Excerpts From

History of Atlas + Titan I Phaseout
1 June 1965 K416.8630-1

CHAPTER III

ATLAS E, F, AND TITAN I PHASEOUT

DIRECTION AND RESPONSIBILITIES: (U)

1. (U) To implement the OSD decision for accelerated phaseout of remaining cryogenic missiles, System Program Directives (SPD) No. 107A-65-1 (Atlas) and 107B-65-(Titan I) were issued by Hq USAF on 21 Nov 64. Missile units were scheduled to be inactivated in accordance with dates indicated in the OSD directive.[1] (See charts No. 1 & No. 2)

2. (U) Specific direction on missile deactivation procedures and responsibilities was provided in the above SPD's, related CSAF messages,[2] USAF Plan of Action, and AFLC Plan of Action. While basic procedures and requirements were understood, command responsibilities were not so clearly outlined.[3] For this reason, Memoranda of Agreement with both AFLC and ATC were developed and agreed to.[4] These memoranda contained the essential elements for clear understanding of command responsibilities and established the basic concepts employed during Atlas E, F and Titan I deactivation. Provisions were included in the memoranda for revision or updating, as appropriate, by mutual consent of all concerned.

3. (U) Briefly, SAC retained accountability for all missile assets until disposed of. SAC also was charged with responsibility to prepare missiles for shipment, secure missile launch facilities, and continue care and custody functions at deactivated missile sites. AFLC was responsible for over-all program guidance, actual missile shipments, and disposition of all missile assets.[5] While it was acknowledged that existing "blue suit" capability would be utilized wherever possible, SAC would participate

in dismantling and equipment removal tasks only as personnel availability permitted. No personnel were retained expressly for this purpose.[6]

CONCEPT AND PLANNING: (U)

1. (U) As indicated previously, the Memoranda of Agreement established the basic concepts for missile unit phaseout. As with the Atlas D, phaseout was conducted in three phases:[7] (see chart no. 3)

a. Phase I: This was a SAC unit responsibility and involved removal and preparation for shipment of re-entry vehicles, missiles, classified components, and excess mobile equipment; and the disposal of propellants and gases. Custody of each missile site was retained by the missile unit until completion of these tasks, at which time the site was turned over to the base civil engineer at each location for care and custody.

b. Phase II: Phase II was a joint SAC/AFLC responsibility for accomplishment and was under the executive management of the local AFLC Site Deactivation Task Force (SDTAF) Commander. The deactivating missile unit completed actions necessary to place the site in the desired shutdown configuration. This involved turn off of all unnecessary power and equipment and protection of equipment, to include maintenance of systems remaining in operation. Procedures (SBAMA Interim Deactivation Technical Procedures) were developed jointly by AFLC/SAC for shutdown purposes, and included provisions for desired site configurations. During Phase II, any equipment identified for removal by the AFLC brochure/screening actions would be processed under SDTAF direction.

c. Phase III: In this phase the site is reported as excess to the Government Services Agency (GSA). SAC must continue care and custody until real estate is disposed of.

2. (U) These phase requirements, adjusted as necessary, applied regardless of whether site was scheduled for disposition or preservation in accordance with CSAF instructions.[8]

3. (U) SAC programming plans for each missile system, incorporating all known guidance, were published. Also, to provide detailed instructions, pilot base-level plans were developed as a consolidated effort of Hq SAC, numbered Air Forces, and field units. These pilot plans provided the models for all unit operations plans or orders.[(9)(10)]

4. (U) While some precedent for missile deactivation had been established by the Atlas D, two significant differences marked the phaseout of follow-on missiles. These were the incremental removal of missiles from alert status and the method of missile shipment.

5. (U) All Atlas D missiles in a given unit had been removed from alert at the same time, and processing, missile shipment, and shutdown of facilities accomplished on a singular basis. Because Atlas E, F, and Titan I units could process two missiles per week/unit on a scheduled program, Maj Gen Beck, SAC DM, proposed that these missiles be removed from alert on a two-missile-per week/unit frequency. This provided a longer operational alert capability for an appreciable number of missiles, and allowed for a more orderly release and assignment of operational personnel from deactivating units. Gen Beck's proposal was accepted and followed in scheduling missiles off alert.[11]

6. (U) It had been determined in Dec 64 that airlift availability for missile transport was questionable.[12] Ultimately, only 9 of 158 missiles were transported by air; the remainder were hauled overland on trailer. While surface transportation, at first, appeared to present extraordinary problems, missile shipments not only met, but bettered, the original schedules which were predicated on airlift. (See charts No. 4 and No. 5)

OPERATIONAL PHASE: (S)

1. (S) The first group of missiles was removed from alert on 4 Jan 65. (Two missiles had been removed earlier, one at Dyess and one at Altus, because of extended maintenance requirements) These were shipped overland to storage without incident and generally set the pattern for succeeding shipments. The first increment (3rd Qtr FY 65) of inactivating missile units had shipped all missiles by 12 Feb 65, 11 days earlier than scheduled. In accordance with the original plan, further shipments were not supposed to resume until 8 April 65,[13] meaning a loss in utilization of the shipping capabilities developed at both SBAMA and SAC. Recognizing the opportunity to compress the phaseout program, SAC proposed a continuous shipping program, based on accelerated availability of missiles from units not yet inactive. Target assignments were revised and a new missile shipping schedule developed. Through continued detailed following of missile availability and shipment possibilities, all unit missiles were shipped by 20 Apr 65 or 35 days ahead of schedule. For a detailed resume of missile shipments, see Transportation in Chapter VIII.

2. (U) A minor problem was encountered when it was determined that cryogenic liquids could not be off-loaded from Atlas F sites until the silo

suspension system had been preloaded through installation of stanchions.[14] This task required approximately 64 manhours per site for installation of a special tool kit. These stanchion kits were not immediately available and some delays were anticipated in the initial deactivation processing of Atlas F silos. These potential delays were quickly overcome through the joint productive efforts of AFLC and SAC, and all required stanchion kits were installed before any serious impact resulted.[15]

3. (U) As missile sites were deactivated, shutdown, and turned over to the local base civil engineer, an entirely new set of ground rules for site care and custody was identified. Required shutdown procedures were generally outlined in letter, Care and Custody Standards, 22 Dec 1964.[16] These procedures were re-examined in detail and revised as necessary to satisfy the unique tasks now confronting the base civil engineer in his new role.

4. (U) An initial manpower package was established and authorized to provide the personnel spaces necessary for proper care and custody. These spaces varied from 250 in Atlas units to 120 for Titan I and 54 for Atlas E, Differences in personnel were due to environmental control procedures necessary for each missile system and the amount of equipment remaining in operation after shutdown of the missilessites.[17] To ensure the adequacy of shutdown procedures, joint AFLC/SAC quarterly inspections of shutdown sites are planned.[18]

5. (U) Additional information concerning care and custody may be found in Chapter VII, Commercial Power and Chapter V, Care and Custody Manpower.

6. (U) SAC was vitally concerned that all possible efforts were taken to ensure maximum dollar return for the missile investment. In this regard, Maj Gen Beck proposed that an Atlas F site be dismantled as a prototype

to establish procedures required, provide manhour data, and furnish an available display of missile assets to prospective buyers/donees of this equipment. This proposal was developed as Project "Extra Purpose"[19] and was successfully completed. A full report is included in Chapter IV, Prototype Dismantlement and Equipment Display.

DISPOSITION ACTIONS AND SAVINGS AS A RESULT OF SAC ACTIONS: (U)

1. (U) The revised AFLC Supply/Disposal Implementing Plan for Phaseout of the Atlas E (CGM-16E), Atlas F (HGM-16F) and Titan I (HGM-25A) weapons systems, dated 1 Feb 65 outlined tasks and responsibilities for disposition of excess materiel generated as a result of phaseout actions. Primary objectives were to: (1) assure maximum redistribution of excess equipment, spares, airborne vehicles and other assets within the Department of Defense or other governmental agencies; and (2) realize the maximum dollar return possible on residual assets which could not be applied to existing or programmed requirements of screening agencies.

2. (U) Fixed installed equipment (i.e., non-mobile AGE and CEM) in missile sites which survives utilization screening is scheduled to be redesignated as RPIE and transferred to the General Services Administration for disposition with the site.[20] This philosophy may be altered somewhat based on the results of experimental prototype disposal techniques through service/salvage contract methods.

3. (U) Airborne vehicles removed from deactivated missile sites were shipped to Norton AFB and Miro Loma AFS, California for storage pending finalization of booster support requirements. Thirty-eight Atlas E and eighty-one Atlas F missiles were in storage at Norton AFB, California

on 1 May 1965. Seventy-nine Titan I missiles were in storage at Mira Loma AFS, California on 1 May 1965.[21]

4. (U) Fuels and cryogenics removed from deactivated missile complexes were redistributed to SAC bases, other governmental agencies or contractors to the maximum extent practical. The program summary provided reflects the dollar value of recovered POL products, i.e. LOX, LN2, Helium and RP-1, based on stock fund prices. It does not reflect losses due to transfer operations or local disposal actions.[22]

5. (U) Program status reflecting the dollar value of excess inventories and disposition actions as of 1 May 1965 were as follows:[23]

a.

	ATLAS E		ATLAS F		TITAN I	
TYPE	TOTAL VALUE	SHIPPED OR COMMITTED	TOTAL VALUE	SHIPPED OR COMMITTED	TOTAL VALUE	SHIPPED OR COMMITTED
AGE	68,216,000	3,091,118	212,851,004	3,550,032	213,195,308	2,380,623
RPIE	6,111,101	1,757,500	13,099,906	---	8,833,139	14,832
CEM	5,601,083	470,195	16,000,000	5,634,797	6,442,357	3,909,088
Airframe	*76,000,000	76,000,000	*162,000,000	162,000,000	*299,500,000	299,500,000

* Atlas E and F airframes estimated at $2 million each, Titan I airframes estimated at $2.5 million.

b.

Atlas E, F, & Titan I			
Type	Total Value	Shipped or Committed	
NOCM[24]	22,353,062	615,982	
POL[25]	*1,690,268	1,690,268	*Value of Redistributed Product only including Atlas D
Spt Acft[26]	13,058,498	13,058,498	
ARLS Spares	**97,177,525	---	**Estimated account value AFW 2281, 2282 Excluding, Atlas D Offutt Spares

REMARKS: Information relative to Base Support RPIE Spares, support vehicles, real property and support facilities, to include disposition actions should be available for updating this summary on or before 31 October 1965.

6. (U) Major categories of equipment and spares which could be directly related and identified to ballistic missile support were reported to the respective inventory control points and the DLSC, as appropriate, for utilization screening.[27]

7. (U) DOD materiel utilization brochures were published and distributed by the DLSC in three volumes. Volume I contained Aerospace Ground Equipment, Volume II Communications Electronics Meterological and Volume III Real Property Installed Equipment. The Automatic Release Date for brochured materiel is 31 July 1965.

8. (U) The SBAMA Program Management Center acted as the central control point for all agency requirements and directed shipment from the possessing base. Excess ARLS and RPIE spares are scheduled to be reported to Inventory Control points by 1 June 65. Concurrent reporting of spares meeting DLSC reporting criteria is to be accomplished. DLSC will publish excess spares listings for DOD/GSA/donation screening and establish an Automatic Release date of 1 October 65. The SBAMA Program Management Center will direct shipment of spares in the same manner as brochured equipment.

9. (U) Significant departures from standard screening procedures were made in two areas. First, the aggregate line item value of all ARLS spares on SAC bases was used as a criterion to determine reporting requirements. This was possible because centralized accountable records

were maintained by the respective System Support Manager. Individual bases would have otherwise disposed of thousands of line items which would not have met reporting and screening criteria. Secondly, ARLS and RPIE spares were identified to end item application and offered to recipients of the major assembly. These actions are designed to increase the range and scope of screening and assure more effective utilitization.

10. (U) There were three crew procedure trainers in the SAC inventory. These trainers were valued at $800,000 each and were located at Lincoln, Dyess and Vandenberg AF Bases. At the time of the announcement of phase out of the Atlas F, the Lincoln trainer was at General Dynamics for updating. This contract was immediately canceled. AFLC authorized local disposition of the trainers as they were not required for further use. Reclaimed materials are being used to build up other training devices at Vandenberg and Carswell AF Bases.

11. (U) Four AF (SAC proposed) cost reduction projects were pending auditor validation and Air Staff approval on 18 May 1964. These projects, together with estimated savings, are as follows:

Project	Number	Savings
a. Titan I - (Mod LOX Sub Coolers)	S652-4100	$ 60,610
b. Titan I - (Delete LOX Exercises)	S652-4101	321,430
c. Titan I - (Delete Engine Overhaul)	S652-4121	6,070,000
d. Titan I - (Eliminate Routine AFTO)	S652-4124	956,250
e. Atlas - (Routine AFTO 22 Eliminate)	S652-4123	504,900
	TOTAL	$7,913,190

MILESTONE SUMMARY - ATLAS E, F, AND TITAN I PHASEOUT

22 May-19 Nov 64 - Atlas E/Titan I, canceled new buys, contracts, OT and FOOT Launches. Published programming plans.

19 Nov 64 - OSD news release - Included Atlas F with Atlas E, Titan I phaseout.

24 Nov 64 - SAC canceled all FLX activities, reduced maintenance inspections, canceled time changes, TCTOs, reports (U-86, K-6, MCS) routine AFTO 22, and JOTS changes.

1 Dec 64 - SAC published programming plan for Atlas F.

9 Dec 64 - USAF established command responsibilities - proposed storage of missiles.

11 Dec 64 - AFLC appointed Gen Mundell, Phaseout Task Force Cmdr.

18 Dec 64 - SAC designated Gen Davis, SAC Task Force Cmdr.

30 Dec 64 - SAC (VCINC msg) instructions on removing missiles from alert, missile shipment, property disposal, interim care and custody.

31 Dec 64 - DM set up ICBM Phaseout project office.

8 Jan 65 - Surface movement 3rd Qtr missiles started.

20 Jan 65 - SAC pilot plans for missile phaseout completed.

22 Jan 65 - SAC/SBAMA Memo of Agreement for missile unit phaseout completed.

2 Feb 65 - SAC/SBAMA started prototype of Atlas and Titan shutdown plan.

8 Feb 65 - SAC, Managerial Committee chairmanship for missile phaseout transferred from DP to DM.

8 Feb 65 - Schilling missile shipments started (accelerated due to early base closure).

12 Feb 65 - 3rd Qtr missile shipments completed.

17 Feb 65 - DO approved early shipment of 4th Qtr missiles except selected sites (SIOP).

24 Feb 65 - Final 4th Qtr missile shipments started.

1 Mar 65 - Shutdown plans published by SBAMA arrived at missile units.

4 Mar 65 - SAC msg - Vandenberg, phaseout Atlas E, F, Titan I earliest practical date except for sale of real estate. In addition keep Btl Ground Guidance Station No. 6 (Titan). Use procedures developed for operational fleet. Dispose of Atlas E facilities, preserve Atlas F, Titan I.

25 Mar 65 - 3rd Qtr units inactivated.

26 Mar 65 - Plans for dismantling Atlas F site (Lincoln -12) finalized.

31 Mar 65 - USAF directed diesel test program.

1 Apr 65 - Personnel reassignment instructions completed.

5 Apr 65 - Lincoln -12 dismantling started.

12 Apr 65 - Gen Nazzaro directed site surveillance/assistance visit program.

20 Apr 65 - 4th Qtr missile shipments completed.

21 Apr 65 - Diesel test procedures finalized.

1 Jun 65 - Chairmanship of ICBM Managerial Committee transferred to DE.

1 Jun 65 - Dismantling project complete.

UNIT DEACTIVATION SCHEDULE - 1965

THIRD QUARTER UNITS

BASE	TYPE MISSILE	FIRST MISSILE OFF ALERT	LAST MISSILE OFF ALERT	LAST MISSILE SHIPPED	UNIT INACTIVATION DATE
FORBES	ATLAS E	4 JAN	28 JAN	8 FEB	25 MAR
WARREN	ATLAS E	4 JAN	30 JAN	8 FEB	25 MAR
DYESS	ATLAS F	1 DEC	3 FEB	10 FEB	25 MAR
ALTUS	ATLAS F	30 DEC	4 FEB	10 FEB	25 MAR
WALKER	ATLAS F	5 JAN	4 FEB	9 FEB	25 MAR
LARSON	TITAN I	4 JAN	2 FEB	8 FEB	25 MAR
ELLSWORTH	TITAN I	4 JAN	1 FEB	12 FEB	25 MAR
BEALE	TITAN I	4 JAN	22 JAN	10 FEB	25 MAR

CHART NO. 1

UNIT DEACTIVATION SCHEDULE - 1965

FOURTH QUARTER UNITS

BASE	TYPE MISSILE	FIRST MISSILE OFF ALERT	LAST MISSILE OFF ALERT	LAST MISSILE SHIPPED	UNIT INACTIVATION DATE
FAIRCHILD	ATLAS E	17 FEB	31 MAR	5 APR	25 JUN
SCHILLING	ATLAS F	1 FEB	5 MAR	11 MAR	25 JUN
PLATTSBURGH	ATLAS F	12 MAR	10 APR	13 APR	25 JUN
LINCOLN	ATLAS F	10 MAR	12 APR	20 APR	25 JUN
MT. HOME	TITAN I	17 FEB	1 APR	8 APR	25 JUN
LOWRY	TITAN I	17 FEB	26 MAR	15 APR	25 JUN

CHART NO. 2

THREE-PHASE CONCEPT

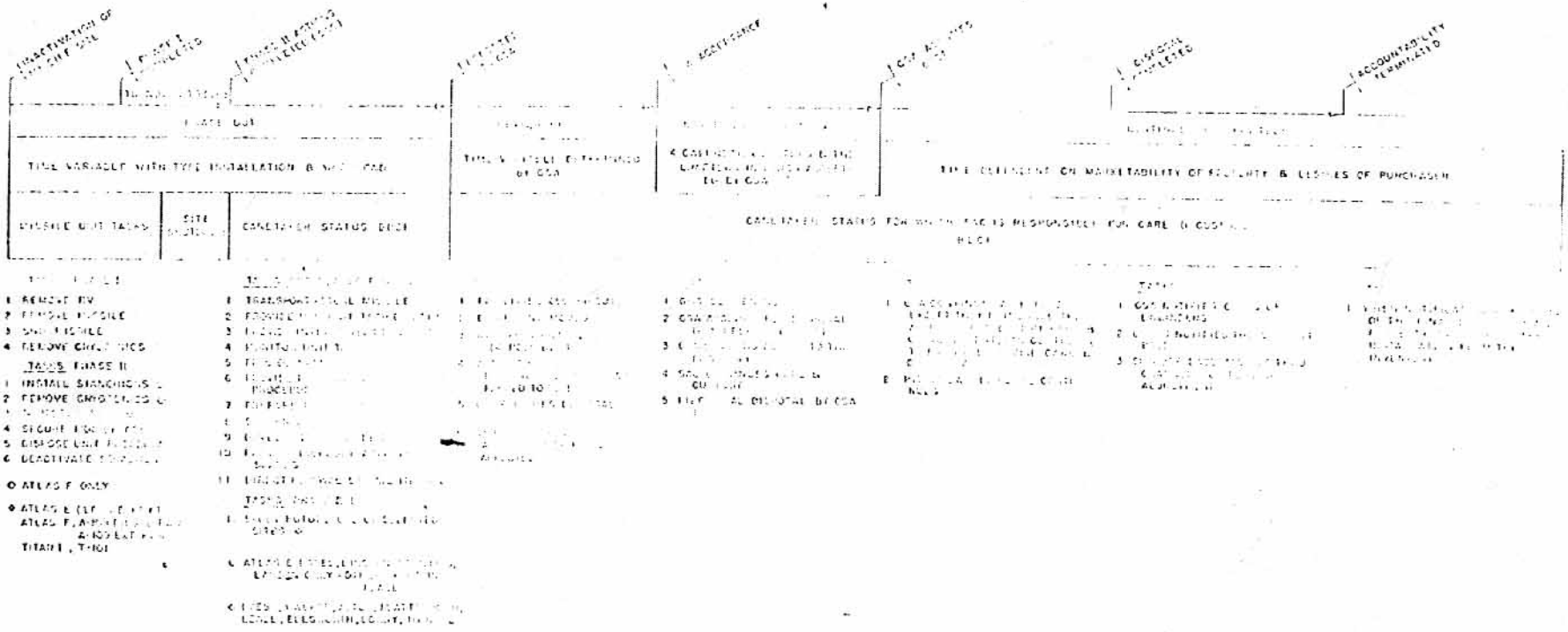


CHART NO. 3

THIRD QUARTER - MISSILE SHIPMENT SCHEDULE

Scheduled - *********

Actual - 000000000000

BASE	MISSILES AFFECTED	JAN	FEB
FORBES	9	9 ********** 14	********** 12 ooooooooo 8
WARREN	9	9 ********** 14	********** 12 ooooooooo 8
LARSON	9	11 ********** 11	********** 12 ooooooooo 8
ELLSWORTH	9	11 ********** 11	********** 22 oooooooooo 12
BEALE	9	11 ********** 12	********** 12 ooooooooo 10
WALKER	9	11 ********** 8	********** 12 ooooooooo 9
DYESS	11	11 ********** 11	********** 23 oooooooooo 10
ALTUS	11	11 ********** 11	********** 23 oooooooooo 10

CHART NO. 4

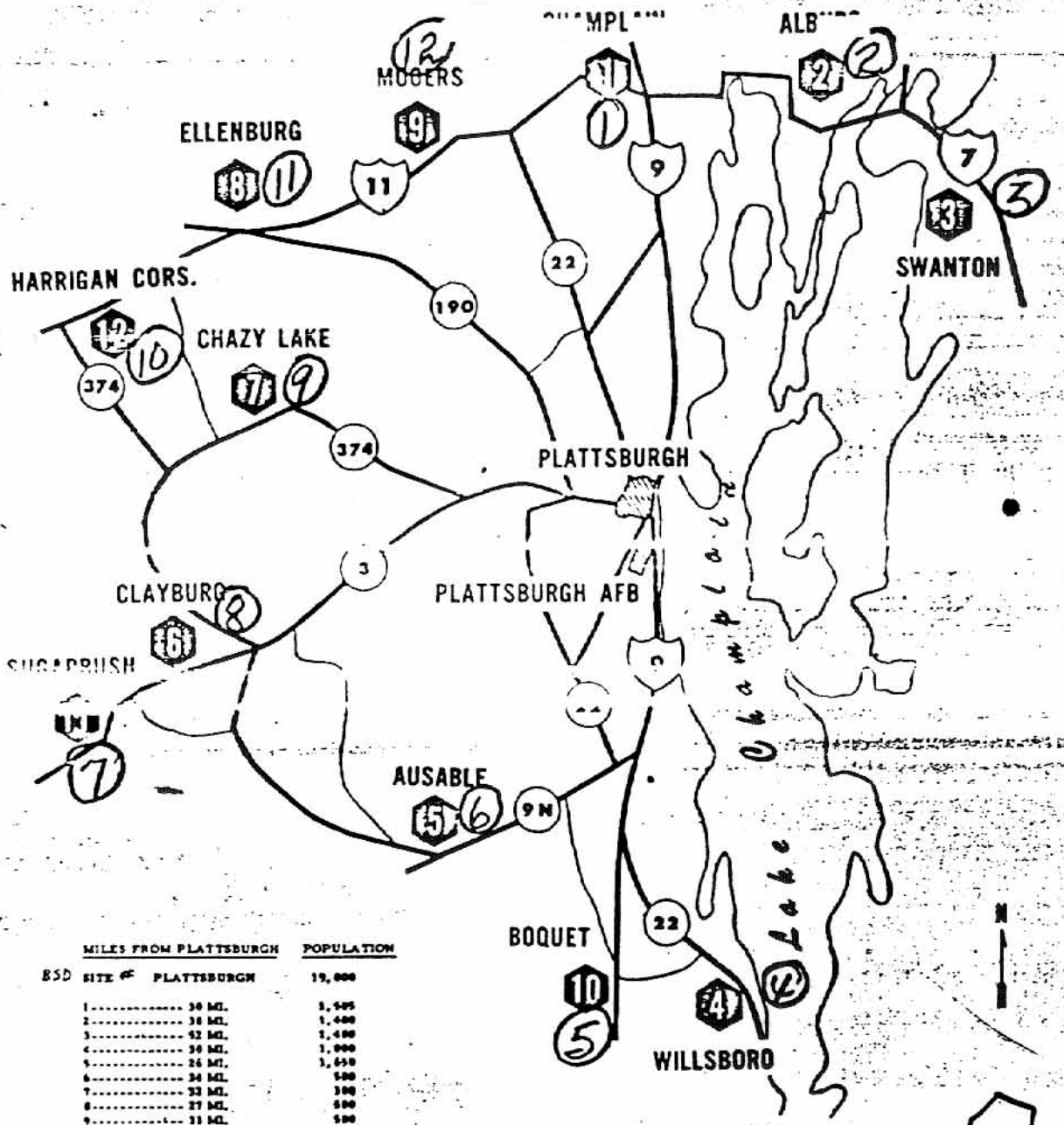
FOURTH QUARTER - MISSILE SHIPMENT SCHEDULE

Scheduled - ********

Actual - oooooooooo

BASE	MISSILES AFFECTED	FEB	MAR	APR	MAY
FAIRCHILD	9	24		8 ********** oooooooooo 5	12
MT. HOME	9	24		8 ********** oooooooooo 8	12
LOWRY	18	24		8 ********** oooooooooooooo 15	12
SCHILLING	12	8 oooooooooooooo	11	8 **********	25
PLATTSBURGH	12		30	8 ********** oooooooo 13	25
LINCOLN	12		18 oooooooooooooooo	8 ********** 20	25

CHART NO. 5



BSD SITE #	MILES FROM PLATTSBURGH	POPULATION
	PLATTSBURGH	19,000
1	30 MI.	1,595
2	38 MI.	1,488
3	52 MI.	1,488
4	38 MI.	1,000
5	26 MI.	1,650
6	34 MI.	500
7	33 MI.	500
8	27 MI.	500
9	33 MI.	500
10	28 MI.	100
11	36 MI.	100
12	39 MI.	100

⬡ BSD No.

○ SAC No.

PLATTSBURGH AFB, N. Y.

CHAPTER X

PROBLEM SITES (U)

1. (U) On 15 January 1965, Headquarters USAF placed an indefinite hold on Atlas F and Titan I sites located at USAF bases not being closed.[1] The USAF hold directive affected 44 Atlas F sites and 45 Titan I sites for a total of 89 sites.

2. (U) The purpose behind the USAF hold status for these sites was to allow all interested agencies ample time to develop studies for potential future uses of available hardened facilities.

3. (U) As the phasedown activities progressed, it became apparent that some of the sites under the indefinite hold directive had peculiar problems which made the indefinite hold in caretaker status uneconomical.

4. (U) Examples of these problems were:

a. Excessive water leaks which required constant surveillance.

b. Excessive connection costs for commercial power.

c. Also those Atlas F sites which were partially destroyed by fire and explosion. (See Charts I and II this Chapter). While the partially destroyed sites were not included in the hold directive, it was necessary to consider them as problem sites to expedite disposal action.

5. (U) Hq SAC requested AFLC to take action to relieve from indefinite hold those sites which were considered problem sites.[2] AFLC agreed with the SAC request and asked for a list of the sites by location and problem.[3]

PROBLEM SITES (U)

1. (U) The following sites by location and problem were considered for early disposal.

a. (U) Titan I, Complex C, Ellsworth AFB, S. D. This site has a water infiltration rate of 30-35 gals per minute which increases at times to 65-70 GPM. This water gives off hydrogen sulphide fumes and requires excessive maintenance efforts for corrosion control to maintain preservation status.[4]

b. (U) Atlas F, all Complexes, Plattsburgh, AFB, N. Y. All sites at Plattsburgh have excessive water infiltration. The average rate is approximately 40-105 GPM. Such flows could allow water to rise as much as nine feet per day in the silo should the sump pumps malfunction. This condition requires constant surveillance under caretaker status.[5]

c. (U) Atlas F, Site 6, Altus AFB, Oklahoma. This site was partially destroyed by fire and explosion on 14 May 64. Site restoration has been determined uneconomical and is in surveillance status pending disposal direction.

d. (U) Atlas F, Sites 1, 2 and 5, Walker AFB, New Mexico. Site 1 was partially destroyed by fire and explosion on 1 Jun 63; site 5 on 13 Mar 64 and site 2 on 9 Mar 64. All these sites have been placed in a surveillance status pending disposition.

. (U) Atals F, Sites 3 and 9, Plattsburgh AFB, N.Y. These two sites will require expenditures of over $45,000 each for commercial power connections. This problem coupled with the water leak problems make it uneconomical to hold these sites for an extended period.[6]

CONCLUSIONS (U)

1. (U) The partially destroyed sites at Altus and Walker will be reported to GSA for disposal by 1 Jun 65.[7]

2. (U) On 6 May 1965, USAF released the indefinite hold status on all Atlas F and Titan I sites except the Titan I complex Chico at Beale AFB, Calif.[8] This action in effect reduced the long range problem of retaining in caretaker status those facilities identified as problem sites.

3. (U) USAF agreed that Plattsburgh sites 3 and 9 (Excessive cost for commercial power and water leakers) will be used for prototyping the service/salvage contract proposal.[9]

4. (U) All other sites are scheduled for final disposal action shortly after 31 July 1965.