

ELECTRONIC SYSTEMS CENTER



MISSION

LINEAGE

Electronic Systems Division established and activated, 20 Mar 1961

Organized, 1 Apr 1961

Redesignated Electronic Systems Center, 1 Jul 1992

STATIONS

Lawrence G. Hanscom Field (later Lawrence G. Hanscom AFB; Hanscom AFB), MA, Apr 1961

ASSIGNMENTS

Air Force Systems Command, 20 Mar 1961

Air Force Materiel Command, 1 Jul 1992

COMMANDERS

Maj Gen Kenneth P. Bergquist, 1 Apr 1961

Maj Gen Charles H. Terhune, Jr., 16 Feb 1962

Maj Gen John W. O'Neill, 15 Jul 1964

Maj Gen John B Bestic, 1 Jul 1967

Maj Gen Joseph J. Cody, Jr., 1 Aug 1968

Maj Gen Albert R. Sheily, Jr., 29 Oct 1971

Maj Gen Benjamin N. Bellis, 29 Mar 1974

Lt Gen Wilbur L. Creech, 11 Oct 1974

Lt Gen Robert T. Marsh, 2 May 1977

Lt Gen James W. Stansberry, 28 Jan 1981

Lt Gen Melvin F. Chubb, Jr., 25 Jul 1984

Lt Gen Gordon E. Fornell, 30 Sep 1988

Lt Gen Charles E. Franklin, 29 Oct 1993

Lt Gen Ronald T. Kadish, 16 Aug 1996

Lt Gen Leslie F. Kenne, Jun 1999
Lt Gen William R. Looney III, May 2002
Lt Gen Charles L. Johnson II, Dec 2003
Lt Gen Ted F. Bowlds, Nov. 2007
Lt Gen Charles R. Davis, Aug 2011

HONORS

Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

Air Force Organizational Excellence Awards
1 Apr 1989-31 Mar 1991
1 Feb 1997-31 Jan 1999
1 Jan 2003-31 Dec 2004

EMBLEM

Approved, 30 Mar 1965, modified, 10 Oct 2007

MOTTO

OPERATIONS

ELECTRONIC SYSTEMS DIVISION is responsible for development, acquisition and delivery of electronic systems and equipment for command and control of aerospace forces. This includes ground-based warning, aerospace support systems, satellite tracking and ground assessment of objects in space.

Aeronautical Systems Division (ASD), Wright-Patterson AFB, Ohio, directs the design, development, and acquisition of major aerospace systems. Priorities under ASD's management and technical umbrella include strengthening strategic nuclear forces, expanding airlift capabilities, and modernizing tactical air forces. These include manned bombers, fighters, trainers, transports, utility and test aircraft, aircraft engines, unmanned vehicles, long- and short-range air-to-surface missiles, simulators, reconnaissance and electronic warfare equipment, offensive and defensive avionics subsystems, ground support, and test equipment. A current ASD program manages the test, production, and deployment of the B-1B strategic bomber. The bomber, powered by four 30,000-pound thrust turbofan engines, carries a crew of four. The division also has upgraded the B-52 bomber by improving its navigation and weapons delivery systems. The air launched cruise missile (ALCM) is being fitted to the B-52 to add to its strike capability. Other major efforts include development of an advanced cruise missile, advanced technology bomber, advanced tactical fighter, F-15E (dual-role fighter), imaging infrared tactical Maverick missile, X-29 forward-swept wing Advanced Technology

Demonstrator, and the C-17 transport and acquisition of C-5B and KC-10 transports, T-46A pilot trainer, HH-60A combat rescue helicopter, and an advanced Wild Weasel electronic warfare system.

The division's 4950th Test Wing flight tests and evaluates military systems, subsystems, and components. The 4950th Test Wing operates a test fleet of 44 aircraft, including the advanced range instrumentation aircraft (ARIA), that provides telemetry support for NASA and DOD space and missile launches. The wing also modifies aircraft and installs parts, equipment and systems to perform flight test and test support.

Four Air Force Wright aeronautical laboratories (AFW AL) also are part of ASD. They are Aero Propulsion, Avionics, Flight Dynamics, and Materials Laboratories. Though the AFWAL staff combines common laboratory overhead, management, and support functions, each laboratory conducts its own basic and applied research and development programs to provide technology for future aerospace systems.

Aero Propulsion Laboratory conducts research and development efforts in turbine engines, ramjets, fuels, lubricants, aircraft fire protection, synthetic fuels, and vehicle power. Avionics Laboratory is responsible for research on reconnaissance, weapons delivery, electronic warfare systems, and microelectronics technology. Materials Laboratory conducts all Air Force research on materials for airframes and engines and also sponsors programs in manufacturing science and technology. Flight Dynamics Laboratory has a varied technical emphasis, ranging from airframe structural design and survivability, crew station design, and flight simulation, to computational aerodynamics. The laboratory makes wide use of flying testbeds in demonstrating new technology.

The Electronic Systems Division (ESD), Hanscom AFB, Massachusetts, manages the development, test, acquisition, and deployment of command, control, communications, and intelligence (C3I) systems for the Air Force and other DOD agencies. Division personnel work closely with operating and support agencies to assure that maintenance, training, and logistics services are available to each deployed system.

Programs are organized by mission area. Tactical systems are those used primarily at theater and sub theater levels and include such missions as secure voice communications system, air-battle management, and tactical radars. Strategic systems include ballistic missile warning, surveillance, satellite communications, the E-4 flying command post, and the worldwide military command control system (WWMCCS). Mission systems provide physical security systems for DOD bases and installations worldwide, air traffic control systems, environmental surveillance, and C3 countermeasures. The Electronic Systems Division is the DOD focal point for the application of computer technology to defense problems.

The division is currently involved in a number of joint service programs. Joint Surveillance Target Attack Radar System (Joint STARS) is an Air Force and Army project to develop a radar that will detect and target stationary and slow-moving enemy armor such as tanks and armored

personnel carriers. The Joint Tactical Information Distribution System (JTIDS) gives ground and air combat units direct access to intelligence and information from a constantly updated base. The Speakeasy program provides secure voice terminals for tri service use over normal AUTOVON lines, and aerial target systems, range instrumentation systems, and electronic warfare threat simulators. It also tests and evaluates electronic warfare systems, inertial guidance systems and base installation intrusion and detection systems; determines target radar cross-section measurements; and assesses and recommends certification of aircraft and stores compatibility.

The division provides a focal point for combining, under a single manager, the elements of basic research and exploratory development; conception, validation, and engineering development; production and deployment; and integrated logistics support of conventional air armaments to arm the Air Force.

Electronic Systems Division. Headquarters Air Force Command and Control Development Division constituted, activated, and organized 16 November 1959; discontinued 1 April 1961. Electronic Systems Division constituted, activated, and organized 1 April 1961.

Apr 1 1960 The Electronic Systems Division (ESD) was activated at L. G. Hanscom Field, Bedford, Massachusetts, with Major General Kenneth P. Bergquist as Commander and Brigadier General Charles H. Terhune, Jr., as Vice Commander. In addition to its headquarters, ESD included the 3245th Air Base Wing and the Rome Air Development Center, the latter at Griffiss Air Force Base, New York. Staff elements of the former AFCCDD and ESC were combined and/or reorganized at intervals during the next three months. There was no ESD financial plan for fiscal year 1961; instead, the approved financial plans for AFCCDD and ESC remained in effect for the duration of the fiscal year.

ELECTRONIC SYSTEMS DIVISION—ESD L. G. Hanscom Field, Massachusetts

ESD is responsible for development, acquisition and delivery of electronic systems and equipment for command and control of aerospace forces. This includes ground-based warning, aerospace support systems, satellite tracking and ground assessment of objects in space.

USAF Unit Histories
Created: 16 Nov 2022
Updated:

Sources
Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.