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Detailed Analysis Report EXERCISE IVY LEAGUE. 82

JCS CASE NO. 385 (5, May 1981) S. 1A

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DETAILED ANALYSIS REPORT
EXERCISE
IVY LEAGUE 82 (U)

JOINT CHIEFS OF STAFF
WASHINGTON, D.C. 20301

Prepared by:
 Joint Exercise Division
 Operations Directorate (J - 3)
 OJCS

CLASSIFIED BY DIRECTOR, J - 3
 DATE FOR REVIEW IS : 30 JULY 2002
 REASON: 5200.1R, PARA. 2-301c.6.

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J3M-1874 82

21 JUL 1982

MEMORANDUM FOR DISTRIBUTION

Subject: Exercise IVY LEAGUE 82 Detailed Analysis Report

1. The attached report represents the Joint Staff Operations Directorate's detailed analysis of the performance of selected OJCS systems and procedures that were employed during Exercise IVY LEAGUE 82.
2. This report must be viewed in the context that this analysis is but one of several efforts to document the findings of Exercise IVY LEAGUE 82. Familiarity with all the evaluative efforts is essential to gain a full appreciation of the "Lessons Learned" as a result of Exercise IVY LEAGUE. These include:
 - IVY LEAGUE First Impressions Conference, 19 March 1982
 - IVY LEAGUE Critique Conference, 19-20 April 1982
 - TOP SECRET Supplement, SIOP Analysis (LIMDIS)

4. The Joint Staff has established specific Remedial Action Projects (RAPs) to intensively pursue the major problems identified during the exercise. RAPs resulting from IVY LEAGUE were published by DJSM 914-82 of 11 June 1982.

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5. Without attachment, this memorandum is UNCLASSIFIED.



ROBERT P. HILTON
Rear Admiral, USN
Vice Director for Operations

Attachment
a/s

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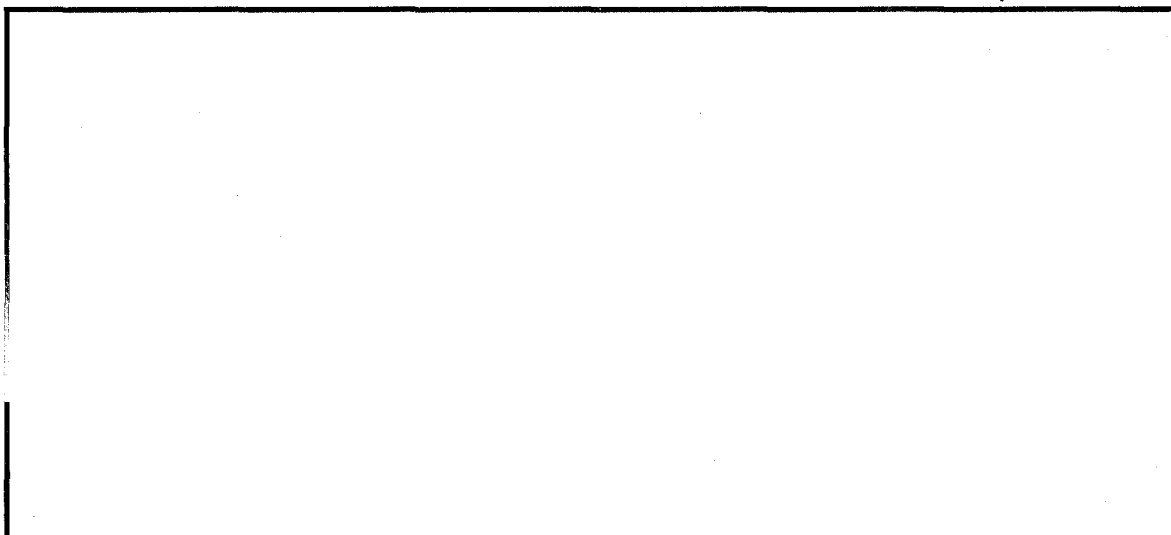
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J-4	8
J-5	6
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(U) EXECUTIVE SUMMARY

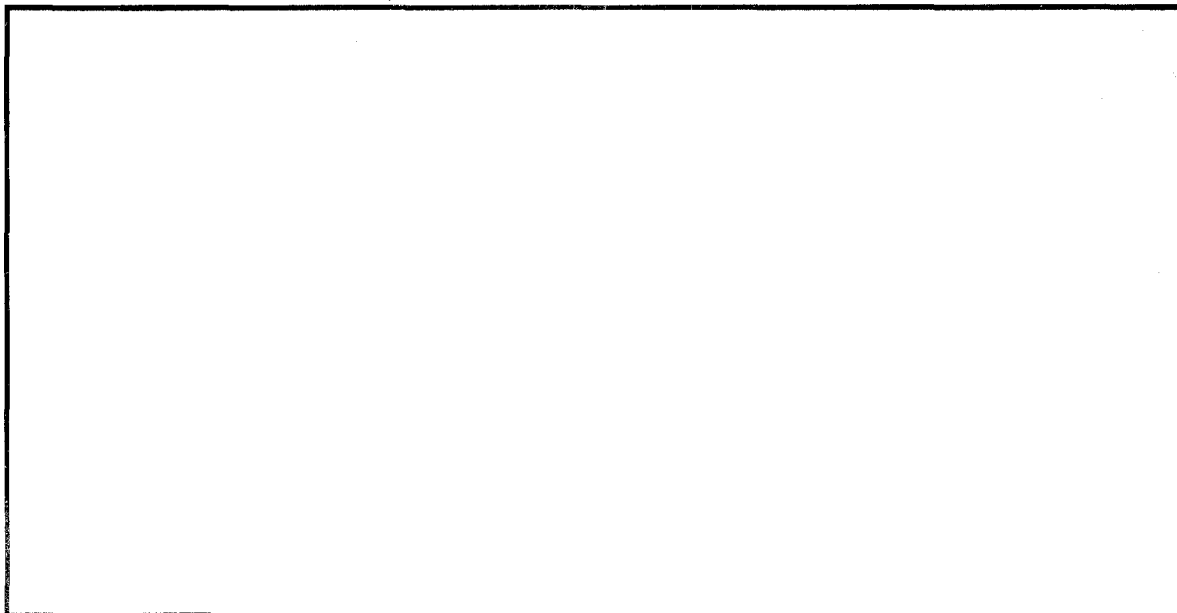
1. (U) Introduction and Exercise Synopsis

a. ~~(C)~~ Exercise IVY LEAGUE 82 (1-5 March 1982) was a biennial, worldwide, selected procedural command post exercise sponsored by the Joint Chiefs of Staff. It exercised systems, procedures, and personnel of the Worldwide Military Command and Control System (WWMCCS).



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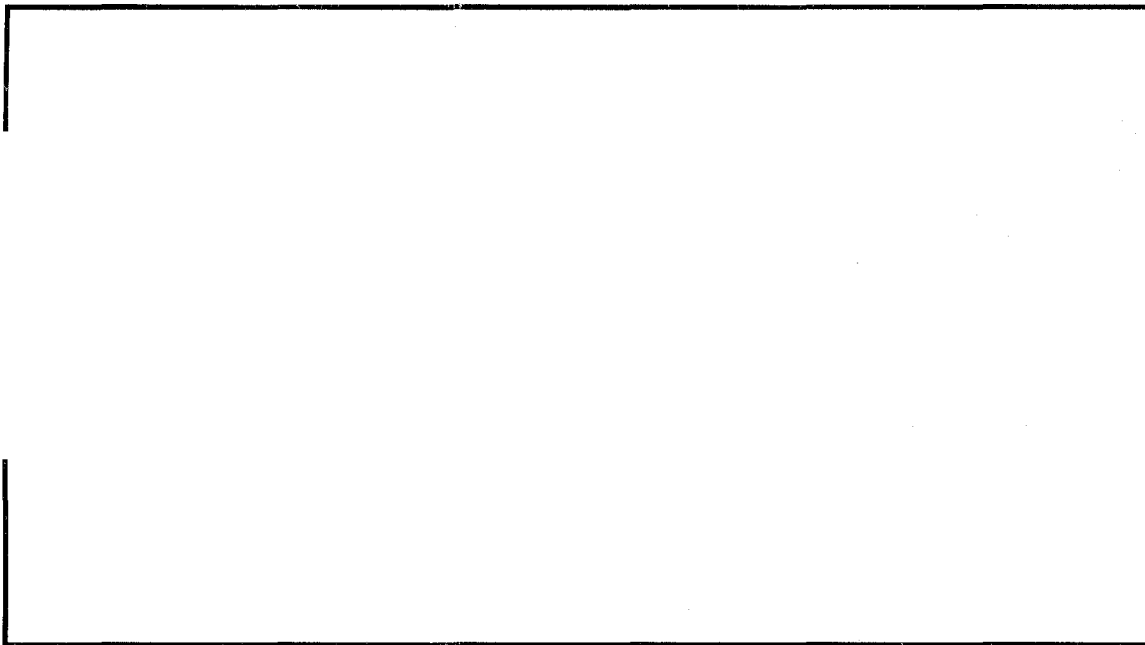
2. (U) Synopsis



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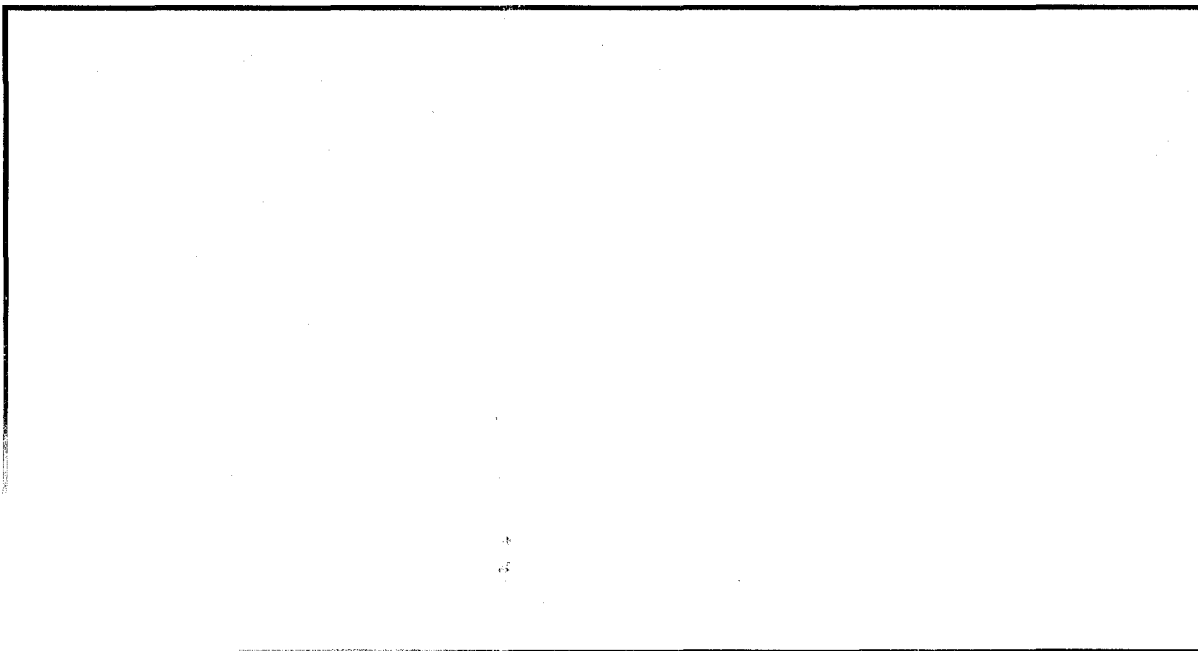
EX-1

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c. (U) The WWMCCS Intercomputer Network (WIN) experienced severe response time degradation during major portions of the exercise. This condition, called "molasses effect" or network slowdown, has been observed in past exercises during periods of high data traffic. The network slowdown condition occurred with varying degrees of severity but was especially severe on 3 and 4 March. Because of these difficulties, WIN operational support to exercise participants was unsatisfactory.



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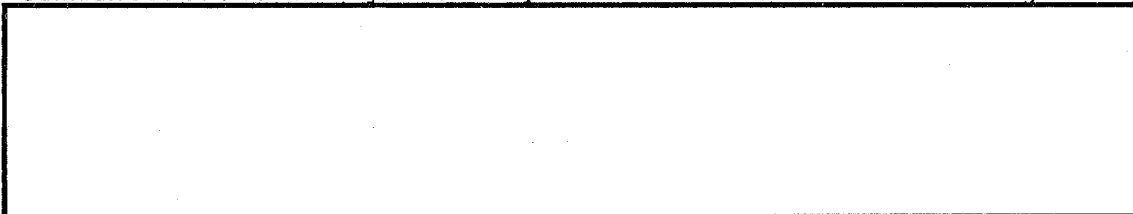
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the FEMA Special Facility was exercised for the first time. This secure link proved to be a very effective means for exchanging information and decisions quickly in a fast-moving crisis situation. The secure link requires some improvements in capability especially in the quality of video from the FEMA Special Facility. Operational and security procedures for the use of the secure video link must also be established.

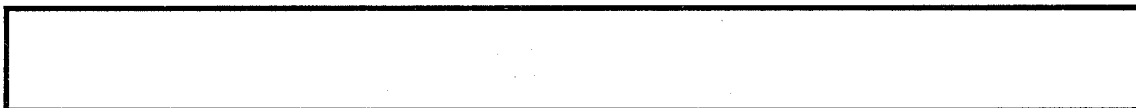
f. ~~(S)~~ Exercise IVY LEAGUE 82 had the most extensive scripted communications outages of any recent exercise. The outages



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3. (U) Analysis Requirements. This report contains the analysis of 12 major analysis objectives which the Organization of the Joint Chiefs of Staff (OJCS) selected for special attention during the exercise. These objectives include only those for which the OJCS has direct responsibility. The major analysis objectives are:

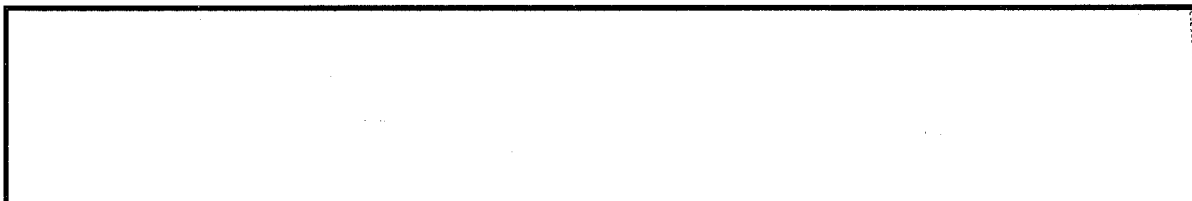
a. ~~(S)~~ Evaluate SIOP execution and following. (The TOP SECRET supplement to this report contains the analysis of this objective.)



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c. ~~(S)~~ Exercise and evaluate systems for tactical warning, attack assessment, nuclear detonation reporting, and indirect residual capability assessment.

d. ~~(S)~~ Exercise and evaluate the Minimum Essential Emergency Communications Network (MEECN).



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EX-3

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- g. (U) Evaluate the WWMCCS Intercomputer Network (WIN) in support of the NCA, NMCS, commanders of unified and specified commands, and Services during the preattack period.
- h. ~~(S)~~ Evaluate the Crisis Staffing Procedures of the Joint Chiefs of Staff including a limited relocation to the Alternate National Military Command Center (ANMCC).

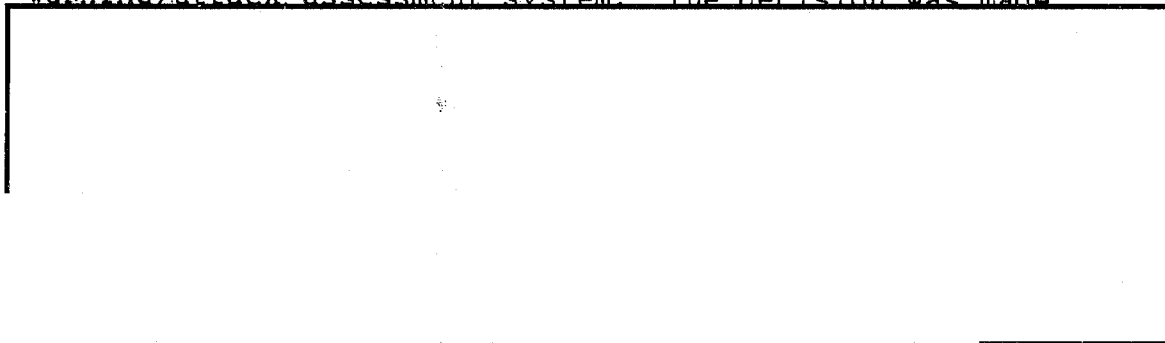


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- j. ~~(S)~~ Evaluate civil and military logistic plans, policies, and procedures in use prior to nuclear attack.
- k. ~~(S)~~ Evaluate telecommunications economy, policy, and communications security practices to include analysis of transmissions for operations security vulnerabilities.
- l. ~~(S)~~ Evaluate the impact of communications degradation to include satellite outages and the ability of telecommunications systems to function when critical links are jammed and false messages are injected into the systems.
4. (U) Exercise Considerations

a. (U) The data from Exercise IVY LEAGUE 82 were biased by exercise design, artificialities, and constraints that put a serious limitation on the exercise findings as compared to real-world operations. The exercise design, constraints, and artificialities (enumerated below) were developed to allow opportunities for identifying and resolving weaknesses in doctrine, plans, ongoing command operations, and procedures without violating operations security requirements.

- (1) ~~(S)~~ The Joint Staff decided, prior to the exercise, not to perform an end-to-end simulation of the tactical warning/attack assessment system. The decision was made



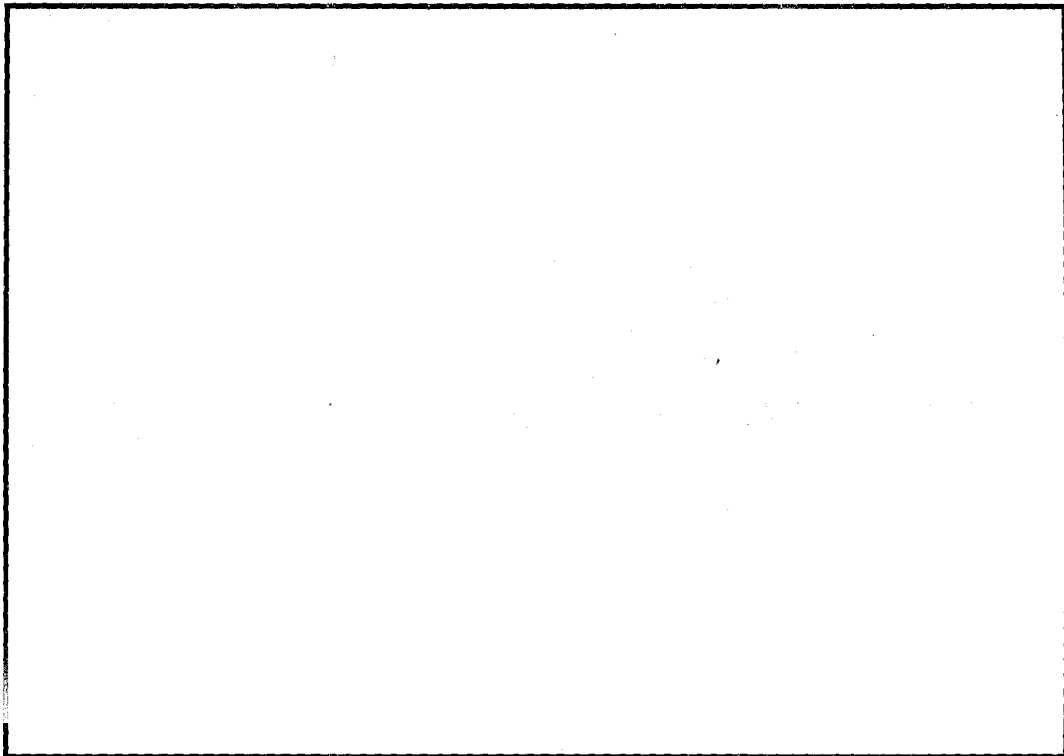
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- b. (U) The analysts considered the impact of these artificialities wherever possible in the analysis.
- c. (U) Whenever this report identifies personnel by title the reader should recognize that the title refers to a surrogate player unless otherwise noted; e.g., the exercise President or the exercise Chairman, Joint Chiefs of Staff.
5. (U) Exercise Participation. Commands and agencies participated during Exercise IVY LEAGUE 82 as follows:
- a. (U) An exercise National Security Council with an exercise President (a former Secretary of State) and Vice President (a former Director of Central Intelligence) participated in the exercise at the White House Situation Room. This was the first JCS-sponsored exercise during which such former senior civilian Government officials participated.
- b. (U) The Joint Chiefs of Staff implemented the Emergency Operating Procedures (EOP) at the start of the exercise. Joint Staff, Service, and Defense agency personnel participated as members of the Operations Planners Group (OPG), Operational Nuclear Planning Group (ONPG), or appropriate response cells.

EX-5

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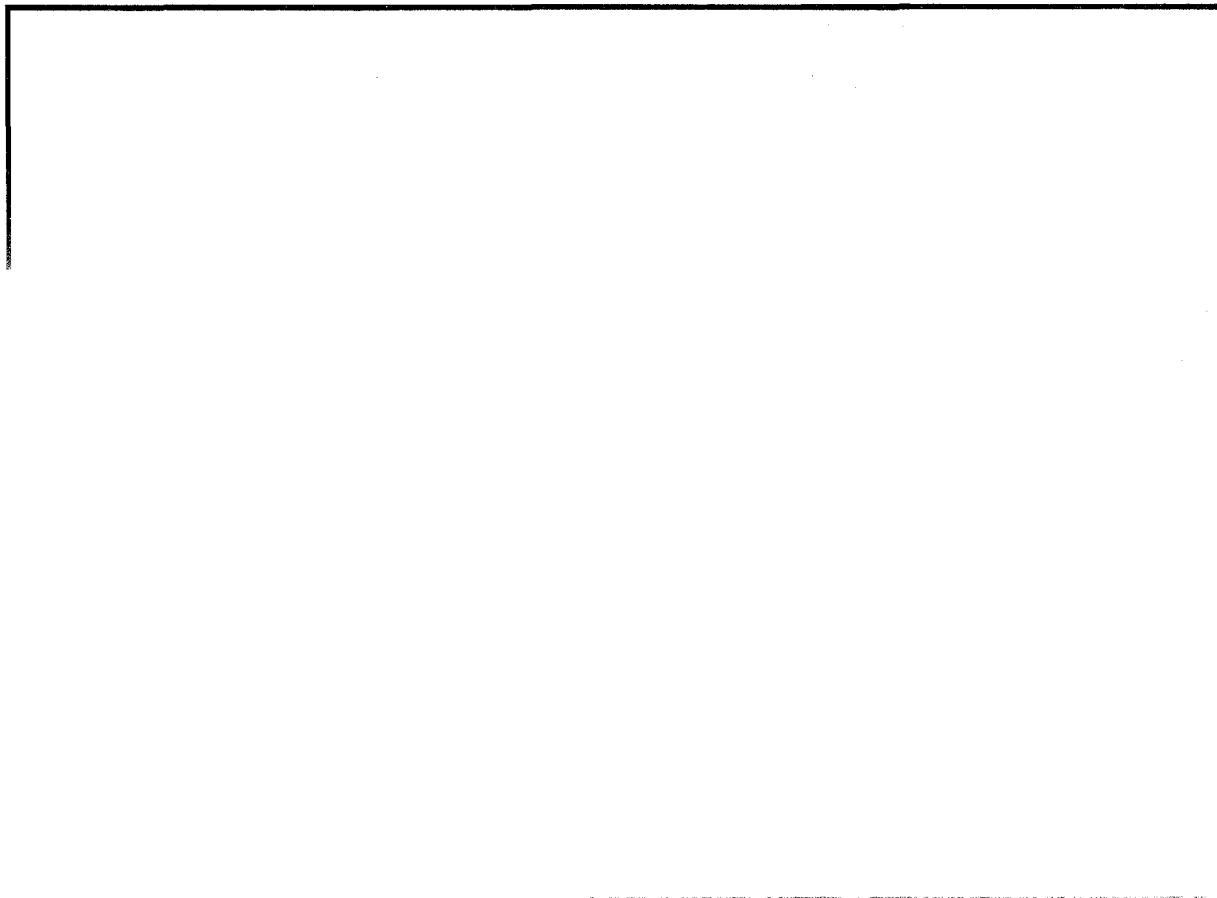
c. (U) Personnel from the Department of State, Office of the Secretary of Defense, Military Services, Coast Guard, and the Federal Emergency Management Agency (FEMA) participated in their expected roles for general war.

d. (U) The Department of National Defence, Canada, participated in the exercise on a 24-hour basis.

e. (U) ADCOM, LANTCOM, USEUCOM, PACOM, USREDCOM, SAC, and JDA participated with normal battle staffs which functioned on a 24-hour basis. MAC, MTMC, and MSC participated with crisis action teams. USSOUTHCOM and Joint Task Force, Alaska, participated with response cells.

f. (U) The Joint Exercise Control Group functioned in its accustomed role and controlled the exercise play. The representatives of the Department of State and the Office of the Secretary of Defense on the Joint Exercise Control Group (JECG) functioned as both players and controllers.

6. (U) Scenario Synopsis



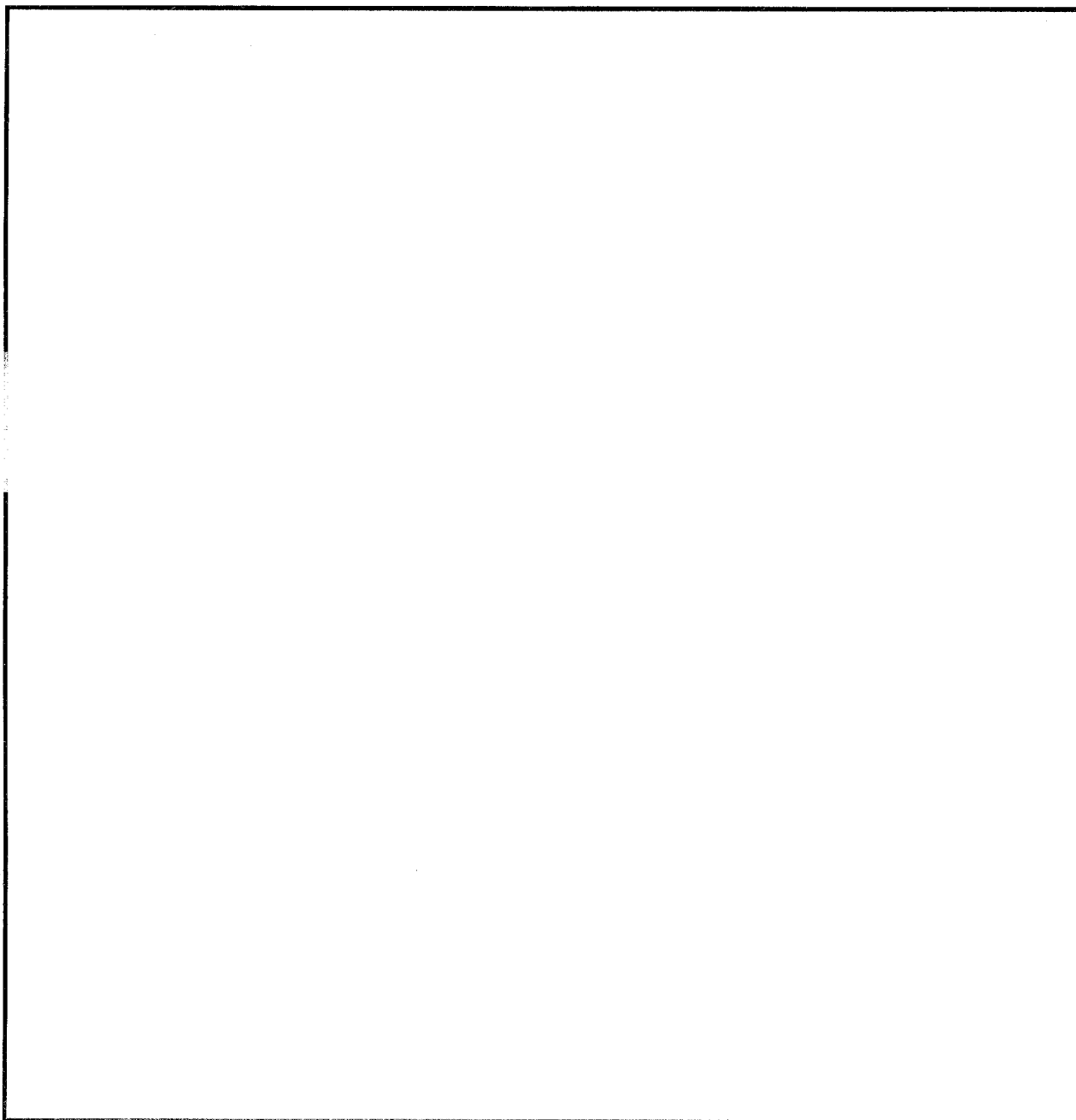
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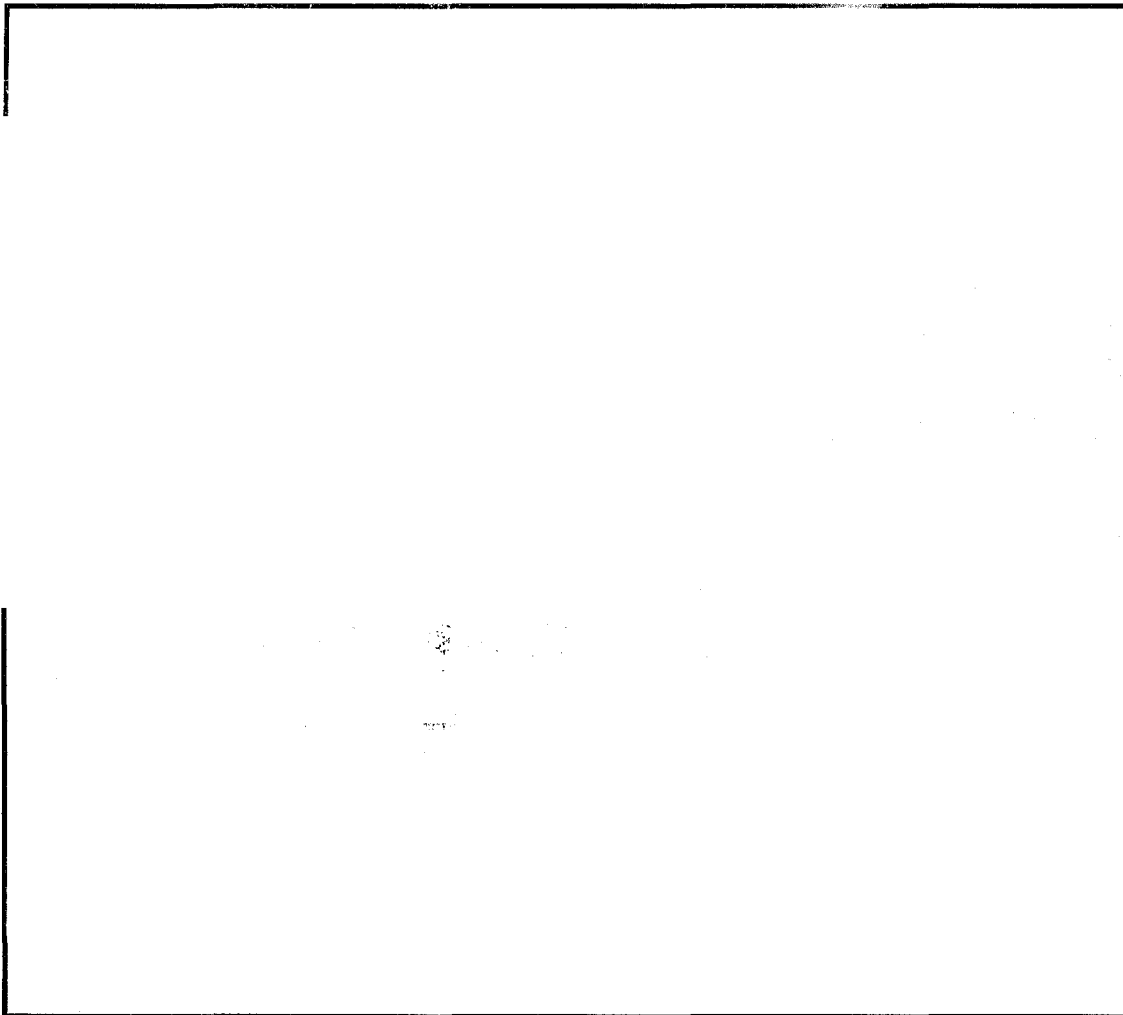
Table EX-1. (U) Exercise IVY LEAGUE 82 Overview of Significant Exercise Events



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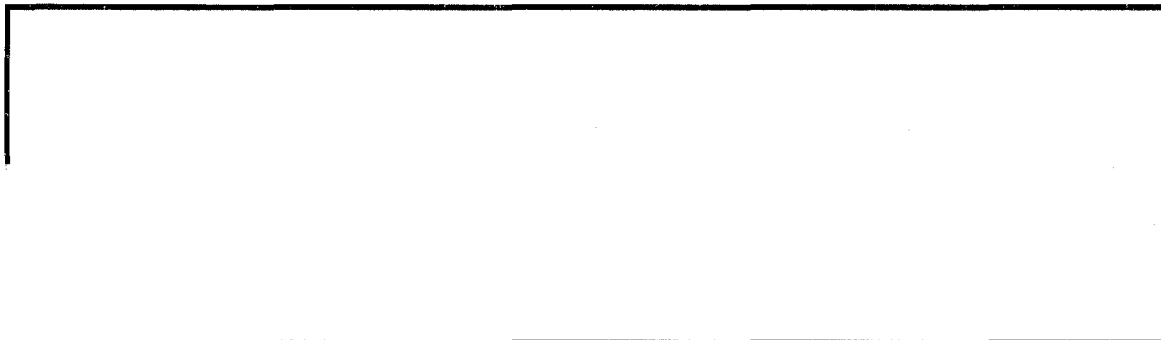
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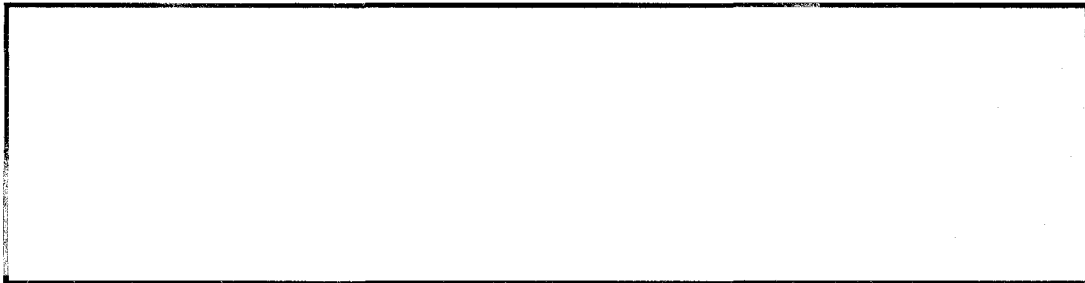
7. (U) Significant Findings, Conclusions, and Recommendations. A synopsis of the most significant findings, conclusions, and recommendations is listed below. Most of these findings were not affected by exercise data bias. These findings are valid regardless of exercise considerations. The pages referenced at the end of each paragraph indicate where detailed information is located.



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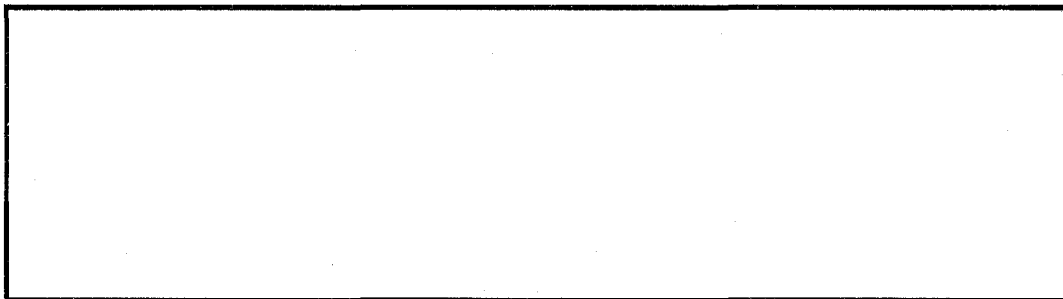
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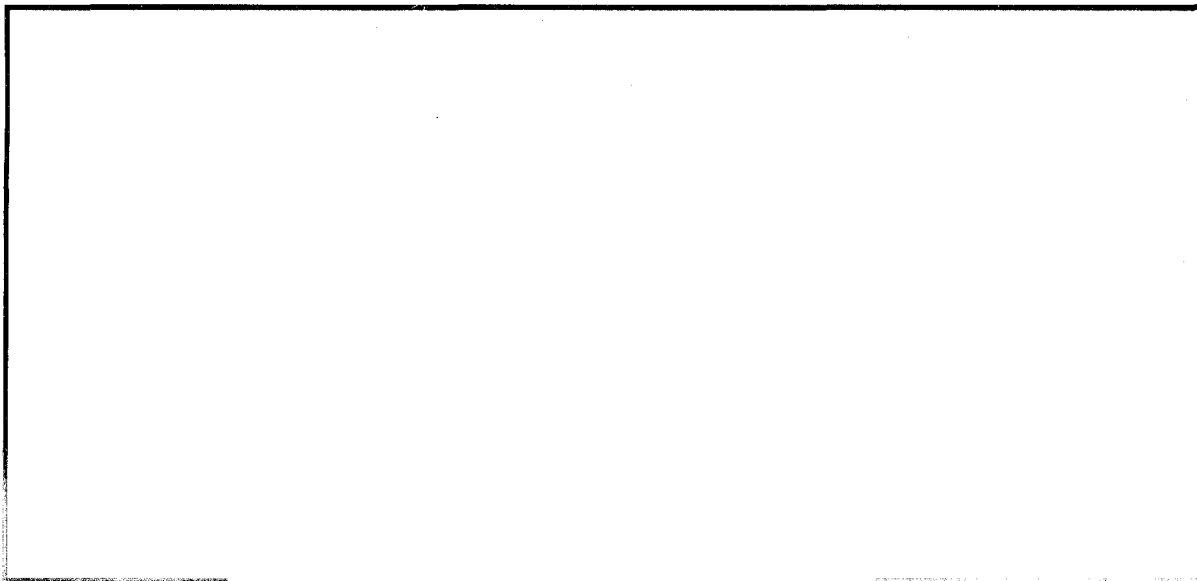
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b. (U) Tactical Warning/Attack Assessment, Nuclear Detonation Reporting, and Indirect Residual Capability Assessment



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(2) (C) USREDCOM, USSOUTHCOM, JTF Alaska, and MAC were not aware of the strategic nuclear attack against the United States until after the nuclear detonations began. These commands are not monitor conferees in a Missile Attack Conference. The Director for Operations, OJCS, will consider adding USREDCOM, USSOUTHCOM, JTF Alaska, and MAC as monitor conferees in a Missile Attack Conference. (II-20)



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EX-9

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d. ~~(C)~~ Worldwide Airborne Command Post (WWABNCP). WWABNCP elements had limited capability to locate and communicate with surviving ground-based military authorities in CONUS and overseas locations. Currently, there is no National Reconstitution Communications Plan which establishes communications capabilities and provides frequencies, call signs, and authentication tables. The Director, National Communications System, should establish a comprehensive National Reconstitution Communications Plan. (IV-10)

e. (U) WWMCCS Intercomputer Network (WIN)

(1) (FOUO) The WIN experienced severe response time degradation during major portions of the exercise. The degradations were most severe on 3 and 4 March. No solutions tried by the Network Operations Center had more than a temporary effect. WIN performance was unsatisfactory. The causes identified were:

(a) (U) Network Management

1. (U) Communication trunk configuration
2. (U) ADP system software restarts.

(b) (U) Operational Control. WIN versus local user priorities.

(c) (U) Local Host Computer System Operation. WIN system and application software competition for computer resources.

The WIN Director, the Data Information and Coordination Office, the WIN Network Operations Center, and the Defense Communications Agency Operations Center must take positive steps to insure that there are not unacceptable operational effects caused by network reconfiguration. Changes such as providing more IMP-to-IMP trunks into a critical site could be made to improve the probability of access of some sites to correspond to the crisis situation. (VI-27)

EX-10

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(2) (U) There is evidence of WIN-spawned high priority jobs causing host slow downs at at least three sites. At one site host computer problems went away when WIN software was removed from the host. Competition for computer resources by WIN jobs all running at the highest system urgency (priority) caused several host computers to slow down or to appear inoperative. Local site operators seemed unaware of their authority to change WIN-spawned job priorities to alleviate the problem. The Director, Command and Control Technical Center, should continue his technical efforts to solve WIN problems. In particular, CCTC should investigate the interaction of WIN software with local HOST programs as handled by GCOS at all WWMCCS sites. The impact of this interaction as it affects the host's ability to process jobs should be determined. (VI-43)

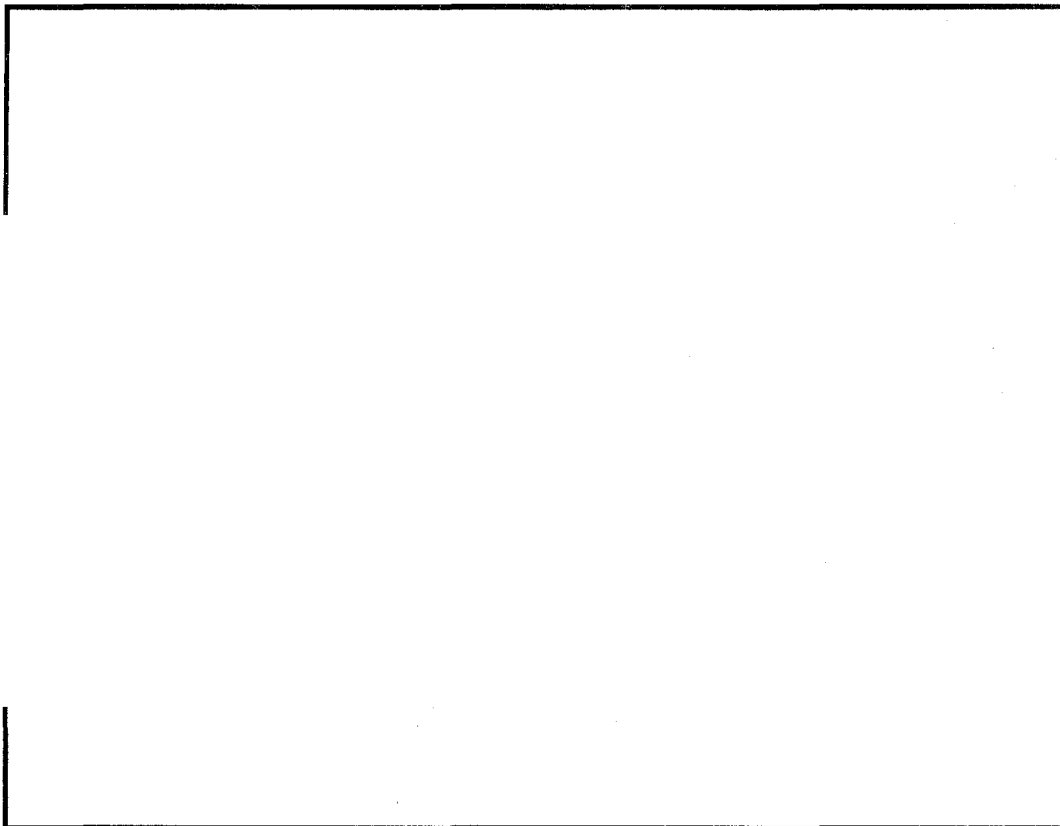
f. (U) Crisis Staffing Procedures

(1) ~~(C)~~ Crisis Staffing Procedures were effective and were followed in most cases. As in previous exercises, instances where procedures were not followed appear to be from a lack of familiarity rather than a conscious decision. The Crisis Staffing Procedures, although adequate for current warfare modes, do not address space warfare. There is no single organization within DOD with overall operational responsibility for space warfare matters. Additionally the Joint Staff is not currently staffed or organized to process space warfare matters as unique actions. The US Air Force staff should examine the operational chain of command required to implement space-related decisions or provide the status of space assets. (VII-1)

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EX-11

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~~SECRET~~g. (U) National Emergency Airborne Command Post (NEACP)h. (U) Civil and Military Logistic Plans

(1) ~~(S)~~ Under Military Assistance to Civil Authorities (MACA) and Military Support of Civil Defense (MSCD), FEMA requested numbers of Army battalions rather than providing mission statements. The civil requirements were difficult to fill. The executive agent for DOD requires mission statements which would allow allocation of forces in the right quantity and mix. OSD should insure that FEMA provides mission support requirements rather than numbers of units under MACA or MSCD. (IX-3)

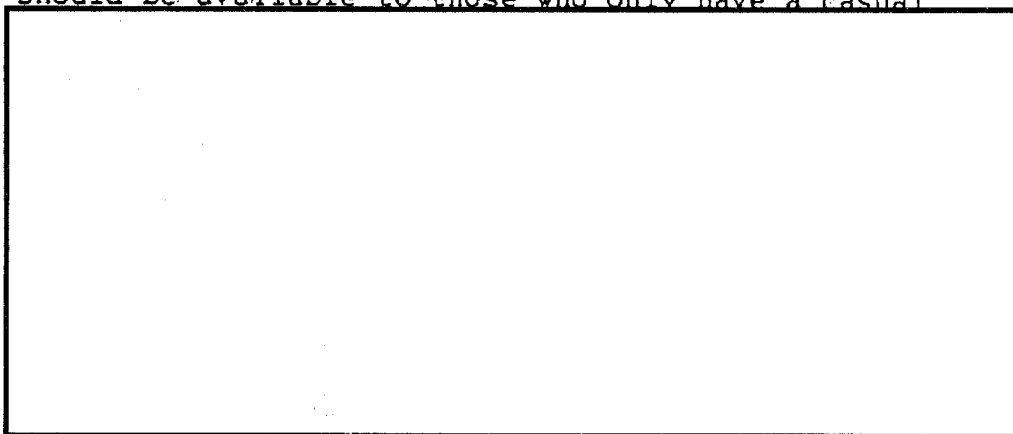
(2) ~~(S)~~ MSCD plans and procedures were not fully exercised because of the late transition from MACA to MSCD. The transition from MACA to MSCD should be a topic of discussion by decisionmakers early in a period of heightened tensions. The Director for Plans and Policy, OJCS, in coordination with the Department of the Army, should examine the feasibility of tying the transition from MACA to MSCD to a specific event. (IX-4)

EX-12

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~~SECRET~~i. (U) Telecommunications

(1) (U) The Director for Administrative Services, OJCS, should intensively manage the distribution of messages in the OJCS to avoid overwhelming the staff with unnecessary messages. Messages with special interest, Joint Reporting Structure reports for example, should be sent only to the Office of Primary Responsibility who should be responsible for dissemination. Messages not addressed to the Joint Chiefs of Staff should not be distributed. As the focus of interest in the exercise changes, distribution should be changed to provide messages only to those who need them. Message libraries, by subject, should be available to those who only have a casual



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j. ~~(S)~~ Communications Degradation. Exercise IVY LEAGUE 82 contained the most extensive denial of message flow conducted to date. As in past outage tests dedicated circuits sup-



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EX-14

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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
EXECUTIVE SUMMARY	EX-1 to EX-13
TABLE OF CONTENTS	iii
LIST OF FIGURES	xi
LIST OF TABLES	xvii
GLOSSARY	xix
I SELECTIVE RELEASE OF NUCLEAR WEAPONS	I-1
1. Major Analysis Objective	I-1
2. Synopsis	I-1
3. System Description	I-1
4. Analysis	I-1
a. Exercise Considerations	I-1
b. Analysis Results by Subarea	I-2
(1) General	I-2
(2) Consultation, Decisions, and Guidance	I-2
(3) Decisionmaker Information Requirements	I-6
(4) Warning, Request, and Response Messages	I-9
(5) Selective Release Procedures	I-12
5. SELREL Findings, Conclusions, and Recommendations	I-19
a. Findings	I-19
b. Conclusions	I-20
c. Recommendations	I-20
II TACTICAL WARNING/ATTACK ASSESSMENT, NUCLEAR DETONATION REPORTING, AND INDIRECT RESIDUAL CAPABILITY ASSESSMENT	II-1
1. Major Analysis Objective	II-1
2. Synopsis	II-1
3. System Description	II-1
4. Analysis	II-1

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page</u>
a. Exercise Considerations	II-1
b. Analysis Results by Subarea	II-2
(1) RECA	II-2
(2) NUDET Reporting	II-8
(3) TW/AA	II-12
5. Tactical Warning/Attack Assessment, Nuclear Detonation Reporting, and Indirect Residual Capability Assessment Findings, Conclusions, and Recommendations	II-25
a. Findings	II-25
b. Conclusions	II-27
c. Recommendations	II-28
III MINIMUM ESSENTIAL EMERGENCY COMMUNICA- TIONS NETWORK (MEECN)	III-1
1. Major Analysis Objective	III-1
2. Synopsis	III-1
3. System Description	III-1
4. Analysis	III-1
a. Exercise Considerations	III-1
b. Analysis Results by Subarea	III-1
(1) Analysis Objective	III-1
(2) Analysis Objective	III-5
(3) Analysis Objective	III-6
5. MEECN Findings, Conclusions, and Recommendations	III-6
a. Findings	III-6
b. Conclusions	III-7
c. Recommendations	III-7
IV WORLDWIDE AIRBORNE COMMAND POST (WWABNCP)	IV-1
1. Major Analysis Objective	IV-1
2. Synopsis	IV-1

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page</u>
3. System Description	IV-1
4. Analysis	IV-1
a. Exercise Considerations	IV-1
b. Analysis Results by Subarea	IV-2
(1) Analysis Objective	IV-2
(2) Analysis Objective	IV-3
(3) Analysis Objective	IV-8
(4) Analysis Objective	IV-9
(5) Analysis Objective	IV-11
(6) Analysis Objective	IV-12
(7) Analysis Objective	IV-13
5. WWABNCP Findings, Conclusions, and Recommendations	IV-16
a. Findings	IV-16
b. Conclusions	IV-17
c. Recommendations	IV-18
V	
WORLDWIDE MILITARY COMMAND AND CONTROL SYSTEM AUTOMATIC DATA PROCESSING (WWMCCS ADP)	V-1
1. Major Analysis Objective	V-1
2. Synopsis	V-1
3. System Description	V-1
4. Analysis	V-1
a. Exercise Considerations	V-1
b. Analysis Results by Subarea	V-1
(1) Analysis Objectives	V-1
(2) Analysis	V-2
(3) Findings	V-3
(4) Conclusion	V-3
(5) Recommendation	V-3
VI	
WWMCCS/INTERCOMPUTER NETWORK (WIN)	VI-1
1. Major Analysis Objective	VI-1
2. Synopsis	VI-1

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page</u>
3. System Description	VI-1
4. Analysis	VI-1
a. Exercise Considerations	VI-1
b. Analysis Results by Subarea	VI-2
(1) WIN Configuration	VI-2
(2) Network Reliability	VI-2
(3) WIN Subsystem Performance	VI-17
(4) Probability of Accessing Selected Hosts from Another Host	VI-22
(5) ADP Support to Selected Users	VI-33
(6) WIN-Host Priorities	VI-43
5. WIN Findings, Conclusions, and Recommendations	VI-46
a. Findings	VI-46
b. Conclusions	VI-48
c. Recommendations	VI-49
VII CRISIS STAFFING PROCEDURES (CSP)	VII-1
1. Major Analysis Objective	VII-1
2. Synopsis	VII-1
3. System Description	VII-2
4. Analysis	VII-2
a. Exercise Considerations	VII-2
b. Analysis Results by Subarea	VII-2
(1) General	VII-2
(2) Crisis Staffing Procedures (CSP): Emergency Operating Procedures (EOP)	VII-3
(3) Briefings, Closed Circuit Television (CCTV), and Visual Aids	VII-13
(4) Emergency Action Procedures (EAP)	VII-17
(5) Continuity of Operations Plan (COOP) and Relocation	VII-19

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page</u>
5. Crisis Staffing Procedures Findings, Conclusions, and Recommendations	VII-22
a. Findings	VII-22
b. Conclusions	VII-23
c. Recommendations	VII-24
VIII NATIONAL EMERGENCY AIRBORNE COMMAND POST (NEACP)	VIII-1
1. Major Analysis Objective	VIII-1
2. Synopsis	VIII-1
3. System Description	VIII-1
4. Analysis	VIII-1
a. Exercise Considerations	VIII-1
b. Analysis Results by Subarea	VIII-2
(1) Analysis Objective	VIII-2
(2) Analysis Objective	VIII-3
(3) Analysis Objective	VIII-5
(4) Analysis Objective	VIII-9
(5) Analysis Objective	VIII-9
5. NEACP Findings, Conclusions, and Recommendations	VIII-10
a. Findings	VIII-10
b. Conclusions	VIII-11
c. Recommendations	VIII-11
IX CIVIL AND MILITARY LOGISTIC PLANS	IX-1
1. Major Analysis Objective	IX-1
2. Synopsis	IX-1
3. System Description	IX-2
4. Analysis	IX-2
a. Exercise Considerations	IX-2
b. Analysis Results by Subarea	IX-3
(1) MACA-MSCD	IX-3
(2) OJCS Briefing Team at FEMA Special Facility	IX-7

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TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page</u>
(3) Resource Claimancy	IX-8
(4) OSD Liaison Cell at FEMA Special Facility	IX-12
(5) DOD Representative to the FEMA IECG	IX-15
5. Civil and Military Logistic Plans Findings, Conclusions, and Recommendations	IX-15
a. Findings	IX-15
b. Conclusions	IX-16
c. Recommendations	IX-17
X TELECOMMUNICATIONS	X-1
1. Major Analysis Objective	X-1
2. Synopsis	X-1
3. System Description	X-1
4. Analysis	X-1
a. Exercise Considerations	X-1
b. Analysis Results by Subarea	X-2
(1) Volume of Messages	X-2
(2) Message Speed of Service (SOS)	X-6
(3) Commander's Situation Reports	X-12
(4) Precedence Usage	X-17
(5) Length of FLASH and IMMEDIATE Messages	X-25
(6) Statistical Data	X-29
(7) OPSEC	X-29
5. Telecommunications, Findings, Con- clusions, and Recommendations	X-38
a. Findings	X-38
b. Conclusions	X-39
c. Recommendations	X-40
XI COMMUNICATIONS DEGRADATION	XI-1
1. Major Analysis Objective	XI-1
2. Synopsis	XI-1

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS (CONTINUED)

<u>Section</u>	<u>Page</u>
3. System Description.	XI-2
4. Analysis	XI-2
a. Exercise Considerations	XI-2
b. Analysis Results by Subarea	XI-2
(1) Analysis Objectives	XI-2
(2) NCMC Outage	XI-4
(3) Actual Circuit Outages	XI-6
(4) Operational Impact of Communications Outages	XI-12
5. Communications Degradation Findings, Conclusions, and Recommendations	XI-14
a. Findings	XI-14
b. Conclusions	XI-14
c. Recommendations	XI-15
XII REMEDIAL ACTION PROJECTS (RAPs)	XII-1
1. Purpose	XII-1
2. Definitions	XII-1
3. Number of Categories	XII-2
4. RAPs	XII-2
a. RAPs for Which OSD is Designated OPR	XII-2
b. RAPs for Which the Director for Plans and Policy, OJCS, is Designated OPR	XII-7
c. RAPs for Which the Director for Logistics, OJCS, is Designated OPR	XII-11
d. RAPs for Which the Director for Operations, OJCS, is Designated OPR	XII-13
e. RAPs for Which the Director for Command, Control, and Communica- tions Systems, OJCS, is Designated OPR	XII-31
f. RAPs for Which US Army is Designated OPR	XII-35

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS (CONTINUED)

<u>Section</u>		<u>Page</u>
	g. RAP for Which US Air Force is Designated OPR	XII-37
	h. RAP for Which Joint Deployment Agency is Designated OPR	XII-38
	i. RAP for Which Defense Nuclear Agency is Designated OPR	XII-39
	5. Deferred Critique Items	XII-39
XIII	PROPOSED REMEDIAL ACTION PROJECTS (RAPs)	XIII-1
	1. Purpose	XIII-1
	2. Definitions	XIII-1
	3. Proposed RAPs	XIII-1
XIV	REMEDIAL ACTION PROJECT (RAP) ANALYSIS	XIV-1
	1. Purpose	XIV-1
	2. General	XIV-1
	3. Synopsis	XIV-1
	4. Trend Analysis	XIV-2
	5. Methods of Comparison	XIV-4
	6. Results of Comparison	XIV-4
	7. Recommendations	XIV-15
XV	ANALYSIS SYNOPSIS	XV-1
	1. Analysis Task Organization	XV-1
	2. Analysis Requirements	XV-1
	3. Analysis Criteria	XV-1
	4. Analysis Approach	XV-2
	5. Analysis and Data Collection	XV-2
	a. Systems Description and Analysis and Data Collection Plan	XV-2
	b. Data Collection	XV-2
	c. Data Collected	XV-2
	d. Analysis Considerations	XV-4
	6. Exercise Message Analysis System (EMAS)	XV-4

UNCLASSIFIED