

~~SECRET~~

7770007  
Frame 009

HISTORY OF STRATEGIC AIR COMMAND

JANUARY-JUNE 1968

HISTORICAL STUDY NO. 112 (U)

VOLUME I

Microfilm Frames 009 thru 238.  
NARRATIVE

DEPARTMENT OF ENERGY/DEPARTMENT OF DEFENSE/COMMISSION REVIEW
1ST REVIEW DATE: 03/19/76
AUTHORITY: LSC/DC/11/11/11
NAME: [Handwritten]
2ND REVIEW DATE: 08/19/76
AUTHORITY: [Handwritten]
NAME: [Handwritten]
CLASSIFIED INFO DISCLOSED BY: [Handwritten]
CLASSIFIED INFO DISCLOSED DATE: [Handwritten]
CLASSIFIED INFO DISCLOSED BY: [Handwritten]
CLASSIFIED INFO DISCLOSED DATE: [Handwritten]
DOE INFO IS SFED

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN  
NATIONALS OR THEIR REPRESENTATIVES.

*B. K. Holloway*  
B. K. HOLLOWAY, General, USAF  
Commander in Chief

EXCLUDED FROM AUTOMATIC  
REGRADING; DOD DIR 5200.10  
DOES NOT APPLY

Reproduced on 20 July 1994  
by authority of  
HQ ACC/HO.

HISTORY & RESEARCH DIVISION  
HEADQUARTERS STRATEGIC AIR COMMAND

FEBRUARY 1969

Reproduced copy #  
RC1 of IRC.

~~SECRET/FAO~~  
~~RESTRICTED DATA~~  
~~AF EYES ONLY~~

92-TS-AFHRA-015  
AFHRA Cy 2 of

ACC 94-IRID-029

Doc # 68-B-3214

(THIS PAGE IS UNCLASSIFIED) SAC CY 2 OF 5 CYS

ACC 94-HO-65

OR-CVI-3767-1A

~~TOP SECRET~~

299

UNCLASSIFIED

(U) ~~(S)~~ Early in March SAC and SANSO met to develop a concept for a Trans-attack Environmental Probe. SAC proposed to deploy ten to 20 hardened TEP missiles in each wing. They would be launched in small groups and transmit UHF signals to all control centers in their wing if powered flight (third stage thrust termination) was successfully completed.<sup>304</sup> SANSO indicated that the job could be done by a considerably smaller number of missiles. But the problem was much more complex than merely transmitting a signal after powered flight. In its consideration of the cost of the new UHF equipment and the question of signal reception probability, SANSO again locked at the old Trajectory Accuracy Prediction System (TAPS) concept which had been rejected as too expensive. For Minuteman III completion of third stage thrust termination did not mean much. The post boost vehicle would then have to continue on and deploy the reentry system. To provide a signal of successful post boost vehicle flight, a system like TAPS would be required.<sup>305</sup> Late in May SAC asked SANSO to include TEP in the next program change request so that the program could be officially approved and funded.<sup>306</sup>

Force Application

(U) ~~(S)~~ On 1 January 1965 the control time launch (CTL) concept became effective with Revision C to SIOP-4. In addition to the pin-down threat and suppression of Soviet ASX defenses, fratricide in the target area and the reduction of vulnerability to Soviet offensive weapons in the launch area dictated the need for precise launch timing for the whole ICBM force. These threats now made the salvo tactic unwise. For the preemptive option a doctrine for more rapid sequential firing was introduced. In the normal retaliatory option a slower rate of firing was used. If a pin-down resulted in a launch delay, the force would later resume firing over an extended period. All sorties would be timed from a master reference time according to their tasks, and to meet the fratricide restraints. If a hold was encountered the proper timing would be accomplished by transferring the delayed sorties to their proper position in another wave block.

UNCLASSIFIED

~~TOP SECRET~~  
~~SECRET~~

A simple wave block scheme was used for Minuteman I and Titan II since their firing could be stopped at any time. Until Minuteman F launches could be cancelled while in progress (CLIP) that force was divided into increments related to tasks. Minuteman F sorties delayed by a pindown would resume launching in their own increments in other wave blocks, or they could be moved to other increments by changing targets and/or tasks. Thus, if a defense suppression sortie was lost to a pindown, a back up sortie assigned to a later increment could be switched into an earlier increment in the next wave block.<sup>307</sup>

(U) ~~(TOP SECRET)~~ To insure the penetration of the ICBM force, the Soviet AEW system would be attacked first. Minuteman B\* and F\*\*, and Polaris missiles would first hit the Hen House early warning radars and their Tailin system defenses. Then the Dog House radar and the Triad system around Moscow would be attacked. More than 100 Minuteman would be involved in AEW suppression.<sup>308</sup>

During the first three months of 1968 these suppression sorties were spread throughout the force. On 1 April 43-133A sorties were deleted from this role because of the relatively slow reaction time of these sorties if the medium frequency (MF) radio system had to be used for a launch. For this and other reasons 100 sorties were to be retargeted and 278 retired.<sup>309</sup>

(U) ~~(TOP SECRET)~~ More doctrinal refinements were planned for 1 July 1968 (Revision 3). Crew documents would be consolidated and reduced. The two hour preplanned launch delay for urban/industrial targeted sorties (Task C) was eliminated to reduce prelaunch vulnerability. To preserve the assured destruction capability, Task C sorties were distributed throughout the wave block and reprogramming from Task A (threat) to Task C targets was made easier. The ripple would be used through six wave blocks. After that there would be so few missiles left that the remainder could be salvaged. The length of

(U) ~~(TOP SECRET)~~ with 100 and retro-rockets.

(U) ~~(TOP SECRET)~~ with 100 ICBM A/V, and 100 ICBM penetration aids when available.

~~TOP SECRET~~  
UNCLASSIFIED

301

A.F.F.  
the basic wave block was extended by a few minutes. The increase in the Minuteman B/MK 11 A CEP relegated those sorties to soft targets only. The Titan IIs were targeted against soft missiles, command and control facilities and urban/industrial areas. For Revision D another 427 Minuteman would have to be retargeted during May and June. <sup>310</sup>

(U) ~~TOP SECRET~~ During the first half of 1968 SAC operations planners showed renewed interest in the use of nuclear bursts to black out enemy radar and enhance penetration of his defenses. This could be done by putting a high altitude fuse on some Minuteman missiles and bursting them in the exoatmosphere. Radar blackout might also occur as a result of Soviet ABX bursts. Development of a high altitude fuse for the MK 11B/C had been directed in December 1967, but by June 1968 it was more likely that it would be developed for MK 12. Although the development of such a radar blackout technique would be expensive, SAC favored development of a fuse and further study of radar blackout as a penetration tactic. <sup>311</sup>

(U) ~~TOP SECRET~~ Although a fire on warning doctrine was the best military answer to the pindown threat, it was politically unacceptable. However, this might not always be so. With credible warning from new systems currently under development,\* streamlined national command authority procedures, and a minimum reaction posture (MRP) for ICBMs, a fire on warning tactic could be feasible. An MRP concept was studied in 1967 and was conditionally approved by General Scompton for further development. Much of what was recommended to save time would require changes to nuclear safety rules. <sup>312</sup> In March and April Ellsworth, Grand Forks and Little Rock were directed to test new crew checklists that would save time. <sup>313</sup> The results were still being studied by Headquarters at the end of June.

\* Over-the-horizon radars and satellite sensors.

UNCLASSIFIED

~~TOP SECRET~~  
~~SECRET~~

Early in March SAC and SAMSO met to develop a concept for a Trans-attack Environmental Probe. SAC proposed to deploy ten to 20 hardened TEP missiles in each wing. They would be launched in small groups and transmit UHF signals to all control centers in their wing if powered flight (third stage thrust termination) was successfully completed. SAMSO indicated that the job could be done by a considerably smaller number of missiles. But the problem was much more complex than merely transmitting a signal after powered flight. In its consideration of the cost of the new UHF equipment and the question of signal reception probability, SAMSO again looked at the old Trajectory Accuracy Prediction System (TAPS) concept which had been rejected as too expensive. For Minuteman III completion of third stage thrust termination did not mean much. The post boost vehicle would then have to continue on and deploy the re-entry system. To provide a signal of successful post boost vehicle flight, a system like TAPS would be required. Late in May, SAC asked SAMSO to include TEP in the next program change request so that the program could be officially approved and funded.

**Force Application:**

(TS-NF) On 1 January 1968 the control time launch (CTL) concept became effective with Revision C to STOP-4. In addition to the pindown threat and suppression of Soviet ABM defenses, fratricide in the target area and the reduction of vulnerability to the Soviet offensive weapons in the launch area dictated the need for precise launch timing for the whole ICBM force. These threats now made the salvo tactic unwise. For the preemptive option, a doctrine for more rapid sequential firing was introduced. In the normal retaliatory option, a slower rate of firing was used. If a pindown resulted in a launch delay, the force would later resume firing over an extended period. All sorties would be timed from a master reference time, according to their tasks and to meet the fratricide restraints. If a hold was encountered the proper timing would be accomplished by transferring the delayed sorties to their proper position in another wave block.

A simple wave block scheme was used for Minuteman I and Titan II since their firing could be stopped at any time. Until Minuteman F launches could be cancelled while in progress (CLIP) that force was divided into increment related to tasks. Minuteman F sorties delayed by a pindown would resume launching in their own increments in other wave blocks, or they could be moved to other increments by changing targets and/or tasks. Thus, if a defense suppression sortie was lost to a pindown, a backup sortie assigned to a later increment could be switched into an earlier increment in the next wave block.

{TS-NF) To insure the penetration of the ICBM force, the Soviet ABM system would be attacked first. Minuteman B\* and P\*\*, and Polaris missiles would first hit the Hen House early warning radars and their Tallinn system defenses. Then, the Dog House radar and the Triad System around Moscow would be attacked. More than 100 Minutemen would be involved in ABM suppression. During the first three months of 1968 three suppression sorties were spread throughout the force. On 1 April WS-133B sorties were deleted from this role because of the relatively slow reaction time of these sorties if the medium frequency (MF) radio system had to be used for a launch. For this and other reasons, 188 sorties were to be retargeted and 278 retired.

(TS-NF) More doctrinal refinements were planned for 1 July 1968 {Revision B). Crew documents would be consolidated and reduced. The two-hour programmed launch delay for urban industrial targeted sorties {Task C) was eliminated to reduce prelaunch vulnerability. To preserve the assured destruction capability, Task C sorties were distributed throughout the wave block and reprogramming from Task A (threat) to Task C targets was made easier. The ripple would be used through six wave blocks. After that there would be so few missiles left that the remainder could be salvoed. The length of

---

\*(TS-NF) [illeg] \*\* (TS-NF) With MK 11C R/V and MK 1 penetration aids when available.

the basic wave block was extended by a few minutes. The increase in the Minuteman B/ MK 11 A CEP relegated those sorties to soft targets only. The Titan IIs were targeted against soft missiles, command and control facilities and urban/industrial areas. For Revision D another 427 Minutemen would have to be retargeted during May and June.

(TS) During the first half of 1968 SAC operations planners showed renewed interest in the use of nuclear bursts to black out enemy radar and enhance penetration of his defenses. This could be done by putting a high-altitude fuse on some Minutemen missiles and bursting them in the exo-atmosphere. Radar blackout might also occur as a result of Soviet ABM bursts. Development of a high-altitude fuse for the MK 11 B/C had been directed in December 1967, but by June 1968 it was more likely that it would be developed for MK 12. Although the development of such radar blackout technique would be expensive, SAC favored development of the fuse and further study of radar blackout as a penetration tactic.

(S) Although fire on warning doctrine was the best military answer to the pindown threat, it was politically unacceptable. However, this might not always be so. With credible warning from new systems currently under development\*, streamlined national command authority procedures, and a minimal reaction posture (MRP) for ICBMs, a fire on warning tactic could be feasible. An MRP concept was studied in 1967 and was conditionally approved by General Compton for further development. Most of what was recommended to save time would require changes to nuclear safety rules. In March and April Ellsworth, Grand Rapids and Little Rock were directed to test new crew checklists that would save time. The results were still being studied by Headquarters at the end of June.

- 
- (TS) Over-the-horizon radar and satellite sensors.

**NATIONAL  
SECURITY  
ARCHIVE**

This document is from the holdings of:

The National Security Archive

Suite 701, Gelman Library, The George Washington University

2130 H Street, NW, Washington, D.C., 20037

Phone: 202/994-7000, Fax: 202/994-7005, [nsarchiv@gwu.edu](mailto:nsarchiv@gwu.edu)