has been decorated by the French, Netherlands, and Belgian governments.

He was promoted to 1st Lieutenant in 1935, Captain in 1940, Major in 1942, Lt Colonel in 1942, Colonel in 1944, took an automatic reduction in 1947 to Lt Colonel and again was promoted to Colonel in 1950. He was promoted to Brigadier General in March 1953, and to Major General on 27 July 1956, with date of rank 1 January 1952.

General Truman and his wife, Margaret Stevenson Truman, reside at Fort Lewis. Other members of his family are: his father, Major General Ralph E. Truman (retired), Springfield, Missouri, his sister, Mrs Henrietta Davidson, Wichita Falls, Texas, and his brother Major Corbie R. Truman, US Army, Presently assigned as a student at Maxwell Field.







## BIOGRAPHY

BRIGADIER GENERAL JOHN H. MCGEE

Assistant 4th Division Commander

Acting Commander, 4th Infantry Division, Exercise Dry Hills

65

John H. McGee was born in Minot, North Dakota on 10 May 1908. He attended the University of Notre Dame 1926-1927. He was appointed to the United States Military Academy in 1927. From his graduation in 1931 until 1940, he served at various posts in the United States and Hawaii.

In July 1940 General McGee was assigned to the 45th Infantry (Philippine Scouts) at Pettit Barracks, Zamboanga. During the defense of the Philippines he commanded the Davao Sub-sector. He was taken prisoner and two years later he escaped. In September 1944 he assumed command of a group of survivors from a torpedoed prison ship and was evacuated to the United States with the group. In July 1945 he returned to the Philippines where he commanded the 169th Infantry on Luzon and in the initial occupation of Japan.

He served as Assistant PMST at the University of Illinois during 1946-49. During 1949-50 General McGee commanded the 8th Infantry at Fort Ord, California. In August 1950 he was assigned to the Eighth Army in Korea, where he organized and commanded the United Nations Reception Center and the 8086th Army Unit.

After his return from the Far East, General McGee attended the Army War College, from which he graduated in 1952. Following this he served with the Third Army at Fort McPherson, Georgia. In September 1952, he was transferred to Fort Jackson, South Carolina, where he was appointed Deputy Post Commander and Chief of Staff of the 8th Infantry Division.

In August 1954 he returned to Hawaii and served as Assistant Chief of Staff, G3, United States Army, Pacific, until 29 October 1955, when he became the Assistant Division Commander of the 25th Infantry Division at Schofield Barracks.

General McGee became Assistant Division Commander of the 4th Infantry Division, Fort Lewis, Washington, on 1 October 1957.

General McGee became Commanding General, 4th Infantry Division and Fort Lewis on 3 June 1958. He held that position until 3 August 1958, when he again became Assistant Division Commander.

The General is married to the former Mary Anne Pratt, daughter of the late Lieutenant Colonel Pratt (Medical Corps, US Army) and Mrs. Pratt. They have one daughter, Kathy, age 17.

General McGee's decorations include the Silver Star and the Legion of Merit with two Oak Leaf Clusters.

He was promoted to first Lieutenant (RA) 1 August 1935; to Captain (AUS) 2 October 1940; to Captain (RA) 11 June 1941; to Major (AUS) 21 Jan 1942; to Lieutenant Colonel (AUS) 10 April 1942; to Colonel (AUS) 20 Oct 1944; to Lieutenant Colonel (RA) 1 July 1948; to Colonel (RA) 3 August 1953; and to Brigadier General (AUS) 29 November 1955.







## BIOGRAPHY

COLONEL NORMAN H. BYKERK

Commanding Officer, 1st Battle Group, 8th Infantry  
Aggressor Commander, Exercise Dry Hills

Colonel Norman H. Bykerk assumed command of the 1st Battle Group, 8th Infantry on 9 September 1958.

Colonel Bykerk is a veteran of over 18 years service in the Army and was promoted to this present rank on 6 May 1955. He served in the Pacific Theater in WW II and participated in the Attu, Kiska, Kwajalein, and Mariana Campaigns. He has served in Europe in the following capacities: battalion commander in the 1st Division, G3 Section of US Army Europe, and in the J3 section of USEUCOM. From 1953 to 1955 he was an instructor at the Command and General Staff College. He came to Ft Lewis from Carlisle Barracks, Pennsylvania where he was a student at the Army War College.

The Colonel's decorations include: Bronze Star Medal with Oak Leaf Cluster, Commendation Ribbon with Metal Pendant and the Combat Infantryman's Badge.

The Colonel is married to the former Maybelle Cravens of Lincoln, Nebraska. They have three children.

Colonel Bykerk is also a native of Lincoln, Nebraska and attended the University of Nebraska from 1932 to 1936.







## 4th INFANTRY DIVISION

### "History of the Famous 4th"

The 4th Infantry Division was first organized at Camp Green, North Carolina, on 3 December 1917, under the command of Major General George H. Cameron. Its distinctive insignia, the Ivy Leaf, dates back to that time. The word "Ivy", as pronounced, suggests the characters used in the Roman numeral "IV". The Division, better known as the Famous 4th, has always been proud of and lived up to its motto-"Steadfast and Loyal".

The division first saw action in France in the summer of 1918, where it was successful in stopping the German advance toward Paris at the Marne River. The 4th then continued to push the Germans back, climaxing its gallant offensive against the heavily fortified Meuse-Argonne area, where a decisive victory marked the beginning of the end for Kaiser's dream of conquest. The division returned to the United States and demobilized on 1 August 1919.

When Hitler rose into power, and again touched off the spark that flamed into World War II, the 4th Division was reactivated on 3 June 1940. During the next three years the 4th trained in the states, and on 18 January 1944 departed for Europe for World War II service.

Here on D-Day, 6 June 1944, the scene of the Normandy invasion, units of the Ivy Division were the first to contact the Germans. After three days of hard fighting, the beachhead was established, and then began the big push toward Cherbourg, and important link in the German coastal supply line. Overcoming overwhelming obstacles, by the end of June, the 4th marched into Cherbourg, occupying the city. It was during this period of grit and dogged determination that the division was named, the "men with the terrible green crosses" by the German troops. During the period 24 July to 18 August, as a part of General Patton's Third Army, the Ivy Division was in the thick of the drive across France and materially aided in the liberation of Paris; being the only American division to march through that city.

During September and October, the Famous 4th breeched the supposedly impregnable Siegfried Line, fighting its way across the border into Germany, where it is credited as being the first American unit to set foot on German soil.

The Division held firm at Dickweiler and Ostweiler in Luxembourg when the Germans made their last big attack of the war on 16 December in the Ardennes Forest.

The 4th quickly overran Fuhren and Viaden, after crossing the Sauer River on 18 January 1945, in pursuit of the Germans, who were, by that time, in full flight. At the time of the cessation of hostilities, the 4th had driven deep into the vital heart of Germany, capturing 75,000 German soldiers and killing inestimable number from D-Day to VE-Day.

The 4th Division won battle streamers for the following World War II campaigns: Normandy, Northern France, Ardennes, Rhineland and Central Europe. It was also awarded the Belgian Fourragere for action in the St. Hubert area. The 8th, 12th and 22d Infantry Regiments of the 4th were each awarded Distinguished Unit Citations.



Returning to the United States after VE-Day, the Famous 4th was inactivated on 15 July 1947 at Fort Ord, California, this time as a training division. Reorganized as an infantry division at Fort Benning, Georgia on 10 October 1950, the 4th began training for overseas shipment.

The division arrived in Germany during May-June 1951. Taking its place with the NATO forces, the 4th occupied operational readiness positions in the main avenues of approach within its assigned zone of responsibility. It served five years in Germany.

In April 1957, seven months after the 4th's colors were returned to the US and assigned to Fort Lewis, Washington, the Ivy Division underwent a pentomic reorganization revolutionizing the size and structure of all units. The 2d Battle Groups of the 39th and 47th Infantry were added to the 1st Battle Groups of the 8th, 12th and 22d Regiments implementing the five-sided battle concept. Other units formed by the pentomic reorganization included the 124th Signal Battalion, 2d Reconnaissance Squadron, 8th Cavalry, 14th Transportation Battalion, and the 4th Aviation Company. Division artillery was altered from five to two battalions, having atomic capabilities in its 8-inch Howitzer and 762mm Honest John Rocket batteries.

By means of continual training and regular maneuvers, the pentomic 4th Division is maintaining a high peak of preparedness for all possible emergencies.

All units of the 4th Infantry Division participate annually in Army Training Tests designed to assess the division's efficiency on a small unit level of pentomic tactics. Exercise GOLD BAD held in Alaska tested the new tactics on a larger scale, and the 2d Battle Group of the 39th Infantry thereby became the first unit of its size to put these tactics to the test.

Exercise INDIAN RIVER in May 1958, the first to coordinate training of the entire division in a field exercise was followed by the announcement of the 4th Infantry Division's integration into STRAC (Strategic Army Corps), the Army's newly developed highly mobile fighting force, composed of two airborne and two infantry divisions. The Famous 4th increased its versatility as a result of Exercise ROCKY SHOALS conducted off the California coast in November 1958, where units gained proficiency in sea to land operations in the largest amphibious exercise since 1950.

In March 1959, the pentomic structure of the 4th Infantry Division underwent major revisions. Division Artillery was augmented to include five direct support battalions and one general support battalion, each containing a Headquarters and Service Battery. Fire power in each direct support battalion was increased by one 105mm Howitzer battery and 155mm Howitzer battery. The general support battalion gives the devastating "punch" of the atom with its 8-inch Howitzer battery and 762mm Honest John Rocket battery. The number of rifle companies in each battle group has been increased from four to five. The Battle Group Headquarters and Headquarters Company was divided into a combat support company and a Headquarters and Headquarters Company. A heavy mortar platoon was organized for inclusion in the combat support company.

Exercise DRY HILLS is being conducted to maintain the high state of combat efficiency and readiness of the 4th Infantry Division.



## 8TH INFANTRY A BRIEF HISTORY

Patriae Fidelitas , loyalty to country, has been the hallmark of the 8th Infantry in over a century and a half of service. On 16 July 1798, the first of four regiments to bear the banner of the 8th was constituted. Of the four, the first three were marshalled to meet requirements of the times and were disbanded when the emergency passed.

The present regiment was constituted by an act of Congress, 5 July 1838. Its first combat mission was to quell the Winnebago of Wisconsin. A long series of successful campaigns against hostile Indians followed in which the 8th materially aided in the westward expansion, crossing paths and swords with Seminoles, Apaches and Sioux.

In addition to Indian campaigns, the Regiment fought in the Mexican War, the Civil War, and the Spanish-American War. In the Mexican War, under the command of Zachary Taylor, the men of the 8th distinguished themselves by the frontal storming of Forts Churubusco and Chapultepec. During the Civil War, after being cut off from Federal support in Texas, the 8th was reformed and entered into the fray in 1863, participating in the battles of Manassas, Fredericksburg, Chancellorsville, Gettysburg, Spotsylvania, and Atlanta. During the Spanish-American War, the Regiment attacked San Juan Hill side by side with Teddy Roosevelt's Rough Riders and participated in the assaults on the Citadel at El Caney and Santiago. From there, the 8th shipped to the Philippines where it aided in the consolidation of American control and where the unit subsequently served two additional tours of duty.

From this distant post in the Pacific, the Regiment was only able to arrive in Europe in time to help ~~occupy~~ a defeated Germany. Returning to the U. S. after a long stretch of globe-trotting, the 8th was assigned garrison duty. In 1923, it was made part of the 4th Infantry Division with which it continues to serve..

At the outbreak of the Second World War, the 8th as part of the 4th Motorized Division began intensive training -- training which took on dramatic meaning on D-Day. On the morning of 6 June 1944 the men of the 8th under the command of Colonel James A. Van Fleet were the first to land on Utah Beach. For that day of successful battle, punctuated by instances of high individual and group valor, the 8th was awarded the Distinguished Unit Citation. Thus began months of strenuous combat. Before these months were past, Ste. Mere Eglise, Le Thiel, the Siegfried Line, and the Battle of the Bulge became names of special significance for the 8th infantry.

At the conclusion of hostilities, the Regiment returned to the States and deactivated on 25 February 1946. It was revived on 15 July 1947 as a training regiment, in which role it also served as the nucleus for the reactivated 4th Infantry Division in October 1950. On 18 May 1951, the 8th traveled with the 4th to Germany to become part of the NATO forces.

In September 1956, the 8th returned to the States and was assigned to Fort Lewis, where, in April 1957, it underwent pentomic reorganization, becoming for 4th Infantry Division purposes, the 1st Battle Group of the 8th Infantry.

This gallant Regiment has to date amassed 35 battle honors. In June of 1957, Department of the Army in its announcement of the "Combat Arms Regimental System", designated the 8th Infantry as one of the permanent parent regiments, thereby insuring the 8th a prominent place in the future of the United States Army.



SPECIFICATIONS  
OF MILITARY EQUIPMENT USED  
DURING VISITORS DAY

- M-41 TANK With a fighting weight of 50,789 lbs, the M-41 is a light reconnaissance type weapon and has a 76mm gun with a range of over 15,000 yards. The tank has a four man crew.
- M-48 TANK Weighing approximately 98,000 lbs, the M-48 Medium Tank is equipped with a 90mm gun which has a firing range of over 13,000 yards. The M-48 has a 4 man crew.
- M-56 ASSAULT GUN The M-56, better known as the "Scorpion" is a self-propelled anti-tank weapon with a 90mm gun capable of firing over 13,000 yards. Weighing only 15,000 lbs, the "Scorpion" can be air-dropped into the battlefield ready for immediate use. The M-56 has a 3 man crew.
- M-59 ARMORED CARRIER The M-59, armed with a 50 calibre Browning Machine Gun, is used to transport cargo and/or personnel in combat zones or for use as a weapons carrier. The Armored Carrier, with a net weight of 38,700 lbs, carries 1 crew member and 12 passengers. It can traverse inland waterways under its own power, without any special preparation or equipment.
- 105mm HOWITZER The 105 Howitzer with a range of 12,000 yards is the standard light artillery weapon organic to the Infantry Division. It has a crew of 9 men and fires a 33 lb conventional artillery shell.
- 155mm HOWITZER With a 96 lb high-explosive artillery shell, the 12 man crew of the 155 Howitzer can place accurate fire power against the enemy up to 16,000 yards away. Organic to the Infantry Division, the 155 is the standard medium artillery piece.
- 8-Inch HOWITZER The 8-inch Howitzer, considered the most accurate means of delivering an atomic warhead, has a maximum range of 18,500 yards. It has a 14 man crew and can be towed by a 10 ton truck or a tractor.
- 762mm HONEST JOHN ROCKET The Honest John Rocket, mounted on a 5 ton truck, is capable of delivering an atomic warhead up to 15 miles away at a speed of 1800 miles per hour. A highly mobile weapon, the 1500 lb free-flight rocket rests on a 43 foot (21 ton) launcher. The Honest John, with a 13 man crew, is 27 feet long and 2½ feet in diameter.



AIRCRAFT  
USED DURING VISITORS DAY

H-19  
"CHICKASAW"

This is the Army's standard utility class helicopter. It is a single engine helicopter used extensively by combat units to transport supplies, equipment, personnel, small units and for aero-medical evacuation in the combat zone. The pilot, co-pilot and six litter patients, or about 1800 lbs of cargo fill the "Chickasaw" to capacity. The helicopter has a top speed of 80 knots and a range of 200 miles.

H-21  
"SHAWNEE"

A large single-engine helicopter, the H-21, like the H-34, is one of the Army's two standard light transport class helicopters. It is assigned primarily to Transportation Helicopter Companies and used to transport supplies, equipment, personnel, small units and for aero-medical evacuation within the combat zone. A giant flying machine, the H-21 has won acclaim with the Army in unprecedented accomplishments while participating in civil disaster operations and world record-breaking endurance flights. The 86 foot long craft has a nine cylinder engine and can airlift the pilot, co-pilot, and from 10 to 15 troops, depending upon the equipment carried and the distance to be hauled. The H-21 has a maximum speed of over 100 knots and it has a range of 200 miles.

F-100D SUPER  
SABRE Jet

The supersonic Super Sabre is capable of delivering nuclear weapons, including the GAR-8 "Sidewinder" air-to-air missile. A single seat jet fighter, the F-100 is armed with four 20mm cannons. In addition to its normal operating range of 1,000 miles, this major weapon in the Tactical Air Command's inventory uses inflight refueling to extend the range. The F-100 can exceed the speed of sound in level flight. The primary mission of the aircraft is to provide interdiction and close air support for ground forces.

RF 101  
VOODOO

"The Eyes" for the Tactical Air Command, the Voodoo which also has Supersonic and nuclear capabilities is used extensively for varied aerial reconnaissance operations. Reconnaissance missions include visual, photo, electronic and weather reporting for both the Air Force and Army. Through the use of in-flight refueling, the RF-101 has an indefinite range.



## THE ATOMIC SIMULATOR OR NUCLEAR FIRE MARKER

The Atomic Simulator was designed to simulate the location of a ground detonated nuclear explosion. The device does not contain radioactive material.

The simulator is composed of one fiber smoke barrel packed inside a metal 55 gallon drum, a packaged sound charge and 150 feet of electric firing cable, one end of which is attached to the bottom of the fiber barrel.

Upon detonation, the simulator produces a fire ball and mushroom shaped cloud approximately 100 meters in diameter and 200 meters high. After detonation, the device tends to hold its shape and consistency for approximately 5 minutes in weather conditions where the wind does not exceed five mph.

An explosion may be increased in intensity by adding two or more devices together.

The Atomic Simulator will simulate the ground zero area of a nuclear explosion, but it will not give the exact size of an operational nuclear explosion.