

# THE CENTER FOR CRYPTOLOGIC HISTORY CALENDAR



# CCH 2023

Front Cover: A gathering of Armed Forces Security Agency (AFSA, NSA's predecessor) senior leadership in 1950. In the center, RADM Earl Stone, USN, AFSA's first director, is flanked by Dr. Solomon Kullback, a pioneer U.S. cryptanalyst (left), and Brigadier John Tiltman, a pioneer British cryptanalyst (right) along with other senior executives.



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# FOREWORD

## *NSA Directors and Deputy Directors: 1950-1988*

The Center for Cryptologic History (CCH) built its 2023 calendar around a theme: the early directors and deputy directors of the National Security Agency (and NSA's immediate predecessor, the Armed Forces Security Agency). CCH wanted to highlight some of the extraordinary individuals whose leadership laid the foundation for the Agency as it is today.

### Note to Reader:

The decades in which these individuals served, the 1950s-1980s, were a time with little workforce diversity in the senior ranks. This does not reflect the rich diversity that the NSA currently values. The CCH is strongly committed to the ongoing efforts for inclusiveness.

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PLAN  
INITIATE  
FOLLOW UP

# JANUARY

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
<b>1</b> U.S. Army Intelligence and Security Command (INSCOM) established, 1977  <i>New Year's Day</i>	<b>2</b> NSA Office of Policy first mandated use of term "Service Cryptologic Element," 1980	<b>3</b> NARA assigned Record Group 457 (now "Records of the National Security Agency") to declassified NSA records, 1977	<b>4</b> Major General Gordon Blake named Commander, Air Force Security Service, 1957	<b>5</b> Lieutenant (later Captain) Laurance Safford named OIC, U.S. Navy Cryptographic Branch, 1924	<b>6</b>	<b>7</b>
<b>8</b>	<b>9</b> Louis Tordella, longest serving D/DIR (1958-1974), died, 1996  Jerzy Rozycki, a Polish Cipher Bureau mathematician who helped break ENIGMA, died in a ship sunk off France, 1942	<b>10</b> U.S. intercepted cable from Napoleon III of France to Mexico revealing French position on status of Emperor Maximilian in Mexico; contributes to lessening of US-French tensions over Mexico, 1866	<b>11</b>	<b>12</b>	<b>13</b> First <i>History Today</i> article appeared on NSA Daily Page, 2003	<b>14</b> BRUSA Agreement—U.S.-UK COMINT relationships during World War II, 1944  Brigadier General Bernard Ardisana, USAF, NSA's first Assistant Deputy Director of Operations, died on active duty, 1978
<b>15</b>	<b>16</b> General Order No. 9 authorized publication of a new War Department Telegraphic Code, 1898  Operation DESERT STORM began, 1991  <i>Martin Luther King, Jr., Day, Observed</i>	<b>17</b>	<b>18</b> Alfred Vail, co-inventor of the telegraph, died, 1859	<b>19</b> Encoded Zimmermann Telegram sent by the Germans and intercepted by the British, 1917  U.S. cryptologic pioneer Abraham Sinkov died, 1998	<b>20</b>	<b>21</b>
<b>22</b> National Security Decision Directive 298 made DIRNSA responsible for interagency OPSEC training, 1988	<b>23</b> Intelligence chiefs of U.S. Army and Navy established list of eligible readers of "Magic" intercept, 1941  North Koreans captured USS <i>Pueblo</i> , 1968	<b>24</b> WWI Naval Battle of Dogger Bank was a British cryptologic failure but the Germans sustained greater losses, 1915	<b>25</b> Navy EA-3B recon aircraft crashed, Mediterranean Sea, 1987	<b>26</b>	<b>27</b> Paris Peace Accords signed—end of U.S. involvement in Vietnam War, 1973  Church Committee began investigation of U.S. Intelligence Community, 1975	<b>28</b>
<b>29</b> New Zealand warship captured Japanese submarine I-1, seizing multiple copies of JN-25 codebooks, 1943	<b>30</b>	<b>31</b> The <i>Federal Register</i> published details for the Secure Hash Algorithm (SHA), 1992				

The Armed Forces Security Agency (AFSA), NSA's predecessor, had deputy directors; when NSA was first formed, it had vice directors, drawn from the military cryptologic services, and then reverted to the title of "deputy director." Rear Admiral Joseph Wenger, a pioneer Navy cryptologist, served as D/DIR of AFSA in 1949 and V/DIR of NSA in 1952-1953. He was the first military cryptologist to achieve flag rank.







# FEBRUARY

## AFRICAN AMERICAN/BLACK HISTORY MONTH

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			<b>1</b> German spy Lothar Witzke arrested carrying a coded message, 1918 German Navy introduced 4-rotor ENIGMA for U-Boats, 1942 SIS began VENONA project, 1943 USAFSS received its first cryptologic units from the ASA, 1949	<b>2</b> USAFSS began operations in South Vietnam with the arrival of Team 1A, 6920th Security Wing, at Da Nang, 1962	<b>3</b> Intercept operations began at Phu Bai. Became the largest U.S. site in South Vietnam, 1963	<b>4</b> Joseph Ream hired as first civilian deputy director of NSA, 1957
<b>5</b> Colossus activated by Bletchley Park, 1944 USAF EC-47 (callsign Baron-52) shot down over Laos. Eight crew members, including four cryptologic technicians, perished, 1973	<b>6</b> Genevieve Young Hitt, early U.S. female cryptologist, died, 1963	<b>7</b> The U.S. Navy's OP-20-G moved to Nebraska Avenue, 1943	<b>8</b> First Americans visit Bletchley Park, begins U.S.-UK cryptologic cooperation during World War II, 1941	<b>9</b> ENIGMA introduced into German Navy as Radio Key C, 1926	<b>10</b> Establishment of the 805th Signal Service Company for operation of the SIGSALY, 1943 Edward Hebern, developer of an electric coding and decoding machine, died, 1952	<b>11</b>
<b>12</b> Signing of King-Marshall Agreement—established role of Army/Navy COMINT liaison officers in Pacific theater, 1944	<b>13</b>	<b>14</b>	<b>15</b> The ENIAC computer began operating, 1946	<b>16</b>	<b>17</b> National Security Council Intelligence Directive 6 established Central Security Service (CSS), 1972	<b>18</b>
<b>19</b>	<b>20</b> Government seizure of cryptologist Herbert O. Yardley's tell-all memoir, <i>Japanese Diplomatic Secrets</i> , 1933 Japan commenced operational use of the PURPLE machine-generated diplomatic cryptosystem, 1939 <i>Washington's Birthday, Observed</i>	<b>21</b> Sarah G. Bagley became first female telegrapher, Lowell, MA, 1846 Ribbon-cutting ceremony for National SIGINT Operations Center (NSOC), 1973	<b>22</b> Dedication of Memorial Wall in OPS2B, honoring those cryptologists who sacrificed their lives, 1996	<b>23</b> Radio Act of 1927 prohibited radio intercept in U.S. Lieutenant General Kenneth Minihan, USAF, became DIRNSA, 1996	<b>24</b> Captain Thomas Dyer, USN, became first NSA Historian, 1954 Claude Shannon, pioneer in cryptologic theory and father of the digital revolution, died, 2001	<b>25</b>
<b>26</b> NSA-sponsored exhibit opened at Smithsonian, 1981	<b>27</b>	<b>28</b> President Wilson informed of the contents of the Zimmermann Telegram, 1917				

Major General Ralph Canine, USA, was appointed the second director of AFSA, NSA's predecessor, in 1951. When AFSA was reorganized as NSA in 1952, the position called for a lieutenant general as director. Here, General Canine, assisted by his spouse, Ruth Wiscomb Canine, is being pinned with his third star.









# MARCH

## NATIONAL WOMEN'S HISTORY MONTH

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			<b>1</b> German ADFGVX cipher first used, 1918 First hire at SIS, Annie Louise Newkirk, cryptographic clerk, 1930 U.S. Army aerial reconnaissance UH-1 loss, Vietnam, 1971	<b>2</b> Cryptologic pioneer Colonel Parker Hitt, USA, died, 1971	<b>3</b>	<b>4</b> U.S. Army aerial reconnaissance RU-8 shot down, Vietnam, 1971 STONEHOUSE site in Ethiopia officially closed, 1975 William Friedman testified before a Senate committee investigating the Teapot Dome scandal, 1924
<b>5</b> Station HYPO began reading Japanese system JN-25, 1942 BRUSA Communications Intelligence Agreement continues U.S.-UK partnership after World War II, 1946	<b>6</b>	<b>7</b> 509th Radio Research Group was resubordinated, ending ASA's 12-year presence in South Vietnam, 1973	<b>8</b> “Direct” SIGINT support to tactical air control center began on Cho Do (island) during the Korean War, 1953 Lieutenant General Ralph J. Canine, USA, first DIRNSA, died, 1969	<b>9</b> USAF aerial reconnaissance EC-47 loss, Vietnam, 1967	<b>10</b> The first successful voice transmission over Alexander Graham Bell's telephone, 1876 Establishment of Radio Intelligence Service, Mexican border, 1918	<b>11</b> U.S. Navy cryptologic organization redesignated OP-20-G, 1935 Evacuation of Station CAST from Manila Bay, 1942
<b>12</b> AFSA Training Branch established, 1951	<b>13</b> DIRNSA approved a barbershop and drug store for NSA Fort Meade, 1957	<b>14</b> Seoul, South Korea, recaptured by UN forces, 1951	<b>15</b> CREAM replaced ULTRA as the codeword for top secret cryptologic material, 1946 USAF aerial reconnaissance RC-135 crashed at Shemya AFS, AK, 1981	<b>16</b>	<b>17</b> The details of the block encryption algorithm Lucifer were published in the <i>Federal Register</i> , 1975	<b>18</b> NSA implements the COVID Code Yellow plan, an alternate work schedule that conformed to CDC recommendations for social distancing, 2020
<b>19</b> Horst Feistel received a patent for “Block Cipher Cryptographic System,” an encryption scheme that laid the foundation for the Data Encryption Standard, 1974 Operation Iraqi Freedom began, 2003	<b>20</b>	<b>21</b>	<b>22</b> ASA flew first airborne radio direction finding mission in Vietnam, 1962	<b>23</b> The director of U.S. naval communications and the director of AFSA (both rear admirals at the time) signed an agreement regarding direction and support of COMINT operating activities of the U.S. Navy, 1951	<b>24</b>	<b>25</b>
<b>26</b> Lieutenant General Michael Hayden, USAF, became DIRNSA, 1999	<b>27</b> Most NSA professionalization programs terminated, 2000	<b>28</b> Griffiss Air Force Base found packet-sniffing malware in its Rome, NY, labs network, 1994	<b>29</b>	<b>30</b> Chief Signal Officer Major General Joseph Mauborgne, Army Signal Corps, permitted to perform intercept and cryptologic services for peacetime training and national defense, 1938	<b>31</b> Geoffrey Stone, member of Presidential Review Group which was created in the wake of the Snowden leaks, spoke at NSA, 2014	

Lieutenant General Canine, USA, NSA's first director (1952-1956) giving an award to Dr. Louis Tordella, an up-and-coming senior executive. Under Canine's successor, Dr. T (as the workforce affectionately called him) would become NSA's longest-serving deputy director, from August 1958 to April 1974.









# APRIL

## DAYS OF REMEMBRANCE (HOLOCAUST)

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
						<b>1</b> Frank Rowlett reported to work for William Friedman, 1930  Lieutenant General Lincoln D. Faurer, USAF, became DIRNSA, 1981
<b>2</b> Samuel Morse, developer of telegraph code, died, 1872	<b>3</b> Bell Labs completed the first cell phone call, 1973  Admiral Michael S. Rogers, USN, sworn in as Director, NSA and Commander, USCYBERCOM, 2014	<b>4</b> Secretary of War transferred cryptologic functions from the Military Intelligence Division to the Signal Corps; created the Signal Intelligence Service with William Friedman as its head, 1929	<b>5</b> Captain Georges Painvin of the French Cipher Bureau solved the first key for the ADFGVX cipher, 1918	<b>6</b> The United States entered World War I, 1917  First break into the Japanese Water Transport Code, 1943	<b>7</b> The <i>Yamato</i> , a 72,000-ton Japanese battleship, sunk off Okinawa in large part because of SIGINT tipoffs, 1945  IBM introduces the System/360 mainframe computer, which developed from NSA's HARVEST computer, 1964	<b>8</b> Navy PB44-2 shot down, Baltic Sea, 1950
<b>9</b>	<b>10</b>	<b>11</b> Abraham Sinkov reported to SIS to work for William Friedman, 1930	<b>12</b>	<b>13</b> FRUPAC intercepted encoded itinerary of Admiral Yamamoto Isoroku's upcoming tour of the Solomon Islands, enabling his shootdown five days later, 1943	<b>14</b> <i>Der Spiegel</i> reported on what might have been the first case of computer espionage, an operation run against IBM's West German affiliate from East Germany, 1969	<b>15</b> Central Bureau established in Australia to provide General Douglas MacArthur's Southwest Pacific Theater with COMINT, 1942  Navy EC-121 shot down by North Korean MiGs, Sea of Japan, 1969
<b>16</b> Clinton administration proposed "Clipper Chip" key escrow method for telephone security, 1993	<b>17</b> COMINT intercepts revealed Japanese plans to attack Port Moresby, allowing Allied defense, 1942  Bay of Pigs landing in Cuba, 1961	<b>18</b> Shootdown of Admiral Yamamoto by U.S. forces, 1943  NSA experts spoke in public for the first time on computer security at the Spring Joint Computer Conference in Atlantic City, 1967	<b>19</b> Confederate Signal Corps established, 1862	<b>20</b>	<b>21</b> Louis Tordella retired as D/DIR, 1974	<b>22</b> Solomon Kullback reported to SIS to work for William Friedman, 1930  General Douglas MacArthur, USA, based on COMINT reports, attacked Hollandia, New Guinea, deep behind enemy lines, 1944
<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b> U.S. Senate issued the Church Committee report, 1976	<b>27</b> DEFSMAC (originally the Defense Special Missile and Astronautics Center) established, 1964  Estonia suffered mass cyber attack, 2007	<b>28</b>	<b>29</b> SECAF approved women for duty on EC-130 aircraft, 1985
<b>30</b> SecDef authorized the establishment of a National Cryptologic School at NSA, 1965						

Lieutenant General John Samford, USAF (left), hosted a visit to NSA in the late 1950s by Dr. James Killian (right), former president of MIT and the first presidential science advisor. In 1954, Dr. Killian had conducted a special study of intelligence at the request of President Dwight D. Eisenhower, and his findings had been important in increasing presidential support for NSA.







# MAY

## ASIAN AMERICAN/PACIFIC ISLANDER HERITAGE MONTH

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
	<b>1</b> GC&CS activated Heath Robinson Machine (predecessor to Colossus), 1943 U-2 recon plane shot down over Soviet Union 1960 President George H.W. Bush visited NSA, 1991	<b>2</b>	<b>3</b> Colonel Ralph H. Van Deman became Chief, Military Intelligence Branch, 1917	<b>4</b> The first 29 Navajos of roughly 400 to be trained as codetalkers reported to Fort Defiance, AZ, 1942 GEN Paul M. Nakasone, USA, sworn in as Commander, USCYBERCOM, and Director, NSA/Chief, CSS, 2018	<b>5</b> Battle of the Coral Sea, set up by COMINT, began, 1942	<b>6</b>
<b>7</b> The 837th Signal Security Detachment, the first U.S. SIGINTers sent to Australia, arrived, 1942	<b>8</b> VE Day, end of war in Europe, 1945 Lieutenant General William Odom, USA, became DIRNSA, 1985	<b>9</b>	<b>10</b> Elizebeth Friedman appointed as cryptanalyst in the Bureau of Prohibition, 1927 U.S. Senate established information security as U.S. government responsibility, 1933	<b>11</b> Colony 7 complex, site of the National Cryptologic Museum, acquired for NSA, 1990	<b>12</b>	<b>13</b> First Japanese linguist, John Hurt, hired by SIS, 1930 Army Security Agency began its service in South Vietnam with the arrival of the Third Radio Research Unit at Tan Son Nhut Air Base in Saigon, 1961
<b>14</b> WAAC (Women's Army Auxiliary Corps) established, 1942 Center for Computer Assistive Technology opened, 1992	<b>15</b> National Bureau of Standards (in cooperation with NSA) began solicitation for a government-wide data encryption standard, which was adopted 3½ years later, 1973	<b>16</b> Captain Laurance Safford, USN, father of U.S. naval cryptology, died, 1973	<b>17</b> System Development Corp. in Santa Monica, CA, convened private, academic, and DoD experts to discuss problems in computer security, 1965 Electronic Security Command took over USAF COMSEC mission, 1985	<b>18</b> The term "Signals Intelligence" (SIGINT) is formally defined by the National Signals Intelligence Committee (SIGCOM) as a combination of COMINT and ELINT, 1962	<b>19</b> U.S. State Department approved creation of Cipher Bureau ("Black Chamber"), 1919	<b>20</b> Armed Forces Security Agency (AFSA) created, 1949 Sergeant Trista L. Moretti Complex at NSA Texas dedicated, 2011
<b>21</b> William Friedman and Elizebeth Smith married, 1917 U.S. Cyber Command established at Ft. Meade, with DIRNSA dual-hatted as its commander, 2010	<b>22</b> Death of Friedrich W. Kasiski; developed solution for polyalphabetic ciphers, 1881 Vice Admiral J. Michael McConnell, USN, became DIRNSA, 1992	<b>23</b> The NSC requested implementation plan for Washington Protected Communications Zone and Executive Secure Voice Network in response to the Soviet intercept threat, 1975	<b>24</b> "What hath God wrought," first telegraph message, sent from Baltimore to Washington, 1844	<b>25</b>	<b>26</b> Prime Minister Baldwin revealed in Parliament that the British government had intercepted and decrypted Soviet telegrams proving Soviet espionage conducted by the All-Russian Co-operative Society (ARCOS), 1927	<b>27</b>
<b>28</b>	<b>29</b>  <i>Memorial Day</i>	<b>30</b> SecDef delegated authority to DIRNSA to accept gifts of documents, records, and equipment for research, display, or museum purposes, 1980	<b>31</b> Rum-running trial against Consolidated Exporters Corp. began with Elizebeth Friedman's cryptanalysis of company's encoded messages, 1933			

Howard Barlow, a long-time senior executive in communications security (COMSEC), turns the first shovel of dirt for construction of the "S Building" (now, the Frank B. Rowlett Building/OPS 3) at NSA Fort Meade in September 1968. On the far right is Deputy Director Dr. Louis Tordella. Barlow and Tordella exchanged memorial gifts for the occasion—uncoordinated beforehand, each gave the other a container of soil from the construction site!







# JUNE

## LESBIAN, GAY, BISEXUAL, & TRANSGENDER PRIDE MONTH

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
				<b>1</b> Jargon code message announcing impending D-Day invasion intercepted and recognized by the German 15th Army but ignored at higher headquarters, 1944 Lieutenant General Marshall Carter, USA, became DIRNSA, 1965	<b>2</b> Travis Trophy presented to the United States, 1948 NSA's Marine Guards awarded the Meritorious Unit Citation, 1970 Judith A. Burgin Building dedicated, 1984	<b>3</b>
<b>4</b> Battle of Midway began, 1942 U-505, with trove of German cryptographic material and devices intact, became first enemy warship, since the War of 1812, captured by a U.S. Navy boarding party, 1944 President George W. Bush's first visit (of four) to NSA, 2002	<b>5</b> Brigadier General Marlborough Churchill, USA, became Chief, Military Intelligence Division, 1918 USAF aerial reconnaissance RC-135 lost, Bering Sea, 1969	<b>6</b> D-Day, 1944 Six-Day War began in the Middle East, 1967	<b>7</b> Death of Alan Turing, famed British mathematician and cryptologist, 1954 Major General Joseph Mauborgne, USA, World War I Army Signal Corps Officer, WWII Chief Signal Officer, and an expert on codes and ciphers, died, 1991	<b>8</b> The USS <i>Liberty</i> , a Navy/NSA SIGINT collection ship, attacked by Israeli forces during the Six-Day War, 1967	<b>9</b> Canada established its cryptologic bureau "Examination Unit," 1941 ELIGIBLE RECEIVER exercise shows DoD's vulnerability to cyber attacks, 1997	<b>10</b> Establishment of U.S. Army Code and Cipher Section, MI-8, 1917
<b>11</b> Herbert O. Yardley hired by Canada's National Research Council, 1941	<b>12</b> Radio Intelligence Service of 1st Army, AEF, formed at Toul, France, 1918	<b>13</b> Publication of Brownell Committee Report; laid foundation for establishment of NSA, 1952	<b>14</b> Signal Intelligence Service took possession of Arlington Hall, 1942 NSA Family Day, 1975	<b>15</b>	<b>16</b>	<b>17</b> Systems Development Corporation (SDC) hosted conference of private and government experts on computer security, 1965
<b>18</b>	<b>19</b> Communications Act of 1934 signed by President Franklin D. Roosevelt, 1934 USSR and United States agreed on hotline between Moscow and Washington, 1963 <i>Juneteenth Independence Day</i>	<b>20</b>	<b>21</b> Publication of first of several installments of the influential cryptologic story "The Gold-Bug" by Edgar Allan Poe, 1843	<b>22</b> GRAB, first SIGINT reconnaissance satellite, launched, 1960	<b>23</b> Diffie and Hellman present their idea for public-key exchange encryption at a conference in Sweden, 1976 John J. Whitelaw Building dedicated at NSA Georgia, 2010	<b>24</b> The "Potomac Code," first of the AEF "River" series of field codes, issued, 1918
<b>25</b> Letters written by Hernán Cortés while in Mexico are first known use of cryptography in New World, 1532 New NSA Headquarters building dedicated, 1966	<b>26</b>	<b>27</b> Albert J. Myer, developer of flag signaling system code, appointed signal officer with rank of major, 1860	<b>28</b> USS <i>Liberty</i> decommissioned, 1968 Commissioning of Coast Guard Cryptologic Group at NSA Fort Meade, 2007	<b>29</b> Allies realized the U.S. diplomatic code had been broken by the Germans, 1942 Frank Rowlett, American cryptologic pioneer, died, 1998	<b>30</b> Two Rock Ranch, one of the West Coast monitoring stations during World War II, closed, 1971	

It is seldom that a director makes a direct handoff of command to his successor. However, in August 1972, NSA had a rare change of command ceremony in front of the headquarters building at NSA Fort Meade as Vice Admiral Noel Gayler, USN (1969-1972) (at podium), welcomed Lieutenant General Samuel Phillips, USAF (1972-1973), as the new director of NSA.









# JULY

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
						<b>1</b> At Elizebeth Friedman's urging, U.S. Coast Guard established a cryptanalytic section, 1931 Lt. Gen. Gordon Blake, USAF, became DIRNSA, 1962 USAF activated Air Force Cryptologic Office at Ft. Meade, 1994 CIA public ceremony for VENONA declassification, 1995
<b>2</b>	<b>3</b> Cryptographic Security Board established, 1945	<b>4</b>  <i>Independence Day</i>	<b>5</b> General Order 8 issued by AEF in France, establishing headquarters organization that included a cryptographic and cryptanalytic branch, 1917 Vice Admiral Bobby Ray Inman, USN, became DIRNSA, 1977	<b>6</b>	<b>7</b>	<b>8</b> Arthur Scherbius received a patent for a cipher machine, now known as the ENIGMA, 1918 Arlington Hall Station made an official military intelligence post, 1942
<b>9</b> First official public acknowledgment of NSA, 1957 The renovated, state-of-the-art Friedman Conference Center reopened, 2018	<b>10</b> NSA Civilian Welfare Fund established at NSA Fort Meade, 1956	<b>11</b> First U.S. patent granted for a cipher device to Edward Hawley, for multiple alphabetic device, 1865 Signal Corps began first communications security monitoring in France, 1918	<b>12</b> Lieutenant William Friedman reported to AEF G2A6, Chaumont, France, 1918	<b>13</b> National Cryptologic Museum opened to NSA/CSS personnel, 1993 Washington Wong Building at NSA Hawaii dedicated, 2016	<b>14</b> NSA/CSS Cryptologic Archival program and position of NSA/CSS Archivist formally established by DIRNSA Inman, 1978	<b>15</b> AFSA formally activated; RADM Earl E. Stone, USN, first Director, 1949 MG Ralph J. Canine, USA, named director, AFSA, 1951 House of Representatives established Permanent Select Committee on Intelligence, 1977
<b>16</b> First WAAC personnel arrived at Arlington Hall Station, 1943	<b>17</b> Mary, Queen of Scots, sent treasonous enciphered response to the Babington letter, 1586 American cryptologic pioneers Parker Hitt and Genevieve Young married, 1911	<b>18</b> First current TUNNY traffic read at Bletchley Park, 1942	<b>19</b> Army Signal Corps conference about establishing the Signal Intelligence Service, 1929	<b>20</b> Captain Joseph Rochefort, USN, a major figure in Navy cryptology in World War II, died, 1976	<b>21</b> CRITIC reporting program initiated, 1958	<b>22</b> Aaron Burr's "cipher letter" to General Wilkinson intercepted, leading to charges of treason against Burr, 1806 Patent issued to Gilbert Vernam for concept of machine encipherment, 1919
<b>23</b> The GUNMAN Project discovered implants hidden in typewriters used in the U.S. embassy in Moscow, 1984	<b>24</b>	<b>25</b> Meeting at Pyry, outside Warsaw, where Poland shared its successes against the ENIGMA with Britain and France, 1939	<b>26</b> National Security Act passed, 1947 U.S. Congress opens hearings on computer threats to privacy and the need for data encryption, 1966	<b>27</b> Office of Management and Budget Circular A-71, "Security of Federal Automated Information Systems," directed federal agencies to create computer security programs, 1978	<b>28</b> First use of transatlantic telegraph cable, generating upsurge in commercial cryptography, 1866 U.S. Navy Code & Signal Section established, 1916	<b>29</b> William Friedman received a patent for a device to transmit telegraphic messages quickly, the first of his eventual 30 patents, 1924 The Soviets shot down an RB-50G-2 near Vladivostok, Russia, 1953
<b>30</b> WAVES (Women Accepted for Voluntary Emergency Service) established, 1942	<b>31</b> The "Wabash" field code issued, 1918 Agnes Meyer Driscoll discharged from U.S. Navy, 1919; retired from NSA, 1959					

Lieutenant General Samuel Phillips, USAF, held senior positions at the National Aeronautics and Space Administration (NASA), both before and after his year as director of NSA, August 1972 to August 1973. Pictured here with his spouse, Betty Anne (Brown) Phillips, in September 1972, when he received the Thomas D. White United States Air Force Space Trophy for work done during his time at NASA.









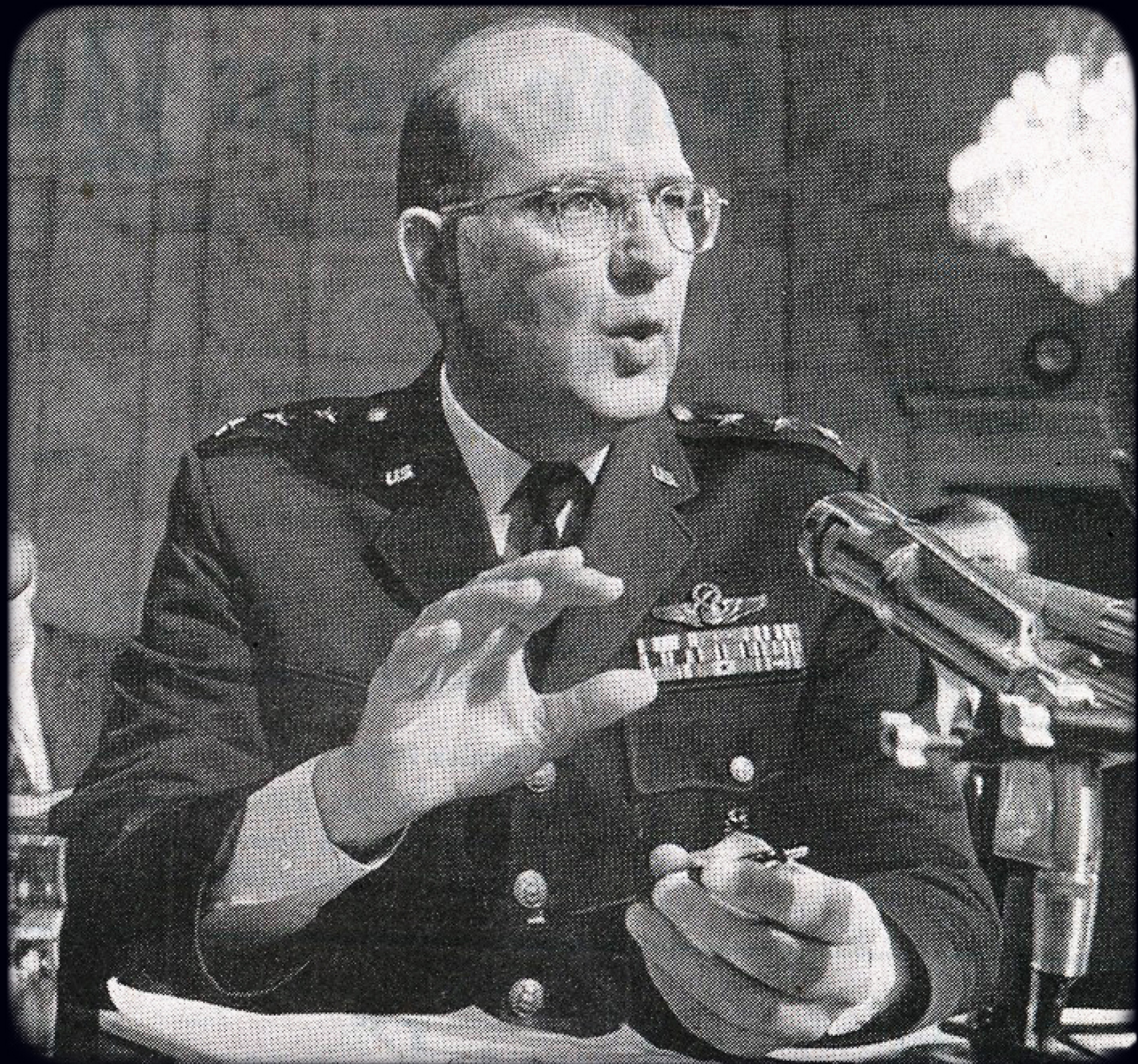
# AUGUST

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
		<b>1</b> Louis Tordella became D/DIR, 1958 New DIRNSAs: VADM Noel Gayler, USN, 1969; Lt. Gen. Sam Phillips, USAF, 1972; VADM William Studeman, USN, 1988; LTG Keith Alexander, USA, 2005	<b>2</b> Australian Coastwatchers sent coded message noting sinking of John F. Kennedy's PT-109, 1943 Iraq invaded Kuwait, 1990	<b>3</b> The "Mohawk" field code issued, 1918	<b>4</b> Prototype U-2 made its first test flight, 1955	<b>5</b> Representatives of U.S., UK, and USSR signed Limited Nuclear Test Ban Treaty, 1963 American cryptologic pioneer Solomon Kullback died, 1994
<b>6</b> The United States dropped atomic bomb on Hiroshima, 1945 World Wide Web was launched, 1991	<b>7</b> American cryptologic pioneer Herbert O. Yardley died, 1958	<b>8</b> First public appearance of DIRNSA before Congress. Lieutenant General Lew Allen testified before the House's Pike Committee, 1975 The nation of Georgia suffered massive cyber attacks in conjunction with its border dispute with Russia, 2008	<b>9</b> The United States dropped atomic bomb on Nagasaki, 1945	<b>10</b> SecDef set the terms of reference for the Stone Board, which considered cryptologic reorganization after World War II, 1948	<b>11</b> Hedy Kiesler Markey (better known as actress Hedy Lamarr) and George Anthel received a patent for a secret frequency-hopping communication system, 1942	<b>12</b> The "Allegheny" field code issued, 1918 IBM introduced the IBM PC, 1981
<b>13</b>	<b>14</b> Spy Velvlee Dickinson sentenced to ten years for providing intelligence to Japan via "Doll Code" steganography in messages, 1944 President Reagan declared this day Navajo Codetalkers Day, 1982	<b>15</b> Japan announced its surrender to the Allies, 1945	<b>16</b> First transatlantic exchange of telegraph communications occurred with congratulatory messages between Queen Victoria and President Buchanan, 1858	<b>17</b> NSA Far East (Tokyo) established, 1953	<b>18</b> USCYBERCOM is elevated to a unified combatant command for cyberspace operation, 2017	<b>19</b>
<b>20</b>	<b>21</b> "House of 4 Hats" dining facility for NSA military opened (later, House of 5 Hats), 1974	<b>22</b> Chinese fighters shot down U.S. Navy reconnaissance plane over Shengsi Islands, killing all 16 crew members, 1956	<b>23</b> NSA responded to U.S. silver shortage in the 1960s by starting the NSA Silver Recovery Program to reclaim silver from scrap and waste, 1968	<b>24</b> President Eisenhower approves the development of the GRAB satellite system, 1959	<b>25</b> First meeting of the Stone Board; led to establishment of AFSA, 1948	<b>26</b> American cryptologic pioneer Elizebeth Smith (Friedman) born, 1892 Russian Navy seized an undestroyed codebook from grounded German ship <i>Magdeburg</i> ; given to the British government, 1914
<b>27</b>	<b>28</b> U.S. Navy establishes collection site at Otter Cliffs, ME, 1917	<b>29</b>	<b>30</b>	<b>31</b> Key intercepts of Russian radio traffic allowed German Generals von Hindenberg and Ludendorff to encircle and crush Russian forces at Tannenberg, 1914		

Benson Buffham, NSA's fourth deputy director (1974 to 1978) (on right) receives an informal award from the Agency's Chief of Staff, John Harney. Both were noted for their abilities as senior executives, and the award highlighted their equal proficiency on the golf links. Buffham guided NSA through a time of national leadership crisis (Watergate) and the end of the war in Southeast Asia. Harney was the senior executive managing the Agency response to the Congressional investigations of the 1970s.









# SEPTEMBER

## NATIONAL HISPANIC HERITAGE MONTH (SEPT. 15 - OCT. 15)

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
					<b>1</b> The War Department Telegraph Code of 1919 was first used, 1921  First Bombe shipped to Nebraska Avenue, 1943	<b>2</b> Belligerents sign Japanese surrender aboard USS <i>Missouri</i> , 1945  RC-130 shot down while on recon mission, Armenia, 1958  Vigilance Park dedicated at NSA Ft. Meade, 1997
<b>3</b>	<b>4</b> First broadcast of the Star Trek episode "The Enterprise Incident," loosely based on the capture of the USS <i>Pueblo</i> , 1968  <i>Labor Day</i>	<b>5</b> Palestinian terrorists killed 11 Israeli Olympic athletes and a German policeman in Munich, 1972	<b>6</b> NRO established, 1961  Winston Churchill visited Bletchley Park, 1941	<b>7</b> Boris Hagelin, inventor of Converter M-209 cryptodevice, died, 1983	<b>8</b> A "computer bug" was first identified and named by Lieutenant Grace Murray Hopper, USN, 1947	<b>9</b> The "Electronic Disruption Theater" mounted a denial-of-service attack on the Pentagon's DefenseLink website, 1998
<b>10</b> USAFSS-crewed RB-50 lost during a typhoon, 1956  Genevieve Grotjan discovered the secret to unraveling the Japanese PURPLE machine, 1940	<b>11</b> al-Qaida attack on the Pentagon and World Trade Center, 2001  President Obama visited NSA and USCYBERCOM, 2015	<b>12</b> U.S. offensive on the St. Mihiel salient, France begins, 1918  Elizebeth Friedman departed the Coast Guard, 1946	<b>13</b>	<b>14</b>	<b>15</b> The Signal Security Agency reorganized as the Army Security Agency, 1945	<b>16</b> First U.S. Intelligence Board meeting at NSA Fort Meade, 1966  American cryptologic pioneer Agnes Meyer Driscoll died, 1971
<b>17</b> President Reagan's National Security Decision Directive-145 briefly gave NSA a role in securing data on federal computer systems, 1984	<b>18</b> USAF Security Group established, 1947	<b>19</b>	<b>20</b> Rivest, Shamir, and Adleman received a patent for the encryption algorithm RSA, 1983	<b>21</b> First NSA open house, 1957	<b>22</b>	<b>23</b> British Major John Andre captured with treasonous ciphered letter from Benedict Arnold, 1780
<b>24</b> American cryptologic pioneer, William Friedman born, Kishinev, Russia (now Chisinau, Moldova), 1891  The "Colorado" field code issued, 1918	<b>25</b>	<b>26</b> Hubert H. Humphrey visited NSA; first vice-presidential visit, 1967  President Reagan dedicated Operations Buildings 2A and 2B; first presidential visit to NSA, 1986	<b>27</b> SIS issued first two translations based on the first solution of the Japanese PURPLE machine, 1940	<b>28</b> Department of Defense and Intelligence Community closed the Information Operations Technology Center (IOTC), 2004	<b>29</b> USMC turned over responsibility for guarding NSA Fort Meade to Federal Protective Service, 1978	<b>30</b> Edward Hebern received a patent for an electric coding machine, the first U.S. cipher machine to use a rotor, 1924  Lieutenant Colonel Frank Moorman, USA, chief of G2A6 during World War I, died, 1953

In 1975, both houses of Congress investigated the components of the Intelligence Community, including NSA, for possible illegal actions. Lieutenant General Lew Allen, USAF, became the first DIRNSA to testify in an open session of a congressional committee. The hearings resulted in better definitions of both the authorities and limitations of each agency. General Allen was director from 1973 to 1977.







# OCTOBER

## NATIONAL DISABILITY EMPLOYMENT AWARENESS MONTH

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
<b>1</b> The American “Black Chamber” began operations, 1919 AFSA assumed operational control of cryptologic activities, 1949	<b>2</b> Signing of Holden Agreement regarding U.S.-UK naval COMINT responsibilities, 1942	<b>3</b> U.S. Army and Navy agreed to “odd/even” day division of effort on Japanese diplomatic cipher, 1940	<b>4</b>	<b>5</b> U.S. Army transferred Cryptographic Division School from Ft. Monmouth to Vint Hill Farms, VA, 1942	<b>6</b> Yom Kippur War in Middle East began, 1973	<b>7</b> USAF aerial reconnaissance RB-29 shot down by Soviet fighters over Sea of Japan, 1952 Operation ENDURING FREEDOM began, 2001
<b>8</b>	<b>9</b> The FBI arrested Joseph Petersen, “NSA’s first spy,” at his home, 1954  <i>Columbus Day</i>	<b>10</b>	<b>11</b> Researchers use 400 linked computers to factor a 100-digit number, 1988	<b>12</b> William Friedman awarded National Security Medal by Director of Central Intelligence Allen Dulles, 1955	<b>13</b>	<b>14</b> DIRNSA Hayden conducted first NSA “Seniors’ Day” meeting, 2000
<b>15</b> World War I trench code “Huron” issued, 1918 School at Vint Hill Farms renamed ASA School, 1946 Pendergrass report on use of computers in cryptology, 1946	<b>16</b> President George W. Bush’s Executive Order 13231 creates the Committee on National Security Systems with NSA as a member, 2001	<b>17</b> First commercial transatlantic wireless service began, 1907	<b>18</b> Howard Engstrom appointed D/DIR, 1957	<b>19</b> Charles Wheatstone, inventor of the Playfair cipher, died, 1875 Robert Lamphere, FBI, began collaboration with Meredith Gardner on VENONA-related material, 1948	<b>20</b> USAFSS established, 1948 NSC Directive 168 designates DoD as executive agent for all government COMSEC matters (DoD further delegates this duty to NSA), 1953 President’s Foreign Intelligence Advisory Board reestablished, 1981	<b>21</b> President Kennedy ordered naval quarantine of Cuba after intelligence discovered offensive missile sites on island, 1962
<b>22</b> USAFSS deployed Emergency Reaction Unit to Key West, FL, for Cuban Missile Crisis, 1962	<b>23</b> Terrorists destroyed the Marine compound in Beirut, killing 254, 1983	<b>24</b> Influential Killian report on defense and intelligence submitted to President Eisenhower, 1957	<b>25</b>	<b>26</b> First combat employment of Native American codetalkers, 1918 National Cryptologic Museum recognized Dr. David Kahn for contributing his collection to the museum library, 2010	<b>27</b> Senator Daniel Patrick Moynihan introduced bill that would create the Public Interest Declassification Board, 1999	<b>28</b> President Lincoln approved establishment of Military Telegraph Department, 1861 Lambros Callimahos, noted NSA cryptanalyst and teacher, died, 1977
<b>29</b> First U.S. intercept in France in World War I, 1917 First message sent on DoD-funded ARPANET, forerunner of the modern Internet, 1969	<b>30</b> Center for Cryptologic History published <i>The Friedman Legacy</i> , containing transcripts of the famed “Friedman Lectures,” 1992	<b>31</b> Elizebeth Friedman died, 1980				

Two views of the early career of Ann Caracristi, deputy director from 1980 to 1982. She began work as a cryptanalyst during World War II; she is at the right in this photograph taken at Arlington Hall Station near the end of the war. Her management skills were soon recognized, and, after the war, she quickly advanced through positions of increasing responsibility to senior executive status. The second photograph shows her receiving an award from Director John Samford in 1958. She chaired a special panel convened by NSA Director Vice Admiral Bobby Ray Inman (1977-1981) to identify the next generation of likely NSA senior executives, many of whom went on to become deputy directors or high-level seniors.









# NOVEMBER

## NATIONAL AMERICAN INDIAN/ALASKA NATIVE HERITAGE MONTH

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			<b>1</b> Britain's GC&CS established, 1919 COMINT station established on Guadalcanal, 1942 First NSA <i>Newsletter</i> , 1953 National Cryptologic School becomes operational; first commandant is Frank Rowlett, 1965	<b>2</b> William Friedman died, 1969	<b>3</b>	<b>4</b> NSA established; Lieutenant General Ralph J. Canine, USA, became first DIRNSA, 1952
<b>5</b> The Android mobile operating system debuts, 2007	<b>6</b> The "Seneca" field code released, 1918  Captain Joseph Wenger, USN, became head of OP-20-G, 1944	<b>7</b>	<b>8</b>	<b>9</b> Lieutenant General Ralph J. Canine, USA, first DIRNSA, born, 1895  Center for Cryptologic History established, 1989	<b>10</b> First NSA Field Chiefs Conference, 1975  NSA designated a Combat Support Agency, 1988 DIRGRAM 00 began the "100 Days of Change," 1999 <i>Veterans Day, Observed</i>	<b>11</b> Armistice signed ending World War I, 1918  First fixed U.S. field station at Houlton, ME, began operation, 1918
<b>12</b> AEF Radio Intelligence Section opened intercept site at Souilly, France, 1917	<b>13</b> First World Wide Web page written, 1990	<b>14</b>	<b>15</b> President Clinton's Executive Order 13026 eased exports of encryption products, 1996	<b>16</b> Herbert O. Yardley hired as State Department code clerk, 1912	<b>17</b>	<b>18</b>
<b>19</b>	<b>20</b> Attempt to rescue POWs from Son Tay, North Vietnam; tactical SIGINT was superb, but the POWs were moved before the raid, 1970	<b>21</b> First permanent ARPANET link established, 1969	<b>22</b> Herbert O. Yardley fired by Canada's National Research Council, 1941	<b>23</b> The Data Encryption Standard approved as federal standard for all unclassified government communications, 1976  Lieutenant General John Samford, USAF, officially opened the OPS 1 building, 1957 <i>Thanksgiving Day</i>	<b>24</b> New DIRNSAs: Lieutenant General John Samford, USAF, 1956; Vice Admiral Laurence Frost, USN, 1960	<b>25</b> Ronald Pelton, former NSA analyst, arrested for spying for Soviets, 1986
<b>26</b> OPS 3 (now the Frank B. Rowlett Building) dedicated, 1968	<b>27</b> SSDD (Signal Security Detachment D) was re-established as Army Security Agency, Europe (ASAE) at Rüsselsheim, West Germany, becoming the parent organization for other ASA units in Europe, 1945	<b>28</b>	<b>29</b>	<b>30</b> Charles Chibitty of the Comanche Nation received Knowlton Award for codetalking contributions during World War II, 1999		

C. Richard Lord served as NSA deputy director from 1986 to 1988. While a senior executive at NSA, he led many reorganizations to make the Agency more effective in the Cold War, including taking an active role in establishing the National Security Operations Center (NSOC).









# DECEMBER

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
					<b>1</b> Polish Cipher Bureau first solves ENIGMA message, 1932 JN-25B code introduced by the Japanese Navy, 1940 ATLAS, first U.S. cryptologic computer, operational, 1950	<b>2</b> Washington Post columnist Jack Anderson compromises sensitive NSA program, 1980
<b>3</b> First “Muzak” in NSA spaces, 1964	<b>4</b> Executive Order 12333 issued on intelligence community roles and activities, 1981	<b>5</b>	<b>6</b> Pre-employment polygraph became mandatory at NSA, 1952	<b>7</b> Japanese attack on Pearl Harbor in Hawaii, 1941	<b>8</b> SecDef announced that the Global Positioning System (commonly known as GPS) was complete; accurate to 100 meters, 1993	<b>9</b> The Sperry Rand Corp. unveiled the Univac 1107, the first electronic computer to use thin-film memory, 1960
<b>10</b> Official end of Spanish-American War, 1898	<b>11</b> Germany and Italy declared war on the United States, 1941	<b>12</b> Panay Incident; U.S. Army decrypts of Japanese RED code shaped U.S. response to incident, 1937	<b>13</b> USAF launched the POPPY 1 satellite into orbit, 1962	<b>14</b> First NSA holiday party, 1958 Three MIT researchers filed for a patent for what came to be known as the RSA public-key encryption algorithm, 1977	<b>15</b> Death of Johannes Trithemius, author of first book on cryptography published in Europe, 1516 NSA Georgia fully operational, 1995	<b>16</b> NSOC inaugurated in 1972; the official ribbon cutting ceremony was held in February 1973
<b>17</b> Guglielmo Marconi proved radio messages could cross the Atlantic, 1902 National Cryptologic Museum opened to the public, 1993	<b>18</b> DoD Directive 5200.28, “Security Requirements for ADP Systems,” established the first computer security regime for DoD, 1972	<b>19</b> Robert Patterson’s coded challenge message that was included in an 1801 letter to Thomas Jefferson was decrypted by Dr. Lawren Smithline, mathematician at CCR-Princeton; the key to the decrypt turned out to be the Declaration of Independence, 2007	<b>20</b> Meredith Gardner solved KGB message containing list of scientists working on Manhattan Project, an important development in the VENONA project, 1946	<b>21</b> Terrorists sponsored by Libya blew up Pan Am flight 103 over Lockerbie, Scotland, 1988	<b>22</b> Specialist James Davis, USA, became first American cryptologist killed in Vietnam, 1961 Astronauts aboard NASA’s Apollo 8 spacecraft transmitted the first live telecast from outer space, 1968	<b>23</b> USS <i>Pueblo</i> crew released by North Korea, 1968
<b>24</b>	<b>25</b> Arlington Hall Station Civilian Welfare Fund began serving AFSA members, 1949	<b>26</b>	<b>27</b> Stone Board report on centralizing U.S. cryptologic organizations issued, 1948	<b>28</b> Brownell Committee established, which led to the creation of NSA, 1951	<b>29</b>	<b>30</b>
<b>31</b> William Friedman became the first civilian cryptanalyst with the Office of the Chief Signal Officer, 1921	<i>Christmas Day</i>					

Lieutenant General William Odom, USA (DIRNSA, 1985 to 1988), and his spouse, Anne Weld (Curtis) Odom, escort President Ronald Reagan and First Lady Nancy Reagan through the new OPS 2B building on NSA’s Fort Meade campus. Reagan visited the Agency on the occasion of the new building’s dedication in September 1986, the first president to visit NSA.







NSA Deputy Director Ann Caracristi with presidents Ronald Reagan (left) and Bill Clinton (right). Caracristi's knowledge and skills in many aspects of cryptology kept her active long after she retired from NSA. The nation needed her knowledge, wisdom, and experience. She served on a wide variety of high-level committees and special studies, including on the presidential-level Foreign Intelligence Advisory Board under two presidents.