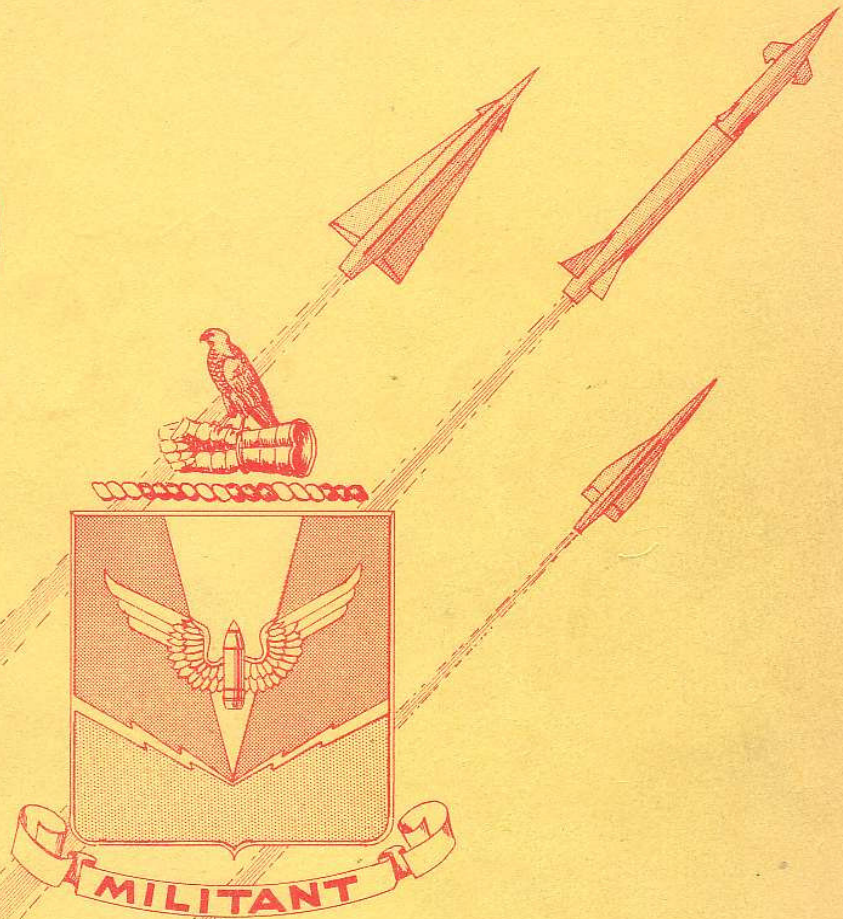
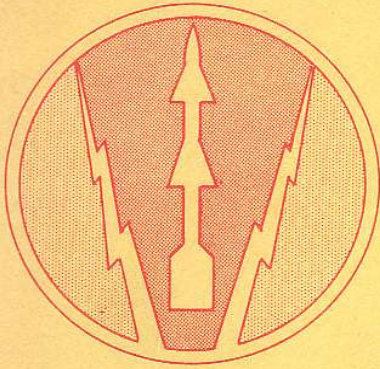
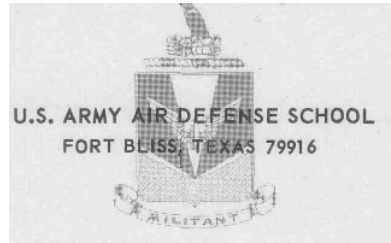


U.S. ARMY AIR DEFENSE

# *DIGEST*



U.S. ARMY AIR DEFENSE SCHOOL  
FORT BLISS, TEXAS  
1965



January 1965

U.S. ARMY AIR  
DEFENSE DIGEST

This document is published to assist personnel conducting instruction in service and USAR schools, ROTC, and National Guard units, as well as to meet the needs of Regular Army units for a factual and unclassified source of Army air defense Information.

Proper employment of air defense weapons is vital in modern warfare. The battlefield is now tridimensional, and the threat from the air must be considered and defeated in all operations.

It should be noted, too, that air defense is a triservice function, and elements of the Army, Navy, and Air Force must be integrated whenever feasible for the efficient employment of air defense weapons.

The U.S. Army air defense program is dynamic and progressive. New developments in materiel, doctrine, tactics, and techniques are constantly being introduced. It is hoped that this document will be helpful in disseminating needed information pertaining to air defense.

FOR THE COMMANDANT:

CHARLES CANTRELL  
Brigadier General, USA  
Assistant Commandant

UNITED STATES ARMY AIR DEFENSE DIGEST

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The U.S. Army Air Defense Digest, 1965, may be purchased at 35 cents per copy by writing to Commandant, U.S. Army Air Defense School, ATTN: Bookstore, Fort Bliss, Texas 79916.

# *Chapter 1*

## *United States Army Air Defense School*



Figure 1. U.S. Army Air Defense School — Hinman Hall.

### HISTORY

The U.S. Army Air Defense School traces its lineage back to the Artillery Corps for instruction (later named the Coast Artillery School) established at Fortress Monroe, Virginia, on 5 April 1824.

By March 1942, the antiaircraft portion of the Coast Artillery School had outgrown the facilities at Fort Monroe. This portion of the Coast Artillery School was then transferred to Camp Davis, North Carolina, and was established as the Antiaircraft Artillery School, coincident with the activation of the Antiaircraft Command, Army Ground Forces, an out-growth of the Office of the Chief of Coast Artillery. In October 1944, the School moved to Fort Bliss, Texas.

During World War II, more than 60, 000 individuals were graduated from courses conducted at the School.

The period following 1944 witnessed outstanding technological progress in air defense weapons (fig 2) and a rapid growth in the responsibilities of the Air Defense School. Technologically, weapons progressed from the 40-mm and 90-mm guns, through the Skysweeper, Nike Ajax, and Nike Hercules, to Hawk and Improved Nike Hercules.

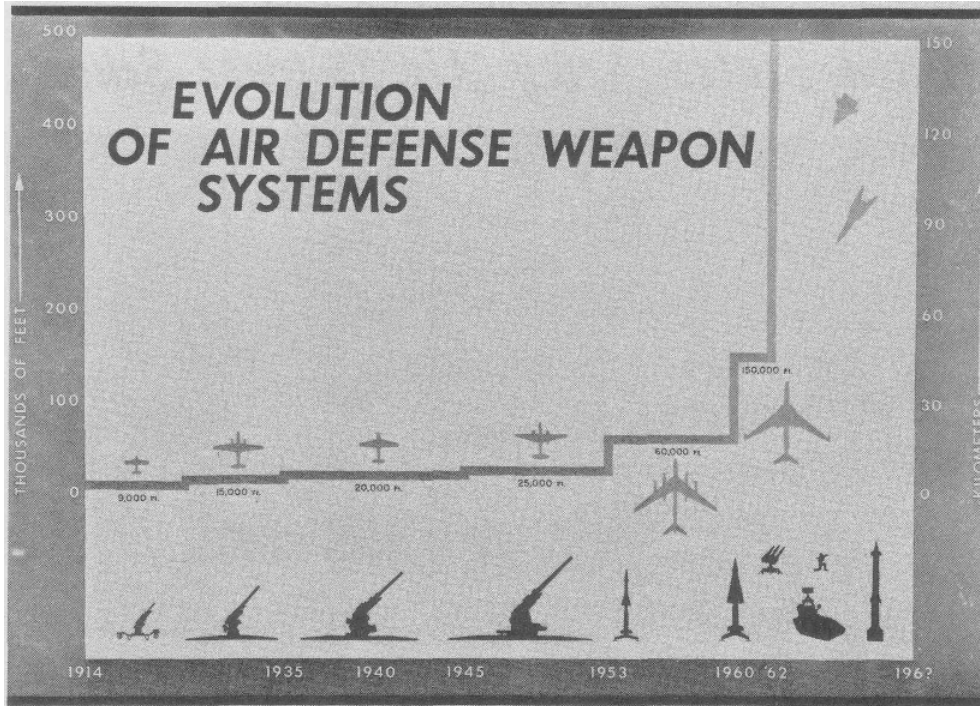


Figure 2. Evolution of air defense weapon systems.

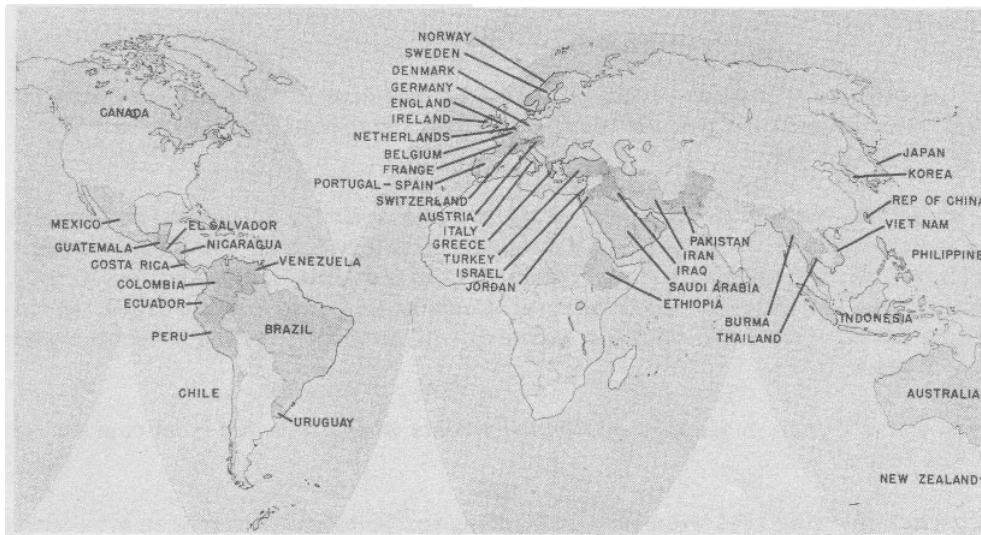


Figure 3. Students from 46 countries trained at the Air Defense School.

ORGANIZATION OF AIR DEFENSE SCHOOL AND  
MISSIONS OF PRINCIPAL OFFICES

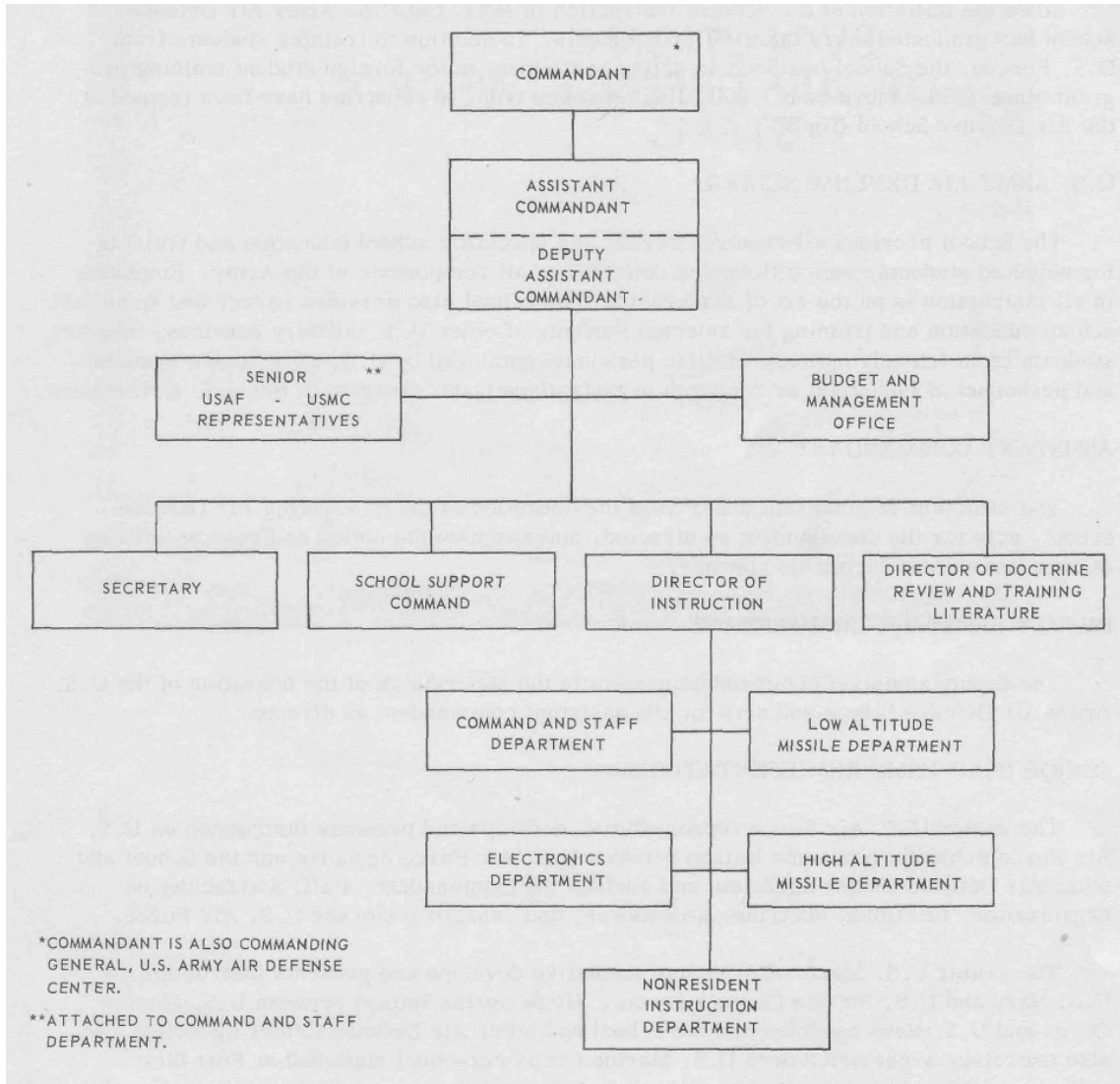


Figure 4. Air Defense School organization.

On 1 July 1957, after several changes in its name, the School was designated the U.S. Army Air Defense School.

Since the initiation of air defense instruction in 1942, the U.S. Army Air Defense School has graduated more than 190,000 students. In addition to training students from U.S. Forces, the School has been an active participant in the foreign student training program since 1953. More than 7,000 Allied students from 46 countries have been trained at the Air Defense School (fig 3).

#### U.S. ARMY AIR DEFENSE SCHOOL

The School provides all required career and specialist school education and training for selected students, both officer and enlisted, of all components of the Army. Emphasis in all instruction is on the art of leadership. The School also provides career and specialist school education and training for selected students of other U.S. military services, military students from friendly nations, civilian personnel employed by U.S. Government agencies, and personnel of industrial or research organizations under contract to the U.S. Government.

#### ASSISTANT COMMANDANT

The assistant commandant supervises the operation of the U.S. Army Air Defense School, acts for the commandant as directed, and assumes the duties and responsibilities of the commandant during his absence.

#### DEPUTY ASSISTANT COMMANDANT

The deputy assistant commandant assists in the supervision of the operation of the U.S. Army Air Defense School and acts for the assistant commandant as directed.

#### SENIOR USAF-USMC REPRESENTATIVES

The senior U.S. Air Force representative develops and presents instruction on U.S. Air Force subjects; performs liaison between U.S. Air Force agencies and the School and other Air Defense Center agencies; and advises the commandant, staff, and faculty on organization, functions, doctrine, procedures, and capabilities of the U.S. Air Force.

The senior U.S. Marine Corps representative develops and presents instruction on U.S. Navy and U.S. Marine Corps subjects. He performs liaison between U.S. Marine Corps and U.S. Navy agencies and the School and other Air Defense Center agencies. He also exercises supervision over U.S. Marine Corps personnel stationed at Fort Bliss.

#### BUDGET AND MANAGEMENT OFFICE

The chief of the Budget and Management Office acts as the principal staff element for budgeting, internal control of funds, management engineering, manpower control, and statistical reporting and analysis.



## SECRETARY

The secretary serves as the administrative executive for the School. He supports the operation of the School with administrative, message center, automatic data processing, student action, academic record, bookstore, library, and special projects services.

## SCHOOL SUPPORT COMMAND

School Support Command provides administrative, logistical, and training (nonacademic) support for U.S. students and the School staff and faculty; administrative and logistical support for foreign military students; and security services in support of School operations.

## DIRECTOR OF INSTRUCTION

The director of instruction directs the academic departments, coordinates their instructional activities, supports the conduct of School operations, and prepares plans for future academic requirements.

## DIRECTOR OF DOCTRINE REVIEW AND TRAINING LITERATURE

The director of doctrine review and training literature develops equipment training plans and devices, acts as the combat development staff element of the School, and prepares and keeps current air defense Army-wide, applicatory-type training literature.

## COMMAND AND STAFF DEPARTMENT

The director of the Command and Staff Department is responsible for conducting instruction in command and staff matters of air defense, combined arms, nuclear weapons, and missile science; participates in the evolution and formulation of doctrine; and prepares training literature.

## ELECTRONICS DEPARTMENT

The director of the Electronics Department is responsible for conducting instruction in electronics, digital computer technology, fire distribution systems, electronic warfare, and defense acquisition radars.

## LOW ALTITUDE MISSILE DEPARTMENT

The director of the Low Altitude Missile Department is responsible for conducting instruction in the Hawk missile system and associated subjects.

## HIGH ALTITUDE MISSILE DEPARTMENT

The director of the High Altitude Missile Department is responsible for conducting instruction in the Nike Hercules missile system.

## NONRESIDENT INSTRUCTION DEPARTMENT

The director of the Nonresident Instruction Department prepares and administers air defense extension courses, prepares and provides instructional material for Army Reserve components, and distributes School-published material to authorized agencies.

### ACADEMIC ACCOMPLISHMENTS

During FY 64, the School conducted 63 courses (U.S. and non-U.S.) for 360 classes. Courses varied in length from 1 to 56 weeks. Included in the 8,407 graduates during FY 64 were 1,956 from other countries. In terms of air defense skills, the graduates included:

- 4,045 maintenance technicians on Nike and Hawk.
- 705 instructors and operators qualified in electronic countermeasures (ECM) and electronic counter-countermeasures (ECCM).
- 537 operators and technicians in fire distribution system (FDS) equipment.
- 3,120 unit commanders and other officers.

Total graduates for each fiscal year since 1958 are indicated in figure 5.

