

~~TOP SECRET~~

HISTORY OF THE  
JOINT STRATEGIC TARGET PLANNING STAFF

SIOP-4 H/I, July 1970 - June 1971

(Unclassified Title)

*Redacted  
Version  
Unclassified.*

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws (Title 18, U.S.C., Sections 793 and 794), the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

Reproduction of this document in whole or in part is prohibited except with the permission of the Joint Strategic Target Planning Staff.

6 January 1972

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO FOREIGN  
NATIONALS.

**RESTRICTED DATA**

The information contained in this document will not be disclosed to foreign nationals or their representatives.

Cy 1A of \_\_\_\_\_ Cys

**NOFORN DISSEM**

GROUP 1  
EXCLUDE FROM AUTOMATIC  
DOWNGRADING AND DECLASSIFICATION

~~TOP SECRET~~

#467  
**72-J-0123**


92-F01-0408  
Doc 1

## FOREWORD

This is the ninth history of the Joint Strategic Target Planning Staff (JSTPS) since its establishment on 16 August 1960. It covers the period of July 1970 through June 1971, for Revisions H and I of SIOP-4. It has been prepared in accordance with Joint Administrative Instruction 210-1, 15 March 1967.

The classification of Top Secret/Restricted Data/Not Releasable to Foreign Nationals/Group 1 is assigned to conform with the classification of the source documents.

This history was prepared for the JSTPS by Miss M. E. Hayes, of the Strategic Air Command Historical Staff.



F. H. MICHAELIS  
Vice Admiral, USN  
Deputy Director

## TABLE OF CONTENTS

|  |    |
|--|----|
| Introduction . . . . .                               | 1  |
| SIOP Preparation . . . . .                           | 1  |
| Review of the NSTAP . . . . .                        | 1  |
| Planning Manual Changes . . . . .                    | 5  |
| DGZs and Available Weapons . . . . .                 | 9  |
| Damage Expectancy . . . . .                          | 15 |
| Vulnerability of Missile Launch Facilities . . . . . | 15 |
| Constraints . . . . .                                | 18 |
| Consequences of Execution . . . . .                  | 19 |
| Coordinated Reconnaissance Plan . . . . .            | 21 |
| JSTPS and SAL Talks . . . . .                        | 25 |
| War Gaming . . . . .                                 | 26 |
| Scientific Advisory Group Meetings . . . . .         | 28 |
| Organization and Personnel . . . . .                 | 28 |
| Summary . . . . .                                    | 33 |
| Glossary . . . . .                                   | 35 |
| Notes . . . . .                                      | 37 |
| Distribution . . . . .                               | 44 |

## ILLUSTRATIONS

### Tables

|   |  |    |
|---|--|----|
| 1 | Force Generation Levels, SACEUR, Revisions H, I . . . . .                              | 9  |
| 2 | SIOP Preparation, DGZs, Available Vehicles and<br>Weapons, Revisions G, H, I . . . . . | 11 |
| 3 | Per Cent Damage Expectancy, SIOP-4, Revision G to I . . . . .                          | 16 |
| 4 | Committed Reconnaissance Forces, Revisions G, H, I . . . . .                           | 24 |
| 5 | JSTPS Personnel Changes, FY-71 . . . . .   | 32 |

### Charts

|   |  |    |
|---|--|----|
| 1 | Joint Strategic Target Planning Staff Organization . . . . . | 30 |
|---|--|----|

### Maps

|   |  |    |
|---|--|----|
| 1 | Shielding Factors, SIOP-4, Revisions G, H, I . . . . . | 20 |
|---|--|----|

## APPENDICES

- A Pre-Launch Survivability, Revisions G, H, I
- B Weapon System Reliability, Revisions G, H, I
- C Missile Weapon System Accuracy, Circular Error Probable, Revisions G, H, I
- D SIOP-4H Delivery Vehicles and Weapons
- E SIOP-4I Delivery Vehicles and Weapons
- F SIOP-4H Damage Expectancies, DGZs by Tasks, Megatonnage Programmed, Constraints Monitor Points
- G SIOP-4I Damage Expectancies, DGZs by Tasks, Megatonnage Programmed, Constraints Monitor Points
- H Roster of Key Personnel, JSTPS, 30 June 1971
- I Computer Information
- J SACEUR Plans

~~TOP SECRET~~

Introduction

~~(TS)~~ (Gp 1) The Joint Strategic Target Planning Staff (JSTPS) was formed in 1960 to select targets for attack in event of nuclear war and to prepare a plan for use of committed forces of the unified and specified commands on those targets. These requirements involved preparation of the National Strategic Target List (NSTL) and the Single Integrated Operational Plan (SIOP). Guidance for preparation of these documents came from the Joint Chiefs of Staff (JCS) as the National Strategic Targeting and Attack Policy (NSTAP).<sup>1</sup>

~~(TS)~~ (Gp 1) The JSTPS was also responsible for preparation of the Coordinated Reconnaissance Plan (CRP) for use of committed reconnaissance forces to determine strike results in the trans- and post-SIOP periods. This required compilation of the National Strategic Reconnaissance List (NSRL) which identified locations that would require coverage to determine damage assessment and a Coverage Summary integrating command reconnaissance plans.

(U) This history covers preparation of SIOP-4 and CRP-4, Revisions H and I, which were in effect during Fiscal Year 1971 (FY-71).

SIOP Preparation

Review of the NSTAP

~~(TS)~~ (Gp 1) In November 1970 the JCS asked for a review of the

~~TOP SECRET~~

6

~~TOP SECRET~~

NSTAP "Guidance for the Preparation of the SIOP," that had been written in 1964 and revised in 1969. This was considered necessary since the use of nuclear forces in strategic attacks was under scrutiny which was expected to continue, and to increase in intensity.<sup>2</sup>

~~(TS)~~ (Gp 1) Two changes were recommended by JSTPS. One concerned Appendix A which established the aims of the SIOP, and where the name of a United States Navy (USN) missile "Polaris" was used rather than the more descriptive term "submarine launched ballistic missile (SLBM)." Since a second USN missile, "Poseidon," had been added to the weapon inventory for use in SIOP planning, it was suggested that the word Polaris be dropped, and the term SLBM, or FBM (fleet ballistic missile) be substituted.

~~(TS)~~ (Gp 1) The other suggested change called for deletion of Appendix B which defined nuclear damage criteria. This information was out of date, having been superseded by new definitions prepared by the Defense Intelligence Agency (DIA) in 1967,<sup>3</sup> approved by the JCS, and in use since that time.<sup>4</sup>

~~(TS)~~ (Gp 1) Four other changes were considered by JSTPS, but after staff discussions were not submitted to JCS. One was for inclusion of "deterrence" as a major objective of the SIOP by revision of the following paragraph:<sup>5</sup>

~~TOP SECRET~~

~~TOP SECRET~~

to:<sup>6</sup>

However, since the SIOP was a capabilities rather than an objectives plan, inclusion of deterrence as an objective was considered inappropriate in this paragraph.<sup>7</sup>

(TS) (Gp 1) The third change recommended an adjustment in one of the three SIOP tasks. These tasks were:<sup>10</sup>

~~TOP SECRET~~

~~TOP SECRET~~

~~TOP SECRET~~



~~TOP SECRET~~

Planning Manual Changes

~~(TS)~~ (Gp 1) A planning manual was prepared for each revision of the SIOP and contained procedures and pertinent planning factors. It was prepared by the JSTPS in conjunction with representatives of the unified and specified commands who participated in preparation of the SIOP. The major changes for both Revisions H and I were in the section on computing the probability of arrival of nuclear weapons on target, as part of the chapter on SIOP planning factors.

~~TOP SECRET~~

~~TOP SECRET~~

~~(TS)~~ (Gp 1) Pre-launch survivability (PLS), weapon system reliability (WSR), and weapon system accuracy mathematical factors were submitted by the commands to the JCS who adjusted and/or approved them for use by JSTPS. These factors were published in the planning manual.

~~(TS)~~ (Gp 1) PLS was the probability that a delivery vehicle would survive an enemy attack under established conditions of warning. The only major change made was in the estimate of the survivability of the

~~TOP SECRET~~

~~TOP SECRET~~

surface-to-surface guided missile, Pershing, located in the European theater.]

~~(TS)~~ (Gp 1) WSR, the probability that an aircraft could deliver a weapon, and a missile a warhead, with detonation as planned, was based on the reliability of the delivery vehicle and the weapon/warhead system, excluding effects of enemy action. The major changes were increases for various types of missiles: the Minuteman B and F, the Pershing, and the AGM-28 (Hound Dog). A compilation of the data from the planning manuals may be found in Appendix B.<sup>22</sup>

~~(TS)~~ (Gp 1) Accuracy was measured as the circular error probable (CEP), which was the radius of a circle in nautical miles whose center was the desired ground zero (DGZ), and within which 50 percent of the weapon detonations could be expected to occur. The CEPs for three land-based missiles improved: The Titan II, Minuteman B and F, as may be seen in the data included in Appendix C.<sup>23</sup>

~~(TS)~~ (Gp 1) The changes for Revision H also included, in Chapter 4, "Target Development," the addition [ ]

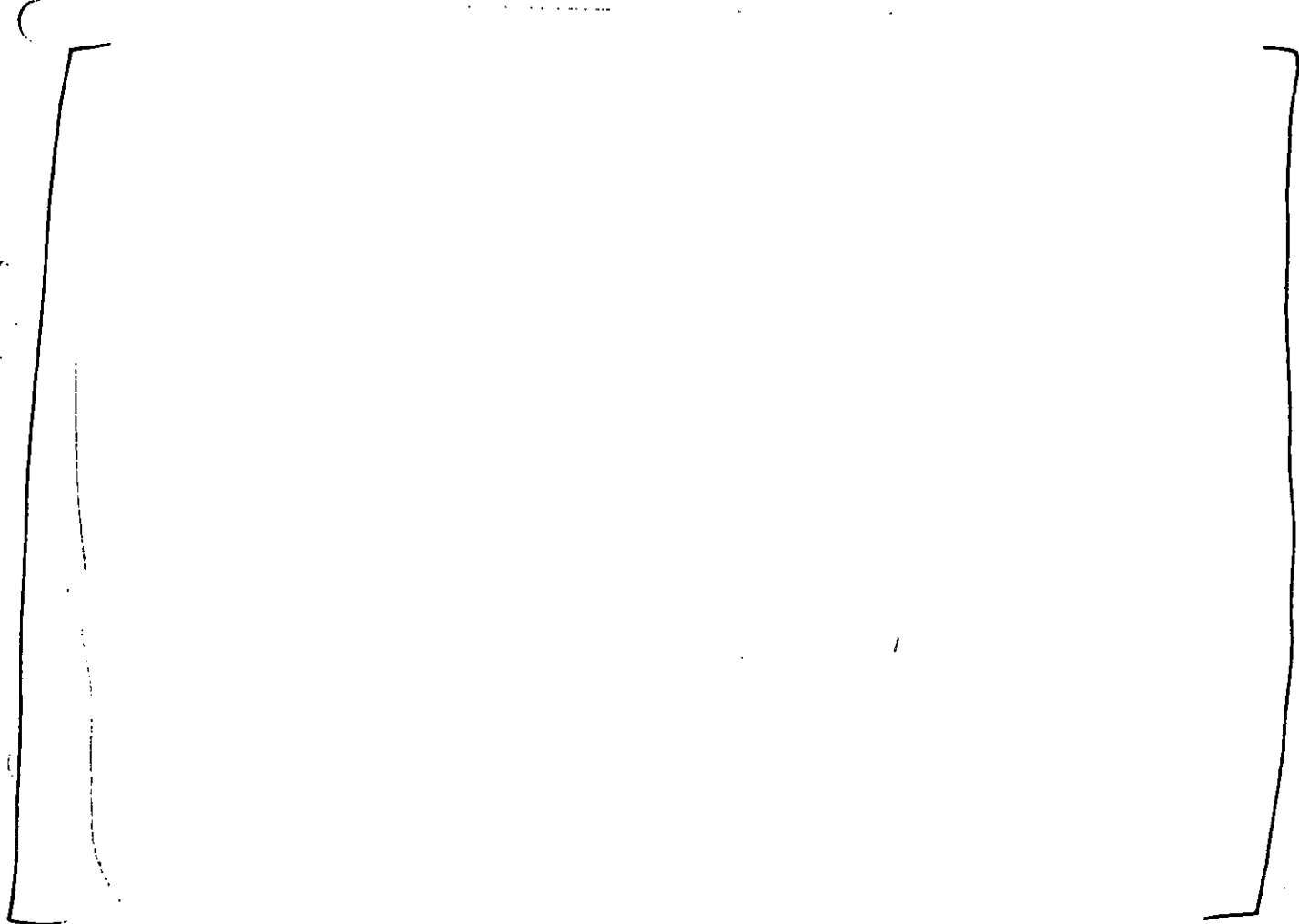
~~TOP SECRET~~

~~TOP SECRET~~



~~TOP SECRET~~

~~TOP SECRET~~



DGZs and Available Weapons

~~(TS)~~ (Gp 1) Preparation of the NSTL began with inspection of DLA's Target Data Inventory (TDI) which provided standardized target data in support of the requirements of the JCS and the unified and specified commands. From the TDI the National Strategic Target Data Base (NSTDB) and the National Strategic DGZ List (NSDL) were developed. The NSDL formed the basis for development of pre-planned

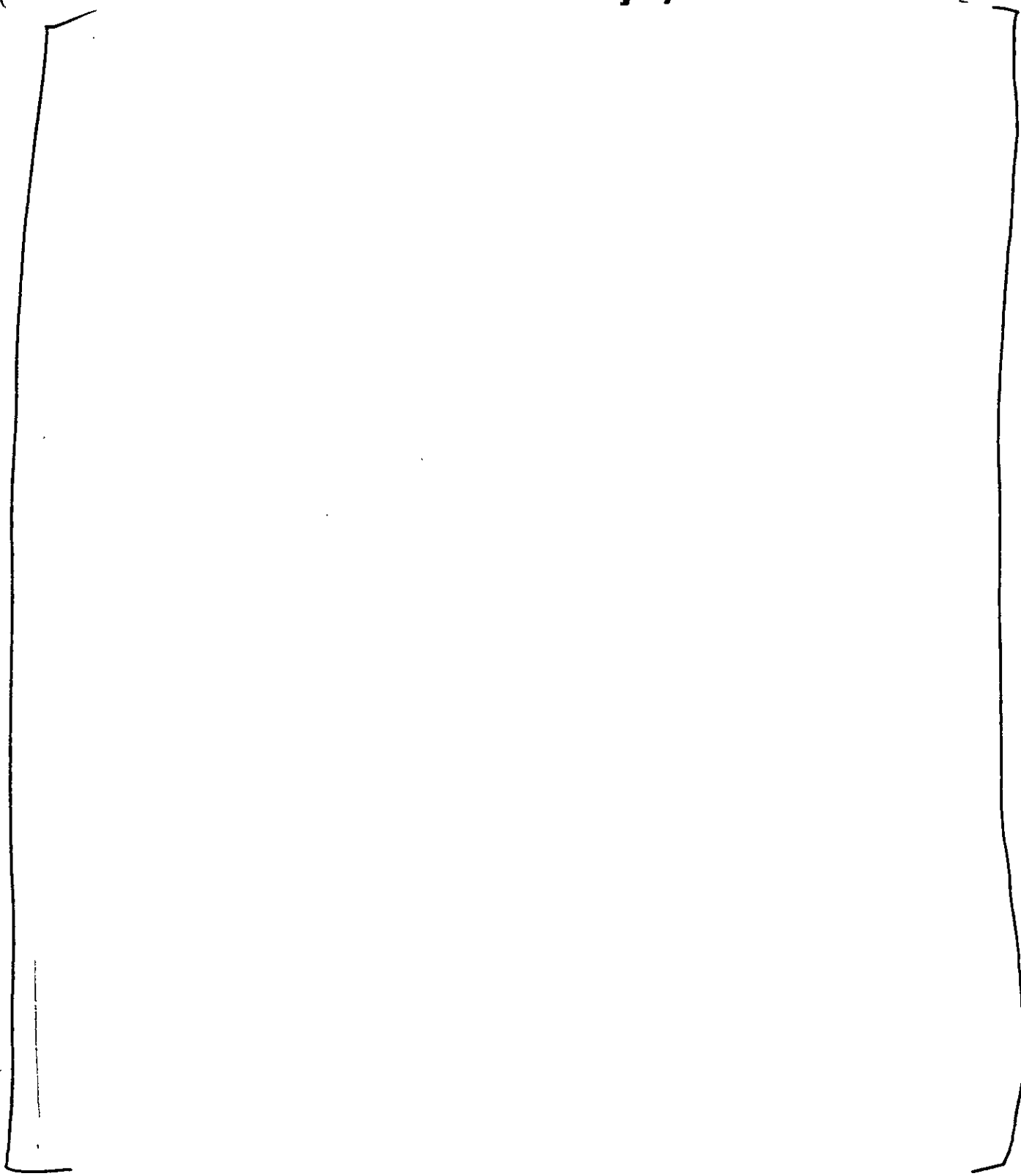
~~TOP SECRET~~

~~TOP SECRET~~

damage expectancy and application of available forces, leading to  
the end product, the NSTL, which was published as Annex C to the  
SIOP. ]

~~TOP SECRET~~

~~TOP SECRET~~



~~TOP SECRET~~

~~NOFORN~~

~~TOP SECRET~~

~~(TS)~~ (Gp 1) A change to the TDI proposed by JSTPS in FY-70 became a reality in FY-71.<sup>29</sup> This was identifying launch control facilities for missiles by their own encyclopedia numbers instead of using the letter "C" or "E" after the target category number, and was required for weapons application and damage assessment. The original request to DIA for these had been refused since all commands did not approve such a change. However, JSTPS considered this item of sufficient importance to pursue it further, and provided additional rationale which convinced all concerned commands that the change was necessary. After the concurrence of all commands was received, launch control facilities were given their own identity numbers before the end of FY-71.<sup>31</sup>

~~(S)~~ (Gp 1) In the spring of 1971 personnel from JSTPS visited the Aeronautical Chart and Information Center (ACIC), St. Louis, Missouri, to discuss the requirement for [1  
]2 These were required for preparation of missile target data for the newly introduced multiple reentry vehicles of the Air Force's Minuteman G and the Navy's Poseidon missiles. Involved were approximately 15,000 entries in the NSTDB, with an estimated net growth of about 170 entries and as many as 130 changes per month.<sup>33</sup> As this would necessarily be a

~~TOP SECRET~~



~~TOP SECRET~~

long term project, JSTPS agreed to furnish ACIC with priorities for specific sets of coordinates. This would insure that JSTPS would receive

\* (U) The GSP and TSP of SACEUR are defined in Appendix J.

~~TOP SECRET~~

~~TOP SECRET~~



~~TOP SECRET~~

~~TOP SECRET~~

Damage Expectancy

~~(TS)~~ (Gp 1) The results of application of SIOP weapons to targets were expressed in percentage as damage expectancy, and were developed as a product of the probability of arrival of the weapon and the probability of damage to the target.<sup>39</sup> As may be seen in Table 3 on the following page, there were increases in several target categories for damage, primarily as the result of improvement in missile reliability and accuracy.

Vulnerability of Missile Launch Facilities

~~(TS)~~ (Gp 1) The DIA supplied vulnerability numbers, i. e., index numbers indicating hardness, for SIOP targets. These were used when determining the degree of damage that could be accomplished by the various weapons

~~TOP SECRET~~

~~TOP SECRET~~

~~TOP SECRET~~

~~TOP SECRET~~

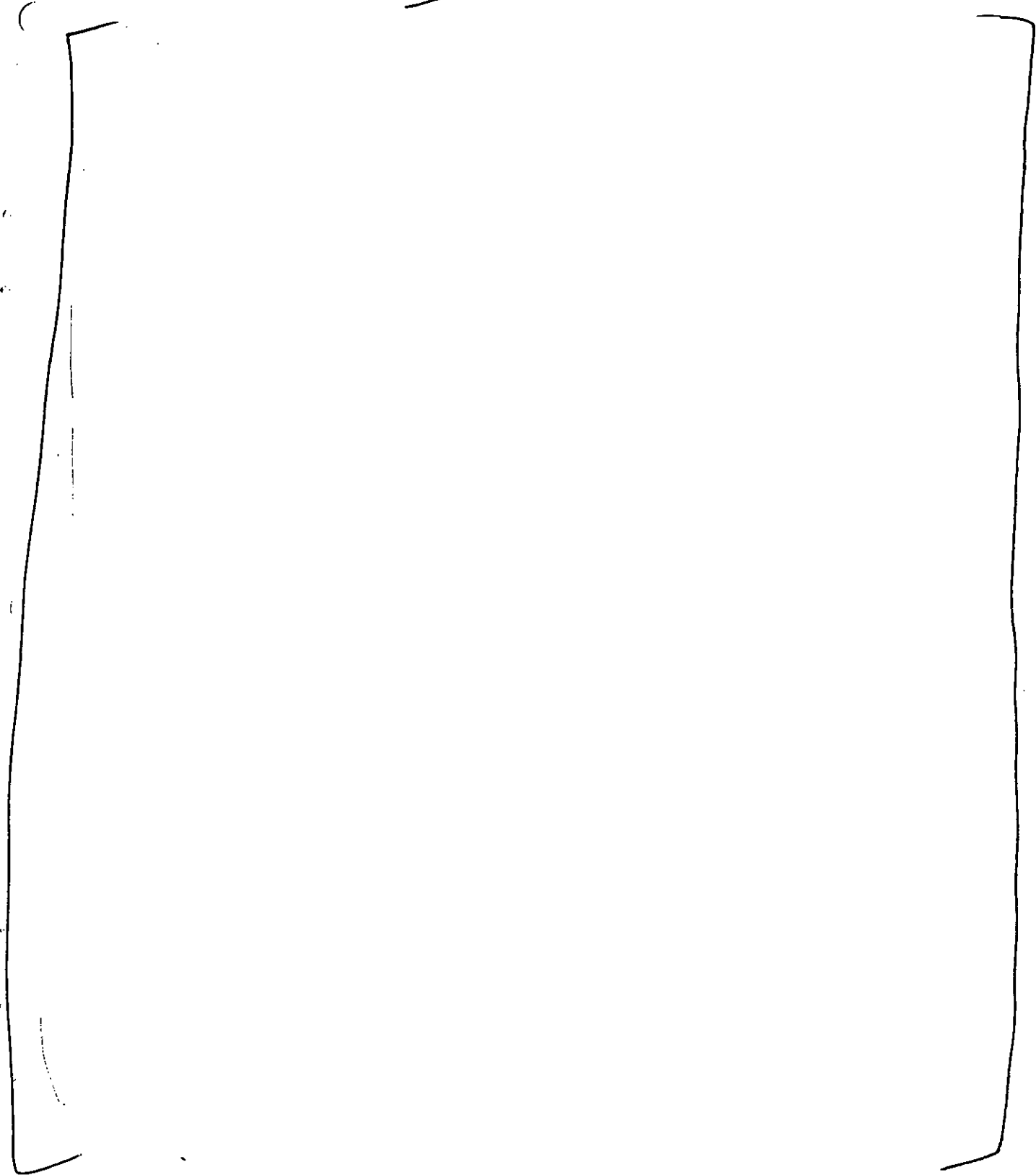
[ This latter category had been introduced early in 1970,<sup>41</sup> and study for its application on missile launch facilities continued into FY-71.

~~(TS)~~ (Gp 1) The JSTPS' Scientific Advisory Group (SAG) was asked to consider this subject on the basis of two-pronged attacks on missile sites, and to identify missile and silo features that were susceptible to nuclear effects for further study.]

] The DIA representative briefed the SAG on their studies which had included surveys of missile structures, techniques of missile installation, silo structures, and command control areas. They felt

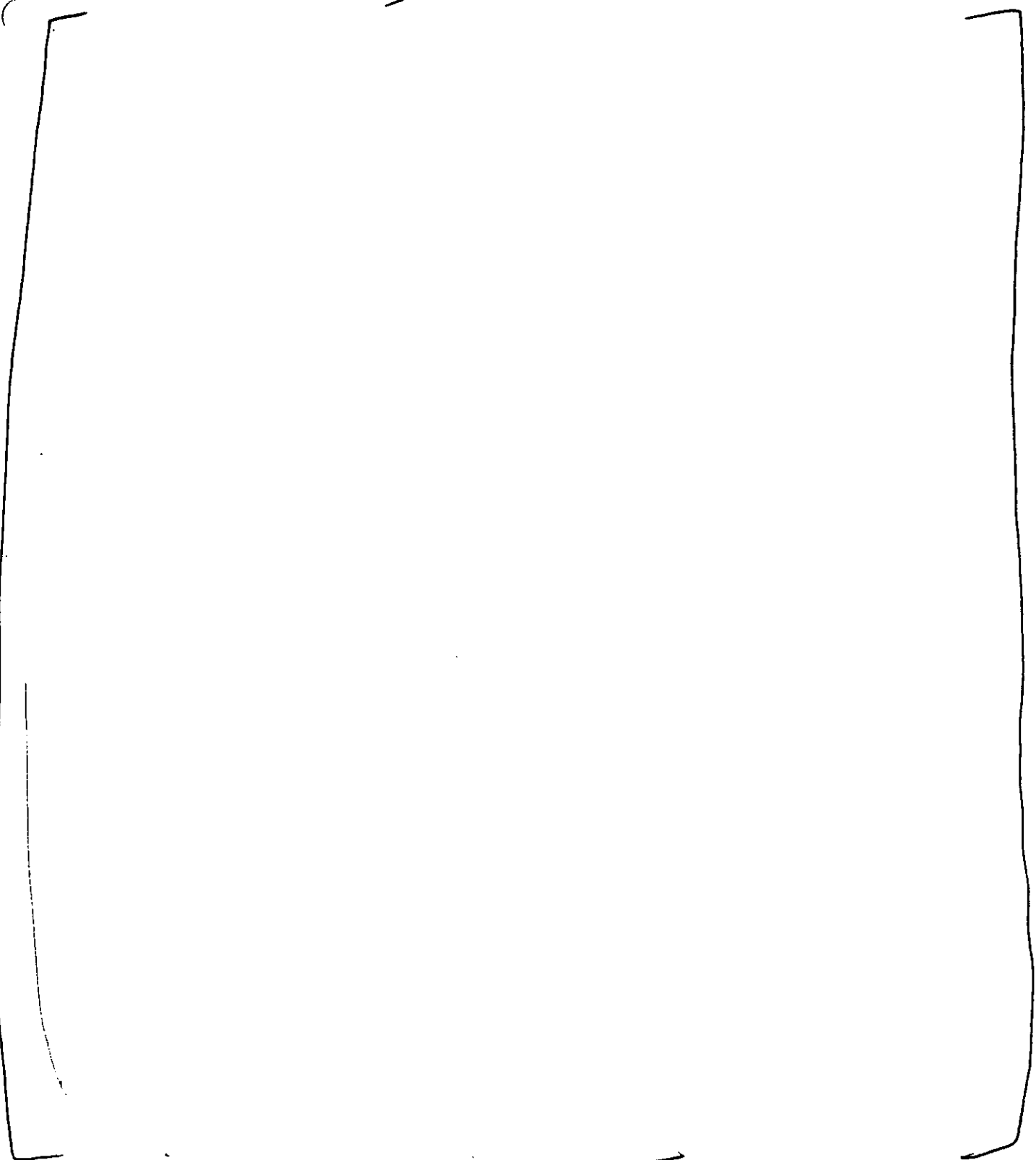
~~TOP SECRET~~

~~TOP SECRET~~



~~TOP SECRET~~

~~TOP SECRET~~



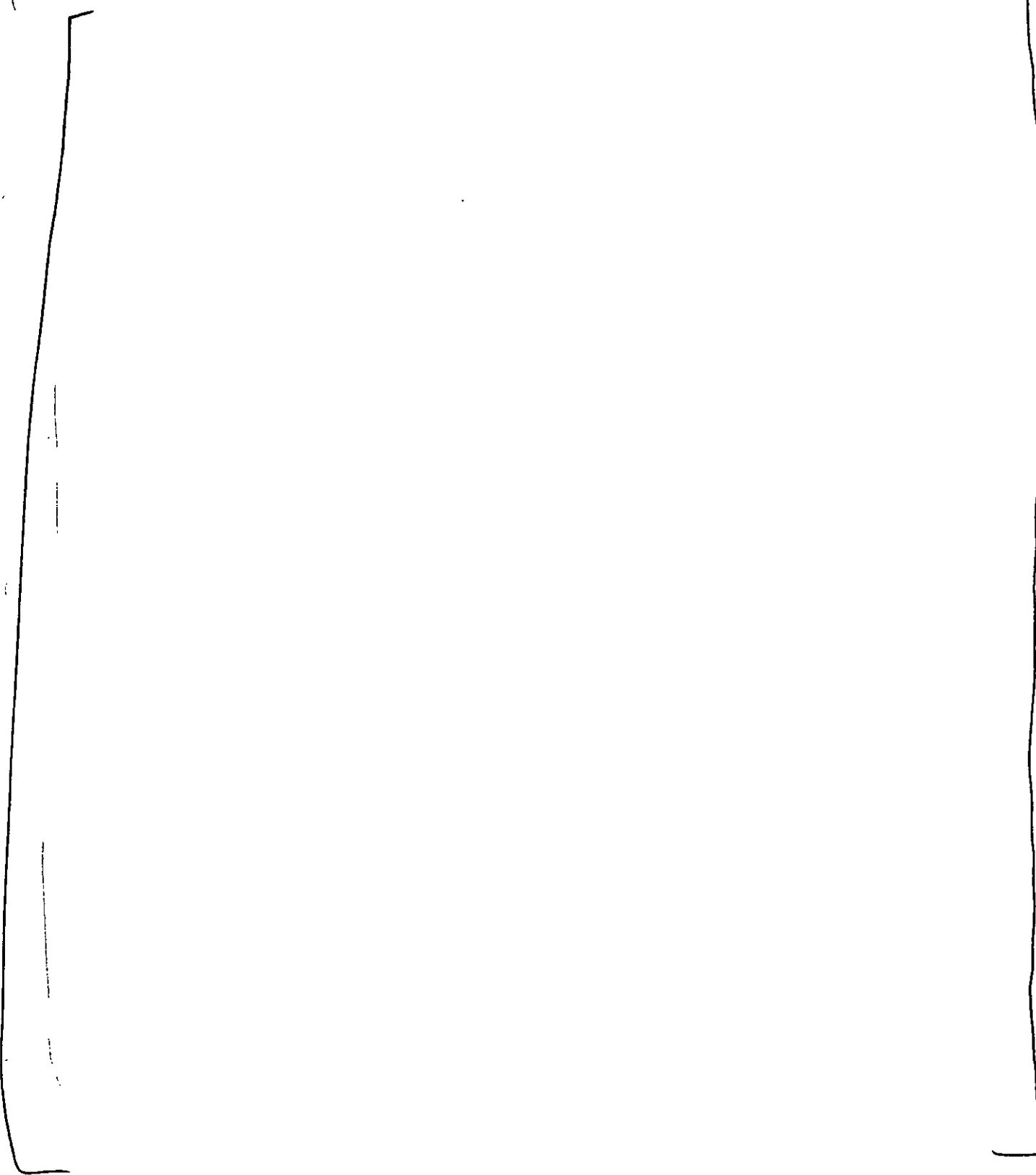
~~TOP SECRET~~

~~TOP SECRET~~

~~TOP SECRET~~

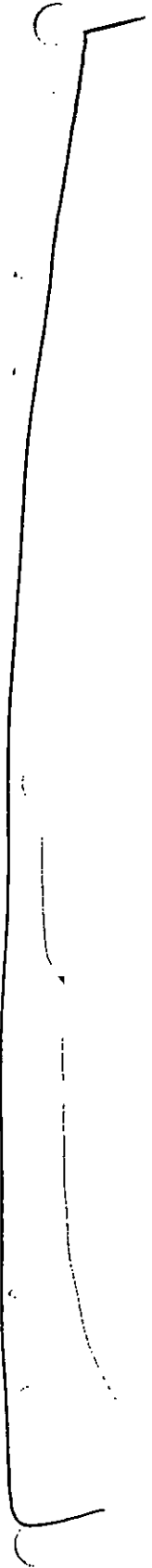


~~TOP SECRET~~



~~TOP SECRET~~

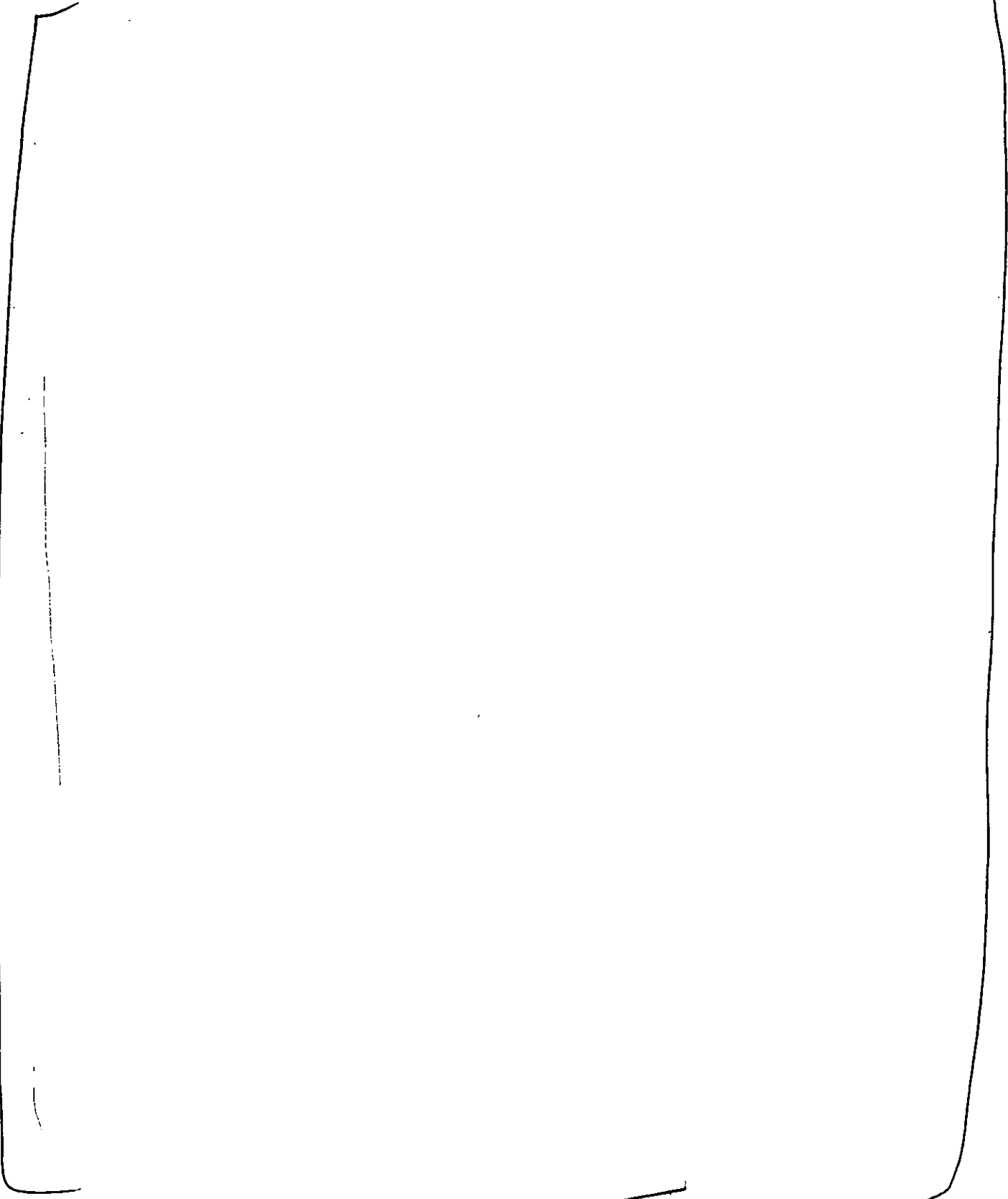
~~TOP SECRET~~



~~TOP SECRET~~



~~TOP SECRET~~



~~TOP SECRET~~

~~TOP SECRET~~

JSTPS and SAL Talks

(TS) (Gp 1) The JSTPS was asked by JCS to assist in preparation of data for use at the Strategic Arms Limitation Talks (SALT). In one request the JCS asked that a representative visit the joint staff to discuss studies on assessment of strategic force levels and to participate in analysis of strike capability under the SAL proposals being considered in the third phase of the talks.\*<sup>57</sup> Vice Admiral F. H. Michaelis, Deputy Director, JSTPS, then met with JCS representatives from the Plans and Policy Directorate (J-5) and the Studies, Analysis, and Gaming Agency (SAGA) in early November. It was decided that SAGA would carry out war gaming of the proposed force, and that JSTPS personnel would be available as consultants.<sup>58</sup> Another request was for data on bomber penetration

\* (U) The Strategic Arms Limitation Talks (SALT) were between the Soviet Union and the United States. Meetings have been held in Helsinki, Finland, and Vienna, Austria: 17 November - 22 December 1969, Helsinki; 16 Apr - 4 August 1970 - Vienna; 2 November - 18 December 1970, Helsinki; the fourth session started 15 March 1971 and had not ended by the closing date of this history, i. e. 30 June 1971.

~~TOP SECRET~~

~~TOP SECRET~~

(TS-NOFORN) (Gp 1) The first of these two items was cited by General Bruce K. Holloway, Director, JSTPS, when commenting on JCS requests to advise on force structure. Reference was also made to another message from JCS asking for comments on Polaris assignments to the Pacific area.<sup>60</sup> He stated that "questions of this type should be referred to the services and the CINCS (commanders-in-chief) who provide these forces. My task is to build an optimum war plan using nuclear forces committed by the individual CINCS." General Holloway said he felt that the effectiveness of the JSTPS over the years had been possible because it had operated within its charter, and had not become involved in force discussions.<sup>61</sup>

War Gaming

(S) (Gp 1) A major war gaming analysis was made of the SIOP to examine the ability of Revision I to achieve JCS objectives and the circumstances to which the plan is most sensitive.

All scenarios were played through a large-scale, detailed computer war game model which simulated the execution of each sortie and weapon contained in the

~~TOP SECRET~~

~~SECRET~~

opposing plans. The simulation results and analysis were presented in a comprehensive briefing to the JCS, CINCLANT, and CINCPAC beginning in June 1971.

(U) JCS asked JSTPS to furnish information on war gaming and related computer use. The data was needed by the General Accounting Office for use by the House of Representatives Committee on Appropriations.\*<sup>62</sup>

(U) JSTPS replied that SIOP war gaming was done by their SIOP Simulation and Analysis Branch in conjunction with the Strategic Air Command's Deputy Chief of Staff, Operations, using International Business Machine 7090, 1460, and 7094 computers. The first of

\* (U) War gaming was defined in the JCS message as "a simulation, through use of automatic data processing equipment, that may or may not include interruption for human decision-making, or a military operation involving two or more opposing forces engaged in conflict which is conducted using rules, data, and procedures designed to depict an actual or assumed real life battle situation without paying real world penalties."

~~SECRET~~

~~TOP SECRET~~

these was used on an average of 1450 hours; the second, an average of 850 hours, while the third was used occasionally, in the development, testing and production of a typical war game.<sup>63</sup>

Scientific Advisory Group Meetings

~~(TS)~~ (Gp 1) The Scientific Advisory Group (SAG), which had been formed in 1968, held three meetings in FY-71. Subjects considered at those meetings were as follows:<sup>64</sup>

Organization and Personnel

(U) The basic organizational structure of the JSTPS consisted of the Director, Deputy Director, four Senior Service members, a Secretariat, and two divisions (National Strategic Target List Division and Single Integrated Operational Plan Division). In addition, there were liaison representatives from CINCPAC, CINCLANT, CINCSAC, SACLANT, and SACEUR, including officers from four European North Atlantic Treaty Organization (NATO) countries. An organization chart

~~TOP SECRET~~



~~CONFIDENTIAL~~

of the JSTPS may be found on the following page.

~~(S)~~ (Gp 3) Organizational changes for FY-71 consisted of the forming of the Integral Analysis Branch and the Computer Programs Branch under the NSTL Division. The first of these had the function of developing, maintaining, and publishing analytical studies associated with SIOP Preplanned Damage Expectancy and SIOP force penetration. The second was to develop and maintain computer programs and data for compilation of the NSTL, NSDL, NSRL, and SIOP Analysis Summary tables and to perform other computer work as required. This Branch had three sections: Data Base, Damage Analysis and Operations.<sup>65</sup>

~~(S)~~ (Gp 3) The JCS manpower survey team that worked with the JSTPS on the above reorganization also recommended deletion of the senior service member positions, with two related administrative spaces. This was to be offset by establishment of a position for a chief of staff, with an executive officer and secretary. JSTPS did not concur with this as it considered essential the retention of the service members as service oriented advisors for JSTPS and service connected matters. It was not felt that the chief of staff position was required as it would be but another layer of command between the two division chiefs and the director/deputy director. The JCS agreed with JSTPS

~~CONFIDENTIAL~~

# JOINT STRATEGIC TARGET PLANNING STAFF

THE JOINT CHIEFS OF STAFF

OFFICE OF THE DIRECTOR

DIRECTOR

DEPUTY DIRECTOR

SUPREME ALLIED COMMAND REPRESENTATIVES

EUROPE (SACEUR)

ATLANTIC (SACLANT)

UNIFIED & SPECIFIED COMMAND REPS

ATLANTIC COMMAND (CINCLANT)

PACIFIC COMMAND (CINCPAC)

STRATEGIC AIR COMMAND (CINCSAC)

ARMY MEMBER

NAVY MEMBER

AIR FORCE MEMBER

USMC MEMBER

SECRETARIAT

PLANNING STAFF

NATIONAL STRATEGIC TARGET LIST DIVISION (NSTL)

SINGLE INTEGRATED OPERATIONAL PLAN DIVISION (SIOP)

PROGRAMS BRANCH

DATA BASE SECTION

DAMAGE ANALYSIS SECTION

OPERATIONS SECTION

TARGET BRANCH

DEVELOPMENTS

SYSTEMS

WEAPONS EFFECTS

ESTIMATES BRANCH

OFFENSIVE ESTIMATES

DEFENSE ANALYSIS

PENETRATION ANAL.

INTEGRAL ANALYSIS BRANCH

SIOP SIMULATION & ANALYSIS BRANCH

STRATEGIC ANALYSIS

TECHNICAL ANALYSIS

SIMULATION

ADMINISTRATIVE

TACTICS BRANCH

CURRENT TACTICS

PENETRATION

ADMINISTRATIVE

COMBAT PLANS BRANCH

CURRENT PLANS

FORCE APPLICATION

PRODUCTION & MAINT

PROGRAM MGMT SEC

ADMINISTRATIVE

RECONNAISSANCE BRANCH

SPECIAL ACTIVITIES BRANCH

~~CONFIDENTIAL~~

and did not approve the change.<sup>66</sup>

~~(C)~~ (Gp 3) Manpower authorizations increased by 32, from 292 in FY-70 to 324 in FY-71. Allocation of personnel among the various services changed as may be seen in the table at the top of the following page.<sup>67</sup>

(U) The reduction from 12 to 6 "no service specified" positions will be seen in the table. Those authorizations had been established by JCS guidance in 1961 in the NSTL Division to provide for placing the best qualified individuals in positions at division, branch and section supervisory levels. At the time of this survey it was considered that the section supervisors should be eliminated from this category as it would ease Service programming problems and insure availability of qualified programmed replacements on a timely basis.<sup>68</sup>

(U) The Manpower Survey Team also reviewed the "dual status" designation which applied to SAC personnel who performed additional duty with the JSTPS, and recommended that the next manpower survey of JSTPS be augmented by appropriate simultaneous Air Force addressal of SAC manning in support of JSTPS.<sup>69</sup>

~~CONFIDENTIAL~~

~~TOP SECRET~~

| (U) TABLE 5 <sup>67</sup>      |       |          |        |
|--------------------------------|-------|----------|--------|
| JSTPS PERSONNEL CHANGES, FY-71 |       |          |        |
| Service                        | Rev G | Revs H/I | Change |
| Air Force                      |       |          |        |
| Single Status                  | 70    | 79       | + 9    |
| Dual Status                    | 134   | 157      | +23    |
| Army                           | 19    | 22       | + 3    |
| Marine                         | 3     | 4        | + 1    |
| Navy                           | 54    | 56       | + 2    |
| No Service Specified           | 12    | 6        | - 6    |
| Total                          | 292   | 324      | +32    |
| Officers                       | 194   | 219      | +25    |
| Enlisted                       | 73    | 80       | + 7    |
| Civilians                      | 25    | 25       | 0      |

~~(TS)~~ (Gp 1) When the JCS reviewed the manpower survey they recognized the expanding manpower requirements to support targeting activities associated with the Minuteman G and the Poseidon missiles that had been introduced in SIOP-4, Revision H and I, respectively. Thus, they stated that this could "result in a continuing need, not fully defined at present, for additional personnel in future years."<sup>70</sup>

~~TOP SECRET~~

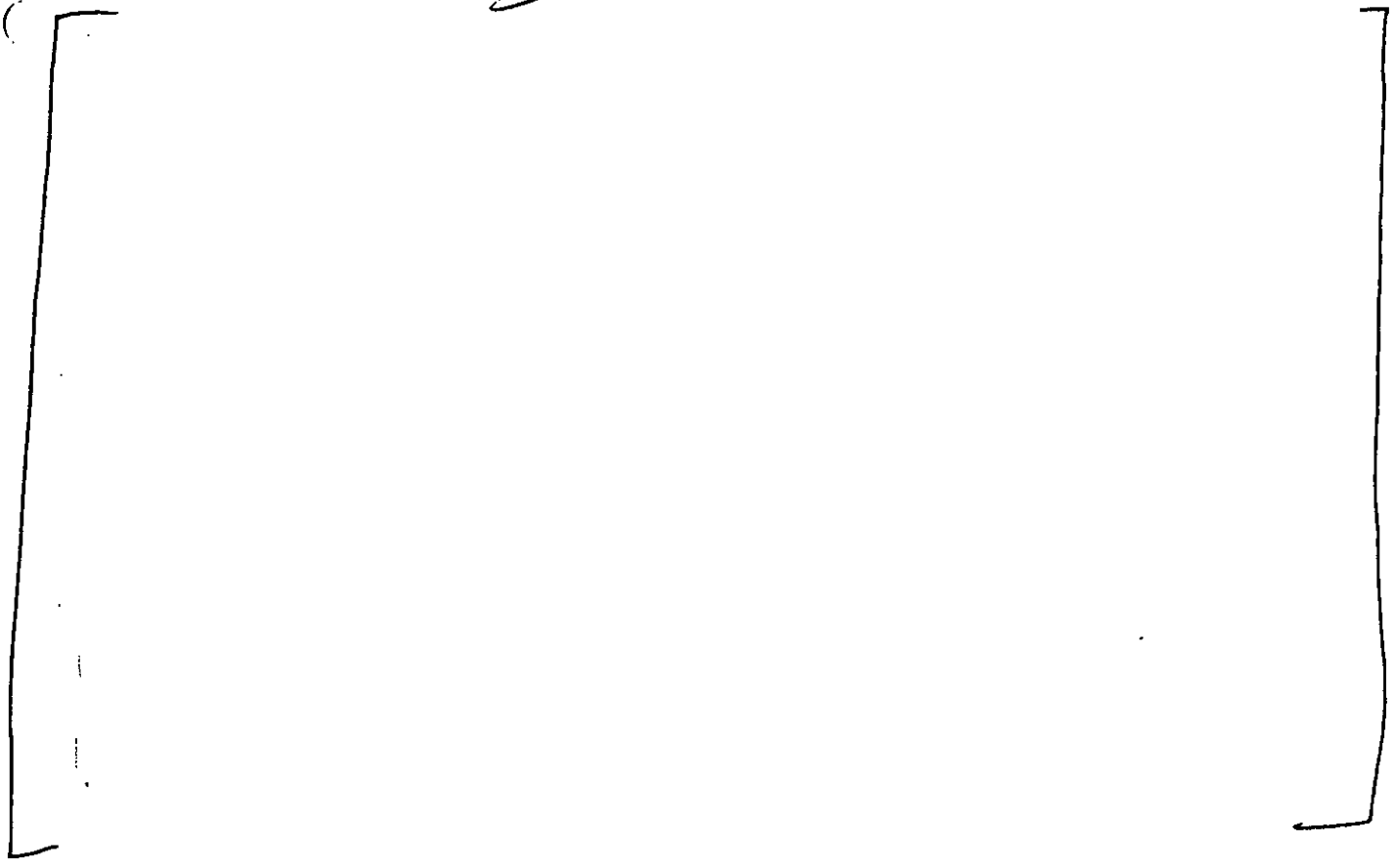
~~TOP SECRET~~

(U) General Bruce K. Holloway remained as Director, JSTPS, and Vice Admiral F. H. Michaelis, as Deputy Director. However, there were four key personnel changes. Capt. E. R. Barrett, US Navy Senior Service Member, was replaced by Capt. W. M. Adams, Jr., in September 1970. Three of the five commands changed liaison officers. CINCPAC's Capt. C. K. Ruiz, USN, was replaced by Capt. L. B. Lampman; CINCSAC's Maj Gen. S. F. Martin, USAF left and Maj. Gen. P. N. Bacalis, USAF, replaced him; and SACEUR's Brig. Gen. J. Myers, USAF, was replaced by Brig. Gen. D. L. Carter. A roster of key personnel is included as Appendix H.

Summary

~~TOP SECRET~~

~~TOP SECRET~~



~~TOP SECRET~~

## GLOSSARY

|          |   |
|----------|---|
| AAA      | Anti-Aircraft Artillery                           |
| ABM      | Anti-Ballistic Missile                            |
| ACIC     | Aeronautical Chart and Information Center         |
| CEP      | Circular Error Probable                           |
| CINC     | Commander-in-Chief                                |
| CINCEUR  | Commander-in-Chief, Europe                        |
| CINCLANT | Commander-in-Chief, Atlantic                      |
| CINCPAC  | Commander-in-Chief, Pacific                       |
| CINCSAC  | Commander-in-Chief, Strategic Air Command         |
| CRP      | Coordinated Reconnaissance Plan                   |
| DGZ      | Desired Ground Zero                               |
| DIA      | Defense Intelligence Agency                       |
| FBM      | Fleet Ballistic Missile                           |
| FY       | Fiscal Year                                       |
| GSP      | General Strike Plan                               |
| ICBM     | Intercontinental Ballistic Missile                |
| IRBM     | Intermediate Range Ballistic Missile              |
| JCS      | Joint Chiefs of Staff                             |
| JSTPS    | Joint Strategic Target Planning Staff             |
| MIRV     | Multiple Independently Targetable Reentry Vehicle |
| NSDL     | National Strategic DGZ List                       |
| NSRL     | National Strategic Reconnaissance List            |
| NSTAP    | National Strategic Targeting and Attack Policy    |
| NSTDB    | National Strategic Target Data Base               |
| NSTL     | National Strategic Target List                    |
| PLS      | Pre-Launch Survivability                          |
| PSP      | Priority Strike Program                           |
| RAP      | Route Assessment Program                          |
| RISOP    | Red Integrated Strategic Offensive Plan           |

|           |   |
|-----------|---|
| SAC       | Strategic Air Command                       |
| SACEUR    | Supreme Allied Commander Europe             |
| SAG       | Scientific Advisory Group                   |
| SAGA      | Studies, Analysis, and Gaming Agency        |
| SIOP      | Single Integrated Operational Plan          |
| SLBM      | Submarine Launched Ballistic Missile        |
| SSBN      | Submarine Ballistic Missile Nuclear Powered |
| TDI       | Target Data Inventory                       |
| TSP       | Tactical Strike Program                     |
| USCINCEUR | United States Commander in Chief, Europe    |
| USN       | United States Navy                          |
| WSR       | Weapon System Reliability                   |



## NOTES

- 1 Doc (TS), JCS, SM-1825-64, Capt. J. E. Mansfield, JCS to JSTPS, et al, "Guidance for the Preparation of the Single Integrated Operational Plan (SIOP) (U)," 5 Dec 64 (70-J-0771).
- 2 Msg (TS), JCS-5705, J-5 to DSTP, "Review of National Strategic Targeting and Attack Policy (U)," 12/1535Z Nov 70.
- 3 Doc (TS), DIA, "Definition of Nuclear Damage," Supplement to AP-550/1-2-1NT, DIA "Physical Vulnerability Handbook - Nuclear Weapons (U), ref. in doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP-4H (U)," 1 Jun 70, p. 74.
- 4 Msg (TS), JSTPS to JCS (J-5), "Review of National Strategic Targeting and Attack Policy (U)," 25/1910Z Nov 70 (70-J-2023).
- 5 Memo (TS), Capt. J. E. Mansfield to C/S Army, et al, "Guidance for the Preparation of the Single Integrated Operational Plan (SIOP) (U)," 5 Dec 64 (70-J-0771), App. A, p. 2.
- 6 Memo (TS) Vice Adm. F. H. Michaelis, JSTPS to JP, JL, "Review of the NSTAP (U)," 16 Nov 70 (70-J-1985).
- 7 Memo (TS), Maj. Gen. W. R. MacDonald, JSTPS (NSTL), Brig. Gen. Robert E. Huyser, JSTPS (SIOP), to JDD, "Review of NSTAP (U)," 24 Nov 70 (70-J-2022).
- 8 Memo (TS), Vice Adm. F. H. Michaelis, JSTPS to JP, JL, "Review of NSTAP (U)," 16 Nov 70 (70-J-1985).
- 9 Memo (TS), Maj. Gen. W. R. MacDonald, JSTPS (NSTL), Brig. Gen. Robert E. Huyser, JSTPS (SIOP), to JDD, "Review of NSTAP (U)," 24 Nov 70 (70-J-2022).
- 10 Memo (TS), Capt. J. E. Mansfield to C/S Army, et al, "Guidance for the Preparation of the Single Integrated Operational Plan (SIOP) (U)," 5 Dec 64 (70-J-0771).

## NOTES

- 11 Memo (TS), Vice Adm. F. H. Michaelis, JSTPS to JP, JL, "Review of NSTAP (U)," 16 Nov 70 (70-J-1985).
- 12 Memo (TS), Maj. Gen. W. R. MacDonald, JSTPS (NSTL), Brig. Gen. Robert E. Huyser, JSTPS (SIOP) to JDD, "Review of NSTAP (U)," 24 Nov 70 (70-J-0771).
- 13 Memo (TS), Capt. J. E. Mansfield to C/S Army, et al, "Guidance for the Preparation of the Single Integrated Operational Plan (SIOP) (U)," 5 Dec 64 (70-J-0771), pp. 11, 11a.
- 14 Memo (TS), Vice Adm. F. H. Michaelis, JSTPS to JP, JL, "Review of NSTAP (U)," 16 Nov 70 (70-J-1985).
- 15 Memo (TS), Capt. J. E. Mansfield to C/S Army, et al, "Guidance for the Preparation of the Single Integrated Operational Plan. (SIOP) (U)," 5 Dec 64 (70-J-0771).
- 16 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0982), p. 20.
- 17 Memo (S), Brig. Gen. George J. Eade, JSTPS (JPT) to SACEUR Representative, "Destruction of Soviet AWACS Aircraft (U)," 24 Feb 69.
- 18 Msg (TS), JSTPS to JCS (J-4), JL-2067, "B-52 Penetration Values (U), 05/1815 Dec 70 (70-J-2067).
- 19 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0982), p. 27.
- 20 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), pp. 16-22.
- 21 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4G (U)," 1 Dec 69 (69-B-2503), p. 9; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0982), p. 9; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 10.

NOTES

- 22 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4G (U)," 1 Dec 69 (69-B-2503), p. 10; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0982), p. 10, 11; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 11, 13.
- 23 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4G (U)," 1 Dec 69 (69-B-2503), p. 32; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0982), p. 34; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 40.
- 24 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0982), p. 73.
- 25 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4H (U)," 1 Jun 70 (70-B-0932), p. 84; doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 91.
- 26 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 90.
- 27 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 81.
- 28 Doc (TS-NF-FRD), JSTPS, "Presentation Briefing Report, SIOP 4H (U)," Vols I, II, 20 Jul 70 (70-J-1300); doc (TS-NF-FRD), JSTPS, "Presentation Briefing Report, SIOP 4I (U)," Vols I, II, 21 Jan 71 (70-J-2057).
- 29 Hist (TS-RD-NF), JSTPS, "SIOP-4 Revisions F and G (U)," (70-J-0680), pp. 10-11.

## NOTES

- 30 Hist (TS-RD-NF), JSTPS, "SIOP-4 Revisions F and G (U)," (70-J-0680), p. 15; memo (TS-NF-FRD), JSTPS (JP) to JS, "Information for the SAC Historian to use in preparation of the SIOP-4 History (U)," 6 Jul 70 (70-J-1395, App. D); memo (TS-NF-FRD), JSTPS (JP) to JS, "Information for the SAC Historian to Use in Preparation of the SIOP-4 History (U)," 19 Jan 71 (71-J-0064), App. E; memo (TS), JSTPS (JL) to JS, "Information for the SAC Historian to Use in Preparation of the SIOP-4 History (U)," 2 Sep 70 (70-J-1966), App. F; memo (TS), JSTPS (JLA) to JS, "Information for the SAC Historian to Use in Preparation of the SIOP-4 History (U)", 12 Apr 71 (71-J-0681), App. G.
- 31 Memo (TS), Maj. Gen. W. R. MacDonald, JSTPS (JLTD) to SAC (IN), "ICBM Launch Control Facilities (U)," 22 Oct 70 (70-J-1841); msg (TS), Brig. Gen. H. Cordes, SAC (IN) to DIA, "ICBM Launch Control Facilities (U)," 03/2125Z Nov 70 (70-B-2511).
- 32 Msg (U); JSTPS (JDD-304) to JCS, "Activity Report for Week Ending 17 Apr 71," 23/2002 Apr 71.
- 33 Msg (S), JSTPS (LF/IN-307) to DIA (MC-4), "Missile Target Data (MTD) (U)," 26/2030 Apr 71.
- 34 Invw (S), M. E. Hayes, Historian, with Lt. Col. J. Joppa, JSTPS (JLTD), 10 Dec 71.
- 35 Msg (S-NF), JSTPS (JL-0191) to JCS (J-3), "SIOP Targeting (U)," 09/1930Z Apr 70.
- 36 Msg (S), JCS-5605 (J-3) to DSTP, "Coordination of the SIOP and SACEUR's General Strike Plan (GSP) (U)," 22/2345Z Jul 70.
- 37 Msg (TS-NF), JSTPS to JCS (J-3), "Coordination of the SIOP and SACEUR General Strike Plan (GSP) (U)," 05/2107Z Aug 70 (70-J-1508).

## NOTES

- 38 Doc (TS-NF-FRD), JSTPS, "Presentation Briefing Report, SIOP-4H (U)," Vols, I, II, 20 Jul 70 (70-J-1300); doc (TS-NF-FRD), JSTPS, "Presentation Briefing Report, SIOP-4I (U)," Vols I, II, 21 Jan 71 (70-J-2507); doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP-4H (U)," 1 Jun 70 (70-B-0982); doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510).
- 39 Doc (TS-NF-FRD), JSTPS, "Planning Manual for SIOP 4I (U)," 1 Dec 70 (70-B-2510), p. 43.
- 40 Hist (TS-RD-NF), JSTPS, Revisions F/G, App. D (71-J-0680); memo (TS), Capt. R. G. Bagby, JSTPS (NSTL) to JS, "Information for the SAC Historian to Use in Preparation of the SIOP-4 History," (U), 9 Sep 70 (70-J-1666); memo (TS), Capt. R. G. Bagby, JSTPS (NSTL) to JS, "Information for the SAC Historian to Use in Preparation of the SIOP-4 History (U), 12 Apr 71, App F.
- 41 Hist (TS-RD-NF), JSTPS, Revisions F/G, App. L (71-J-0680).
- 42 Doc (TS-NF), "Minutes of the Ninth JSTPS Scientific Advisory Group Meeting (U), 12-13 Oct 70 (7-J-2111).
- 43 Ibid.
- 44 Msg (S), JSTPS (JLTW) to DIA (DT), "Short Term Damage (U)," 02/2200Z Apr 71.
- 45 Msg (S), JSTPS (JLTS-212) to DIA (DI-7), "Target Intelligence Conference for 1971 (U)," 25/2315Z Mar 71; Invw M. E. Hayes, Historian, with Maj L. D. Clawson, JSTPS (JLTD), 17 Dec 71.
- 46 Hist (TS-RD-NF), JSTPS, "SIOP-4 Revisions F and G (U)," (70-J-0680).
- 47 Doc (TS-FRD-NF), "JSTPS Presentation Briefing Report, SIOP-4I (U), 21 Jan 71 (70-J-1300).

## NOTES

- 48           Invw (TS), M. E. Hayes, Historian with Lt. Cdr. J. S. Lierman, JSTPS (JLTW), 21 Dec 71.
- 49           Doc (TS-RD-NF), "Joint Strategic Capabilities Plan, FY-71," (U) Annex C, "Nuclear," 7 Apr 70 (70-B-0866)
- 50           Doc (TS-FRD-NF), "JSTPS Presentation Briefing Report, SIOP-4H (U)," 20 Jul 70 (70-J-1300); doc (TS-FRD-NF), "JSTPS Presentation Briefing Report, SIOP-4I (U)," 21 Jan 71 (70-J-1300).
- 51           Ibid.
- 52           Invw (TS), M. E. Hayes, Historian, with Lt Cdr. J. S. Lierman, JSTPS (JLTW), 22 Dec 71.
- 53           Msg (S), JCS-6214 to DSTP, "Complex-Based National Strategic Reconnaissance List (U)," 30/0041Z Jul 70.
- 54           Msg (TS), JCS-4181 (J-3) to USCINCEUR, "CRP Source Data Submission (U)," 17/1710Z Feb 71 (71-J-0234).
- 55           Invw (TS), M. E. Hayes, Historian, with Col R. W. Smith, JSTPS (JPR), 28 Dec 71.
- 56           Source: JSTPS (JPR).
- 57           Msg (TS), JCS (J-5) 4809 to DSTP, "SAL Negotiations," (U), 30/1704Z Oct 70 (70-J-1878).
- 58           Memo (TS), Maj. James A. Larking, JCS (SAGA) to Secretary, SAGA-178-70, "Structuring of the U.S. Strategic Forces Under a SAL Agreement," 17 Nov 70 (70-J-2050).
- 59           Msg (TS), JCS (J-5) 7074, "B-52 Penetration Values (U)," 02/0046Z Dec 70 (70-J-2060); msg (TS), JSTPS to JCS (J-5), "B-52 Penetration Values (U)," 05/1815 Dec 70 (70-J-2067).

- 60           Msg (TS), JCS (J-5) 6846 to JSTPS, PACOM, "PACOM Strategic Nuclear Resources," 28/0031Z Nov 70 (70-J-2047).
- 61           Msg (S), JSTPS (JPPF)0830 to JCS (J-5), "Comments on Strategic Forces Considerations (U)," 17/1430 Dec 70.
- 62           Msg (U), JCS (SAGA) 9104 to JSTPS, et al, "Study of the Management of Automatic Data Processing Equipment," 03/1436Z Sep 70.
- 63           Msg (U), JSTPS-1383 (JPS) to JCS, "War Gaming in JSTPS," 08/1420Z Sep 70.
- 64           Doc (TS-FRD-NF), "Minutes of Ninth JSTPS Scientific Advisory Group Meeting (U)," 12-13 Oct 70 (70-J-2111); doc (TS-RD-NF), "Minutes of Tenth JSTPS Scientific Advisory Group Meeting," (U), 24-25 Feb 71 (71-J-0718); doc (TS-RD-NF), "Minutes of Eleventh JSTPS Scientific Advisory Group Meeting (U)," 9, 10, 11 Jun 71 (71-J-1062).
- 65           Rpt (U), "Joint Chiefs of Staff Manpower Survey of Joint Strategic Target Planning Staff," 13-21 Nov 69; ltr (U), SM-163-70, Brig. Gen. Roy C. Crompton, JCS to C/S, Army, et al, "JCS Manpower Survey of the Joint Strategic Target Planning Staff," 4 Mar 70; doc (C), "Joint Manpower Program 1971 (JTD #11), JSTPS," (U), 4 Mar 70.
- 66           Ibid.
- 67           Hist (TS-RD-NF), JSTPS, Revisions F/G p. 31 (71-J-0680); doc (C), "Joint Manpower Program 1971 (JTD #11), JSTPS," (U), 4 Mar 70.
- 68           Rpt (U), "Joint Chiefs of Staff Manpower Survey of Joint Strategic Target Planning Staff," 13-21 Nov 69.
- 69           Ibid.
- 70           Ltr (U), SM-163-70, Brig. Gen. Roy C. Crompton, JCS to C/S, Army, et al, "JCS Manpower Survey of the Joint Strategic Target Planning Staff," 4 Mar 70.

## DISTRIBUTION

JCS 5

JSTPS 3

JS (1)

JP (1)

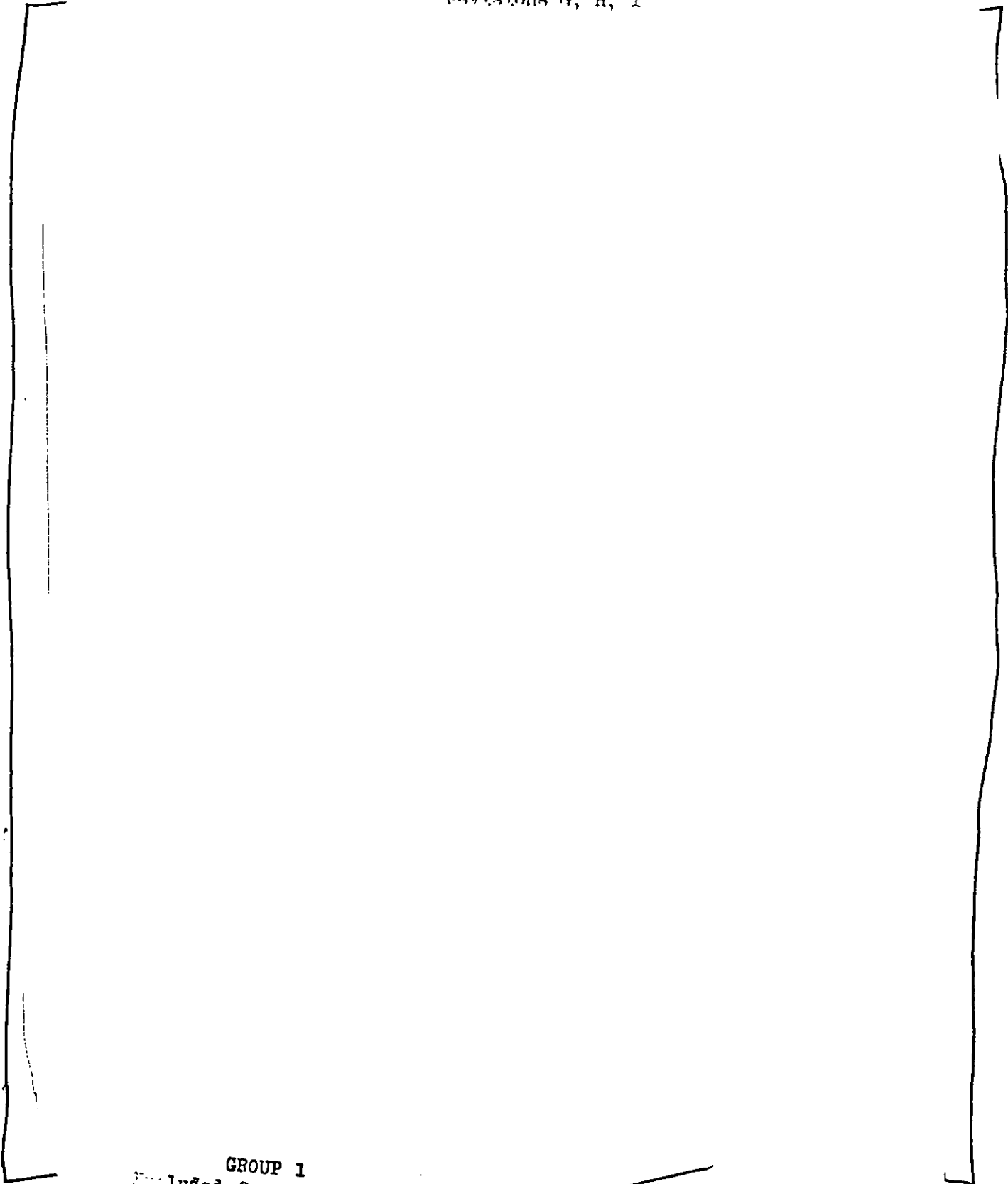
JL (1)

SAC (HO) 1



~~TOP SECRET~~

PRE-LAUNCH SURVIVABILITY  
Revisions G, H, I



GROUP 1  
Excluded from automatic  
downgrading and  
declassification

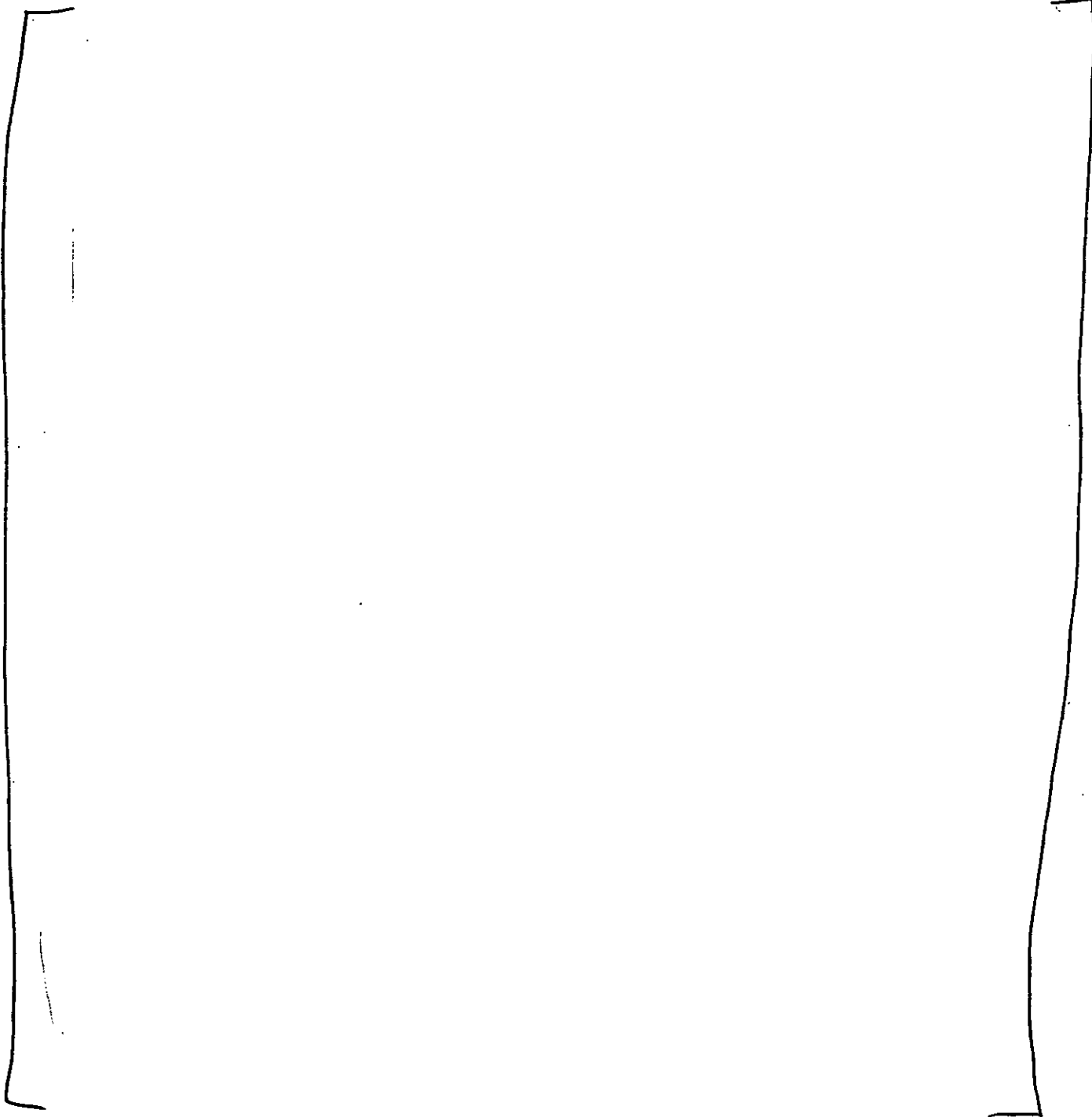
~~TOP SECRET~~

RESTRICTED DATA  
ATOMIC ENERGY ACT 1954

~~TOP SECRET~~

APPENDIX

WEAPON SYSTEM RELIABILITY (WSR)



RESTRICTED DATA  
ATOMIC ENERGY ACT 1954

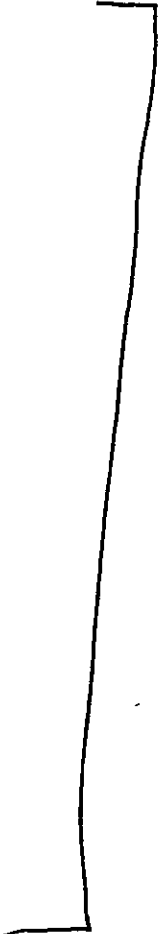
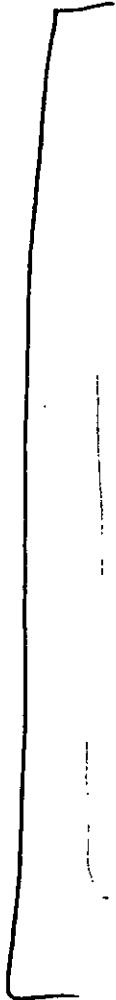
~~TOP SECRET~~

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

~~TOP SECRET~~

APPENDIX "C"

MISSILE WEAPON SYSTEM ACCURACY  
Circular Error Probable (CEP)



RESTRICTED DATA  
ATOMIC ENERGY ACT 1954

~~TOP SECRET~~

GROUP 1  
Excluded from automatic  
downgrading and  
declassification



~~TOP SECRET~~  
THE JOINT CHIEFS OF STAFF  
JOINT STRATEGIC TARGET PLANNING STAFF  
OFFUTT AIR FORCE BASE  
NEBRASKA  
68113

REVISION 2

6 JUL 1970

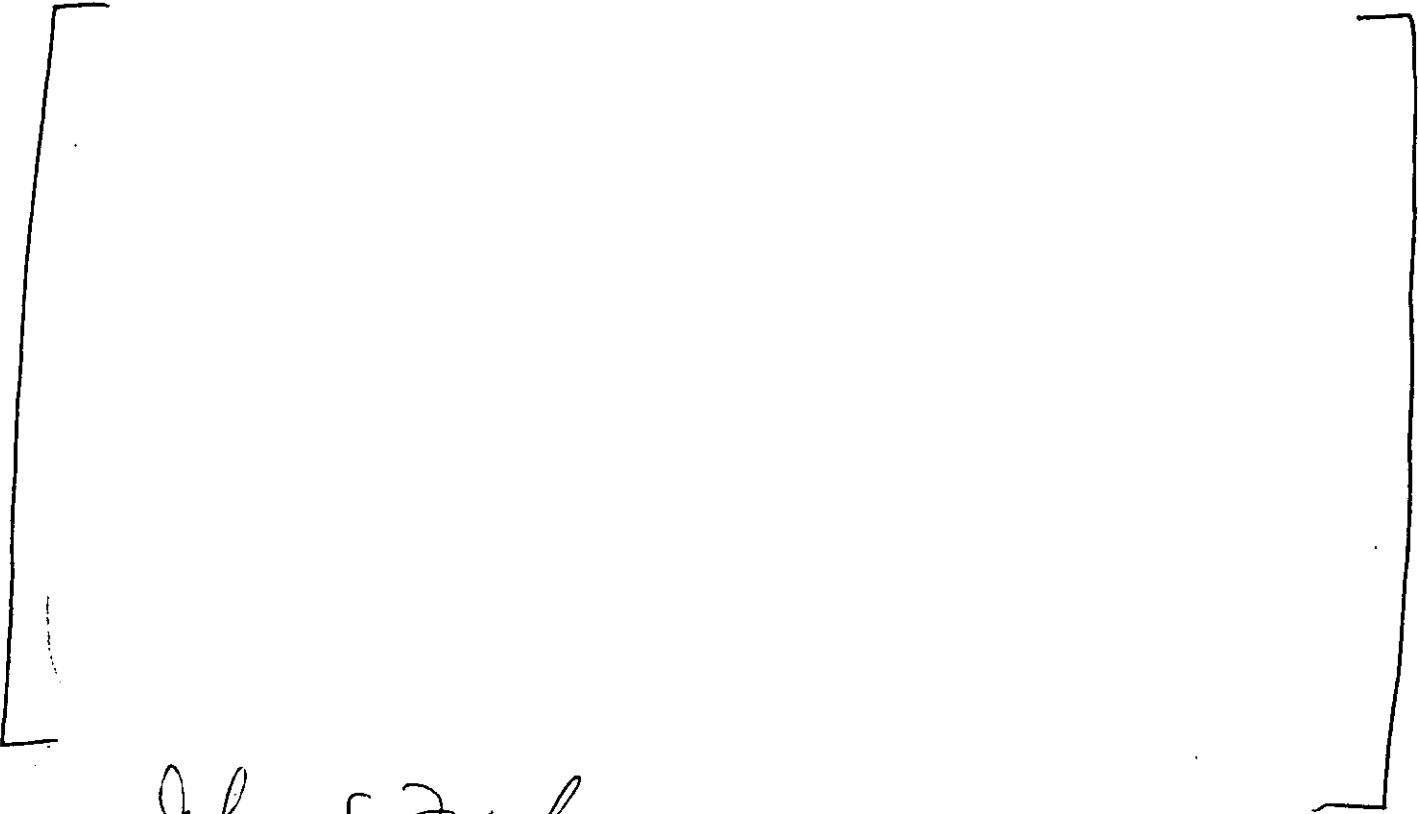
JP

MEMORANDUM FOR: JS

SUBJECT: Information for the SAC Historian to use in preparation of the SIOP-4 History (U)

REFERENCE: JS Memo, 20 Apr 70, Subject as above

(TS) In accordance with paragraph one, referenced message, the following information is submitted.



*John E. Ford*  
JOHN E. FORD  
CAPTAIN, USN

SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO  
FOREIGN NATIONALS

The information contained in this document will not be disclosed to foreign nationals or their representatives.

FORMERLY RESTRICTED DATA  
(Handle as Restricted Data in Foreign Dissem. Category 1A13, Atomic Energy Act of 1954)

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

Reproduction of this document in whole or in part is prohibited without the permission of the office of origin.

~~TOP SECRET~~

CY 1 OF 2 CYS  
70-J1395

~~TOP SECRET~~

APPENDIX "E"



THE JOINT CHIEFS OF STAFF  
JOINT STRATEGIC TARGET PLANNING STAFF  
OFFUTT AIR FORCE BASE  
NEBRASKA  
68113

REVISION: I

JP

19 JAN 1971

MEMORANDUM FOR: JS

SUBJECT: Information for the SAC Historian to Use in Preparation of the SIOP-4 History (U)

REFERENCE: JS Memo, 5 Jan 71, subject as above

(TS) (U) In accordance with paragraph two, referenced memo, the following information is submitted.

[Redacted content]

*Richard H. Mills*

RICHARD H. MILLS  
Captain, USN

"SPECIAL HANDLING REQUIRED  
NOT RELEASABLE TO  
FOREIGN NATIONALS

The information contained in this document will not be released to foreign nationals or their representatives."

FORMERLY RECLASSIFIED DATA  
(Handle as Restricted Data in Foreign Dissemination, Section 1413, Atomic Energy Act of 1954)

71-10034

CY 1 of 2 CYS

Reproduction of this document in whole or in part is prohibited without the permission of the office of origin.

Excluded from automatic downgrading and declassification

~~TOP SECRET~~



~~TOP SECRET~~

APPENDIX "F"

THE JOINT CHIEFS OF STAFF  
JOINT STRATEGIC TARGET PLANNING STAFF  
OFFUTT AIR FORCE BASE  
NEBRASKA  
68113

REVISION #

SEP 9 1970

JL

MEMORANDUM FOR: JS

SUBJECT: Information for the SAC Historian to  
Use in Preparation of the SIOP-4  
History

REFERENCE: JS Memo 0541 dtd 20 Apr 1970

1. Attachments 1 and 2 are forwarded as requested by reference for use by the SAC Historian.
2. When attachments 1 and 2 are withdrawn this correspondence may be downgraded to Unclassified.

*R G Bagby*

R. G. BAGBY  
Captain, USN  
Deputy Chief  
NSTL Division

2 Atchs

1. Cy 1 TS DOC, Subj:  
SIOP-4H Historical Data  
for SAC Historian - Damage  
Expectancies (1 Jul 70) (U)
2. Cy 1 TS DOC, Subj:  
SIOP-4H History - Constraints  
Monitor Points AO-2C-AR (U)

Reproduction of this document is authorized  
to the extent necessary to meet an official  
requirement in the interests of the national security

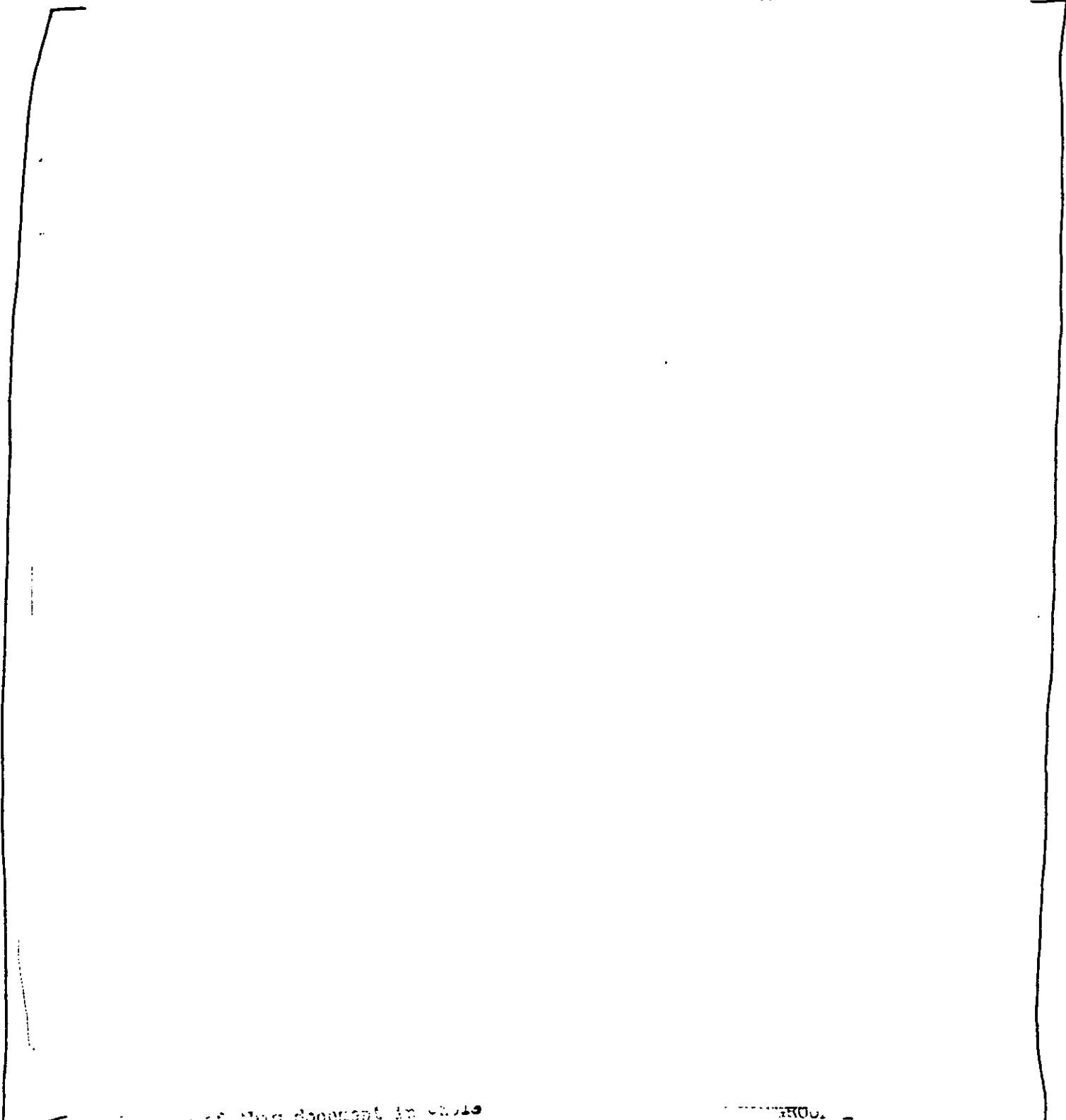
~~TOP SECRET~~

70J 1666

GROUP 1  
Excluded from automatic  
downgrading and

~~TOP SECRET~~

SIOP-4H HISTORICAL DATA FOR SAC HISTORIAN  
DAMAGE EXPECTANCIES (1 JULY 1970)



... of this document is...  
... is prohibited without the  
... of the office of...

...  
... from automatic  
... upgrading and declassification

~~TOP SECRET~~

70J 1666

cy,  
~~70-3675-127~~  
AKH 1

~~TOP SECRET~~

SIOP-4H HISTORICAL DATA FOR SAC HISTORIAN (Cont'd)



~~TOP SECRET~~

70J 1666

Cy 1  
~~70 JETS 127~~  
ATCH 1



~~TOP SECRET~~

SIOP REV H

BACK UP DATA



Reproduction of this document is authorized  
to the extent necessary to meet an official  
requirement in the interests of the national security

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

~~TOP SECRET~~

**70J 1666**  
Atch 2

~~TOP SECRET~~

APPENDIX "G"



THE JOINT CHIEFS OF STAFF  
JOINT STRATEGIC TARGET PLANNING STAFF  
OFFUTT AIR FORCE BASE  
NEBRASKA  
68113

REVISION I

12 April 1971

JLA

MEMORANDUM FOR: JS

SUBJECT: Information for the SAC Historian to Use in  
Preparation of the SIOP-4 History (U)

Reference: JS Memo 238, same subject, dated 2 Apr 71

1. (U) Information requested in reference is forwarded as attachments 1 and 2.
2. ~~(C)~~ The format of attachment 1 is the same that was used for constraints input to the Revision G and Revision H histories. It has been established through informal coordination with JSM-A, the OPR for Revision I history, that the format of attachment 1 is acceptable, and that the format specified in referenced memo is not required.
3. (U) This memorandum may be downgraded to CONFIDENTIAL upon removal of attachments 1 and 2.

*R. G. Bagby*  
R. G. BAGBY  
CAPTAIN, USN  
DEPUTY CHIEF  
NSR DIVISION

- 2 Atch
1. Cy 1 of TS Document,  
Subj: SIOP Rev I Constraints  
Info (U), undated
  2. Cy 1 of TS Document,  
Subj: SIOP-4I Historical  
Data for SAC Historian Damage  
Expectancies (U), dtd 5 Apr 71

Reproduction of this document is authorized  
to the extent necessary to meet an official  
requirement in the interests of the national security

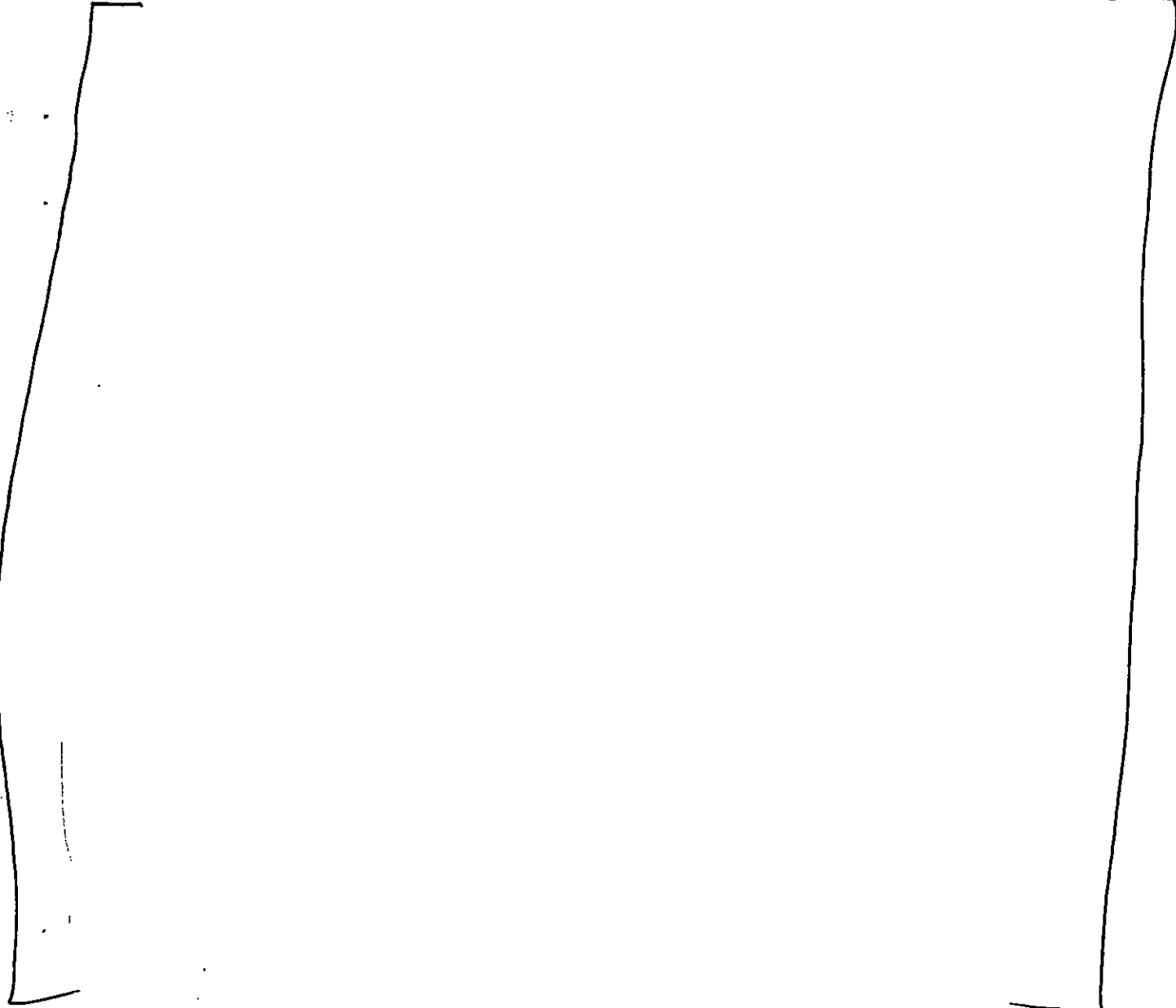
~~GROUP 3~~  
Downgraded at 3 year intervals?  
Declassified after 12 years

~~TOP SECRET~~

~~TOP SECRET~~

SIOP REV I

CONSTRAINTS INFORMATION (U)



Reproduction of this document is authorized  
to the extent necessary to meet an official  
requirement in the interests of the national security

ATTACHMENT 1

GROUP-3  
Downgraded at 12 year intervals;  
Not automatically declassified.

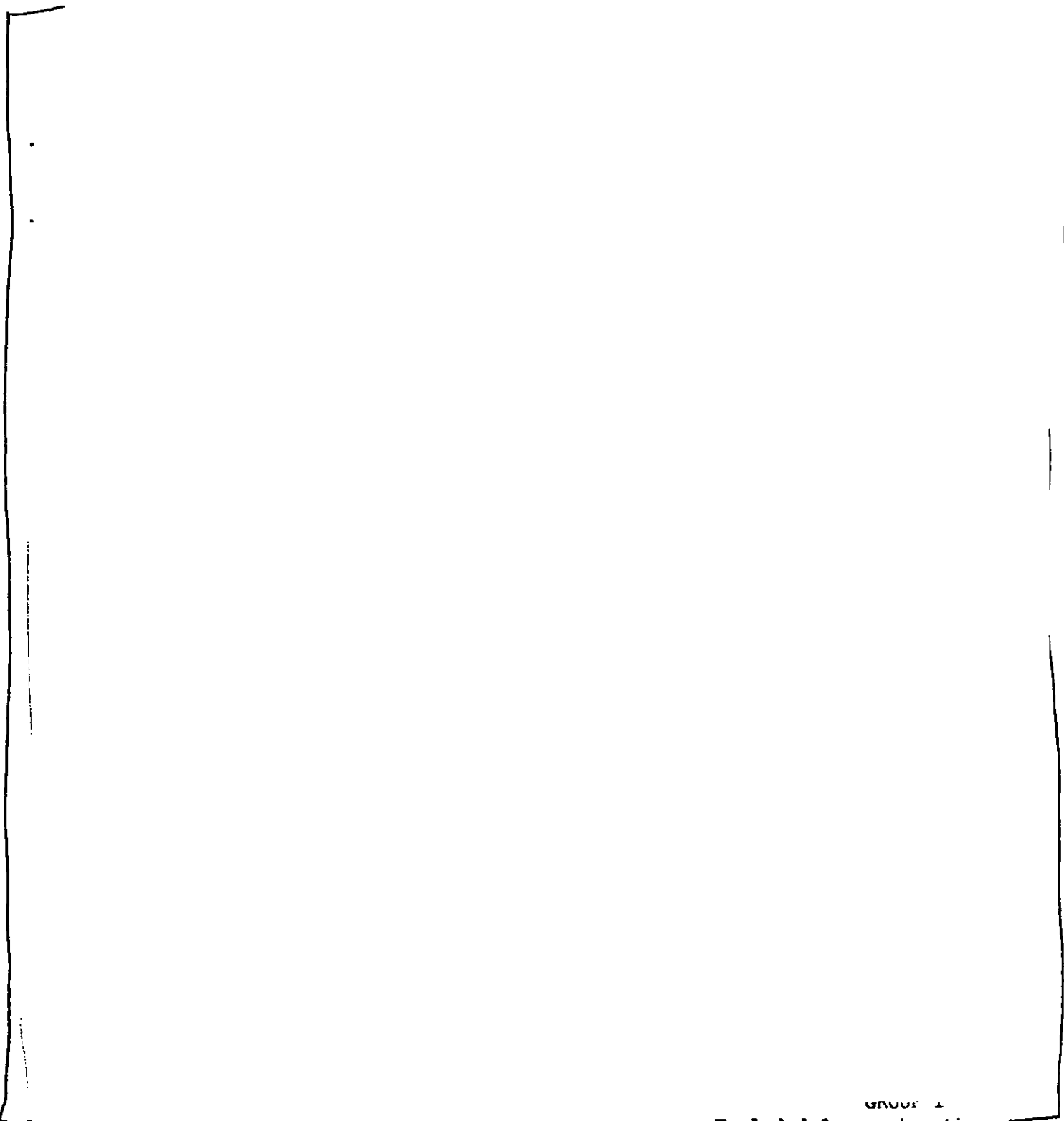
~~TOP SECRET~~

71-5-0681  
~~SIKTW off~~

~~TOP SECRET~~

APR 5 1971

SIOP-4I HISTORICAL DATA FOR SAC HISTORIAN  
DAMAGE EXPECTANCIES (1 JAN 1971) (U)



GROUP 1

Reproduction of this document is authorized to the extent necessary to meet an official requirement in the interests of the national security

Excluded from automatic downgrading and declassification.

~~TOP SECRET~~

71-5-0681

ATCH #2

~~TOP SECRET~~

~~71-5-0681~~ CV1

~~TOP SECRET~~

SIOP 4-I HISTORICAL DATA FOR SAC HISTORIAN (Cont'd)

Reproduction of this document is authorized  
to the extent necessary to meet the  
requirement in the interests of the national security

~~TOP SECRET~~

~~SECRET~~

71-5-0681

41

~~71-5275-63~~

ROSTER OF KEY PERSONNEL, JSTPS  
30 June 1971

| Organization                  | Name                           | Service | Dates     |           |
|-------------------------------|--------------------------------|---------|-----------|-----------|
|                               |                                |         | From      | To        |
| Director                      | General B. K. Holloway         | USAF    | 1 Aug 68  |           |
| Deputy Director               | Vice Admiral F. H. Michaelis   | USN     | 1 Sep 69  |           |
| NSTL Division                 | Maj. Gen. William R. MacDonald | USAF    | 30 Jul 69 |           |
| SIOP Division                 | Brig. Gen. R. E. Huyser        | USAF    | 1 Feb 70  |           |
| <u>Senior Service Members</u> |                                |         |           |           |
| US Army                       | Col. C. R. Supplee             | USA     | 29 Jun 69 |           |
| US Navy                       | Capt. E. R. Barrett            | USN     | 12 Jun 69 | 27 Aug 70 |
|                               | Capt. W. M. Adams, Jr.         | USN     | 11 Sep 70 |           |
| US Air Force                  | Col. S. G. Desens              | USAF    | 1 Feb 70  |           |
| US Marine Corps               | Col. W. Biehl, Jr.             | USMC    | 2 Sep 69  |           |
| <u>Commands</u>               |                                |         |           |           |
| CINCLANT                      | Capt. R. E. Crispin            | USN     | 18 Aug 69 |           |
| CINCPAC                       | Capt. C. K. Ruiz               | USN     | 5 Apr 68  | 5 Jun 70  |
|                               | Capt. L. B. Lampman            | USN     | 21 May 70 |           |
| CINCSAC                       | Maj. Gen. S. F. Martin         | USAF    | 26 Jul 68 | 9 Apr 70  |
|                               | Maj. Gen. P. W. Bacalis        | USAF    | 9 Apr 70  |           |

| Organization                | Name                       | Service   | Dates     |           |
|-----------------------------|----------------------------|-----------|-----------|-----------|
|                             |                            |           | From      | To        |
| SACEUR                      | Brig. Gen. J. Myers        | USAF      | 1 Aug 69  | 30 Sep 70 |
|                             | Brig. Gen. D. L. Carter    | USAF      | 15 Sep 70 |           |
| SACLANT                     | Capt. R. E. Crispin        | USN       | 18 Aug 69 |           |
| <u>NATO Representatives</u> |                            |           |           |           |
| Germany                     | Col. F. Schroter           | Air Force | 10 Jan 69 |           |
| Italy                       | Col. Sergio Mazzerelli     | Air Force | 2 Dec 69  |           |
| United Kingdom              | Gp. Capt. D. G. L. Heywood | Air Force | 8 May 67  | Unknown   |
|                             | Gp. Capt. R. Hampton       | Air Force | 7 Jan 71  |           |
| Belgium                     | Maj. L. E. Coupez          | Air Force | 15 Sep 66 | Unknown   |
|                             | Lt. Col. L. V. Peeters     | Air Force | 3 Apr 70  |           |

~~SECRET~~

COMPUTER INFORMATION FOR THE  
SAC HISTORIAN IN PREPARATION OF THE SIOP-4 HISTORY (U)

1. ~~(C)~~ Computers continued to play a very important role in the development and analysis of the Single Integrated Operational Plan (SIOP), Revisions H and I. The introduction of Multiple Independently Targeted Reentry Vehicles (MIRVs) in the inventory has resulted in an increase in the number of weapons as well as an increase in the number of DGZs required to efficiently utilize these new weapons. New equipment (hardware) was installed as well as new computer programs (software) were developed to provide responsive support in the development of the SIOP.
  
2. ~~(C)~~ (U) In the area of hardware:
  - a. ~~(C)~~ The IBM 1410 computer was replaced with a newer, faster, third generation system, the IBM 360/50. As a result, more complex mathematical programs were executed on the system thereby increasing the sophistication and efficiency of the plan. The installation of the new system allowed for an increase in the number of revisions that could be maintained on-line at any one time from two to four. In addition, the greater amount of storage available enabled JLP to implement the previously initiated restructuring of the Weapon/DGZ Files to include the additional fields necessary to support MIRV applications.
  
  - b. (U) At the start of Revision I, the IBM 7094 computer was removed from the premises and all processing relegated to the fully operational IBM 360/85. As a consequence, the bulk of the damage analysis processing was transferred to the newer, faster computer system. Increased sophistication in the existing damage assessment computer programs as well as the adaptation of MIRV supporting programs for use in the preplanning, application, and analysis phases of the development of the SIOP were made possible.

OPR: JLP  
Date: 17 Aug 71

GROUP-3  
Downgraded at 12 year intervals;  
Not automatically declassified.

~~SECRET~~



3. ~~(S)~~(U) In the area of software:

a. (U) All IBM 1410 and 7094 programs had to be rewritten to efficiently utilize the new systems. At the end of Revision I approximately 75% of this task was completed and work is progressing most satisfactorily. Several old software packages were combined during the rewrite phase to provide more powerful programs, eliminating possible costly duplications and redundancies of automated intelligence output.

b. ~~(S)~~ A new Visual Analysis Sub-System (VASS) program, the Batch Processor, provided JL planners with increased DGZ optimization capabilities. Prior to this only one DGZ at a time could be optimized. Now as many as 74 can be serially processed without analyst intervention.

c. ~~(S)~~ An updated production program, the Compounder, continued to compute related target damage within the SIOP as well as to support studies concerning preplanned damage expectancy. It also was updated to reflect current philosophies of MIRV applications. Its output provides the Force Application Team with increased capabilities in detailed options and alternatives. The program can accommodate any weapon in the inventory.

d. ~~(S)~~ A new Probability of Damage (POD) routine, central to numerous assessment programs (SABER, COBRA, CRUSADER, ADEM, OPTIMIZER), was written and incorporated in the subject programs to reflect the latest changes in the DIA Physical Vulnerability Handbook published in June 1969.

e. ~~(S)~~ A new aiming point selection program (CRUSADER) was developed to reflect a new targeting philosophy. This program was used to develop aiming points for Revision I.

f. ~~(S)~~ Numerous and extensive modifications to SABER, the primary JSTPS assessment model, were required to reflect new methodologies in computing damage required because of the introduction of MIRVs in the weapons inventory.

~~SECRET~~

The Interdependent Compound Damage Expectancy (ICDE) fix insures

g. ~~(S)~~ The contractor-developed MIRV supporting computer programs were adapted and used in the analysis of Revision I. These include the Minuteman G and Poseidon series of the MAP programs. Basically, these programs are: G102, PS102, G114, and PS114. The 102 series of programs were used to support preplanning. These MIRV supporting programs were used to determine the allocation of a given number of Minuteman or Poseidon systems against a specified DGZ base. In addition to performing an allocation

series of MIRV programs were used to perform the analysis of damage. These programs determine whether a candidate

expectancy at the installation level.

h. ~~(S)~~ In expectation of greater computer support required for Revisions J and K, due to the anticipated increase in the number of MIRVs in the weapons inventory, an automated Preplanned Damage Expectancy (PPDE) system was devised and was operational for Revision J and will be used extensively for Revision K.

#### 4. ~~(S)~~ War Gaming.

a. ~~(S)~~ The introduction of new weapons systems, such as the FB-111 and the MIRV missile, required major modifications to the simulation models. The total IBM 7090 hours expended for program modification, test and SIOP-4I/RISOP-71 war games was about 1400 hours for the year.

b. ~~(S)~~ The forthcoming installation in 1972 of the WWMCCS replacement computer, a Honeywell 6070, has required considerable preplanning for the conversion of existing simulation programs.

c. ~~(S)~~ Besides the basic war games, about 100 hours of IBM 7090 time and 10 hours of UNIVAC 1108 time were used with highly detailed technical simulation models to investigate specific aspects of the SIOP.

~~SECRET~~

~~TOP SECRET~~

APPENDIX 10

SACEUR PLANS

GROUP 1  
EXCLUDE FROM AUTOMATIC  
DOWNGRADING AND DECLASSIFICATION

~~TOP SECRET~~