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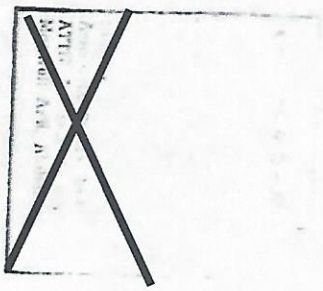

43rd Bombardment Wing (Medium)

October - December 1968
(Unclassified Title)

Assigned to

825th Strategic Aerospace Division, Second Air Force
Strategic Air Command

Stationed at
Little Rock AFB, Arkansas

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FOREWORD

(U) This historical report, prepared by Amn. Paul H. Stevens, covers the activities of the 43rd Bombardment Wing (Medium) from 1 October through 31 December 1968.

(U) In order to document this history, the historian made every effort to screen and present those documents which, in his opinion, most objectively reflected the activities of the wing during this period.

(U) Several topics mentioned in SACM 210-1 were not included in this report. These topics included: Chapter III - Airborne Alert, Rotations; Chapter IV - Conversion; Chapter V - New Facilities. These topics were not applicable during this period. In Chapter VI, several topics were not covered because no events of historical importance occurred during this quarter. These topics included: Communications, Security, Transportation, and Budgetary Matters.

(U) Wing activities in support of Senior Crown are discussed in the 43rd Bombardment Wing SPAR History for the period July through December 1968.

(U) This report - like all other reports - is subject to revision, deletion, and/or addition. Corrections or improvements are encouraged.

CHRONOLOGY

DATE	EVENT
October	
3	(U) One B-58 from the 43rd BW participated in a Busy Luggage mission.
9	(U) An excessive amount of fuel leaks in the wing's B-58 fleet caused 11 aircraft to be grounded. A total of 19 sorties from 10 October to 21 November were lost due to the leaks.
9	(U) The wing participated in Snow Time 69-1-E missions. Two of the eight B-58s deployed for the missions aborted.
15-16	(U) Representatives of the 43rd BW attended a B-58 Post-Modification Review - convened by SAAMA personnel- at Little Rock AFB
17-25	(U) A Battle Staff exercise, "High Heels 68," was conducted by the 43rd BW.
21	(S) The wing conducted a Sustained Reaction Posture test in which 20 aircraft participated - the normal alert force of 16 aircraft plus two additional B-58s and two KC-135s.
22-24	(U) 43rd BW representatives attended a B-58 Spares Review Conference at Kelly AFB, Texas.
30	(U) Modification of fire hydrants installed on the edge of the Little Rock AFB ramp taxiway was completed. However, the hydrants were later found to be a safety hazard and were pending removal at the end of the quarter.
November	
2	(U) Repair of the B-58 pod hook support fitting began. The work was done by a General Dynamics team at Grissom AFB, Indiana.
4-8	(U) A 825 SAD staff assistance visit was conducted to the 43rd BW. Included in the visit was a follow-up inspection of discrepencies noted in the May ORI and the August ORIT.

DATE	EVENT
November (continued)	
6	(U) A suggestion by two members of the 43rd AEMS for a B-58 heading rack modification was forwarded to 2nd AF. The suggestion was approved by both 2nd AF and SAC, and actual testing of the proposed modification began on 2 December at Little Rock AFB.
17	(U) Four wing B-58s were scheduled to take part in a Glass Road mission. However, one of the B-58s aborted.
18-22	(U) The 1st Combat Evaluation Group (CEG) conducted a no-notice visit to the 43rd BW. The wing was rated satisfactory.
December	
3	(U) The Air Force-wide "Top Three Program" had its official kick-off. Plans were drawn up during the month to establish a 43rd BW Top Three Council.
9-13	(U) The 1st CEG conducted a visit to the Combat Crew Training School (CCTS). The CCTS was rated satisfactory.
12	(U) The wing participated in Snow Time 69-2-C missions with eight B-58s, two of which aborted the missions.
15-20	(U) A 2nd AF Standardization Division visit was conducted to the 43rd BW.
31	(U) The wing's KC-135 commitment to Goose Bay, Labrador, terminated. KC-135s began home alert at Little Rock AFB.

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INTRODUCTION

(U) Figures for total military personnel authorized versus assigned in the 43rd BW dropped to a low this quarter that had not been reached in the previous six quarters.

(U) A critical manning situation continued to exist in the wing's Survival Equipment shop. A manning crisis of a more immediate nature took place in the 43rd DCM Fuel Systems Shop and arose from severe fuel leaks that developed in the wing's B-58 aircraft fleet.

(U) A new personnel program was introduced Air Force-wide during the quarter, the "Top Three Program," which was aimed toward improvement of first-term airmen retention.

(U) Re-enlistment rates for both career and first-term airmen decreased below last quarter's rates, and were well below SAC standards.

~~(C)~~ The wing's three bomb squadrons, and the 70th AREFS, maintained "C-1" ratings throughout the quarter.

(b) (1) (B)

[redacted]

~~(S)~~ Downtime for B-58 aircraft showed the highest increase during the quarter since July 1966. Total downtime figures this quarter almost were twice as high as those recorded in the previous quarter.

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Twenty wing aircraft participated in a Sustained Reaction Posture test in October. This was the first full-scale implementation of the wing's SRP plan that was revised on 1 January 1968.

The 43rd BW participated in the satellite basing program and the force dispersal program during the quarter, and it was scheduled for satellite basing and force dispersal with four other bases.

(U) The 43rd BW participated in five special missions during the quarter. One of these exercises is discussed in the 43 MBW July-December 1968 SPAR History.

(U) Twenty B/TB-58 aircraft took part in the four-way modification program conducted at James Connally AFB, Texas.

(U) Two members of the 43rd AEMS submitted a proposal for modification of the bomb-navigation system heading rack this quarter. Testing for implementation of the modification was approved by SAC.

CHAPTER I

MISSION, ORGANIZATION, ADMINISTRATION

MISSION

(U) From 1 October to 31 December, the primary mission of the 43rd Bombardment Wing (Medium), henceforth termed the 43rd BW, remained the same as stated in the previous seven histories. Located at Little Rock Air Force Base (AFB), Arkansas, the 43rd BW, being a part of the Strategic Air Command (SAC), had the same general mission as SAC itself.

(U) SAC's mission was the prevention of a nuclear war by operating from a position of unquestioned strength. SAC hoped to preserve peace on honorable terms by maintaining a strategic* bomber and missile aerospace** force capable of winning under all circumstances. If this primary mission failed, then SAC was prepared to destroy the enemy's capability to continue the conflict. The command's war plans were based on absorbing a surprise attack, although a situation in which

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* Strategic - A concept of warfare in which long-range aircraft and/or missiles destroy enemy forces, facilities and supplies before they reach the battlefield and before they are manufactured, if possible.

** Aerospace - The earth's atmosphere and the space beyond, considered as one continuous expanse.

SAC could have gained the initiative through long-range warning was not ruled out.[1]

(U) The mission of the 43rd BW was to maintain a combat-ready* B-58 and KC-135 aircraft force which was prepared to conduct strategic missions on a global scale either independently or in conjunction with land and sea forces.[2]

(U) The discussion throughout the narrative describes the manner in which the wing was capable of accomplishing its assigned mission during October, November and December 1968. These assigned duties consisted of:[3]

1. Maintaining assigned units in a state of readiness to permit immediate retaliation against all enemies of the United States and its allies.

2. Maintaining the capability to perform the tasks assigned in the Emergency War Orders (EWO) and related operational orders.

3. Training bombardment and/or refueling combat crews for performance of global operations.

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* Combat-Ready - Operationally ready for combat.

1. AFP 190-2-2, Vol. I, "Aerospace Information Handbook" (U), 1 Jul 63, (U).

2. 2AFR 23-6, "Mission of Strategic Aerospace and Bombardment Wings" (U), 4 Feb 65, (U).

3. Ibid.

4. Supporting Air Reserve and Air National Guard programs in accordance with instructions from higher headquarters.

5. Performing any special missions as may be directed by Second Air Force (2nd AF) or SAC.

6. Assuring required support was provided to tenant units when acting as host to these units.

ORGANIZATION

(U) The 43rd BW was organized under the deputy commander concept in accordance with provisions of SACM 23-2, "Functions of Strategic Air Command Units." The wing was divided into two separate parts, each headed by a deputy commander. The Deputy Commander for Operations (DCO) directed the 63rd, 64th and 65th Bombardment Squadrons (BS) and the 70th Air Refueling Squadron (AREFS). The Deputy Commander for Maintenance (DCM) directed the 43rd Field Maintenance Squadron (FMS), the 43rd Organizational Maintenance Squadron (OMS), the 43rd Armament and Electronics Maintenance Squadron (AEMS) and the 27th Munitions Maintenance Squadron (MMS).[4]

(U) The 825th Strategic Aerospace Division (SAD), also located at Little Rock AFB, had immediate jurisdiction over the 43rd BW. The 825th SAD was directed by 2nd AF, a major sub-command located at Barksdale AFB, Louisiana, which in turn was directed by SAC Headquarters, Offutt AFB, Nebraska.

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4. Rpt, "Units Assigned" (U), Oct-Dec 68, (U), Ex. 1.

(U) The 825th Combat Support Group (CSG), commanded by Col. McLyle G. Zumwalt, provided administrative and logistic support to the 43rd BW. The wing was provided medical assistance by the 825th Medical Group, commanded by Col. Harold F. Hartman.

(U) Detachment 13 of the 26th Weather Squadron provided weather information to the wing. Communications assistance was provided by the 1924th Communications Squadron.

ADMINISTRATION

(U) Col. Sherwin G. Desens was the 43rd BW commander during the October-December 1968 quarter. The wing's vice commander was Col. Roy L. Harris. Several changes took place in the 43rd BW's roster of key personnel during the quarter. Lt. Col. John M. Weeks, Jr., previously the 43rd FMS commander, was replaced by Col. Leo Florick, who came to Little Rock AFB from the 35th FMS, Phan Rang AB, Republic of Viet Nam. Colonel Weeks was transferred to the 8th Tactical Fighter Wing under the Pacific Air Force. Lt. Col. Thomas M. Gilbert, Jr., took over duties as 64th BS commander, replacing Lt. Col. Leslie R. Prout, Jr., who was assigned to temporary duty (TDY) as special assistant to the wing's DCO. Colonel Gilbert previously had been chief of the 43rd BW Standardization Division. Lt. Col. Ralph H. Herman, previously the 70th AREFS operations officer, became the 70th's commander, replacing Lt. Col. John C. Sunderland who was assigned to TDY to the 4252 Strategic Wing at

Kadena AB, Okinawa. Capt. Jacob Bruckler, Jr. replaced 1st Lt. Harold D. Fink as commander of the 43rd Headquarters Squadron (HS), and 2nd Lt. Dorothy A. Gregory became the wing's chief of administrative services, filling a post that previously had been vacant.[5]

5. Key Personnel Roster, as of 31 Dec 68; and Interview, Amn. P. H. Stevens, Historian, with SMSgt. E. H. Redam, Wing Sergeant Major, 6 Jan 69.

CHAPTER II

PERSONNEL

AUTHORIZED AND ASSIGNED STRENGTH

(U) After having shown a slight increase in the July-September 1968 quarter, figures for total military personnel authorized versus assigned during the October-December 1968 quarter dropped far below figures for the previous six quarters. Figures plummetted from 96.7 per cent at the end of September to 93.9 per cent at the end of December. Never since June of 1967, when the authorized versus assigned figure was 92 per cent, had the figures dropped so low. At the end of October, the figure was 94.6 per cent, and at the end of November, the figure was at the quarter's low - 93.3 per cent. A major reason for the drop was large decreases in the number of airmen assigned to the Armament and Electronics Squadron (AEMS) and the Field Maintenance Squadron (FMS). Comparing assigned figures at the end of September and at the end of December, the FMS lost 39 assigned airmen during the present quarter and the AEMS lost 27. The number of authorized airmen remained the same during the quarter in both squadrons.[1]

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1. Extract of Rpt, "Assigned Strength" (U), Oct, Nov and Dec 68, (U), Ex. 3; Hist, 43 MBW, Jul-Sep 68, p. 6; and Hist, 43 MBW, Apr-Jun 67, p. 6.

(U) Authorizations in the wing's Unit Manning Document (UMD) were the same as the number at the end of the previous quarter - 2,434 positions. Overall, the 43rd BW lost 69 persons during the quarter. At the end of September, 2,355 officers and airmen were assigned to the wing; at the end of December, this figure decreased to 2,286.[2]

(U) The continuing problem of uneven rank-spread was again present during the quarter - to a higher degree than in previous quarters. A shortage of 337 non-commissioned officers (NCOs) existed at the end of the quarter, compared to a shortage of 251 in the July-September quarter and 324 in the April-June period. The wing had 148 extra airmen assigned, 16 more than in the previous quarter. This shortage of NCOs and abundance of airmen had existed since October 1966.[3]

(U) Manning in the staff sergeant (SSgt) rank - which in previous quarters had experienced undermanning to a greater degree than any other rank - continued to drop in numbers at a rapid rate during the quarter. A shortage of 268 SSgts existed at the end of December, compared to 189 less assigned than authorized at the end of September. The sergeant (Sgt) rank helped to counterbalance this decline somewhat with an overage of 84, compared to an overage of 45 at

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2. Rpt, "Unit Manning Document FY 2/69" (U), on file in 43rd BW Historical Archives; Extract of Rpt, "Assigned Strength" (U), 31 Dec 68, (U), Ex. 3; and Hist, 43 MBW, Jul-Sep 68, Ex. 3.

3. Extract of Rpt, "Officer and Airmen Assignments" (U), Oct, Nov and Dec 68, (U), Ex. 3; and Hist, 43 MBW, Jul-Sep 68, p. 7.

the end of the previous quarter. The overage in the Sgt rank was the highest of any ranks in the wing. The airman first class (A1C) rank had an overage of 76, 20 less than at the end of the previous quarter. The airman (Amn) rank doubled its overage during the quarter: from 36 at the end of September to an overage of 72 at the end of December. There were two airmen basic assigned at the end of the quarter. Personnel holding either of these last two ranks were not authorized in the wing's UMD.[4]

(U) Overall airmen and NCO manning decreased by 68 this quarter against a UMD authorization that remained constant. Most of the overall decrease was caused by decreases in the technical sergeant (TSgt) and SSgt ranks. The TSgt rank decreased by 37 assigned at the end of December, compared to figures at the end of the previous quarter, and the number assigned in the SSgt rank decreased by 79.[5]

Officer Manning

(U) Assigned versus authorized figures for officer manning varied little during the quarter. The wing was manned at 110 per cent at the end of the quarter, exactly the same figure which existed at the end of the July-September and the April-June quarters. At the end of December, the Headquarters Squadron (HS) was manned at 80 per cent;

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4. Extract of Rpt, "Assigned Strength" (U), Oct, Nov and Dec 68, (U), Ex. 3; and Hist, 43 MBW, Jul-Sep 68, p. 7.

5. See note above.

AEMS, 63 per cent; FMS, 143 per cent; Organizational Maintenance Squadron (OMS), 100 per cent; 63rd Bombardment Squadron (BS), 134 per cent; 64th BS, 120 per cent; 65th BS, 118 per cent; Munitions Maintenance Squadron (MMS), 80 per cent; and 70th Air Refueling Squadron (AREFS), 115 per cent. The FMS had the greatest change in officer manning from the last quarter. Its authorized versus assigned figure increased from 100 per cent at the end of September to 143 per cent at the end of December. The next greatest change was in the MMS, which decreased from 100 per cent at the end of September to 80 per cent at the end of the quarter.[6]

(U) Authorized versus assigned manning figures for civilians remained the same as figures for last quarter. Decreases had been experienced in previous quarters: 1.4 per cent decrease in July-September; 4.5 per cent in April-June, and 2.4 per cent in January-March. Although overall figures of 47 civilians authorized and 38 assigned at the end of December were the same as those at the end of September, several changes took place within squadrons. The HS lost one authorization and lost one assignment. However, the AEMS gained one assignment and the FMS gained one authorization to neutralize these losses.[7]

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6. Compiled from Rpt, "Officer and Airman Assignments" (U), 31 Dec 68, (U), Ex. 3; and Hist, 43 MBW, Jul-Sep 68, Ex. 3.

7. Extract of Rpt, "Assigned Strength" (U), Oct, Nov and Dec 68, (U), Ex. 3.

SHORTAGES AND EFFECTS

Survival Equipment (Egress) Personnel

(U) A critical manning situation in the wing's Survival Equipment (Egress) shop continued to be a major manning problem, as it was in the previous quarter. The cause of the problem was a major time change program which directed a change of approximately 16 items on each of the 131 B-58 escape capsules. The change flow was first scheduled to begin maximum buildup in March 1969 and continue through June 1970.[8]

(U) In order to meet the increased workload, the Egress shop made a request during the previous quarter to the SAC Management Engineering Team (SACMET) at Little Rock AFB for an increase in manpower. This request was turned down by SACMET, which stated that the present workload was being adequately accomplished with the eight persons assigned. The Egress shop had an authorization of 15 positions at this time.[9]

(U) The problem continued into the present quarter. In late October, the 43rd DCM made a request that the Egress shop be 100 per cent manned for the period March 1969 through June 1970. The DCM further requested that all temporary duty (TDY) and permanent change in station (PCS) assignments be suspended for shop personnel

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8. Hist, 43 MBW, Jul-Sep 68, Ex. 4 and 5.

9. Ibid.

during this period. A reply from 2nd AF to the requests was not encouraging. SAC overall manning in the Egress field was 75 per cent, 2nd AF stated, which would preclude supporting the request for 100 per cent manning. 2nd AF did, however, approve a change submitted by the 43rd BW that would authorize the wing to re-schedule time change requirements to provide a balanced workload. SAC also approved the request, which was to permit the Egress shop to begin time changes in January, thus spreading the workload over a longer period.[10]

(U) A manning assistance request for the Egress shop was forwarded to SAC by the 825th Combat Support Group (CSG) later in the quarter. The message stressed that it was essential to the EWO mission of the wing that the Egress shop be 100 per cent manned by 1 January 1969. It requested the following: that three NCOs scheduled for assignments be released from their orders; that all projected gains for 1969 be in place by 1 January to insure adequate training; that Egress personnel be deferred from TDY or PCS assignments.[11]

(U) A reply was received from SAC on 3 December. SAC defined the Egress manning shortage as an Air Force wide problem, stating

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10. Msg, 291530Z, 825 SAD to 2AF, "Critical Manning B-58 Egress Personnel" (U), 29 Oct 68, (U), Ex. 4; Msg, 082327Z, 2AF to 825 DM, "Critical Manning, B-58 Egress Personnel" (U), 8 Nov 68, (U), Ex. 5; and Interview, Amn. P. H. Stevens, Historian, with MSgt. Kenneth Rateliff, NCOIC, Egress Shop, 15 Jan 69.

11. Ltr, 825 CSG to SAC, Subj: Manning Requirement Egress, (U), 13 Nov 68, (U), Ex. 6.

that manning shortages were caused by insufficient school production and low retention rates. SAC stated that current manning in the 43rd Egress shop was consistent with the command and world-wide manning average, the latter being 84 per cent. A freeze of overseas shipments for Egress personnel would only cause hardships on other airmen, who would serve a disproportionate share of overseas service, SAC continued. SAC cancelled the assignment of TSgt. Heard, the non-commissioned officer in charge (NCOIC) of the 43rd Egress shop. The two other assignments were protested by SAC to USAF.[12]

(U) A request that SAC reconsider its decision was made by the commander of the 825th SAD on 12 December. The commander stated that the Egress System Time Change Program was "an unusual problem which involves a life sustaining measure and demands priority manning." No further reply was received to this request by the end of the quarter.[13]

(U) At the end of December, there were 14 personnel assigned to the Egress shop, six more than had been assigned at the end of the previous period. The shop was projected to have 15 personnel assigned by February 1969. This was against an authorization of 16 personnel. The manning figure of 87 per cent at the end of December was above SAC

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12. Msg, 032141Z, SAC to 825 SAD, "Egress Manning" (U), 3 Dec 68, (U), Ex. 7.

13. Msg, 122203, 825 SAD to SAC, "Command Assistance - Egress System Manning" (U), 12 Dec 68, (U), Ex. 8.

and world-wide standards, but still below the desired 100 per cent manning figure.[14]

Fuel Systems Personnel

(U) A manning crisis of a more immediate nature than that faced by Egress personnel occurred in the 43rd DCM Fuel Systems shop during the quarter. This crisis came about when a large number of fuel leaks in the inboard engine pylons of the B-58 forward tank began to affect a sizeable portion of Little Rock AFB's bomber inventory. On 9 October, 11 B-58s were out of commission due to the fuel leaks. And during the period of 10 October through 21 November, the 43rd BW had to cancel 19 sorties because of the fuel leaks.[15]

(U) Due to a lack of manning in the Fuel Systems shop, outside aid was necessary to begin immediate repair of the leaks. The shop had an authorization of 17 personnel, but was assigned just eight, one of whom was on TDY in Southeast Asia. The entire repair work had to be supported by these personnel, who were assigned on two 12-hour shifts. A request by the wing's DCM on 9 October for six depot personnel was fulfilled two days later when a team chief and a crew of

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14. Interview, Amn. P. H. Stevens, Historian, with MSgt. Kenneth Ratelifi, NCOIC, Egress Shop, 15 Jan 69, and Egress Manning Chart, as of 31 Dec 68, on file in Base Career Control Section.

15. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report - November, 11 Dec 68; and Msg, 091433Z 825 SAD to 2AF, "Request for O & F Level Maintenance Assistance" (U), 9 Oct 68, (U), Ex. 9.

six arrived at Little Rock AFB from the San Antonio Air Materiel Area (SAAMA). Following a later request for additional personnel, two fuel systems specialists arrived from Oklahoma City Air Materiel Area (OCAMA) on 6 November to augment the work force.[16]

(U) By the first of December, almost all of the leaks had been repaired, and on 20 December, all SAAMA and OCAMA personnel departed from Little Rock AFB. The fuel leakage problem is discussed in greater detail in Chapter IV, "Maintenance Problems." The effect of the leaks on B-58 alert aircraft is discussed in Chapter III, "Downtimes for Alert Aircraft." At the end of the quarter, nine personnel were assigned to the Fuel Systems shop, against an authorization of 17.[17]

PERSONNEL PROGRAMS

(U) A new program aimed at improving retention of airmen on their first enlistment went into effect late in the quarter. The Top Three Program, as it was called, had its official Air Force-wide kickoff on 4 December, but it was not until later in the month that actual plans were drawn for its implementation at Little Rock AFB. The "Top Three" referred to the three upper grade NCO ranks - chief master

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16. Msg, 091433Z, 825 SAD to 2AF, "Request for O & F Level Maintenance Assistance" (U), 9 Oct 68, (U), Ex. 9; Msg, 090010Z, 825 SAD to 2AF, "Request for O & F Maintenance Assistance" (U), 9 Oct 68, (U), Ex. 10; Interview, Amn. P. H. Stevens, Historian, with TSgt. Walter R. Prevatt, NCOIC, Fuel Systems Shop, 6 Jan 69; and Msg, 282254Z, 825 SAD to 2AF, "Fuel Systems Shop Manning" (U), 28 Oct 68, (U), Ex. 11.

17. Interview, Amn. P. H. Stevens, Historian, with TSgt. Walter R. Prevatt, NCOIC, Fuel Systems Shop, 6 Jan 69.

sergeant, senior master sergeant and master sergeant. The idea of the Top Three Program was to have these ranks carry the responsibility for establishing a program within their own unit which would help to increase retention of first-term airmen.[18]

(U) Although the program was not actually initiated in the 43rd BW by the end of the quarter, plans were being drawn up for a 43rd BW Top Three Council. The council was to be headed by SMSgt. E. H. Redam, Wing Sergeant Major, and was to include a senior NCO from the DCM and DCO sections, and also from the 43rd AEMS, 43rd FMS, 43rd OMS, and the 27th MMS.[19]

(U) Other programs relating to personnel during the quarter included the Young Airmen's Council and two retention programs which were continued from early 1968. The 43rd BW Young Airmen's Council consisted of airmen E-4 and below who met on a monthly basis to discuss problems and initiate programs under supervision of the wing's first sergeant. Two personnel programs designed to improve airmen retention included Selective Re-enlistment and Pro Pay, both of which are discussed in the 43 MBW January-March 1968 History.[20]

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18. Interview, Amn. P. H. Stevens, Historian, with MSgt. Lou B. Yother, Base Career Adviser, 23 Jan 69.

19. Interview, Amn. P. H. Stevens, Historian, with SMSgt. E. H. Redam, Wing Sergeant Major, 23 Jan 69.

20. Interview, Amn. P. H. Stevens, Historian, with MSgt. Lou B. Yother, Base Career Adviser, 23 Jan 69.

UNIT MANNING DOCUMENT

(U) The wing's UMD remained very stable during October, November and December. No changes were made in the number of officers and airmen authorized for any of the wing's squadrons. The 43rd HS lost one civilian authorization during October, but the loss was countered by a gain of one civilian authorization by the 43rd FMS during the same month.[21]

ON-THE-JOB-TRAINING

(U) The principle behind On-The-Job-Training (OJT) was to "learn by doing" under the guidance of a skilled person. An airman advanced to higher skill levels after becoming more proficient in his job. This advancement was accomplished by passing Specialty Knowledge Tests (SKT).[22]

(U) The number of personnel tested and passed during the quarter in the 43rd BW is shown in the following chart:[23]

Chart 2.2 - OJT Statistics Oct-Dec 68

3 Level		5 Level		7 Level		9 Level	
Tested	Passed	Tested	Passed	Tested	Passed	Tested	Passed
14	13	85	57	15	14	16	12

21. Extract of Rpt, "Assigned Strength" (U), Oct, Nov and Dec 68, (U), Ex. 3.

22. SACM 52-2, "On-The-Job-Training" (U), 12 Aug 68, (U).

23. Compiled from Wall Charts, "OJT Statistics" (U), Oct, Nov and Dec 68, (U), Appendix A.

(U) The wing's passing rate for the quarter was 73.8 per cent, which exceeded the year's low of 71 per cent set during the July-September quarter. Last quarter's low was caused in part by poor performances on the 3 level SKT - which had a 67 per cent passing rate. However, during the present quarter, the 3 level SKT passing rate climbed to 93 per cent. The 9 level passing rate also showed improvement, increasing from 33 per cent during the previous quarter to 75 per cent during October-December. The 7 level passing rate showed slight improvement, moving up two percentage points from the previous quarter to a 93 per cent level this quarter. The 5 level SKT passing rate was the only one that failed to improve, dropping from 71 per cent during the July-September quarter to 67 per cent in the present quarter. There were 407 airmen in training at the end of the quarter.[24]

RETENTION

(U) Only enlisted personnel were rated in the retention program. Retention rates for officers were recorded at major command level. Airmen were divided into two groups: career airmen* and first-term airmen**. SAC retention goals for career airmen and first-term airmen were 90 per cent and 35 per cent.

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* Career Airmen - Airmen on second or subsequent enlistment.

** First-Term Airmen - Airmen on first enlistment.

24. Compiled from Wall Charts, "OJT Statistics" (U), Oct, Nov and Dec 68, (U) Appendix A; and Hist, 43 MBW, Jul-Sep 68, p. 13.

Retention Rates and Effectiveness

(U) The following chart shows the retention rates for both career and first-term airmen at the end of December:[25]

Chart 2.3 - Retention Statistics

	Career Airmen			First-Term Airmen		
Squadron	Eligible	Retained	Per Cent	Eligible	Retained	Per Cent
Hq Sq	11	10	90.9	12	2	16.7
AEMS	18	13	72.2	18	3	16.7
FMS	16	15	93.7	27	4	14.7
OMS	10	9	90.0	22	7	31.8
MMS	5	4	80.0	7	0	0.0
Totals	60	51	85.0	86	16	18.6

(U) The re-enlistment rates for both career and first-term airmen decreased from rates for the previous quarter, and both rates were below the goals established by SAC. This quarter's 85.0 retention rate for career airmen was down 8.2 per cent from last quarter's mark. The retention rate of 18.6 per cent for first-term airmen showed an even greater drop - it was exactly half of the 37.2 per cent rate for first-term airmen during July-September. Combining career and first-term airmen, the overall retention through the quarter was 45.9 per cent, compared to 67 per cent in the previous quarter and 41 per cent in the April-June quarter.[26]

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25. Extract of Rpt, "Retention Statistics" (U), Oct-Dec 68, (U), Ex. 12.

26. Extract of Rpt, "Retention Statistics" (U), Oct-Dec 68, (U), Ex. 12; and Hist, 43 MBW, Jul-Sep 68, p. 14.

SIGNIFICANT PERSONNEL TRENDS

(U) The UMD authorization for the wing remained the same throughout the quarter. While the UMD was constant, the number of assigned military personnel decreased by 69 persons, accounting for a decrease of 2.8 per cent in the assigned versus authorized manning figure as compared to that figure at the end of last quarter. The wing lost 68 enlisted personnel this quarter after having gained 16 in the previous quarter.

CHAPTER III

OPERATIONS AND TRAINING

COMBAT READINESS RATING

(U) The combat readiness rating ("C" rating) system was in effect during October, November and December. This rating was an assessment of a unit's ability to perform its Emergency War Order (EWO) mission as directed by the Joint Chiefs of Staff and SAC-approved plans. The status of personnel, supplies, maintenance, facilities and training were all considered in determining a unit's "C" rating. There were four possible ratings that could be assigned to a unit. A "C-1" rating was designated to a unit which could perform its mission satisfactorily. A "C-2" rating was assigned to a unit which could perform its mission satisfactorily, but which had minor problems in one or more of the areas mentioned above. A unit which was severely limited in performing its mission was rated "C-3", and a unit which was incapable of performing its mission was rated "C-4".[1]

Bomb Squadrons

(S) The 63rd, 64th and 65th Bombardment Squadrons (BS) maintained a "C-1" rating throughout the entire quarter. This rating had been assigned to the squadrons on 1 September 1968.[2]

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1. SACM 55-8, Vol. II, "Unit Capability Report (RCS: SAC-VI)" (U), 4 Mar 68, (S).
2. Rpt, I-SAC-V-1, "Unit Capability Report" (U), Oct, Nov and Dec 68, (S), on file in 43rd BW Command Post; and Hist, 43 MBW, Jul-Sep 68, p. 17.

Refueling Squadron

(S) The 70th Air Refueling Squadron (AREFS) maintained a "C-1" rating during the quarter. This rating had been assigned to the squadron on 1 September 1967.[3]

WEAPON SYSTEM INVENTORY

Bomb Squadrons

(U) The 43rd BW was assigned two types of B-58 aircraft during the quarter: B-58A and TB-58A. The B-58A "Hustler," a strategic bomber capable of supersonic speeds, was flown by members of the wing's bomb squadrons. The B-58 was powered by four J-79-5C turbojet engines, each with a thrust of more than 15,000 pounds (with afterburners in use.) It was capable of speeds in excess of 1,300 miles per hour and altitudes above 60,000 feet. The delta-winged bomber carried a two-component disposable pod* below its sleek fuselage. Part of the aircraft's fuel was carried in the lower component of the pod, while the upper component housed the largest of the aircraft's five bombs. Four smaller bombs were carried, two under each wing. The B-58 had a three-man crew consisting of a pilot, navigator/bombardier and a defensive systems operator (DSO). The

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* Pod - A streamlined metal housing mounted below the B-58's fuselage which served to carry munitions and extra fuel.

3. Rpt, I-SAC-V-1, "Unit Capability Report" (U), Oct, Nov and Dec 68, (S), on file in 43rd BW Command Post; and Hist, 43 MBW, Oct-Dec 67, p. 24.

TB-58 was essentially the same type of aircraft except that its crew consisted of an instructor pilot, pilot and DSO. This aircraft was used for instrument training; and to teach new B-58 pilots while a qualified instructor was aboard the aircraft.[4]

(U) The following chart shows the number of authorized, assigned, possessed* and available** B-58 and TB-58 aircraft at the end of each month during the quarter:[5]

Chart 3.1 - B/TB-58s Authorized and Assigned

Aircraft	Month***	Authorized	Assigned	Possessed	Available
B-58	October	39	34	35	33
	November	39	35	35	32
	December	39	34	34	31
TB-58	October	4	3	2	2
	November	4	3	3	3
	December	4	3	3	3

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* Possessed - Aircraft assigned to the wing excluding those that were on loan, deployed or temporarily assigned to another base.

** Available - Possessed aircraft operationally ready for flight.

*** Month - Figures given are those recorded at the end of each month.

4. Rpt, RS2120/818, "USAF/SAC/AEC/SC/43/B58 BA 53/BLU-2B/B58 Joint Drop Test Programs" (U), published by Sandia Corporation, Aug 67, (S-RD), on file in 43rd BW Weapons Operations Section; and AFP 190-33, Vol. III, "Aerospace Information Handbook" (U), 15 Jan 67, (U).

5. Rpt, 1-SAC-V-1, "Unit Capability Report" (U), Oct, Nov and Dec 68, (S), on file in 43rd BW Command Post.

(U) Of the 39 B-58 aircraft authorized at the end of October, 34 were assigned to the wing. The five aircraft not assigned were in work for the four-way modification program at James Connally AFB in Waco, Texas. This program is discussed in Chapter IV, "Modification Programs." Four aircraft were in work for the modification at the end of November, and five aircraft were in work for the modification at Waco at the end of December. Thus the assigned figures for these months were 35 at the end of November and 34 at the end of December.[6]

(U) At the end of October, 35 B-58 aircraft were possessed, although just 34 were assigned. This was due to the fact that one aircraft was assigned to Grissom AFB, Indiana, at the end of the quarter, but possessed by Little Rock AFB. Of the 35 possessed aircraft at the end of the month, 33 were available. One aircraft was unavailable because of a functional flight check*. Availability was lost on the second aircraft because of a modification of its forward pod hook; this also is discussed in Chapter IV, "Modification Programs."[7]

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* Functional Flight Check - A flight utilized for an airborne check of an aircraft on which maintenance had been performed or which had been modified. Check had an average duration of four to five days

6. Extract of Wall Chart, "B/TB-58 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 13 ; and Interview, Amn. P. H. Stevens, Historian, with TSgt. R. J. Tibbetts, B-58 Aircraft Scheduler, 7 Jan 69.

7. See note above.

(U) All of the 35 assigned aircraft were possessed by the wing at the end of November. Of these 35 possessed B-58s, 32 were available. The three aircraft not available were undergoing the functional flight check at the end of the month.[8]

(U) Again, at the end of December, all of the 34 assigned aircraft were also possessed by the wing. Three B-58s were not available to the wing at the end of the month, and all three were undergoing functional flight checks.[9]

Refueling Squadron

(U) The KC-135Q Stratotanker was assigned to the 70th AREFS during the quarter. The tanker was a swept-wing, multi-purpose tanker-transport designed for high altitude air refueling and speeds in excess of 500 miles per hour. It had a range of over 5,000 miles. The KC-135, powered by four J-57 jet engines, carried a crew of four consisting of a pilot, copilot, navigator and boom* operator.[10]

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* Boom - A retractable, maneuverable pipe mounted under the tail of a tanker, used for transferring fuel to another aircraft while in flight.

8. Extract of Wall Chart, "B/TB-58 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 13; and Interview, Amn. P. H. Stevens, Historian, with TSgt. R. J. Tibbetts, B-58 Aircraft Scheduler, 7 Jan 69.

9. See note above.

10. AFP 190-33, Vol. III, "Aerospace Information Handbook" (U), 15 Jan 67, (U).

(U) The following chart shows the number of authorized, assigned, possessed and available KC-135 aircraft at the end of each month during the quarter:[11]

Chart 3.2 - KC-135s Authorized and Assigned

Month	Authorized	Assigned	Possessed	Available
October	20	18	11	11
November	20	17	10	10
December	20	18	11	11

(U) The variations between assigned and authorized figures were due to KC-135 aircraft in work for the continuing Inspect and Repair As Necessary (IRAN) program. The Hayes International Corporation at Birmingham, Alabama, conducted the program, and aircraft were in work there for from three to six weeks. Two aircraft were at Birmingham at the end of October. The number increased to three at the end of November, then dropped back to two at the end of the quarter.[12]

(U) Aircraft on temporary duty (TDY) accounted for all variations between assigned and possessed figures. At the end of October, three aircraft were TDY to Goose Bay, Labrador for Reflex commitments, and two were TDY for Young Tiger operations--both of which

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11. Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14.

12. Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14; and Hist, 43 MBW, Jul-Sep 68, p. 20.

are discussed later in this chapter. Two aircraft were TDY for support at Eielson AFB, Alaska, which is discussed in the 43 MBW July-December 1968 SPAR History.[13]

(U) At the end of November, three aircraft were TDY to Goose Bay, two to Young Tiger, and one to Eielson. One aircraft was TDY to the Oklahoma City Air Materiel Area (OCAMA) at Tinker AFB, Oklahoma, for fuel cell repair.[14]

(U) Seven aircraft were TDY at the end of December. Three aircraft were TDY to Goose Bay, two to Young Tiger, and one to Eielson. One aircraft was TDY to Spain in a Spanish Tanker Task Force mission, also discussed later in this chapter.[15]

(U) Eight aircraft returned in October from missions flown in August and September. Seven aircraft had not returned from various commitments by the end of the quarter.[16]

(U) The number of Young Tiger missions continued to decrease, comparing figures for past quarters. The greatest number of aircraft

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13. Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14.

14. Ibid.

15. Ibid.

16. Ibid.

TDY at one time for Young Tiger this quarter was two. The number was three last quarter, five in the April-June quarter, and eight in the January-March quarter. Young Tiger is discussed later in this chapter.[17]

Weapon Inventory

(~~S-RD~~) Two types of nuclear weapons were maintained by the wing during the quarter. The two types were termed the B-43 and the B-53. (b) (3) (A) [redacted] DOE b(3)
(b) (3) (A) [redacted] It had three delivery and burst options: free fall airburst, retarded airburst and laydown.* (b) (3) (A) [redacted] DOE b(3)
(b) (3) (A) [redacted] A BLU-2B pod was used in conjunction with the B-53 weapon, and the two together were termed a BA-53 weapon.[18]

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* Megaton - The explosive force of one million tons of TNT; the unit for measuring the power of nuclear weapons.

** Laydown - A term used to describe a bomb descent retarded by a system of parachutes.

17. Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14; and Hist, 43 MBW, Jul-Sep 68, p. 22.

18. AF Technical Order 11NB53-0, (S-RD), 1 Aug 64; AF Technical Order 11NB43-0, (S-RD), 2 May 62; and Rpt, RS2120/818, "USAF/SAC/AEC/SC B43/B58 BA 53/BLU-2B/B-58 Joint Drop Test Programs" (U), published by Sandia Corporation, (S-RD), Aug 67, on file in 43rd BW Weapons Operations Section.

(b) (3) (A)

[redacted]

DOE
b(3)

COMBAT CREW RESOURCES AND CAPABILITIES

Crews Authorized, Formed, Available and Upgraded

Bomb Squadrons

(U) The number of assigned combat ready B-58 crews improved during the quarter over figures for the previous quarter. A deficiency of combat ready crews existed during just one month of the quarter - December. Then, the total of 58 assigned combat ready crews was two less than the number of authorized crews. In October, there were 61 assigned combat ready crews, and in November, there were 60. The number of assigned combat ready crews during the previous quarter included: July, 60; August, 58; and September, 57. Crew authorization remained unchanged for the last year. SAC's policy on the number of authorized crews per authorized aircraft had not been changed since June of 1967; this ratio for the past year was 1.5. With 39 B-58s authorized, the wing's authorized number of crews was listed at 60 during the entire quarter.[20]

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19. AF Technical Order 11NB53-0, (S-RD), 1 Aug 64; and AF Technical Order 11NB43-0, ~~(S-RD),~~ 2 May 62.

20. Rpt, "Combat Crew Status Report" (U), Oct, Nov and Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Jul-Sep 68, p. 23.

(U) The following chart shows the number of combat crews authorized, crews formed, and crews combat ready and non-combat ready at the end of each month:[21]

Chart 3.3 - B-58 Combat Crews

Number of Crews	September	October	November	December
Authorized	60	60	60	60
Formed*	57	61	60	58
Combat Ready	57	61	60	58
Non-Combat Ready	0	0	0	0

(U) The decrease in the number of combat ready crews in December was caused by a shortage of available pilots. This problem had been experienced by the wing for many months. To alleviate the shortage, SAC had planned to increase the pilot output of the B-58 Combat Crew Training School (CCTS) at Little Rock AFB. Three classes were scheduled to graduate in 1969, totaling 17 pilots, 11 navigators and 11 DSOs. Another class containing six pilots, four navigators and four DSOs was scheduled to graduate in March 1970.[22]

(U) The total number of assigned pilots varied slightly during the first two months of the quarter, but then increased sharply in

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* Formed - Formed figures do not include crews on leave.

21. Rpt, "Combat Crew Status Report" (U), Oct, Nov and Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Jul-Sep 68, p. 24.

22. See note above.

December. The number of authorized pilots remained at 60 throughout the quarter. The number of pilots assigned decreased from 78 in October to 77 in November. However, in December the number jumped to 86. This increase of nine pilots from November's total occurred when 10 additional personnel were placed in reserve status. In this status, they were eligible to enter CCTS for pilot training, but no training class starting date had been assigned to the pilot hopefuls by the end of the quarter. The increase of 10 personnel to reserve status, coupled with the loss of one pilot assigned TDY to another unit, accounted for the increase of nine assigned pilots.[23]

(U) The number of pilots who served as members of the Wing Commander's staff during the quarter varied. The number was seven in October, five in November and six in December. Ten student pilots were assigned to CCTS during October, 11 during November, and 21 during December.[24]

(U) The number of navigators and DSOs available during the quarter remained sufficiently above authorized figures of 60. There were 63 available navigators in all three months of the quarter. The

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23. Rpt, Combat Crew Status Report" (U), Oct, Nov and Dec 68, (U), on file in 43rd BW Historical Archives.

24. Ibid.

number of available DSOs was 67 in October and 66 in November and December.[25]

Refueling Squadron

(U) Combat crew manning figures for the 70th AREFS remained the same during the entire quarter. The percentage of crews assigned versus authorized remained at 94.4 per cent, the same figure recorded at the end of the previous quarter.[26]

(U) For the first time in over a year, no shortage of navigators was experienced by the squadron. However, there was still a shortage of combat ready crews. The factor that limited the squadron in the formation of the authorized 30 combat ready crews was a shortage of co-pilots. There were 29 co-pilots available for crew duty during all three months of the quarter. The situation was expected to improve, however, as one co-pilot was scheduled to complete training and become available to the squadron on 1 January.[27]

(U) The following chart shows the number of combat crews authorized, formed, combat ready and non-combat ready at the end of each month:[28]

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25. Rpt, Combat Crew Status Report" (U), Oct, Nov and Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Jul-Sep 68, p. 24.
26. Rpt, Combat Crew Status Report" (U), Oct, Nov and Dec 68, (U), on file in 43rd BW Historical Archives; and Hist., 43 MBW, Jul-Sep 68, p. 25.
27. See note above.
28. See note above.

Chart 3.4 - KC-135 Combat Crews

Number of Crews	September	October	November	December
Authorized	30	30	30	30
Formed	29	29	29	29
Combat Ready	29	29	29	29
Non-Combat Ready	0	0	0	0

GROUND ALERT

Background

(U) In order for SAC to maintain a position of unquestioned strength, even following a surprise attack, SAC units maintained aircraft and combat crews on ground alert. Alert aircraft were fully serviced and loaded, and the crews on alert were in constant touch with the Wing Command Post in order to respond to an alert* with a minimum loss of time.

(b) (1) (B)

[redacted]

* Alert - A warning of probable or imminent attack.

29. Msg, DOC 64M-3076, 2AF to AIG 701/702, "Unit Reaction Time" (U), 13 May 64, (S), located in 43rd BW Command Post.

(U) The Joint Strategic Target Planning Staff chose and assigned targets to the wing. The staff, which was formed in August 1960, was composed of highly experienced officers representing all branches of the Armed Forces. Its purpose was to assure maximum use of our strategic capabilities, improving the offensive strength and deterrent posture of the United States.[30]

Number on Alert and Alert Cycle

(S) The wing maintained a ground alert force of 16 B-58 aircraft throughout the quarter. For each mission assigned, the wing maintained one aircraft on ground alert. On 31 December, the wing added three KC-135s to its ground alert force at Little Rock AFB. In case of EWO conditions, the tankers would have refueled SAC bombers which were enroute to their EWO targets.[31]

(U) The maximum time a B-58 aircraft was scheduled to be on alert during the quarter was 42 days, although most aircraft maintained a 35-day alert cycle. The 42-day maximum cycle was the same length as the cycle at the end of the previous quarter.[32]

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30. AFP 190-2-2, Vol. I, "Aerospace Information Handbook" (U), p. 18.
31. Rpt, 1-SAC-V-1, "Unit Capability Report" (U), Oct, Nov and Dec 68, (S), on file in 43rd BW Command Post; and Interview, Amn. P. H. Stevens, Historian, with SMSgt. T. T. McClure, NCOIC, 43rd BW Control Division, 9 Jan 69.
32. Extract of Wall Chart, "B/TB-58 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 13; and Interview, Amn. P. H. Stevens, Historian, with TSgt. R. J. Tibbetts, B-58 Aircraft Scheduler, 7 Jan 69.

(U) The longest alert tour by a B-58 during the quarter was 38 days. The shortest tour was 29 days. Combat crews maintained a seven-day alert cycle throughout the quarter.[33]

Downtime for Alert Aircraft

(U) If an aircraft on ground alert developed a maintenance problem, it was taken off alert and repairs were made through unscheduled maintenance. When the problem had been corrected, the plane was immediately returned to its alert status. The amount of time between the aircraft being taken off alert and the aircraft being placed back on alert was called "downtime."

(U) If an aircraft on ground alert developed a major maintenance problem, it was usually replaced with another aircraft so that the EWO-required number of aircraft could be maintained on alert.

~~(S)~~ The following chart shows the amount of downtime for B-58 aircraft during July, August and September:[34]

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33. Extract of Wall Chart, "B/TB-58 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 13; and Interview, Amn. P. H. Stevens, Historian, with TSgt. R. J. Tibbetts, B-58 Aircraft Scheduler, 7 Jan 69.

34. Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68, ~~(S)~~ Appendix B.

Chart 3.5 - B-58 Downtime

Month	Instances	Days*	Total Downtime	Average Downtime
October	61	25	155 hrs, 33 mins	2 hrs, 35 mins
November	56	20	209 hrs, 58 mins	3 hrs, 45 mins
December	40	22	168 hrs, 36 mins	4 hrs, 13 mins
Quarter	157	67	534 hrs, 07 mins	3 hrs, 23 mins

~~S~~ The total number of downtime hours this quarter was the highest figure recorded since the July-September 1966 quarter, when 535 hours, 17 minutes of downtime were recorded. The increase in downtime hours this quarter ended a downward trend that had continued in the four previous quarters. Total downtime for this quarter was 534 hours, 7 minutes. In the July-September 1968 quarter, total downtime was 281 hours; April-June 1968, 293 hours; January-March 1968, 338 hours; and October-December 1967, 420 hours. But the average downtime per instance this quarter - 3 hours, 23 minutes - was exceeded in two of these previous quarters: in January-March, average downtime was four hours, 31 minutes, and in October-December 1967, three hours, 37 minutes. The average downtime this quarter doubled, however, from the previous quarter's total of one hour, 59 minutes.[35]

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* Days - Calendar days during which there were one or more downtimes.

35. Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68, ~~S~~, Appendix B; Hist, 43 MBW, Jul-Sep 68, p. 30; Hist, 43 MBW, Jan-Mar 68, p. 22; and Hist, 43 MBW, Jul-Sep 66, p. 23.

(U) The biggest cause of the large number of downtime hours this quarter was fuel leaks. The leaks, which began in October and continued to be a problem through the first half of November, are discussed in detail in Chapter IV, "Maintenance Problems." Fuel leaks accounted for 103 hours, 50 minutes of downtime during the quarter. Seven different alert aircraft developed the leaks during the quarter. With a total of 10 fuel leaks occurring on alert aircraft, the average downtime for a fuel leak was 10 hours and 23 minutes per instance. Aircraft #014* experienced fuel leaks on three different dates: on October, it was off alert for eight hours, 25 minutes; on 12 November, 20 hours; and on 20 December, 14 hours, 15 minutes.[36]

(U) This quarter showed an ever increasing immediate substitution of flight-ready aircraft for those requiring maintenance. This occurred 41 times during the quarter, compared to 34 times during the previous quarter and 24 times during the April-June quarter. Because the immediate substitution was counted as a downtime instance but did not create any actual downtime hours,

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* #014 - Refers to last three numbers of aircraft tail number.

36. Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68, (S) Appendix B.

its increase this quarter helped to prevent the downtime average from rising as rapidly as the total number of downtime hours.[37]

(S) The aircraft off alert for unscheduled maintenance most during the quarter was #010, which was off alert 10 times. Two aircraft - #450 and #442 - were off alert nine times each, and aircraft #446 and #458 were each off alert eight times during the quarter. Four different aircraft were off alert seven times each.[38]

(S) Various types of leaks - hydraulic leaks, oil leaks and air leaks - combined with the devastating fuel leakage to contribute to a major portion of downtime during the quarter. The leaks accounted for 37 instances of downtime, or about one-fourth of the total instances this quarter. Leaks accounted for 31 instances of downtime during the previous quarter.[39]

(S) The number of days in which the wing was free from unscheduled maintenance on alert aircraft continued a downward trend during the quarter. The number totaled 25 days during the present quarter. In the July-September quarter, the number of days was 28; April-June, 31; and January-March, 45.[40]

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37. Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68, (S), Appendix B; and Hist, 43 MBW, Jul-Sep 68, p. 31.
38. Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68, (S), Appendix B.
39. Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68, (S), Appendix B; and Hist, 43 MBW, Jul-Sep 68, p. 31.
40. See note above.

Alert Exercises

Background

(S) Four types of alert exercises were possible during this quarter - the same types possible since July 1967. They were designated Bravo, Delta, Golf and Coco. Higher headquarters conducted all four types this quarter to test the 43rd BW. While each type will be described in the narrative to follow, more detailed information on the exercises can be found in the 43 MBW January-March 1968 History.[41]

Bravo Exercises

(S) Bravo exercises commenced when the klaxon* sounded, or in the case of klaxon-out procedures, just before crew notification at the alert facility. The combat crews rushed to their aircraft, started the engines and at the time when brakes were to have been released, the exercise was ended and the engines were shut down. The time between the start of the exercise and the brakes being prepared for release was the Bravo time.[42]

Delta Exercises

(S) In Delta exercise procedures, the crews proceeded to their aircraft, started the engines and then shut down the engines.

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* Klaxon - A type of horn used to signal crews of an alert.

41. SACM 55-2, Vol. II, "SAC Command, Control and Execution Procedures" (U), 6 Mar 68, (S), located in 43rd BW Command Post.

42. Ibid.

When a restart directive was received, all engines were again started. The wing's restart capability was measured by this exercise. The Delta exercise could be terminated by a notice to shut down the engines or it could progress into a Golf or Coco exercise upon notification.[43]

Golf Exercises

(~~S~~) Actual movement and taxiing of aircraft occurred in Golf exercises. Aircrews boarded their planes when the klaxon sounded, started all engines and taxied to the runway hold line.* When the crews were given a Golf notification, a Coco directive followed.[44]

Coco Exercises

(~~S~~) During a Coco exercise, the crews proceeded to their aircraft, started all engines, taxied to the runway hold line and crossed the hold line. When the line was crossed, the Coco exercise was terminated. The aircraft then rolled down the runway and returned to their alert locations. If the alert had been declared by the President, the aircraft would have launched and proceeded toward their EWO targets.[45]

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* Hold Line - A line painted on the junction of the runway and taxiway which showed the pilots where to position the aircraft.

43. SACM 55-2, Vol. II, "SAC Command, Control and Execution Procedures" (U), 6 Mar 68, (~~S~~), located in 43rd BW Command Post.

44. Ibid.

45. Ibid.

~~SECRET~~

(S) Alert exercises were employed in several combinations so that aircraft could be placed in any desired position: from the alert parking area to taxiing down the runway. If a Coco exercise was directed during a Delta, all aircraft brakes would be released, the aircraft would taxi to the hold line, then down the runway and back to their alert parking areas. If a Coco followed a Golf exercise, the brakes would be released at the hold line and the taxiing procedure would follow.[46]

Bravo Exercises

(S) Ten Bravo alert exercises were conducted during the October-December quarter. This figure was two less than the number called in the April-June period. There were just seven aborts in the 160 individual Bravo missions conducted this quarter. However the mission success rate of 95.7 per cent was lower than previous quarters' rates: in July-September, successful missions compared to total missions attempted was 96.8 per cent; in April-June, 97.1 per cent. Three of the seven aborts this quarter occurred when the aircraft were in unscheduled maintenance when the alert exercise was held. The other four were caused by failure of aircraft engines to start. Also, five aircraft had Bravo times exceeding

46. SACM 55-2, Vol. II, "SAC Command, Control and Execution Procedures" (U), 6 Mar 68, (S), located in 43rd BW Command Post.

15 minutes. Three occurred because of trouble in starting aircraft engines, and the other two were caused by inoperative air start carts. These carts were mobile units used to start the B-58 aircraft.[47]

Delta Exercises

(S) Three Delta-Golf exercises were directed during the quarter. This was the largest number of these exercises that the 43rd BW had participated in during any past quarter. The Delta exercise also incorporated the Golf and Coco exercises. In a Delta-Golf exercise conducted on 29 October, 15 aircraft completed the exercise. One aircraft was off alert for the Delta phase only, but another aircraft was in unscheduled maintenance for all three phases. In the second Delta-Golf exercise, conducted on 7 November, two aircraft aborted the exercise: one aborted all three phases when it was off alert due to a fuel leak and the other aborted the Golf and Coco phases due to a sheared starter shaft. A Delta-Golf exercise on 20 December also was marred by two aborts. One was caused by a sheared starter shaft and the other occurred when the aircraft's #2 engine failed to ignite.[48]

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47. Extract of Rpt, "Alert Recap - BRAVOs" (U), Oct, Nov and Dec 68, (S), Ex. 15; and Hist, 43 MBW, Jul-Sep 68, p. 35.

48. Extract of Rpt, "Alert Recap - COCOs" (U), Oct, Nov and Dec 68, (S), Ex. 16.

Golf Exercises

(~~S~~) The only Golf exercises conducted during the quarter were held in conjunction with the Delta-directed exercises previously discussed.[49]

Coco Exercises

(~~S~~) Seven Coco alert exercises were conducted during the quarter, with three called in conjunction with the previously-discussed Bravo-Golf-Coco exercises.[50]

(~~S~~) The first Coco exercises of the quarter were held on 22 and 23 October in conjunction with a Sustained Reaction Posture (SRP) test, which is discussed later in this section. Twenty aircraft participated in the test, the normal alert force with two additional B-58s and two KC-135s. There were no aborts in either of the two Coco exercises conducted during the test, one Coco called on 22 October and the second on 23 October.[51]

(~~S~~) A Bravo-Coco exercise was held on 12 November, and two aborts occurred during the exercise. Two aircraft were in unscheduled maintenance at the time of the exercise: one for fuel and hydraulic leaks, and the other for a fuel leak.[52]

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49. Extract of Rpt, "Alert Recap - COCOs" (U), Oct, Nov and Dec 68, (~~S~~), Ex. 16.
50. Ibid.
51. Ibid.
52. Ibid.

(S) Two aborts also occurred in a Bravo-Coco exercise held on 10 December. One aircraft was off alert because of a seal change, and the other was off alert due to a hydraulic leak.[53]

Sustained Reaction Posture Exercise

(U) The 43rd BW participated in a Sustained Reaction Posture (SRP) exercise - formerly designated DEFCON 1-S - on 21 and 22 October. The exercise was the first full-scale implementation of the wing's SRP plan that was revised on 1 January 1968.[54]

(U) SAC directed that effective 1 August 1968, all SAC aircraft units would exercise their SRP plan four times each year, once each quarter. Three of these exercises would be of short duration which would test only the air and ground crews in SRP repositioning and reaction procedures. One exercise each year was to be of long duration to exercise all support activities associated with the SRP. This exercise was to be 36 to 48 hours in duration and was to involve a minimum of two Coco or Delta-Golf exercises. The exercise held during October was the annual, long-duration SRP exercise.[55]

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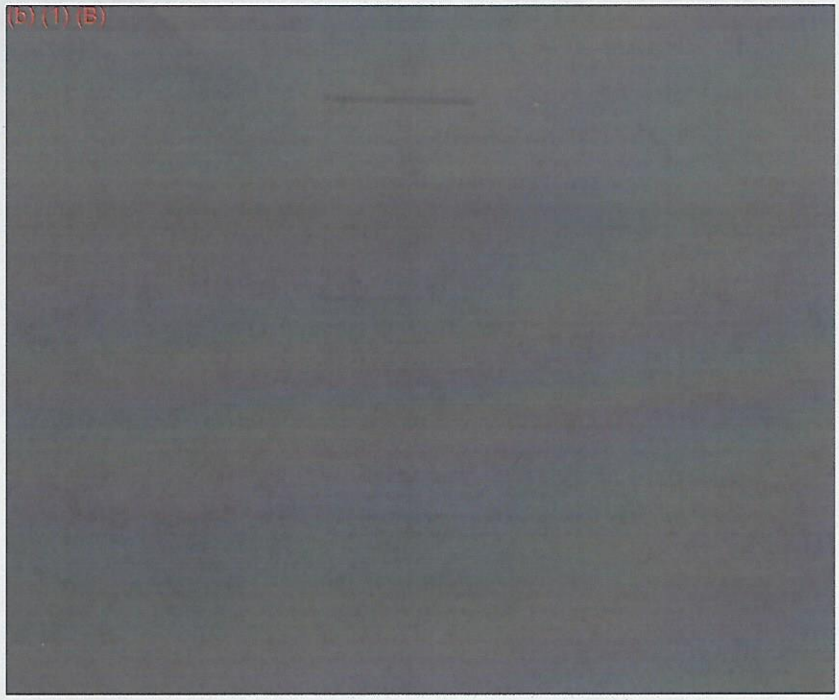
53. Extract of Rpt, "Alert Recap - COCOs" (U), Oct, Nov and Dec 68, (S), Ex. 16.

54. Msg, 281717Z, 2AF to 43C, "Test Exercises" (U), 28 Sep 68, (S), Ex. 17; and Hist, 43 MBW, Oct-Dec 67, p. 41.

55. Msg, 151844Z, SAC to 43BW, "Sustained Reaction Posture Exercises" (U), 15 Jul 68, (U), Ex. 18.

Background

(b) (1) (B)



(S) Under the wing's normal SRP alert procedures, eight of the normal 16 alert B-58 crews would have gone into a cockpit alert*

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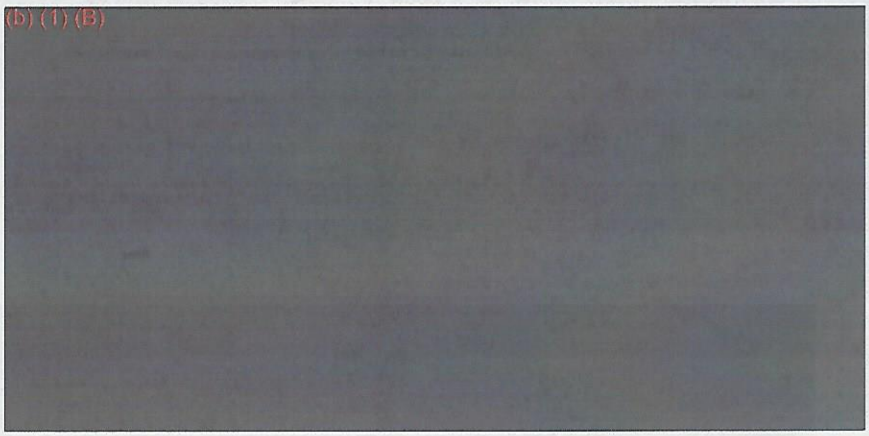
* Cockpit Alert - A procedure for increasing the state of readiness by stationing crews in their aircraft on a continuous basis. This eliminated time required for movement to the aircraft from the alert facility or some other authorized place on base and thereby reduced reaction time to an alert which might have been called.

56. Hist, 43 MBW, Jul-Sep 67, Ex. 14 and 15.

status. All available aircraft would have been generated into a full ground alert status.[57]

(b) (1) (B)



The first implementation of the new plan - on a small scale basis - occurred on 23 April when two aircraft were tested on DEFCON 1-S posture. Surprisingly, the two aircraft were the slowest to react of all alert aircraft participating in a Coco exercise. The reason was that the aircraft in DEFCON 1-S posture were remotely positioned in respect to the alert runway entrance. Under actual DEFCON 1-S conditions, the aircraft would have been located in the alert hangers, immediately near the alert runway entrance. A diagram of the revised SRP aircraft parking plan can be found in Appendix G.[59]

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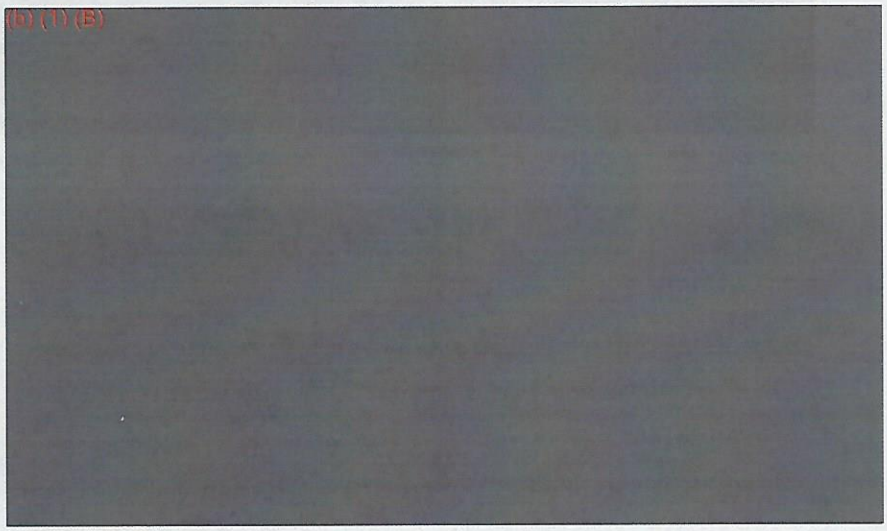
57. Hist, 43 MBW, Jul-Sep 67, Ex. 15.
58. Hist, 43 MBW, Oct-Dec 67, pp. 43, 44.
59. Hist, 43 MBW, Apr-Jun 68, p. 43.

Results of Exercise

(~~S~~) The SRP exercise held on 21 and 22 October involved the normal alert force of 16 B-58 aircraft, plus two additional B-58s and two KC-135 tankers. Eight B-58 aircraft assumed a cockpit alert status, while the other 12 aircraft operated from normal alert status.[60]

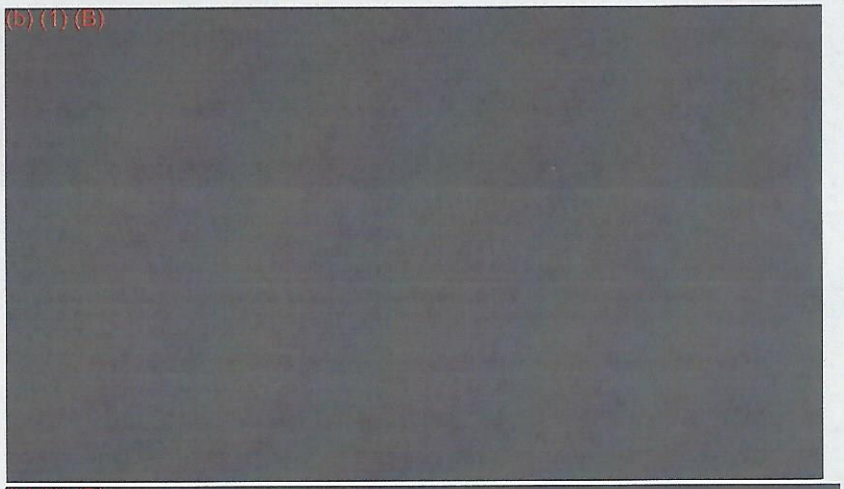
(~~S~~) A Coco alert exercise for the 20 aircraft was called on each day of the SRP exercise. The following chart shows the Coco times for B-58 aircraft on cockpit alert, and B-58 and KC-135 aircraft on normal alert for each day of the exercise:[61]

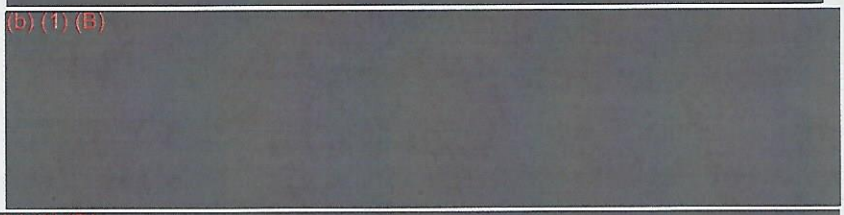
(b) (1) (B)

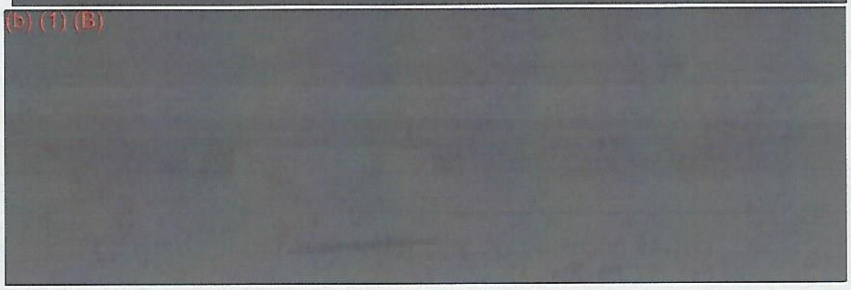


60. Ltr, 43DCOP to 2AF, subj: 43BW SRP Annual Exercise (U), 5 Nov 68, (~~S~~), Ex. 19; and Directive, SRP - Crew and Staff Flimsy, (U), from 43 DCO, 24 Sep 68, (U), Ex. 20.

61. Ltr, 43 DCOP to 2AF, subj: 43BW SRP Annual Exercise (U), 5 Nov 68, (~~S~~), Ex. 19.







62. Ltr, 43 DCOP to 2AF, subj: 43BW SRP Annual Exercise (U), 5 Nov 68, (~~S~~), Ex. 19.

63. Ibid.

(b) (1) (B)

[redacted]

(S) No major problems were experienced during the SRP exercise. There were no aborts among the 20 aircraft on either of the two alert exercises. Two minor problems occurred, however, with power unit failures and a lack of klaxons in the primary alert area. Corrective action was taken on the unit failures. Funding assistance was requested from 2nd AF on the klaxon problem to install klaxons in the primary alert area.[65]

Change in Alert Procedures

(U) The normal maximum aircraft alert cycle during the quarter was 45 days, as was discussed earlier in the chapter. This cycle length was the same at the close of the previous two quarters.[66]

(S) A maximum of two Coco exercises per month continued to be directed by higher headquarters. In October, the wing participated in three Coco exercises, - two in conjunction with the SRP test and

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64. Ltr, 43 DCOP to 2AF, subj: 43BW SRP Annual Exercise (U), 5 Nov 68, (S), Ex. 19.

65. Ibid.

66. Hist, 43 MBW, Jul-Sep 68, p. 37; and Interview, Amn. P. H. Stevens, Historian, with Tsgt. R. J. Tibbetts, B-58 Aircraft Scheduler, 7 Jan 69.

the other as part of a Delta-Golf exercise. Two Coco exercises were conducted in both November and December.[67]

Tanker Alert

(S) For the first time in two years, the 43rd BW maintained KC-135 tankers on home alert at Little Rock AFB. The last such home alert for tankers terminated on 31 December 1966. Three tankers - #0345, #0346, and #1470 - began the alert at 1600 hours local time on 31 December. The wing was scheduled to keep a continuous force of three tankers and three tanker combat crews on alert. Because the alert commitment began on the last day of the quarter, no information applicable to this quarter - such as downtimes, alert cycle - was available.[68]

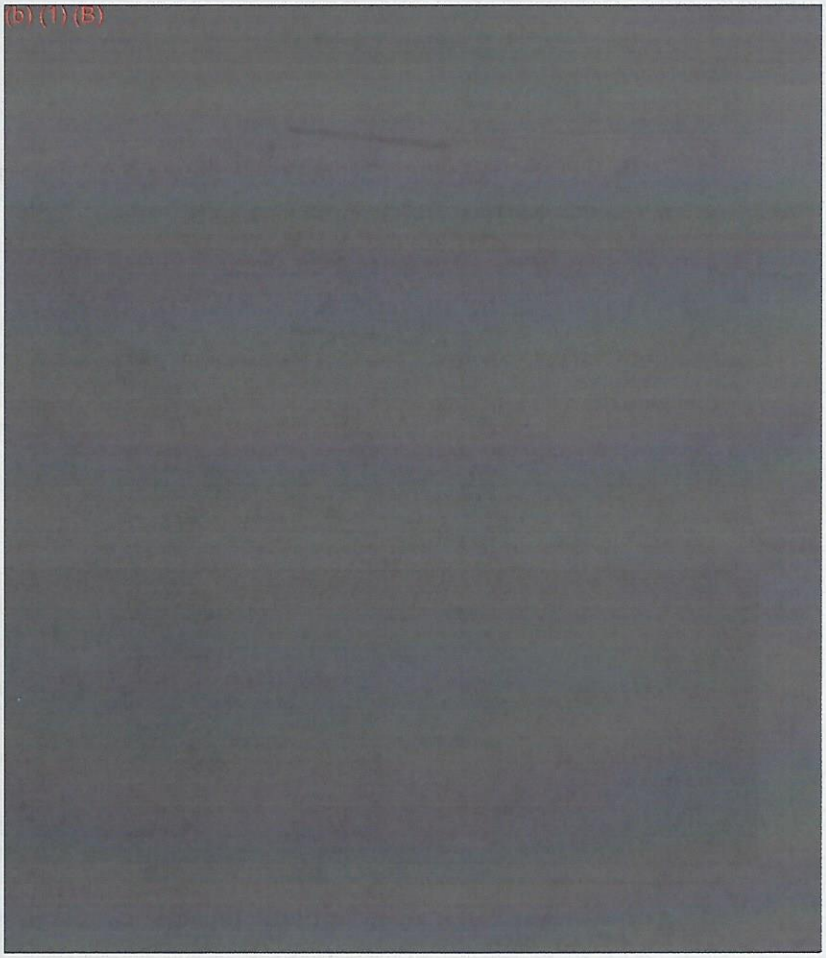
(b) (1) (B)

[redacted]

67. Extract of Rpt, "Alert Recap - COCOs" (U), Oct, Nov and Dec 68, ~~(S)~~, Ex. 16.

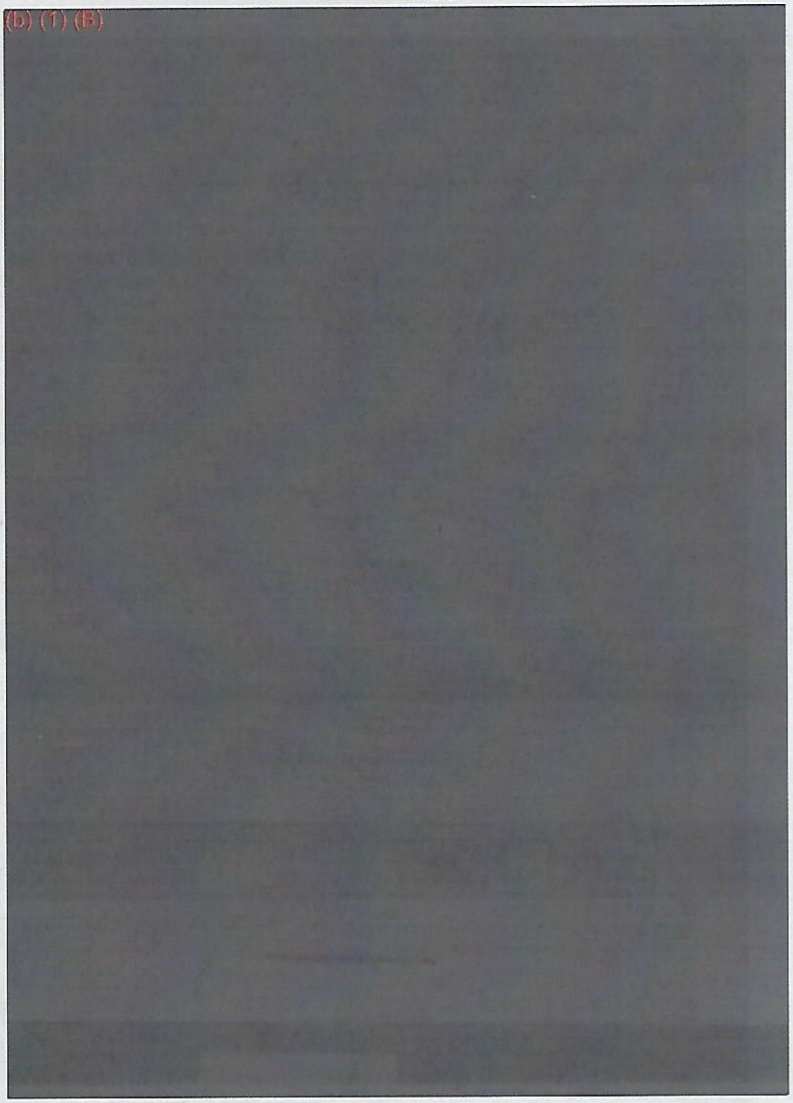
68. Interview, Amn. P. H. Stevens, Historian, with SMSgt. T. T. McClure, NCOIC, 43rd BW Control Division, 9 Jan 69; Extract of Wall Chart, "KC-135 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14; and Hist, 43 MBW, Oct-Dec 66, p. 35.

(b) (1) (B)



70. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. L. E. Riggle, 43rd BW Chief of Operations and Plans Division, 21 Jan 69; and Interview, Amn. P. H. Stevens, Historian, with SMSgt. T. T. McClure, NCOIC, 43rd BW Control Division, 22 Jan 69.

(b) (1) (B)



72. See note above.

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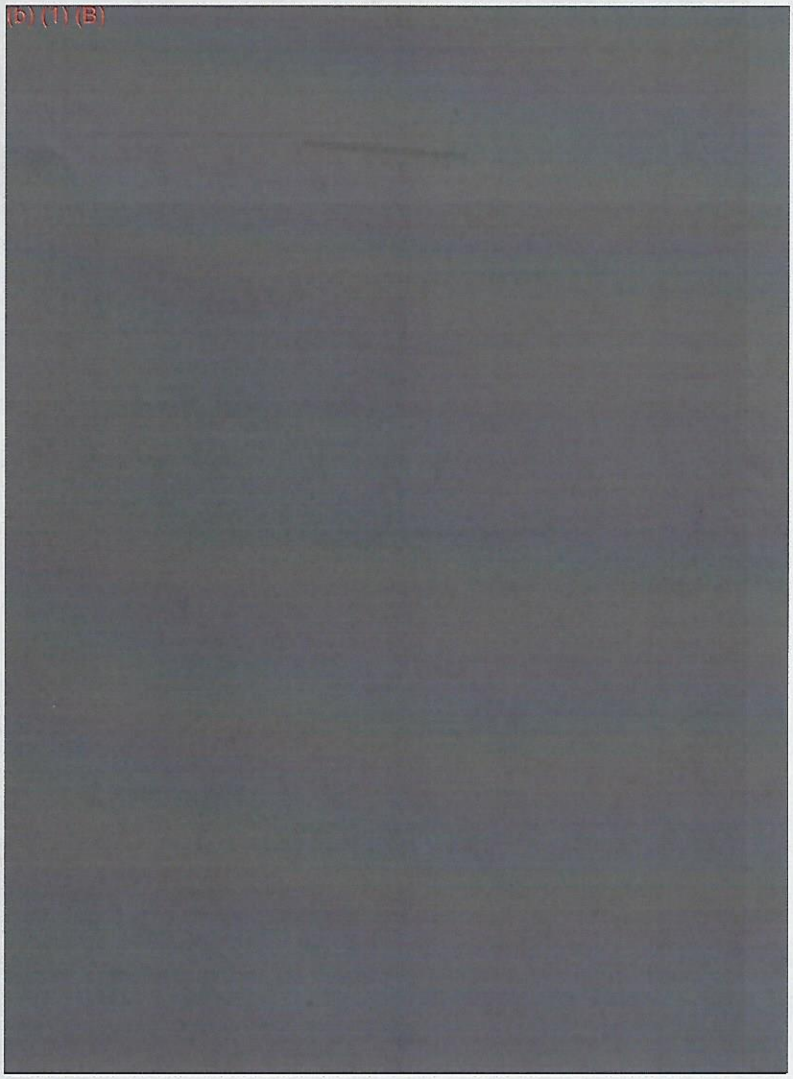

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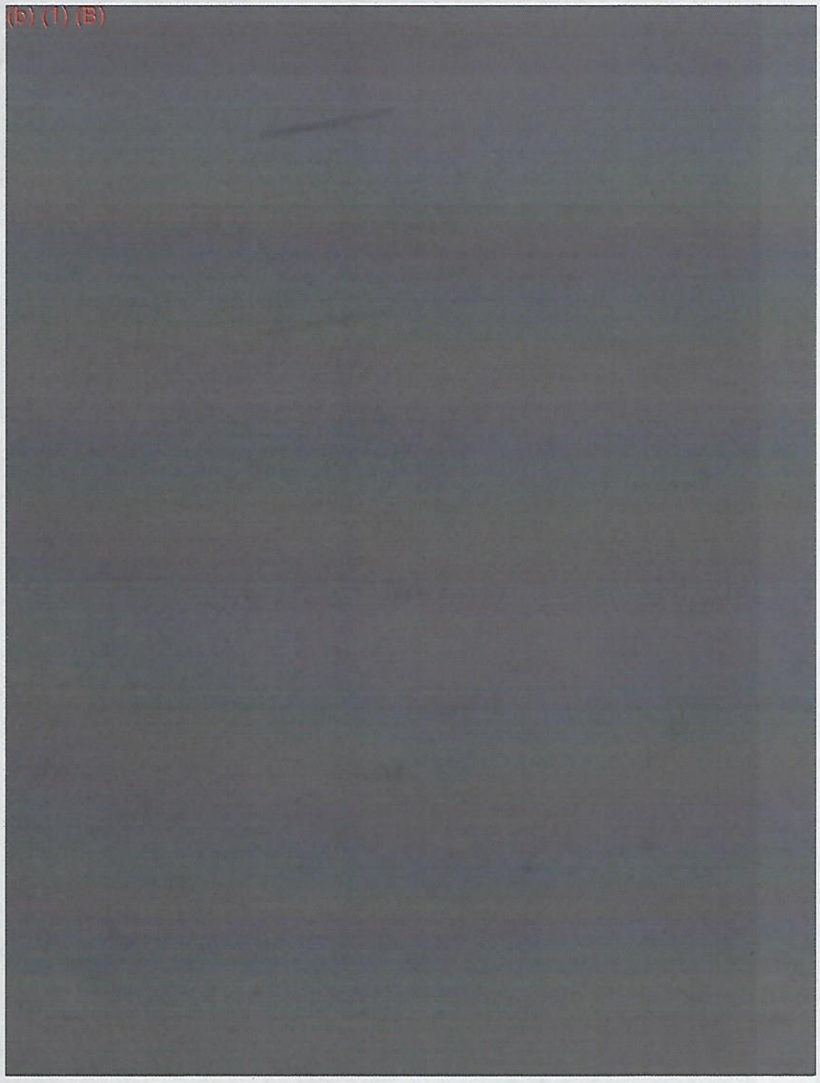


Deployment and Redeployment

(U) Four aircraft departed Little Rock AFB in October to maintain the reflex at Goose Bay. The number rose to five during November, then dropped to three in December. Four aircraft returned from reflex in October, five in November and six in December.[81]

Downtime or Mission Effectiveness

(U) No downtime figures or a statement of mission effectiveness of the wing's KC-135s were available to the 43rd BW during the quarter. Downtimes were a part of the records of the 95th Strategic Wing.

(b) (1) (B)

[redacted]

81. Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14.

82. Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14; and Interview, Amn. P. H. Stevens, Historian, with SMSgt. T. T. McClure, NCOIC, 43rd BW Control Division, 9 Jan 69.

OTHER COMMAND SUPPORT MISSIONS

Background

(U) SAC, as single manager of all air refueling aircraft in the Air Force, provided air refueling needed for movements and operations of fighter and bomber aircraft assigned to the Tactical Air Command (TAC) and other major air commands. Support of these operations often entailed formation of a separate tanker task force composed of aircraft and personnel from different units. This task force operated as a separate organization under the direct command of SAC Headquarters.[83]

(U) Air refueling support by SAC was provided to all types of TAC aircraft. Refueling formations consisted of one or more cells,* each consisting of one to four KC-135s, with tanker/receiver ratios of from 1:1 to 1:6. The most common ratio was one tanker for every two fighters.[84]

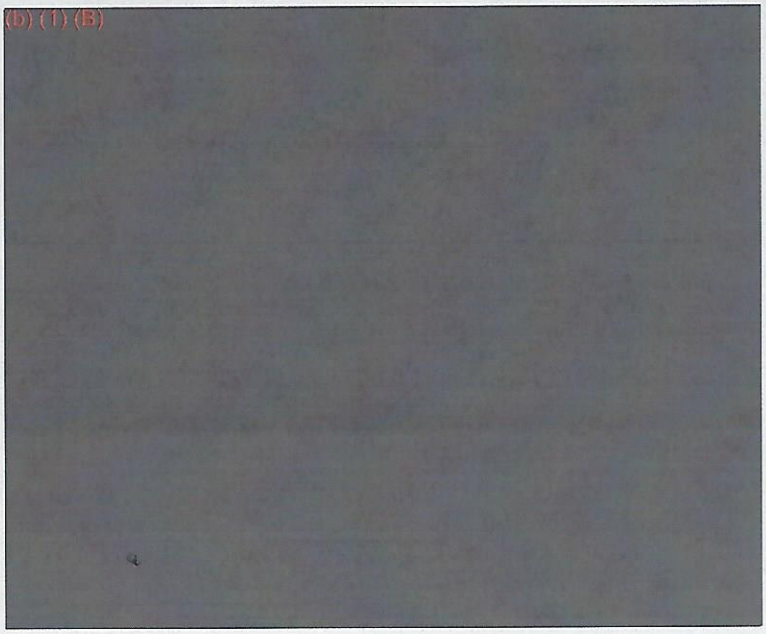
(b) (1) (B)

[redacted]

* Cells - Groups of one or more aircraft with a common mission used as an integral unit.

83. SACM 55-23, "Tanker Task Force Operations" (U), 8 Apr 68, (U).

84. Ibid.



(U) One crew from the 70th AREFS - #E-127 - flew 51 missions during its support of Young Tiger. This tied the record for most missions flown by a Young Tiger crew. The crew, which returned to Little Rock AFB in November, included: Capt. William W. Redmond, aircraft commander; 1st Lt. Thomas A. Robertson

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85. Compiled from Wall Charts located in 43rd BW Crew Scheduling Section and 43rd DCM Maintenance Scheduling, "Young Tiger Aircraft and Aircrew Support" (U), Oct, Nov and Dec 68, (U), Appendix D; Msg, 091943Z, 2AF to AIG 702, "2AF Young Tiger Schedule FY 2/69" (U), 9 Sep 68, (U), Ex. 25; and Hist, 43 MBW, Jul-Sep 68, p. 44.

Jr., co-pilot Capt. John E. Gallagher, navigator; and TSgt. Rosario J. Plaia, boom operator.[86]

(U) The TDY figures for Young Tiger continued to show an overall decreasing trend. TDY figures for the past year included: end of January, six tankers and eight crews; February, seven tankers and seven crews; March, six tankers and nine crews; April, four tankers and five crews; May, six tankers and four crews; June, five tankers and four crews; July, three tankers and four crews; August, four tankers and two crews; and September, four tankers and five crews.[87]

AIRCRAFT TRAINING

SACM 50-8 Requirements

Bomb Squadrons

(U) The total number of requirements to be completed by the wing during the training period varied with the number of crews assigned to the wing. If the number of crews increased, this would cause an increase in the number of requirements. In order that its workload could be properly scheduled, the wing estimated the number

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86. Interview, Amn. P. H. Stevens, Historian, with Capt. John R. Trundle, 70th Historian, 29 Jan 69.

87. Hist, 43 MBW, Jul-Sep 68, p. 44; and Hist, 43 MBW, Apr-Jun 68, p. 46.

of requirements it would have to complete by the end of the training period. The estimate was based on the average number of assigned crews and crew members the wing expected to have during the training period.[88]

(U) SACM 50-8 training requirements contained all Basic Training Requirements (BTRs) and profile missions each crew and crew member had to complete. All mainline* qualified crews were assigned three additional mainline requirements to complete, but were relieved of three radar bomb score (RBS) requirements.[89]

Requirements and Requirements Met

(U) The bomb squadrons completed 100 per cent of their 11,970 BTRs during the training period extending from 1 July to 31 December. At the end of September, the squadrons had completed 9,828 BTRs, or 76.1 per cent of the total BTRs required for the period. This left 2,142 BTRs for the squadrons to complete during the last half of the training period. During the last training period - extending from 1 January to 30 June - the wing

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* Mainline - Photo reconnaissance.

88. SACM 50-8, Vol. I, "Training Concepts, Policies and Instructions SAC Units and Aircrews" (U), 14 Jun 68, (U).

89. Ibid.

completed 99.1 per cent of its BTRs. However, during that time period the wing experienced servious difficulty from B-58 structural problems.[90]

(U) The total number of BTRs required, the number completed during each quarter and the percentage completed is shown in the following chart:[91]

Chart 3.7 - B-58 BTRs

Item	Number Required	Total Comp. 1st Q	Total Comp. 2nd Q	Per Cent Completed
High Altitude RBS	535	474	61	100.0
Low Altitude RBS	1,120	925	195	100.0
High Altitude Navigation	450	329	121	100.0
Low Altitude Navigation	200	168	32	100.0
Air Refueling	550	448	102	100.0
Electronic Warfare and Gunnery	1,308	839	469	100.0
Instrument Training	6,150	5,291	859	100.0
Pilot Proficiency	1,050	869	181	100.0
Profile Missions	170	95	75	100.0
Mainline	45	33	12	100.0
Miscellaneous	300	271	29	100.0
Annual*	92	86	6	100.0
Total BTRs	11,970	9,828	2,142	100.0

* Annual - Yearly requirements.

90. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Apr-Jun 68, p. 48.

91. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

Refueling Squadron

(U) The BTRs for the 70th AREFS were established in a manner similar to requirements for the bomb squadrons. An increase in the number of assigned crews effected an increase in the number of requirements. The only difference between BTRs for the bomb squadrons and the 70th AREFS was in the type of BTRs.[92]

Requirements and Requirements Met

(U) The 70th AREFS completed 100 per cent of its BTRs during the training period. All but 827 of the refueling squadron's 6,799 BTRs had been completed by the end of the previous quarter. At the end of the previous training period, the 70th had completed 98.2 per cent of its requirements.[93]

(U) The following chart shows the total number of BTRs, the number completed during each quarter, and the percentage completed by the 70th AREFS:[94]

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92. SACM 50-8, Vol. II, "Training Requirements for Air Refueling Aircrews KC-135 Aircraft" (U), 10 Jun 68, (U).

93. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Apr-Jun 68, p. 50.

94. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

Chart 3.8 - KC-135 BTRs

Item	Number Required	Total Comp 1st Q	Total Comp 2nd Q	Per Cent Completed
Navigation	381	325	56	100.0
Refueling	605	438	167	100.0
Instrument Training	4,778	4,416	362	100.0
Pilot Proficiency	786	600	186	100.0
Miscellaneous	195	140	55	100.0
Annual	54	53	1	100.0
Total BTRs	6,799	5,972	827	100.0

Additional Specialized Training

Bomb Squadrons

(U) The three bomb squadrons completed Additional Specialized Training (AST) in every required area during the training period. The largest portion of AST was completed in the Instrument Training, Electronic Warfare and Gunnery, Pilot Proficiency and High Altitude RBS categories. These categories had also shown a sizeable overage at the end of the previous training period. Figures for AST this training period decreased by 3,876 over figures at the end of the last training period.[95]

(U) The total amount of AST completed by the bomb squadrons during the training period is shown in the following chart:[96]

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95. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Apr-Jun 68, p. 52.

96. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

Chart 3.9 - B-58 AST

Item	Completed 1st Quarter	Completed 2nd Quarter	Total AST Completed
High Altitude RBS	337	875	1,212
Low Altitude RBS	292	654	946
High Altitude Navigation	88	255	343
Low Altitude Navigation	63	123	186
Air Refueling	238	633	871
Electronic Warfare and Gunnery	776	1,538	2,314
Instrument Training	4,267	8,361	12,628
Pilot Proficiency	565	1,065	1,630
Mainline	6	5	11
Miscellaneous	45	44	89
Annual	27	20	47
Total AST	6,704	13,573	20,277

Refueling Squadron

(U) AST in every required area was completed by the 70th AREFS during the training period. As was the case with B-58 AST, the AST completed by KC-135s during the training period was much less than the total completed during the previous period. KC-135 AST completed this period was 14,170, compared to a total of 17,819 AST completed by the 70th AREFS during the January-June training period. Commitments for command support discussed earlier in the chapter accounted for much of the decrease.[97]

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97. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Apr-Jun 68, p. 52.

(U) The total amount of AST which the refueling squadron completed during the training period is shown in the following chart:[98]

Chart 3.10 - KC-135 AST

Item	Completed 1st Quarter	Completed 2nd Quarter	Total AST Completed
Navigation	81	114	195
Air Refueling	683	991	1,674
Instrument Training	3,920	7,053	10,973
Pilot Proficiency	364	900	1,264
Miscellaneous	28	19	47
Annual	9	8	17
Total AST	5,085	9,085	14,170

Recommendations

(U) The 43rd BW received a reply during the quarter to a recommendation concerning SACM 50-8 requirements which it made during the previous quarter. During the July-September quarter, the wing experienced problems in completing 50-8 requirements on missile defense runs (MDRs) and optional defense runs (ODRs). This was due to a lack of RBS site capability to score these runs. On 28 December, the wing was notified by 2nd AF of the waiver of a number of MDRs and ODRs for several of its crews. Thirty-four

98. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

MDRs were waived for 12 different crews, and 11 ODRs were waived for six different crews.[99]

(U) The message also verified waiver of the low altitude high speed dash. This requirement was waived for all 43rd BW crews during the training period due to low altitude speed restrictions placed on the B-58 following the Time Compliance Technical Order 1B-58-1090 modification, discussed in the 43 MBW April-June 1968 History.[100]

Special Missions

(U) The 43rd BW participated in five special missions during the October-December quarter: one Busy Luggage mission, one Glass Road mission, one Coronet Finch mission and two Snow Time missions. The Coronet Finch mission is discussed in the 43 MBW July-December 1968 SPAR History.

Busy Luggage

(U) The 43rd BW participated in a Busy Luggage mission on 3 October in which one B-58 aircraft took part. It was the fourth Busy Luggage mission flown by the wing in the last two and one-half

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99. Hist, 43 MBW, Jul-Sep 68, p. 51; and Msg, 272345Z, 2AF to 43C, "Waiver of SACM 50-8 Training" (U), 27 Dec 68, (U), Ex. 26.

100. Msg, 272345Z, 2AF to 43C, "Waiver of SACM 50-8 Training" (U), 27 Dec 68, (U), Ex. 26.

years, and the first of 1968. Previous code names for Busy Luggage were Mixed Marble and Buckle Game.[101]

Background

(b) (1) (B)

[redacted]

(b) (1) (B)

[redacted]

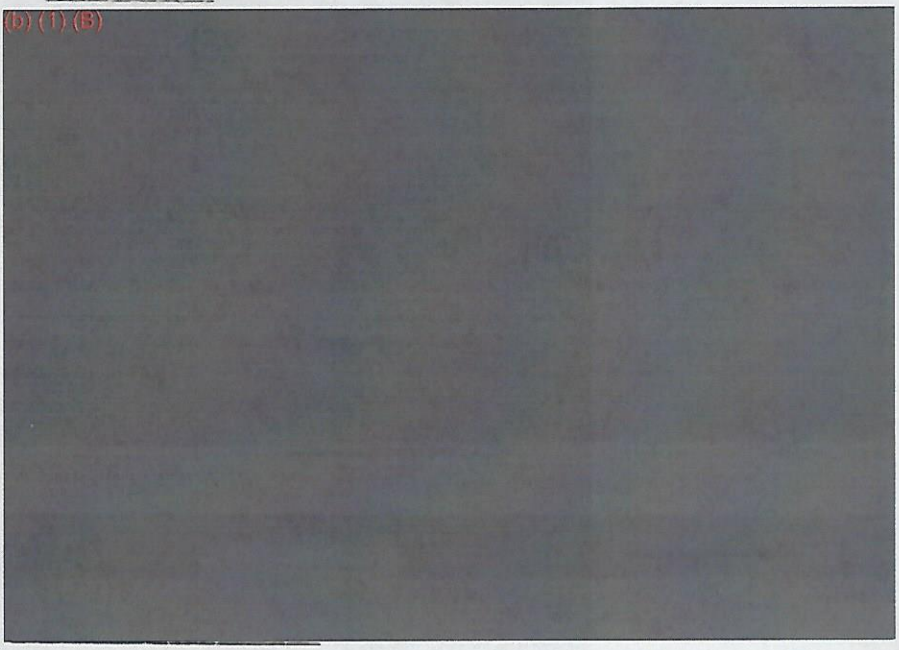
101. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. E. C. Dewey, Chief, 43rd BW Air Weapons Section, 27 Jan 69; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

102. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. E. C. Dewey, Chief, 43rd BW Air Weapons Section, 27 Jan 69; and Hist, 43 MBW, Oct-Dec 66, p. 50.

(b) (1) (B)

Mission Results

(b) (1) (B)



103. Hist, 43 MBW, Jan-Mar 67, p. 53; Hist, 43 MBW, Jul-Sep 67, pp. 40-42.

104. SAC OPORD 35-69, "Busy Luggage," (U), 1 Jan 68, ~~(S-RD-NOFORN)~~.

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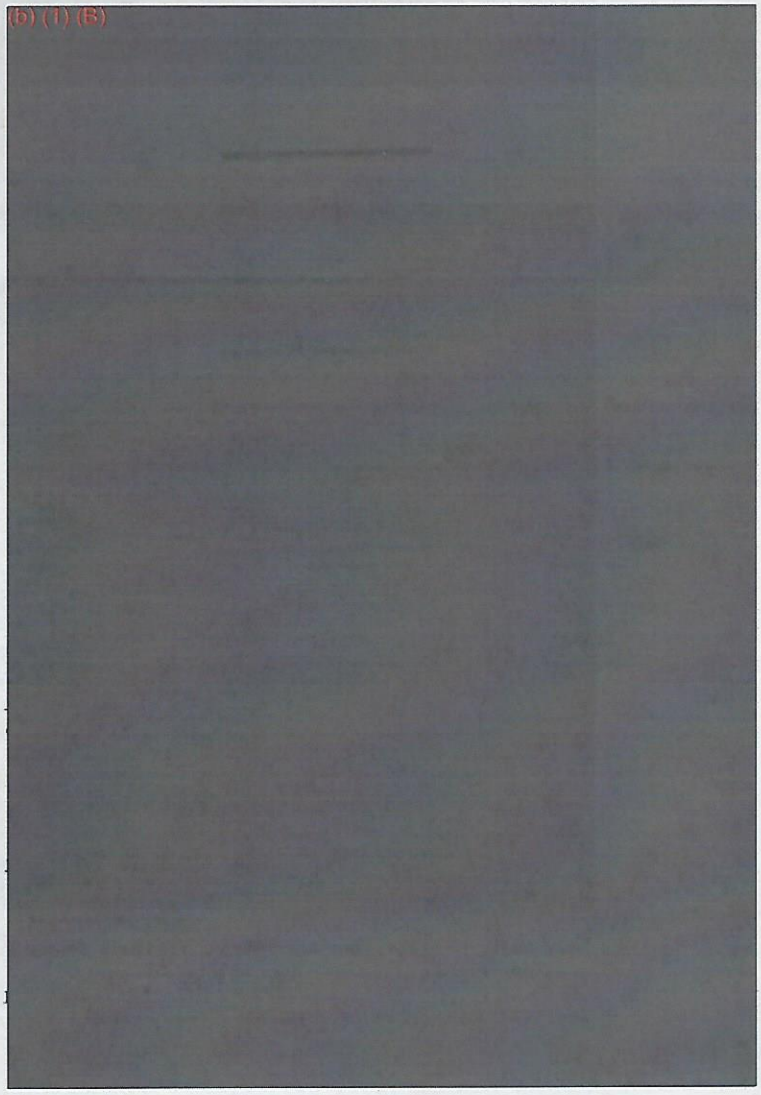
(b) (1) (B)



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(b) (1) (B)

(b) (1) (B)

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* Synchronous - A bomb release method in which all navigation and bombardment computers aboard the aircraft worked harmoniously.

** Knot - A nautical mile per hour, e.g., 1,516 statute miles per hour.

*** Azimuth - In bombing, the factor of the bomb's movement after release to the right or left of its downward course.

107. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. E. C. Dewey, Chief, 43rd BW Air Weapons Section, 27 Jan 69; and Msg, 211548Z, SAC to 2AF, "Post-Mortem Report on Busy Luggage-3 Test SAC OPORD 35-69" (U), 21 Oct 68, ~~(C-RD)~~, Ex. 28.

108. 2AF Item of Interest, "Busy Luggage Test" (U), 4 Oct 68, ~~(C)~~, on file in 43rd BW Historical Archives.

after they had made contact with the ground can be found in Appendix F. [109]

(b) (1) (B)

Snow Time 69-1-E

(S) The purpose of Snow Time missions was to provide a tactical evaluation of SAC, North American Air Defense Command (NORAD), Air Defense Command (ADC), and the Army Air Defense Command. The information gathered from Snow Time missions aided in improving Tactical Air Command (TAC) doctrine and SAC EWO concepts. The missions also aided in improvement of Single Integrated Operation Plan (SIOP)* missions and SAC combat crew wartime survivability. [111]

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* Single Integrated Operations Plan - A higher headquarters plan for detailed movement of aircraft during actual wartime.

109. Ltr, 2AF/DO to 2AF/VC, subj; Busy Luggage (U), 30 Oct 68, (C), on file in 43rd BW Historical Archives; and 2AF Item of Interest, "Busy Luggage Test" (U), 4 Oct 68, (C), on file in 43rd BW Historical Archives.

110. SACM 50-4, Vol. II, "Bombing Accuracy Standards" (U), 27 Dec 67, (C).

111. SAC OPORD 12-68, "Top Rung/Snow Time" (U), 1 Jul 67, (S)

(U) SAC's objectives in these types of missions were to exercise and evaluate offensive penetration tactics and equipment. Realistic EWO tactics were employed, including supersonic, high altitude and subsonic low-level penetration tactics and electronic countermeasures (discussed later in this chapter).[112]

(U) The 43rd BW participated in Snow Time 69-1-E on 9 October. The mission was conducted in the northern, eastern and central NORAD regions. The wing was scheduled to fly eight B-58s in support of the mission.[113]

(C) Two B-58s aborted the entire mission when they developed aircraft malfunctions prior to launch. One aircraft - BAR #102 - aborted when its search radar failed. The other B-58 - BAR #104 - aborted on the ground due to an inoperative airspeed indicator in the pilot's station.[114]

(C) A total of 29 radar lock-ons was detected by the six 43rd BW aircraft that flew the mission. Twenty-four of these were ground lock-ons and the other five were airborne interceptor lock-ons.

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112. SAC OPORD 12-68, "Top Rung/Snow Time" (U), 1 Jul 67, (S).

113. Msg, 041950Z, 2AF to 43DCO, "Snow Time 69-1-E Flying Area" (U), 10 Sep 68, (U), Ex. 29; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

114. Msg, 162151Z, 825 SAD to SAC, "Snowtime 69-1-E" (U), 16 Oct 68, (C), Ex. 30.

All but one of the radar lock-ons were broken; the one lock-on not broken - in sortie #116 - was a ground radar lock-on. One aircraft detected three fighters through radar and visual contact. Two aircraft each detected a fighter through radar contact.[115]

(C) Five electronic countermeasures (ECM) malfunctions occurred. Three malfunctions occurred in the same aircraft - #446. In one malfunction, the forward-mounted T-4 ECM transmitter failed during a flight check. However, when tested with a flight tester on the ground, the transmitter was operative. The second malfunction occurred when the aft-mounted T-4 receiver caused an excessive load on the generators. It was removed and replaced by a T-4 receiver locked oscillator. The third malfunction on #446 occurred when the ALR-12 ECM receiver noise was predominate, causing received signals to be unintelligible. The ALR-12's amplifier indicator was removed and replaced. Aircraft #463 experienced the two other ECM malfunctions. The first occurred when its forward-mounted T-4 ECM transmitter failed to operate. The cause of the malfunction could not be determined through flight line testing. The other malfunction occurred when the aft-mounted

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115. Msg, 162151Z, 825 SAD to SAC, "Snowtime 69-1-E" (U), 16 Oct 68, (S), Ex. 30.

T-4 transmitter would not operate. The solenoid power supply was removed and replaced to correct the problem.[116]

(U) No other problems were experienced and no recommendations were made.

Snow Time 69-2-C

(S) The 43rd BW again was scheduled to fly eight B-58s in direct participation during Snow Time 69-2-C on 11 December. However, two aircraft experienced air aborts during the exercise. The first abort, in BAR #104, occurred when the bomber's mating tanker air aborted. And in BAR #108, the abort was caused by a loss of search radar.[117]

(S) One B-58 detected two fighters through visual contact. Four ground radar lock-ons were detected by three of the wing's aircraft, and all four lock-ons were broken.[118]

(S) Two ECM malfunctions occurred during the exercise. In one of the malfunctions, the aft-mounted ALQ-16 ECM transmitter

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116. Msg, 162151Z, 825 SAD to SAC, "Snowtime 69-1-E" (U), 16 Oct 68, (S), Ex. 30.

117. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69; Msg, 122044Z, 2AF to 43DCO, "Exercise Notification, Snow Time 69-3-C" (U), 12 Nov 68, (U), Ex. 31; and Msg, 172101Z, 825 SAD to SAC, "Snowtime 69-2-C" (U), 17 Dec 68, (S), Ex. 32.

118. Msg, 172101Z, 825 SAD to SAC, "Snowtime 69-2-C" (U), 17 Dec 68, (S), Ex. 32.

failed during a flight check. Action taken was the replacement of the solenoid power supply. The second malfunction took place when the forward-mounted T-4 ECM transmitter failed to operate. Action taken was the replacement of the solenoid power supply.[119]

Glass Road

(U) Glass Road missions consisted of a simulated forward area deployment (FAD)* to Moron AB and Torrejon AB, Spain. The missions were designed to familiarize crews with the forward base areas, and also to exercise forward area base reception plans, validate EWO planning and identify potential problem areas.[120]

(U) Four B-58s from the 43rd BW participated in a Glass Road mission on 17-22 November. The bombers were scheduled to deploy to Moron AB on 18 November, but due to bad weather conditions on the east coast, deployment was delayed until 19 November. Logistics tanker support was provided by the 34th AREFS, 41st AREFS, the 305th AREFS, and the 301st Air Refueling Wing. Bomber air refueling support was provided by the

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* Forward Area Deployment - The act of deploying to an area or at the front; i.e., in or near a combat area, or near the enemy.

119. Msg, 172101Z, 825 SAD to SAC, "Snowtime 69-2-C" (U), 17 Dec 68, [redacted], Ex. 32.

120. Hist, 43 MBW, Oct-Dec 67, Ex. 44.

41st AREFS, the 380th AREFS and the 34th AREFS. Four B-58s from the 305th BW at Grissom AFB also were scheduled to take part in the Glass Road mission.[121]

(U) All four B-58s from Little Rock AFB deployed on 19 November, but one aircraft - #436 - developed air conditioning problems, forcing the plane to air abort and return to Little Rock AFB. The other three wing B-58s landed on schedule at Moron AB. Two B-58s from the 305th BW were forced to cancel the mission when runway conditions prevented the take-off of the 380th AREFS's tankers, which were to refule the two B-58s.[122]

(U) The three B-58s from the 43rd BW returned to Little Rock AFB on 22 November in a three-ship cell. All three aircraft made the return trip without further difficulty.[123]

(~~C~~) In early September, 2nd AF stated that it was considering the possible curtailment or elimination of the Glass Road

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121. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69; and Msg, 061945Z, 2AF to 43BW, "Glass Road Support, September-November 1968" (U), 6 Aug 68, (~~C~~), Ex. 33.

122. Ltr, 64th BS to SAC/2AF/825SAD, subj: Glass Road Deployment Trip Report (U), 27 Nov 68, (U), Ex. 34; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69.

123. Ltr, 64th BS to SAC/2AF/825SAD, subj: Glass Road Deployment Trip Report (U), 27 Nov 68, (U), Ex. 34.

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deployments, due to a forecasted fund shortage. Asked to give opinions and evaluations on the value of the program, the 43rd BW Commander and the 825th SAD Director of Operations made recommendations to 2nd AF. These recommendations can be found in the 43 MBW July-September 1968 History.[124]

(S) In a letter dated 4 December, SAC's Deputy Chief of Staff, Operations, stated that the Glass Road exercises should be continued. He said that although each exercise costs SAC approximately $5,000, it was well worth the cost, since the Glass Road mission was the only mobility exercise the B-58 wings had.[125]

Spanish Tanker Task Force

(U) The Spanish Tanker Task Force supported air refueling training, fighter ferry movements, SAC reconnaissance missions and other requirements in Europe as directed by SAC Headquarters. The 98th Strategic Wing had operational control of the task force, which supported the U. S. Armed Forces in Europe (USAFE). The wing was located at Torrejon AB, Spain.[126]

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124. Hist, 43 MBW, Jul-Sep 68, p. 55.

125. Ltr, SAC to 2AF DO, subj: Glass Road (U), 4 Dec 68, (S), Ex. 35.

126. Hist, 43 MBW, Apr-Jun 67, p. 26.

(U) The 43rd BW provided two KC-135 aircraft and three combat crews for this task force during the October-December quarter. The first crew left on 2 September and returned on 10 September. The second crew departed for Spain on 3 September and returned 3 October. The last crew left on 9 December and was scheduled to return on 8 January 1969. The dates for deployment of the KC-135 aircraft were 3 September to 3 October and 10 December to 8 January (scheduled return date.)[127]

Flying Hours

Allocated and Expended

(S) No change of allocated flying hours was requested during the quarter by the bomb squadrons or the 70th AREFS. The bomb squadrons total of 2,600 flying hours were authorized for the wing's B-58s at the end of September and at the end of the quarter. The TB-58s were allocated 525 flying hours at the end of these periods. The refueling squadron's KC-135 fleet was allocated 2,075 flying hours throughout the quarter.[128]

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127. Msg, 091942Z, 2AF to 70th AREFS, "2AF Spanish Area Support FY 2/69" (U), 9 Sep 68, (U), Ex. 36; Extract of Wall Chart, "KC-135 Aircraft Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 14.

128. Msg, 191720Z, 2AF to AIG 696/697, "Tactical Flying Hour Allocations for FY 2/69" (U), 19 Sep 68, (S), Ex. 37; and Hist, 43 MBW, Jul-Sep 68, p. 59.

(C) The bomb squadrons' total flying hours expended for the quarter fell below their authorized number of hours for both the B-58 and the TB-58. The squadrons flew 2,539 of 2,600 authorized B-58 flying hours during the quarter for a percentage of 97.7. This was a drop of 2.2 per cent over the percentage of hours flown during the previous quarter. Ninety-two per cent of the authorized 525 TB-58 flying hours were expended during the quarter. Two reasons for the wing's failure to reach its flying hour authorization figures for B-58 and TB-58 aircraft were the increased number of aircraft in work for the four-way modification and the fuel leakage problem which struck the B/TB-58 fleet in October and November. Both of these problems are discussed in Chapter IV.[129]

(C) The percentage of actual flying hours compared to the allocated figure dropped sharply for the 70th AREFS during the quarter. At the end of the previous period, the squadron flew 99.8 per cent of its allocated 2,097 hours. However, during the present quarter, the 70th flew just 88.7 per cent of its allocated 2075 flying hours. The squadron transferred 200 of its 234 underflown hours to another

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129. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Rpt, "Report of Pilots-RCS: HAF P-32" (U), 31 Dec 68, (U).

KC-135 unit which had experienced an over-fly of its allocated figure. The figures did not include flying time spent during redeployment and Young Tiger missions. The number of hours flown in Young Tiger alone amounted to 704 during the quarter.[130]

(U) The following chart shows the number of flying hours allocated at the beginning of October, at the end of December and the total number of flying hours that the wing expended during this quarter:[131]

Chart 3.11 - Flying Hours

Aircraft	Authorized Beginning of October	Authorized End of December	Expended	Per Cent
B-58	2,600	2,600	2,539	97.7
TB-58	525	525	486	92.6
KC-135	2,075	2,075	1,841	88.7

Flight Training

(U) Several areas of SACM 50-8 training requirements were of considerable importance and will be discussed more thoroughly here.

Bomb Squadrons

Radar Bomb Scores

(U) During wing training exercises, nuclear weapons were not dropped. The wing instead practiced with a harmless electronic signal.

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130. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Rpt, "Report of Pilots-RCS: HAF P-32" (U), 31 Dec 68, (U).

131. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; and Hist, 43 MBW, Jul-Sep 68, p. 59.

Just before an aircraft attempting a training bomb run reached its target, the navigator/bombardier turned on an electronic signalling device. As the aircraft came over its target, the navigator simulated dropping the bomb by turning off the electronic signal. Thus, by knowing the speed and direction of the aircraft and the instant the bomb was released, ground radar equipment and computers could determine if the simulated bomb hit its target.[132]

High Altitude

(U) High Altitude Radar Bomb Scores (RBS) runs were performed at a minimum altitude of 25,000 feet. Minimum altitude was 30,000 feet if the run was supersonic. All subsonic runs were flown at 435 knots indicated air speed (KIAS), and all supersonic RBS runs were flown at a speed of Mach* 1.65 or 2.0. Synchronous RBS runs were made utilizing all naviagtion and bombardment computers aboard the aircraft. Only if all computers were working harmoniously could this run be accomplished. Fixed Angle (FA) runs used a technique of manually determining the required course and weapon release time from the radar scope, without the use of synchronous equipment. Integrated Emergency runs used a manual bomb release method in addition

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* Mach - The speed of sound (Mach X); X refers to the number multiplied by.

132. SACM 50-4, Vol. I, "Radar Bomb Scoring, Navigation and Low Altitude Training Operations" (U), 17 Jan 68, (U).

to fixed angle techniques. Terrain Feature runs used a feature in the terrain as a target, as opposed to a man-made object. Radar Offset Fixed Angle runs were emergency type runs using fixed angle techniques.[133]

(U) The following chart shows the number of high altitude RBS runs accomplished and reliable for combat crews and crews not on combat duty during the training period.[134]

Chart 3.12 - High Altitude RBS

Crew	Type Run	Accomplished	Reliable	Per Cent
Combat Crews	Synchronous (supersonic)	0	0	-
Other Crews	"	1	1	100.0
Combat Crews	Synchronous (subsonic)	1060	983	92.7
Other Crews	"	73	65	89.0
Combat Crews	Fixed Angle (subsonic)	165	162	98.1
Other Crews	"	2	2	100.0
Combat Crews	Int. Emerg. (supersonic)	64	59	92.2
Other Crews	"	3	3	100.0
Combat Crews	Int. Emerg. (subsonic)	222	211	95.1
Other Crews	"	26	24	92.3
Combat Crews	Terrain Feature	61	58	95.1
Other Crews	"	0	0	-
Combat Crews	Radar Offset FA	64	59	90.6
Other Crews	"	3	3	100.0
Total	High Altitude RBS	1,744	1,630	93.4

133. SACM 50-4, Vol. I, "Radar Bomb Scoring, Navigation and Low Altitude Training Operations" (U), 17 Jan 68, (U).

134. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

(U) The high altitude RBS reliability rate for the wing dropped from that of last quarter. While the rate at the end of September was 95.8 per cent, the rate this quarter was 93.4 per cent. The total number of High Altitude RBS runs completed during the training period - 1,744 - was 239 less than the number accomplished at the conclusion of the previous training period.[135]

Low Altitude

(U) Low Altitude RBS runs were made at a speed of 435 KIAS and at an altitude of less than 25,000 feet and down to 6,000 feet. Altitudes of less than 6,000 feet were restricted to 350 KIAS. The reason for this is discussed in the 43 MBW July-September 1968 History. Several other types of low altitude RBS runs were used, in addition to the synchronous, fixed angle, integrated emergency, terrain feature, and radar offset fixed angle RBS runs mentioned previously. Short Look Large Charge/Lay Down Large Charge (SLLC/LDLC) runs used a technique of executing two bomb releases on two targets with slow falling weapons. Synchronous plus Time plus Synchronous runs were the same as

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135. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives; Hist, 43 MBW, Jul-Sep 68, p. 61; and Hist, 43 MBW, Apr-Jun 68, p. 75.

SLLC/LDLC runs except that a release was made on each of three targets, the first release being synchronous, the second manually timed by the navigator/bombardier and the third synchronous. Another type of low altitude RBS was the Long Offset run. Offset techniques were used when the target could not be seen on radar, or when the target was a poor reference point. A SLLC/LDLC Express site run differed from the SLLC/LDLC run in that the scoring site was a mobile van or train. A Triple Release run occurred when three releases were made on one run.[136]

(U) The following chart shows the number of low altitude RBS runs accomplished and reliable for combat crews and crews not on combat duty during the training period:[137]

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136. SACM 50-4, Vol. I, "Radar Bomb Scoring, Navigation and Low Altitude Training Operations" (U), 17 Jan 68, (U); and Hist, 43 MBW, Jul-Sep 68, Ex. 32.

137. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

Chart 3.13 - Low Altitude RBS

Crew	Type Run	Accomplished	Reliable	Per Cent
Combat Crews	SLLC/LDLC	454	423	93.1
Other Crews	"	47	43	91.5
Combat Crews	Syn-Time-Syn	412	383	92.9
Other Crews	"	20	15	75.0
Combat Crews	Syn(SL/LD)	2	2	100.0
Other Crews	"	0	0	-
Combat Crews	Int. Emergency	3	3	100.0
Other Crews	"	3	2	66.7
Combat Crews	Int.Emerg(SL/LD)	288	280	97.2
Other Crews	"	28	25	89.9
Combat Crews	Long Offset	58	54	93.1
Other Crews	"	0	0	-
Combat Crews	Terrain Feature	189	162	93.1
Other Crews	"	3	3	100.0
Combat Crews	SL/LD Express Site	1	1	100.0
Other Crews	"	0	0	-
Combat Crews	Triple Release Run	433	399	92.1
Other Crews	"	24	19	79.1
Combat Crews	Radar Offset FA	62	62	100.0
Other Crews	"	0	0	-
Combat Crews	Triple Release, Int. Emergency	17	15	88.8
Other Crews	"	0	0	-
Combat Crews	Non-BTR/AST Releases	20	19	95.0
Other Crews	"	2	2	100.0
Total	Low Altitude RBS	2,066	1,912	92.1

(U) The 2,066 runs accomplished during the period was a large increase over the number accomplished at the end of the previous training period. At that time, 1,457 low altitude RBS runs had been accomplished, with a reliability percentage of 90.2.[138]

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138. Hist, 43 MBW, Apr-Jun 68, p. 77.

Air Refueling

(U) The bomb squadrons completed four types of air refueling training during the training period. These types were: rendezvous; heavy weight (day or night); optional wet (day or night); and night refueling. Rendezvous refueling required both aircraft - tanker and receiver - to close within one-half mile of each other. Both heavy weight refuelings required that the fuel transferred between the tanker and receiver bring the gross weight of the tanker down to 160,000 pounds. The heavy weight (day or night) was not a SAC BTR. A minimum of 3,000 pounds of fuel was required to be transferred between tanker and receiver during an optional wet refueling.[139]

(U) The following chart shows the number of refueling hook-ups accomplished and reliable for combat crews and crews not on combat duty during the training period:[140]

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139. SACM 50-8, Vol. I, "Training Concepts, Policies and Instructions SAC Units and Aircrews" (U), 14 Jun 68, (U).

140. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

Chart 3.14 - B-58 Air Refueling

Crew	Type Refueling	Accomplished	Reliable	Per Cent
Combat Crews	Rendezvous	547	547	100.0
Other Crews	"	52	52	100.0
Combat Crews	Heavy Weight (day or night)	64	64	100.0
Other Crews	"	17	17	100.0
Combat Crews	Optional Wet (day or night)	518	518	100.0
Other Crews	"	77	77	100.0
Combat Crews	Night Refueling (Heavy Weight/Opt.)	136	136	100.0
Other Crews	"	10	10	100.0
Total	Refueling Hook-ups	1,421	1,421	100.0

(U) The bomb squadrons completed a total of 1,421 refuelings during the training period, 54 less than the number completed in the previous training period. Of this period's total, 686 were completed during the first quarter and 735 during the last quarter. The reliability rate remained at 100 per cent.[141]

Defensive Electronic Countermeasures

(U) The purpose of Defensive Electronic Countermeasures (DECM) was to increase the effectiveness of a bomber by electronically confusing enemy radar defenses. Target Defense runs (TDRs) were electronic warfare (EW) runs using a maximum amount of DECM, such as electronic confusion, false echoes and chaff* as

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* Chaff - Metallic strips used to reflect radar and create false echoes.

141. Hist, 43 MBW, Apr-Jun 68, p. 79.

well as evasive aircraft maneuvers. Missile Defense runs (MDRs) were EW runs by a single aircraft against a target area defended by surfact-to-air missiles. Target Complex runs were EW runs made by a single aircraft which trained crews to identify and react to anti-aircraft artillery. NIKE Fox Brown (TDR/RBS) runs were the same as Target Complex runs with the exception that the former were made as a target defense run against a NIKE site, using electronic confusion. NIKE defense runs - the only type of run not required by SAC - were the same as MDRs except that they were made against a NIKE missile site. Fighter Intercept runs were made against simulated enemy fighter aircraft. The Fighter Intercept Exercise (Simulator) runs were identical except that the B-58 flight simulator was used for evaluation rather than actual aircraft flight. EWO Profile runs were almost identical to TDRs with the exception that EWO conditions were simulated to a maximum degree of realization. An Optional Defense run was designed to train aircrews in the procedures required to successfully penetrate a target area defended by anti-aircraft artillery, surface-to-air missiles, or enemy radars.[142]

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142. SACM 51-5, Vol. I, "Defensive Systems Training" (U), 9 Jul 68, (U).

(U) The number of DECM runs accomplished and reliable for combat crews and crews not on combat duty during the training period is shown in the following chart:[143]

Chart 3.15 - B-58 Defensive Electronic Countermeasures

Crew	Type DECM Run	Accomplished	Reliable	Per Cent
Combat Crews	Target Defense	277	186	67.2
Other Crews	"	41	29	70.7
Combat Crews	Missile Defense	304	163	53.6
Other Crews	"	18	11	61.1
Combat Crews	Target Complex	1,283	1,213	94.5
Other Crews	"	124	119	96.0
Combat Crews	NIKE Fox Brown RBS TDR	418	373	89.2
Other Crews	"	22	21	95.4
Combat Crews	NIKE Defense (subsonic)	54	53	98.1
Other Crews	"	5	5	100.0
Combat Crews	Fighter Intercept Exercise	111	111	100.0
Other Crews	"	3	3	100.0
Combat Crews	Fighter Intercept Exercise(simulator)	58	58	100.0
Other Crews	"	2	2	100.0
Combat Crews	EWO Profile	676	676	100.0
Other Crews	"	71	70	98.6
Combat Crews	Optional Defense Run	150	97	64.7
Other Crews	"	5	3	60.0
Total	DECM Runs	3,622	3,193	88.1

143. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

(U) The number of DECM runs accomplished during the training period was far below the number accomplished in the January-June 1968 period. The 3,622 DECM runs accomplished this period were exceeded by 359 during the previous period. The percentage of reliability also dropped this period. At the end of June, 90.8 per cent of the DECM runs were reliable. The reliability rate for the present period was 88.1 per cent.[144]

Refueling Squadron

(U) The 70th AREFS completed four types of rendezvous and five types of air refueling during the training period. Electronic Rendezvous was completed by one aircraft locating another aircraft through radar. Alternate Rendezvous was any type of rendezvous other than a normal Electronic Rendezvous. On Course Rendezvous occurred when both the tanker and receiver met while on course, and not while the tanker was in orbit*. Buddy Rendezvous occurred when two planes taking off from the same base followed one another to a refueling point. Cell Rendezvous occurred when two or more tankers travelled on the same route. One type of air refueling was accomplished with normal boom operation and another type was accomplished with manual boom operating

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* Orbit - An oval path flown by a tanker while waiting to meet the receiving aircraft.

144. Hist, 43 MBW, Apr-Jun 68, p. 81.

techniques. Autopilot Off refuelings were not conducted during the period because the 70th AREFS had no commitments with B-52 aircraft; this training requirement was waived. SAC receiver refuelings were completed by the squadron with other SAC aircraft.[145]

(U) The number of refueling hook-ups accomplished and reliable for combat crews and crews not on combat duty during the training period is shown in the following chart:[146]

Chart 3.16 - KC-135 Refueling Hook-ups

Crew	Type Refueling	Accomplished	Reliable	Per Cent
Combat Crews	Electronic Rendezvous	230	230	100.0
Other Crews	"	10	10	100.0
Combat Crews	Air Refueling(normal)	512	512	100.0
Other Crews	"	8	8	100.0
Combat Crews	Air Refueling(manual)	63	63	100.0
Other Crews	"	2	2	100.0
Combat Crews	Autopilot Off	0	0	-
Other Crews	"	0	0	-
Combat Crews	Refueling with SAC	387	387	100.0
Other Crews	"	8	8	100.0
Combat Crews	Alternate Rendezvous	121	121	100.0
Other Crews	"	3	3	100.0
Combat Crews	On Course Rendezvous	47	47	100.0
Other Crews	"	11	11	100.0
Combat Crews	Buddy Rendezvous	11	11	100.0
Other Crews	"	0	0	-
Combat Crews	Cell Refueling	30	30	100.0
Other Crews	"	0	0	-
Combat Crews	Refueling with other SAC Receivers	397	397	100.0
Other Crews	"	1	1	100.0
Total	Refueling Hook-ups	1,841	1,841	100.0

145. SACM 50-8, Vol. II, "Training Requirements for Air Refueling Aircrews KC-135 Aircraft"(U), 10 Jan 68, (U).

146. Rpt, 1-SAC-T-12, "Status Listing of Aircrews" (U), 31 Dec 68, (U), on file in 43rd BW Historical Archives.

(U) A reliability figure of 100 per cent was maintained by the 70th AREFS during the quarter, and for the entire training period. This was the eleventh quarter for 100 per cent refueling reliability by the 70th AREFS.[147]

TRAINING EFFECTIVENESS

(U) There was no operational Readiness Inspection or Operational Readiness Inspection Test of the 43rd BW conducted during the quarter. However, during the quarter, the wing was evaluated by the 2nd AF Standardization Division. Two inspections by the 1st Combat Evaluation Group (CEG) were conducted in the 43rd BW during the October-December period. The wing also took part in a High Heels exercise during October.

2nd AF Standardization Visit

(U) A 2nd AF standardization staff no-notice visit to the 43rd BW was conducted on 15-20 December. The purpose of the visit was to evaluate the unit's standardization evaluation program and related activities. Included in the visit were several examinations. B-58, KC-135 and non-tactical crew members were tested on emergency procedures. The results of these examinations were: B-58 crew members - 41 highly qualified, four qualified;

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147. Hist, 43 MBW, Jul-Sep 68, p. 70.

KC-135 crew members - 11 highly qualified, four qualified; and non-tactical crew members - 30 highly qualified, 10 qualified. A professional knowledge examination covering items in SACM 51-4 was given to 31 members of the Standardization Division. Twenty-six were rated highly qualified, one was qualified, two were conditionally qualified and two were unqualified. The grades less than qualified were received by non-tactical personnel. The results of the professional knowledge examination were down from those achieved in a similar visit conducted in July. In that examination, 19 received highly qualified ratings and two were qualified.[148]

(U) Non-tactical crew members were examined on celestial ground missions.* Three were highly qualified and one was qualified. Flight evaluations were conducted on several crews and various crew members. The results included: KC-135 crews - one highly qualified, two qualified; C-47 pilots - two qualified; T-29 pilots - two qualified; T-29 flight mechanics - one qualified; and UH-1F crew members - four qualified.[149]

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* Celestial Ground Mission - A simulation of an inflight navigation leg in which the information computed by the navigator was evaluated for accuracy.

148. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69.

149. Ibid.

Combat Evaluation Group Visits

(U) The first visit of the quarter by the 1st CEG was conducted on 18-22 November. The no-notice evaluation of the 43rd BW included a flight evaluation and emergency procedures testing. Eight B-58 crews and 11 non-tactical personnel were tested in the flight evaluation. Three of the B-58 crews were rated highly qualified, three were qualified and two were conditionally qualified. Of the 11 non-tactical personnel evaluated, one was highly qualified and the remaining 10 were qualified. In the emergency procedures testing, 58 B-58 crew members were rated highly qualified and seven were qualified. The results attained by non-tactical personnel on the test included: 24 highly qualified, 10 qualified and one unqualified.[150]

(U) The 1st CEG conducted an evaluation of the 43rd Combat Crew Training School (CCTS) during 9-13 December. The CCTS program was rated satisfactory. In a flight evaluation of instructors, conducted in the B-58 simulators, the two instructors examined were rated qualified. CCTS crew members were given an emergency procedures examination. Of the 25 tested, 23 received highly qualified ratings and two were qualified. Three crews were

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150. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-November, 11 Dec 68.

administered evaluations during TB-58 flights as a make-up of the 18-22 November visit. One crew was rated highly qualified and the remaining two were qualified. Three crew members selected for evaluation demonstrated satisfactory knowledge of life support equipment.[151]

High Heels Exercise

~~(S)~~ The 43rd BW took part in a world-wide battle staff exercise, "High Heels 68," during the quarter. The exercise, which was conducted from 17-25 October, was designed to simulate actual EWO conditions. In the past, the unit command post was the only participant in the exercise. But the concept of the exercise changed to include the entire battle staff in a High Heels exercise, that is, each organization which had EWO responsibilities. The exercise conducted in October was the first implementation of this battle staff concept by the 43rd BW.[152]

~~(S)~~ Activities during the exercise were designed to simulate as far as possible actual EWO condtions. Sealed envelopes

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151. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

152. Interview, Amn. P. H. Stevens, Historian, with SMSgt. T. T. McClure, NCOIC, 43rd BW Control Division, 30 Jan 69; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

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which contained a written problem were given to various tasked organizations during the exercise. For instance, the wing DCM might be told that a B-58 aircraft had developed serious fuel leaks; he would then simulate actions to have it repaired and returned to combat-ready status.[153]

~~(S)~~ The 43rd BW was evaluated in the exercise on the basis of reports forwarded to 2nd AF and SAC on actions which it took in performing its simulated EWO mission. The 43rd BW was rated at 99.8 per cent, which earned a satisfactory mark. The item that prevented the wing from attaining a perfect score resulted from a misinterpretation of SACM 55-8, Vol. I, on a bomber launch report. The exercise was the first High Heels test in which a dispersal base - in the 43rd's case, Whiteman AFB, Missouri - was

(b) (1) (B) [redacted]

FLYING SAFETY

(U) No major aircraft accidents occurred during October, November and December at Little Rock AFB. The last major aircraft accident at Little Rock AFB - involving a 43rd BW B-58

153. Interview, Amn. P. H. Stevens, Historian, with SMSgt. T. T. McClure, NCOIC, 43rd BW Control Division, 30 Jan 69.

154. Ibid.

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aircraft - occurred in July 1968. This accident is discussed in the 43 MBW July-September 1968 History.

Fire Hydrant Hazard

(U) A safety hazard was identified during the quarter that resulted from the modification of the fire hydrants installed along the edge of the runway. A total of 24 hydrants - 21 inches high and spaced about 300 feet apart - were installed adjacent to the edge of the ramp taxiway. They were designed to replenish aircraft fire fighting foam trucks with water during crash rescue operations. However, the fire hydrants were installed in a line eight feet inside the ramp taxiway blue lights and constituted a fixed obstacle hazard to taxiing aircraft.[155]

(U) The hydrants had formerly been mounted flush with the pavement, but the changed AFM 88-10 required that they be raised. This was done under civil engineer project number LRK 56-7, which was completed on 30 October. Although the original plan called for the hydrants to be raised and then placed behind the taxiway lights, this was not done. Instead, the hydrants were raised from their original flush mount location.[156]

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155. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68; and Interview, Amn. P. H. Stevens, Historian, with Lt. Col. R. D. Snyder, 43rd BW Director of Safety, 6 Feb 69.

156. See note above.

(U) One non-reportable accident and several near-misses occurred with aircraft encountering the hydrants. The 43rd BW Director of Safety notified the 2nd AF Director of Safety of this hazard. In the 2nd AF Safety Survey on 2-6 December, the inspecting team concurred that the hydrants were indeed a hazard. Work was accomplished in December to remove several of the hydrants that were the most definite safety hazards; these hydrants were placed behind the taxiway lights. However, the cost to move all the hydrants was estimated to be $2,500. A problem with funding delayed the movement of all the hydrants by the end of the quarter. However, a request for funding was expected to be forwarded to the 2nd AF Director of Safety during January.[157]

(U) The nuclear safety board continued to meet a minimum of once each quarter and surveyed each squadron at least twice a year. A total of 15 personnel were assigned to this board.[158]

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157. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. R. D. Snyder, 43rd BW Director of Safety, 6 Feb 69; Minutes, Little Rock AFB Air Traffic Control Board Meeting of 25 Nov 68, on file in 43rd BW Historical Archives; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

158. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. R. D. Snyder, 43rd BW Director of Safety, 6 Feb 69.

(U) The flight safety accident board consisted of 10 groups - each involved with different aspects of flight safety. The groups included safety advisors, escape and survival personnel, electrical and electronic instrumentation personnel, nuclear personnel, maintenance and flight operations personnel, a pneudraulics group, and personnel specialized in communications and weather. The accident board was comprised of 24 personnel and met once each quarter.[159]

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159. Interview, Amn. P. H. Stevens, Historian, with Lt. Col. R. D. Snyder, 43rd BW Director of Safety, 6 Feb 69.

CHAPTER IV

MAINTENANCE AND SUPPLY

MAINTENANCE

(U) Maintenance workload figures for the 43rd BW's four maintenance squadrons decreased during the October-December quarter from figures recorded in the previous quarter. The primary reason for the decrease was that more maintenance crews and aircraft were on temporary duty (TDY).[1]

Maintenance Activities

(U) The manhour cost per sortie* and flying hour for B-58 and TB-58 aircraft increased during October and November, then decreased during December. The figure for manhour cost per sortie at the end of September was 270.5; this figure jumped by 16.8 manhours per sortie in October, and the figure at the end of November was 301.4. Manhours per sortie dropped to 248.9 at the end of December. The primary reasons for the variations was an increase in the number of AFTO 349s** processed during October and November, and a decrease in the number during December. Also, there was a decrease in the number of maintenance teams TDY during October and

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* Sortie - One mission by a single aircraft.

** AFTO 349 - A report that recorded total manhours expended which was issued by maintenance crews after maintenance had been performed on an aircraft.

1. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40 .

November; the number increased, however, in December. Manhours for those on TDY were added to the base where these teams were temporarily assigned.[2]

(U) The highest figure for B/TB-58 manhour cost per sortie this quarter was 301.4 manhours per sortie, compared to last quarter's high of 341.4 manhours per sortie.[3]

(U) The manhour cost per sortie and flying hour for KC-135 aircraft increased considerably from figures for the last quarter. The increase was due to fewer tanker maintenance crews on TDY status. Commitments for Young Tiger and Spanish Tanker Task Force decreased from the number last quarter. These commitments are discussed in Chapter III. Aircraft that were on TDY were temporarily assigned to other units, and all sorties that these aircraft flew were computed with those units' figures.[4]

(U) The total amount of manhours per sortie and flying hour for the wing this quarter is shown in the following chart:[5]

Chart 4.1 - Wing Manhours/Sortie and Manhours/Flying Hour

Aircraft	Month	Manhours Per Sortie	Manhours Per Flying Hour
B/TB-58	October	287.3	54.1
	November	301.4	55.3
	December	248.9	50.8
KC-135	October	190.8	38.7
	November	179.3	32.9
	December	148.7	30.3

2. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex.38, Ex. 39 and Ex. 40; and Hist, 43 MBW, Jul-Sep 68, p. 82.
3. See note above.
4. See note above.
5. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

Organizational Maintenance Squadron

(U) The Organizational Maintenance Squadron (OMS) had responsibility for the maintenance of assigned tactical aircraft and also maintained assigned support of transient aircraft.[6]

(U) The manhours per sortie and flying hour for the OMS were considerably below figures during the previous quarter. The highest manhours per sortie figure for B/TB-58 aircraft during the last quarter was 155.5 in July, while the highest figure this quarter was 88.8 (in October). Manhours per flying hour for the OMS also showed a large drop. The figures decreased from 21.6 at the end of September to 14.6 at the end of this quarter.[7]

(U) The same figures for KC-135 aircraft showed a slight increase this quarter. At the end of September, the OMS manhours per sortie for KC-135 aircraft was 47.9; the figure increased to 74.2 in October, then dropped back to 53.5 in November and 53.2 in December. The number of manhours per flying hour showed a similar increasing trend. Again, these figures were primarily affected by a decrease in the number of maintenance teams sent on TDY.[8]

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6. SACM 66-12, Vol. XI, "Organizational Maintenance" (U), 21 Sep 67, (U).

7. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

8. See note above.

(U) The following chart shows the OMS manhours per sortie and flying hour for B/TB-58s and KC-135s this quarter:[9]

Chart 4.2 - OMS Manhours/Sortie and Manhours/Flying Hour

Aircraft	Month	Manhours/Sortie	Manhours/Flying Hour
B/TB-58	October	88.8	16.7
	November	87.1	16.0
	December	71.6	14.6
KC-135	October	74.2	15.1
	November	53.5	9.8
	December	53.2	10.9

Field Maintenance Squadron

(U) The Field Maintenance Squadron (FMS) was composed of personnel who maintained airframe and engine systems.[10]

(U) The figures for manhours per sortie and flying hour for the FMS increased over those recorded last quarter. Manhours per sortie for B/TB-58 aircraft increased from 105 at the end of September to 109.7 at the end of October - the high for this quarter. The figures then decreased in the remaining two months of the quarter, although they still were above those in the July-September quarter. B/TB-58 manhours per flying hour experienced a decrease: from 24.7 at the end of September to 20.7 at the end of October.[11]

9. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

10. SACM 66-12, Vol. XIV, "Field Maintenance Aircraft" (U), 7 Mar 68, (U).

11. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40; and Hist, 43 MBW, Jul-Sep 68, p. 86.

(U) Manhours per sortie figures for KC-135 aircraft showed a large increase during the quarter. The figure at the end of September was 60.9; it jumped to 96.0 at the end of October and was at a quarter's high of 106.6 at the end of November. The primary reason for the increase was that the number of AFTO 349 forms reported increased. Manhours per flying hour increased from the previous period, rising from 14.5 at the end of September to 19.5 at the end of October and November. The manhours per flying hour for December subsided to 16.5.[12]

(U) The following chart shows the FMS manhours per sortie and flying hour expended this quarter for each type of aircraft:[13]

Chart 4.3 - FMS Manhours/Sortie and Manhours/Flying Hour

Aircraft	Month	Manhours/Sortie	Manhours/Flying Hour
B/TB-58	October	109.7	20.7
	November	107.8	19.8
	December	103.4	21.1
KC-135	October	96.0	19.5
	November	106.6	19.5
	December	80.6	16.5

Armament and Electronics Maintenance Squadron

(U) The Armament and Electronics Maintenance Squadron (AEMS) performed flight line maintenance on airborne armament and

12. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40; and Hist, 43 MBW, Jul-Sep 68, p. 86.

13. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

electronic systems. The AEMS had the additional responsibility of administration and management of the Precision Measurement Equipment Laboratory.* [14]

(U) A sharp increase during the first month of the quarter, followed by a stable condition in the remaining two months, occurred in manhours per sortie figures for B/TB-58 aircraft. This figure rose from 51.0 manhours per sortie at the end of September to 59.4 at the end of October. Figures for November and December were 57.2 and 57.4. The increase in the workload for the squadron was caused by the four-way modification, discussed later in this chapter, which involved various branches of the AEMS. [15]

(U) A similar situation occurred with manhours per sortie figures for KC-135 aircraft. The number showed an early increase - from 12.2 at the end of September to 20.5 at the end of October - and then dropped during the following two months. Manhours per flying hour showed little change from the previous quarter. [16]

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* Precision Measurement Equipment Laboratory - An electronic laboratory containing high accuracy electronic measurement equipment used to calibrate the accuracy of electronic equipment used throughout the wing.

14. SACM 66-12, Vol. XIII, "Armament-Electronics Maintenance" (U), 20 Aug 68, (U).

15. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

16. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40; and Hist, 43 MBW, Jul-Sep 68, p. 87.

(U) The following chart shows the AEMS manhours per sortie and manhours per flying hour for B/TB-58 and KC-135 aircraft during this quarter:[17]

Chart 4.4 - AEMS Manhours/Sortie and Manhours/Flying Hour

Aircraft	Month	Manhours/Sortie	Manhours/Flying Hour
B/TB-58	October	59.4	11.2
	November	57.2	10.5
	December	57.4	11.7
KC-135	October	20.5	4.2
	November	18.7	3.4
	December	14.7	3.0

Munitions Maintenance Squadron

(U) The Munitions Maintenance Squadron (MMS) maintained munitions, associated bomb release systems and aerospace ground equipment* (AGE). MMS provided the base with receipt, storage, issue, handling, loading, mating (joining a pod to an aircraft), and maintenance of all munitions.[18]

(U) The workload figures for the MMS increased during the first two months of the quarter, and then plunged during December. The October manhours per sortie figure increased to 29.4 from a 21.0 manhours per sortie figure in September. But the largest jump

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* Aerospace Ground Equipment - Maintenance equipment used on the ground to support aircraft, such as mobile generators.

17. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

18. SACM 66-12, Vol. XV, "Munitions Maintenance" (U), 27 Mar 68, (U).

occurred in November when manhours per sortie soared to 49.2. The reason for this increase was that the number of pod time changes increased considerably. This is discussed in Chapter III, "Downtimes." A reason for increased October figures was final preparations taken by MMS for a Busy Luggage mission, which tested the B-58 bomb release system. This mission is discussed in Chapter III, "Special Missions."[19]

(U) The following chart shows the MMS manhours per sortie and manhours per flying hour for B/TB-58 aircraft during October, November and December:[20]

Chart 4.5 - MMS Manhours/Sortie and Manhours/Flying Hour

Aircraft	Month	Manhours/Sortie	Manhours/Flying Hour
B/TB-58	October	29.4	5.5
	November	49.2	9.0
	December	16.4	3.4

Modification Programs

B/TB-58 Modifications

(U) The most important activity conducted on B/TB-58 aircraft during the quarter was the continuation of the Inspect and Repair As Necessary* (IRAN) program. This program, which began

* Discussed in the 43 MBW April-June 1967 History.

19. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40; and Hist, 43 MBW, Jul-Sep 68, p. 88.

20. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40.

in January 1966, involved general disassembly of the aircraft and a detailed inspection of its components to determine any possible trouble area. The IRAN program for B/TB-58 aircraft was conducted at James Connally AFB at Waco, Texas.[21]

(U) Four major modifications of the B/TB-58 aircraft were implemented concurrent with the IRAN program during the October-December period. These modifications were designated the "four-way modification." A total of 20 aircraft - 18 B-58s and two TB-58s - assigned to the 43rd BW participated in the IRAN program during the quarter. Eight aircraft were still in IRAN by the end of the quarter. Last quarter, eight B-58 aircraft and one TB-58 aircraft assigned to the wing took part in the program.[22]

Four-Way Modification Progress

(U) The four-way modification program involved changes of the flight control system and the bomb-navigation system, provided engine start capability without the use of air start carts, and provided the aircraft with a low altitude radar altimeter system. These modifications were termed Class IV Mod No. 10002 (Flight Control), Class IV Mod No. 10003 (Bomb-Navigation), Class V Mod No. FS 887

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21. Hist, 43 MBW, Jul-Sep 68, p. 90.

22. Hist, 43 MBW, Jul-Sep 68, p. 90; and Extract of Wall Chart, "B/TB-58 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex.13.

(Self-Start Capability), and Class V Mod No. FS 1588 (Low Altitude Radar Altimeter). In the following narrative, the progress of each of the four modifications during the quarter will be discussed. A detailed description and background on these modifications can be found in the 43rd MBW July-September 1968 History.[23]

Bomb-Navigation Modification

~~(C)~~ Modified bomb-navigation systems capability continued to be considerably below the required fleet standards set by SAC. At the end of the quarter, with 15 modified aircraft at Little Rock AFB, the capability rate was 76.4 per cent. Although this was a slight improvement from the last quarter - at the end of which the capability rate was 60 per cent - the rate for this quarter still fell below the SAC-required standard. The 76.4 per cent capability rate at the end of December was also well below the rate predicted by the Weapon System Integration Group (WSIG), a Sperry Gyroscope Corporation group associated with Warner-Robins Air Materiel Area (WRAMA).[24]

(U) The following problem areas hampered the improvement of bomb-navigation capability: 1) Line Replaceable Unit (LRU)* spares

* Line Replaceable Units - Small packages or units which, upon failure, can be unplugged from a system, a new package installed on the flight line, thus eliminating in-shop bench work.

23. Hist, 43 MBW, Jul-Sep 68, pps. 90-91.

24. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69; Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69; and Hist, 43 MBW, Jul-Sep 68, p. 96.

shortages, 2) air-conditioning problems, and 3) harness and wiring problems. Each will be discussed in the following paragraphs.[25]

(U) The original inputs of LRUs to the modification site created an excessive drain on the already limited level of assets available at the field shop level. To counteract this situation, SAC and Air Force Logistics Command (AFLC) agreed that the best approach to the problem would be to emphasize "bits and piece" support required for the repair of LRUs. SAC's Director of Materiel (DM3B) authorized Priority II supply requisitions for "bits and piece" repair in support of the bomb-navigation modification. This occurred in September 1968. Also, to further aggravate LRU problems, many of the initially input LRUs were those "black boxes" that had known historical problems. These assets were known by WSIG as "dog LRUs" or "K-9s."[26]

(U) In October, Sperry Gyroscope Corporation was approached by WRAMA requesting the feasibility of establishing a teardown and repair of the "dog LRUs." Sperry advised WRAMA that such a program was feasible. Funds required for contract repair of certain selected assets were approved by Headquarters AFLC on 2 October. WRAMA

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25. Minutes of B-58 Post Modification Aircraft Performance Review, 15-16 October at Little Rock AFB (U), no date, (U), Ex. 41; Ltr, 825 SAD Commander to 2AF Commander, subj: B-58 Post-Modification Aircraft Performance Review (U), 23 Oct 68, (U), Ex. 42; and Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69.

26. See note above.

initiated the purchase request for repair of these LRUs on 4 October. However, as of 31 December, the contract had not yet been forwarded to the Sperry Corporation by WRAMA Contract Procurement.[27]

(U) Air-conditioning problems had a heavy impact on the bomb-navigation system's performance, and part of the low systems capability of the original modification aircraft outputs was attributable to these problems. The main difficulty incurred with the air-conditioning system was that its continuous failure led to overheating of the bomb-navigation system. A task group was sent by San Antonio Air Materiel Area (SAAMA) direction to Grissom AFB, Indiana, on 16 October to study this problem. The group's final conclusions and recommendations were not available by the end of the quarter.[28]

(U) A navigation unit chassis and aircraft wiring problem also contributed to the poor performance of the aircraft's modified bomb-navigation system. In an effort to resolve this problem, a decision was made to rehabilitate problem navigation unit chassis identified by SAC. WRAMA implemented a navigation unit chassis rehabilitation program at SAAMA on 26 September. At the end of the present quarter, the program did not appear to have significant impact on improving

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27. Interview, Amn. P.H. Stevens, Historian, with Capt. W.M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69; and Ltr, 825 SAD Commander to 2AF Commander, subj: B-58 Post-Modification Aircraft Performance Review, (U), 23 Oct 68, (U), Ex. 42.

28. See note above.

the bomb-navigation system's capability. However, only a limited number (3) were actually rehabilitated.[29]

~~(C)~~ The reliability rate for the bomb-navigation system showed a slight increase during the quarter among modified B-58 aircraft. From 1 September to 21 November, a total of 84 sorties had been flown with Little Rock AFB's modified aircraft, and in 63 of these sorties, the system was reliable; this was a capability rate of 75 per cent. The capability rate for Grissom AFB aircraft was comparable. The rates for aircraft from both bases improved by the end of December. Modified B-58 aircraft from the 43rd BW had flown a total of 139 sorties at the end of the quarter, of which 107 were considered reliable, or 77 per cent systems capability.[30]

Flight Control Modification

(U) The progress of the flight control modification during the quarter was much more encouraging than that shown by the bomb-navigation system. During the period 1 September to 31 December, a total of 139 flight control sorties had been flown by modified aircraft at Little Rock AFB, and just two of these sorties were unreliable.

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29. Minutes of B-58 Post Modification Aircraft Performance Review, 15-16 Oct at Little Rock AFB (U), no date, (U), Ex. 41; Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69.

30. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-November, 11 Dec 68; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69.

The capability rate was a glowing 98.6 per cent. The picture was even brighter at Grissom AFB, where 264 sorties had been flown during this period with just three failures for a capability rate of 98.9 per cent.[31]

(U) The only significant problem that occurred with the modified flight control system during the quarter concerned the "yaw caution" lights. At the B-58 Post Modification Aircraft Performance Review, held at Little Rock AFB on 15-16 October, it was noted that flight control modified aircraft were experiencing what was considered to be excessive "yaw caution" light illumination. Controversy developed as to whether a flight control malfunction indeed existed when the caution light illuminated. These caution light indicators were a frequent in-flight occurrence, and in the majority of cases, when the pilot pressed his "reset" button, the light went off. Flight crews were briefed to the effect that the caution lights were indicators of a "deviation from the norm" and did not necessarily mean a malfunction.[32]

Self-Start Capability

(U) No significant problems occurred during the quarter with

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31. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-December, 6 Jan 69.

32. Ltr, 825 SAD Commander to 2AF Commander, subj: B-58 Post Modification Aircraft Performance Review (U), 23 Oct 68, (U), Ex. 42 ; and Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69.

the self start capability modification. In this modification, a large cylinder containing an explosive charge was attached to one of the aircraft's engines. When activated, the charge ignited, creating a rush of air through the engine's turbine which eventually effected aircraft start. The other three engines were then started from this engine. Before the modification, the B-58 aircraft could only have been started with the aid of a mobile start cart. The purpose of the self start modification was to provide a start capability for the B-58 at bases where no starting equipment was available.[33]

Low Altitude Radar Altimeter

(U) The Low Altitude Radar Altimeter (LARA) modification had shown indications of being ineffective during the latter part of the previous quarter. At this time, aircraft which were the first to return from the four-way modification - most of which were assigned to Grissom AFB - experienced numerous antenna failures.[34]

(U) On 16 October, TCTO 1B-58A-831 provided instructions for the deactivation of the LARA. Engineering deficiencies encountered in the antenna installation necessitated this deactivation. As of 31 December, WRAMA was awaiting cost quotations concerning repair

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33. Ltr, 825 SAD Commander to 2AF Commander, subj: B-58 Post Modification Aircraft Performance Review (U), 23 Oct 68, (U), Ex. 42 ; Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69; and Hist, 43 MBW, Jul-Sep 68, pps. 104-105.

34. Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69; and Hist, 43 MBW, Jul-Sep 68, p. 106.

of the antennas from the vendor, Minneapolis Honeywell. No projected reactivation date was established by the end of the quarter.[35]

B-58 Heading Rack Modification

(U) The efforts of two personnel from the 43rd AEMS led to the initiation of testing for modification on the B-58 bomb-navigation system heading rack this quarter. The idea for the modification was submitted by TSgt. Bert Israel and TSgt. Woodrow Sammons, both bomb-navigation system technicians who had been with the 43rd BW since it first received the B-58 aircraft in 1960. The idea was forwarded to 2nd AF on 6 November.[36]

(U) The modification was designed to increase EWO capability and mission effectiveness by providing synchronous bombing capability when the primary navigation stabilization unit (PNSU) and the auxiliary reference unit (ARU) were inoperative or unuseable. Before the modification, when these units were inoperative during flight, no synchronous bombing capability was possible because of loss of heading and velocity references. The modification was designed to provide accurate heading and velocity references with the PNSU and ARU inoperative.[37]

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35. Msg, 181420Z, SAAMA to 825SAD/43DCM, "Deactivation of Low Altitude Radar Altimeter" (U), 18 Oct 68, (U), Ex. 43; and Interview, Amn. P. H. Stevens, Historian, with Capt. W. M. Beabes, 825 SAD Avionics and Munitions Staff Officer, 12 Feb 69.

36. Interview, Amn. P. H. Stevens, Historian, with TSgt. Bert Israel, 43AEMS Bomb-Nav Technician, 21 Jan 69; and Ltr, 43AEMS to 2AF, subj: B-58 Bombing Navigation System Heading Rack Modification (U), 6 Nov 68, (U), Ex. 44.

37. See note above.

(U) Actual implementation of the modification required that the heading rack and the auxiliary flight reference system (AFRS) package be modified. Relays were installed in the heading rack and AFRS package. Thus, when both the PNSU and the ARU became inoperative, the navigator could flip a switch to activate these relays. When this occurred, a J-4 heading was inserted into the bomb-navigation system. At the same time, the air speed would be switched into the ground track computer and integrator loops to provide an accurate velocity reference.[38]

(U) Before the modification proposal was submitted to 2nd AF, a week of research and ground testing on a Field Training Detachment mock-up aircraft was conducted to prove the modification's feasibility. The modification was approved by 2nd AF and forwarded to SAC. On 22 November, SAC granted authority for testing of the modification. Testing began 2 December on a 43rd B-58 aircraft, and it was monitored and controlled by the AEMS. A total of five successful flights were required before the modification could be given final approval. Testing was still taking place by the end of the quarter.[39]

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38. Ltr, 43AEMS to 2AF, subj: B-58 Bombing Navigation System Heading Rack Modification (U), 6 Nov 68, (U), Ex. 44; and Interview, Amn. P. H. Stevens, Historian, with TSgt. Bert Israel, 43AEMS Bomb-Nav Technician, 21 Jan 69.

39. Msg, 222208Z, SAC to 43AEMS, "B-58 BNS Heading Rack" (U), 22 Nov 68, (U), Ex. 45; and Interview, Amn. P. H. Stevens, Historian, with TSgt. Bert Israel, 43AEMS Bomb-Nav Technician, 21 Jan 69.

(U) The cost to modify the entire B-58 fleet - both 43rd BW and 305th BW aircraft - was estimated to be $25,000. However, the savings would be substantial in terms of the number of sorties gained which would have been lost without the modification. The B-58 wings lost a total of 91 sorties during 1968 when synchronous bombing capability was lost due to the PNSU and the ARU becoming inoperative. The sorties then had to be rescheduled to fulfill the wings' BTRs (discussed in Chapter III). A net savings of approximately $170,000 would have been realized in 1968, had the modification been implemented.[40]

Potting Compound Replacement

(U) An additional modification was performed on B/TB-58 aircraft which were in work for the four-way modification program at James Connally AFB. This modification - issued as TCTO 1B-58A-830, Replacement of Potting Compound of Weapons Arm and Release System - called for the replacement of potting compound which experienced "reversion", or softening, on B-58 arming and release system electrical components.[41]

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40. Interview, Amn. P. H. Stevens, Historian, with TSgt. Bert Israel, 43AEMS Bomb-Nav Technician, 21 Jan 69; Rpt, 1-SAC-U82, "Aircraft Performance Reports" (U), Jan-Dec 68, (U), on file in 43rd DCM Analysis Section; and Rpt, 1-SAC-U82, "Aircraft Performance Reports"(U), Jan-Dec 68, (U), on file in 305th BW DCM Analysis Section.

41. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68; and Msg, 122251Z, SAC to 825SAD DM/43DCM, "B/TB-58 Potting Compound Inspection and Replacement" (U), 12 Nov 68, (U), Ex. 46.

(U) The modification, performed in conjunction with the four-way modification, began on 21 October. It was forecast to continue until April 1969 when work was to be transferred to the field level. The number of aircraft in work for the potting compound replacement was limited to 12 during the quarter.[42]

(U) A replacement of potting compound on B-58 aircraft pods also took place during the quarter. The replacement was issued as TCTO 1B-58A-829, Replacement of Potting Compound on B-58A Pods. The work, which involved the replacement of old potting (or sealing) compound with a new sealing compound, required about 12 hours per pod. Work on pods for 43rd BW aircraft took place at Little Rock AFB and was accomplished by 27th MMS and SAAMA personnel. A total of 61 upper components and 64 lower components underwent the resealing. The first pod was completed on 16 October, and the last on 9 November.[43]

Pod Hook Support Fitting

(U) B-58 aircraft from the 43rd BW were involved in another modification that related to the pod during the October-December quarter. This

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42. Msg, 122251Z, SAC to 825SAD DM/43DCM, "B/TB-58 Potting Compound Inspection and Replacement" (U), 12 Nov 68, (U), Ex. 46.

43. Msg, 141900Z, SAAMA to 825SAD/43DCM, "Supplemental Information to TCTO 1B-58A-829, Replacement of Potting Compound-Aircraft Pods" (U), 14 Oct 68, (U), Ex. 47; and Interview, Amn. P. H. Stevens, Historian, with TSgt. Weldon Knox, NCOIC, 43DCM Production Control, 10 Feb 69.

work - under TCTO 1B-58A-828, Pod Hook Support Fitting - required inspection, and in some cases, replacement of this fitting. The inspection required downloading of aircraft pods. All non-alert aircraft had been inspected by the end of October, and 12 aircraft were found to have cracked fittings. Eight were assigned to Grissom AFB, two to the 43rd BW and two were aircraft in work for the four-way modification. Repair of the fittings began at Grissom AFB on 2 November by a General Dynamics field team. Work on all but the two aircraft at James Connally AFB was completed by 9 November.[44]

(U) The team at Grissom AFB then began the replacement of support fittings which were suspect in 17 other B-58 aircraft. With a maximum of two aircraft in work at one time, the 17 aircraft were modified by 3 December. Four B-58 aircraft on loan to the 43rd BW from the 305th BW were among the 17 aircraft to take part in this modification cycle. The average time in work at Grissom AFB was three days.[45]

KC-135 Programs

(U) The KC-135 IRAN program - like the B/TB-58 IRAN program - involved dismantling of major aircraft parts followed by a detailed inspection

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44. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68; and Msg, 122250Z, SAC to 825SAD/43DCM, "Contractor Replacement of Cracked Pod Hook Support Fittings" (U), 12 Nov 68, (U), Ex. 48 .

45. Msg, 122250Z, SAC to 825SAD/43DCM, "Contractor Replacement of Cracked Pod Hook Support Fittings" (U), 12 Nov 68, (U), Ex. 48 ; and Extract of Wall Chart, "B/TB-58 Scheduling" (U), Oct, Nov and Dec 68, (U), Ex. 13.

of internal and external systems of the aircraft. The KC-135 IRAN program was accomplished by personnel assigned to the Hayes Corporation, a private firm located at Birmingham, Alabama. All tankers that entered IRAN were flown to Birmingham and were temporarily assigned to the AFLC until released.[46]

(U) A total of seven tankers from the 43rd BW participated in the IRAN program during the October-December quarter. Five tankers had participated in IRAN during the previous quarter, and three of these returned in October. Three tankers were in IRAN at the end of November and four were in IRAN at the end of the quarter. As of 31 December, seven tankers from the wing had completed the IRAN program. The average completion time per aircraft for IRAN this quarter was 40 days.[47]

Maintenance Problems

B-58 Fuel Leaks

(U) A rash of fuel leaks struck the 43rd BW's B-58 fleet in early October and continued into November. On 9 October, 11 B/TB-58 aircraft were out of commission due to the fuel leaks. And during the period 10 October to 21 November, the 43rd BW was forced to cancel 19 sorties because of the leaks. The 43rd DCM stated that the impact of the leaks on training losses and their effect on EWO capability was a matter of deep concern. The impact of the leaks on Fuel Systems personnel is discussed in Chapter III, "Shortages and Effects."[48]

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46. Hist, 43 MBW, Jul-Sep 68, p. 107.

47. Extract of Wall Chart, "KC-135 Aircraft Schedule" (U), Oct, Nov and Dec 68, (U), Ex. 14 .

48. Msg, 211645Z, 43DCM to 825SAD/2AF, "B-58 Fuel Leaks" (U), 21 Nov 68, (U), Ex. 49.

(U) An excessive number of leaks occurred at the inboard engine pylons of the forward tank. The leaks appeared to have been a direct result of improper sealant application during the TCTO 1090 modification completed during the first half of 1968. More information on this modification can be found in the 43 MBW January-March 1968 History. As of 21 November, five aircraft had developed leaks in the pylon area. Examination of this area indicated that foreign matter, such as safety wire and brush bristle impregnated in the sealant, and improper preparation of the surface prior to application of the sealant were causes of the sealant breakdown. Repair of the leaks was a major task that involved a seven-step process, including removal of the upper wing skin. The repair usually resulted in loss of an affected aircraft for five to 10 days.[49]

(U) General Dynamics and SAAMA engineers arrived at Little Rock AFB on 22 November to evaluate the problem. Their findings were that just a small proportion of aircraft which underwent the 1090 modification were not adequately sealed following the modification. The engineers stated that the fuel leaks could be stopped satisfactorily without the removal of the upper wing panels. The sealant could be repaired by externally shooting the leaks without removing the wing skin. General Dynamics provided a fuel cell technician for a 10-day period to train assigned fuel cell personnel in proper methods for

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49. Msg, 211645Z, 43DCM to 825SAD/2AF, "B-58 Fuel Leaks" (U), 21 Nov 68, (U), Ex. 49.

preparing and shooting the leaks externally. He arrived at Little Rock AFB on 2 December.[50]

(U) The nine-member depot team departed Little Rock AFB on 20 December, as was mentioned in Chapter II, "Shortages and Effects." However, the 43rd DCM had earlier requested that the team be committed to the Fuel Systems Shop for an additional 90 days, beginning on 2 January 1969. This request was prompted by the fact that one wing KC-135 was returning to Little Rock AFB from a mission because of fuel leaks; 15 pods required fuel cell repair; and a manhour backlog of 800 hours existed.[51]

(U) Following a request from SAC that the request for nine personnel be re-evaluated, the 43rd DCM modified the number requested to six personnel. This new request was approved by SAC, and the six fuel systems specialists were scheduled to arrive at Little Rock AFB as soon as possible after 2 January 1969.[52]

J-79-5C Engine Shutdown Rates

(U) A total of three inflight B-58 engine shutdowns occurred during the

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50. Msg, 271600Z, SAAMA to 825SAD/43DCM, "B-58 Fuel Leaks" (U), 27 Nov 68, (U), Ex. 50 ; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-November, 11 Dec 68.

51. Msg, 211845Z, 43DCM to 825SAD/2AF, "Request for Extended Duty, Depot Fuel System Specialists" (U), 21 Nov 68, (U), Ex. 51.

52. Msg, 232124Z, 43DCM to 825SAD/2AF, "Depot Assistance, Fuel System Specialists" (U), 23 Dec 68, (U), Ex. 52 ; and Msg, 271531Z, SAC to 825SAD/43DCM, "Request for Depot Assistance" (U), 27 Dec 68, (U), Ex. 53.

quarter, the lowest number recorded in any quarter of 1968. Before the October-December quarter, the engine shutdown rates had shown an increasing trend. Six inflight B-58 engine shutdowns occurred during the January-March 1968 quarter, seven during the April-June quarter, and 10 during the July-September quarter.[53]

(U) One engine shutdown occurred during each month of the quarter. The shutdown in October was the #2 engine on aircraft #457, and was due to loss of oil pressure. The engine was removed and replaced due to the failure of the compressor rear frame. In November, the lone shutdown occurred on the #3 engine of aircraft #444. The shutdown was caused by a low oil light, which was preceded by decoupling the generator due to an inoperative generator light. The engine was removed and replaced. The engine shutdown during December was caused by a low oil light on the #1 engine of aircraft #435. Maintenance action disclosed that the light's fuse was blown.[54]

(U) Because B-58 engine shutdown rates failed to show a significant trend, the month of December was the last in which records of the shutdowns were kept.[55]

Maintenance Effectiveness

(U) The needs of the 43rd BW continued to be met by maintenance

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53. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38 and Ex. 39; and Interview, Amn. P. H. Stevens, Historian, with Mr. B. Callaway, Propulsion Specialist, 4 Feb 69.

54. See note above.

55. Interview, Amn. P. H. Stevens, Historian, with Mr. B. Callaway, Propulsion Specialist, 4 Feb 69.

squadrons within the wing during the quarter. The amount of maintenance accomplished continued to be high, even though recorded workload figures decreased this quarter. This was especially true in the AEMS where most of the testing of modified aircraft systems completed in the four-way modification was conducted. The large amount of maintenance performed by KC-135 teams on TDY was also not recorded.[56]

Actions to Improve Maintenance

New Job for Grounded Hustler

(U) On 16 July, a B-58 Hustler from the 43rd BW developed landing gear problems just after take-off and was forced to crash-land at Little Rock AFB. The aircraft later was classified as "beyond repair" by a General Dynamics evaluation team. But the same aircraft - #437 - returned to service in the 43rd BW this quarter - not as a functional bomber aircraft but rather as a stationary aircraft designed to train maintenance personnel.[57]

(U) The grounded B-58 began its new role on 15 November, almost four months after it had crashed. It was used to train unskilled personnel from the 27th MMS in weapons loading procedures. The use of the grounded aircraft eliminated the need to tie up a functional aircraft for maintenance training and allowed MMS to establish a firm training schedule. The results of its use were favorable for the wing as the aircraft reduced

56. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40 .

57. Extract of Base Newspaper, "Grounded Hustler Finds New Job," 12 Dec 68, Ex. 54 .

time required to train unskilled personnel to a certifiable level by about 40 per cent. Before, it usually required 20 working days - eight to 10 hours a day - to certify a MMS loading crew. However, with the use of the grounded aircraft, the time needed to certify a crew was reduced to about 12 days. An MMS loading evaluation team was in charge of instructing the trainees on the grounded B-58, which was located in a corner of the jumbo hanger at Little Rock AFB.[58]

SUPPLY

Effectiveness

(U) The not operationally ready maintenance/supply (NORS)* rate for B-58s was not a significant problem area for the 43rd BW this quarter. The NORS rate was slightly lower this quarter than in the previous quarter. The rate was 0.4 for October, 1.4 for November and 1.8 for December. Rates during the three months of the previous quarter ranged from 0.4 in August to 2.5 in September.[59]

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* NORS - An aircraft or system not operational because of a supply shortage.

58. Extract of Base Newspaper, "Grounded Hustler Finds New Job," 12 Dec 68, Ex. 54 ; and Interview, Amn. P. H. Stevens, Historian, with MSgt. D. J. Weaver, Team Chief of MMS Loading Evaluation Team, 21 Jan 69.

59. Msg, 181620Z, 2AF to AIG 694/CSUP/DCM, "NORS and Cann Data for October" (U), 18 Nov 68, (U), Ex. 55 ; Msg, 171940Z, 2AF to AIG 694/CSUP/DCM, "NORS and Cann Data for November" (U), 18 Dec 68, (U), Ex. 55; Msg, 152235Z, 2AF to AIG 694/CSUP/DCM, "NORS and Cann Data for December" (U), 15 Jan 69, (U), Ex. 55 ; Hist, 43 MBW, Jul-Sep 68, p. 114; and Hist, 43 MBW, Apr-Jun 68, p. 108.

(U) The monthly NORS rates for KC-135 aircraft were 2.6 in October, 1.1 in November and 0.9 in December.[60]

(U) The NORS rates for B-58 aircraft, although slightly lower than last quarter's rates, and NORS rates for KC-135 were both higher than those recorded since October 1967.[61]

Cannibalizations

(U) The rate for cannibalizations of B/TB-58 aircraft during October, November and December averaged 0.09 per cent (cannibalizations versus number of sorties). This was a decrease of 0.01 per cent from the previous quarter, and 0.09 per cent from the April-June quarter. The rates for the quarter were: October, 0.07; November, 0.06; and December, 0.14. The greatest amount of cannibalizations occurred in December with 28 instances. Sixteen instances were recorded in October, and 10 in November. These cannibalizations were accomplished to prevent an aircraft from not being operationally ready because of supply conditions (NORS).[62]

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60. Msg, 181620Z, 2AF to AIG 694/CSUP/DCM, "NORS and Cann Data for October" (U), 18 Nov 68, (U), Ex. 55 ; Msg, 171940Z, 2AF to AIG 694/CSUP/DCM, "NORS and Cann Data for November" (U), 18 Dec 68, (U), Ex. 55 ; and Msg, 152235Z, 2AF to AIG 694/CSUP/DCM, "NORS and Cann Data for December" (U), 15 Jan 69, (U), Ex. 55 .

61. Hist, 43 MBW, Jul-Sep 68, p. 115.

62. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40; Msg, 082305Z, 825 SAD to 2AF DMA, "Materiel CMS Items from 43rd BW for October" (U), 8 Nov 68, (U), Ex. 56 ; Msg, 062247Z, 825 SAD to 2AF DMA, "Materiel CMS Items from 43rd BW for November" (U), 6 Dec 68, (U), Ex. 56 ; Msg, 102003Z, 825 SAD to 2AF DMA, "Materiel CMS Items from 43rd BW for December" (U), 10 Jan 69, (U), Ex. 56 ; Msg, 082305Z, 825 SAD to 2AF DMA, "Materiel CMS Red Areas for 43rd BW for October" (U), 8 Nov 68, (U), Ex. 57; Msg, 092108Z, 825 SAD to 2AF DMA, "Materiel CMS Red Areas for 43rd BW for November" (U), 9 Dec 68, (U), Ex. 57 ; and Msg, 092217Z, 825 SAD to 2AF DMA, "Materiel CMS Red Areas for 43rd BW for December" (U), 9 Jan 69, (U), Ex. 57.

(U) Cannibalization rates for KC-135 aircraft remained very stable during the quarter. The rate for October was 0.07, November, 0.06, and December, 0.05. A total of 15 KC-135 cannibalizations occurred during the three months of the quarter, the lowest number recorded for any quarter during 1968.[63]

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63. Rpts, "Maintenance Summary" (U), Oct, Nov and Dec 68, (U), Ex. 38, Ex. 39 and Ex. 40 ; Msg, 082305Z, 825 SAD to 2AF DMA, "Materiel CMS Items from 43rd BW for October" (U), 8 Nov 68, (U), Ex. 56 ; Msg, 062247Z, 825 SAD to 2AF DMA, "Materiel CMS Items from 43rd BW for November" (U), 6 Dec 68, (U), Ex. 56 ; Msg, 102003Z, 825 SAD to 2AF DMA, "Materiel CMS Items from 43rd BW for December" (U), 10 Jan 69, (U), Ex. 56 ; Msg, 082305Z, 825 SAD to 2AF DMA, "Materiel CMS Red Areas for 43rd BW for October" (U), 8 Nov 68, (U), Ex. 57 ; Msg, 092108Z, 825 SAD to 2AF DMA, "Materiel CMS Red Areas for 43rd BW for November" (U), 9 Dec 68, (U), Ex. 57 ; and Msg, 092217Z, 825 SAD to 2AF DMA, "Materiel CMS Red Areas for 43rd BW for December (U), 9 Jan 69, (U), Ex. 57 .

CHAPTER V

FACILITIES

ADEQUACY OR INADEQUACY

(U) Facilities of the 43rd BW were adequate for the wing to accomplish its mission during October, November and December. No major construction occurred during the quarter. However, two projects took place during the quarter which--although not major--required immediate action. One project, the removal and replacement of fire hydrants on the flight line, was discussed in Chapter III, "Flying Safety." The other project concerned pavement repair in the flight line area at Little Rock AFB, which will be discussed next.

Pavement Repair

(U) Deterioration of the runway, taxiways and aircraft parking ramp began to become apparent during the quarter. Chipping of concrete segments and upheaval of asphalt areas of the runways occurred in several areas. This situation was a potential cause of aircraft tire damage.[1]

(U) Following analysis of the amount of repair required, work began in November to repair deteriorating pavement areas on the flight line and runway. The work, done by civil engineering

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1. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

personnel, was directed through Work Order 9-1247. The runway at Little Rock AFB was closed for the emergency repairs from 4-8 November, on 11 November, and from 12-15 November. During these periods, it could have been opened in five minutes for emergencies. The total cost of repair - both on flight line and runway pavement - amounted to 364 man hours, and the monetary cost for labor and material was $1,227.[2]

B-58 Training Simulators

(U) The following chart shows the number of hours scheduled and utilized for each B-58 crew position in the B-58 training simulators:[3]

Chart 5.1 - B-58 Flight Simulator Training

Simulator	Month	Scheduled	Utilited	Per Cent Utilized
Pilot	October	311	285	92
	November	257	244	95
	December	337	305	91
Navigator	October	305	269	88
	November	219	192	87
	December	210	189	90
DSO	October	307	272	88
	November	270	248	92
	December	282	248	88
Total	Quarter	2,498	2,252	90

2. Interview, Amn. P. H. Stevens, Historian, with Darrel E. Burri, Civil Engineer, 20 Jan 69; and Msg, 292300Z, 2AF to 825 SAD, "Runway Closure - Little Rock AFB" (U), 29 Oct 68, (U), Ex. 58 .

3. Rpts, SAC-E2, "Synthetic Training Devices Operational Status and Evaluation Report" (U), 31 Oct, 30 Nov and 31 Dec 68, (U), Ex. 59 .

(U) Ninety per cent of the scheduled B-58 training simulator hours for the quarter were utilized. None of the simulators were utilized 100 per cent during the quarter.[4]

(U) The overall utilization rate this quarter was an increase of one per cent over the rate for the previous quarter. In that July-September quarter, however, the 89 per cent utilization rate was the lowest recorded at Little Rock AFB since the installation of the simulators in 1964. The rate this quarter was the second lowest rate since installation.[5]

(U) The figures for October were the lowest of the three quarters. The pilot simulator had 92 per cent usage during the month, while the navigator simulator had 88 per cent usage and the DSO simulator, 88 per cent usage. A total of 89 scheduled hours were not utilized during the month. Almost half, or 42, of these hours were lost due to practice alerts. Twenty-seven hours were lost in October because of a "broken" alert aircraft. This situation occurred when an alert aircraft had maintenance performed on it while on alert status; the aircraft's crew had to be with the plane during the maintenance process.[6]

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4. Rpts, SAC-E2, "Synthetic Training Devices Operational Status and Evaluation Report" (U), 31 Oct, 30 Nov and 31 Dec 68, (U), Ex. 59 .
5. Rpts, SAC-E2, "Synthetic Training Devices Operational Status and Evaluation Report" (U), 31 Oct, 30 Nov and 31 Dec 68, (U), Ex.59 ; and Hist, 43 MBW, Jul-Sep 68, p. 118.
6. Rpts, SAC-E2, "Synthetic Training Devices Operational Status and Evaluation Report" (U), 31 Oct, 30 Nov and 31 Dec 68, (U), Ex. 59 .

(U) Usage rates for the simulators during November were the highest of the quarter. The pilot simulator had 95 per cent usage, the navigator simulator, 87 per cent usage, and the DSO simulator, 92 per cent usage. The usage rate for the navigator simulator during November, however, was the lowest recorded during the quarter. The largest cause of lost hours in this simulator during the month was scheduling errors, which accounted for 12 of a total 21 hours lost during November.[7]

Housing

(U) Base housing continued to meet the needs of personnel assigned to the 43rd BW during the October-December quarter. Occupation of the 1,535 Capehart houses was maintained at 99.6 per cent throughout the quarter. Seven dormitories were in use during the quarter for airmen assigned to the wing. The average ratio of airmen for each room assigned varied little during the quarter. The ratio varied from 1.4 to 2.4 airmen per room in October, 1.8 to 2.3 airmen per room in November, and 1.8 to 2.4 airmen per room in December.[8]

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7. Rpts, SAC-E2, "Synthetic Training Devices Operational Status and Evaluation Report" (U), 31 Oct, 30 Nov and 31 Dec 68, (U), Ex. 59.

8. Extract of Rpt, "Dormitory Housing and Bachelor Housing Utilization Occupancy Report" (U), conducted by Base Housing Office, Oct-Dec 68, (U), Ex. 60; and Rpt, Minutes of Base Family Housing Management Council" (U), submitted by Base Housing Office, 16 Jan 69, (U), Ex. 61.

CHAPTER VI

SPECIAL ACTIVITIES

RELATIONS WITH CIVILIAN COMMUNITIES

Aircraft Displays, Tours and Fly-bys

(U) The community's understanding of the U. S. Air Force was improved through the use of base tours and static displays supported by the 43rd BW during the quarter. A total of 14 tours were conducted during the quarter, with static displays being provided by the 43rd BW in all but one of the tours. Through the tours alone, 290 individuals received a background and visual inspection of the wing's B-58 and KC-135 aircraft. The 43rd BW also provided a mainline-equipped B-58 for static display in support of the National War College field trip to Seymour Johnson AFB, North Carolina, on 3 October. No fly-bys were conducted during the quarter.[1]

AIR DIVISION ACTIVITIES

Staff Assistance Visit

(U) The 825th SAD conducted a staff assistance visit to the 43rd BW from 4-8 November. Included in the visit was a follow-up inspection of discrepancies found in the May Operational Readiness Inspection (ORI) and the August Operational Readiness Inspection Test

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1. Rpt, "Tour Log 1968" (U), 1 Oct-31 Dec 68, (U), on file in Little Rock AFB Information Division; and Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-October, 5 Nov 68.

(ORIT). All items identified as discrepencies during these inspections were found to have been corrected in the 43rd BW. No major discrepancies were noted during the visit. The 825th SAD commander stated that "the overall results of the staff assistance visit were gratifying."[2]

MORALE

Top Crew Award

(U) The 43rd BW commander presented the "Top Crew Trophy" for July through December to B-58 crew #S-45. Crew members were Maj. Rodney B. Henney, pilot; Maj. Paul A. Johnson, navigator; and Capt. Alan D. McKenzie, DSO. The award was based on a crew rating system which used average points per mission as criteria. Not only did the crew establish the highest points per mission average, but it also set a wing record for the most points credited on one sortie.[3]

Awards and Decorations

(U) A total of 102 personnel assigned to the 43rd BW received decorations during the quarter ranging from the Distinguished Flying Cross (DFC) to the Air Force Commendation Medal (AFCM).[4]

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2. Ltr, 825 SAD Commander to 2AF Commander, subj: Division Commander's Monthly Report-November, 11 Dec 68.

3. Extract of Little Rock AFB Newspaper, "Crew S-45 Wins Bomb Wing Trophy," 16 Jan 69, Ex. 62 .

4. Rpt, "Incoming Awards and Decorations" (U), 1 Oct-31 Dec 68, (U), on file in Base Decorations and Awards Section.

(U) Three officers assigned to the 70th AREFS were recipients of the DFC during the quarter. They were Maj. Prince L. Harris, Maj. Leslie P. McConnell and Capt. Jerry F. Thomas. Major Harris received two silver stars, the DFC and the 9th Oak Leaf cluster to the Air Medal for duty while in Southeast Asia. Major McConnell received the DFC for his actions as an EB-66 aircraft commander in a flight over North Vietnam in December 1967. Captain Thomas received the first Oak Leaf cluster to the DFC for a mission he flew in Southeast Asia as an RF-4C pilot on 29 June 1968.[5]

(U) Seven personnel from the 43rd BW were awarded the Bronze Star. They included MSgt. T. Lee, 1st Lt. R. F. Tipton, TSgt. F. Jones Sr., Capt. T. G. Scott, CMSgt. C. E. Stoneking, CMSgt. J. W. Masoner and Capt. N. L. Blakely. A total of 33 personnel from the wing were awarded the Air Medal, all of whom were members of the 70th AREFS. One Purple Heart medal and 58 AFCMs were awarded to 43rd BW personnel during the quarter.[6]

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5. Rpt, "Incoming Awards and Decorations" (U), 1 Oct-31 Dec 68, (U), on file in Base Decorations and Awards Section; Extract of Little Rock AFB Newspaper, "Two Majors Decorated for SEA Duty," 12 Dec 68, Ex. 63 ; and Extract of Newspaper, "Aerial Heroics in SEA Bring DFC to Thomas," 14 Nov 68, Ex. 64 .

6. Rpt, "Incoming Awards and Decorations" (U), 1 Oct-31 Dec 68, (U), on file in Base Decorations and Awards Section.

~~SECRET~~

SUMMARY

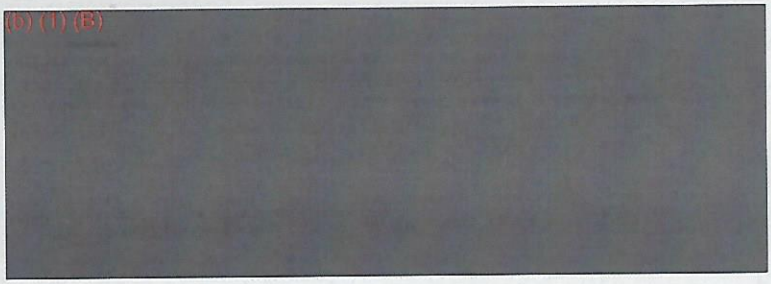
(U) Large decreases in the number of airmen assigned to the AEMS and FMS occurred during the quarter, accounting in part for the large drop in the wing's authorized versus assigned figure for total military personnel.

(U) Depot assistance from SAAMA and OCAMA aided the wing's undermanned Fuel Systems shop in combatting the large number of B-58 fuel leaks that occurred during the quarter. A six-man depot team was scheduled to continue the assistance for 90 days, commencing in January 1969.

(U) Plans were being drawn up at the end of the quarter for implementation of the Top Three Program in the 43rd BW.

~~(S)~~ The wing achieved satisfactory results in implementation of its SRP annual exercise. Overall average times in the second day's Coco exercise were much improved over times recorded in the first day's Coco alert exercise.

(b) (1) (B)



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~~(S)~~ One B-58 aircraft from the wing took part in a Busy Luggage mission in October. The aircraft experienced no problems in dropping its reconfigured bombs, and miss distances for all three releases were well within SAC training requirements for an ORIT/Bay None profile run.

~~(C)~~ The total number of flying hours expended by the wing's bomb squadrons fell below the authorized number of hours during the training period that ended on 31 December. Aircraft in work for the four-way modification and the fuel leakage problem accounted for this failure to reach the authorized figure.

(U) Eight wing aircraft were in work for the four-way modification at the end of the quarter. Reliability for bomb-nav modified aircraft was well below fleet standards. No major problems were experienced with the flight control modification and the self start capability modification. However, the LARA modification was deactivated in October because of engineering deficiencies.

(U) Testing continued on the bomb-navigation system heading rack modification, the idea for which was submitted by two wing personnel. A total of five successful flights was necessary before the modification could be adopted.

KEY PERSONNEL ROSTER

(As of 31 December 1968)

COMMANDER	Col. Sherwin G. Desens
VICE COMMANDER	Col. Roy L. Harris, Jr.
DEP COMDR FOR OPS	Col. John M. Parker
DEP COMDR FOR MAINT	Col. James D. Rigley, Jr.
COMDR, 43 FMS	Col. Leo Florick
COMDR, 43 OMS	Lt. Col. Joseph M. McHale
COMDR, 43 AMMS	Maj. Ralph L. White
COMDR, 27 MMS	Lt. Col. Carlton T. Marsh
COMDR, 63 BS	Lt. Col. Jean E. Shotts
COMDR, 64 BS	Lt. Col. Thomas M. Gilbert, Jr.
COMDR, 65 BS	Lt. Col. Roy A. Kirkpatrick
COMDR, 70 ARCFS	Lt. Col. Ralph H. Herman
COMDR, 43 HQSQ	Capt. Jacob Bruckler, Jr.
DIRECTOR OF SAFETY	Lt. Col. Richard D. Snyder
CHIEF, ADMIN. SERV.	2nd Lt. Dorothy A. Gregory
WING SGT. MAJOR	SMSgt. Everett H. Redan

GLOSSARY

AB	Air Base
ADC	Air Defense Command
AEMS	Armament and Electronics Maintenance Squadron
AFB	Air Force Base
AFLC	Air Force Logistics Command
AFM	Air Force Manual
AFR	Air Force Regulation
AFSC	Air Force Specialty Code
AFTO	Air Force Technical Order
AGE	Aerospace Ground Equipment
AREFS	Air Refueling Squadron
AST	Additional Specialized Training
BMEWS	Ballistic Missile Early Warning System
BS	Bombardment Squadron
BTR	Basic Training Requirement
BW	Bombardment Wing
C	Confidential
CCTS	Combat Crew Training School
CINCSAC	Commander in Chief of Strategic Air Command
CSG	Combat Support Group
DCM	Deputy Commander for Maintenance
DCO	Deputy Commander for Operations
DECM	Defensive Electronic Countermeasures

DSO	Defensive Systems Operator
ECM	Electronic Countermeasures
EW	Electronic Warfare
EWO	Emergency War Order
FA	Fixed Angle Bomb Run
FAD	Forward Area Deployment
FMS	Field Maintenance Squadron
FY	Fiscal Year
HHCL	"H" Hour Control Line
HS	Headquarters Squadron
ICBM	Intercontinental Ballistic Missile
IRAN	Inspect and Repair as Necessary
JSTPS	Joint Strategic Target Planning Staff
KIAS	Knots Indicated Air Speed
LARA	Low Altitude Radar Altimeter
LRU	Line Replaceable Unit
M	Mach
MBW	Medium Bombardment Wing
MDR	Missile Defense Run
MMS	Munitions Maintenance Squadron
MOB	Main Operating Base
NCO	Noncommissioned Officer
NCOIC	Noncommissioned Officer in Charge
NORAD	North American Air Defense Command

NORS	Not Operationally Ready (due to) Supply
OCAMA	Oklahoma City Air Materiel Area
ODR	Optional Defense Run
OJT	On-the-Job-Training
OMS	Organizational Maintenance Squadron
OPORD	Operations Order
ORI	Operational Readiness Inspection
ORIT	Operational Readiness Inspection Test
OSD	Office of the Secretary of Defense
PMEL	Precision Measurement Equipment Laboratory
RBS	Radar Bomb Scoring
RYD	Redundant Yaw Damper
S	Secret
SAAMA	San Antonio Air Materiel Area
SAC	Strategic Air Command
SACMET	Strategic Air Command Management Engineering Team
SACM	Strategic Air Command Manual
SAD	Strategic Air Division
SEA	Southeast Asia
SKT	Specialty Knowledge Test
SIOP	Single Integrated Operational Plan
SLBM	Submarine Launched Ballistic Missile
SL/LD	Short Look Large Charge/Lay Down Large Charge

SLLC/LDLC	Short Look Large Charge/Lay Down Large Charge
S-RD	Secret Restricted Data
SRP	Sustained Reaction Posture
TAC	Tactical Air Command
TCTO	Time Compliance Technical Order
TDR	Target Defense Bomb Run
TDY	Temporary Duty
TO	Technical Order
UMD	Unit Manning Document
USAFE	United States Armed Forces in Europe
WRAMA	Warner-Robbins Air Materiel Area
2nd AF/2AF	Second Air Force

KEY TO APPENDICES

Appendix	
A	Compiled from Wall Chart, "OJT Statistics" (U), Oct, Nov and Dec 68, (U).
B	Compiled from Rpt, "B-58 Alert Downtimes" (U), Oct, Nov and Dec 68 (S).
C	Compilation of Rpt, "Reflex Aircrew Support" (U), Oct, Nov and Dec 68, (U).
D	Compiled from Wall Charts located in 43rd BW Crew Scheduling Section and 43rd DCM Maintenance Scheduling, "Young Tiger Aircraft and Aircrew Support" (U), Oct-Dec 68, (U).
E	Photograph, "B-58 Hustler"; Fact Sheet, "General Dynamics B-58 'Hustler' Specification and Performance Data" (U), Oct 68, (U); Photograph, KC-135 Refueling, "SAC, Single Manager of the U. S. Air Force Tanker Fleet" (U), no date, (U); Fact Sheet, "B-58 Hustler-KC-135 Stratotanker" (U), Jul 68, (U); Fact Sheet, "B-58 'Hustler' Comparative Information-KC-135 Stratotanker" (U), Jan 68, (U).
F	Photographs, 1 copy of each of three prints, "Busy Luggage Test Drops" (U), no date, (S-RD).
G	Diagrams, extracted from 43rd BW Operations Plan 50-69 (U), 1 Jan 68, (S): Atch I, "Alert Parking Plan (No Dispersal)" (U), 1 Jan 68, (S); Atch II, "Alert Parking Plan - With Dispersal" (U), 1 Jan 68, (S); and Atch III, "Alert Parking Plan-Available Parking for B-58 and KC-135 Aircraft Not Dispersed" (U), 1 Jan 68, (S).