

Fort Monmouth and Team C4ISR Timeline

(Disclaimer: This is not a comprehensive list of all the major milestones in the history of Fort Monmouth and Team C4ISR. See our website at <http://www.monmouth.army.mil/historian/> for additional information and more detailed publications. To contribute suggestions or updates to this document, please contact the CECOM LCMC History Office at 732 532 6322.)

May 1917	With the authorization of the Adjutant General of the Army, LTC Carl F. Hartmann leased 468 acres of land from Melvin Van Keuren of Eatontown on 16 May 1917 with the option to buy. ¹
June 1917	The Signal Corps sent the first troops to open a temporary training camp at Little Silver on the aforementioned site in June. ²
September 1917	On 15 September 1917, having decided that the new Camp would operate throughout the emergency on a “semi-permanent basis,” the Chief Signal Officer named it, officially, for Alfred M. Vail – this in recognition of Vail’s significant contributions to the development of the telegraph. ³
1917-1918	The Chief Signal Officer selected Camp Alfred Vail as the site of a Signal Corps Laboratory, largely at the urging of associates who favored the Camp on account of its proximity to related commercial enterprises. Construction, begun in mid-December 1917, was largely finished by the end of January 1918. In addition to forty-three semi-permanent laboratory buildings in the vicinity of what is now Barker Circle, the contractor (Heddon Construction Company) drained and leveled ground for two air fields and built four hangars east of Oceanport Avenue. Laboratory equipment and personnel were

¹ Dr. Richard Bingham’s *Concise History of Fort Monmouth*; Chaplain H. E. Winter, “History of Fort Monmouth,” the *Signal Corps Bulletin*, Aug 1926, No. 35; and “Post Return” reports sent by the CO of the camp to the AGO of the Army each month commencing June 1917.

² Richard Bingham’s *Concise History of Fort Monmouth*; Stenographic record of interview with COL Carl F. Hartmann, Signal Corps Retired, 26 October 1955 in the Office of the Chief Signal Officer; “Shore Veteran Recalls Early Days of Post,” *Monmouth Message*, May 18, 1967 p. 14.

³ Dr. Richard Bingham’s *Concise History of Fort Monmouth*; Order 122, Office of the Chief Signal Officer, 21 August 1917. Born at Morristown NJ, in 1807, Alfred E. Vail graduated from the University of the City of New York in 1836 and early became associated with Samuel F. B. Morse. Vail’s mechanical knowledge greatly expedited the first experiments in telegraphy. He devised the Morse alphabet of dots, dashes, and spaces. His automatic roller and grooved lever embossed on paper the characters that were transmitted. Vail was the superintendent of construction of the original telegraphy line between Washington and Baltimore. Inventor of the finger key, he received the first message successfully transmitted in 1844. In view of the great contributions Vail made to wire communications, it seemed appropriate that he be commemorated in the naming of a Signal Corps training camp. However, in an interview conducted by Helen Phillips in 1950, Hartmann (the Camp’s first commander) stated that the Chief Signal Officer actually intended in the naming of the Camp to honor his good friend, Theodore N. Vail, Chief Executive Officer of American Telephone and Telegraph.

³ Signal ROTC courses in prominent universities throughout the United States were also training radio operators and telegraphers. See *Historical Sketch of the Signal Corps*, Signal School Pamphlet No. 32 (Fort Monmouth, 1929).

	largely in place by 25 February 1918, when Major Lincoln B. Chambers was designated the Commanding Officer. ⁴
1918	The 122 nd Aero Squadron (Service) came to Camp Vail from Kelly Field, Texas, at the end of March 1918. Its job was maintenance and repair of all equipment and aircraft used in aerial experiments. The first airplane was ready for flight on 1 April, but there was no pilot on hand to fly it until the arrival of a Lieutenant Fry later that month. Fry made the first historic flight from the Camp Vail airfield on 5 May. ⁵
1919	The Pigeon Breeding and Training Section was established at Camp Vail to train pigeons and handlers. ⁶
October 1919	On 23 August 1919, the Chief Signal Officer requested authority to establish a Signal Corps School at Camp Vail for both officers and enlisted men. ⁷ The Adjutant General approved the request on 4 September, and the School, housed largely in the abandoned airplane hangars, ⁸ opened on 2 October. Fort Monmouth's last class in signal communication graduated on 17 June 1976.
1920	Camp Vail real estate purchased (previously leased). ⁹
1924	The Signal Corps Board established at Camp Vail. ¹⁰
August 1925	Camp Vail attained permanent status and was renamed Fort Monmouth. ¹¹
1926	The SCR-136 and SCR-134 ground to ground and ground to air radios enter production. These are the military's first extended range voice radios.
1926-1928	Construction of barracks, the first of the permanent structures, took place on what would later be known as Barker Circle. ¹²

⁴ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

⁵ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

⁶ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

⁷ Signal Corps officers were, at the time, trained at Fort Leavenworth, Kansas, in the "General Service Schools" – an education system for officers that included the Staff College and the Infantry and Cavalry Schools. Instruction for enlisted personnel took place at Forts Wood and Omaha. For a more detailed account of the Signal School at Fort Monmouth, see Helen C. Phillips, *History of the U. S. Army Signal Center and School* (Fort Monmouth, N. J., 1966)

⁸ The hangars provided classroom and workshop space for the School until well after World War II.

⁹ Dr. Richard Bingham's *Concise History of Fort Monmouth*; Helen Phillip's *History of the Signal Center and School*.

¹⁰ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

¹¹ Dr. Richard Bingham's *Concise History of Fort Monmouth*; Helen Phillip's *History of the Signal Center and School*.

¹² Dr. Richard Bingham's *Concise History of Fort Monmouth*; Helen Phillip's *History of the Signal Center and School*.

1928	Radiosonde, carried aloft by balloon, is the first major application of electronics to the study of weather and the upper atmosphere.
August 1929	In 1929 the OCSigO formulated plans to consolidate its five laboratory facilities in one location. In the interests of “economy and efficiency” the Signal Corps Electrical Laboratory, the Signal Corps Meteorological Laboratory, and the Signal Corps laboratory at the Bureau of Standards, all in Washington, D.C., relocated to Fort Monmouth. ¹³
1935	Squier Hall completed for the Laboratories. The original 1917-vintage lab buildings were razed. ¹⁴
1936	Russel Hall completed. ¹⁵
1936	The labs develop the SCR-300 handheld “walkie-talkie” for front-line troops.
1937	The labs develop a “mystery ray” -- a prototype of the Radio Direction and Ranging (RADAR) sets SCR-268 and SCR-270 -- to locate and track airplanes.
1941	The SCR-510 FM back-pack radio is developed to provide reliable, static free tactical communications.
1941-1945	The Signal Corps schools at Fort Monmouth trained tens of thousands of troops for war.
1941	Property is purchased for Camp Coles, Camp Wood and Camp Evans.
October 1941	The Signal Corps activates Field Laboratories One, Two, and Three.
February 1942	Field Lab Two is moved from Squier Hall to Camp Wood and named “Eatontown Signal Laboratory.” Field Lab Three is moved to Camp Evans from Fort Hancock, Twin Lights, Highlands, and Rumson.
March 1942	The “Signal Corps Laboratories” become the “Signal Corps Radar Laboratory” and the “Signal Corps General Development Laboratory.”
September 1942	Field Lab One is moved from Squier to Camp Coles (formerly Giblon Farm), near Red Bank.
December 1942	The Toms River Signal Laboratory is activated; moved from Squier to Spring Lake, 22 Apr 1943; deactivated on 1 Sep 1943.
April 1943	The Signal Corps Ground Maintenance Agency is established as an element of the Signal Corps Eastern Signal Service, Philadelphia.
January 1946	The Diana project at Camp Evans launches the era of space-age communications through radar contact with the moon.
1946	Automatic mortar locating radar, MPQ-10, is developed.
1948	Fort Monmouth develops the first weather radar.
1948	The development of synthetic quartz at Fort Monmouth frees the military from reliance on foreign imports.

¹³ Dr. Richard Bingham’s *Concise History of Fort Monmouth*; Letter, OCSigO to Commander, Fort Monmouth, 12 August 1929. Camp Alfred Vail was renamed Fort Monmouth in 1925.

¹⁴ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

¹⁵ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

1948-1949	Fort Monmouth scientists develop a technique (still used) for mass production (auto-assembly) of integrated circuits.
1949	Watson Labs (Air Force Avionics) are relocated from Camp Wood to Rome, NY.
1949	Avenue of Memories dedicated to Signal Corps Soldiers who gave their lives during WWII. ¹⁶
1950	Spanish-American war memorial dedicated. ¹⁷
1950	Lane Hall dedicated to Private Second Class Morgan D. Lane, first member of the Signal Corps to be awarded the Medal of Honor during the Civil War (Fort Monmouth dedicated the current Lane Hall in 1983, after the old Enlisted Mess Hall that had originally memorialized Lane was razed). ¹⁸
1950-1953	In Korea, PRC-6/8/10 radios replace the SCR-510; the first tactical application of mortar locators.
1951	Augenstine memorial dedicated to Chief Warrant Officer Edwin Daniel Augenstine, who served and died in the Philippines in 1945. ¹⁹
1952	WWII memorial dedicated. ²⁰
1953	In November 1953, the Army completed construction of six barracks (each with a capacity of 500 men), an administration building, and three classroom buildings for the Signal School. These ten buildings, of masonry construction, were located at the western end of Main Post (1200 Area). The administrative building was dedicated 11 September 1953 to the memory of Brigadier General Albert J. Myer, founder of the Signal Corps. ²¹
1954	The “Hexagon,” a major laboratory now known as the Myer Center, opened for the Signal Corps Engineering Labs in what was then called Camp Charles Wood. ²²
1954	Hemphill Parade Ground dedicated to Col. John E. Hemphill, commanding officer at Camp Alfred Vail, 1920-1925. ²³
1957	Pigeon Service discontinued. Pigeons sold or donated to zoos. ²⁴
1957	Voris Park dedicated to Col. Alvin C. Voris, Post Commander 1937-1938. ²⁵

¹⁶ Memorialization and Tradition Committee files, CECOM LCMC Historical Office.

¹⁷ HHC Dunwoody biography file; ¹⁷ Memorialization and Tradition Committee files, CECOM LCMC Historical Office.

¹⁸ See Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder “Landmarks and Place Names 1945-1962.”

¹⁹ Edwin Daniel Augenstine biography file.

²⁰ Date verified by the program.

²¹ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

²² 1 October 1954 *Monmouth Message*.

²³ John E. Hemphill biography file. See also Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder “Landmarks and Place Names 1945-1962.”

²⁴ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

²⁵ Alvin C. Voris biography file. See also Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder “Landmarks and Place Names 1945-1962.”

1957	Black Hall dedicated to BG Garland C. Black, who landed at Normandy as General Bradley's 12 th Army Group Signal Officer. ²⁶
1958	Patterson Army Hospital dedicated. The Army Advent Management Agency (precursor of SATCOM) moved into the old hospital (Allison Hall). ²⁷
1958	Solar cells developed at Fort Monmouth power the Vanguard I during its five years in orbit.
December 1958	SCORE, launched on 18 December, broadcasts President Eisenhower's Christmas message round the world.
February 1959	Vanguard II, the first weather satellite, is launched with a Fort Monmouth electronics package.
1959	Dean Field dedicated to Sgt William H. Dean, 330 Infantry, killed in Germany in 1944. ²⁸
1959-1960	World-wide synchronization of atomic clocks establishes global standard for time.
1960	The Pigeon memorial dedicated in commemoration of the winged couriers who "got the message through" during WWI, WWII, and Korea. The Signal Corps Pigeon Breeding and Training was located here from 1919-1957 to prepare those birds for war. Fort Monmouth dedicated the memorial on July 14, 1960, as a part of the post's celebration of the U.S. Army Signal Corps Centennial. The Memorial has subsequently been removed. ²⁹
1960	TIROS I, developed under Fort Monmouth's technical supervision, sends back the world's first televised weather pictures via the Space Sentry terminal at Evans.
1960	MOBIDIC, the world's first van-mounted mobile computer, begins an experiment in automating combat support functions at Field Army and theater levels.
1960	COURIER proves that high-volume communications (100,000 words a minute) can be relayed through space.
1961	Cowan Park dedicated to Col. Arthur S. Cowan, who commanded the Signal Corps Camp at Little Silver 1917-1918 and 1929-1937. ³⁰
1962	The Hartmann Gate (East Gate) dedicated to Col Carl F. Hartmann, (first) Commanding Officer of the Signal Corps Camp at Little Silver,

²⁶ See Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder "Landmarks and Place Names 1945-1962."

²⁷ See Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder "Landmarks and Place Names 1945-1962."

²⁸ William H. Dean biography file. See also Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder "Landmarks and Place Names 1945-1962."

²⁹ Date verified by the program.

³⁰ Arthur S. Cowan biography file; program from dedication ceremony; Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder "Landmarks and Place Names 1945-1962."

	1917. ³¹
1962	The Signal Corps Engineering Labs demonstrate an experimental, 10-pound radar that can spot moving targets on the ground more than a mile away.
August 1962	Though it retained its distinction as the “Home of the Signal Corps” for another decade, Fort Monmouth was no longer a Signal Corps installation as of 1 August 1962. It was instead an installation of the Army Materiel Command (AMC) and its newly-organized subordinate component, the U. S. Army Electronics Command (ECOM). ECOM’s first commander, Major General Stuart Hoff, became Fort Monmouth’s 22 nd Commander. ³²
1963	The AN/VRC-12/PRC-25 radio family is first deployed to Military Assistance Groups in South Vietnam.
1964	Moorman Hall (Bldg 362) was built and dedicated for WWI era Signal Corps officer Frank Moorman in 1967. In addition to his distinguished military career, Frank Moorman fathered MG Frank W. Moorman, who later commanded Fort Monmouth from 1963- 1965. ³³
1965	Bijur Hall built and dedicated to Cpt Arthur H. Bijur, killed in the Philippines in 1945. ³⁴
1965-1972	Vietnam receives the first tactical deployment of ECOM systems -- night vision devices, personnel locators, intrusion detectors, portable radars, computers, SATCOM terminals, helmet radios (PRT-4/PRR-9), and pulse-code modulated (digital) communications terminals.
1968	Mallard, a quadripartite project, is established at Fort Monmouth to develop cellular phone technologies for the battlefield.
1969	Blair Hall dedicated to Col. William R. Blair, father of American radar. ³⁵
1972	Smarr Hall dedicated to Col. Albert W. Smarr, a Signal School instructor who died in a helicopter crash in Vietnam in 1972. ³⁶
1973	Congress kills Mallard in favor of the Tri-Service Communications (TRI-TAC) Program.
1974	ECOM leases the GSA Office Building in Tinton Falls to house logistics and management support organizations and closes operations in Philadelphia and Camp Coles.
1975	The Military Academy Preparatory School moved to Fort

³¹ Verified by the program. General orders number 60, dated June 18, 1962, mandated the designation (three days after the dedication ceremony). See Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder “Landmarks and Place Names 1945-1962.”

³² Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

³³ Frank Moorman biography file; F.W. Moorman biography file.

³⁴ See Memorialization and Tradition Committee, Fort Monmouth Box 1: 1945-1949, folder “Landmarks and Place Names 1945-1962.”

³⁵ GO No. 5, 4 March 1969. See *Fort Monmouth Landmarks and Place Names*.

³⁶ Albert Smarr biography file; also verified by program.

	Monmouth. ³⁷
1976	Fort Monmouth's last class in signal communication graduated on 17 June 1976. ³⁸
1976	The Army Tactical Data Systems (ARTADS) Program Manager is established to oversee battlefield automation.
1976	FIREFINDER artillery and mortar locating radar systems are fielded.
1977	The Van Deusen Library dedicated, commemorating the 37- year Army career of MG George Lane Van Deusen. He served in various capacities at Fort Monmouth, his last being that of Commanding General of the Eastern Signal Corps Training Center (1942-1945). ³⁹
January 1978	ECOM is fragmented on the recommendation of Army Materiel Acquisition Review Committee to form three Commands and one Activity.
July 1978	The Electronics Materiel Readiness Activity, Vint Hill Farms Station, VA, is transferred to the C-E Materiel Readiness Command.
1979	U.S. Army Chaplain Center and School moved to Fort Monmouth. ⁴⁰
1980	The Communications Research and Development Command (CORADCOM) engineers the establishment of Software Support Centers throughout the Army Materiel Command (AMC).
1981	The first Tactical Fire Direction (TACFIRE) system is fielded.
1981	AMARC reorganizations are undone. The C-E Materiel Readiness Command and CORADCOM merge to form the Communications-Electronics Command (CECOM).
1982	CECOM fields the first TTC-39 TRI-TAC switches.
1982	The 513th Military Intelligence Group moved to Fort Monmouth and subsequently becomes a brigade. ⁴¹
1983	CECOM awards the first contract for production of Single Channel Ground and Airborne Radio Systems (SINCGARS) to replace radios of the VRC-12 family.
1984	Watters Hall (Bldg 1207, previously Myer Hall and later Mallette Hall) dedicated to Chaplain Charles J. Watters, a Catholic Priest killed in Vietnam in 1967 and posthumously awarded the medal of honor. ⁴²
1985	The Laboratory Command (LABCOM) replaces ERADCOM and the Night Vision and Electronic Warfare Labs return to CECOM along with the Signals Warfare Lab. LABCOM retains Atmospheric Sciences (Fort Huachuca) and Electronics Technology (Fort Monmouth).

³⁷ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

³⁸ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

³⁹ Verified by the program.

⁴⁰ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

⁴¹ Dr. Richard Bingham's *Concise History of Fort Monmouth*.

⁴² "Medal of Honor Recipients," <http://www.history.army.mil/html/moh/vietnam-m-z.html#watters;>

Verified by the program.

1985	CECOM awards Mobile Subscriber Equipment (MSE) contracts in a revolutionary \$4.5 billion procurement. MSE supplants TRI-TAC.
1987	CECOM loses Project Managers to three newly established Program Executive Offices and develops a “matrix support” mechanism.
October 1987	Vint Hill Farms Station becomes a CECOM sub-installation.
1987	Pruden Auditorium dedicated to LTC Aldred (sic) A. Pruden, an Army Chaplain who fought to wear his rank insignia on his uniform. Pruden also planned and organized the Army’s first training school for chaplains. ⁴³
1988	The First MSE Coherent Unit Set is fielded to III Corps (1st Cavalry Division), Fort Hood.
1989	Fort Monmouth garnered the Army Chief of Staff award in the first Army Community of Excellence competition. ⁴⁴
1990-1991	Operations Desert Shield and Desert Storm prove Signal Corps/CECOM products.
1991	The last of the AMARC organizations, the Avionics R&D Activity (AVRADA), is united with CECOM.
1993	BRAC orders the closing of Camp Evans, Vint Hill Farms, and the Tinton Falls Office Building as well as the relocation of personnel to Main Post and Charles Wood. CECOM acquires some missions and personnel of the Belvoir RD&E Center.
1994	CECOM is given the technical lead in “Battlefield Digitization.”
1994	The 513 th Military Intelligence Brigade moved to Fort Gordon. ⁴⁵
1994-1997	CECOM components in GSA office building, Tinton Falls, are relocated to main post.
1995	The Chaplain Center and School move to Fort Jackson (a BRAC action). CECOM begins construction of a new IEW Lab building (Bldg 600) and renovation of the old Signal School complex (1200 area). ⁴⁶
1995	BRAC orders the relocation of the avionics logistics support mission from St. Louis to Fort Monmouth.
1995	PEO C3S is formed with merger of PEO COMM and PEO CCS.
1996	The CECOM Logistics and Readiness Center wins the President’s Quality Improvement Prototype award.
1996	The Signal Organization Mission Assessment (SOMA) realigns the Information Systems Command. CECOM acquires (both in place) the Information Systems Engineering Command (Fort Huachuca) and the Information Systems Management Activity (Fort Monmouth).
1997	Vint Hill Farms Station is formally closed.
1997	ARL’s Sensors and Electronic Devices Directorate (formerly, the Electronics Technology and Devices Laboratory) are relocated from

⁴³ Pruden biography file.

⁴⁴ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

⁴⁵ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

⁴⁶ Dr. Richard Bingham’s *Concise History of Fort Monmouth*.

	Fort Monmouth to Adelphi, Md.
1997	McAfee Center (Building 600) dedicated. ⁴⁷
1997	Operational control of Tobyhanna Army Depot is transferred to CECOM from the Industrial Operations Command (a QDR initiative).
1997-2000	The Army-wide Wholesale Logistics Modernization Program is managed by CECOM.
1998	Defense Finance and Accounting Service missions at Fort Monmouth are transferred to St. Louis.
1998	The Military Traffic Management Command's 600 th Transportation Group is relocated to Fort Monmouth from Bayonne Military Ocean Terminal.
2001	Fort Monmouth (Patterson Army Health Clinic) chosen as the site for the NJ Veterans Affairs Outpatient Clinic.
2001	Team C4ISR aids in the search and rescue efforts at the World Trade Center and the Pentagon.
November 2003	The contributions of CECOM and its partners to the 9/11 rescue efforts and the Global War on Terrorism are so significant that Fort Monmouth is designated a New Jersey Center for Defense Technologies and Security Readiness on 10 November 2003.
July 2004	Monmouth County's first Veterans' Affairs Health Clinic opened at Fort Monmouth. ⁴⁸
2 February 2005	The US Army Communications-Electronics Life Cycle Management Command (C-E LCMC) is activated, formally aligning PEO IEWS, PEO C3T, and the Communications-Electronics Command under unified leadership. Team C4ISR teammates include the Communications Electronics Research, Development, and Engineering Center; PM Defense Communications and Army Transmissions Systems; and PM Defense and Army Switched Systems will continue to be LCMC partners throughout the activation.
May 2005	On 13 May 2005, the Department of Defense recommended the closure of Fort Monmouth and the realignment of CECOM LCMC elements at Fort Monmouth to Aberdeen Proving Ground in Maryland. The transition of the workforce to Maryland is expected to take place by 2011.
2005	Team C4ISR provided valuable assistance in the Gulf Coast Region in support of Hurricane Katrina relief efforts. Satellite communications technologies and generators were sent to the region to aid rescue workers and government agencies.
2008	

⁴⁷ Verified by the program.

⁴⁸ "VA Clinic," Fort Monmouth Public Webpage, <http://www.monmouth.army.mil/C4ISR/vaclinic.shtml>.

	<p>CECOM LCMC's Foliage Penetrating Radar (FOPEN) was successfully used to locate hostages in Colombia that were constantly being moved beneath the covering of very dense foliage. Locating these hostages made their release possible. The FOPEN was also used in 2003 in Texas at the request of both NASA and FEMA, to support their search and recovery efforts for the Space Shuttle Columbia.</p>
2008	<p>The groundbreaking for the new Army Team C4ISR campus at Aberdeen Proving Ground occurred on 17 March 2008</p>
Today	<p>Team C4ISR continues to provide innovative and integrated C4ISR solutions to the Warfighter in support of the GWOT. Some of these technologies and capabilities include: counter remote controlled improvised explosive device systems to protect Soldiers from IEDs; radars to protect troops from mortar attacks; sensors to protect personnel and installations; night vision equipment; aircraft survivability equipment; situational awareness systems and high band width satellite communication systems.</p>