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[UNCLASSIFIED] HISTORY



OF
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7TH



COMMUNICATIONS AND CONTROL GROUP

SHAW A.F.B., S.C.

1 JANUARY

30 JUNE 1959

7-17114-H

(Unclassified)

History

of the

507TH COMMUNICATIONS AND CONTROL GROUP

Shaw Air Force Base, South Carolina

Ninth Air Force, Tactical Air Command

1 January - 30 June 1959

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The AN/GPA-29A, commonly called the MINX RAFAX, a radar optical projector used in the semi-automatic tracking of aircraft. During the period covered in this history, 1 January to 30 June 1959, it was the only device of its kind in the Tactical Air Command, and was used exclusively by the 507th Group's 728th Aircraft Control and Warning Squadron. Flight pattern of aircraft within the search radar area may be projected directly onto a grid map screen from outlying radar scopes. Using the device, an area commander, during CASF deployments, may make immediate use of aircraft information to assist in determining tactical decisions.

Joint Operations

Units of the 507th joined forces with other services and other Air Force units in seven joint exercises. Code names given these exercises were: **BIG BLAST X**, LUCKY DELTA, CLOVER LEAF III, FAREX 59, BANYAN TREE,¹⁴ DRY HILLS¹⁵ and DARK CLOUD/PINE CONE II.¹⁶

All of the exercises, with the exception of the last three, were command post exercises.¹⁷ For **BIG BLAST X**, the 507th provided a reduced SCC with allied equipment at Fort Sheridan, Illinois, for five days, which started on January 20th. Other units of Ninth AF and the Fifth Army also participated. On 7 and 8 February, the Group provided a reduced SCC and four MSC-21 vans, with associated personnel and equipment, in conjunction with Ninth AF and the Third Army, for LUCKY DELTA. CLOVER LEAF III involved the Fourth Army and Ninth AF units. The 507th again provided a reduced SCC and the personnel and equipment at Fort Hood, Texas, on 7 and 8 March. The purpose was to provide training in new concepts, organization, doctrines and procedures under assumed conditions employing the latest weapons of warfare. As with the other CPX's, FAREX 59 required the 507th to provide a reduced SCC with necessary personnel and equipment, deploying them to Fort Dix, New Jersey, on 25 and 26 April. Besides the Group and other Ninth AF units, the First Army was involved.

14. Discussed in detail in the Comm. and Elect. Chapter, Pages 15 and 16. See Sup Doc No. 8.

15. Ibid. See Sup Doc No. 9.

16. Ibid. See Sup Doc No. 10.

17. Final Reports on each of the CPX's. See Sup Doc No.'s 11, 12, 13 and 15.

Headquarters
507TH COMMUNICATIONS AND CONTROL GROUP
UNITED STATES AIR FORCE
SHAW AIR FORCE BASE, SOUTH CAROLINA

OFS

13 February 1959

SUBJECT: Exercise BIG BLAST X

TO: Commander
Ninth Air Force
Shaw Air Force Base
South Carolina

1. In accordance with Ninth Air Force Operations Order 145-58, the 507th Communications and Control Group provided a reduced Sector Control Center (SCC) to support Exercise BIG BLAST X. This was a Command Post Exercise employing the Fifth United States Army and units of Ninth Air Force. The exercise was conducted at Fort Sheridan, Illinois during the period 20-25 January 1959.

2. The SCC provided by this organization consisted of the following personnel and equipment:

a. Personnel:

3 Officers (Weapons Controllers)
6 Airmen (ACEW Operators)

b. Equipment:

Vertical Plotting Board
Status Boards
EE-8 Telephone and Headsets
Maps and miscellaneous supplies

3. During this exercise the SCC simulated the functions of air defense, radar surveillance, and air traffic control in the assigned area of responsibility. Friendly close support and reconnaissance missions were known in advance (Ninth Air Force Operations Order 1002-58) and were plotted on the display board. Twenty-eight (28) hostile tracks were displayed, nine (9) injected by the SCC to provide play during lulls in activity. All hostile aircraft injected by the SCC were destroyed either by intercept or AAA action or both prior to reaching their targets. This was in accordance with an agreement by the Army Exercise Coordinator and the SCC Commander to prevent interference with the exercise problem. Air traffic control procedures, for all practical purposes, was not exercised since an Army FCC representative was not present in the SCC to act as liaison officer. Advance notification of all Air Force strikes were given to G-3 Air until the SCC was notified by G-3 Air that these reports were not necessary as strike information was already known.

OPS, Hqs 507th CCG, Shaw AFB, SC, Subj: Exercise BIG BLAST X, dtd 13 Feb 59

4. In a Tactical Air Control System all sites use the Geographical Reference (GEOREF) Grid System for air situation display. During joint operations this presents a conversion problem when coordinating with the ASOC and Army units who use the Universal Transverse Mercator (UTM) Grid System. There have been no problems in this respect when coordinating air defense with the Army in larger exercises since the Army Air Defense Command Post has been using GEOREF. It was decided in planning for this exercise that a UTM Grid Overlay be used on the vertical plotting board with a capability of converting to GEOREF if necessary. Army Map series 1:500000 were used for reference giving a 360 x 550 nautical mile area coverage. The SCC using UTM rather than GEOREF for this exercise, a reverse of all previous procedures, proved very successful and relieved SCC personnel the time consuming efforts in accomplishing numerous conversions from UTM to GEOREF. However, it is realized that these procedures can be used only during CPX's of the BIG BLAST type. As long as the Army and the Air Force use different grid references this will continue to be a problem for the Tactical Air Control System.

5. It is believed that the mission of this organization in supporting Exercise BIG BLAST X was accomplished in a highly successful manner. This success may be attributed in no small part to the excellent support and cooperation the SCC received from Army and Ninth Air Force personnel.

6. The SCC was visited by many high ranking Army Officers, both players and observers. It is planned for future exercises to include posters and training aids as a part of SCC equipment to be used by the SCC Commander when briefing visitors on the operations of a Tactical Air Control System.

7. It is believed that exercising SCC/FOC coordination in air traffic control procedures is as important as exercising air defense coordination. During exercises involving live aircraft the SCC (or AATCC) has the responsibility for air traffic control within the exercise area and must accomplish this by close coordination with the Army FOC. Proficiency in this function is vital during these major exercises. Any training in these air traffic control procedures during CPX's should be considered if only for the purpose of training SCC personnel.

FOR THE COMMANDER

s/t/ AVERY C. McCURRY, JR.
Captain, USAF
Administrative Officer