

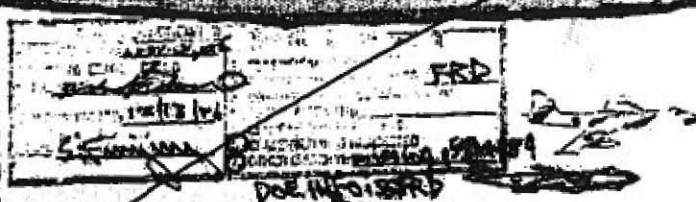
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HIST

SECOND AIR FORCE

DEC
1958
VOLUME
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SECOND AIR FORCE HISTORICAL DATA
(UNCLASSIFIED TITLE)

FROM 1 JULY THROUGH 31 DECEMBER 1958

HISTORICAL DIVISION
OFFICE OF INFORMATION
HEADQUARTERS SECOND AIR FORCE
MAY 1959

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2AF Historical Data
July - December 1958

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FOREWORD

This is the 19th volume in a series recording the life of the reestablished Second Air Force. The first volume of this series covered the initial period from the Command's reestablishment on 1 November 1949 through 31 December 1949. Seventeen others followed semiannually embracing the periods of January through June and July through December.

This, the 19th volume covers the period from 1 July through 31 December 1958.

A 20th volume will be released in October 1959. It will recount developments during the first six months of 1959. Others will follow semiannually.

The narrative of this volume is based on thorough research both within and without Headquarters Second Air Force. Care has been taken to analyze and evaluate the evidence, to establish the facts by reconciling conflicting evidence, and to present these facts in an organized synthesis that in no way violates the spirit of truth either through poor perspective or the omission or distortion of facts.

It is believed that an accurate picture is presented; however, if any significant omission or inaccuracy is uncovered, this narrative is subject to revision.

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CHAPTER I

TIME COMPRESSION - ALERT POSTURE EVOLUTION

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BACKGROUND

Recognition that, due to compression of time, the ability to react very quickly to an act of aggression becomes increasingly important as the Soviet weapons systems improve has been the key to Strategic Air Command (SAC) and, in turn, Second Air Force operational doctrine. This is evident throughout the history of Second Air Force, particularly during the time from early 1954 to the present. Basically, the history of Second Air Force operations during the period February 1953 through 1958 is a documentation of the application of the B-47 medium bomber to the United States grand strategy of "the maintenance of ineluctable force with destructive power unacceptable to an enemy."¹ (U)

The evaluation of the B-47 Emergency War Order (EWO) doctrine is depicted in a series of operational concepts and exercises. Following the development of timing methods and procedures for single wing missions, Second Air Force in early 1954 planned and executed a then new concept aimed at more complete utilization

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1. Col Alexander Sheridan, "Impact of the Missile on Warfare," Air University Quarterly Review (Summer 1957), 121 - 130.

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2AF Historical Data
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of the range, speed and dependability of the B-47. Labeled HIGH GEAR, a prime objective of this operation was to decrease the combat strike launch time. ² *(S)*

This operation, by means of an accelerated deployment and strike schedule, reduced time of the first bomb strike by four days as compared to the EWO (50-53) then current. Under the HIGH GEAR plan, the air division and necessary support personnel and equipment of one B-47 wing deployed immediately upon declaration of hostilities to a forward operating base using the KC-97's of both wings. The B-47's of both wings were readied by personnel of the remaining wing and routed through a bomb pick-up site to the forward base. Beginning on X-day, the B-47's were deployed at the rate of 15 per day per wing. Enroute air refueling eliminated the need for staging and the task force commander at the forward base then launched

-
2. 2AF Hist Data, Jul-Dec 1954, p. 192. Full objectives of HIGH GEAR were to (1) decrease time required to launch combat strikes following declaration of hostilities, (2) decrease vulnerability of SAC resources on forward bases, (3) increase strike potential on forward bases, (4) increase operational flexibility, (5) decrease logistical and operational requirements at forward bases, (6) reduce reliance on MATS aircraft, and (7) obtain positive control of aircraft by the SAC commander.

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maximum strikes on X plus two, three, four and five. Following each strike, the bombers returned to the forward base and after minimum crew rest and maintenance, returned to the ZI, air refueling enroute. Deployed tankers and support personnel remained at the forward base to sustain repeat operations. ³ (*g*) *u*

Next development was the LEAP FROG concept, with the goal of earlier strikes and reduction of force vulnerability at the forward base. ⁴ It differed from HIGH GEAR in that twice refueled B-47's went direct from ZI base to target and returned to a post-strike base. Prepositioned tankers refueled the first bomber flight; refueling capability was then built up in the forward area by tanker deployment after the strike execution order. The size of succeeding strikes then depended on the size of the tanker forces. Approximately one-half of the Second Air Force KC-97 air refueling capability was organized

3. Ibid., pp. 191-192.

4. Ibid., p. 195. Further objectives of LEAP FROG were to (1) circumvent political problems associated with launching special weapon strikes from foreign bases, (2) increase operational flexibility, (3) reduce special weapons ferry requirements, (4) decrease forward base logistical and operational requirements, and (5) reduce dependency on MATS.

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2AF Historical Data
July - December 1956

into five task forces to support the operation. A sixth force of some 50 tankers was assigned the air refueling task over Bermuda. Successful use of the LEAP FROG concept enabled an entire air division to execute its strikes two days earlier than under the HIGH GEAR principle, with the result that LEAP FROG methods were adopted temporarily for the EWO.⁵ (S)u

These strategems were further polished by stocking weapons at the ZI bases, wave operation, night formation refueling, and post strike support by temporary duty units at forward bases. Further exercises through 1956 made provision for B-47 weather scouts, development of a QUICK STRIKE⁶ capability and refinement of tanker utilization. (u)

Toward the later part of 1956, Second Air Force's 38th Air Division, at Hunter Air Force Base, Georgia, tested a new projection when on 20 October it was directed to maintain one-third of its force on alert status 24 hours a day, seven days a week. No manning increase was authorized. This test, TRY OUT demonstrated that a B-47 wing could maintain this alert

5. Ibid., pp. 196-210.

6. 2AF Hist Data, Jan-Jun 1957, p. 351.

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2AF Historical Data
July - December 1958

under certain conditions. These conditions were a 1.5/1 aircrew/plane ratio, 100 percent body and 85 percent effective manning, cancellation of all normal leaves, no off-base school quotas, no higher headquarters flying requirements and acceptance of a degree of morale deterioration. ⁷ (S) M

Most of these conditions were unacceptable and SAC planners set out to find a solution. Since the cause of the EWO requirement was not controllable, this solution had to be found within SAC's existing structure. From the Hunter AFB test, TRY OUT, it was determined that a structural reorganization would be required to support the one-third launch within 15 minutes alert concept. ⁶ (S) M

Second Air Force service-tested its proposal for reorganization at Little Rock Air Force Base, Arkansas, from 1 April to 30 November 1957. Four major changes were examined: (1) four instead of three tactical bomb squadrons, (2) deputy commanders in place of directors and a special staff, (3) separation of maintenance from supply, and (4) the

7. Ibid., pp. 403-404.

8. SAC Hist Study No. 71, Vol. I, "Structural-Functional Reorganization of 1958," Introduction, filed 2AF Hist Archives.

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consolidation of maintenance personnel into a single organizational maintenance squadron. Fifteenth Air Force conducted a similar test at Mountain Home AFB, Idaho, from 1 July to 1 December 1957. This test emphasized the strong squadron organization concept. The results of TRY OUT, Little Rock, and Mountain Home tests were exhaustively studied by SAC. After this study new organizational directive, dated 24 July 1958, was published. ⁹ (U)

This directive (SACR 20-15R) provided an organizational structure capable of sustaining combat readiness while maintaining a continuous alert. Under the new organization, a tactical wing commander was authorized a deputy commander for operations and a deputy commander for maintenance. Administration, personnel, supply, safety and the comptroller remained staff agency functions. Each base normally was authorized a combat support group. The support group commander in turn was authorized a deputy commander for operations, for material, for services and for installations engineering. Basically the new structure centralized similar functions with simple and clearly defined command channels. ¹⁰ (U)

9. Ibid.

10. SACR 20-15R, Hq SAC, "Organization of Manned Bomber Force Tactical and Supporting Units Below Major Subordinate Command Level," 24 Jul 1958.

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2AF Historical Data
July - December 1958

Second Air Force's mission during 1958 was therefore multiple. The shortened alert time had to be sustained while units were being re-organized throughout the force. Additionally, B-52 strategic wings were being manned, equipped, trained toward combat readiness, and dispersed. (S) M

REFLEX CONCEPT

To increase the speed of reaction required to meet 1958's war plan requirements, Second Air Force had originated, developed and tested a plan during the summer of 1957. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Following these tests, in September 1957, SAC directed the establishment of an alert force in each combat wing on 1 October 1957, with operations scheduled to begin in January 1958.]

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Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] To meet this commitment, the 2d, 308th Bomb

11. Msg, (TS), CINGSA to Major Sub-Comdrs, DOB 62756, 16 Sep 57.

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2AF Historical Data
July - December 1958

Additionally, the 44th and
321st Bomb Wings were to deploy from their home
stations to and from Loring Air Force Base, Maine.
The basic rotational requirement was five B-47's
per wing.¹²

REFLEX ACTION was the code name given this
operation in the three forward areas - North Africa,
the United Kingdom and the northeastern United States.
These areas will be considered separately in succeeding
pages of this narrative since different wings and for-
ward units were involved as well as different climatic
and navigational conditions. The mission and methods,
involving all of Second Air Force's B-47 wings, were
the same.¹³

Nine Second Air Force B-47 wings were committed
to REFLEX ACTION on 1 January 1958.¹⁴

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12. 2AF Hist Data, Jan-Jun 1956, pp. 254-255.
 13. OPORD 96-57, Hq 2AF, Annex A, 15 Nov 1957, as amended 1 Feb 1958. Exhibit 1.
 14. Ibid., Annex A.
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On rede-
ployment, two air refuelings, one day celestial
pressure line of position, one gunnery mission, one
fighter attack, one electronics countermeasures (ECM)
run, three hours visual formation, two radar camera
attacks and three radar bomb scored (RBS) runs were
scheduled. ¹⁶

(S/FRD)
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- 15. Ibid., Annex A.
- 16. Ibid., App 1, Annex A. Exhibit 1.

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42 USC sec. 2168
(a)(1)(c)(FRD)

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42 USC sec. 2168
(a)(1)(c)(FRD)

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- 17. Ibid., App 2, Annex A.
 - 18. Ibid., App 4, Annex A.

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2AF Historical Data
July - December 1958

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schedule, during this period, was undergoing evaluation. Crews were receptive to this fact and no deterioration of alert force or timing resulted. ¹⁹ (U)

On 10 January 1958, the 306th Bomb Wing reported its REFLEX increments 21 through 24 as successful missions. Training requirements were considered only partly successful. Various causes for the loss of these training requirements were given. Fifty-four RBS radar attacks were lost due to route changes by higher headquarters. Maintenance difficulties and air refueling rendezvous were responsible for others. Tanker support was generally adequate. ²⁰ (U)

Reflex missions for the period 19 through 31 January 1958 were reported as successful by the 379th Bomb Wing. Shortages of fuel and radar malfunctions precluded some scheduled training. This same wing, on 23 January reported that its 1-19 January missions were successful.

DOE
(b)(3)

19. Msg, Comdr Reflex Sidi to Comdr 2AF, ZIPPO/SECRET/REL/DBG 58-B-0978, M-27 Report for period 1 Feb 58 to 28 Feb 58, on file Combat Rptng Br, Cps Div, D/C, Hq 2AF.
20. Msg, Comdr 6AD to Comdr 2AF, ZIPPO/SECRET/01-0570/B-27/2AF/306BWM/Reflex Action/ 10 Jan 1958, on file Combat Rptng Br, Cps Div, D/C, Hq 2AF.

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2AF Historical Data
July - December 1958

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~~(S/FRD)~~ M

On 27 January and 10 February, the 305th Bomb Wing stated succinctly "Mission highly successful, no new activity reported by crew members, comment on adequacy of support items, excellent through satisfactory." (u)

Although the 306th Bomb Wing had a successful mission with adequate tanker support on its January 15th deployment, certain refueling and weather conditions were reported. The tanker rendezvous point was moved 02 degrees east from the briefed coordinates by Second Air Force. The tankers apparently did not receive this change and the refueling rendezvous was accomplished approximately 60 nautical miles (NM) west of final briefed rendezvous. The lead tanker instead of the last tanker gave the rendezvous instructions and number 2 and 3 tankers trailed 10 to 12 miles, causing the B-47's to over-run on descent

21. Msg, Comdr 379BW to Comdr 2AF, ZIPPO/SECRET/
O2-013/B-27/2AF/379BWM/Reflex action/ 3 Feb
1958, on file Combat Rptng Br, Ops Div, D/O
Hq 2AF.

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2AF Historical Data
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with the result that refueling was accomplished in weather at 18,000 feet instead of the briefed 16,000 feet. ²² *(S) m*

In Second Air Force planning, total sorties programmed through each base and air refueling area were founded on certain numerical factors. In the air refueling area, Kindley was scheduled for 80 sorties per month, five each on Tuesday through Friday weekly; Northeast OCLUS (outside continental limits of United States) when sorties were available from inter-base tanker resources, redeployment was to be accomplished using the "Yellow" route; Lajes was programmed for 80 sorties per month during January, February and March, and was reduced to 40 per month during the summer months. ²³ *(S) m*

At the enroute bases, Kindley was programmed for approximately seven B-47's per month dropping in for missed air refueling alternate or low fuel reserves. Lajes Field was estimated for approximately five B-47's per month with an additional 15 for ground refueling and staging; this latter figure increased to 45 per month during January, February and March; Loring,

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22. Msg, Comdr 6AD to Comdr 2AF, ZIPPO/SECRET/02-025C/B-27/96-57/2AF/306BWM/Reflex Action, 10 Feb 1958, on file Combat Rptng Br, Cps Div, Hq 2AF.
23. OPORD 96-57, Hq 2AF, 15 Nov 1957. Exhibit 1.
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Pease and Harmon Air Force Bases were to alternate as ground staging stops to prevent staging more than five B-47's per week at any one station. ²⁴ (u)

Night mass air refueling (SACR 50-8) was to be given only for five aircraft refueling in one track. All Reflex air refueling was to be so accomplished using the Ann track in the scheduled area. Base air refueling altitude at the Kindley area was set at ²⁵ 16,000 feet and the Lajes area at 15,000 feet. (u)

The foregoing planning factors in Reflex refueling, if the reader will bear them in mind, explain many later problems as well as the previous 306th Bomb Wing reference to its deployment on 15 January. (U)

An example of the weather effect on the Reflex mission was also noted in this same 306th Bomb Wing period. On 31 January 1958, the weather out of Lajes was not as briefed and crews were required to remain overnight at Lajes due to a Military Air Transport Service (MATS) emergency and Air Traffic Control (ATRC) clearance difficulty. Second Air Force was notified and the execution order was requested for 1000Z on 1 February. Base facilities were not properly notified

24. Ibid.
25. Ibid.

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2AF Historical Data
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and a 50-minute delay in take-off resulted. Crews had been briefed for 60-65 knot headwinds but actual 166 knot winds were encountered causing the aircraft to land at Kindley due to fuel shortage. ²⁶ (S) M

Reflex missions for the month of February 1958 were reported successful by the 379th Bomb Wing. Four constants had hampered this unit in its training program on Reflex deployments. These were the 200,000 pound gross weight limitation, the 15 minute loss of flying time due to the departure "bottleneck" at Homestead, a loss of 20 minutes flying time in avoiding warning areas at the Jacksonville Beach coast-out route, and finally the fuel off-load at refueling of 36,000 pounds of which sometimes as much as 10,000 pounds had been aviation gas (AVGAS). ²⁷ (S) M

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No difficulties were experienced in the early deployment and redeployment phases. All aircraft were on schedule and only one redeployment was delayed for one

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26. Msg, Comdr 6AF to Comdr 2AF, ZIPPO/SECRET/02-0250/B-27/96-57/2AF/306BWM/Reflex Action, 10 Feb 1958, on file Combat Rptng Br, Ops Div, D/C, Hq 2AF.
27. Msg, Comdr 379BW to Comdr 2AF, ZIPPO/SECRET/03-002/B-27/96-58/2AF/379BWM/Reflex Action, 3 Mar 1958, on file Combat Rptng Br, Ops Div, D/C, Hq 2AF.
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day due to a fuel leak.

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However, some deployment and redeployment delays were experienced.

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This incident was resolved locally as far as possible.

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Crew morale problems entered the picture about this time. As previously mentioned, the 9-16 day crew rotation cycle placed in effect on 19 February was

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2AF Historical Data
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being evaluated. At the end of March 1958, the majority of the crews were not in favor of this schedule and considered it awkward and unsatisfactory. The five day alert period was considered as too long and a confined and restless behavior resulted since the crews were constantly aware of their alert status. Crews as a whole were unable to enjoy a leisurely meal or secure a good night's rest due to the constant threat of an alert. The majority of the crews at this time favored a ten crew to five aircraft ratio.³⁰ (U)

From the crew viewpoint, the redeployment schedule at this time was also unsatisfactory. As the redeploying crew was on duty until 0830Z on departure days, they did not have adequate time to brief the new crews or prepare for the return trip. When aircraft were executed to arrive at other than the 1000-1200Z scheduled time, additional problems confronted the old crew. In one instance, the aircraft arrived at 0330Z and was met by the alert (ready to redeploy) crew. This crew went back to bed at approximately 0530Z and then were up at 0700Z to attend the 0800Z briefing.

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Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

.] Up at 0600Z, the following day, this crew attended the 0700Z pre-take off briefing and crew change-over at 0800Z, followed by final pre-flight.

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Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

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this 305th Wing instance, Amber route was on the 24 hour route selection with individual clearance, while the execution order called for ground staging at Lajes and Kindley. The basic difference between the two was that the M-2 reflected a request for a 1000Z take-off while Amber route entailed a 1400Z take-off. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] Three instances of

31. Ibid.

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this type were cited by the 305th Bomb Wing on 20/21
March. ³² *(S) M*

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42 USC sec. 2168
(a)(1)(c)(FRD)

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SEC 1306 -*

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with the sharpest rise about 1000Z. The 1400Z take-off
time had been established by Second Air Force to allow
maintenance sufficient time to ready redeploying aircraft.

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A recommendation was made to change time to 1000Z during the hot months since this would allow ground and flight crews to preflight during the cool hours of early morning, when runway temperatures would be lower and flight crews less fatigued. ³⁴ ~~(S/FRD)~~ *M*

The weekly and 24 hour route selections continued to present difficulties. Basically this was caused by the involvement of Air Traffic Control and similar agencies in a combat operational plan. This is discussed at greater length later in this narrative since it is common to other forward reflex areas. ~~(S)~~ *M*

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34. Ibid.

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All take-offs from enroute stops, home stations and forward area were with maximum internal/external fuel consistent with critical field lengths for water/alcohol thrust augmentation and existing runway temperature and pressure altitudes. ³⁵ (S/FRD) u

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On redeployment, RES was accomplished on Springfield, Richmond, Charlotte, Atlanta and Little Rock. A 12 minute separation for bomber stream was developed by orbiting over St. Eval or the Augusta VOR. ³⁷ (S/FRD) u

The first deployment began on 5 January 1958 with the 308th Bomb Wing launch of five aircraft at 0100Z. ³⁸ (S/FRD) u

35.

- 36. Ibid., Annex B.
- 37. Ibid., Annex B.
- 38. Ibid., Annex B.

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~~(S/FRD)~~

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January 1958, the 303th Bomb Wing mission was reported as unsuccessful. Launching schedules could not be met due to intangibles, with a resulting loss in training and an almost impossible maintenance scheduling problem.

39. Ibid., Annex B.

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2AF Historical Data
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The 38th Air Division (2d and 308th BW) considered ground staging at northern bases as impractical and felt that a non-stop air refueling route was a necessity for deployments. ⁴⁰ (S/FRD) M

The 384th Bomb Wing January 1958 operations were considered successful from the standpoint of the Reflex Action posture but only marginal as far as 50-6 training. Redeployment of the five 384th Bomb Wing crews was extended 25 days because one complete Reflex cycle was dropped out. There was an additional delay of two days and eventually they were redeployed on an alternate route via Lejes, Hunter and then to Little Rock. This wing, however, forecast better training with improving weather. ⁴¹ (S) M

On 7 February 1958, the 308th Bomb Wing had terminated a successful mission period. At this point, the 38th Air Division made a series of recommendations to improve Reflex operations. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] The

- 40. Msg, Comdr 38AD to Comdr 2AF, ZIFPC/SECRET/01-C-152/B-27/2AF/308BW/Reflex Action, 29 Jan 1958, on file Combat Rptng Br, Ops Div, D/C, Hq 2AF.
- 41. Msg, Comdr 38AD to Comdr 2AF, ZIFPC/SECRET/02-016/B-27/2AF/384BW/Reflex Action, 6 Feb 1958, on file Combat Rptng Br, Ops Div, D/C, Hq 2AF.

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2AF Historical Data
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number of runs on London RBS was not up to what was expected. The 4,000 feet separation on this RBS was considered excessive and some aircraft had to bomb from as high as 41,000 feet, well above optimum and where necessary speed could not be maintained. ⁴² (S/FRD) u

The 384th Bomb Wing on 20 February also complained about the time/altitude separation over London RBS plot. This wing's third and fourth wave missions were tactically successful but again marginal as far as 50-8 accomplishments. During this time of adverse weather, Second Air Force was launching aircraft on schedule using the alternate island hopping southern route rather than delaying for weather in the refueling area and along primary routes. Weather in the northern refueling areas caused excessive tanker chase on deployment of the third 384th Bomb Wing wave and the flight commander had to divert to Goose AFB. ⁴³ (S) u

42. Msg, Comdr 38AD to Comdr 2AF, ZIPPO/SECRET/
O2-C-119/B-27/96-57/2AF/308BW/Reflex Action,
7 Feb 1958, on file Combat Rptng Br, Ops Div,
D/C, Hq, 2AF.
43. Msg, Comdr 825AD to Comdr 2AF, ZIPPO/SECRET/
O2-105/E-37/2AF/384BW/Reflex Action, 20 Feb 1958,
on file Combat Rptng Br, Ops Div, D/C, Hq 2AF.

~~SECRET/FRD~~ u

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Through the spring months of 1958, the airline operational phase of Reflex for the three Wildcat Alpha wings continued much along the preceding lines. Air refueling improved as the weather improved. All aircraft were deployed as scheduled in execution orders. Problems continued in the redeployment phase. Results, for example, indicated that Goose Air Base gave better support for ground staging than did Loring AFB. ⁴⁴ Enroute base support for missed air refueling was considered sub-standard. Aircraft redeployment was so frequently delayed that their availability for scheduling could not be depended upon until at least five days (average) after their scheduled return date. It was felt that cancellations and rescheduling deviations could be minimized to some extent by establishing a higher priority of maintenance for Reflex aircraft at enroute support bases. ⁴⁵ *(7) u*

Route changes, fuel shortages and lack of communications coordination were continuing problems for these three wings in their shuttles back and forth

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44. Msg, Comdr 354D to Comdr 2AF, ZIFPO/SECRET/OL-B-079/B-27/2AF/2BW/Reflex Action, 11 Apr 1958, on file Combat Rptng Br, Ops Div, L/O, Hq 2AF.
45. Msg, Comdr 354D to Comdr 2AF, ZIFPO/SECRET/OL-C-112/B-27/2AF/30SEW/Reflex action, 8 Apr 1958, on file Combat Rptng Br, Ops Div, L/O, Hq 2AF.
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across the Atlantic. The first two of these were generally a result of the winter weather. (S) (u)

The third forward area of Second Air Force Reflex operations during early months of 1958 was Loring Air Force Base, Maine. This phase of the operation involved continuous non-stop, non-refueled deployment and redeployment by the 44th and 321st Bomb Wings. Code named SADDLE CREEK, this mission was "to provide from each of the two wings a minimum of three combat crews and three combat equipped B-47 aircraft loaded with WR war ready weapons and nuclear capsules on one hour alert at Loring for strike against designated targets in event of the execution of the EWP." Maximum 50-8 training was also scheduled on this Reflex operation. ⁴⁶ (S) (u)

The 44th and 321st Bomb Wing's deployment days were Monday, Tuesday, and Wednesday, redeploying on Wednesday, Thursday, and Friday of each week. Planned arrival time at Loring AFB was 2000Z, departures at 1900Z. Route selections were based on RBS availability at ZI plots. ⁴⁷ (S) (u)

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- 46. OPORD 96-57, Hq 2AF, Annex C, "Loring AFB, SADDLE CREEK," 15 Nov 1957. Exhibit 1.
 - 47. Ibid., Annex C.

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On 3 February 1958, the 321st Bomb Wing reported its initial month's (January) activity as successful, with weather, maintenance, and crew morale considered major problems. This wing felt that the weather deployment problems would be alleviated by deployment of all three aircraft on Tuesday of each week. If weather delays were encountered, all three could be deployed at the first break in the weather. The 321st Wing considered that this system would eliminate one aircraft arriving on schedule at Loring while the others were delayed. Maintenance was hampered by extremely contrary weather conditions at this very northern 21 base. ⁴⁸ (S) M

The 44th Bomb Wing deployed its first B-47 on 6 January 1958; redeployment of the first six crews was made on 7 February 1958. This wing did not consider its initial REFLEX operation as very successful. The schedule of aircraft into Loring AFB was very erratic due to weather and hazardous runway landing conditions. At one time there were nine crews and eight aircraft in place at Loring against a requirement of

48. Msg, Comdr 321BW to CINCSAS, ZIFPO/SECRET/02-008/
B-27/2AF/SADDLE CREEK, 3 Feb 1958, on file Combat
Rptng Br, Ops Div, D/O, Hq 2AF.

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~~SECRET~~ FRD *m*

2AF Historical Data
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four and three. Once in place at Loring, the 44th Bomb Wing considered the alert situation as satisfactory; the nonperformance result was on 50-8 training and maintenance scheduling at the home base, Chennault. ⁴⁹ (S) *m*

This situation continued for the 44th Wing in February. The Loring commander began to execute the aircraft on deployment after 28 February, accepting operational control after take-off from Chennault, using a ceiling minimum of 500 feet and one nautical mile visibility. ⁵⁰ This improved forward control considerably. In March, this wing reported: "Reflex operations have become standardized. Deployment and redeployment in March have been normal." ⁵¹ (S) *m*

During April, 38 crews from the two SADDLE CREEK wings performed alert duty. Crews and aircraft returned to their home stations on time with the exception of those delayed by weather. ⁵² Again during May, 38 crews

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49. Msg, Comdr 806AD to CINCASAC, ZIFPG/SECRET/02-239/B-27/2AF/44BW/SADDLE CREEK, 14 Feb 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.
 50. Msg, Comdr 806AD to CINCASAC, ZIFPG/SECRET/02-293/B-27/2AF/44BW/SADDLE CREEK, 22 Feb 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.
 51. Msg, Comdr 806AD to CINCASAC, ZIFPG/SECRET/04-011/B-27/2AF/44BW/SADDLE CREEK, 10 Apr 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.
 52. Msg, Comdr 428W, Loring to Comdr 2AF, ZIFPG/CONFIDENTIAL/03-031/B-27/Reflex/SADDLE CREEK, 2 May 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.
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~~SECRET~~ FRD *m*
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2AF Historical Data
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~~SECRET/FRD~~ M

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were on alert at Loring. Test alerts at Loring during this month showed that B-47 crews could average 5.6 minutes to reach Alpha status and 11.1 minutes to reach Bravo. ⁵³ (6) M

Thus another two of Second Air Force's B-47 wings completed what might be termed their basic training in Reflex Action operations.

DOE
(6x3)

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did not, however, have the air refueling rendezvous and flight clearance problems of their Second Air Force sister wings. (~~SECRET/FRD~~) M

Problems In Control

Up to this point, planning of REFLEX has been outlined; accomplishment of the directed missions by the wings has been examined from their standpoint, and some of their problems have been discussed. Remaining at the purely operational level, in order to more fully comprehend what was entailed by the Reflex operation, it is now necessary to look at some of

53. Msg, Comdr 42BW Loring, to Comdr 2AF, ZIPRO/
CONFIDENTIAL/00-052/M-27/Reflex/SADDLE CREEK,
4 Jun 1958 on file Combat Rptng Br, Ops Div,
D/C, Hq 2AF.

~~SECRET/FRD~~ M

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~~SECRET/FRD~~ M

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Second Air Force Command problems in controlling the operation. (U)

One difficulty was caused by failure of aircrews to comply with execution orders by diverting to land at other than specified bases. In addition to being an air discipline problem, this caused an unbalanced maintenance support condition where unscheduled landings were made. This was brought to the attention of the three air divisions concerned, the 6th, 38th and 823d, on 21 March 1958 with instructions to brief their aircrews that Reflex execution orders were directive and must be complied with in detail unless safety considerations dictated a change. ⁵⁴ (9) M

Route and communications situations began to develop with the International Civil Aviation Organization (ICAO) and the Air Traffic Control Centers (ATRC). An illustration of this problem was the 306th Bomb Wing redeployment on 7 March 1958. Route selection was made on 6 March to use Peach Alpha route with take-off at 1400Z on 7 March. Four aircraft were executed to fly Peach Alpha. Two aircraft were

54. Msg, Comdr 2AF to Comdrs 6, 36, 623, DC 9560, "Compliance with Execution Orders," 21 March 1958. Exhibit 2.

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2AF Historical Data
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scheduled to go via Amber route with take-off at 1000Z on 8 March. On the 9th of March, three more 306th Bomb Wing aircraft were executed to Lajes, then to MacDill via the Amber route.

*DOE
(b)(3)*

The other aircraft were redeployed as executed. ²⁵ *(C/FRD) M*

Block altitude requested was not cancelled. Operational necessity had required one aircraft to be deleted from the block to deliver the engine to Lajes. It was intended that the other four aircraft use the reserved block. Three did, but the fourth had to ground abort due to lack of a replacement.

*DOE
(b)(3)*

aircraft had entered the Santa Maria control area. ATC filed a complaint, but this was obviously an ATC internal communications problem. Second Air Force was making every effort to notify ATC agencies of cancellations and delays affecting the block altitude

55. Msg, Comdr 2AF to CINCSAC, DOC 9784, "Route Selection," 3 Apr 1958. Exhibit 3.

~~SECRET/FRD~~ *M*
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2AF Historical Data
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reservations. Whenever this occurred, phone calls were made to Kansas City CARF and New York Gateway to advise the agency of the change. The unit initiating the change also called and cancelled with the local ATC agency. ⁵⁶ (~~SECRET~~) *u*

Incidents such as the preceding continued to hamper Reflex operations. They also called attention to a communications problem within SAC itself, the ban on use of high frequency position reporting. Lack of adequate position reports created an unacceptable burden on the ICAC centers. As a result, the capability of obtaining altitude reservations for Reflex aircraft was jeopardized since these reservations were extremely wasteful of airspace and became further aggravated when the centers were not kept informed by position reports. ⁵⁷ (~~SECRET~~) *u*

On 14 July 1958, Second Air Force requested permission from SAC to reinstate use of high frequency position reporting. Factors underlying the request were carefully outlined: ⁵⁸

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56. Ibid.
57. Msg, Comdr 2AF to CINCSAC, DC 11415, "High Frequency Reporting," 14 Jul 1958. Exhibit 4.
58. Ibid. An example of Civil Air Traffic: Pan American Airways has five Boeing 707 flights daily to Paris; six 707's weekly to London. (Time, 16 Mar 1959, p. 19)
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2AF Historical Data
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The ever increasing frequency of BOAC comet flights is already complicating the altitude reservation problem and the forthcoming inauguration of jet service by U.S. Air carriers will undoubtedly make the problem more acute.

The use of altitude reservation actually saturates three times the airspace that would be required for any given flight utilizing standard ARTC separation. The factors dictating this waste of airspace are, first the fact that an airplane can be as much as one hour ahead or one hour behind its ETA without the knowledge of ARTC, which utilizes a two hour block of airspace. Secondly ICAO aircraft separation standards prescribe that there will be at least 30 minutes separation ahead of and behind the aircraft. These factors when added together dictate the reservation of a block of airspace at least three hours or 1275 NM long and 120 miles wide when the altitude reservation system is utilized. If aircraft were cleared under standard clearance criteria only one hour (30 minutes ahead and 30 minutes behind) would be blocked over a given fix which would net a 2 hour saving over the system currently in use. The ICAO centers are unable to reduce this airspace misuse as long as the SAC position on High Frequency reporting is maintained. If the use of High Frequency reporting is reinstated the Oceanic Centers will be able to reduce the airspace utilized to that presently utilized under standard clearance criteria, namely 30 minutes ahead and 30 minutes behind the aircraft. *jsm*

In justifying need for reinstatement of authorized high frequency position reporting for REFLEX aircraft operating on altitude reservation Second Air Force emphasized the following points:

59. Ibid.

~~SECRET/FRD~~ *M*
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2AF Historical Data
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1. Gander, Moncton and Prestwick ICAO centers will unquestionably be forced to refuse to approve reservations in the near future for Reflex Action aircraft due to the unreasonable use of airspace by altitude reservations coupled with the small number of aircraft utilizing the airspace. It is the position of Second Air Force that aircraft must be provided with altitude reservations since fuel reserves in a large number of cases will not permit any deviations from optimum altitude which may be dictated by clearances received if flights are conducted on an individual clearance basis.

2. The receipt of regular position reports by High Frequency radio through ICAO Air/Ground radio stations will enable the centers to continually pinpoint the progress of Reflex Action aircraft and thus enable them to eliminate the extravagant cushions necessitated by the uncertainty of the aircraft location on the part of the ARTC agencies since aircraft currently may be an hour early or late without advising the ICAC center. This will reduce the airspace requirement from a three hour to a one hour block.

3. This system will provide altitude reservation privileges for Reflex Action aircraft without the unnecessary waste of airspace otherwise incurred.

4. The number of ARTC violations processed by Control Agencies resulting from reporting discrepancies will be substantially reduced. This command has received one formal violation and numerous complaints directly attributable to this procedure.

5. Security will not be jeopardized in that Reflex Action movements are now made on a daily basis and all Reflex Action aircraft move under special route call signs not associated with the unit tactical call sign.

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6. The restriction on High Frequency position reporting as they pertained to large scale USCM, etc., is not disputed. (S) u

On 25 November 1958, SAC authorized high frequency position reporting on all Reflex aircraft movements regardless of type of flight plan filed. In addition, SAC took exception to other procedures used by the ICAO centers and requested USAF assistance:

During July 1957, we initiated our "Reflex" operation over standard routes on an air-line type schedule across the Atlantic Ocean. [

Air Traffic control procedures in ICAO areas were not completely compatible with our operations at the start and within the past six months period have become acute.]

Present ICAO operating procedures and communications systems will only accommodate a limited number of aircraft. Our "Reflex" operation was the first continuous extensive jet operation in the North Atlantic area. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

60. Ltr, Maj. Gen. James V. Edmundson, D/O SAC, to Maj. Gen. John P. McConnell, Comdr 2AF, [Air Traffic Clearance Procedures], 25 Nov 1958. Exhibit 5.
61. Ltr, Gen. Thomas S. Power, CINCSAC, to Lt. Gen. Dean C. Strother, Dep Ch/S, Operations, Hq USAF, "[Air Traffic Control Procedures]," Exhibit 6. (This letter outlines needed changes in standard procedures).

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2AF Historical Data
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Air Force (b)(3)
42 USC sec. 2168
~~(2)(1)(c)(FRD)~~

[One problem which stands out in particular is the lack of standard operating procedures. Each ICAO agency can change procedures within its area of responsibility merely by filing an exception to the normal procedure. This complicates the picture for crews flying in different ICAO areas inasmuch as separate directives and procedures apply for each area. The primary difficulties and procedures apply for each area. The primary difficulties are being experienced in the Goose-Gander/Prestwick Shannon ICAO areas. ~~(S)FRD~~ M

In his request, General Power pointed out that a 4,000 foot altitude separation for aircraft operating in the North Atlantic area caused a shortage of air space with the result that many Reflex aircraft altitude assignments were incompatible with fuel reserves. The incompatibility forced landings at alternate bases. This disrupted REFLEX scheduling and increased ground staging support requirements. Another difficulty developed in June 1958, when single heading and single drift navigation techniques were blocked by Gander and Prestwick ICAO centers directing that all flight plans be filed to cross each 10 degrees of longitude at a whole degree of latitude. This resulted in an increase in overall distances and required frequent enroute heading changes. ⁶² M

62. Ibid.

~~SECRET/FRD~~
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He also emphasized that communications between ICAO centers were unreliable and Reflex aircraft were often operating in an ICAO area while the controlling agency was unaware of their presence. By taking exception to their own agency's standard loss of communications procedures, Gander and Prestwick ruled that aircraft would maintain the latest assigned altitude or the minimum safe altitude, whichever was higher; since this was generally unworkable in jet operations, many Reflex aircraft were forced to declare an emergency and climb to higher altitudes. ⁶³ (U)

General Power made it clear that SAC was dissatisfied with the results of ICAO response to requests for resolution of these problems. For that reason, he was requesting Air Staff to render assistance in improving North Atlantic ICAO communications, standardizing procedures and emphasizing to this agency the optimum altitude characteristics of jet aircraft. ⁶⁴ (U)

Another troublesome area, to Second Air Force, at mid-1958, was the "considerable confusion" existing in UK Reflex deployment and redeployment movements

63. Ibid.
64. Ibid.

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2AF Historical Data
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because lateral headquarters, Eighth Air Force and 7th Air Division, did not operate on the same set of ground rules. Numerous delays resulted from Eighth Air Force failure to provide tanker support the day after a flight delay due to weather or other causes. Eighth Air Force had also denied Second Air Force the option of staging through other bases when weather or fuel reserves made Loring Air Force Base undesirable.

65

(S) M

There was also another area of disagreement. Seventh Air Division, during the spring, established a policy which required a test flight for Reflex aircraft which had not flown for 18 consecutive days.

~~Air Force (b)(3)~~
42 USC sec. 2168
(a)(1)(c)(FRD)

It was felt by that unit that a material failure under lightweight conditions could be detected in the test flight and a possible accident avoided. Second Air Force did not consider this a valid requirement under current regulations.

66

(S) (FRD) M

- 65. Msg, Comdr 2AF to Comdrs 8 and 15AF, Info CINCSAC, DO 9741, "Reflex Action to the United Kingdom," 1 Apr 1958. Exhibit 7.
- 66. Hist 7th Air Div, Jan-Jun 1958, Vol.1, p. 150, in archives, Hist Div, OI, Hq 2AF; Msg, Comdr 2AF to Comdrs 8 and 15AF, Info CINCSAC, DO 9741, "Reflex Action to the United Kingdom," 1 Apr 1958, Exhibit 7.

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The foregoing problems, refueling support, staging bases and the test flight requirement, will be examined again later in this narrative. (U)

[Air Force (b)(3) 42 USC sec. 2168 (a)(1)(c)(FRD)	:] ⁶⁷	(SIFRD) M
<u>Base</u>	<u>No. of B-47's</u>	<u>Unit</u>	

DDE
(b)(3)

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Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

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67. Operations Order 96-58, "Reflex Action," Hq 2AF, 20 May 1958, Annex A., in archives Hist Div, OI, Hq 2AF.

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Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

[] Routes and training requirements

basically were unchanged from the 1 January 1958 plan;
some additional routes had been added as the number
and location of the forward area bases changed. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] 68

~~(S)(FRD)~~
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DDE
(b)(3)

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In order to ameliorate the ARTC clearance problem
an altitude Reservation Request Manual was distributed
to all participating units and ARTC Centers. This
manual contained complete route clearance request for
all Reflex routes and became effective 1 July 1958.
Headquarters Second Air Force continued to coordinate
block clearances with the ARTC agencies. Route selec-
tions, covering one week's deployment/redeployment,

68. Ibid.
69. Ibid.

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primary and alternate routes, were made at 2400Z on Saturdays, nine days preceding the effected week. Final route selection was made approximately 24 hours prior to scheduled launch time. On receipt of this selection, units were required to cancel any routes not to be flown, as well as make any adjustments in take-off time required by forecast winds for the date of the mission. This information was to be furnished directly to the local ARTC agency.

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

]70 ~~SECRET~~ u

With minor changes to meet fluctuating situations, the trans-Atlantic shuttle of Second Air Force B-47's continued through the end of 1958. Second Air Force Operations Order 96-58 guided these operations and was effective from 1 July 1958 through 31 December 1958. An in-place capability had to be maintained at all times. Reflex operations had third priority for use of airspace, tanker aircraft, and base facilities. Only SAC directed large scale exercises and SAC directed wing strength overseas movements had higher priorities.

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(S)

70. Ibid.
71. Air Operations Schedule (Peacetime-Tentative), Hq 2AF, FY 1959, 1 Jun 1958, SECRET, in archives Hist Div, OI, Hq 2AF.

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On 5 November 1958, Second Air Force was able to report to SAC that the mission of "deploying and redeploying three aircraft weekly from its involved units to forward bases had been executed as directed during the period 4 August through 4 October 1958." These ocean crossings were mostly hard altitude assignments due to clearance problems resulting in less than predicted fuel reserve at destination. Assistance was requested from SAC in obtaining climbing flight path over-water clearances. Tanker support continued to be a problem in the Northeast area. ⁷² (S) u

On 25 November 1958, Second Air Force was advised that a series of steps had been taken to bring air traffic clearance procedures in the North Atlantic ICAO area more into line with Reflex operations. ⁷³ (U)

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(b)(3)

72. Msg, Comdr 2AF to CINCSAC, ZIPPO/SECRET/11-116/M-28/96-58/2AF/Reflex Action/4 Aug - 4 Oct 58/; 5 Nov 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.
73. Ltr, Maj. Gen. James V. Edmundson, D/O SAC, to Maj. Gen. John P. McConnell, Comdr 2AF, "Air Traffic Clearance Procedures", 25 Nov 1958. Exhibit 5.

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2AF Historical Data
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44

SAC was advised by USAF that this was being initiated and there was hope that the circuit could be activated at least during the redeployment time period even though SAC would probably have to provide the necessary funds. ⁷⁴ (S) M

Also high frequency position reporting on all Reflex aircraft movements was authorized. [The 7th Air

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(b)(3)

] SAC also advised that in January 1959, KC-135's would be used for practically all redeployment refueling. ⁷⁵ (S) M

At this time also, Eighth Air Force and SAC were investigating the problem of inadequate tanker support. Second Air Force was notified of the results of these investigations on 24 December 1958. It was indicated that approximately nine per cent of the Reflex tanker sorties were ineffective, disregarding weather and receiver deviations. It was also found, however, that

74. Ibid.
75. Ibid.

~~SECRET/FRD~~

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~~SECRET~~ M

2AF Historical Data
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Eighth Air Force had approximately four percent more effective tankers than did units of the Second Air Force.

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~~SECRET~~ M

Support

To sustain the rotation of its Reflex aircraft and crews, Second Air Force had to furnish personnel and materiel augmentation to the forward bases. Additional adjustment had to be made at the home bases to prepare the B-47's for deployment and to meet training operational maintenance requirements without any increase in personnel.

77

DOE (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

- 76. Ltr, Maj. Gen. James V. Edmundson, D/O SAC, to Maj. Gen. John P. McConnell, Comdr 2AF, "Reflex Tanker Support J," 24 Dec 1958. Exhibit 8.
- 77. For personnel breakdown by grade, forward base and AFSC, see Exhibit 9.

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ZAF Historical Data
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DOE (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] 78 The

success of the rotational missions during 1958 was a
tribute to the loyalty and effectiveness of the Second
Air Force maintenance teams. ~~(S)(FRD)~~ M

Maintenance responsibility for Reflex was divided.
The forward base maintenance sections (60-day temporary
duty augmentation packages) were responsible for ser-
vicing and unscheduled maintenance. The home base of
the aircraft was charged with all post-flight, periodic
inspections and other scheduled maintenance or modifi-
cations. Immediate action technical orders were
accomplished at the base where the aircraft were
physically located on receipt of the order. 79 M

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Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

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78.

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(b)(3)

79. OPRD 96-58, Hq ZAF, Annex D, 20 May 1958, p. 14,
in archives Hist Div, OI, Hq ZAF.

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2AF Historical Data
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⁸⁰ ~~(S)FRD~~

Enroute maintenance stops at any station west of 25° longitude were supported by the home base; landings east of 25° longitude were as directed by the Sixteenth Air Force or 7th Air Division. Enroute staging teams were positioned by Second Air Force at Kindley, Lajes and Loring AFB. ⁸¹ *(u) u*

Complete squadron flyaway kits, less engines, were deployed to each forward location, except Lajes and Kindley. Only the pre- and post- strike portions of the kits were positioned at the latter enroute bases. ⁸² *(u) u*

80. Ibid., p. 15.
81. Ibid., pp. 18-19.
82. Ibid., pp. 18-19.

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2AF Historical Data
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Each participating wing deployed four inboard and two outboard J-47 power packs. Lajes and Kindley power packs consisted of a new and an old 40-KVA outboard, one 20-KVA outboard, one hydraulic and one non-hydraulic inboard. Resupply of these power packs was to be accomplished by shipment of built-up power packs from the home stations on a one-for-one basis using either MATS or Second Air Force carrier resources. No report of any delay in this re-supply was received.

83

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Bench stocks and pre-issue items which could not be supplied from the deployed flyaway kit were made up by the forward area base supply to the degree possible. The balance of these items was then made up by the home base. Tools and equipment were deployed by the B-47 wings; this included armament and electronics bench sets and test equipment.

84

During the latter half of 1958, after skill and ~~experience had overcome the routine types of main-~~tenance and materiel problems, a few areas remained

83. Ibid., pp. 18-19.
84. Ibid., pp. 18-19.

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~~SECRET/FRD~~ *m*

2AF Historical Data
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49

which required special attention. These were maintenance of booster pumps, radar and gunnery systems, and the continuity of maintenance. *lot m*

*Doc
(6/3)*

A retrofit program was established by SAC in early September 1958 to replace all main tank booster pumps with a greatly improved pump. If this modification proved successful, it was planned to modify and retrofit all B-17 type pumps installed in auxiliary tanks.

27 October,

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(6/3)*

SAC advised that OCAMA had a sufficient quantity of these pumps to bring the FAK up to the authorized allowance. Bases submitted requisitions on or about 28 October. *lot m*

The 38th Air Division, with its wings reflexing to the United Kingdom, placed emphasis on radar and gunnery systems.

*Doc
(6/3)*

85. Msg, Comdr 2AF to CINCOSAC Offutt, ZIP:G/ 11-116/ M-28/96-58/2AF/REFLEX ACTION/4 Aug-4 Oct 58, 5 Nov 1958. Exhibit 11; DF, D/M to I/O, Hq 2AF "Commander's Report, Reflex Action," 31 Oct 1958. Exhibit 12.

~~SECRET/FRD~~ *m*

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2AF Historical Data
July - December 1958

50

At the home base position, the 305th Bomb Wing had recommended that no aircraft written up as "Radar-non recommended for record bombing" be sent on REFLEX. As Second Air Force could not isolate aircraft under these conditions, the 6th Air Division was advised that all aircraft must be maintained equally and that identification of specific aircraft for specific missions could not be condoned. ⁸⁶

DB E
(b) 3

(S) M

Due to the 60-day rotation of personnel, some continuity of maintenance was lost. SAC approved 7th Air Division warning documents for support of REFLEX in the JK on a permanent change of station basis and steps were taken to have these personnel in place at the earliest practical date, but not later than 1 April 1959. ⁸⁷

(S) M

Each wing and forward base area involved in REFLEX was requested to furnish data for a comparison of maintenance aborts versus B-47 ground time. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

]

It was found that the median time on the ground was

86. See note above.
87. See note above.

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2AF Historical Data
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51

5.8 days. The average abort rate for the group of aircraft having ground times longer than this was 9.2 per cent. Those having less time had a rate of 10.7 per cent. During operation TRYOUT the abort rate had been 11 per cent for B-47's that had served from four to 11 days on alert. ⁸⁸ (S/FRD) u

Later in the year (20 November 1958) an analysis was made to determine if there were any other indications of maintenance quality other than the simple record of whether or not a maintenance abort had occurred. A comparison was made between overseas and 2I launches but Operations Analysis felt that the validity of this suffered from a lack of data from forward bases on overseas launches. As a result of a study of 695 sorties, the abort rate showed up lowest for group launched during the second and third weeks on the ground. The relatively small sample (14 sorties) launched during the fourth week on the ground showed a rather high abort rate of 21.4 per cent. The average for the 695 sorties was 11.1 per cent. ⁸⁹ (S/FRD) u

88. Memo for Record, O/A, Hq 2AF, "Interim Report of Maintenance Aborts Vs. B-47 Ground Time," 17 Sep 1958. Exhibit 13.

89. Ibid.

~~SECRET/FRD~~ u

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~~SECRET~~ M
2AF Historical Data
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52

During the April-August 1958 period another possible indication of maintenance quality was the percentage of actual plus potential aborts. A potential abort was defined as aircraft upon which major maintenance had been performed during the ground time and presumably, would have been an abort if the trouble had not been corrected. This could be considered as an indication of the abort rate to be expected if major maintenance capability did not exist at the launch base. In 551 REFLEX ZI launches there was an actual abort rate of 11.2 per cent, a potential rate of 5.1 per cent, combined 16.3 per cent.

90

~~SECRET~~ M

DOE
(b)(3)

The aircraft quality generated by the frequent inspections and the high percentage requiring major maintenance resulted in a low maintenance abort rate at launch. The analysis concluded

90. Memo for Record, O/A, Hq 2AF, "Second Interim Report of Maintenance Aborts vs. B-47 Ground Time," 20 Nov 1958. Exhibit 14.

~~SECRET~~ FRD M
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2AF Historical Data
July - December 1958

53

that there was not an apparent change in the rate with
ground time on ZI launches. [

DOE (b)(3)
42 USC sec. 2168.
(a)(1)(c)(FRD)

.] ⁹¹ *u* (S/FRD)

Forward Base Posture

DOE
(b)(3)

92

u

Staff visits and inspections of the REFLEX operation at the forward bases indicated great improvement in all areas. Facilities were better, morale had improved and more experienced supervision resulted in a more effective operation. (U)

91. ibid.

92. Operations Order 96-58, "Reflex Action," Hq 2AF, 20 May 1958, in archives, Hist Div, GI, Hq 2AF.

~~SECRET/FRD~~ *u*
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2AF Historical Data
July - December 1958

54

[

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Doc
(b) 3

.] Six B-47 aircraft and

nine three man crews were in position there from the 2d Bomb Wing and six B-47 ECM aircraft and nine five man ECM crews were on alert from the 301st Bomb Wing. At this base, reception of REFLEX crews was very effective. On landing, incoming crews were met by the staff and old REFLEX crews and immediately downloaded and transported to the customs and debriefing sections. The debriefings were conducted expeditiously with all concerned agencies available to receive the necessary information and forms. Facilities were available for money exchange; combat rations and medical supplies were issued as needed. A comprehensive indoctrination was later given by the Deputy REFLEX Commander.

93

(S) (FRD)
u Doc (b) 3

[

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

.] The

Doc (b) 3

93.

~~SECRET~~/FRD *u*
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~~SECRET/FRD~~ u

2AF Historical Data
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55

maintenance structure at this base was composed of personnel from the 3920th Air Base Group, 2d Bomb Wing, 301st Bomb Wing and 7th Air Division.

⁹⁴ (S/FRD) u

[Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)] after removing

camera magazines, chaff dispenser side panels and ammunition cans and installing loaded camera magazines, an after-flight inspection was performed and all maintenance was accomplished which would debar refueling. The aircraft was then loaded to capacity with JP-4 fuel and any additional unscheduled maintenance was then performed. ATO racks and bottles were loaded. Training ammunition and chaff were removed and the pre-loaded combat items were installed.

[

D.E (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] ⁹⁵ (S/FRD) u

94. Ibid.
95. History, 7th Air Division, Jan-Jun 1958, Vol. I, p. 146, in archives, Hist Div, OT, Hq 2AF.

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~~SECRET/FRD~~ *m*

2AF Historical Data
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56

[

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] During the period 10 April to 26 June the average time was 12.44 hours; from 3 July to 1 October the time had increased to 14.89 hours. During the latter period, the 301st Bomb Wing time averaged 13.5 hours.

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] ⁹⁶ ~~(S/FRD)~~ *m*

[

DoE (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] The

lowest single aircraft time at this station during the period had been two hours and 50 minutes. ⁹⁷

~~(S)~~ *m*

The Second Air Force Inspector reported,

96. Ibid., p. 146.
97.

DoE
(b)(3)

~~SECRET/FRD~~ *m*
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~~SECRET/FRD~~ u

2AF Historical Data
July - December 1958

57

on 28 October 1958, that morale of crews at this station was the highest observed during the past two years. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

98] Maintenance, supply support and flight line conditions were considered to be very satisfactory. (S/FRD) u

(U)

DOE
(b)(3)

It was operated by the

98. Ibid.

~~SECRET/FRD~~ u
UNCLASSIFIED

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2AF Historical Data
July - December 1958

56

3973d Air Base Group. A new 11,600 foot runway had been constructed at this facility. (U)

Air Force (b)(3)
42 USC sec. 2168.
(a)(1)(c)(FRD)

Base support was generally excellent. The quarters, food, recreation and off duty interests were above Second Air Force average.

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Maintenance personnel were doing an excellent job although there was a lack of proper consolidation with the overall base maintenance program. The temporary duty REFLEX Commander was maintaining an organizational and functional capability similar to that of early SAC wing deployments rather than the integrated force directed by 96-58 operational orders. This left the regular base maintenance structure out of the picture.

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Another

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~~SECRET/FRD~~ *u*

2AF Historical Data
July - December 1956

55

result was a mild misunderstanding between base activities and other than REFLEX tenants as to the need for all the emphasis on crew comfort.

99

(S/FRD) *u*

on. 100 The

DOE
(b)(3)

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

8. 101

(S/FRD) *u*

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Launch time criteria could have been met except for southerly take-offs.

Air Force (b)(3)
42-USC sec. 2168
(a)(1)(c)(FRD)

] AACP/ANFE

rates were zero and no downtime was recorded for

99.

100.

101.

DOE
(b)(3)

~~SECRET/FRD~~ *u*
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2AF Historical Data
July - December 1958

60

armament and electronic maintenances.

102

DoE
(b)(3)

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

[
] Overall

condition of aircraft on arrival was excellent.

[

DoE (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] 103
(S)(FRD) u

HOME STATION ALERT

The other face of Second Air Force's B-47 alert picture was the home station alert. The SAC Planning Factors Manual on Alert defined REFLEX ACTION as a method of maintaining a bomber/tanker alert force in the Zone of Interior or oversea area. During the period 1 July 1958 through 30 June 1960, the launch timing requirement for both alert force B-47 and tanker aircraft was finely drawn. First aircraft were to be airborne within 20 minutes after receipt of the execution message, with subsequent aircraft following

102.

DoE
(b)(3)

103.

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2AF Historical Data
July - December 1958

61

at one minute intervals. Bombers on alert were to launch direct to target without planned pre-strike operations. Some bombers were planned for non-stop unrefueled strikes while others had air refuelings. ¹⁰⁴ (8)

Each REFLEX B-47 wing of Second Air Force was expected to maintain one/two aircraft on home station alert beginning 1 July 1958. However, assumption of this posture was delayed until 1 September for various reasons, principally the full SAC alert occasioned by the Lebanon crisis in July 1958. ¹⁰⁵ (9) On 31

December, the home station alert line was as follows:
305th Bomb Wing, one B-47E, 744 hours; 306th Bomb Wing, one B-47E, 744 hours; 308th Bomb Wing, two B-47E's, 1488 hours; 321st Bomb Wing, one B-47B, 744 hours; and 384th Bomb Wing, two B-47E's, 1488 hours. As required by the SAC EWO 50-59, the home station alert force was maintained 24 hours a day, seven days a week. ~~One completely combat configured aircraft and one combat ready, lead or select crew was maintained on alert status for certain designated targets.~~ ¹⁰⁶ (9) M

104. SACM 27-1, Hq SAC, "Planning Factors Manual on Alert," Aug 1958. (SRD)

105. Interview MSgt J.V. LeBlanc, Historian, with Lt.Col. J.M. Werner, Combat Operations, Ops Div, E/C, Hq 2AF and Maj. Wm. J. Rakel, Combat Operations, Ops Div, D/C, Hq 2AF, 13 Apr 1958.

106. Report, Weekly Combat Capability Report for B-47 Bomb Wings, (2-SAC-VI), Hq 2AF, as of 31 Dec 1958, on file E/Comptroller, Hq 2AF.

~~SECRET/FRD~~

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2AF Historical Data
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62

With the reorganization of bases and wings under the deputy commander concept, the responsibility for furnishing aircrews for the alert was rotated among the four tactical squadrons. A typical B-47 wing, the 2d Bomb Wing, conformed to the alert requirement in the following method. Basically this system, with minor variations to suit local conditions, was followed throughout the B-47 force. ¹⁰⁷ (U)

Four tactical squadrons, the 20th, 49th, 96th and 429th Bomb Squadrons rotated alert responsibility on a weekly basis. The commander of the squadron on alert was designated as the "Alert Force Commander" and his squadron was the duty squadron. ¹⁰⁸ M

The duty squadron rotation started on Monday, 29 September, with the 429th followed by the other three squadrons with a new crew coming on alert every Monday at 0730 hours. The duty squadron was also required to furnish three primary and one airspare crews for the REFLEX deployment on Tuesday of their

107. Reports, Weekly Combat Capability Report for B-47 Bomb Wings (2-SAC-VI), Hq 2AF, as of 30 September, 31 October, 30 November, and 31 December 1958, on file D/Comptroller, Hq 2AF.
108. Manual, 2d Bombardment Wing Alert Force SOP's, Hq 2d BW, 1 Oct 1958, Alert SOP No. 2, "Scheduling Of Alert and Reflex Crews," Hq 2d Bomb Wing, in History, 2d Bomb Wing, Oct 1958, Exhibit 26.

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~~SECRET/FRD~~ M

2AF Historical Data
July - December 1958

63

duty week. ¹⁰⁹ (S) M

Alert aircrews were changed three times each week. Tours of duty began on Monday, Thursday and Saturday. Typical daily schedules were as follows:

110 (S) M

Monday and Saturday

0730-0800 Briefing in squadron briefing room
0800-0830 Draw SACM 100-1, KAC-1 and KAC-72
and weapons
0830-1000 Preflight aircraft
1000- Change-over at the aircraft, old
and new crew

Tuesday, Wednesday and Friday

0730-0800 Briefing in squadron briefing room
0830-1000 Preflight aircraft
Thursday (aircraft change-over day)
0700-0730 Draw personal equipment, rations,
etc., for incoming aircraft
0730-0900 Complete preflight of incoming aircraft
1000-1030 Briefing in squadron briefing room
1045-1145 Weapons acceptance check, towing
and cocking

109. Ibid., SOP No. 2.

110. Ibid., SOP No. 3, "Crew Schedule and Procedures."

~~SECRET/FRD~~ M
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~~SECRET/FRD~~ M

ZAF Historical Data
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64

1145-1200 Old crew uncocks outgoing aircraft
and removes EWP materials.
1200- Change-over at the aircraft, old
and new crews

Sunday

0930-110 Briefing in squadron

1000-1130 Preflight aircraft (S) M

On aircraft change-over days, if maintenance
difficulties precluded the new aircraft from being
put into the alert line as scheduled, the new aircrew

preflighted and accepted the old aircraft thus
relieving the old crew of alert responsibility. 111 (S) M

Alert crews were required to keep the command
post notified of their location at all times. Prior
to leaving one location, crews had to call, giving
their next destination, and on arrival were again
required to call and give the telephone number of
the location. No facility was visited unless a klaxon
horn was installed. Alert aircrews had complete
freedom of movement around the base providing a
klaxon horn was in the immediate vicinity of their
location; these horns were installed at 27 locations,

111. Ibid., SOP No. 3.

~~SECRET/FRD~~ M
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~~SECRET/FRD~~ M

2AF Historical Data
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65

for example, in the Officers Club, NCO Club, theatre,
mess hall, alert barracks, swimming pool. ¹¹² (S) M

Government transportation was furnished the
home station alert crews. In the event of expansion
of the alert force by a SAC Alert, crews alerted by
the subsequent generation of aircraft were allowed
to use one private vehicle per crew for the duration
of the SAC Alert. ¹¹³ (S) M

Before placing an aircraft into the alert status,
a complete interior and exterior preflight inspection
was accomplished as outlined in the flight manual.

Daily preflights were then performed by the alert
crew. If maintenance was required on an alert air-
craft, the flight crews uncocked the aircraft and
notified the command post. After maintenance was
completed and inspected by the alert crew, the command
post was again notified. The established schedules
for aircraft change-over allowed the flight crews one
and one-half hours of uninterrupted preflight time
prior to the loading of the weapon, AFO, ammunition
and other cocked requirements. ¹¹⁴ (S) M

112. Ibid., SOP No. 3.

113. Ibid., SOP No. 4.

114. Ibid., SOP No. 11, "Maintenance Alert Aircraft."

~~SECRET/FRD~~ M
UNCLASSIFIED

ZAF Historical Data
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66

To meet the existing generation rates, maintenance was required to keep one completely combat configured aircraft on the line at all times. In the event of maintenance difficulties on the primary alert aircraft, the maintenance alert aircraft was preflighted and accepted by the alert crew. The maintenance alert aircraft remained on the line for one week at a time. It was preflighted twice weekly, once on Monday and again on Thursday. Non-combat ready crews were used in some instances to perform this preflight for practice under the EMP configuration, provided they were under the supervision of a fully qualified combat ready crew member. Standard fuel weights for alert aircraft were established as follows: 51-52 models, 112,395 pounds and 53 models, 112,395 differing principally in distribution in the forward and aft main tanks. ¹¹⁵ *(S)u*

The Command Post was the primary alerting agency upon notice of an alert, actual or practice. On receipt of alert notice, crews proceeded directly to their aircraft and accomplished the alert scramble check on arrival. When flight crew arrived before

115. Ibid., SOP No. 11, "Maintenance Alert Aircraft."

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~~SECRET~~ FRD *u*

2AF Historical Data
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87

the ground crew, they started the power unit to warm up the radios, provided the navigators had a valid permit to operate the MD-3 power plant. Engines were not started until the ground crew arrived and announced "Ready on 4". The navigator stayed on the ground until the type of alert was verified. Safing wires and manual lock pins could be removed only on an actual "Positive Control" launch. ¹¹⁶ *(S) u*

Specific types of alert were as follows: Alfa, Bravo, Coco, Romeo and EWO launch. When ready to start engines on ALEA, the command post was contacted and notified "(Nickname) Ready". The crew then remained on command post frequency until termination of alert. In a BRAVO alert, engines were started and the command post was notified "Ready to taxi." In the COCO alert, crews proceeded as in BRAVO, notifying the command post "Taxiing" and changing ~~over to tower frequency calling "(Nickname) Taxiing."~~ The tower announced runway direction, altimeter ~~setting and winds every two minutes.~~ The aircraft was taxied on to the runway, held brakes, applied

116. Ibid., SOP No. 14, "Alert Notification and Launch Procedures."

~~SECRET~~ FRD *u*
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~~SECRET~~/FRD u

2AF Historical Data
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take-off power, cut in water, reduced power and taxied back to the parking area. For the ROMEO alert, crews proceeded as for a COCO alert except that take-off was to be completed and the Battle Cry mission flown. The take-off time was Klaxon time plus 20 minutes, or sooner, if conditions permitted. In the actual EWO launch, crews were scheduled to proceed as in the Romeo alert except that the EWO routes were flown. ¹¹⁷ (6) u

~~TANKER SUPPORT IN REFLEX OPERATIONS~~

Because of the fact that modern day military strategic aircraft require extensive aerial in-flight refueling in order to reach their targets, the total operation becomes dependent upon a critically linked chain of events involving (1) the availability of aerial tanker bases -- both within the continental United States and overseas - all of which are subject to the same manner of obliteration and the need for discouragingly quick response times that apply to the regular bomber force; as a matter of fact, this could be the major weak link in the chain; (2) a critically programmed and extremely complicated requirement for rendezvous meetings between the surviving bomber and tanker forces at the right time and at the right place and with the right amount of fuel available. 115 (U)

117. Ibid., SOP No. 14, "Alert Notification and Launch Procedures."

118. Extract fr Ltr by Mr. John W. Darley, Jr., Ltr,

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~~SECRET/FRD~~ *m*

2AF Historical Data
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KC-97 tanker support operations for REFLEX aircraft deploying and redeploying to forward bases emphasized the critical rendezvous problems of air refueling. To support the REFLEX bomber force two methods of refueling operation were employed. Yo-Yo refueling required launch of the tanker, rendezvous, off-load, and return to the launch base. Leap Frog refueling called for home base launch of the tankers, rendezvous, refueling enroute and landing at a forward base. Yo-Yo operations then continued from the forward base. ¹¹⁹ *(m)*

On deployment, two air refueling areas, Salt Spray and Sandy Beach, were serviced by the 303d Air Refueling Squadron, with a 40% off-load requirement. Estimated arrival times (ETA) for rendezvous

DOE
(6 (3))

118. (cont'd) Operational Analysis Section of General Electric Co.'s Aircraft Nuclear Propulsion Dept, to the President of the United States on 14 Jan 1959. Reprinted on p. 67, 16 Mar 1959 issue of Aviation Week magazine.
119. SACM 27-1, Planning Factors Manual on Alert, Hq SAC, Aug 1958, "Operational Concepts," p. 15, in archives Hist Div, OI, Hq 2AF.

~~SECRET/FRD~~
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~~SECRET/FRD~~ M

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DOE
(b)(3)

Kindley Air Force Base was used for missed
air refueling alternate in the 303d Air Refueling
Squadron areas and Loring Air Force Base, for the Dow
Air Force Base areas. ¹²⁰ (S) M

Redeployment air refueling was somewhat more
complicated, involving some nine air refueling areas
and Second Air Force rotational tanker units. In
the Lajes refueling area, with the exception of
Island Maid, the off-load requirement was 40M. The
Goose Air Base area varied from 26M to 50M.

61 (S) M

DOE
(b)(3)

. These aircraft were on call,

120. Operations Order 96-58, "Reflex Action," Hq 2AF,
20 May 1958, in archives Hist Div, OI, Hq 2AF.
121. Ibid.

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capable of becoming airborne within 30 minutes. The 303d was also required to provide one KC-97 on strip alert for emergency air refueling during B-47 deployment into ground staging at Kindley AFB and during periods of over-flight and ground staging on redeployment. ¹²² An interesting sidelight on the strip alert tankers was that during the 1 January - 30 June 1958 period, the maximum dollar value creditable to strip alert scrambles was \$130,000 compared to the estimated cost of \$3 million to provide this service. ¹²³ (S)M

In the NEAC air refueling areas, weather scouts were provided by the air refueling squadron responsible for refueling support. In the Kindley areas on deployment, each bomb wing furnished a B-47 modified weather scout on an "as needed" basis. Weather scouts reconnoitred enroute to the air refueling area and provided coverage for a four-hour period prior to scheduled refueling. A KC-97 scout for the Lajes refueling areas was furnished by the Lajes rotational air refueling

122. Ibid.

123. Memo for Record, Mr. E.O. Berdahl, Chief, Office of Operations Analysis, Hq 2AF, "Trip Report: Headquarters SAC, 30 June-2 July 1958," n.d. Exhibit 21.

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2AF Historical Data
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squadron. 124 (S) M

During the winter months, it was immediately apparent that a non-stop air refueling route was practically a necessity for deployment. 125 At the end of January, the 38th Air Division considered support from the sorties launched by the 4060th Air Refueling Wing in the NEAC areas as satisfactory but their launch ability during the winter was inadequate. 126 The critical weather and time factors in Atlantic air refueling was illustrated by the 6 March problem

encountered by the 379th Bomb Wing. Refueling was scheduled for the Island Maid area at 1552Z. First indications that the refueling was not accomplished were the landing reports from Lajes with no comment as to the reason for landing. Interrogation of crews, on their return to Homestead Air Force Base, revealed that air refueling had been cancelled because Lajes received a weather ship report that the weather was unsuitable for refueling operations. The aircrews

124. OPRD 96-58, "Reflex Action," Hq 2AF, 20 May 1958, in archives, Hist Div, OI, Hq 2AF.

125. Ibid.

126. Msg, Comdr 38AD to Comdr 2AF, ZIPPO/SECRET/01-C-152/S-27/2AF/306EW/Reflex Action, 29 Jan 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.

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~~SECRET~~ M
2AF Historical Data
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reported that the refueling area weather was clear with unlimited visibility. Due to crew rest requirements, the conflicting reports were not reconciled. ¹²⁷ (S)M

As the weather improved in the NEAC area, resulting improvement in wing launch schedules bettered the entire REFLEX operation. Aircraft commanders of deploying aircraft in the Fighting Fox area reported that common discrepancies existed with tanker aircraft, for example, faulty director lights, hydraulic leaks and boom malfunctions. ¹²⁸ Missed

air refuelings caused landings at alternate bases with resultant excessive fuel burn-off. ¹²⁹ (S)M

Principal complaints were that sufficient tankers were not always airborne, tankers were not advising receivers of weather conditions in the rendezvous area and that they were not always maintaining correct

127. Msg, Comdr 19AD to Comdr 2AF, ZIPPO/SECRET/03-041/Special B-27/96-57/2AF/379BW/Reflex Action Shot Gun, 11 Mar 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.
128. Ibid.
129. Msg, Comdr 825AD to Comdr 2AF, ZIPPC/SECRET/03-086/B-27/96-57/384BW/Reflex Action Wildcat Alpha, 11 March 1958, on file Combat Rptng Br, Ops Div, D/O, Hq 2AF.

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~~SECRET~~ M
2AF Historical Data
July - December 1958

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130
formation nor displaying proper color beacons.
Relatively, however, there were few REFLEX refueling
sorties lost due to tanker aborts. The 19th Bomb
Wing had experienced the most concentrated loss on
12 February - five sorties on redeployment. 131 (SM)

During October 1958 the Second Air Force
Inspector General checked the three bases principally
concerned with refueling support: Lajes Air Base,
Azores, Goose Air Base, Labrador, and Kindley Air
Base, Bermuda. (SM)

Goose was visited on 6 October. The 301st Air
Refueling Squadron was preparing for redeployment
to the ZI at this time. Advance personnel from the
44th Air Refueling Squadron were in position pending
deployment of their squadron. The operational commit-
ment at this base required alert tankers from the
in-place squadron, augmented by two REFLEX tankers
from the 376th Air Refueling Squadron. Sufficient
in-commission KC-97 aircraft were available to sup-
port the EWO at this time. Weather was not adverse

130.

131. DF, Control Div to D/O, Hq 2AF, "Refueling
Sorties Lost on Reflex Due to Tanker Aborts,"
6 Oct 1958. Exhibit 22.

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~~SECRET/FRD~~ M
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2AF Historical Data
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75

but the Inspector General reported that, as winter continued, additional maintenance personnel would be required to assist crews in keeping the aircraft free of ice and snow and ready for immediate launch. Facilities for support of the tanker aircraft were satisfactory and good relations existed between the base and the temporary duty functions. Crews were well briefed and were furnished the latest weather information for their missions. ¹³² (S) M

On 21 October, the 70th Air Refueling Squadron was on deployment to Lajes Air Base. It was considered fully capable of carrying out its EWO and meeting REFLEX commitments. The squadron had 29 crews available to meet flying and alert requirements. ¹³³ Twenty-six of these crews were combat ready. (S) M

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(b)(3)

132. DF, IG Hq 2AF to Comdr 2AF, "Report of Staff Visit-Goose Air Base," 3 Nov 1958. Exhibit 23.
133. DF, IG Hq 2AF to Comdr 2AF, "Staff Visit to Lajes Air Base, Azores," 3 Nov 1958. Exhibit 24.

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As previously considered in relating command problems, delays in execution orders by Second and Sixteenth Air Forces created clearance problems. Forty-eight hours, and in no case less than 24 hours, had to be given the squadron in order to secure the block altitude clearances from Santa Maria Control. Delays in cancellations also resulted in reserved air spaces being maintained at the expense of other aircraft. The restriction on the use of high frequency transmissions by tanker aircraft delayed relay of weather scout information, off-load reports, and other operational data until the aircraft could contact the rather limited UNH/UHF facilities in the local area. Satisfactory alert facilities were on hand or had been programmed. ¹³⁴ *(S) M*

The 303d Air Refueling Squadron at Kindley Air Force Base was visited on 22 October 1958. A review of aircraft generation rates in this unit showed ten in commission and 12 out for minor maintenance. The latter group of aircraft could have been generated within six hours. All crews on alert had been briefed on their responsibilities. Daily briefings including

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two weather briefings, were given to alert crews. There was a pyramid alert system provided but due to off base housing, poor telephone systems and "buddy" transportation, effective recall of personnel required one hour. ¹³⁵ M

Bomber scheduling was made more critical by the week-end and delayed B-47 movement rules through the Eighth Air Force area. On week-ends air refueling was not provided. Tanker support was cancelled for any B-47 movements delayed more than four hours. ¹³⁶ M

The Northeast air refueling areas were also centers of traffic congestion which in turn caused clearance problems. Conflicts between SAC missions and REFLEX occurred since most of the tanker support was in this area which also was primary support area for DEVIL FISH and SWORD FISH missions. Sixty percent of the tanker support for REFLEX was also accomplished in this area. The Second Air Force Commander requested that SAC restrict the use of these areas and if possible limit test type missions and unit simulated

135. DF, IG Hq 2AF to Comdr 2AF, "Report of Staff Visit to Kindley Air Base," 3 Nov 1958. Exhibit 25.
136. GPORD 96-56, "Reflex Action," Hq 2AF, 20 May 1958, in archives, Hist Div, CI, Hq 2AF.

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combat missions (USCMs) to periods of the day which would not interfere with REFLEX flights. ¹³⁷ (S) M

Inadequate support such as short off-loads or less than the required number of tankers also caused clearance problems. Receiver aircraft were forced to request a change of route, altitude and sometimes destination. Shortage of tankers caused cancellation of altitude reservations when less than three receivers were able to continue the mission. ¹³⁸ (S) M

Lack of effective tanker support had an adverse effect on some of the wing training programs. For example, during the period 1 July through 31 December 1958, the 19th Bomb Wing had 54 tanker sortie aborts out of 468 scheduled refuelings along with 28 tanker cancellations. This represented approximately 17.5 percent of total scheduled refuelings and had two effects: non combat-ready crew upgrading was retarded and the wing suffered considerably in the SAC Management Control System. ¹³⁹ Again in December, the 68th

137. Ltr, Maj. Gen. J.P. McConnell, Comdr 2AF, to Maj. Gen. James V. Edmundson, D/O Hq SAC, "[Reflex Problems Areas and Recommendations]" n.d. Exhibit 26.

138. Ibid.

139. Air Training Report for Sep-Dec 1958, 3-SAC-T-12, Hq 19th Bomb Wing, Commander's Remarks, Part III, on file Crew Surveillance Br, Tang Div, D/O, Hq 2AF.

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Bomb Wing reported that during the September-December training period it had upgraded 13 non combat-ready crews to ready status. The wing did not acquire maximum points in the management control system for this effort as six of these crews were upgraded during the last part of the training period. The primary reason for this delay was the unreliability of KC-97 tanker support during the last three months of the year. ¹⁴⁰ The 321st Bomb Wing during the same period reported 47 tanker aborts as compared to 15 receiver aborts, a three to one ratio. ¹⁴¹ (S)M

REFLEX refueling was a subject for concentrated attention from the Second Air Force commander and his staff. Operations Analysts completed several refueling studies.

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~~The analysts recommended that the latter~~
unit's refueling capability should be improved by adding an extra UHF antenna on the top side of some

140. Air Training Report for Sep-Dec 1958, 3-SAC-T-12, Hq 58th Bomb Wing, Commander's Remarks, Part III, on file Crew Surveillance Br, Trng Div, D/O, Hq 2AF.
141. Air Training Report for Sep-Dec 1958, 3-SAC-T-12, Hq 321st Bomb Wing, Commander's Remarks, Part III, on file Crew Surveillance Br, Trng Div, D/O, Hq 2AF.

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KC-97's, eliminating the use of lower boom receptacle lights because of blinding effect, improving boom markings and adding luminous tape for better "wings level" and directional reference. These studies were being continued with a view toward giving a realistic picture of the best EWO performance to be expected from the KC-97/B-47 combination. ¹⁴² *(S)u*

DISTURBING FACTORS IN MAINTAINING ALERT FORCE

Because of an inadequate number of combat ready crews in Second Air Force units, the interval between REFLEX deployments had been too short in 1958. For the same reason, crews were not given adequate time off upon redeployment. This was aggravated by the requirement for the home station alert. ¹⁴³ *(S)u*

On 18-19 November 1958, Second Air Force conducted a symposium for Reflex Action, Home Station alert Posture. ¹⁴⁴ The opinions and comments of alert crew personnel were a "penetrating critique of the training and scoring procedures now presumed to

142. DF, OA, Hq 2AF, to C/S 2AF, "Report on Recent Overseas Command Staff Visit to Bases Involved in REFLEX ACTION," 5 Dec 1958. Exhibit 27.
143. Report. "Semi-annual Inspection Report of Second Air Force Command, July-December 1958, prep by IS, Hq 2AF, in archives, Hist Div, CI, Hq 2AF.
144. Ltr, Hq 2AF, to Second 2AF, 16AF, 7AF, 80BT, "Second Air Force Alert Crew Symposium," 3 Mar 1959. Exhibit 28.

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test the BWO effectiveness of SAC's striking force. That these procedures are considered inequitable and, in certain instances, ridiculous might be disregarded in accordance with time-worn military tradition if it did not so clearly imply weaknesses which could be catastrophic." ¹⁴⁵ *(S) M*

From the remarks made by crew members during the symposium, it can be concluded that whenever performance scoring can produce an adverse effect on the pay of an individual or the professional standing of a unit, the full attention of all concerned is likely to be directed toward beating the scoring system. When this succeeds, it not only leads to command failure but engenders a false atmosphere of reliability where very little may exist. ¹⁴⁶ *(S) M*

This had been a matter of great concern to the Commander, Second Air Force. On 6 November 1958, he expressed this concern to the Commander-in-Chief, Strategic Air Command: ¹⁴⁷ *(S) M*

145. DF, D/C, to C/S, Hq 2AF, "Combat Proficiency Testing of Bomber Crews," 24 Nov 1958, w/1 Incl, Memo for Record, C/A, Hq 2AF, "Combat Proficiency Testing of Bomber Crews," 21 Nov 1958. Exhibit 29.
146. Id.
147. Ltr, Maj. Gen. J.P. McConnell, Comdr 2AF, to Gen. Thomas S. Power, CINCSAC, 6 Nov 1958. Exhibit 30.

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The increased alert posture which becomes effective in January 1959 has caused me great concern over our capability to maintain such a force for an extended period of time.

The Strategic Air Command combat crews have done a magnificent job in shouldering the responsibility of the alert force. From the very beginning of the alert program, they have expressed strong approval and pride at being a part of it. They are deeply appreciative of the progress that has been made in improving their living conditions while on alert. But they have expressed dissatisfaction with the imposition of an alert which keeps them away from their families more and more, without a proportionate reduction in other requirements.

We must take a fresh look at the areas affecting the combat crew. Our guide should be that crews either be on alert, flying, or off duty and home with their families. I believe we can provide them with this type schedule without any reduction in proficiency or safety standards.

One area that needs some very drastic action is personnel movements. Immediate action should be taken to freeze personnel at Strategic Air Command and the Numbered Air Force Headquarters past their standard tour. It would mean curtailing transfer to service schools. It would affect other movements, but, in from twelve to eighteen months, it would have a stabilizing effect on the combat crew inventory.

My net gain in the January-September period this year after upgrading 193 B-47 crews was 38. Only 27 of these crews were lost to the B-52 program. Almost every transfer of a rated officer ultimately results in the movement of an officer from a combat crew. This constant drain will never allow us to build a crew inventory adequate to support one-third of the force on alert or the requirements of an airborne alert.

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The Commander Second Air Force made certain recommendations regarding the training and standardization programs. He emphasized the impracticability of operating the alert force under old business-as-usual policies and attitudes. To meet the expanded Alert Force Concept, he urged that the entire ground training program should be carefully reviewed and tailored to fit the Alert Concept. ¹⁴⁸ Only those items that can be scheduled for a crew while on alert should be required and these should be based on a

minimum of four hours a day. Such items as survival and physiological training which require temporary duty should be eliminated except for the initial indoctrination, or when radical changes in equipment required further re-training. ¹⁴⁹ (S)M

Flying training requirements for combat ready crews were excessive while performing REFLEX ACTION. ~~If the REFLEX mission differed only in target and recovery base from the primary mission, then repeated practice should fulfill the major training requirement.~~ The Commander considered that demonstrated proficiency at REFLEX should suffice for evaluation except for

148. Ibid.

149. Ibid.

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flight safety items, maximum performance maneuvers, and instrument proficiency. The recommendations continued: (1) reduce Pop-Up proficiency training from two to one mission per training period; realign the restrictive RBS regulation; modify existing regulations so that credit can be given for a 50-8 transition sortie on the pilot missions of the standardization check; and install the fifth seat in B-47 Aircraft. ¹⁵⁰ (S)

The third area which the Second Air Force Commander presented to CINCSAC for consideration was the additional SAC commitments. The extra sorties required by Sage System Testing, forward base aviation depot squadron loading practice, and USAFE exercises required aircrew and aircraft days which did not contribute to the alert force posture, aircrew upgrading, or accomplishment of required 50-8 items. Second Air Force units were responsible for the following sortie commitments during Fiscal Year 1959: DEVIL FISH -486; SWORD FISH -170; GRAY FOX -24; SILVER LINING - 192; and SUN BEAM -19, for a total of 891 sorties of these types. ¹⁵¹ (S)

150. Ibid.

151. Ibid.

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General McConnell further said: "We are in a new era, and piecemeal efforts to modify an old system to meet the new concepts are just not adequate. Business-as-usual attitudes still are prevalent and are hindering our efforts to support one-third of the force on alert."¹⁵² *(S)M*

The ten B/RB-47 units of Second Air Force on 1 July 1958 had a total of 682 crews of which 496 were combat ready. On 31 December the total had increased to 716 crews of which 547 were combat ready.¹⁵³ The average number of crews per unit at the end of the year was 54.7 combat ready and 16.9 non combat ready.

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42 USC sec. 2168
(a)(1)(c)(FRD)

154 *(S)M*

152. Ibid.

153. DF, D/Personnel to OI, Hq 2AF, "History of Combat Crew Force, 1 July 1958 to 31 December 1958, 17 Feb 1959. Exhibit 31.

154. Analysis of Combat Crew Training, Period Ending August 1956, in archives, Hist Div, OI, Hq 2AF.

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CHAPTER II

HEAVY BOMBER INTEGRATION

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DISPERSAL IN PLAN AND ACTION

The process of integrating B-52/KC-135 aircraft into the Second Air Force weapons system involved a series of actions which were inter-related and often concurrent. Existing wings, equipped with B-36's, were being converted to B-52's and trained to a state of combat readiness and new wings were being activated, organized, equipped, and trained. This heavy force was being dispersed to reduce its vulnerability and hasten its speed of reaction. Operational readiness in the EWO was gradually unfolding. (U)

Dispersion began in SAC in late 1957 and was scheduled for completion by 30 June 1963. Originally, under the dispersal concept, some heavy wings were to be located on bases which were not self-sufficient. This would have required performance of certain functions, particularly in heavy maintenance, at a base known as a main or home base. Dependent bases were identified as satellite bases. However, Strategic Air Command reprogramming in 1958 provided

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a self-sufficient capability in each strategic wing.¹ (S) M

Under this dispersal concept, each heavy bomb wing was divided into three fully capable organizations with one-third of the heavy bombers and associated tanker aircraft assigned to each organization. One of the organizations was to retain the designation of the original wing while the other two units were to be designated as strategic wings. Maximum aircraft population on each base was to be 15 B-52's and 10 KC-135's.²

(S) M

Once independent maintenance capability was established, the primary difference between a main and a satellite base was the location of the air division on the main base. At year's end 1958, Second Air Force's active heavy bomb-strategic wing complex in the ZI was as follows:³ (S) M

1. Study, "Maintenance Dispersal B-52/KC-135, Home Satellite Concept," Hq SAC on file D/Pl, Hq 2AF.
2. Ibid.
3. 2AF Monthly Analysis, December 1958, 25 Jan 1959, prep by D/Comptroller, Hq 2AF. Exhibit 32.

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<u>MAIN BASE</u>	<u>AIR DIVISION</u>	<u>DISPERSAL BASE</u>
Carswell 7th Bomb Wing 7th Air Ref Sq 4123d Strat Wing	19th	Bergstrom 4130th Strat Wing 910th Air Ref Sq
Barksdale 4238th Strat Wing 913th Air Ref Sq	4th	Columbus 4226th Strat Wing 901st Air Ref Sq
Altus 11th Bomb Wing 96th Air Ref Sq	816th	Clinton-Sherman 902d Air Ref Sq

The foregoing was the dispersal complex for six B-52 and six KC-135 units. By 31 December 1958, two of these units, the 11th Bomb Wing and the 4123d Strategic Wing had reached combat ready status, graduating on 27 and 20 October, respectively. ⁴ Manning, equipping, and training units at the other bases was progressing. Combat ready status was contingent principally on delivery of B-52 and KC-135 aircraft, construction of facilities, and supply build-up. Crew manning was on schedule. ⁵ *(S) M*

4. Progress Report No. 16, 2AF Supp to SAC Programming Plan 11-57, Conversion of the 11th Bomb Wing (H), Altus Air Force Base and Organization of the 4123d Strategic Wing, Carswell Air Force Base, Status of 31 October 1958, 22 Nov 1958. Exhibit 33.
5. 2AF Monthly Analysis, December 1958, 25 Jan 1959. Exhibit 32.

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In the last three months of 1958, five of the six KC-135 air refueling squadrons cited here were upgrading to combat ready status. The 96th at Altus had converted from KC-97 to KC-135 aircraft; the 7th at Carswell, 913th at Barksdale, 901st at Columbus, and 910th at Bergstrom, were in various stages of conversion and/or build-up. The 902d at Clinton-Sherman had not yet been activated; however, the 915th at Ramey Air Force Base, Puerto Rico, was building up. The latter unit had started equipping with KC-135's in December although its parent wing, the 72d Heavy Bomb Wing, had not as yet received any B-52's and hence was not included in the active base list. Progress toward combat ready status for the refueling units was satisfactory and in most cases excellent. ⁶ (S) M

Concurrently with conversion of heavy bomber wings, Second Air Force was required to bring them into the Strategic Alert Concept as rapidly as possible. This required developing a capability of getting the first B-52 airborne within 30 minutes after receipt of the execution message, with

6. See below p.

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subsequent aircraft at two-minute intervals. Preparations were also being made to begin sustaining continuous airborne alert operations. ⁷ (S) M

Under the home base-satellite concept, dispersal was to be accomplished by placing B-52's on bases as the bases came into existence under the Military Construction Program. Two major deficiencies made this early dispersal concept inadequate. Distances between home bases and satellites were in some instances as much as 1700 miles, a factor which not only violated span of control principles but on occasion crossed Air Force boundaries. Programming in 1957 had resulted in most main bases being located in Fifteenth Air Force geographical area while most satellite bases were in Second Air Force territory.

The second defect was lack of maintenance self-sufficiency for the satellite base. Aircraft were to be ferried to and from the home base for periodic inspection and heavy maintenance, resulting in reduction of in-commission aircraft at the satellite base. ⁸ (S) M

7. SACM 55-12A, "Air Operations Peacetime - Alert Force," Hq SAC, August 1958, in archives Hist Div, OI, Hq 2AF.
8. Study, "Maintenance Dispersal, B-52/KC-135, Home Satellite Concept," Hq SAC, on file D/P1, Hq 2AF.

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In early 1958, SAC units were programmed to occupy 22 bases in the Second Air Force area by the end of June 1961. Thirteen of these bases, some of which belonged to other commands, were to be equipped with heavy bomb units. Manpower requirements for the completely self-sufficient type of base had been presented to Headquarters USAF by SAC in January 1958 and tentative approval had been received. As SAC had made the proposal to Air Staff that each of the heavy bases be completely self-sufficient, the Commander, Second Air Force requested that consideration be given to the development of a command structure which would provide effective supervision in the heavy bomber complex. ⁹ (S) M

Based on his conclusion that the homogenous grouping of three dispersal bases under a single command would provide a balanced structure with the supervision needed to insure the build-up of each heavy unit, General McConnell made four recommendations to the Commander-in-Chief, SAC, on 7 January 1958. These were (1) that four air divisions be established

9. Ltr, Maj. Gen. J.P. McConnell to Gen. Thomas M. Power, "Dispersal Plans and Recommendations," 7 Jan 1958. Exhibit 34.

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in the Second Air Force heavy complex, (2) that each of these divisions exercise command supervision of SAC units on three dispersal bases, (3) that Ramey Air Force Base be reduced from a main base configuration and assume self-sufficient strategic wing status under direct Second Air Force control and, (4) that facilities needed to make each dispersal base self-sufficient be furnished as quickly as possible. This plan was designed to provide experienced senior officers for a sound command structure and reduce the Second Air Force Commander's span of control from 22 commanders to twelve. ¹⁰ (G) M

The SAC Commander-in-Chief, on 23 January, replied that the base relationships recommended by the Second Air Force Commander were very nearly in line with SAC's preliminary findings in regard to revision of dispersal plans for the heavy unit bases. Self-sufficiency for all of these bases and changing the early geographic grouping were two objectives on which CINCSAC was acting at this time. ¹¹ (G) M

10. Ibid.

11. Ltr, Gen. Thomas M. Power, to Maj. Gen. J.P. McConnell, 23 Jan 1958. Exhibit 35.

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SAC reasoning on need for self-sufficiency
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is outlined in greater detail below:

An analysis of the aircraft distribution is support of alert places one-third on alert, with one-third of the aircraft available to training, and one-third available to maintenance. 1,000 hours per month are required to support the training program on each satellite base. The flying time used to ferry aircraft from the satellite to the home base must be provided from this 1,000 hours. Flying time used in returning aircraft for periodic inspections can be fully utilized for training both ways, with the remaining flying time between home base and the satellite being non-productive. This represents a loss of 2½ percent of the available time, or for the 22 satellites, a total of 14 aircraft per day. This is the equivalent of the alert force of one wing and is considered to be entirely unacceptable..... for an additional \$21,000,000 facilities and equipment can be provided to permit true dispersal (self-sufficiency) of the heavy forces and thus reduce an aggressor's ability to immobilize the SAC striking force, even under conditions of a surprise attack. (9) *u*

On 21 March 1958, supporting concepts for the new dispersal plan were spelled out in more detail for the Second Air Force staff. These concepts were

12. Study, "Maintenance Dispersal, B-52/KC-135, Home Satellite Concept," on file D/PI, Hq 2AF.

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proposed on 10 March 1958 but had not been directed as a final program by SAC. General highlights of the plan were that the air division would be assigned to the main base, with the satellite wing commanders responsible to the air division commander. ¹³ (S) M

Operationally, the air division would be in control when more than one wing was involved, otherwise the wing would control its own missions with the division monitoring. The communications net would connect the satellite to the main base and the main base to Second Air Force. In this March plan, evidently no communication channel was planned from the numbered air force directly to the satellite. Twenty-four hour control rooms were to be established on each base. EWO planning was to be accomplished under the supervision of the air division; individual target assignments, flight plans, and crew folders ¹⁴ were to be prepared at each base. (S) M

This March 1958 revision of the dispersal plan still did not provide for maintenance self-sufficiency.

13. DF, D/Plans, Hq 2AF, to C/S, 2AF, "Supporting Concepts for Dispersal," 21 Mar 1958. Exhibit 36.
14. Ibid.

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Main bases were to be responsible for periodic maintenance and most field maintenance at the satellite bases. There was no change in the requirement that each unit be capable of mobility concept deployment, with fly-away kits (FAK) established at all bases. ¹⁵ M

This was not acceptable. The number of combat crews and aircraft available for alert duty at the home base would have been decreased. Scheduling would have become complicated for all crews and aircraft ~~delayed due to dock maintenance, weather~~ or other flying safety reasons. Second Air Force operations staff recommended that each strategic wing be made fully capable, maintenance-wise. ¹⁶

It was apparent that many delays would result and considerable liaison would have to be kept up between satellite and main base to make the 10 March plan workable. Complexities of the centralized maintenance system demanded one "boss." It was also considered impractical to store base FAK packages at the satellites and then airlift them to the main base at the

15. Ibid.

16. DF, D/O, HQ 2AF, to D/P1, HQ 2AF, "Maintenance Dispersal Concept," 13 Jun 1958. Exhibit 37.

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time they were to be used. ¹⁷ *(S)M*

On 15 May 1958, Headquarters USAF approved a change in the maintenance concept for the heavy bomber dispersal plan, providing complete maintenance capability at heavy bases as opposed to the foregoing home-satellite concept. Second Air Force was notified of this change on 24 May and at the same time, SAC, considering the time factor extremely critical, required the completed program for Second Air Force bases to be in SAC Headquarters by 30 June 1958. ¹⁸ *(S)M*

The third and final major planning sequence in the dispersal concept which affected Second Air Force during 1958 was organization of command and control machinery of the program, both functionally and geographically. SAC had requested the Second Air Force Commander to examine existing structure in light of SAC's movement toward its goals for alert and dispersal, the advent of the ballistic missiles into the weapons inventory, and the approaching space era. All of the SAC numbered air force commanders

17. OP, D/M, Hq 2AF, to D/Pl, Hq 2AF, "Dispersal Concept," 31 Mar 1958. Exhibit 38.
18. Ltr, Hq SAC, to Comdr 2AF, DPLC, "Maintenance Dispersal Concept," 24 May 1958. Exhibit 39.

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had been given a short briefing on this issue at the
Commander's Conference earlier in the year. ¹⁹ (U)

On 14 July 1958, SAC outlined the problem more
specifically in a series of questions. Should units,
bases and personnel be added to the existing command
structure or should an additional Air Force type
organization be activated? How many units, equipped
with radically different weapons systems, can a
subordinate command directly supervise? What is the
effect of geography on SAC's organization? What will
be the effect of a reorganization on the acute man-
power picture? ²⁰ (U)

These questions were answered on 21 August.
Primarily, the recommendation was that units and
bases should be added to the existing command struc-
ture. Major General J.P. McConnell, Second Air Force
Commander, considered that an additional numbered
air force would insure better span of control but
that it would not justify the cost in manpower,
administrative overhead and facilities. His recom-
mendation was that existing numbered air forces be

19. Ltr, Maj. Gen. Charles B. Westover, D/Pl, Hq SAC,
to Maj. Gen. J.P. McConnell, Comdr 2AF, "Command
and Control Machinery", 14 Jul 1958. Exhibit 40.

20. Ibid.

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expanded to support multiple weapons systems; programmed missile wings and groups be abolished; intermediate supervisory commands be established with necessary cellular augmentation; and finally, the numbered air forces be realigned on a south-north axis. This latter recommendation was based on the need to insure that each force gain experience in control of the various weapons systems as well as having a fair share of both good and bad climatic areas. ²¹ *(S)M*

SAC notified Second Air Force informally on 14 October that three basic considerations would guide staff planning for the proposed future command control of SAC. Briefly, a fourth numbered air force would be formed to reduce span of control, the missile organizations would be integrated at numbered air force and division levels and the south-north

(ARROWHEAD) concept would be adhered to in aligning ²² bases under each numbered air force. ²³ These guidelines were confirmed on 18 October. *(S)M*

- 21. Ltr Maj. Gen. J.P. McConnell, Comdr 2AF, to Maj. Gen. Charles B. Westover, D/Pl, Hq SAC, "Command and Control of the Future SAC Force", 21 Aug 1956. Exhibit 41.
- 22. DF, D/Pl, Hq 2AF, to C/S 2AF, "Command Control," 14 Oct 1956. Exhibit 42.
- 23. Msg, CINCSAC to Comdr 2AF, et al, CONFIDENTIAL/CS4355, "Commanders' ~~CONFIDENTIAL~~ Oct 1956. Exhibit 43.

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Further planning went forward between the SAC Commander-in-Chief, and the numbered air force commanders and, on 30 December 1958, a geographical realignment of SAC's command structure was announced, effective 1 January 1959. The additional numbered air force apparently had been shelved for the time being. ²⁴ (U)

Under the realignment, three areas were drawn vertically from north to south. The center sector was assigned to Second Air Force, the eastern to Eighth Air Force, and the western, to Fifteenth Air Force. In the interchange of bases, Second Air Force was to lose Homestead, MacDill, and McCoy, in Florida; Hunter, in Georgia; and Ramey, in Puerto Rico. They would be lost through transfer to Eighth Air Force.

In turn, Second Air Force was to gain immediately from Eighth Air Force R.I. Bong, in Wisconsin; Bunker Hill, in Indiana; Forbes, in Kansas; Lincoln, in Nebraska; and Whiteman, in Missouri. Fifteenth Air Force was to be little affected by the realignment. One base, Schilling, in Kansas, was to be

24. Msg, CINCOSAC to Comdr 2AF, et al, OIP7099, "Realignment of SAC Command Structure," 30 Dec 1958. Exhibit 44.

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gained from Eighth Air Force while no bases were to
be lost to either Second or Eighth Air Force. ²⁵ (U)

In his public announcement, General Thomas S. Power, Commander-in-Chief, Strategic Air Command, stressed that geographical realignment of SAC's command structure was "basically administrative in nature" and designed "to provide more effective command and control of its bombardment and missile bases." It was expected "to achieve greater equalization of the bases, units, and personnel of SAC's ²⁶ three numbered air forces in the United States." (U) ²⁷

General Power's announcement also emphasized:

The many changes resulting from SAC's bases development program, the integration of intercontinental ballistics missiles (ICBM) units into the bomber force, and in keeping with its concept of maximum dispersal of the retaliatory strike force required the regrouping. Good management dictated that the bases under the operational control of the three numbered air forces be realigned to provide more effective control, faster communication, and greater self-sufficiency. Additionally, the generally north-south alignment of bases within each numbered air force will further strengthen the command's ability to carry out its wartime mission. (U)

25. Ibid.
26. Ibid.
27. Ibid.

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The above announcement ended dispersal planning. The new year was to be faced with new bases, new people and planning for new weapons. However, in the meantime, build-up of the heavy force, EWO ready and dispersed, was a matter of concerted action. (U)

BUILD-UP OF B-52/KC-135 FORCE

By 1 July 1958, Second Air Force was moving forward rapidly in converting, activating, and equipping units and bases designated for B-52 dispersal.

Delivery of Second Air Force's first B-52 had been made on 20 January 1958 to the 11th Bomb Wing at Altus Air Force Base, Oklahoma. ²⁸ By 31 July 1958, Second Air Force had received delivery of 54 B-52's; SAC-wide the B-52 fleet at that time numbered 335.

Six of the refueling associates of the heavy bombers, the KC-135 tankers, had also been delivered to Second Air Force by that date. Two wings, the 11th Heavy Bomb Wing and the 4123d Strategic Wing, the latter then temporarily training at Carswell, had received their full B-52 inventory. The 7th Heavy Bomb Wing had received nine B-52's. ²⁹ *(M)*

28. Progress Report No. 5, "B-52 Conversion of the 11th Bomb Wing," Ho 11th BW, 31 Jan 1958, in History 11th Bomb Wing, January 1958, Exhibit 2.
29. 2AF Monthly Analysis, 25 Aug 1958. Exhibit 43;

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Six months later (31 December 1958), Second Air Force possessed 93 B-52's, distributed in four wings: 7th Heavy Bomb Wing - 30 B-52F's; 11th Heavy Bomb Wing - 32 B-52E's; 4123d Strategic Wing - 16 B-52E's; and the 4238th Strategic Wing - 15 B-52F's. Sixty-five KC-135's were distributed among five air refueling squadrons. ³⁰ (S) M

The 7th and 11th Heavy Bomb Wings apparently were over-equipped under the dispersal concept. This was a temporary situation as two heavy bomb units were being equipped at both Altus and Carswell Air Force Bases, with eventual transfer of one of these units from each base to another location in strategic wing status. (S) M

At that time, programming plans were tentative for nine more heavy wings to be activated in Second Air Force. Two of these, the 4130th Strategic Wing at Bergstrom Air Force Base, and the 4228th Strategic Wing at Columbus Air Force Base were already in active process. (S) M

29. (cont'd) Statistical Summary, 2AF, July - December 1958. Appendix A.
30. See note above.

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At mid-1958, B-52 and KC-135 crew build-up for the 11th Heavy Bomb Wing, 4123d Strategic Wing, and the 7th Heavy Bomb Wing was on schedule.³¹ A fourth unit, the 4238th Strategic Wing at Barksdale Air Force Base, was also being manned with B-52 crews at that time although it had not as yet received any aircraft.³² At that time, the four Second Air Force B-52 units had 12 combat ready and 65 non-combat ready crews. Three KC-135 units had a total of 24 crews, of which two were combat ready. By 31

December 1958, five Second Air Force B-52 wings had 129 total crews; 89 were combat ready. Four KC-135 squadrons had 69 crews, 47 combat ready.³³ JEM

B-52 and KC-135 combat crew initial training was conducted at Castle Air Force Base, California

31. Progress Report No. 13, 2AF Supplement to SAC Programming Plan 11-57, "Conversion of the 11th Bomb Wing (H), Altus Air Force Base, and Organization of the 4123d Strategic Wing, Carswell Air Force Base," 5 Sep 1958. Exhibit 46.
32. Progress Report No. 6, 2AF Supplement to SAC Programming Plan 15-57, "Conversion of the 7th Bomb Wing (H), Carswell Air Force Base, and Organization of the 4238th Strategic Wing, Barksdale Air Force Base," 29 Jul 1958. Exhibit 47.
33. DF, D/P, Hq 2AF, to OE, Hq 2AF, "History of Combat Crew Force - 1 July 1958 to 31 December 1958," 17 Feb 1959. Exhibit 31.

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by the 4017th Combat Crew Training Squadron (CCTS) of the 93d Bombardment Wing (15th AF). This initial phase training was designed to provide selected heavy crew members with the knowledge required to operate B-52 and KC-135 aircraft, less in-flight refueling training. On completion of this phase, crews returned to their wings to continue up-grading to combat-ready status. ³⁴ (S) M

After approximately eight months of training by the 4123d Strategic Wing and nine months by the 11th Heavy Bomb Wing, both were declared ready in October 1958. They were considered completely capable of performing their assigned EWO under the B-52 weapons system. The 11th Heavy Bomb Wing flew 535 training missions and 4,625 training hours in reaching combat ready status with 27 ready crews. The 4123d Strategic Wing became combat ready with 13 ready crews after flying 200 training missions involving 1,736 training hours. ³⁵ (S) M

34. SAC Manual 27-2, "B-52 Planning Factors," January 1958.
35. Progress Report No. 16, 2AF Supp to SAC Programming Plan 11-57, "Conversion of the 11th Bomb Wing (H), Altus Air Force Base and Organization of the 4123d Strategic Wing, Carswell Air Force Base, Status of 31 October 1958," 22 Nov 1958. Exhibit 33.

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Sufficient personnel had been assigned to the 7th Heavy Bomb Wing and the 4238th Strategic Wing by 31 December 1958 to support a combat readiness capability. Aircraft assignments for these wings were complete and crew training program was on schedule. The former had 34 crews assigned, 28 of which were combat ready; the 4238th had seven of its 16 assigned crews in ready status. ³⁶ The fifth unit in Second Air Force's active B-52 program, the 4130th Strategic Wing, at Bergstrom Air Force Base, was still in a preparatory stage. Aircraft and crews for this wing were to be transferred into Bergstrom AFB from Loring AFB in January 1959. ³⁷ *(S) m*

Development of combat readiness in the 11th Heavy Bomb Wing and the 4123d Strategic Wing was a unique operation which provided Second Air Force and these wings with involved problem solving experience.

36. Progress Report No. 12, 2AF Supplement to SAC Programming Plan 15-57, "Conversion of the 7th Bomb Wing (H), Carswell Air Force Base; and Organization of the 4238th Strategic Wing, Barksdale Air Force Base, Status of 31 December 1958," 27 Jan 1959. Exhibit 48.
37. Progress Report No. 1, 2AF Supplement to SAC Programming Plan 16-58, "B-52 Unit Conversion and Dispersal, Status of 31 December 1958," 27 Jan 1959. Exhibit 49.

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This uniqueness was the result of a series of circumstances. This wing began its operational training in B-52's at Altus Air Force Base; the 423d Strategic Wing was activated, equipped, and trained at Carswell Air Force Base with future movement planned to Clinton-Sherman Air Force Base as soon as facilities and construction were complete at the latter base. In July 1958, when training was finally on a full schedule with all aircraft delivered at Altus Air Force Base, the runway there was condemned for use.

Repair of the runway centerline was necessary. While repairs were underway, it was necessary to arrange evacuation of aircraft for approximately six months. ³⁸ *(GAM)*

Operation INDIAN CLAY was developed to perform this task. This operation plan directed the 11th Heavy Bomb Wing, with assigned aircraft and support elements, and the 4037th USAF Hospital to move on temporary duty for approximately six months to Clinton-Sherman and Carswell Air Force Bases, beginning 1 August or as soon as practicable thereafter. Operational flying and flight line maintenance were to be

38. Operations Plan 403-58, "Operation Indian Clay," Hq 11th Bomb Wing, in History 11th Bomb Wing, July 1958, Exhibit 3.

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accomplished at Clinton-Sherman; aircraft post-flight, periodic inspections and heavy maintenance were to be accomplished at Carswell. The 11th was directed to move minimum essential unit mission equipment (UME) and unit support equipment (USE), along with support personnel needed to operate B-52, KC-135 and Base Flight aircraft to Clinton-Sherman and Carswell and to attain maximum capability as soon as possible after the movement was accomplished. The wing was required to maintain maximum EWO and alert capability

at Clinton-Sherman and maintain a state of mobility readiness to meet current requirements.³⁹ The order was executed on 13 August 1958.⁴⁰ (S) M

The Clinton-Sherman ramp was designed to handle one B-52 wing and a 10-aircraft KC-135 squadron. The 11th Bomb Wing had to place two tactical squadrons and a converting refueling squadron on that base. The refueling unit attained full 20 aircraft strength long before the temporary duty was finished.⁴¹ (U)

39. Ibid.

40. Msg, Comdr 2AF to Comdr 816 AD, et al, OS 11916, 13 Aug 1958, in History 11th Bomb Wing, August 1958, Exhibit 3.

41. Colonel John S. Samuel, "Mission Accomplished," Combat Crew (May 1959).

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For the phase at Clinton-Sherman, the three tactical squadrons were combined into one operational squadron. One personal equipment section was established and maintained by personnel of the three squadrons. Key personnel from these units and field maintenance personnel remained at Clinton-Sherman at all times. The two B-52 squadrons were able, by virtue of the similarity of their missions, to combine and rotate operations personnel. Combat crews of the two tactical squadrons planned their missions at Altus, going to Clinton-Sherman only to fly. ⁴² (U)

As the temporary duty operation developed, it was discovered that the workload would not permit heavy maintenance at Carswell. Accordingly, all heavy maintenance, with the exception of those requirements turned up during the Carswell inspections, was performed at Clinton-Sherman. Work had to be accomplished in the open under field conditions, since there were no docks or hangars at Clinton-Sherman. This requirement for inspections and heavy maintenance at Carswell was a hindrance, especially during the last two months of the operation, when the wing was

42. Ibid.

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limited to a maximum of six aircraft on the ground at Carswell at any one time. This demanded complete realignment of the maintenance schedule which resulted in generation of a lesser number of sorties. Having less aircraft to work with, meant that more aircraft on hand had to be kept in flyable condition with less selectivity in aircraft to generate. ⁴³ *(u)*

Only noticeable pause in the forward pace of the 11th Wing was cancellation of three of the scheduled bomber stream missions for the month of August.

With 30 B-52 aircraft available for training purposes, 115 of 137 sorties scheduled were flown, involving 896:30 hours of B-52 flying time. ⁴⁴ In September, 1,222 hours, including four bomber stream missions, were flown; October flying hours totalled 1,257 in B-52's, including seven bomber stream missions.

Without let-up during this period of split-operations, the wing maintained continuous strip alert, participated in the bombing competition and other missions directed by higher headquarters, and kept up required air and ground training requirements. The pace

43. Report (Final), "Status of 11th Bomb Wing Operation INDIAN CLAY, as of 1 December 1958," Hq 11th BW, in History 11th Bomb Wing, November 1958, Exhibit 1.
44. Report, Air Training Report for August 1958, "Commander's Remarks," Hq 11th BW, in History, 11th Bomb Wing, August 1958, Exhibit 16.

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continued on into November until on the 13th of that month, the 11th Heavy Bomb Wing accomplished its graduation mission, a unit simulated combat mission, ALL STAR. ⁴⁵ (S) u

ALL STAR was carried out during the period 18 through 21 November. Purpose of the mission was to demonstrate capability of the 11th Heavy Bomb Wing to execute its emergency war order in accordance with 50-59 requirements, upon completion of conversion to B-52 equipment. During the exercise, the wing was required to generate and prepare aircraft in accordance with SAC Manual 55-7, conduct an air weapons exercise, off-load weapons, launch aircraft, and conduct an electronic counter-measures penetration and target defensive tactics against ground controlled intercept, air intercept fighters, and anti-aircraft artillery mission control. ⁴⁶ (S) u

ALL STAR was a joint operation in that it was also the graduation exercise for the 4123d Strategic Wing, executing the order for Carswell Air Force Base.

45. Report, Air Training Report for September 1958, "Commander's Remarks," in History, 11th Bomb Wing, September 1958, Exhibit 18.
46. OPRD No. 203-58, "ALL STAR," 11th BW, 8 Oct 1958, in History 11th Bomb Wing November 1958, Exhibit 12.

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Independent operations orders and separate general briefings by different staff teams were prepared and conducted at Carswell. The 11th Wing aircraft took off at two minute intervals with two aircraft in each cell. At the designated navigation point (39-08N 98-44W), one aircraft from the 4123d Strategic Wing joined the two 11th Wing aircraft to form a three ship cell. The 4123d aircraft flew 1,500 feet above the highest aircraft in the 11th Wing cell; neither wing was authorized to delay or wait for the other wing's aircraft at the start navigation point (38-08N 98-44W). The exercise was conducted under Option One in which generation phase and launch phase could last approximately 60 hours, with some overlapping.

47

(S)u

From its own standpoint, the 11th Wing considered its graduation exercise an overall success. Certain areas for improvement were noted by the wing commander in his report to SIKCSAC. The expense of time required to launch aircraft under the execution option selected extended the duration of the exercise excessively. This in turn amplified coordination problems between

47. Ibid.

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participating units at separate bases and resulted in expensive air traffic control clearance changes and delays. The commander recommended that in future exercises of this type, if more than one unit is involved, only one unit should prepare the operations order. Similarly, primary responsibility for mission control should be invested in the unit which prepared the operations order and aircraft should be prepared and launched according to a mass penetration option in order to shorten the overall launch time. The

11th Wing Commander felt that this type of option would provide a more realistic test of a unit's capability to generate and launch under the most extreme operational timing. ⁴⁸ (S) M

Second Air Force staff teams composed of representatives of the Operations, Materiel and Intelligence Directorates were present at both Carswell and Clinton-Sherman Air Force Bases during the exercises.

These observers considered the overall performance of both wings to be highly satisfactory and that both wings were fully capable of performing their assigned EWO missions. ⁴⁹ (S) M

48. Msg, Comdr 11th BW to CINCSAC and Comdr 2AF, SECRET/ZIPPO 11-160/B-27/203-58/11BW/ALL STAR, 26 Nov 1958. Exhibit 50.
49. Ltr, Hq 2AF to Comdr 19 ABIV, "Report of Visit to

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Thirteen 4123d Wing aircraft were committed to flight and 13 flew the mission as briefed. Three aircraft substitutions were necessary; two air aborts caused two sorties to be rescheduled for a total of 15 scheduled sorties. All aircraft were launched within the required 30 minutes of adjusted take-off time. Thirteen sorties were airborne exactly on time, one aircraft was launched five minutes and another 26 minutes after take-off time. Aircraft all post-strike landed at Carswell AFB. Twenty-two 11th Wing

aircraft were committed for flight. All launched on time in accordance with the pre-planned schedule, with post-strike landings at Clinton-Sherman AFB. 50 (g) M

In the meantime, runway repairs at Altus AFB were completed ahead of schedule. Four days after its graduation exercise, the 11th Bomb Wing completed operation INDIAN CLAY, and returned to its home station at Altus AFB. 51 (g) M

49. (cont'd) 4123d Strategic Wing, Heavy, Carswell AFB, Texas, " 5 Dec 1958. Exhibit 51.
50. Ltr, Hq 2AF to Comdr 816 ADiv, "Report of Visit to 11th Bombardment Wing, Heavy, Clinton-Sherman AFB, Oklahoma," 5 Dec 1958. Exhibit 52.
51. Report (Final), "Status of 11th Bomb Wing Operation INDIAN CLAY, as of 1 December 1958," Hq 11th BW, in History, 11th Bomb Wing, November 1958, Exhibit 1.

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The split operation at Altus, Carswell, and Clinton-Sherman AFBs presented a myriad of obstacles to effective operation of a unit converting to new equipment. In spite of these, as a result of excellent coordination and cooperation as well as aggressive support by higher headquarters, the 11th Heavy Bomb Wing attained combat readiness as scheduled. During the temporary duty at Clinton-Sherman, it was found that the organization became more closely knit because the majority of the people, particularly maintenance and support elements, not only worked together but lived together. They got to know each other both professionally and socially and the end result was a better maintenance organization working together as a team and generating more sorties than originally thought possible. ⁵² (U)

After five months of training, the 96th Air Refueling Squadron, at Altus Air Force Base, reached combat readiness on 26 November 1958 with 20 ready crews. The unit was declared officially ready on 15 December 1958, with an adequate initial build-up of

52. Ibid.

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aircraft spares and equipment. ⁵³ The 7th Air Refueling Squadron, at Carswell Air Force Base, had 20 KC-135's assigned and possessed and 13 combat ready crews in November. By year's end this squadron had upgraded 22 crews to ready status, two more than were required and approximately a month ahead of the SAC established combat ready date of 1 February 1959. ⁵⁴

(S) u

Activation and equipping of the 913th Air Refueling Squadron was on schedule with delivery completed on ten KC-135's in December. Sufficient personnel, including 12 CCTS crews were assigned to this unit. The 913th was scheduled for readiness in March 1959. ⁵⁵

(S) u

In the case of the 901st Air Refueling Squadron, at Columbus Air Force Base, training was delayed due

- 53. Progress Report No. 9 (Final), 2AF Supplement to SAC Programming Plan 1-58, "Conversion of the 96th Air Refueling Squadron (H), Altus Air Force Base, to KC-135 Aircraft, Status as of 30 November 1958," 24 Dec 1958. Exhibit 53.
- 54. Progress Report No. 9, 2AF Supplement to SAC Programming Plan 6-58, "Activation and Equipping of the 7th Air Refueling Squadron (H), Carswell Air Force Base, Status as of 31 December 1958," 27 Jan 1959. Exhibit 54.
- 55. Progress Report No. 7, 2AF Supplement to SAC Programming Plan 8-58, "Activation and Equipping of the 913th Air Refueling Squadron, Barksdale Air Force Base, Status as of 31 December 1958," 27 Jan 1959. Exhibit 55.

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to cracking and breaking of the runways at that base. The 901st had been programmed to receive two KC-135's in November. Due to the runway problem, these aircraft plus eight others had been delivered to Barksdale Air Force Base pending availability of the Columbus runways for training. It was not until 7 January 1959 that Columbus runways were conditionally accepted and training began. This squadron had 12 CCTS crews assigned. ⁵⁶ (*u*)

Manning actions and lay-in of base spares and equipping for the 915th Air Refueling Squadron at Ramey Air Force Base, and the 910 Air Refueling Squadron, at Bergstrom Air Force Base were considered satisfactory at year-end. The 915th received its first KC-135 on 5 December with four additional aircraft due for delivery during that month. Crew training was to commence on 1 January 1959. ⁵⁷

56. Progress Report No. 5, 2AF Supplement to SAC Programming Plan 14-58, "Activation and Equipping of the 901st Air Refueling Squadron, Columbus Air Force Base, Status as of 31 December 1958," 21 Jan 1959. Exhibit 56.
57. Progress Report No. 4 (Final), 2AF Supplement to SAC Programming Plan 15-58, "Activation and Equipping of the 915th Air Refueling Squadron, Ramey Air Force Base, Status as of 31 December 1958," 27 Jan 1959. Exhibit 57.

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Initial actions for manning and equipping the two remaining Second Air Force tanker squadrons programmed at this time, the 902d at Clinton-Sherman Air Force Base, ⁵⁸ and the 911th at Seymour-Johnson Air Force Base, ⁵⁹ were on schedule at the end of December. *(S)M*

On 1 January 1959, the 911th and 915th Air Refueling Squadrons were to be relieved from assignment to Second Air Force and reassigned to Eighth Air Force. ⁶⁰ Tanker-wise in KC-135's, Second Air Force would begin 1959 with one combat ready unit, the 96th at Altus, and five others in varying degrees of progress toward combat readiness. ⁶¹ *(S)M*

ENTRY INTO HOME STATION ALERT

Dependent on their combat ready status in relation to crews, aircraft inventory and maintenance

58. Progress Report No. 1, 2AF Supplement to SAC Programming Plan 26-58, "Activation and Equipping of the 902d Air Refueling Squadron, Clinton-Sherman Air Force Base, Status as of 31 December 1958," 27 Jan 1959. Exhibit 58.
59. Progress Report No. 1 (Final), 2AF Supplement to SAC Programming Plan 28-58, "Activation and Equipping of the 911th Air Refueling Squadron, Seymour-Johnson Air Force Base, Status as of 31 December 1958," 28 Jan 1959. Exhibit 59.
60. Ibid.
61. DF, D/P. Hq 2AF, to OI, Hq 2AF, "History of Combat Crew Force - 1 July 1958 to 31 December 1958," 17 Feb 1959. Exhibit 31.

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capability, two Second Air Force B-52 wings were required to integrate into the SAC Alert Force on a gradually increasing basis during the final six months of 1958. The 11th Heavy Bomb Wing began strip (home station) alert on 1 July with combat crew and aircraft capable of immediate launch in EWO configuration; the 4123d Strategic Wing assumed this posture on 1 September. Both wings were required to meet the full SAC alert force requirements by the end of December after having reached full combat readiness.

62 *(S)M*

All ready, lead, and select crews were assigned alert force duty. For each aircraft on alert, 4.35 combat ready crews were required on the alert roster. Seven crew days per week were available for alert. The 4.35 ratio permitted sufficient time to perform other required duties such as flying, ground training, tower and briefing officer, necessary temporary duty, leave, and time off. ⁶³ (U)

Prior to upgrading to combat ready status, each B-52 crew was required to undergo an alert procedures

- 62. Interview by MSgt J.V. LeBlanc, Historian, with Major H.E. Eriarton, Combat Ops Br, Ops Div, D/O, Hq 2AF, 19 May 1959.
- 63. Alert Force SOP 35-1, Hq 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7.

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proficiency check. Crews were scheduled for one day's training, under supervision of qualified instructors for each crew position, in procedures for pre-flighting and cocking an aircraft. Instructors then simulated the alert warning and the crew in training was required to execute the scramble checklist, progress to ALFA and then to BRAVO alert condition. The wing command posts were notified when these alert conditions were attained and that engines were being shut down. Following engine shut-down, the crew was required to re-soak the aircraft. Instructors then critiqued them. After this critique, the alert was again simulated and the crew was required to follow through to a COCA condition. Alert procedures were made a part of the proficiency check by standardization personnel prior to upgrading a crew to combat ready status. ⁶⁴ (U)

Since aircraft were on alert for seven days and aircrews for either three or four days, a definite plan was followed for crew changeover to insure continuous coverage of assigned alert sorties. Although

64. Alert Force SOP 50-1, "Initial Check-out of Alert Crews," Hq 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7.

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the following plan description is based on the alert SOP of the 4123d Strategic Wing, basically this was also the alert force procedure for the 11th Heavy Bomb Wing. The 4123d Wing changed its Sortie No. 1 crews on Monday and Friday and the aircraft on Tuesday; Sortie No. 2 crews changed on Monday and Friday, with aircraft change-over on Friday. Sorties were assigned as directed by Second Air Force Operations Order 50-59. Crews were required to complete necessary target and route study and other alert preparations before assuming the alert position. ⁶⁵ (U)

Aircrews were kept fully informed on weather as it affected their assigned missions. Weather briefings were conducted daily at 0600 for all 4123d alert crews at which time a flimsy was given to the aircraft commander. A second flimsy was picked up by the crew between 1800 and 2200 hours CST. Briefings and flimsys included target altitude, enroute winds, and forecast contour heights. A general outlook for target and post-strike areas was also provided at the briefing. To cover all phases of the Alert Force

65. Alert Force SOP 55-5, "Alert Crew Changeover," Hq 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7; also see, "Alert Aircrew Schedule." Exhibit 60.

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operational weather, forecasted terminal weather for Thule, Goose Bay, Harmon, Loring, and Westover Air Force Bases was included in each flimsy. Whenever the alert was sounded, the duty weather forecaster immediately gave the command post controller the runway temperature at Carswell Air Force Base and departure and enroute weather according to the EWO sortie number. ⁶⁶ *(S)M*

All alert aircrews were thoroughly familiarized with SAC positive control procedures. Positive control was an emergency launch method designed to get the Alert Force airborne and on its way to the target, with the positive assurance that no aircraft would penetrate enemy territory or the early warning net without further specific orders to proceed on the strike mission. Each alert sortie had its positive control point beyond which the flight could not continue unless the properly authenticated "Go" code was received. The alert crew aircraft commander was required to sign a positive control certificate immediately prior to crew changeover certifying to

66. Alert Force SOP 55-6, "Weather Briefings," Hq 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7.

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his complete understanding of the procedures involved. Other officer crew members were required to counter-sign the certificate. ⁶⁷ (S) M

Selected 4123d Strategic Wing aircraft were normally not scheduled for training flights within three work days of the alert date. Three maintenance cycles were applied to an alert aircraft; I - preparation for alert, II - Aircraft "cocked" and in alert status, and III - removal from alert status. Alert aircraft were assigned the highest maintenance priority while in cycles I and II. Two ground crews, working alternate 24-hour shifts, were assigned to an alert aircraft. Several days prior to going into alert status, these ground crews were required to thoroughly study Alert Force SOP's. The day before coming on alert, they were required to undergo several practice runs according to the check-list, under the supervision of the alert forces line chief. ⁶⁸ (U)

67. Alert Force SOP 55-7, "Positive Control," Hq 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7.
68. Alert Force SOP 66-1, "Strip Alert Maintenance Force Procedures," Hq 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7.

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When an aircraft was declared ready for flight and designated as an alert aircraft, the following actions were taken to place it in the alert configuration:
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- (1) Aircraft was towed to fuel pit.
- (2) Tires were inflated to proper pressure for total alert gross weight.
- (3) Aircraft was fueled to alert load.
- (4) Ammunition was loaded.
- (5) Required ECM was installed.

- (6) ~~Chaff was loaded.~~

- (7) Cameras were installed and loaded.
- (8) Liquid oxygen was fully serviced.
- (9) Water was serviced, if required.

- (10) Bomb bay in desired configuration and ring-out current.

- (11) Weapons were loaded, after aircraft was spotted on alert.
- (12) Any other munition requirement was met.
- (13) All air inlet, wing and vertical stabilizer plugs were removed.
- (14) Grenades were put on board. (U)

69. Ibic.

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Once these steps were accomplished, the MD-3 and MA-1A units were plugged into the aircraft, ground wires were connected, chocks and fire extinguishers were positioned, plugs and covers were replaced as required, all panels, doors and hatches except the main entrance hatch were closed and secured, "door lock" and by-pass keys were removed, and the ground interphone was connected and properly stowed. The aircraft were moved each 48 hours to rotate the tires, liquid oxygen was serviced daily, and tanks were topped off after each engine run-up. Flight

and maintenance crews were required to pre-flight the aircraft daily. ⁷⁰ (U)

Aviation depot squadrons were required to lead thermo-nuclear weapons and 50 calibre API ammunition. Thermite grenades were furnished the ground crew at the time of weapons loading. [

DoE (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

Parachutes were not installed on these weapons.]

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] Since this weapon was gas

70. ibid.

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boosted, bomb bay doors had to be left open at all times when the weapon was in the bay. Ground and safety procedures were rigidly followed and, in the event of bomb bay door closure, aviation depot personnel were required to run a test for any tritium gas leakage. A daily line inspection of weapons, including visual check and humidity readings, was made.⁷¹ (~~SECRET/FRD~~) u

As in Second Air Force's B-47 wings, quarters, messing, medical and dental care were the best available and had first priority for the B-52 alert force crews. As in the medium bomb wings also, the heavy alert force was tested periodically under the four types of alert conditions. (U)

Strip alert imposition on the 11th Heavy Bomb Wing and 4123d Strategic Wing did not change the primary objective of upgrading sufficient combat ready crews to meet the full EWO 50-59 requirement sortie-wise. The upgrading program during July-December 1958 proceeded under full pressure in the

71. Alert Force SOP 136-1, "Munitions Support," No 4123d Strat Wg, 22 Sep 1958, in History, 4123d Strat Wg, September 1958, Exhibit 7.

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75th and 11th Heavy Bomb Wings and the 4236 and 4238th Strategic Wings.⁷² B-52 crew personnel were obtained principally from former B-36 crews, B-47 trained crew members and ex-B-52 crew members. Minimum requirements for initial check-out (SACR 51-19) for the B-52 airplane were accomplished during assignment to the 4017th Combat Crew Training Squadron at Castle Air Force Base. The formed crews were then assigned to their home B-52 wing for intensive proficiency training to reach combat ready status. This entailed four basic steps. Each individual crew member's records were screened by the wing to evaluate his previous performance and to identify his areas of weakness. Then, since the crew members would live together much of the time during alert and similar assignments, their compatibility with one another was determined in as much as possible. The third step was a thorough air and ground proficiency training cycle with emphasis on emergency procedures related to flying safety. Finally, a crew had to completely satisfy the Standardization Division that they were

72. Interview by MSgt J.V. LeBlanc, Historian, with Major H.R. Briarton, Combat Ops Sr, Ops Div, D/O, Hq 2AF, and Major D.C. Lillard, Jr., Tactical Missions Sr, Ops Div, D/O, Hq 2AF, 19 May 1959.

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unquestionably qualified for combat ready status. 73 (S) M

After assignment to their home wing, the next step for a formed crew normally, was accomplishment of ground training pertinent to the B-52. Spread over approximately 102 hours, this included such subjects as Tactical Doctrine (20 hours), Combat Reporting (4 hours), Ejection Seat Trainer (4 hours), Special Weapons (16 hours), Aircraft Specialized Bombing Systems (4 hours), Positive Control Procedures (1 hour), Cruise Control Performance Computer (1 hour), Engines (4 hours), Electrical System (4 hours), Fuel System (2 hours), Pneumatics (2 hours) and Target Study (40 hours). The aircraft commander and co-pilot were required to undergo all of these. The navigator, radar navigtor, ECM operator and gunner were excused from some, principally those subjects concerned with aircraft flight operation, for example, engines. 74 (U)

The flying training cycle was divided into four phases. These were the pre-solo, post-solo, standardization check and then maintenance of combat ready skill. (U)

73. Operations Plan 425-59, Hq 4238th Strat Wg, "B-52 Upgrading," Annex B, "Flying Training," in History, 4238th Strat Wg, July - August 1958, Exhibit 8.
74. Ibid., Annex A, "Ground Training."

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The pre-solo phase generally consisted of three missions. Refueling was scheduled on every mission. The first mission included gunnery pre-solo, transition for the aircraft commander and co-pilot, navigation, bombing, ECM and emergency procedures. The second covered navigation, bombing, night air refueling, ECM and pre-solo check for navigators. The third consisted of navigation, bombing, ECM and pre-solo checks for pilots and the ECM operators. Purpose of the pre-solo phase was to complete each

crew member in SACR 51-19 requirements and to give each crew member free practice at work before flying for record. ⁷⁵ (U)

When a crew had completed its pre-solo checks, it was then declared to be a combat ready crew, and ready for entry into the post-solo phase. This required the meeting of all combat ready requirements as specified by SACR 50-8 (Training Progress for SAG Units and Aircrews) for one training period, with the exception of the graduation USOM which was directed by higher headquarters. Seven eight-hour missions were usually allocated for this phase of upgrade

75. Ibid., Annex B, Appendix 1, "Pre-Solo Phase."

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training. Based on the availability of facilities such as tankers and radar bomb scoring (RBS) sites, and known crew weaknesses, these missions were intensively devoted to radar RBS, navigation, pilot proficiency and ECM. ⁷⁶ (U)

A crew was not considered qualified for combat readiness in any given area until it had accomplished consecutively the number of items called for by SACR 50-8 with a reliability of 75 per cent or better. For example, if five radar RBS runs were demanded by 50-8, a crew in the upgrading process had to show 75 percent or better reliability on their five most recent runs. Even though it was not a recurring SACR 50-8 requirement, crews were expected to attain a night heavy weight refueling capability before being designated combat ready. Every effort was made to include tanker rendezvous whenever possible during the post-solo missions. ⁷⁷ (U)

When the post-solo phase was completed, the crews were checked by the Standardization Division in accordance with SACR 51-4. This included a written

76. Ibid., annex B, appendix 2, "Post-Solo Phase."
77. Ibid.

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examination and a performance check conducted generally during two eight-hour sorties. If the crew passed this check system, then it was eligible for upgrading to combat ready status and entry into its wing's EWO plan. ⁷⁸ (U)

The KC-135 crews were trained in much the same manner with the exceptions of those operations peculiar to the operation of tanker aircraft, such as fuel handling in airborne hook-ups, rendezvous operations and aquatic survival. Initial training was also conducted by the training unit at Castle AFB. ⁷⁹ (U)

Results of this intensive crew up-grade training in the B-52 wings in Second Air Force during the July-December 1958 period are best told by looking at the record of progress. At the end of July, the 11th Heavy Bomb Wing had 35 B-52 crews assigned; seven were combat ready, the remaining 28 were non-combat ready but available. Based on the crew to aircraft ratio of 1.6 to 1 the wing had 72.9 percent of its programmed crews assigned. Twelve KC-135 crews were

78. Ibid.

79. Operations Plan 426-59, Hq. 4236th Strat Wg, "KC-135 Upgrading," in History, 4236th Strat Wg, July - August 1958, Exhibit 2.

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formed and assigned to the 11th Wing's 95th Air Refueling Squadron. Of these, nine crews were available; one combat ready and eight non-ready. Three of these were still in training at Castle Air Force Base. An additional nine KC-135 crews had been formed as training crews at this time, but these were also at Castle. ⁸⁰ (S) M

The 7th Heavy Bomb Wing had 26 B-52 and seven KC-135 tactical crews which had completed Castle training. Actually this wing had 32 B-52 and 18 KC-135 formed crews assigned. In addition, there were five B-52 and two KC-135 staff crews. During July, three B-52 crews and five KC-135 crews entered Castle training. ⁸¹ The 4123d had a total of 13 crews assigned at the end of July; five of these were combat ready. The fourth of the B-52 wings in Second Air Force at mid-year which had a crew complement was the 4238th Strategic Wing at Barksdale Air Force Base. Although this wing had no B-52 aircraft assigned, it had one combat-ready B-52 crew and 14

80. DF, D/P, Hq 2AF, to OI, Hq 2AF, "History of Combat Crew Force - 1 July 1958 to 31 December 1958," 17 Feb 1959. Exhibit 31.
81. Report, Comdr, 7th BmWg, to CINCSAC, "B-52 Conversion Progress Report No. 6, 31 July 1958," in History, 19th Air Division, 1-31 July 1958, Exhibit 3.

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non-ready crews. There were seven non-combat ready
KC-135 crews assigned. ⁸² *(S/M)*

The Second Air Force command total on 1 July
1958 consisted of two combat ready and 22 non-combat
ready KC-135 crews and 12 combat ready and 65 non-
ready B-52 crews. ⁸³ By the end of October, the 11th
Heavy Bomb Wing and 4123d Strategic Wing had reached
full combat readiness and demonstrated this on 20
November. ⁸⁴ By 31 December, the 7th and 4238th
Wings were on the verge of full readiness. ⁸⁵ Second

Air Force crew status on that date was as follows:

B-52 - 69 combat ready and 40 non-combat ready; KC-135 -
47 combat ready and 22 non-combat ready. This repre-
sented a command net gain of 77 B-52 combat ready
crews and 44 KC-135 combat ready crews, with an

82. Report, "Heavy Bombardment Training Report,
May, June, July 1958," Hq 4123d Strat Wg, in
History, 4123d Strat Wing, 1-31 July 1958,
Exhibit 14.
83. DF, D/P, Hq 2AF, to OI, Hq 2AF, "History of
Combat Crew Force - 1 July 1958 to 31 December
1958," 17 Feb 1959. Exhibit 31.
84. Progress Report No. 12, 2AF Supp to SAC Pro-
gramming Plan 11-57, "Conversion of the 11th
Bomb Wing (H), Altus Air Force Base and
Organization of the 4123d Strategic Wing,
Carswell Air Force Base, Status as of 31
October 1958," 22 Nov 1958. Exhibit 33.
85. 2AF Monthly Analysis, December 1958, 25 Jan
1959. Exhibit 32.

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average of 18 B-52 and 11.7 combat ready crews per
unit. ⁸⁶ (b)M

MIDDLE EAST-LEBANON CRISIS AND B-52 ALERT POSTURE

A full stand-down SAC alert on 15 July 1958 as a readiness measure in the Middle East-Lebanon political crisis proved profitable to the 7th and 4123d Strategic Wings at Carswell and the 11th Heavy Bomb Wing at Altus. This command alert, which lasted through 21 July, enabled Headquarters Second Air Force and these wings to identify areas where additional training and preparation were required to bring a B-52 wing to a state of combat readiness. ⁸⁷ (b)M

At Carswell Air Force Base, only the 4123d Strategic Wing had a combat capability at the time. Three of the 7th Bomb Wing's crews and aircraft were temporarily integrated into the 4123d Wing during the alert. This enabled the 4123d to exceed its EWO ⁸⁸ commitment. The 11th Bomb Wing at Altus Air Force

86. DF, D/P, Hq 2AF, to CI, Hq 2AF, "History of Combat Crew Force - 1 July 1958 to 31 December 1958," 17 Feb 1959. Exhibit 31.
87. Msg, Comdr 19th AD to Comdr 2AF, SECRET/ZIPPO 07-086, "Report, 4123d Wing Preparation for EWP from Able Hour 15 July Thru Able Plus Six Days," 29 Jul 1958. Exhibit 61.
88. Ibid.

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Base, with 30 aircraft and 35 crews assigned, also entered the alert at 1400 hours on 15 July. ⁸⁹ (S) u

The 19th Air Division at Carswell AFB, supervisory command at the time for the 7th and 4123d Wings, considered this stand-down particularly valuable as a prelude to the 4123d ultimate combat ready posture. Plans and procedures under development at the time for maintenance generation, the alert force, and command post were tested and evaluated. ⁹⁰ (S) u

Seven valid positive control envelopes were on hand and issued to 4123d Wing aircraft commanders of the seven QUICK STRIKE crews required under Option 14, Second Air Force 50-59 EWO. Thirteen of 15 combat crews assigned were available at Able hour.

Of these 13 crews, two were lead, three were combat ready, and five were SACR 51-19 solo, non-combat ready but considered capable of executing an EWO mission. Three of the crews had not completed

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89. Report, "Wing Commander's Report D/E-27 of SAC Alert, 15 July 58-21 July 58," Hq 11th BW, in History, 11th Bomb Wing, 1-31 July 1958, Exhibit 7.
90. Msg, Comdr 19th AD to Comdr 2AF, SECRET/ZIPPO 07-086, "Report, 4123d Wing Preparation for EWO from Able Hour 15 July Thru Able Plus Six Days," 29 Jul 1958. Exhibit 61.

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sufficient upgrade training to qualify them for an EWO mission. Consequently, ten 41236 Wing crews were assigned for EWO 50-59 sorties. The three 7th Heavy Bomb Wing combat ready ex-B-52 instructor crews on station at the time were assigned three additional sorties. Thus a total of 13 of the 15 EWO sorties assigned the 41236 Wing were covered immediately. A 14th sortie was assigned to a non-combat ready but qualified crew which had returned from leave on 21 July.⁹¹ (S) M

Since the 41236 Wing was committed [] with its five combat ready crews, 146 hours had to be spent on target study by the non-ready crews prior to beginning the SACM 55-7 schedule for take-off generation.⁹² (S)

AF (b)(1)
EO 12958
SEC 3.3 (b)(5)
7257

The 4123d Wing had been initially scheduled to start alert force operations with one aircraft and crew on 1 August 1958. SAC extended this entry into the alert concept until such time as ten combat ready crews would be available. Consequently, the alert facilities were not completely operational by 15 July. The commitment under Option 1A of the EWO to seven

91. Ibid.
92. Ibid.

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QUICK STRIKE crews plus two more crews scheduled for take-offs at E hour plus 40 and E plus 1:03 necessitated establishment of alert facilities and housing for a total of nine crews on base. A practice test was called on 18 July and seven QUICK STRIKE crews reported at their aircraft in from three to eight and one-half minutes. ⁹³ (S) u

Fifteen aircraft were assigned to the 4123d at Able hour. Thirteen of these aircraft were generated; two could not be forecast due to major structural repair on one and a main tank high level fuel leak on the other. ⁹⁴ (S) u

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DoE (b)(3)
42 USC sec. 2168
(a)(1)(e)(FRD)

⁹⁵ (S) u

Generation rate for one dispersed B-52 squadron

- 93. Ibid.
- 94. Ibid.
- 95. Ibid.

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(SACW 55-7) was met or exceeded with the exception of three aircraft. [

Air Force (b)(3)
42 USC sec. 2168
(a)(1)(c)(FRD)

] 96

(S)FRD M

The 11th Bomb Wing generation rate was hindered to a degree as a result of the aforementioned weapon loading decision and also because of ECM equipment deficiencies. The EWO required that weapon loading be accomplished in a maximum limit of two and one-half hours per aircraft. The 11th Bomb Wing was unable to meet this time limit because authorized K-4 hoists had been substituted for by C-9 hoists which were extremely poor in design, age and quantity. A shortage of dual capability racks caused additional loading difficulty; of the 60 dual racks required by the wing, only 52 were available. 97 (S)M

A serious lack of combat configured ECM aircraft was encountered by the 11th Bomb Wing early in the alert. Subsequent to 66 hours, enough ECM equipment was acquired to equip 27 aircraft in the 7-holer

96. Ibid.

97. Report, "Wing Commander's Report B/R-27 of SAC Alert, 15 July 56-21 Jul 58," Hq 11th BW, in History, 11th Bomb Wing, 1-31 July 1958, Exhibit 7.

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configuration. 98 (S)M

Following the resumption of normal activities, the 4123d Wing, on 23 July, was required to put on a maximum effort 10-aircraft bomber stream mission. Weapons were downloaded and the aircraft were defueled to an average gross weight of 405,000 lbs. with full drop tanks. The purpose of this mission, partly, was to test the quality of maintenance provided during the alert generation phase. Nine of the ten scheduled aircraft accomplished take-offs at 12 minute intervals. The tenth aircraft aborted on take-off due to materiel failure of a pneumatic duct; this tenth crew took off 3:12 hours later. All ten aircraft flew the mission as briefed. No major maintenance troubles were noted. 99 (S)M

The alert, by spotlighting status of Second Air Force's B-52 training efforts, stimulated progress during the following months. Organizational and control defects were remedied on the spot in most instances during the alert. Materiel and equipment deficiencies, alert facilities, and other such long-term items were again called to the attention of

98. Ibid.

99. Msg, Comdr 19th AD to Comdr 2AF, SECRET/ZIPPO 07-086, "Report, 4123d Wing Preparation for BWP from Able Hour 15 July Thru Able Plus Six Days," 29 Jul 1958. Exhibit 61.

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higher headquarters. For example, dispersed maintenance equipment shortages were a problem area for all heavy bases formerly scheduled as satellites. The revised maintenance concept for the heavy dispersal program required a major adjustment in the Air Materiel Command equipment buy program. On 15 August, SAC advised Second Air Force that the equipment would be available at a time compatible with programmed unit moves. ¹⁰⁰ (*S*) *M*

Construction completion dates and beneficial occupancy dates for key items at dispersed bases were being very closely monitored by SAC. That headquarters stated that the program for occupancy of Second Air Force bases should proceed as scheduled with the exception of Sheppard Air Force Base, which was to activate a B-52 strategic wing in January 1959. This program was expected to slip from four to six months. Major construction items, such as family housing, MB-2 docks, heavy duty access ramps and fuel storage facilities were some of the items requiring close staff supervision throughout the period from 1 July to 31 December 1958. ¹⁰¹ (*S*) *M*

100. Ltr, Hq SAC, to Comdr 2AF, DFL, "Problem Areas, Second Air Force Heavy Dispersal Bases," 15 Aug 1958. Exhibit 62.

101. Ibid.

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BOMBER STREAM MISSIONS AND B-52 TRAINING

A final significant operational consideration during the 1958 B-52/KC-135 integration period was the application of bomber stream tactics to training operations in relation to future planned assumption of the full one-third alert. A bomber stream is a tactic developed for one phase of the operations of high-speed, high altitude jet aircraft. The aircraft flow on target penetration and approach resembles the flow of a stream, a smooth uninterrupted procession, either singly or in cells of aircraft. A principal difference between bomber stream and the earlier formation flying is that reference to other aircraft is by electronic rather than visual means. The heavy wings in Second Air Force, with B-52 aircraft in operation, were required to fly from one to eight bomber stream missions each month. Maximum crew training as outlined in SACR 50-43 was required to be accomplished on these missions. This was, in a sense, the fourth phase of the B-52 crew upgrading system; maintenance of combat ready proficiency. ¹⁰² *(S)M*

102. Interview, MSgt J.V. LeBlanc, Historian, with Maj. H.R. Briarten, Combat Ops Br, Ops Div, D/O, Hq 2AF, 19 May 1959.

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The 11th Heavy Bomb Wing mission of 11 July, was a typical example of training required during a stream mission. There were eight requirements: one ground position indicator (GPI) nav-bomb mission, two radar bomb scoring (RBS) runs, two ground controlled intercept (GCI) runs, one night celestial leg with pressure line of position (PLOP), one night celestial grid leg, maximum gunnery, one jet penetration, ground controlled approach (GCA) and landing, and one RBS simulator. ¹⁰³ (S)M

Application of bomber streams to the training program was not a new concept. However, the degree of emphasis being placed on training during the bomber stream was developed by the 11th Heavy Bomb Wing Commander at the Second Air Force Commander's Conference on 4 November 1958. This study was based on the problem of increasing the percentage of crews and alert aircraft versus training standards. ¹⁰⁴ (S)M

Basic problem, the 11th Bomb Wing Commander felt, stemmed from sortie and consequent training loss inherent in maintaining up to one-third of aircraft

103. OPRD 805-58, "Bomber Stream Mission Order for 11 July 1958," Hq 11th BW, 26 Jun 1958, in History, 11th Bomb Wg, 1-31 July 1958, Exhibit 14.
104. Study, "Bomber Stream Concept," by Col F. R. Ramputi, Comdr 11BW, presented at Second Air Force Commander's Conference, 4 Nov 1958. Exhibit 63. 147

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on alert while continuing the same standards of training with this lesser crew and aircraft availability. Three different solutions were considered. The first idea had been the generation of additional sorties; this was discarded because crews did not have sufficient time to take advantage of additional sorties. The second thought was to decrease the training requirement, both air and ground. This was not considered a satisfactory answer. The third solution, a system which would partly solve the problem was to increase sortie effectiveness. ¹⁰⁵ (S) M

The 11th Wing Commander offered three methods of accomplishing this third plan. These were, first, more efficient use of available human resources, secondly, better use of available facilities such as RBS sites and gunnery ranges, and finally, better evaluation of what was being done. Every possible minute of the sortie needed to be effectively utilized. ¹⁰⁶ (S) M

The 11th Wing Commander felt that bomber stream missions could best attain these objectives. They would reduce the number of individually planned,

^{105.} ibid.
^{106.} ibid.

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briefed and critiqued missions; therefore, better work could be done and closer supervision would be possible. To make better use of training facilities, he proposed to produce more aircraft per hour over the facility. Bomber streams also provided identical missions for all crews. In this way, crews could be evaluated against other crews over the same targets and under the same conditions. (u)

His plan was that each unit would have three pre-planned bomber stream missions and these missions would provide all 50-8 requirements except proficiency. Each crew would normally fly these three missions twice each training period and in addition, fly two pilot proficiency and two optional missions per quarter. These latter missions were to provide for missed 50-8 training on the stream missions and for emphasis on detected weaknesses on the part of the crews. ¹⁰⁷ (S) M

Four advantages would result: (1) a unit using bomber streams would require only one-third the RBS site time utilized under the existing sorties system; (2) all crews would meet existing 50-8 requirements

107. Ibid.

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even with one-third of the aircraft on alert; (3) a valid yardstick would be provided to measure all crews; and (4) the air division would be provided with the same yardstick to evaluate its wings. ¹⁰⁸ (S)

In his conclusion, the 11th Wing Commander requested Second Air Force to allocate training facilities for a whole training period (four months) in advance and to schedule these facilities to match the bomber stream concept. A request was then made that the 11th Bomb Wing be directed to make the trial run of this concept during the training period starting 1 January 1959; that a B-47 wing be included; and that necessary facilities scheduling be provided. ¹⁰⁹ (U)

On 19 November 1958, Second Air Force granted this request to so utilize the 1 January 1959 training period. RBS time was made available, except that air traffic control clearances were to be a responsibility of the unit. In authorizing this test, however, Second Air Force made a prediction on which this narrative of Second Air Force B-52/KC-135 conversion progress in 1958 will be closed: ¹¹⁰ "The bomber

108. Ibid.

109. Ibid.

110. Msg, Comdr 2AF to Comdr 516 AD, and 11th EW, DOTO M-8-1920L, "Bomber Stream Concept," 19 Nov 1958. Exhibit 64.

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stream concept has considerable merit. However, it is anticipated the B-52 force will commence an airborne alert in the near future and SACR 50-8 and 51-26 and other training regulations will be rewritten to be compatible with this new concept. Therefore a test by a 30-aircraft B-52 wing would not obtain data valid for future air operations." *(S) M*

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