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RESEARCH PRODUCT 82-11

MISSION-BASED ANALYSES OF ARMOR TRAINING
REQUIREMENTS, VOLUME II. ARMOR OPERATION
TIME SEQUENCES

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item 20, continued

An analysis of armor operations was conducted to identify, classify, and interrelate the activities performed during tank platoon missions. Volume II* of this report contains diagrams and flow charts illustrating the sequence of activities occurring during tank team and tank platoon operations. *Key word: Armor Operations*

Other reports in the series are as follows:

- Volume I: Final Report
- *Volume II: Armor Operation Time Sequences
- Volume III: Leadership Tasks Performed During Tank Platoon Operations
- Volume IV: Crewman Tasks Performed During Tank Platoon Operations
- Volume V: Relationships Among Collective and Individual Tasks in Tank Platoon Operations
- Volume VI: Training Objectives for Tank Platoons and Crews
- Volume VII: Training Objectives for the XM1 Loader

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FOREWORD

This is Volume II of the Final Report of a project entitled Mission-Based Simulation and Training Requirements. The report contains the results of an analysis of tank platoons and missions. The other volumes of the Final Report are Volume I: Final Report; Volume III: Leadership Tasks Performed During Tank Platoon Operations; Volume IV: Crewman Tasks Performed During Tank Platoon Operations; Volume V: Relationships Among Collective and Individual Tasks in Tank Platoon Operations; Volume VI: Training Objectives for Tank Platoons and Crews; and Volume VII: Training Objectives for the XM1 Loader.

The work reported here was performed at the Fort Knox Office of the Human Resources Research Organization (HumRRO), under Contract No. 903-80-C-0229 with the US Army Research Institute for the Behavioral and Social Sciences (ARI). Dr. David W. Bessemer was the Contracting Officer's Technical Representative and provided administrative assistance and guidance.

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INTRODUCTION

The diagrams and flow charts contained in this volume were developed during an analysis of armor operations. A detailed description of the analysis is contained in Volume I of this report. The abbreviations and symbols used in the diagrams and flow charts are shown in Appendix A.

Purpose

The purpose of the analysis of armor operations was to identify, classify, and interrelate the activities performed during tank platoon missions. A mission was defined as a specific goal that was assigned to a military unit by the commander of the unit at the next higher echelon. Since the number of such goals was assumed to be inherently large, it was concluded that the number of platoon missions was too extensive to serve as the focal point for the analysis. The first step in the analysis, therefore, was to identify the categories or clusters of activities that normally occur during the performance of these missions. Six such categories were identified--offense, defense, assembly areas, plan operations, conduct movement, and sustaining operations. These categories were labeled "mission phases" since the clusters occur at different times and represent different stages of mission performance. The four mission phases pertaining to activities conducted in support of offense and defense (i.e., assembly areas, plan operations, conduct movement, and sustaining operations) were collectively referred to as the "supporting mission phases".

PROCEDURE

The analysis of armor operations focused on a tank team containing armor and infantry platoons. Since missions are assigned to platoons by the team commander to facilitate the performance of the team mission, it was concluded that the analysis of platoon operations must begin with an analysis of team operations. The strategy was to first identify the team operations that are normally performed during each mission phase. Once these were identified, the next step was to identify the platoon operations normally occurring during each team operation. Each platoon operation was then further examined to identify the platoon leader activities and the platoon tasks that would normally occur during that operation.

TANK TEAM OPERATIONS

The Tank Team Operation Outline in Appendix B shows the combat organization of the tank team and the team operations that were identified during an examination of FM 71-1, The Tank and Mechanized Infantry Company Team. In addition, the figure shows the interface between tactical team operations (i.e., tank team operations that are performed during either the offensive or defensive mission phases) and supporting team operations (i.e., tank team operations that are performed during one of the four supporting mission phases).

Each team operation is identified in the figure contained in Appendix B and in the figures presented in the other Appendixes by its name and a code. The code contains a letter representing the mission phase in which the operation occurs, and a digit arbitrarily assigned to each team operation occurring during the mission phase. The correspondence between the letters and the mission phases is as follows: O - Offense; D - Defense; A - Assembly Areas; P - Plan Operations; M - Conduct Movement; and S - Sustaining Operations.

Once the team operations were identified, the description of the conduct of each operation was examined to identify its phases. A team operation phase represents a cluster of activities that occur during different stages of a team operation. While some activities may occur during two or more phases of a team operation, the combination of activities performed during each phase tend to be unique and are intended to accomplish different subgoals.

The Tank Team Mission Hierarchy in Appendix C is an outline of the team operations and the team operation phases that occur during each mission phase. Each team operation phase is identified by name and by code. The code for each team operation phase was generated by arbitrarily assigning an additional digit to the code for the team operation of which it was a part.

The Tank Team Time Line Mission Sequence in Appendix D is a diagram summarizing the order in which the team operations are likely to occur in combat.

Analysis of Tank Team Operations

Once the team operations and their phases were identified, an analysis was made of the activities that occur during each operation. The focal point of this analysis was the team commander. From the descriptions of team operations, the command, control, and communications functions of the team commander were identified and placed into the sequence in which they would normally occur. The types of stimuli initiating each leadership act were derived from consideration of the combat situation. Team tasks were then identified by determining the specific activities that would result from each command issued by the team commander.

The results of the analysis of team operations are summarized in a series of flow charts contained in Appendix E. Each flow chart shows the order in which the activities performed by the team and the team commander would normally occur during a team operation. The name of the team operation is shown near the start of the flow chart. It is preceded by the name of the team operation that is most likely to occur immediately before it. Following the name of the team operation is the initiating stimulus which causes the operation to begin. Only three initiating stimuli are possible--a team operations order issued by the battalion commander, a team operations order issued by the team commander, and a frag order issued by the team commander. The initiating stimulus is followed by a decision which must be made by the team commander. The alternate decisions are then shown. Each decision is followed by one of

three different alternatives. Some decisions are followed by commands, some by leader actions, and some by no commands or actions. The commands and team leader actions are shown on the flow charts when they occur. A command is followed in turn by the team task which is performed as a result of the command. At this point the sequence is repeated beginning with the stimulus for the next decision. It should be noted that the specific stimulus preceding each decision is not given. Instead the flow charts contain the stimulus categories that initiate the next decision. The categories are identified using the METT system in which M refers to different aspects of the mission, E to characteristics of the enemy, the first T to terrain and weather, and the second T to troops available. To avoid confusion whenever either one of the last two categories appeared without the other, TR was used in the flow charts to designate terrain and weather, while TP was used to designate troops available. The team operation most likely to follow the operation is shown at the end of each flow chart.

TANK PLATOON OPERATIONS

After the team operations and their phases were identified, the analysis was continued by examining the activities that occur at the platoon level. Descriptions of team operations were reviewed to identify the platoon operations that are conducted during each team operation phase. A platoon operation was defined as a coordinated set of activities that could be performed by a single tank platoon that would enable the platoon to accomplish the goal assigned to it by the team commander. The descriptions of the team operations indicated that some platoon operations could be performed by themselves with all of the tanks platoons in the tank team operating together. Some platoon operations could not be performed by themselves, but only in conjunction with other platoon operations. When two platoon operations are performed simultaneously, each by different platoons, a name was assigned to the type of platoon (or platoons) conducting each of the separate operations.

A series of three Tank Platoon Mission Hierarchies is contained in Appendix F. These are outlines of the platoon operations that occur in each team operation and team operation phase during the offensive, defensive, and supporting mission phases. Each platoon operation is identified by name and by code. The code for a platoon operation was generated by arbitrarily assigning an additional digit to the code for the team operation phase during which it is conducted. Platoon operations that could be performed by all of the platoons in the team are indicated by the letter P below the name of the operation. For each platoon operation requiring coordination with another, an abbreviation is given for the type of platoon(s) that would perform the operation.

Two Tank Platoon Time Line Mission Sequences are contained in Appendix G. These diagrams summarize the order in which the team operations, team operation phases, and platoon operations are likely to occur during the offensive and defensive mission phases.

Analysis of Tank Platoon Operations

The results of the analysis of platoon operations are summarized in a series of flow charts contained in Appendix H. Each flow chart shows the order in which the activities performed by the platoon and the platoon leader would normally occur during each team operation. The activities are shown in a single column for the team operations in which there are no coordinated platoon operations. During team operations that do require coordinated platoon operations, the activities are shown in parallel columns with each column containing the activities that are conducted during a different team operation phase.

On each flow chart, the name of the team operation is preceded by the name of the team operation that is most likely to occur immediately before it. Following the name of the team operation is the initiating stimulus which causes the team operation to begin. This is followed by the name of the team operation phase and the name of the platoon operation whose activities are being shown. The sequence of activities shown for platoon operations is the same of that shown earlier for team operations except that the leadership activities pertain to the platoon leader and the tasks are platoon tasks. Linked to each platoon leader command is a code number designating a leadership, platoon, or crew drill that can be used to train skills required to perform the leadership task exhibited by the platoon leader or the crew and platoon skills necessary to perform the platoon task. Some of the drills are already in existence, while others remain to be developed. Table H-1 in Appendix G lists the titles of these drills and the sources in which the existing drills can be found. Also indicated on the flow charts is the mode of communication by which the platoon leader would issue his command.

The diagrams and charts contained in this volume represent graphic illustrations of the derivation of platoon and platoon leader tasks emanating from tank team operations. Additional details on the derivation of these tasks can be obtained in Volumes I, III, and V of this report.

APPENDIX A

ABBREVIATIONS AND SYMBOLS LEGEND

TABLE A-1: ABBREVIATIONS FOR TEAM OPERATIONS AND
PLATOON OPERATIONS STIMULI - DECISION - RESPONSE FLOW DIAGRAMS

| | |
|------------------------------|--|
| AA - Assembly Area | F&M - Fire and Maneuver |
| ACCEL - Acceleration | FLD FIRE - Fields of Fire |
| ADJ - Adjusted | FLNK - Flank |
| AFTER-OPS - After Operations | FO - Forward Observer |
| ALTERN - Alternate | FORM - Formation |
| ANC - Announce | FOR OBSRVER - Forward Observer |
| APP - Approach | FRAGO - Frag Order |
| APPROP - Appropriate | FWD - Forward |
| ARTY - Artillery | G D - Gunnery Drill |
| ASSGND - Assigned | GD - Good |
| ASSLT - Assault | GND - Ground |
| ATK - Attack | GRDS - Guards |
| AVAIL - Available | HAW - Heavy Anti-Tank Weapons |
| AVE - Avenue | HRBONE - Herringbone |
| BETWN - Between | IC - Intercommunications |
| B D - Battle Drill | ID - Indirect |
| BNDG - Bounding | IDF - Indirect Fires |
| B-OP - Breaching Operation | ILLUM - Illumination |
| BRCH - Breach | IMM - Immediate |
| BTL - Battle | IND - Individual |
| CHKS - Checks | INEFFEC - Ineffective |
| CNT - Contact | INF - Infantry |
| COMMO - Communications | INIT - Initiated |
| COMP - Complete | INST - Installed |
| CON - Conduct | INT - Interval |
| CONT - Continue | IWD - Initial Withdrawing |
| COORD - Coordinate | IWP - Initial Withdrawing Platoon |
| COR - Correct | LD - Line of Departure |
| CORRECTD - Corrected | LP - Lead Platoon |
| COUNTERATK - Counterattack | M - Mission |
| COV - Covering | MAINT - Maintenance |
| CP - Critical Point | MAINTD - Maintained |
| CRIT - Critical | MASS - Massed |
| CRSG - Crossing | MAX - Maximum |
| DEF - Defense | METR - Mission, Enemy, Terrain |
| DEFIL - Defilade | METT - Mission, Enemy, Terrain, Troops |
| DELVD - Delivered | MNVR - Maneuver |
| DEPL - Deployed | MO - Mission Order |
| DESGNTD - Designated | M-TR - Mission, Terrain |
| DESTRYD - Destroyed | MVD - Moved |
| DIR - Direct | MVT - Movement |
| DISENGD - Disengaged | OBSER - Observation |
| DISPLACE - Displacement | OBST - Obstacle |
| DISTRIB - Distribute | OCCUPYS - Occupies |
| DPTH - Depth | OLAPNG - Overlapping |
| EFFEC - Effective | OPNL - Operational |
| ELEMTS - Elements | OPORD - Operation Order |
| EMERG - Emergency | OPP - Opportunity |
| EN - Enemy | ORD - Ordered |
| ENGD - Engaged | ORG - Organize |
| ESTAB - Established | ORGANZD - Organized |

TABLE A-1. CONTINUED.

| | |
|---------------------------------------|---------------------|
| OWATCH - Overwatch | TECH - Technique |
| PERFD - Performed | TER - Terrain |
| PERM - Permission | TNK - Tank |
| PERS - Personnel | TF - Task Force |
| PHS - Phase | TGTS - Targets |
| PLAT - Platoon | TM - Team |
| PLS-D - Platoon Leader/Sergeant Drill | TNTV - Tentative |
| POS - Position | TRAV - Traveling |
| PSBL - Possible | TUR - Turret |
| PREPS - Preparations | WD - Withdraw |
| PRES - Present | W/DRAW - Withdrawal |
| PREV - Previous | W/OTH - With Other |
| PROP - Proper | WPNS - Weapons |
| PROT - Protective | |
| PROV - Provided | |
| PTS - Points | |
| QURTG - Quartering | |
| RD - Road | |
| RDNS - Readiness | |
| RECD - Received | |
| RECON - Reconnaissance | |
| REESTAB - Reestablish | |
| REL - Release | |
| REORGAN - Reorganize | |
| REPOS - Reposition | |
| REQ - Request | |
| REV - Reverse | |
| RMNG - Remaining | |
| RP - Range Point | |
| RPTD - Reported | |
| RPTS - Reports | |
| RTS - Routes | |
| SCHED - Scheduled | |
| SEC - Security | |
| SEL - Selected | |
| SF - Suppressive Fires | |
| SIT - Situation | |
| SP - Starting Point | |
| SPEC - Specified | |
| ST PT - Starting Point | |
| SUB - Subsequent | |
| SUBS - Subsiding | |
| SUC - Successive | |
| SUP - Support | |
| SUPP - Suppressive | |
| SURP - Surprise | |
| SURVEIL - Surveillance | |
| SUR-D - Survival Drill | |
| SUS-D - Sustaining Drill | |
| SUST - Sustaining | |

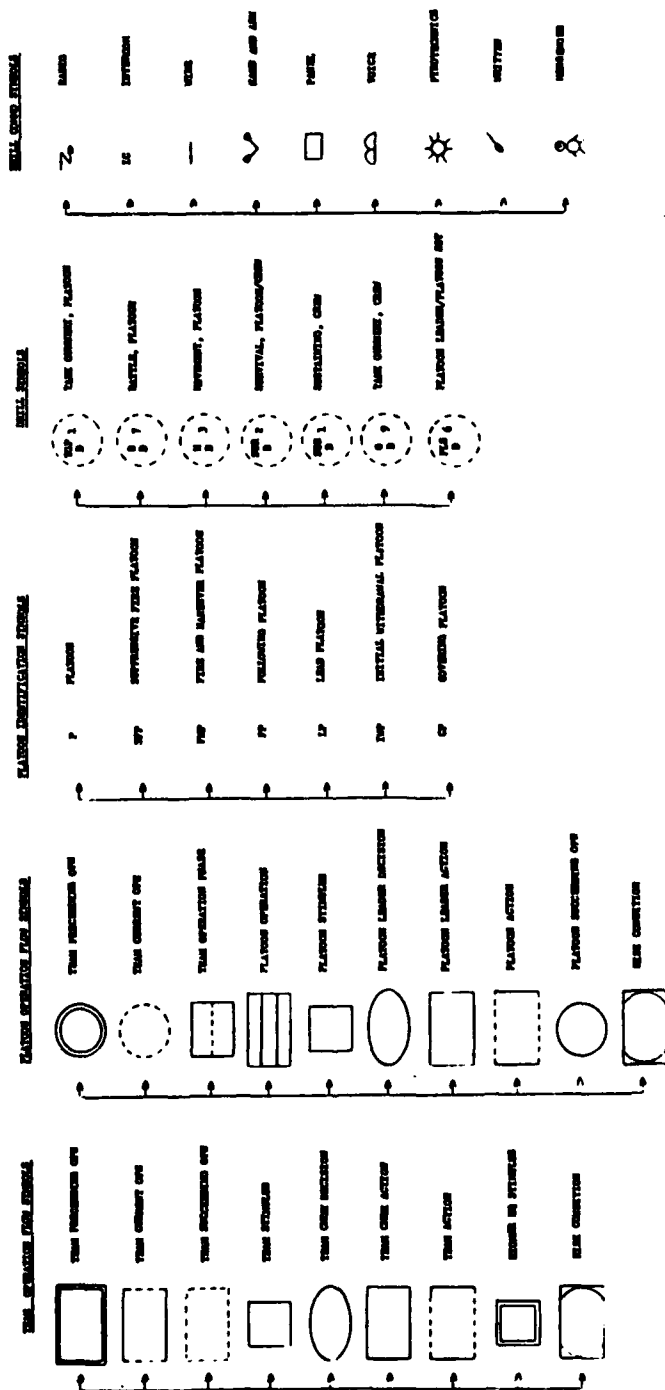


FIGURE A-1. SYMBOLS LEGEND

APPENDIX B

TANK TEAM OPERATIONS OUTLINE

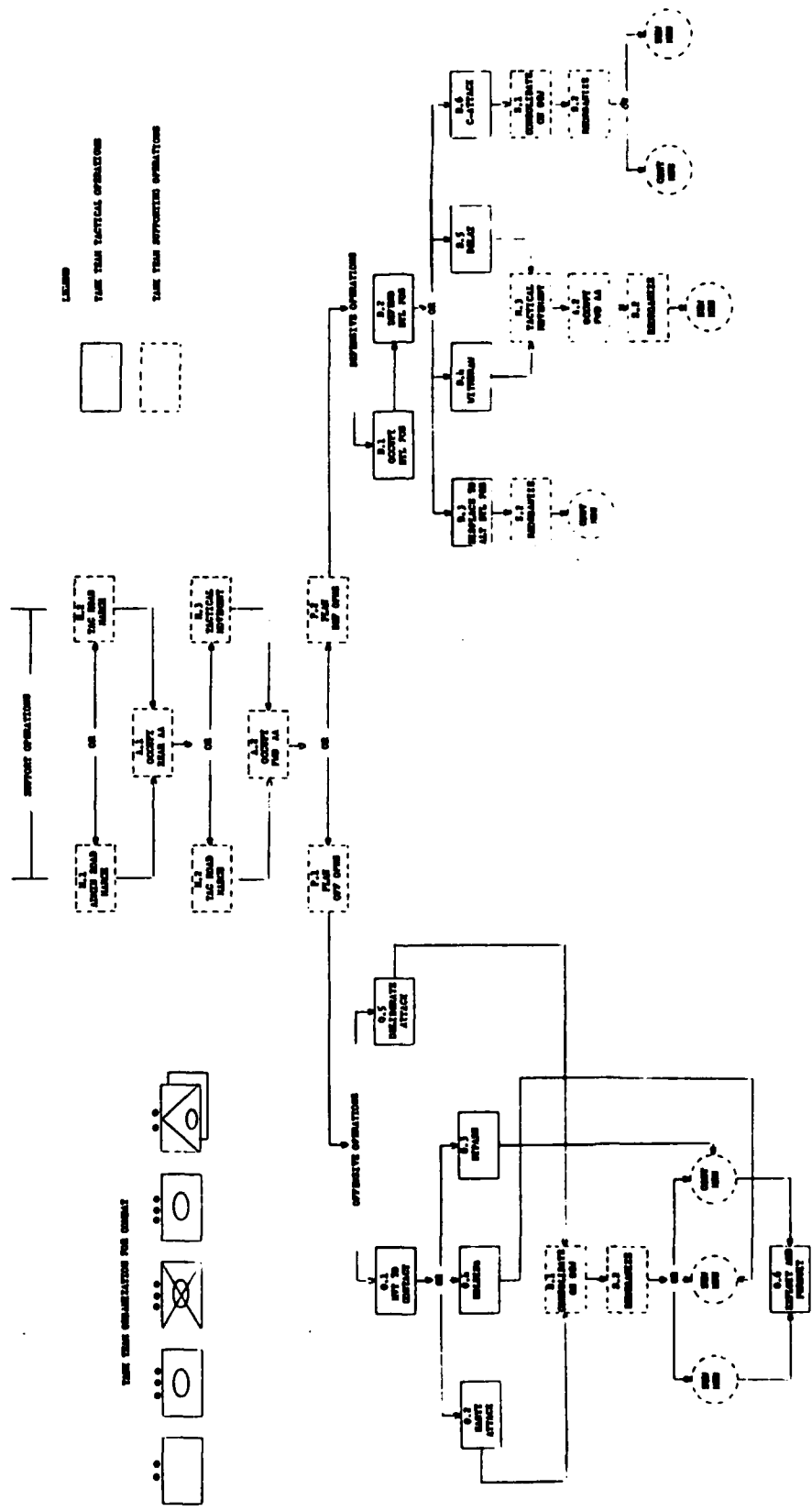


FIGURE 9-1. TANK TEAM OPERATIONS OUTLINE

APPENDIX C

TANK TEAM MISSION HIERARCHY

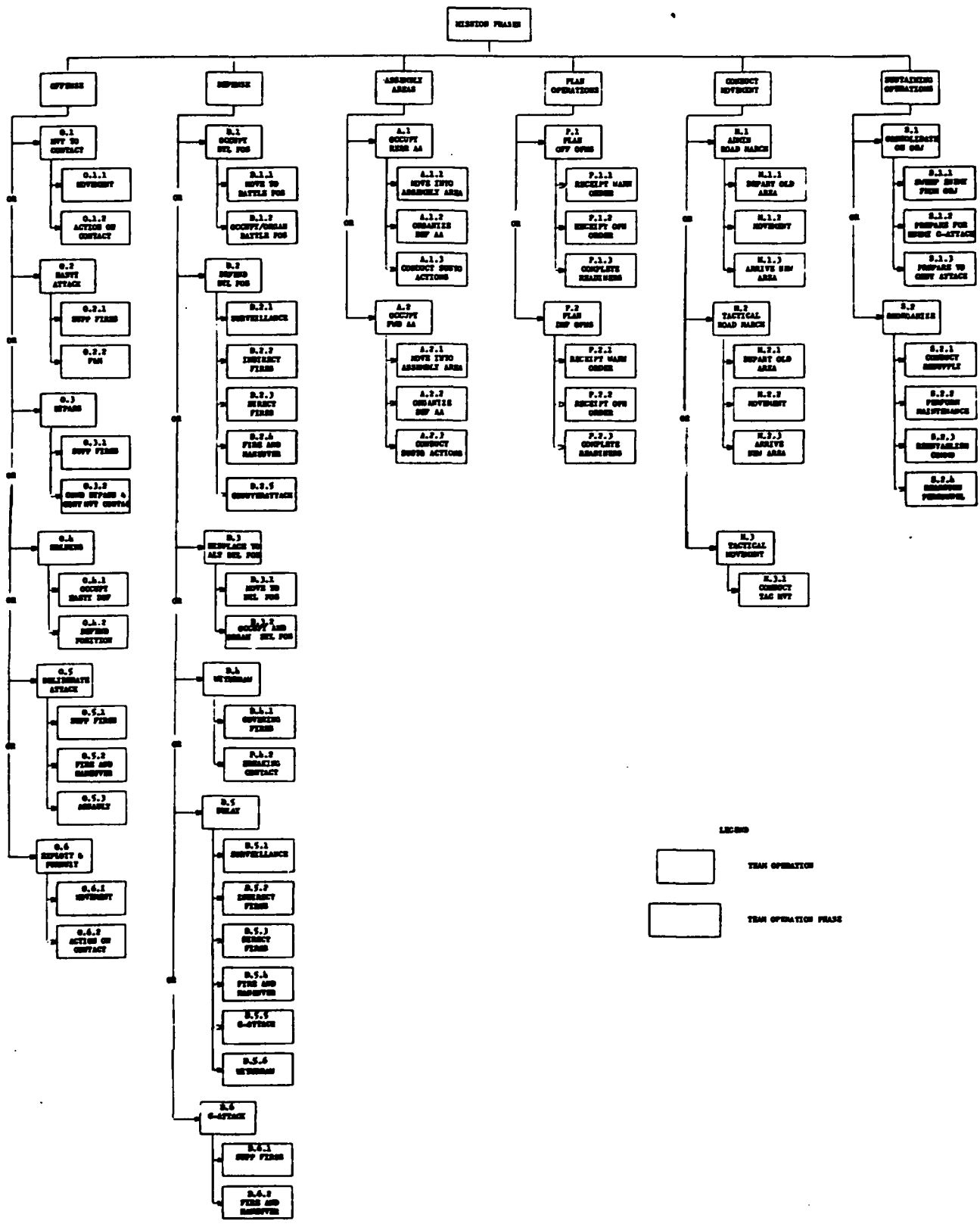


FIGURE C-1. TANK TEAM MISSION HIERARCHY

APPENDIX D

TANK TEAM TIME LINE MISSION SEQUENCE

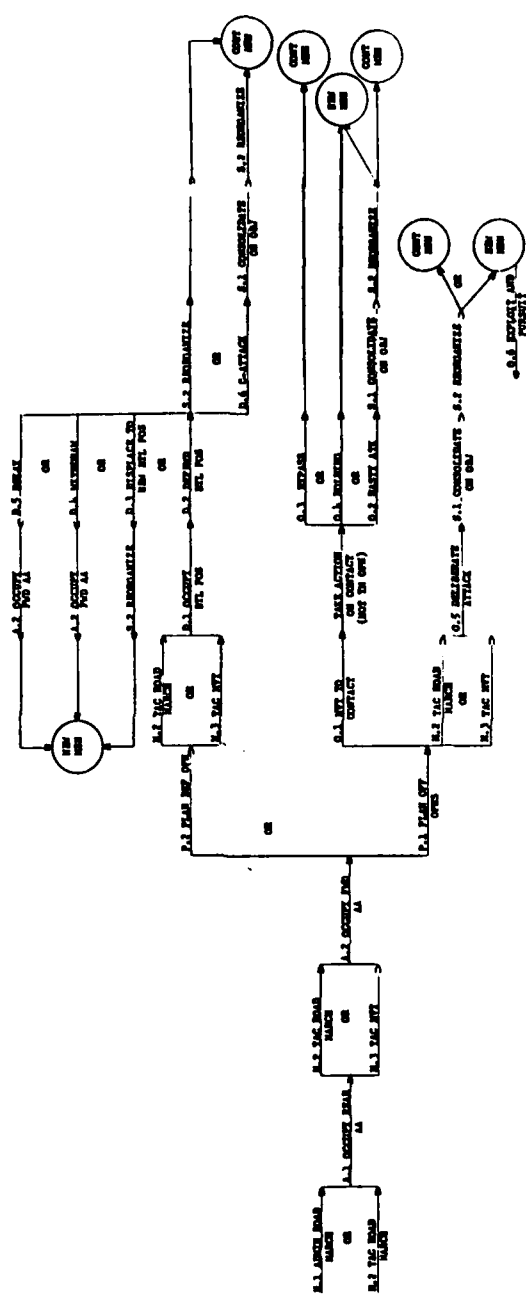


FIGURE D-1. TANK TEAM TIME LINE MISSION SEQUENCE

APPENDIX E

TANK TEAM OPERATION FLOW DIAGRAMS

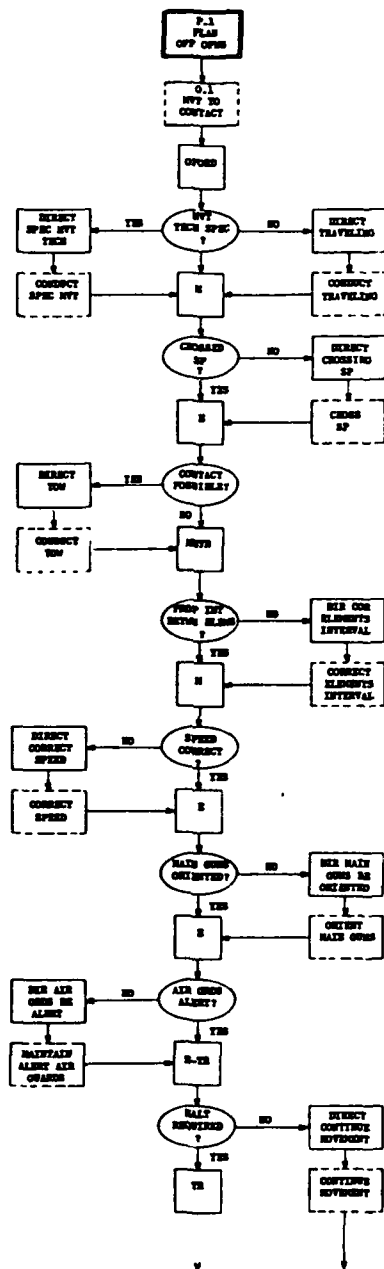


FIGURE E-1. TANK TEAM OPERATION: MOVEMENT TO CONTACT; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-1 Continued on Page 17

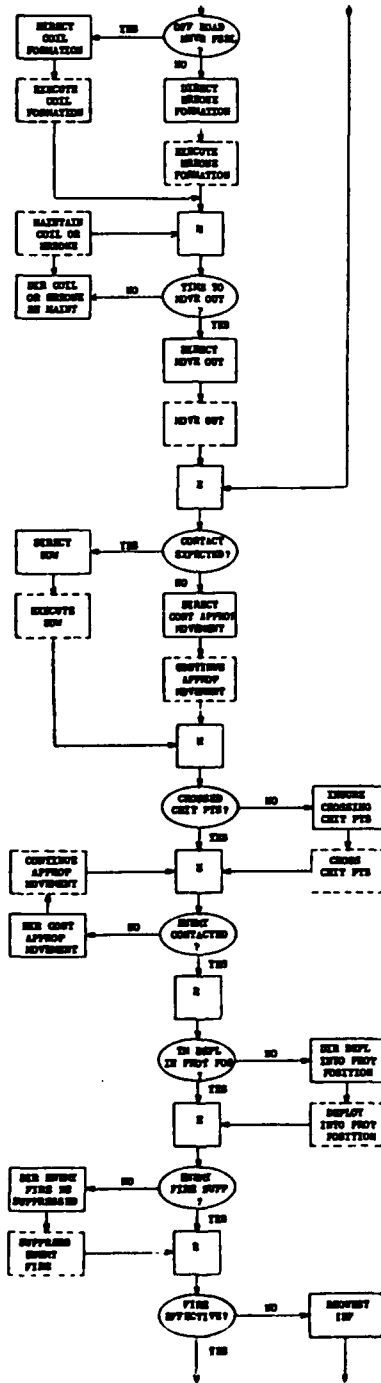


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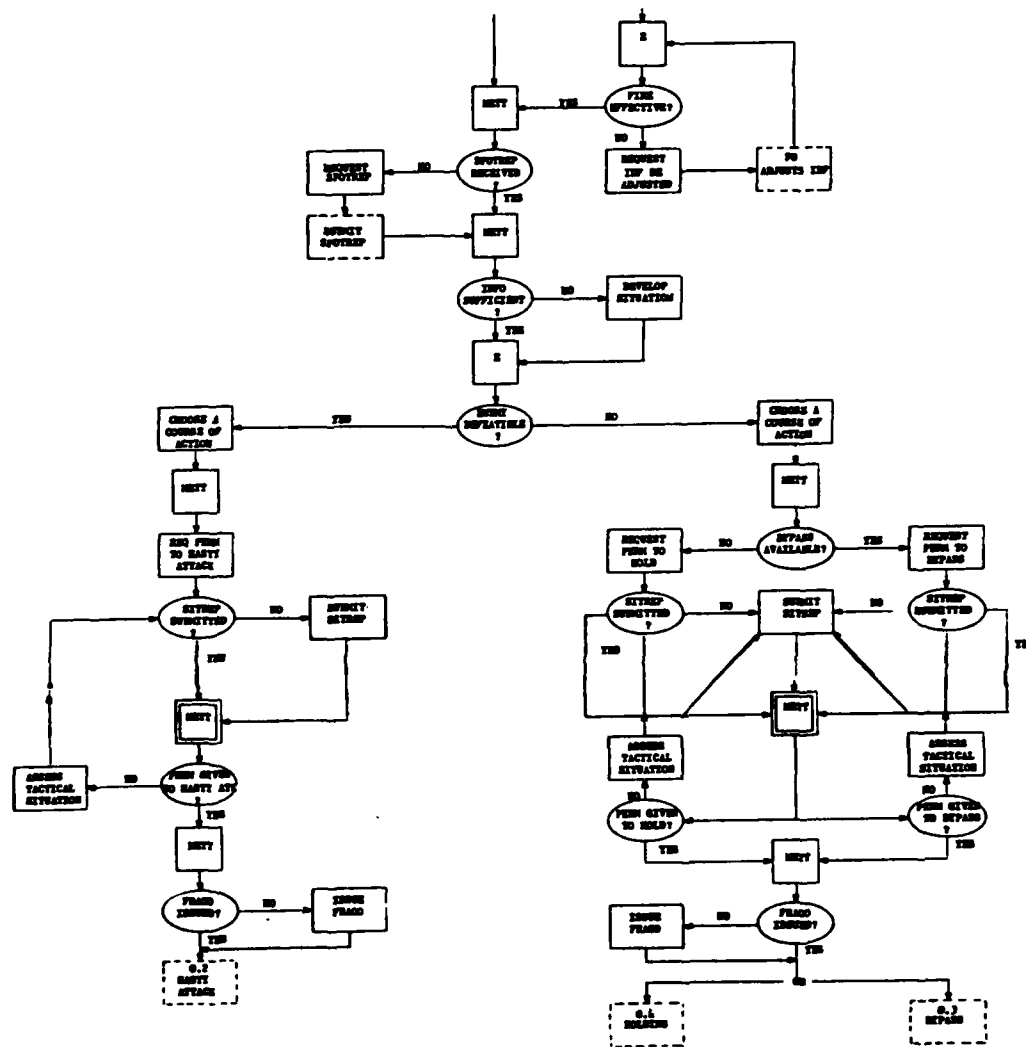


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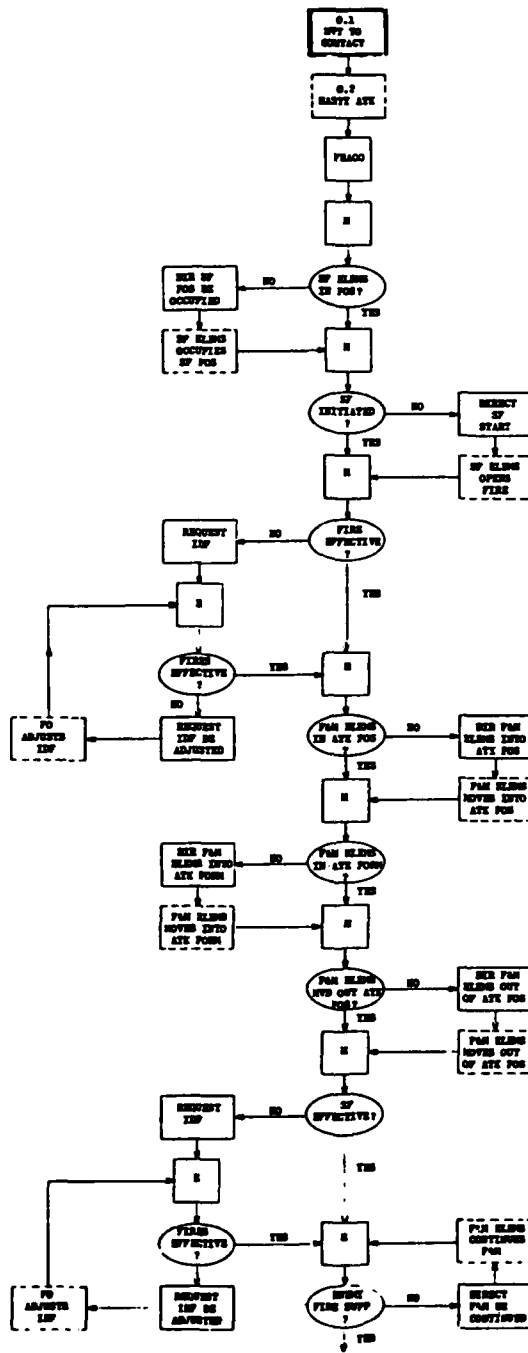


FIGURE E-2. TANK TEAM OPERATION: HASTY ATTACK: STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-2 Continued on Page 20

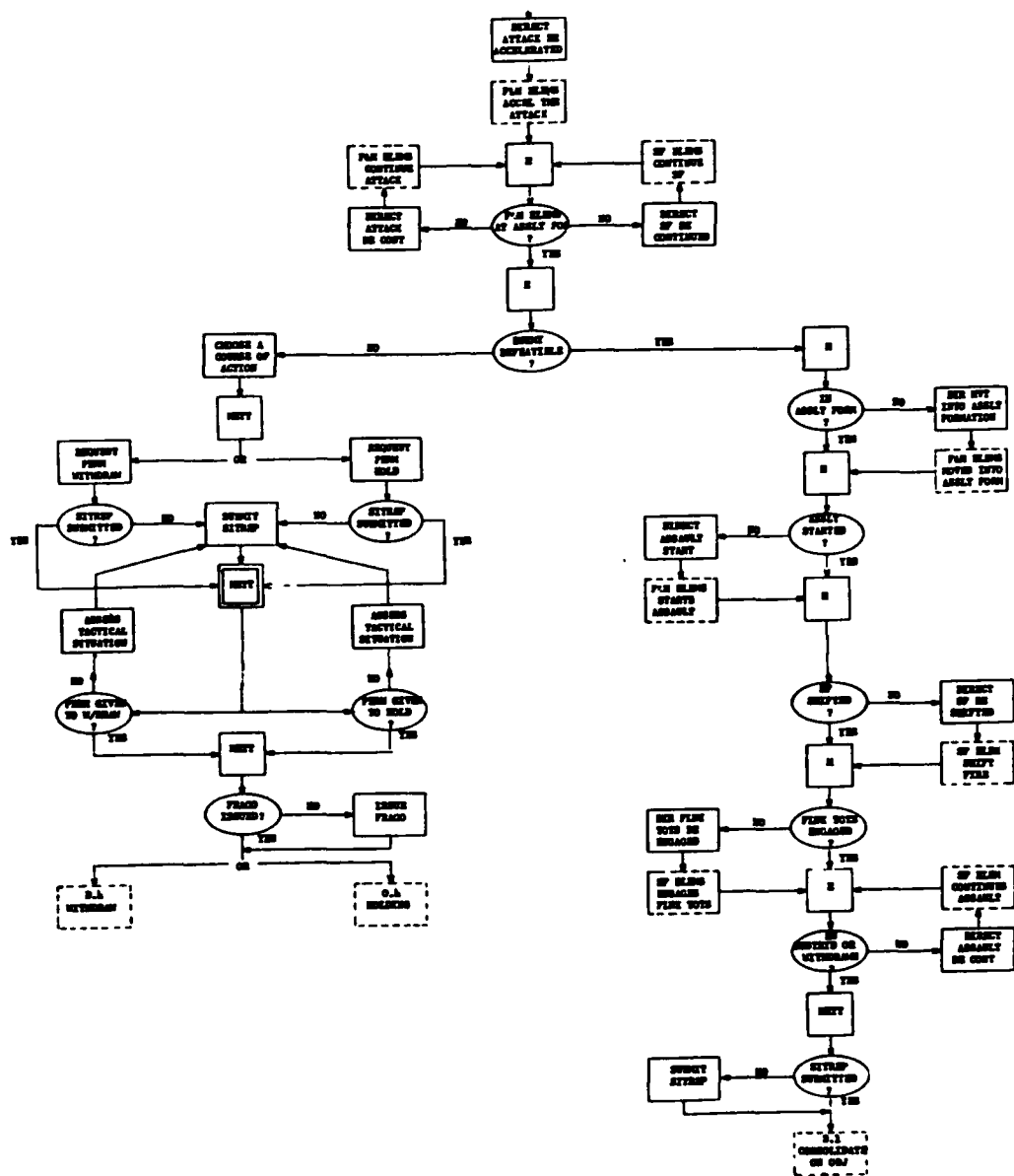


Figure E-2 Continued

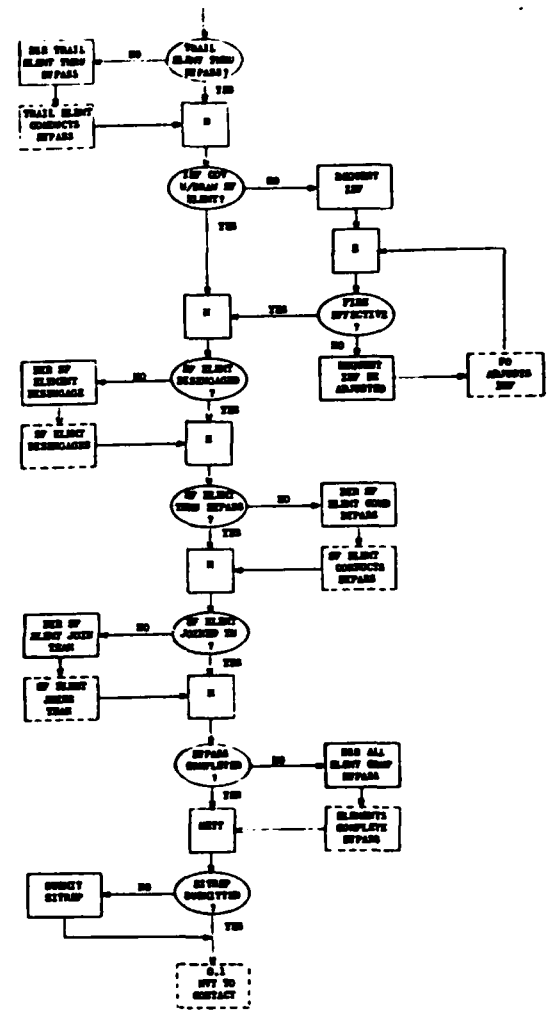


Figure E-3 Continued

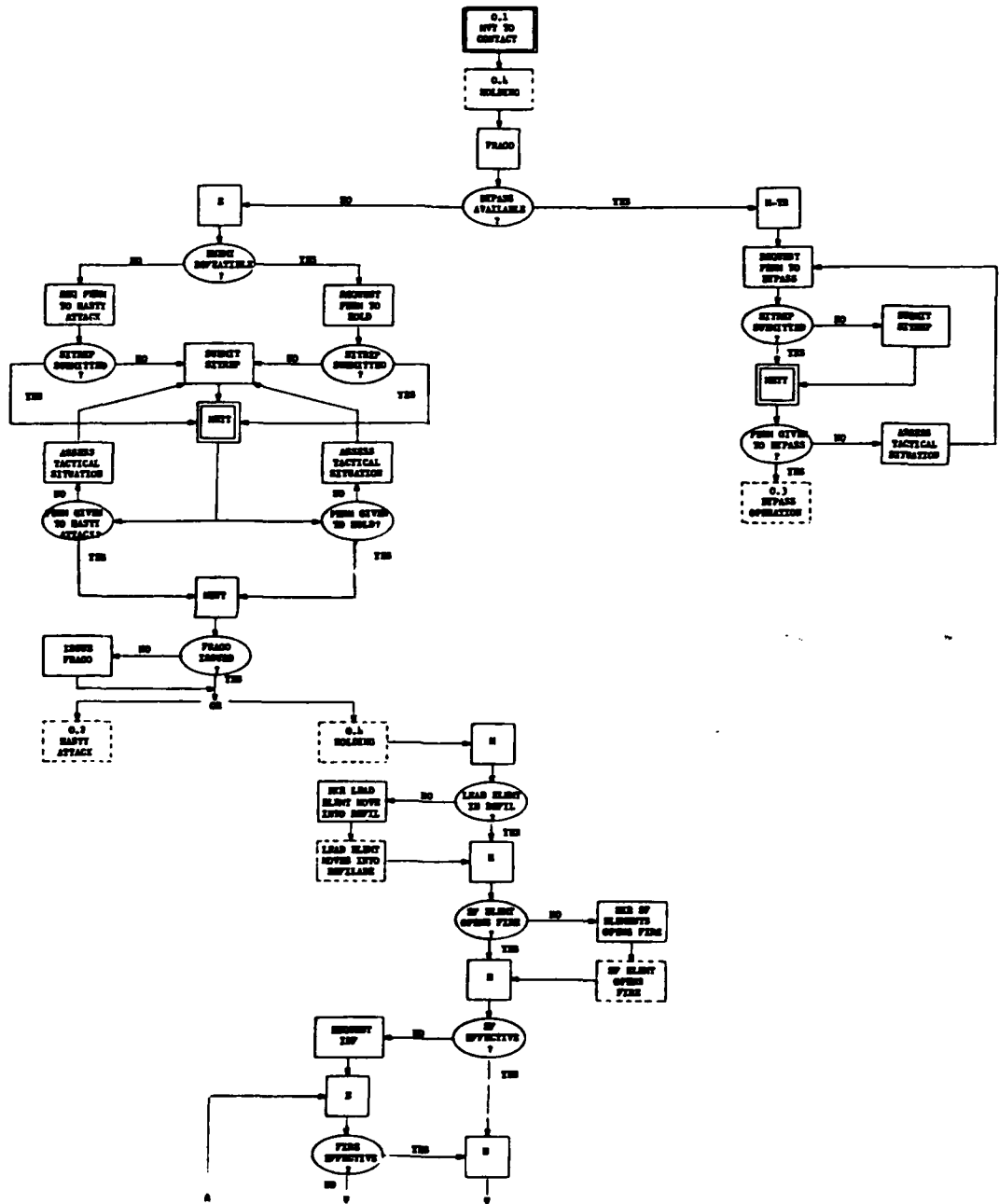


FIGURE E-4. TANK TEAM OPERATION: MOLDING; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-4 Continued on Page 24

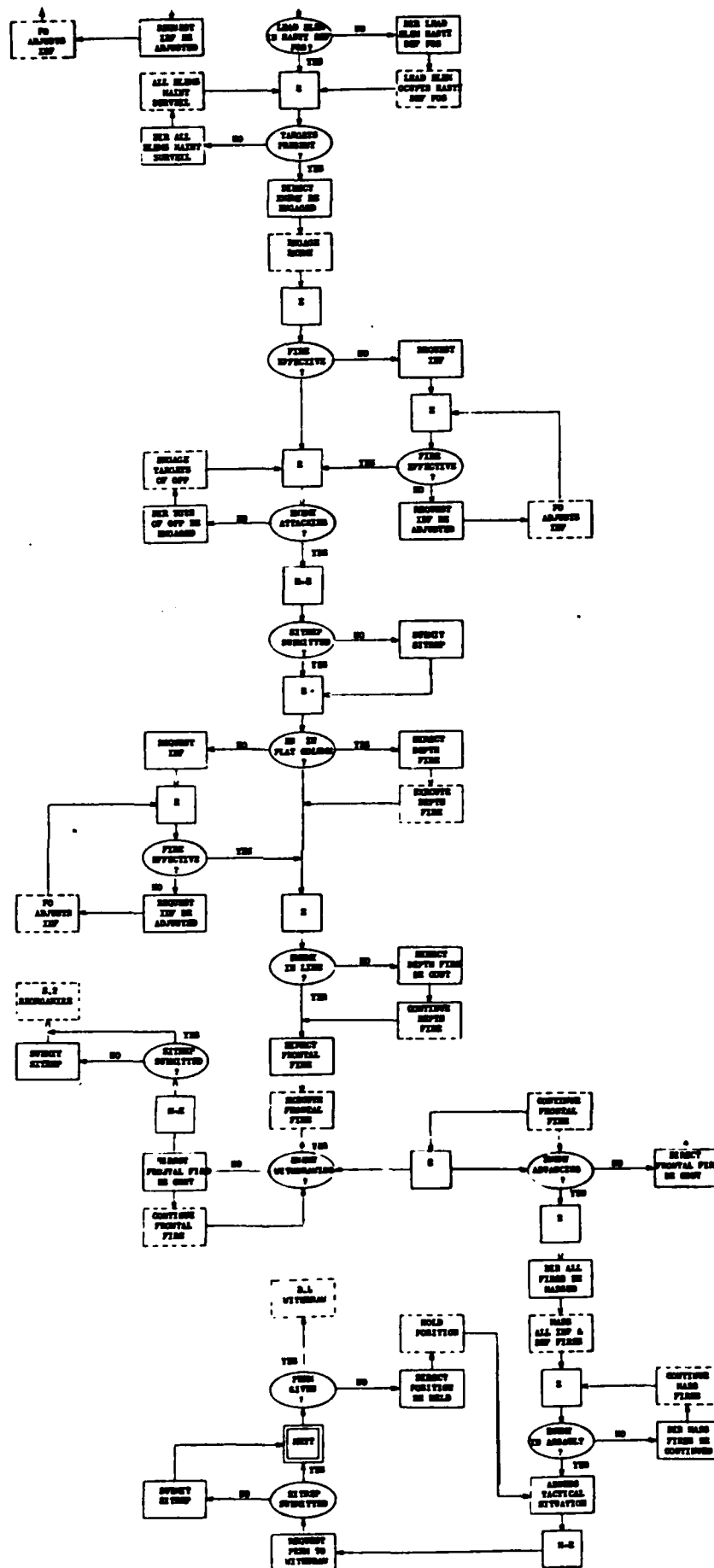


Figure B-4 Continued

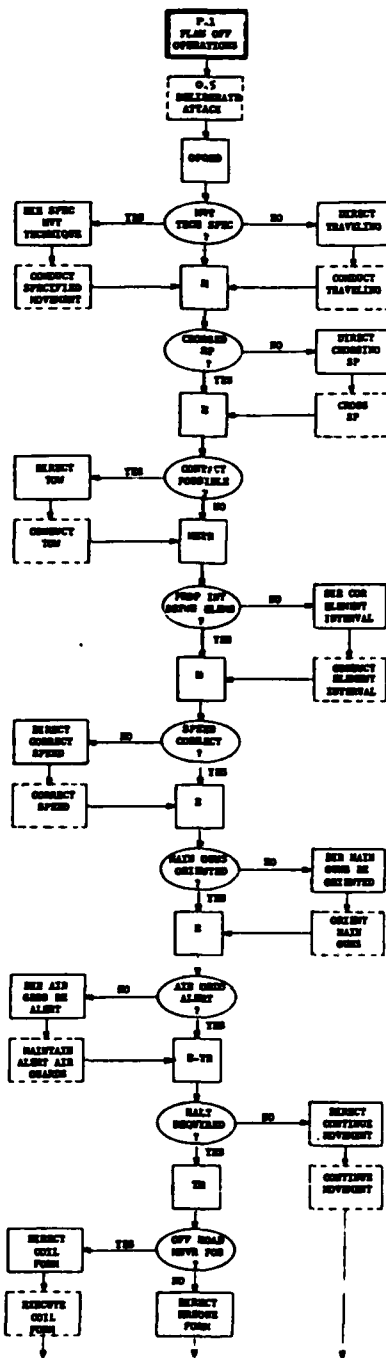


FIGURE E-5. TANK TEAM OPERATION: DELIBERATE ATTACK; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-5 Continued on Page 26

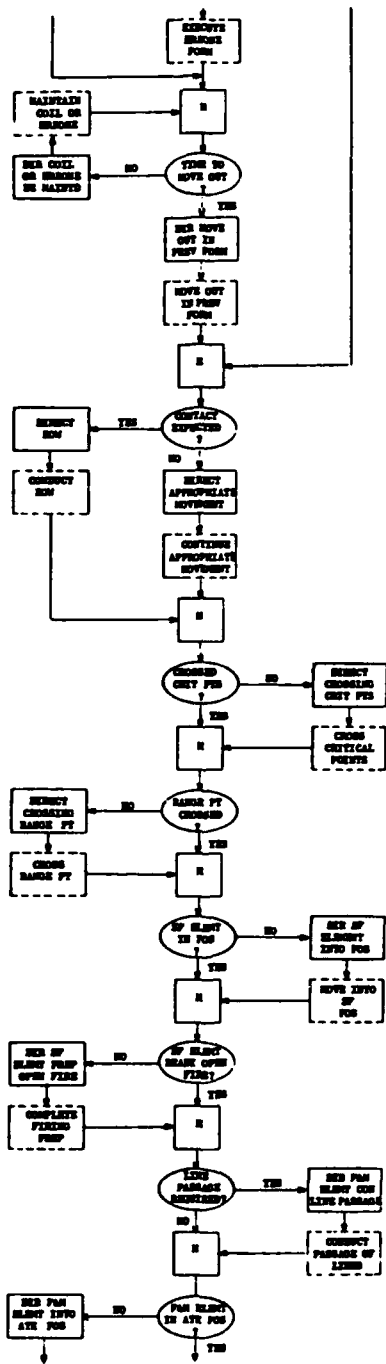


Figure E-5 Continued

Figure E-5 Continued on Page 27

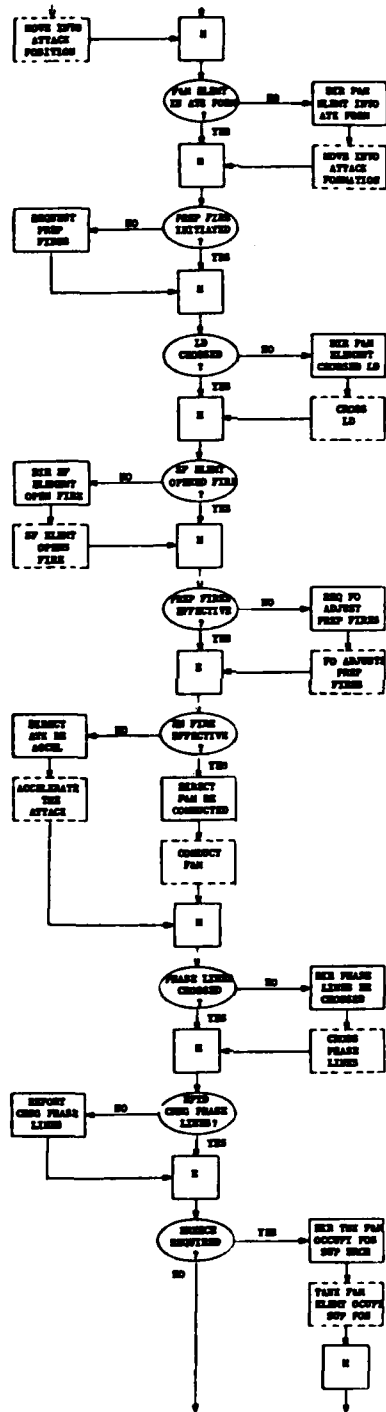


Figure E-5 Continued

Figure E-5 Continued on Page 28

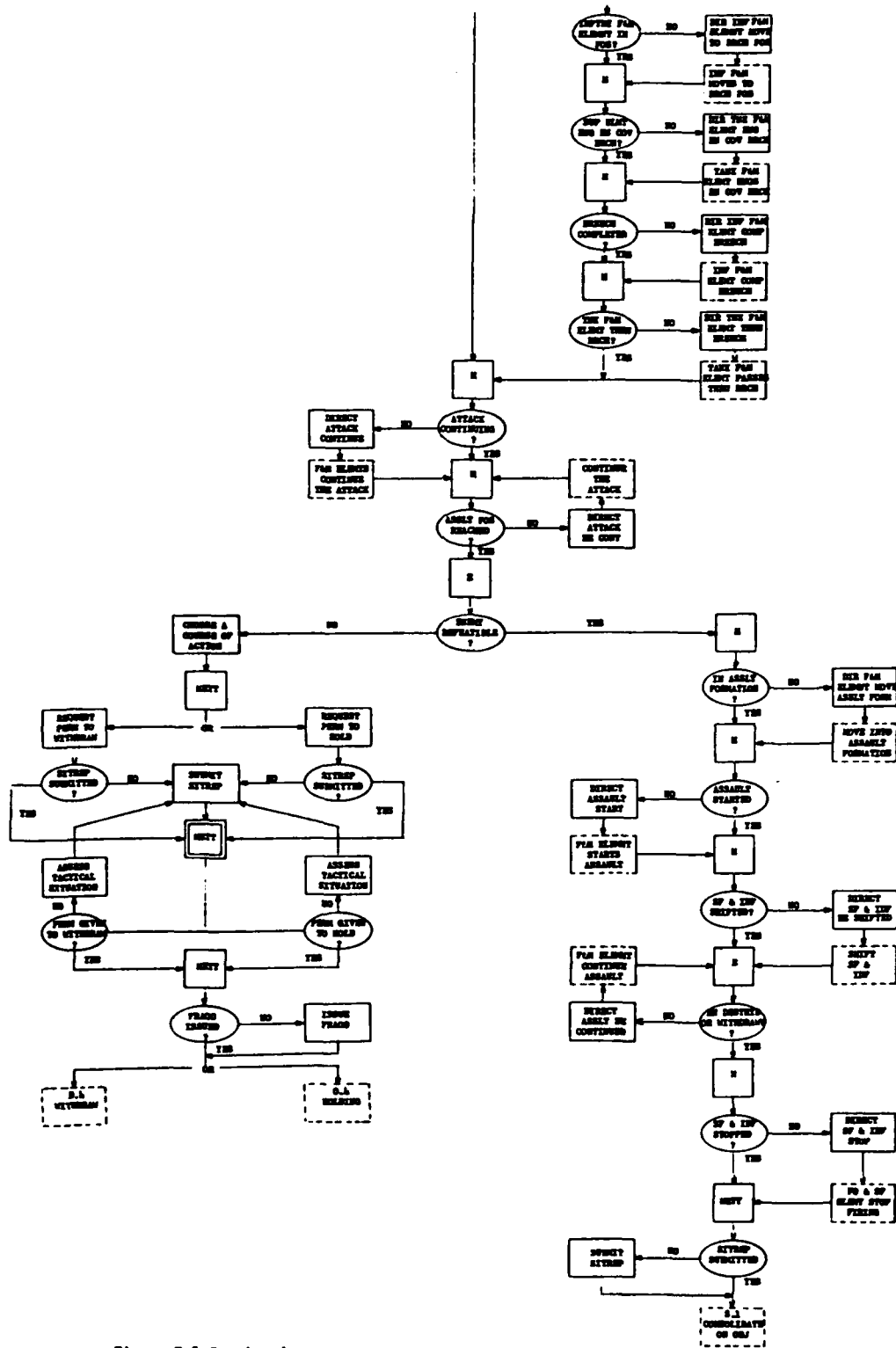


Figure E-5 Continued

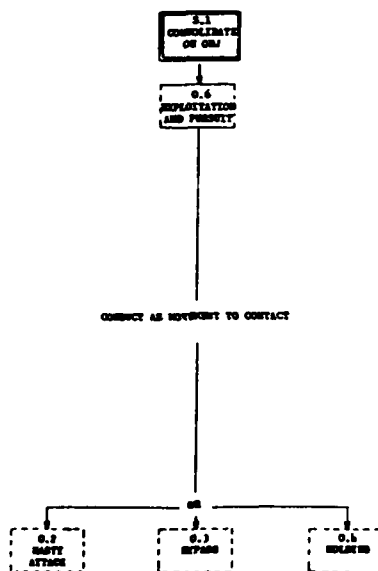


FIGURE E-6. TANK TEAM OPERATION:
EXPLOITATION AND PURSUIT;
STIMULI - DECISION - RESPONSE
FLOW DIAGRAM

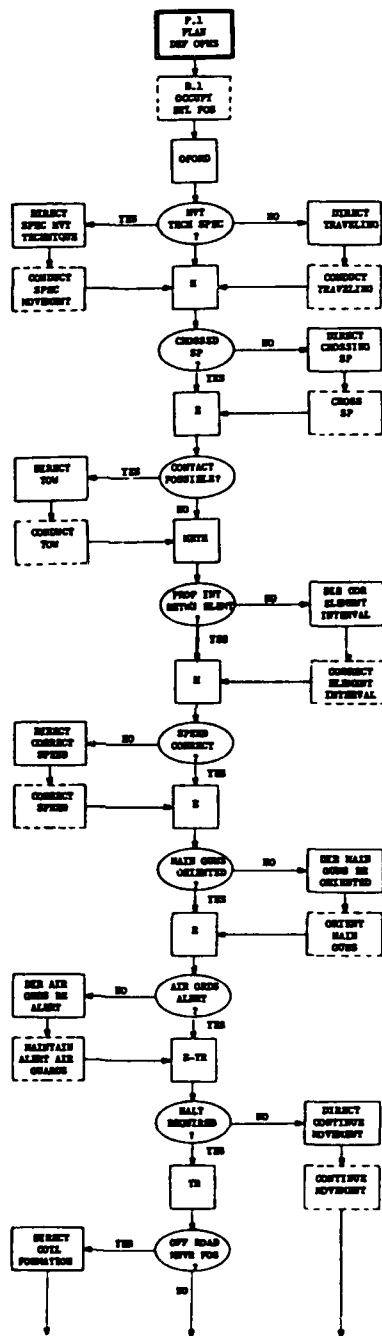


FIGURE E-7. TANK TEAM OPERATION: OCCUPY BATTLE POSITION; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-7 Continued on Page 31

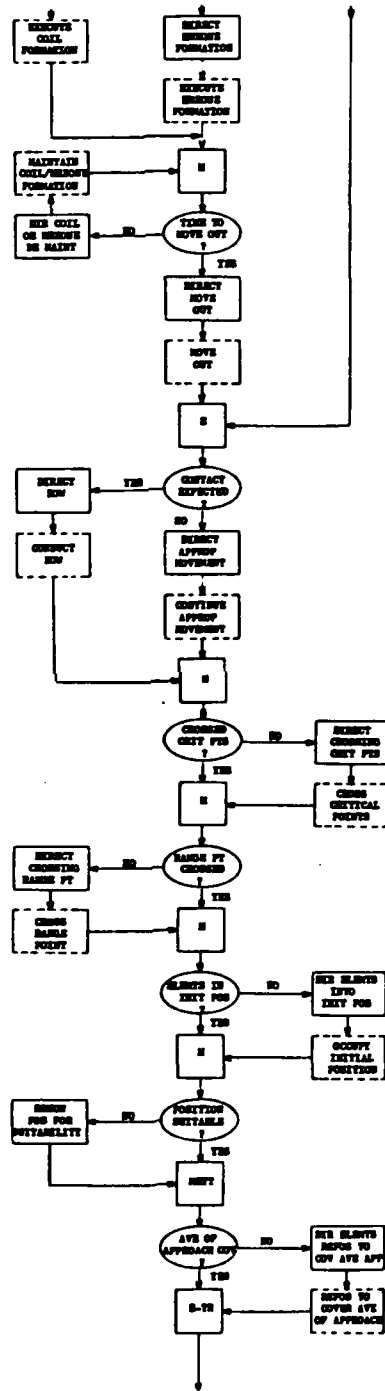


Figure E-7 Continued

Figure E-7 Continued on Page 32

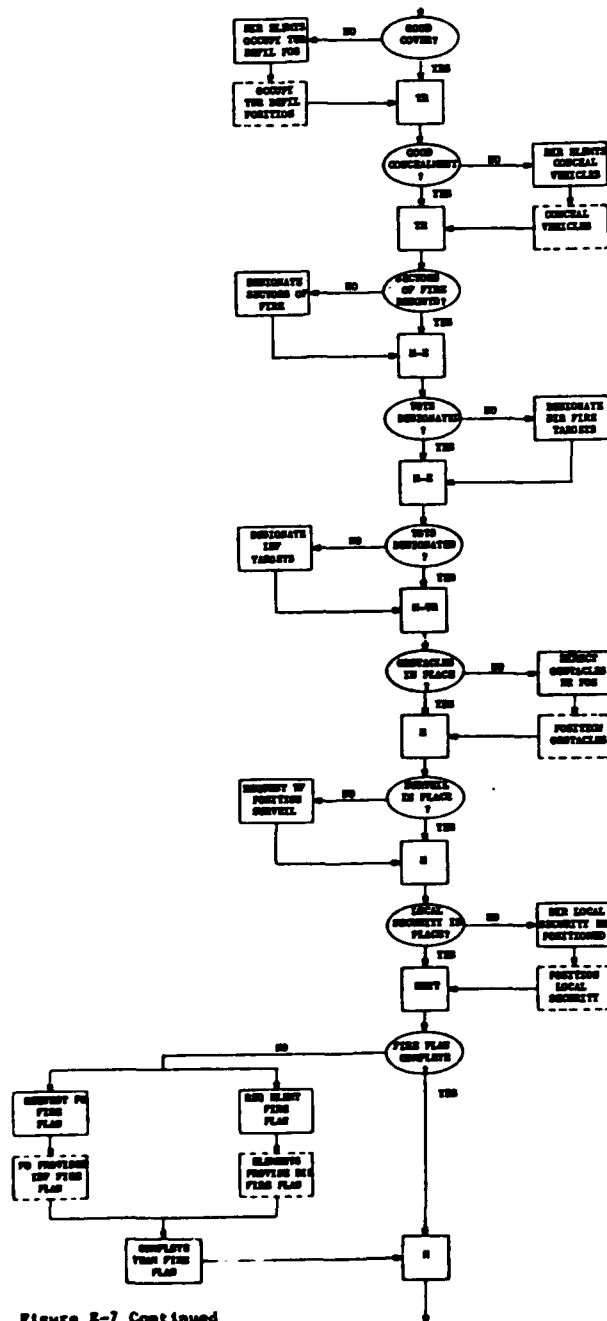


Figure E-7 Continued

Figure E-7 Continued on Page 33

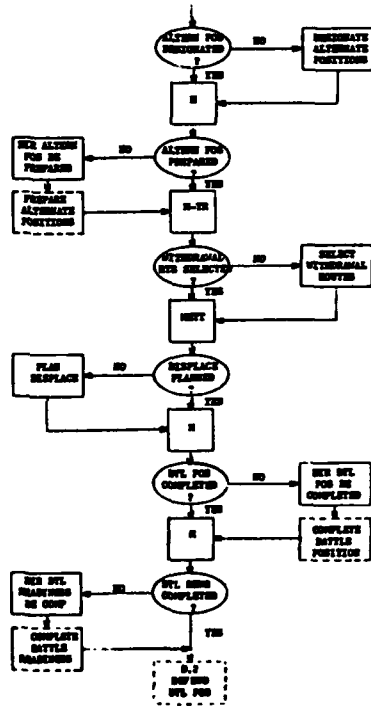


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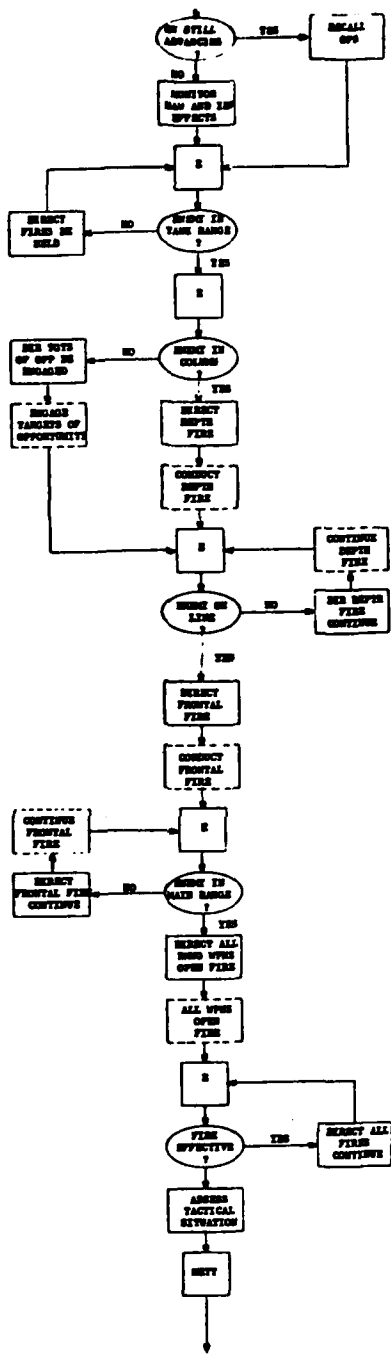


Figure E-8 Continued

Figure E-8 Continued on Page 36

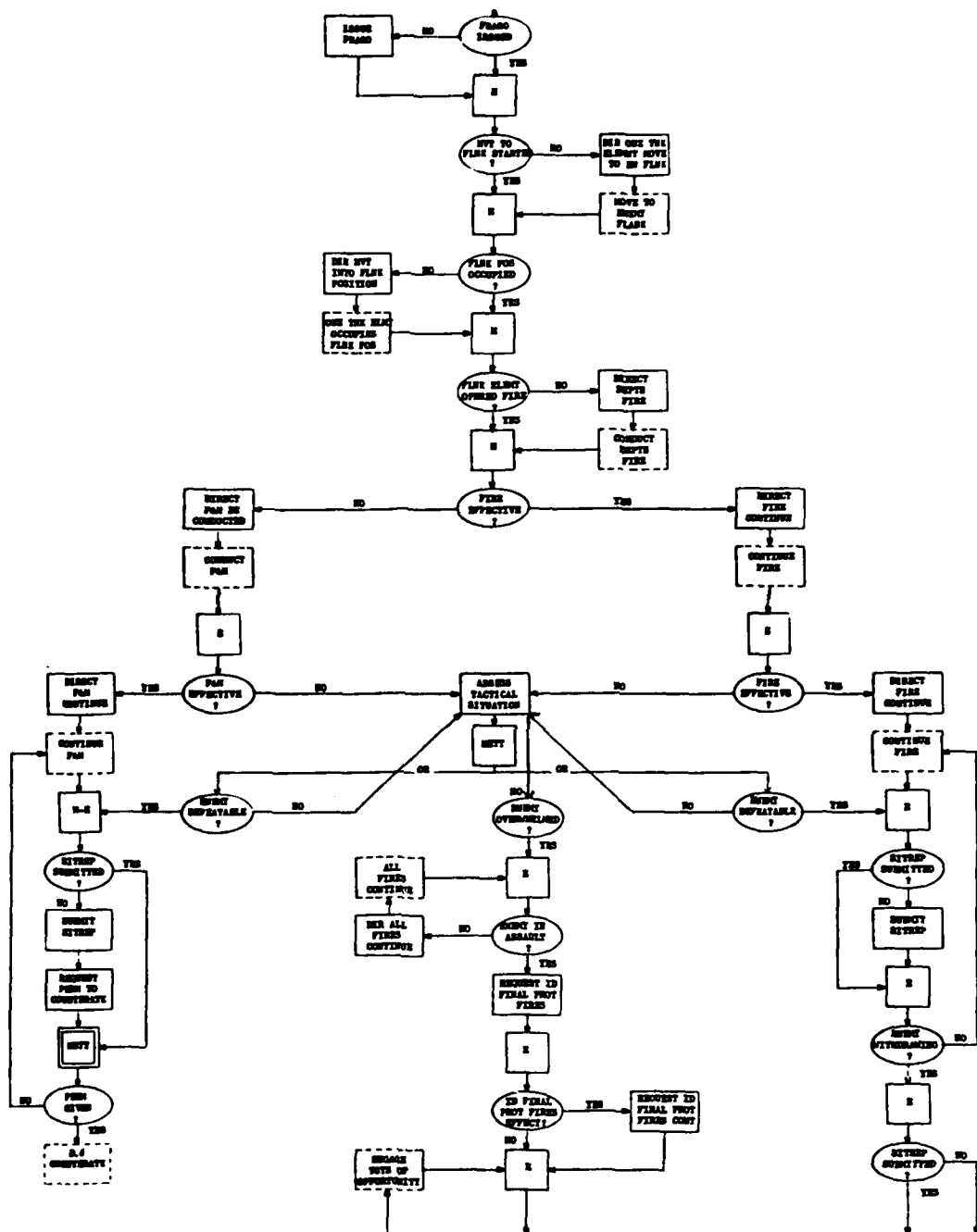


Figure E-8 Continued

Figure E-8 Continued on Page 37

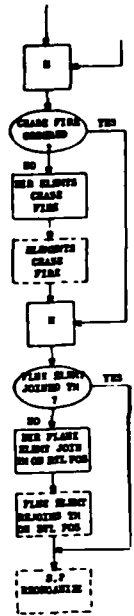
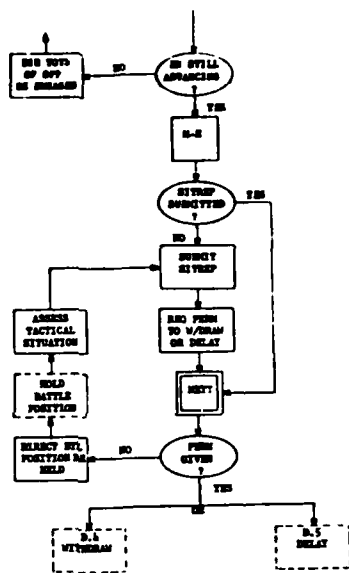


Figure E-8 Continued

S.1
DEFEND
BYE FOR

S.2
DISPLACE TO
ALTERNATE BYE
POSITION

CONDUCT AS OCCUPIE BATTLE POSITION

S.3
DEFEND
BYE FOR

FIGURE E-9. TANK TEAM OPERATION: DISPLACE
TO ALTERNATE BATTLE POSITION;
STIMULI - DECISION - RESPONSE
FLOW DIAGRAM

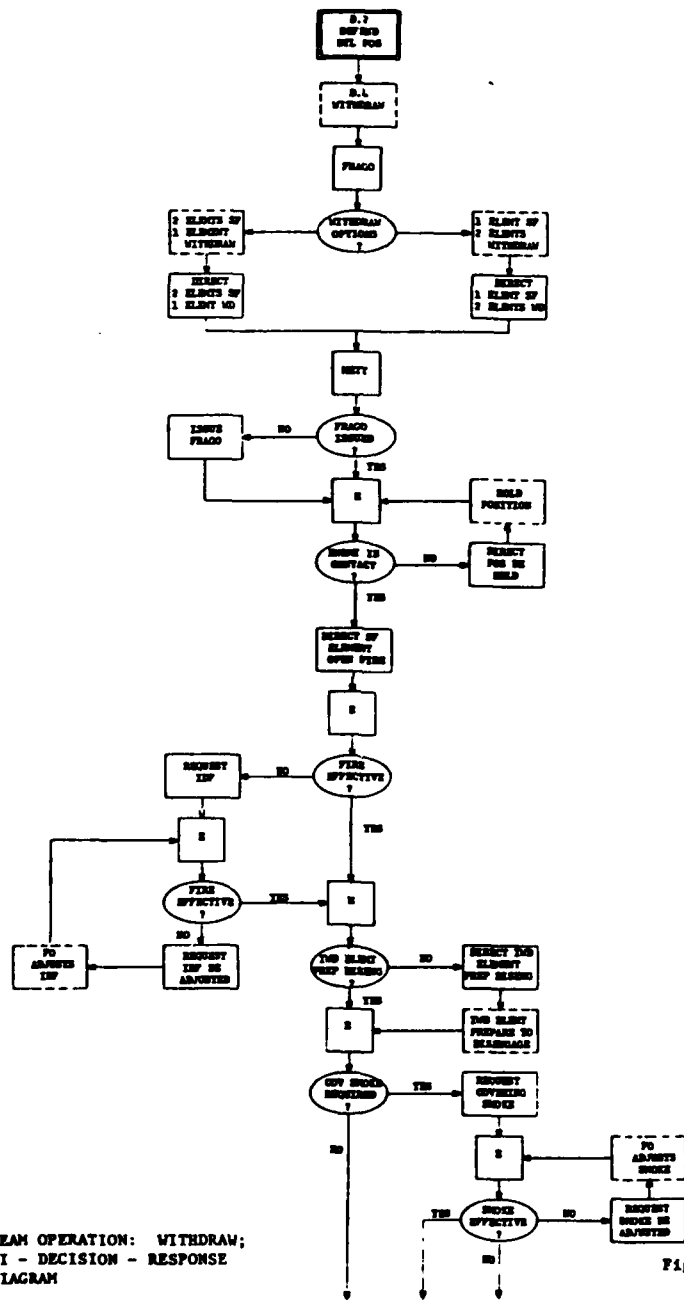


FIGURE E-10. TANK TEAM OPERATION: WITHDRAW; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-10 Continued on Page 40

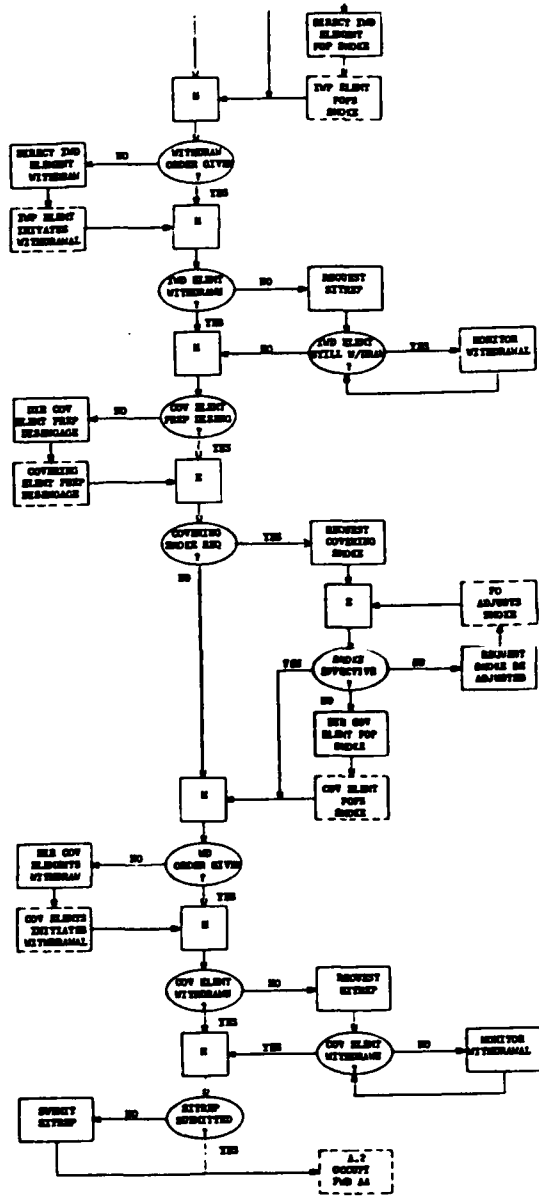


Figure E-10 Continued

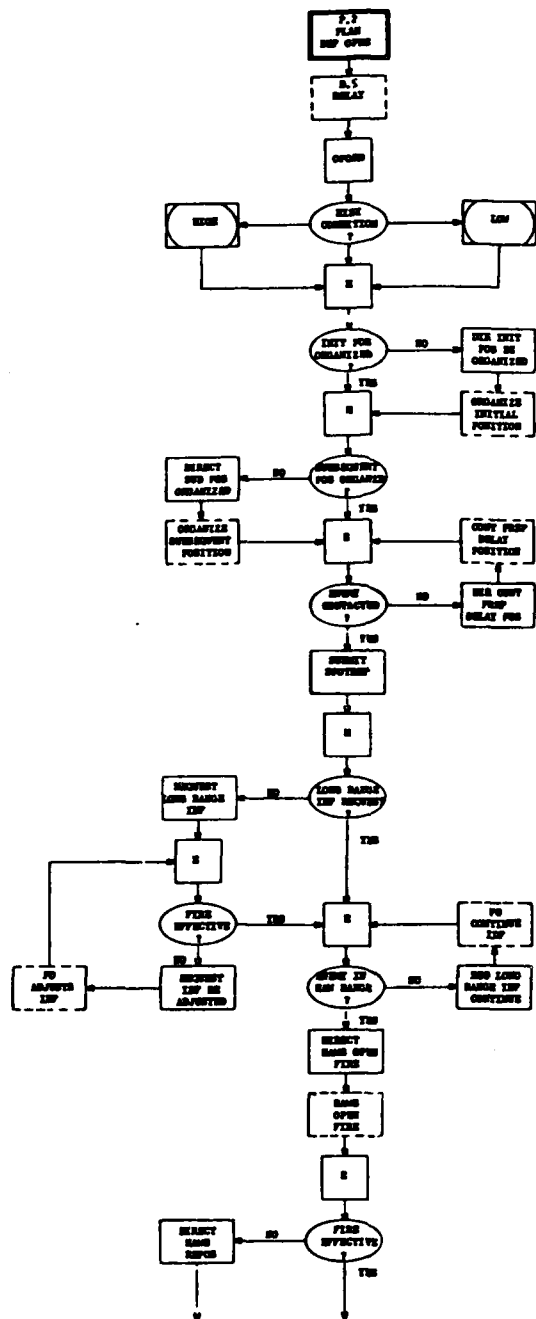


FIGURE E-11. TANK TEAM OPERATION: DELAY;
STIMULI - DECISION - RESPONSE
FLOW DIAGRAM

Figure E-11 Continued on page 42

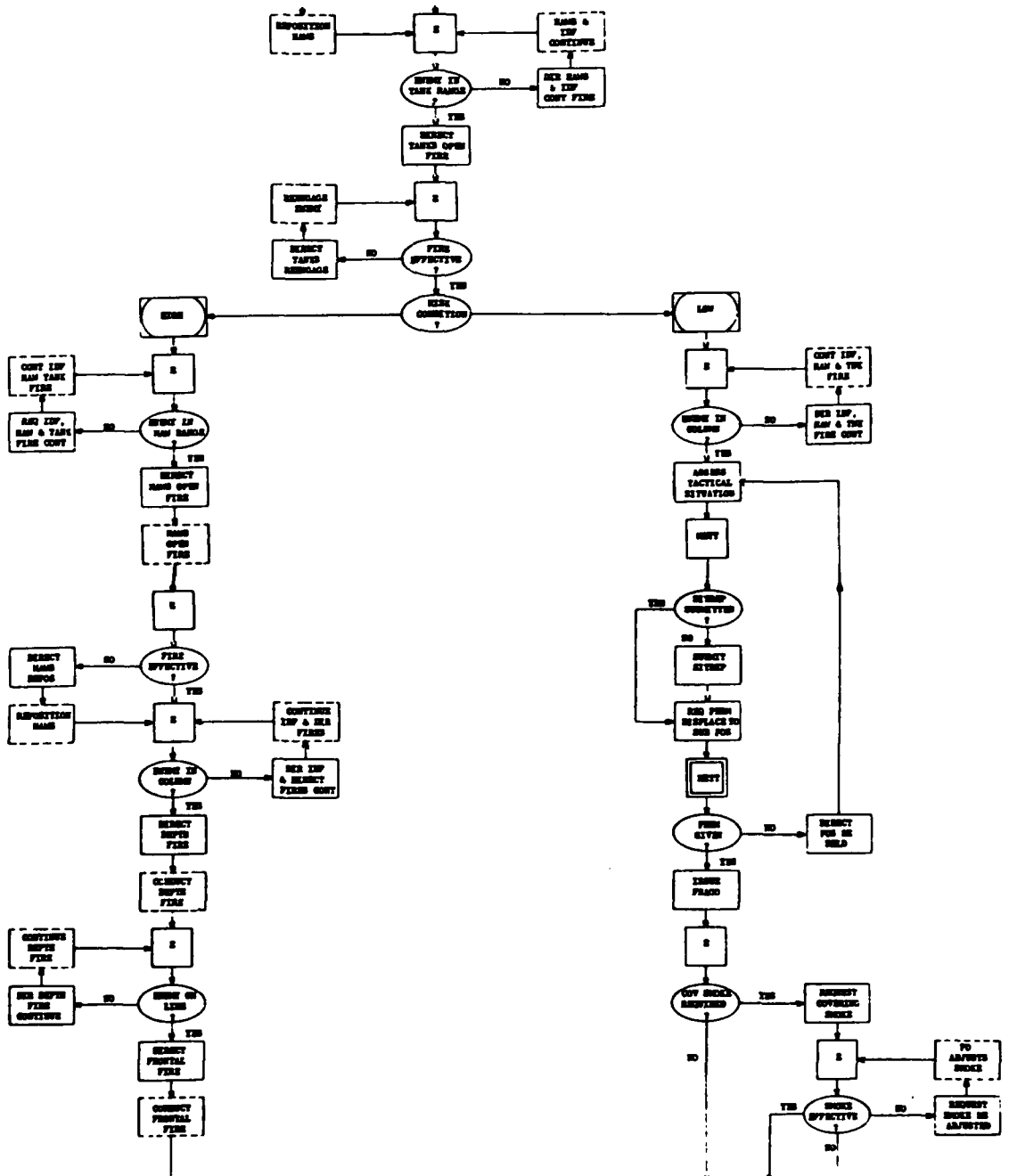


Figure E-11 Continued

Figure E-11 Continued on Page 43

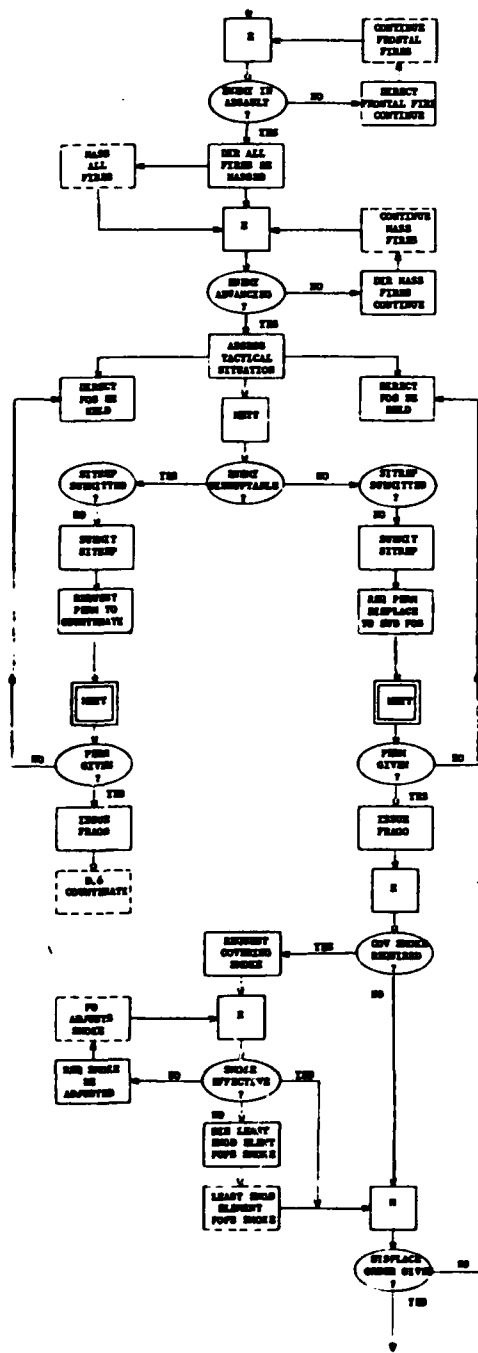


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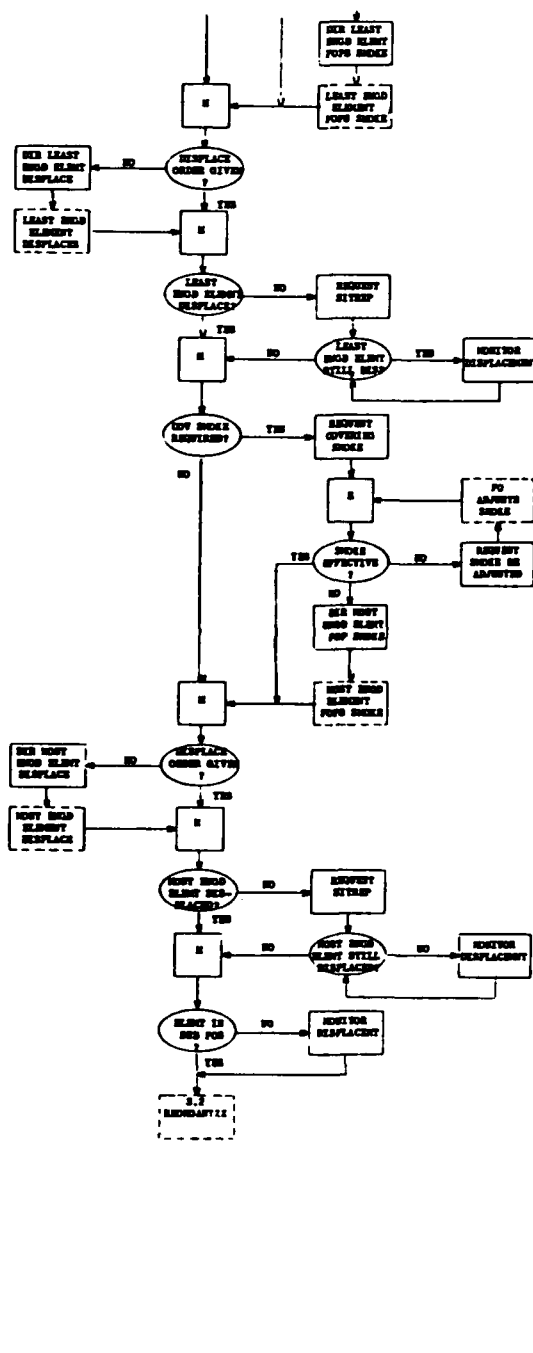


Figure E-11 Continued on Page 44

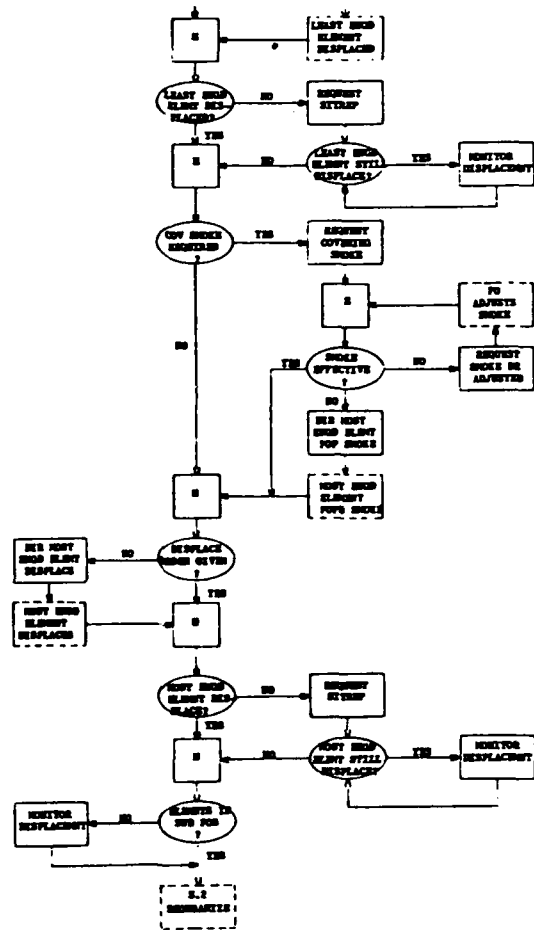


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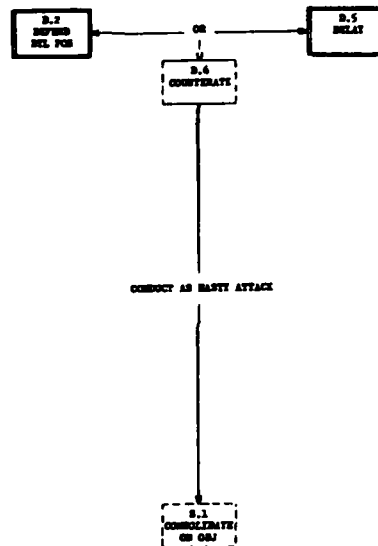


FIGURE E-12. TANK TEAM OPERATION:
COUNTERATTACK; STIMULI -
DECISION - RESPONSE FLOW
DIAGRAM

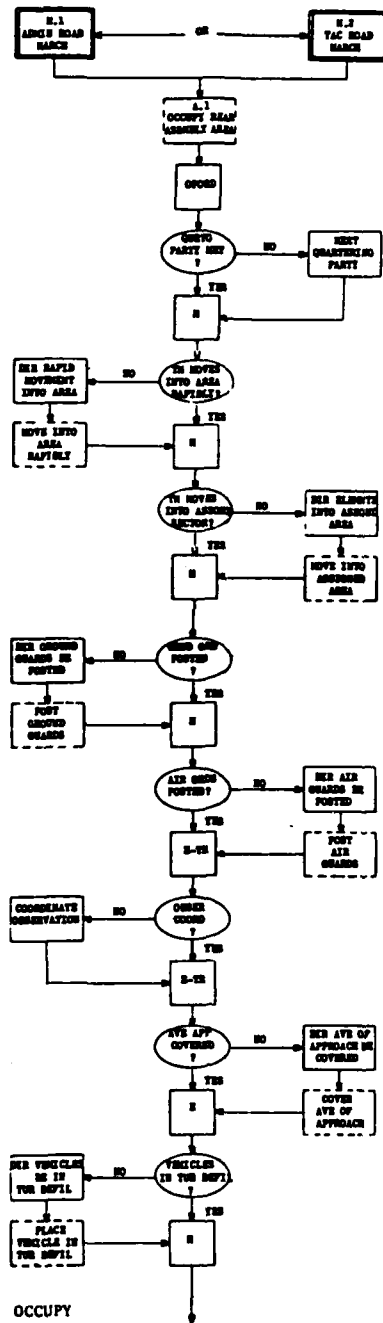


FIGURE E-13. TANK TEAM OPERATION: OCCUPY REAR ASSEMBLY AREA; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-13 Continued on Page 47

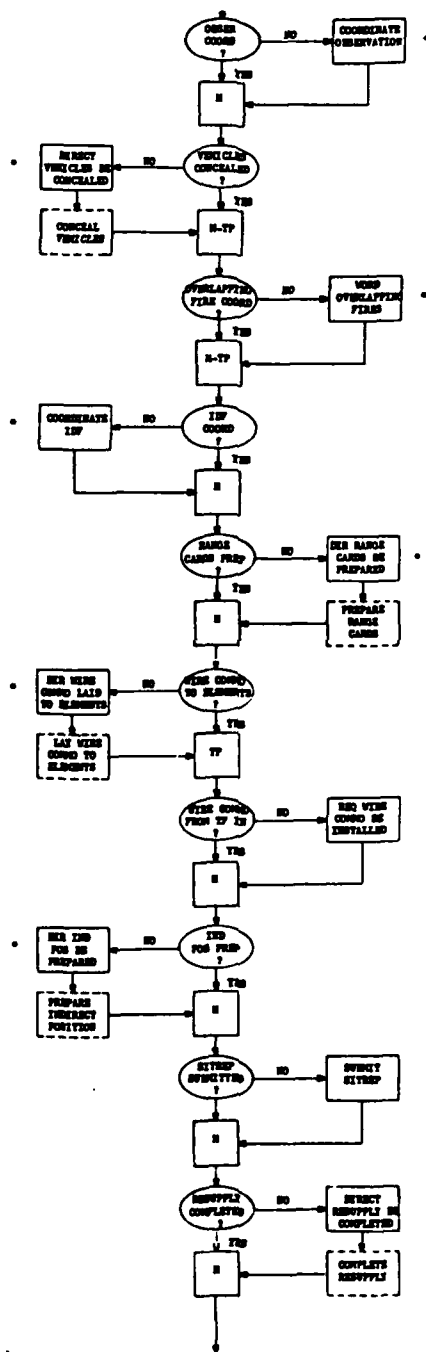
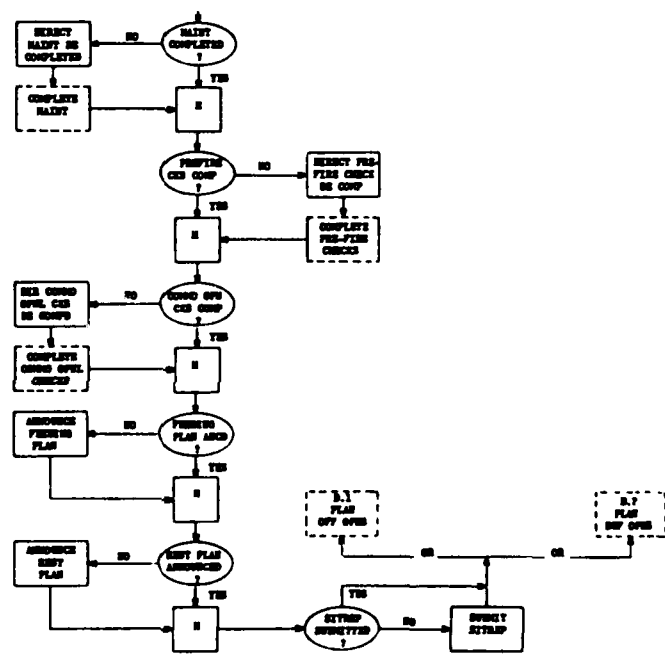


Figure E-13 Continued

Figure E-13 Continued on Page 48



*ACTIONS NORMALLY DONE ONLY IN FORWARD ASSEMBLY AREA.

Figure E-13 Continued

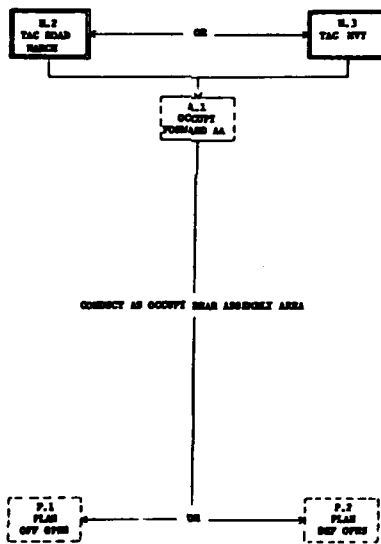


FIGURE E-14. TANK TEAM OPERATION: OCCUPY FORWARD ASSEMBLY AREA; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

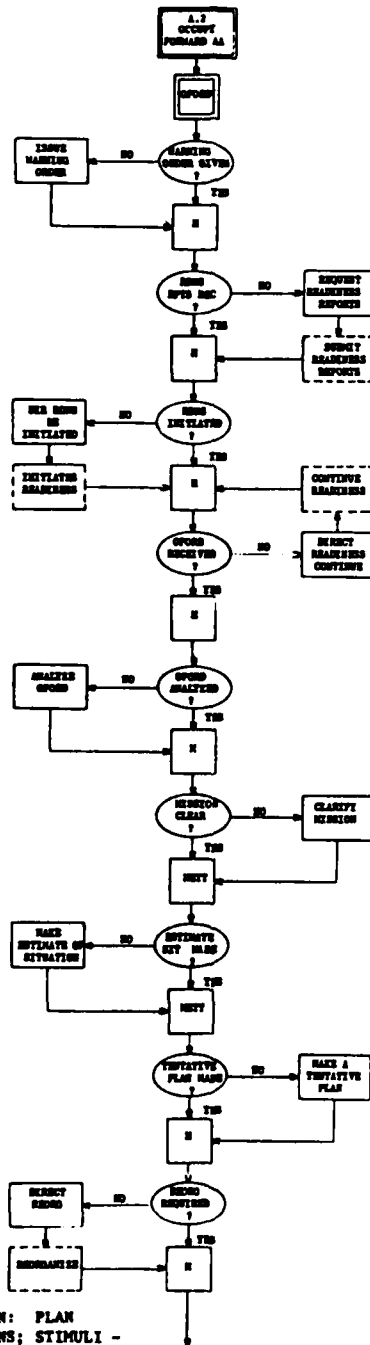


FIGURE E-15. TANK TEAM OPERATION: PLAN OFFENSIVE OPERATIONS; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-15 Continued on Page 51

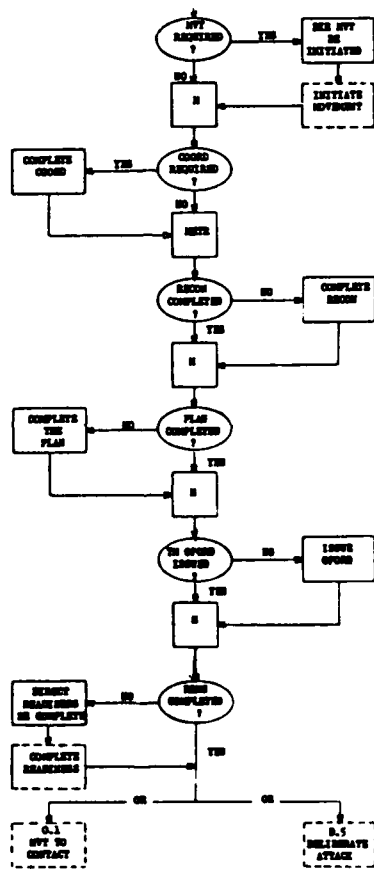


Figure E-15 Continued

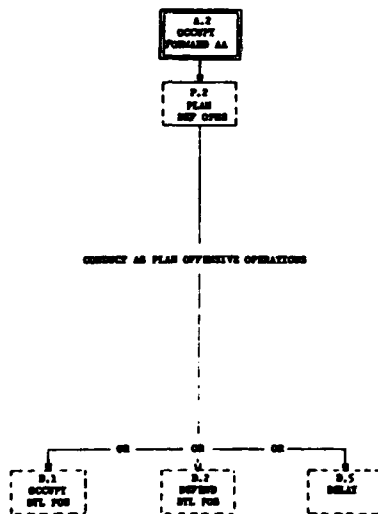


FIGURE E-16. TANK TEAM OPERATION: PLAN DEFENSIVE OPERATIONS; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

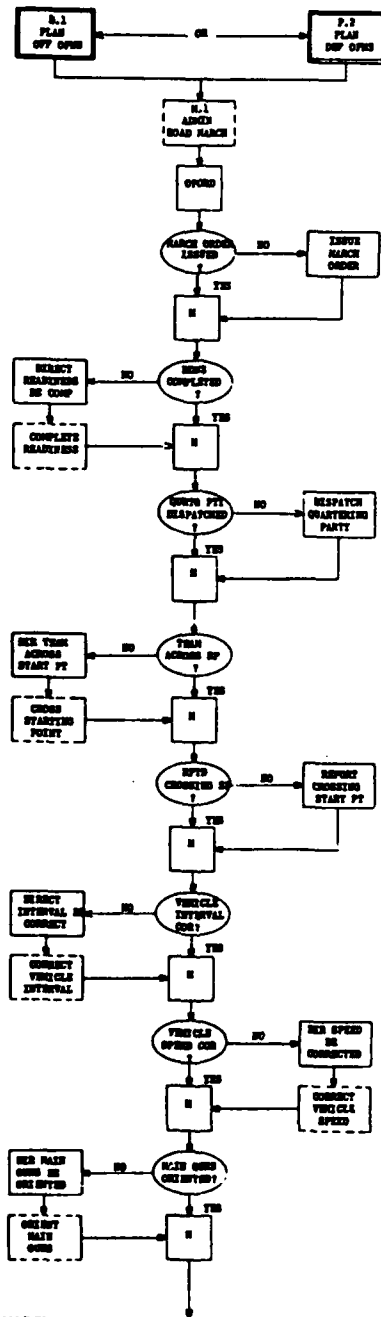


FIGURE E-17. TANK TEAM OPERATION:
ADMINISTRATIVE ROAD MARCH; STIMULI -
DECISION - RESPONSE FLOW DIAGRAM

Figure E-17 Continued on Page 54

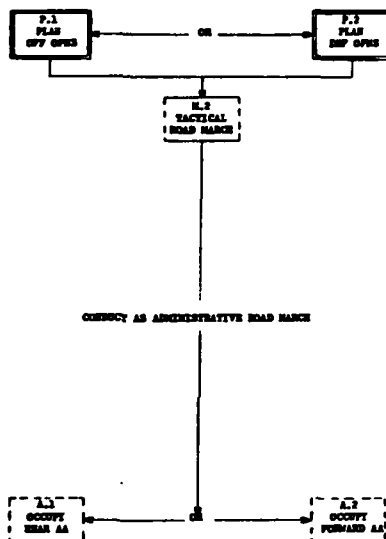


FIGURE E-18. TANK TEAM OPERATION: TACTICAL ROAD MARCH; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

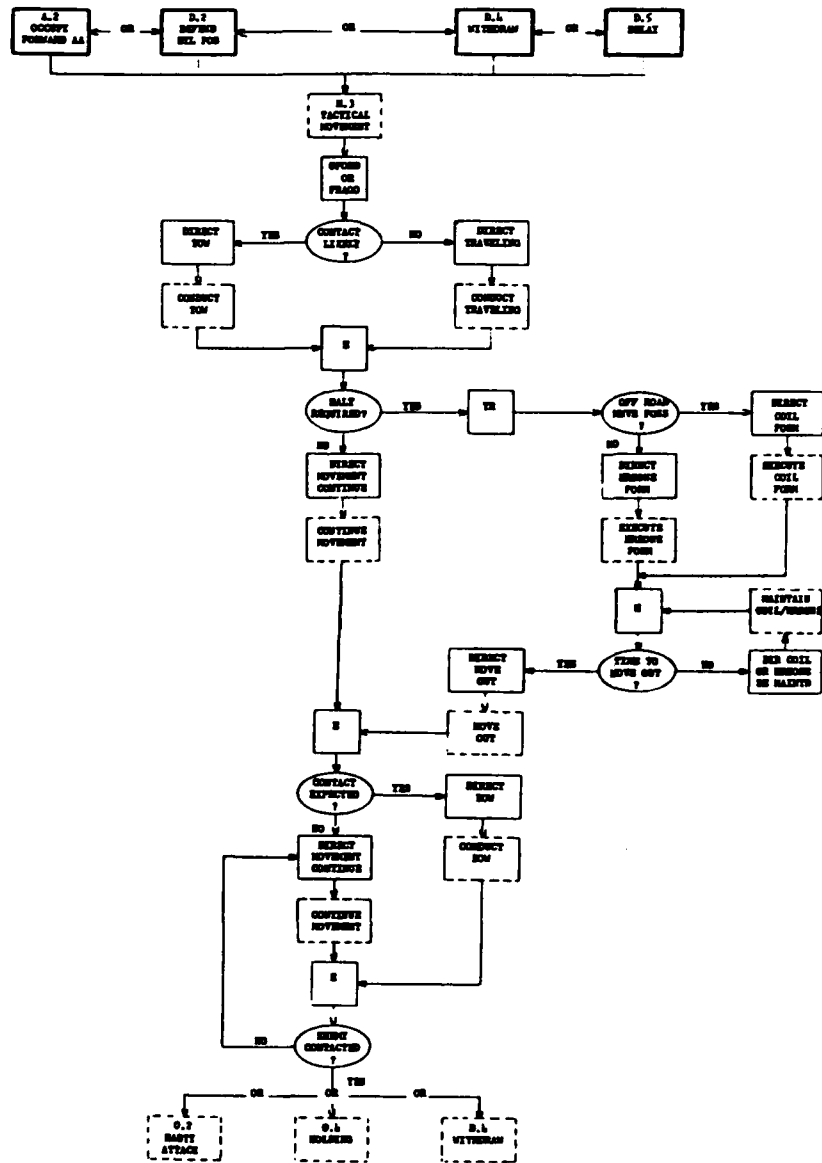


FIGURE E-19. TANK TEAM OPERATION: TACTICAL MOVEMENT; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

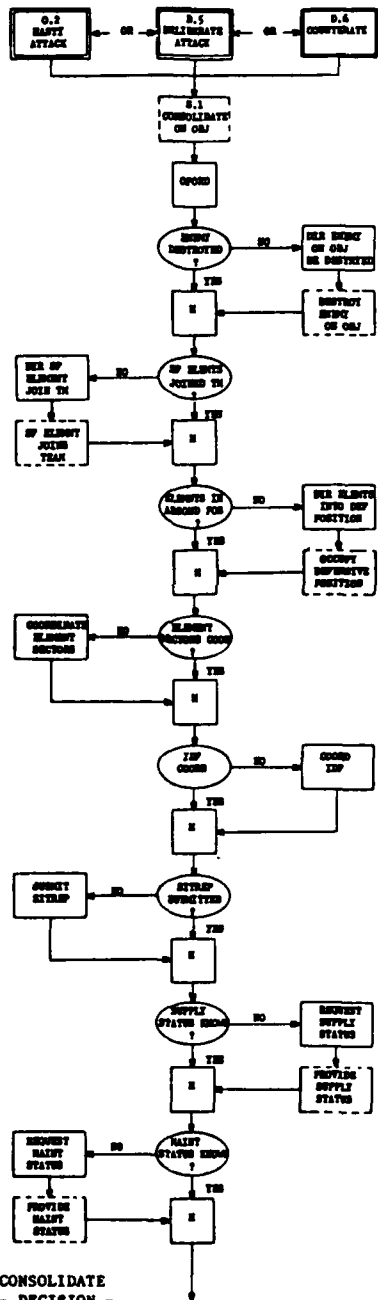


FIGURE E-20. TANK TEAM OPERATION: CONSOLIDATE ON OBJECTIVE; STIMULI - DECISION - RESPONSE FLOW DIAGRAM

Figure E-20 Continued on Page 58

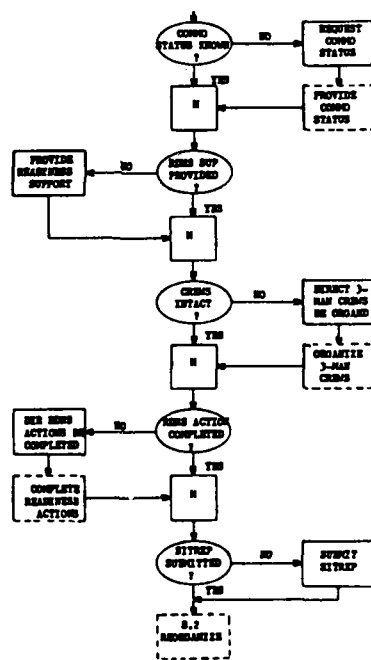


Figure E-20 Continued

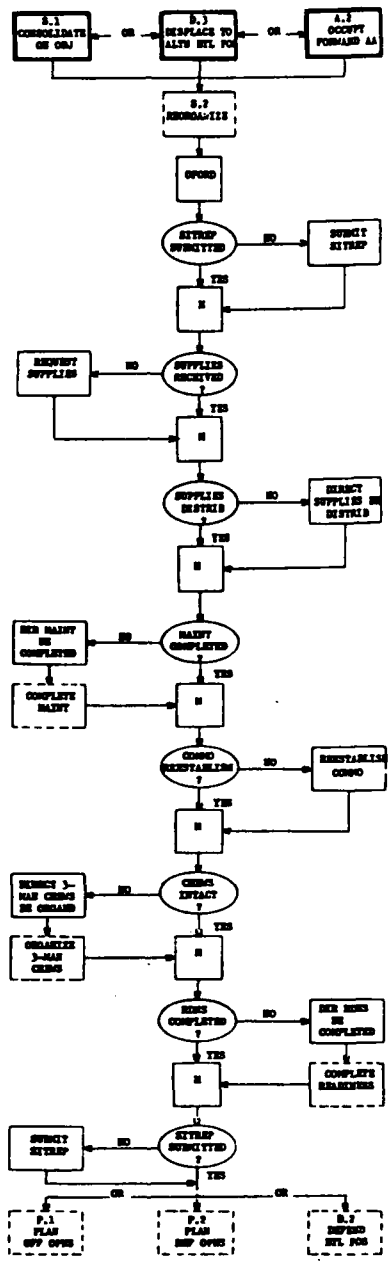


FIGURE E-21. TANK TEAM OPERATION:
 REORGANIZE; STIMULI -
 DECISION - RESPONSE FLOW
 DIAGRAM

APPENDIX F

TANK PLATOON MISSION HIERARCHIES

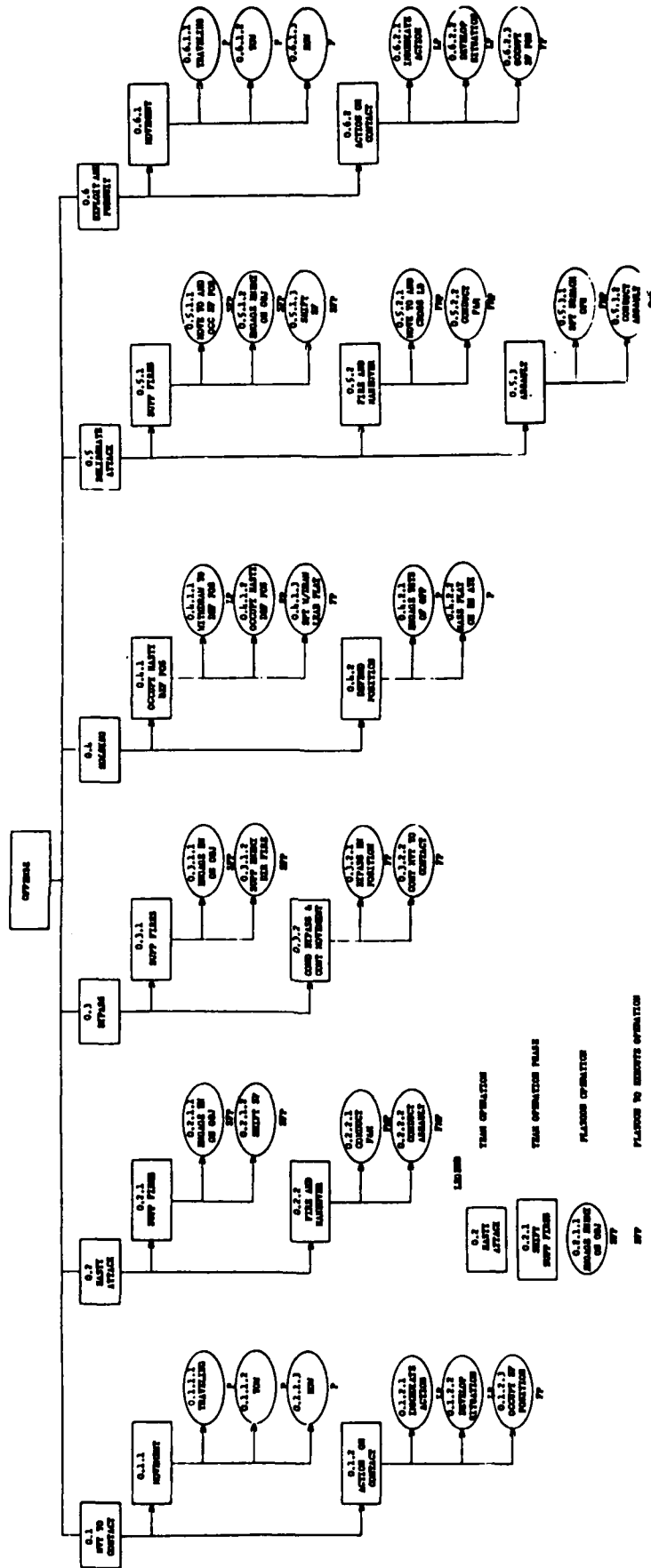


FIGURE P-1. TANK PLATOON OFFENSE MISSION HIERARCHY

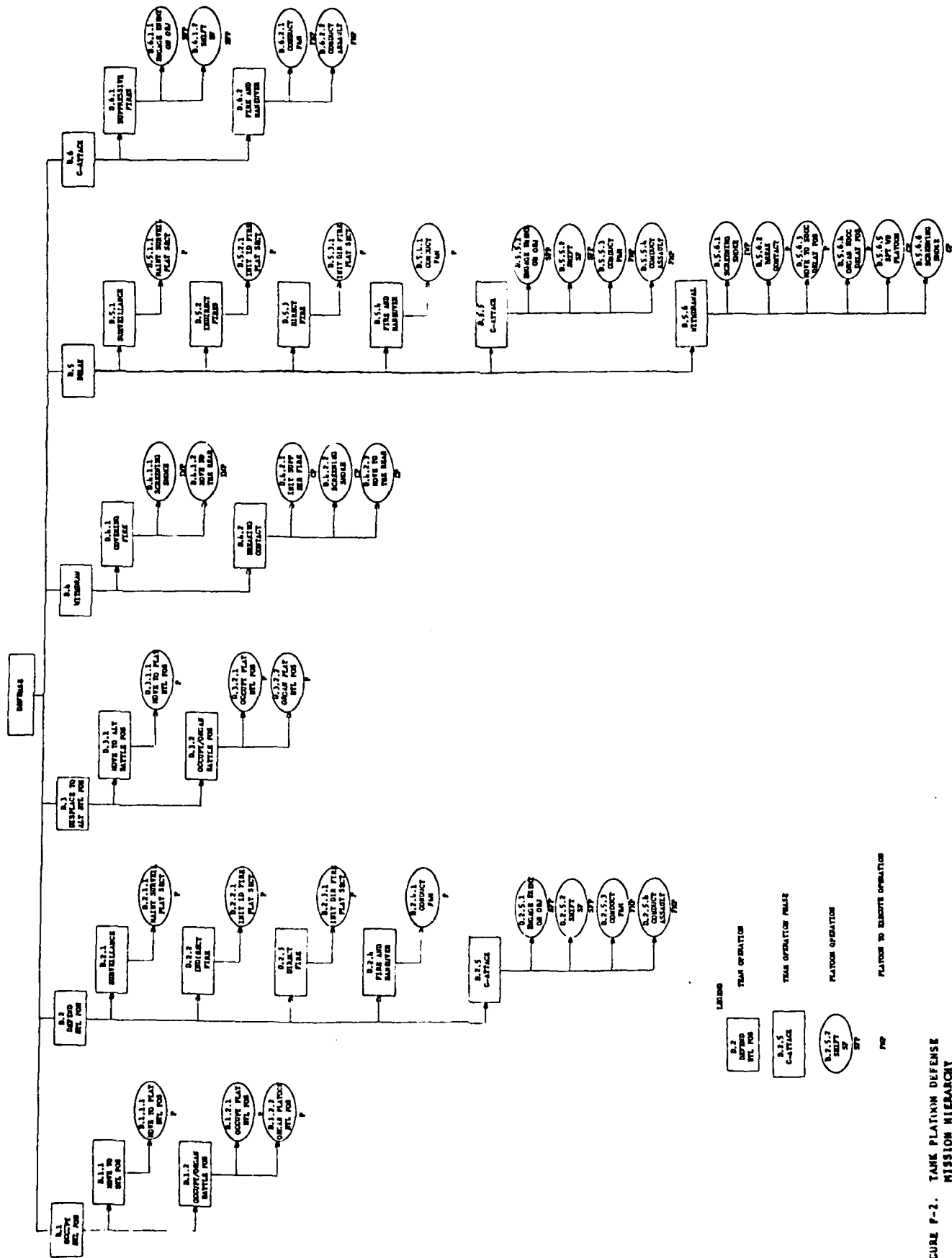


FIGURE P-2. TANK PLATOON DEFENSE MISSION HIERARCHY

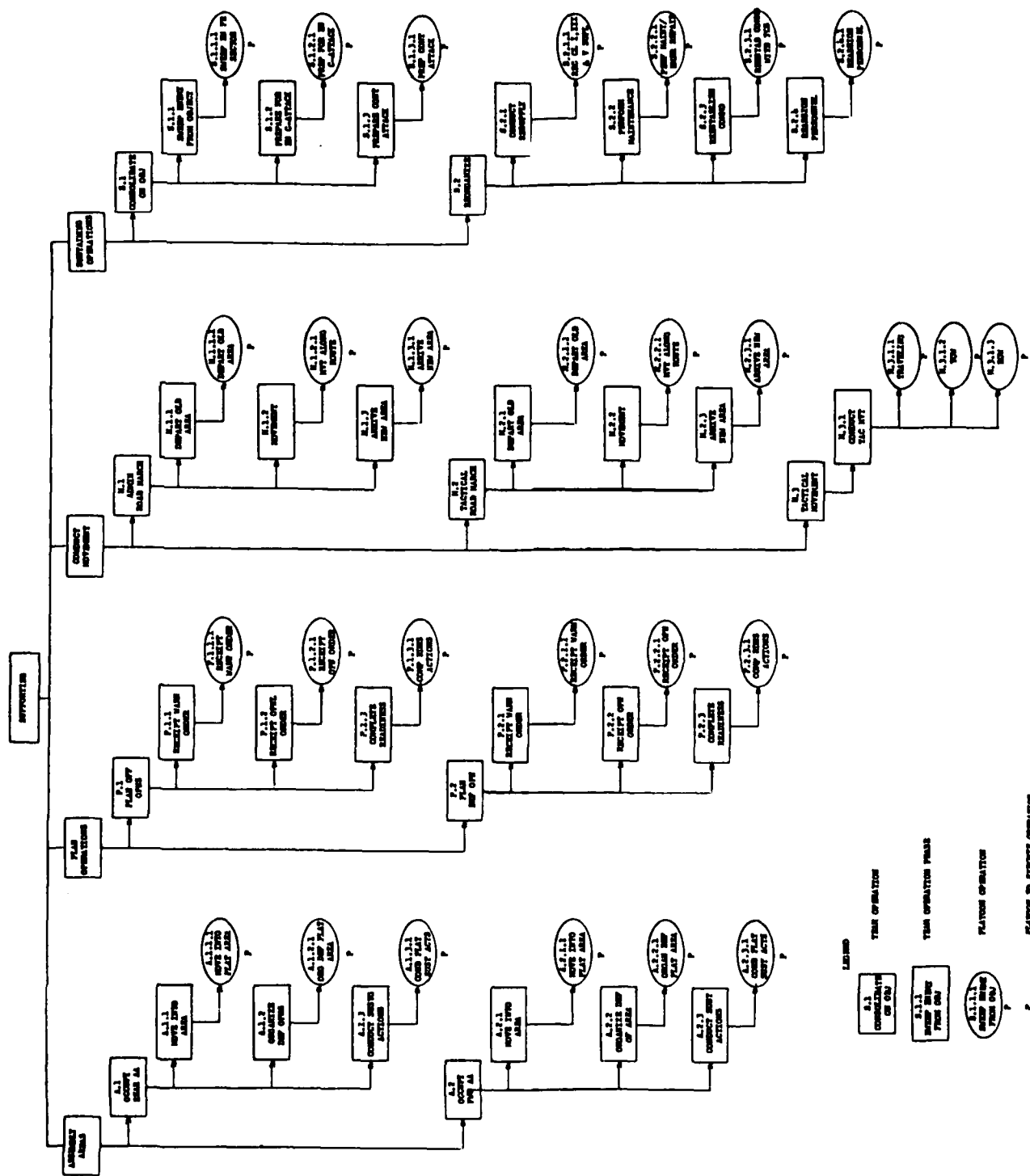


FIGURE P-3. TANK PLATOON SUPPORTING MISSION HIERARCHY

APPENDIX G

TANK PLATOON TIME LINE MISSION SEQUENCES

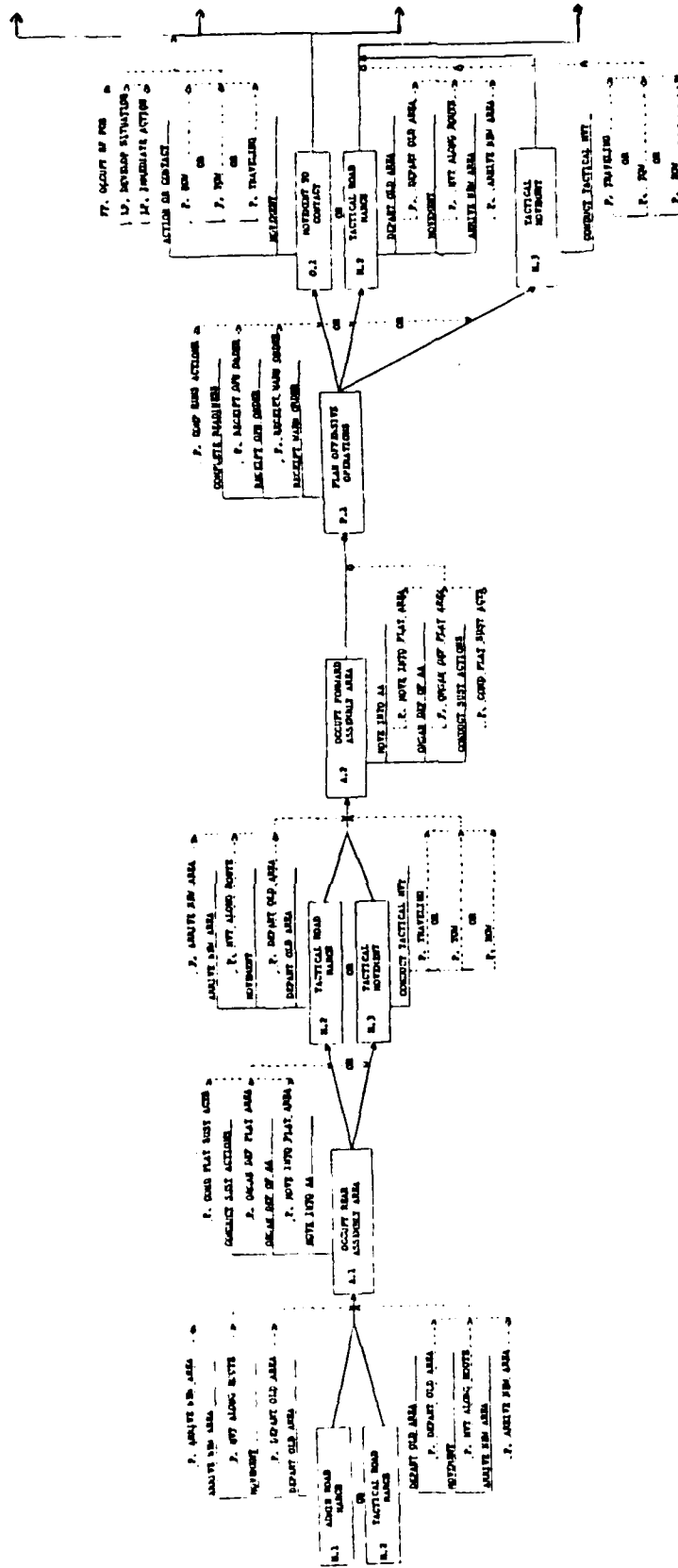


Figure C-1 Continued on Page 66

FIGURE C-1. TANK PLATOON OFFENSE TIME LINE MISSION SEQUENCE

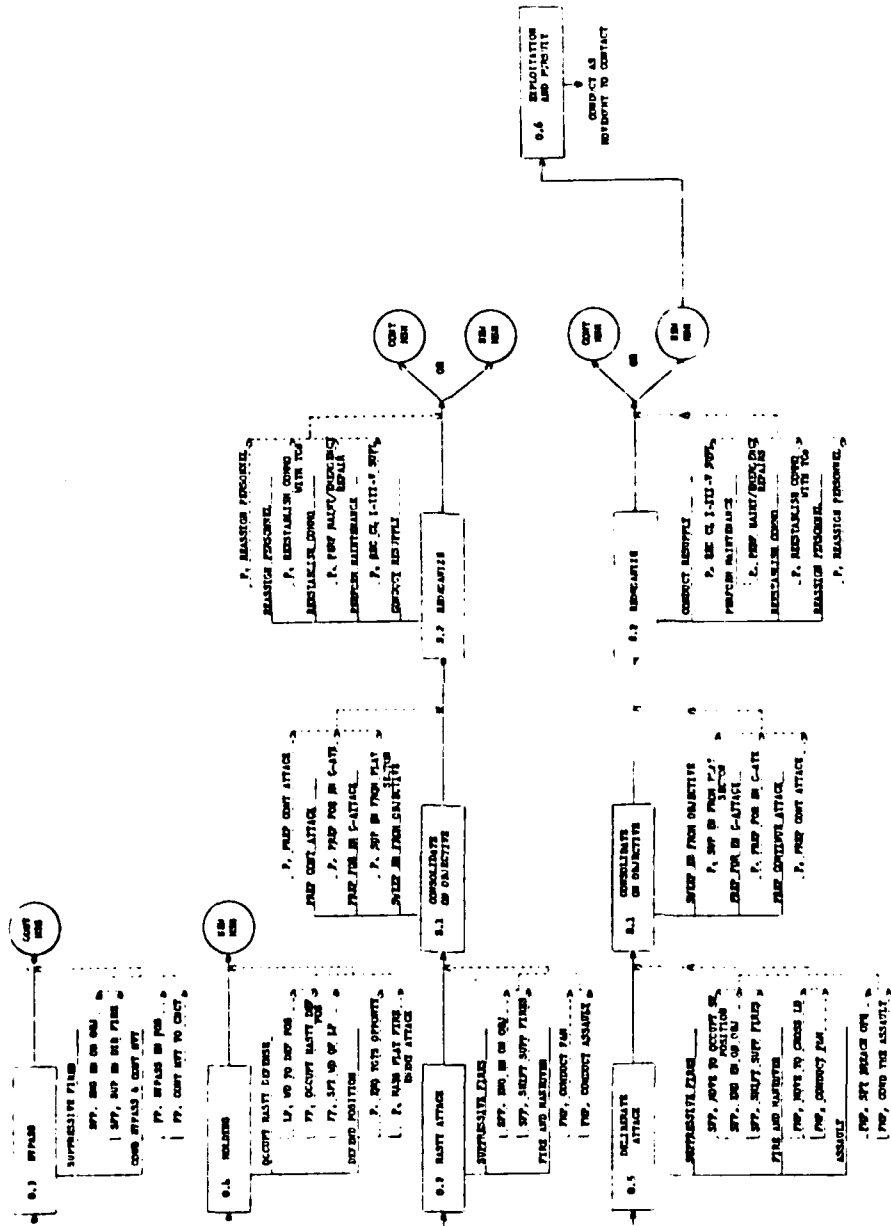


Figure G-1 Continued

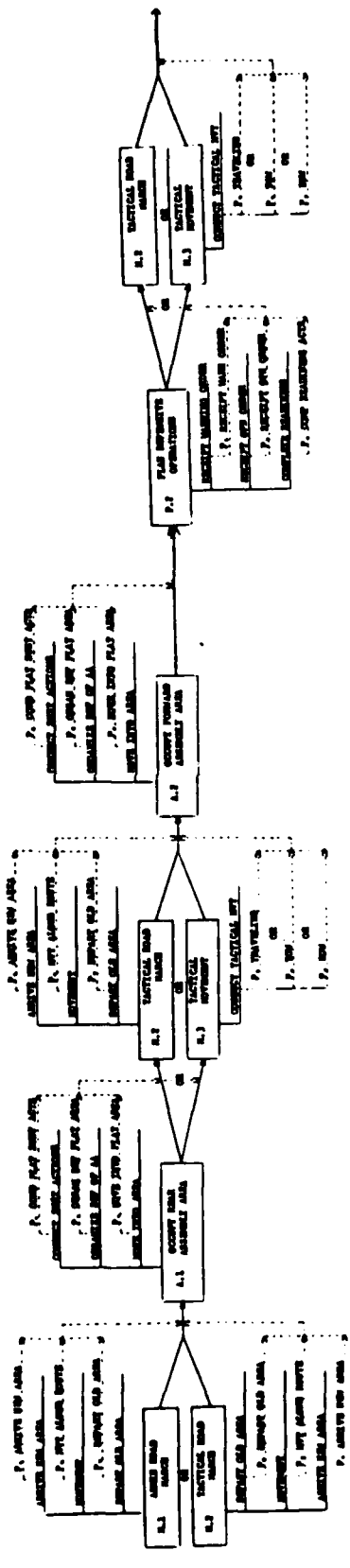


FIGURE G-2. TAKE PLATOON DEFENSE
TIME LINE MISSION SEQUENCE

Figure G-2 Continued on Page 68

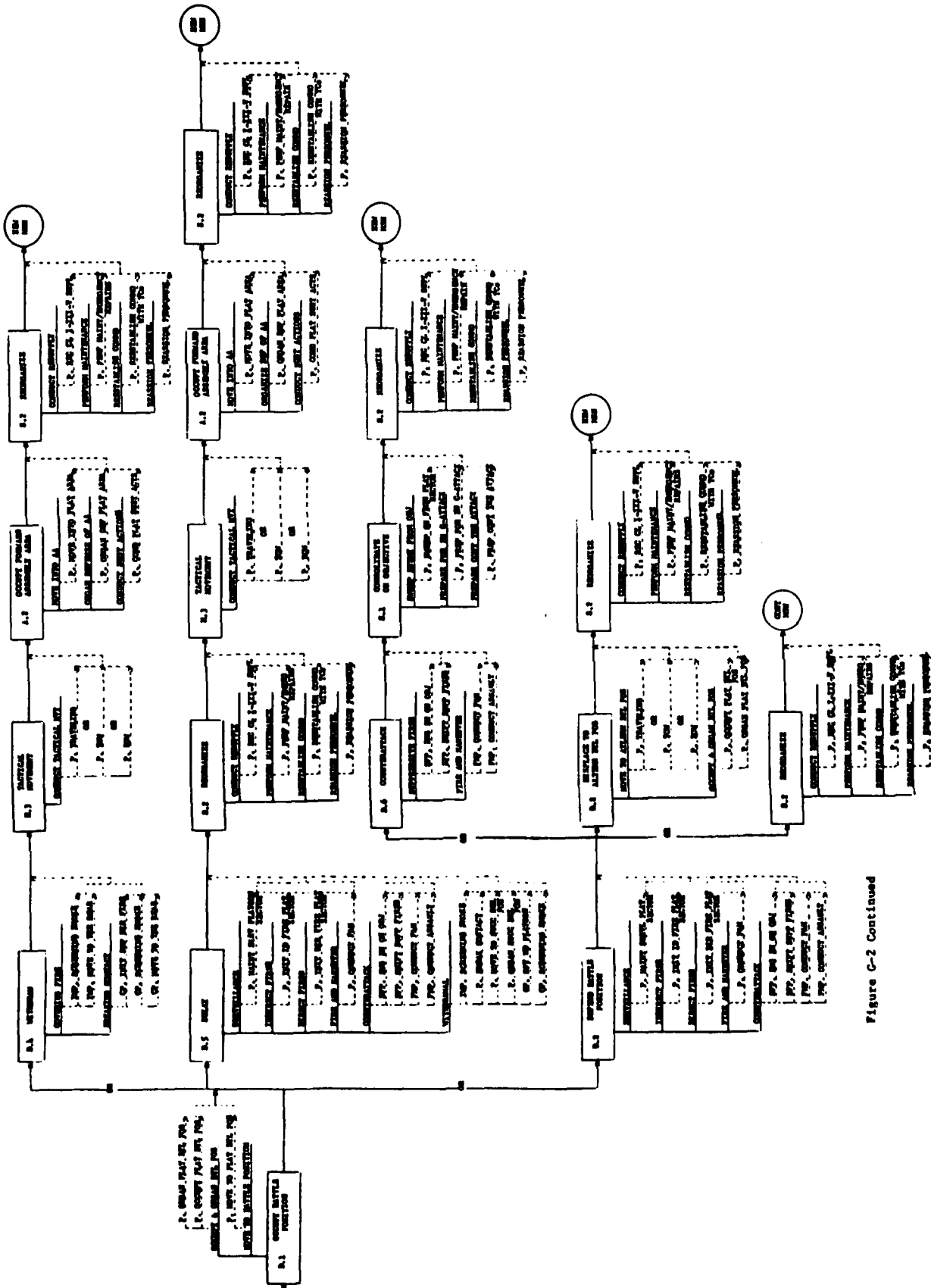


Figure C-2 Continued

APPENDIX H

TANK PLATOON OPERATION FLOW DIAGRAMS

TABLE H-1. TANK PLATOON/CREW DRILL SYMBOLS

| TANK GUNNERY DRILLS (PLATOON) | | Reference |
|------------------------------------|---|-----------------|
| TGP-1 | Frontal Fire Distribution | XM1-Spt. Pkg. * |
| TGP-2 | Cross Fire Distribution | XM1-Spt. Pkg. |
| TGP-3 | Depth Fire Distribution | XM1-Spt. Pkg. |
| TGP-4 | Offensive Fire Distribution | XM1-Spt. Pkg. |
| TGP-5 | Defensive Fire Distribution | XM1-Spt. Pkg. |
| ----- | | |
| BATTLE DRILLS (PLATOON) | | |
| B-1 | Hasty Attack | XM1-Spt. Pkg. * |
| B-2 | Action Front (left, right or rear) | XM1-Spt. Pkg. |
| B-3 | Ambush Reaction | XM1-Spt. Pkg. |
| B-4 | Hasty Defense | XM1-Spt. Pkg. |
| B-5 | Contact With Mines or Obstacles | XM1-Spt. Pkg. |
| B-6 | Attack Through Smoke | New ** |
| B-7 | Defend Through Smoke | New |
| B-8 | Consolidate on Objective | New |
| | a. Eliminate Enemy from Objective | New |
| | b. Prepare for Counterattack | New |
| | c. Prepare to Continue the Attack | New |
| ----- | | |
| MOVEMENT DRILLS (PLATOON) | | |
| M-1 | Passage Defile, Forest, Urban Area | XM1-Spt. Pkg. * |
| M-2 | Coiling at Unscheduled Halt | XM1-Spt. Pkg. |
| M-3 | Herringbone at Unscheduled Halt | XM1-Spt. Pkg. |
| M-4 | Traveling | XM1-Spt. Pkg. |
| M-5 | Traveling Overwatch | XM1-Spt. Pkg. |
| M-6 | Bounding Overwatch | XM1-Spt. Pkg. |
| M-7 | Assault Formation | XM1-Spt. Pkg. |
| M-8 | Occupying Assembly Area | New ** |
| ----- | | |
| SURVIVAL DRILLS (PLATOON AND CREW) | | |
| SUR-1 | Nuclear Attack | TC-17-15-1 |
| SUR-2 | Nuclear Warning | TC-17-15-1 |
| SUR-3 | Protective Mask | TC-17-15-1 |
| SUR-4 | Fire Fighting | TC-17-15-1 |
| SUR-5 | Wounded Evacuation (TC,GN,LD,DV) | TC-17-15-1 |
| SUR-6 | Escape Hatch Evacuation | TC-17-15-1 |
| SUR-7 | Camouflage a Tank | TC-17-15-1 |
| SUR-8 | Fighting With a Three Man Crew (TC Cas) | RP-79-14 |
| SUR-9 | Fighting With a Three Man Crew (GN Cas) | RP-79-14 |
| SUR-10 | Fighting With a Three Man Crew (LD Cas) | RP-79-14 |
| SUR-11 | Fighting With a Three Man Crew (DV Cas) | RP-79-14 |
| SUR-12 | Chemical/Biological Attack | XM1-Spt. Pkg. * |

*Gives titles of drills, but does not have drills

**New-Nonexistent

TABLE H-1. TANK PLATOON/CREW DRILL SYMBOLS (CONT'D)

| SURVIVAL DRILLS (PLATOON AND CREW, CONT'D) | | |
|--|---|------------------|
| | | <u>Reference</u> |
| SUR-13 | Protection/Recovery Damaged Vehicle | XMI-Spt. Pkg. |
| SUR-14 | Artillery Reaction | XMI-Spt. Pkg. |
| SUR-15 | Anti-Armor/Anti-Helicopter | XMI-Spt. Pkg. |
| SUR-16 | ATGM Evasion | XMI-Spt. Pkg. |
| SUR-17 | Evade Missile With Smoke | TC-79-15-19 |
| SUR-18 | Move to New Position With Smoke Coverage | TC-79-15-19 |
| SUR-19 | Abandon Tank | TC-79-15-11 |
| SUR-20 | Anti-Aircraft | XMI-Spt. Pkg. |
| SUSTAINING DRILLS (CREW) | | |
| SUS-1 | Combat Refueling | XMI-Spt. Pkg. |
| SUS-2 | Combat Resupply | XMI-Spt. Pkg. |
| SUS-3 | Reorganization on Objective | New |
| TANK GUNNERY DRILLS (CREW) | | |
| G-1 | Moving Target Engagement (Stabilized) | TC-17-15-11 |
| G-2 | Multiple Target Engagement | TC-17-15-11 |
| G-3 | Simultaneous Target Engagement | TC-17-15-11 |
| G-4 | Closed Hatch Main Gun Engagement | TC-17-15-11 |
| G-5 | Surprise Target Engagement | TC-17-15-11 |
| G-6 | Night Engagement | TC-17-15-11 |
| G-7 | Coax Engagement | TC-17-15-11 |
| G-8 | Aircraft Engagement | TC-17-15-11 |
| G-9 | Rangecard Engagement | TC-17-15-11 |
| G-10 | Rangecard Lay to Direct Fire Engagement | TC-17-15-11 |
| G-11 | Combat Misfire | TC-17-15-11 |
| G-12 | Redistribute Ammunition | TC-17-15-11 |
| G-13 | Critical Target Selection | New |
| G-14 | Prepare Rangecard | New |
| PLATOON LEADER/PLATOON SERGENAT DRILLS | | |
| PLS-1 | Receipt of Warning Order | New |
| PLS-2 | Receipt of Operation Order | New |
| PLS-3 | Estimate of Situation | New |
| PLS-4 | Operation Order | New |
| PLS-5 | Action on Contact | New |
| PLS-6 | Spot Report | New |
| PLS-7 | Develop Situation | New |
| PLS-8 | SITREP | New |
| PLS-9 | Frag Order | New |
| PLS-10 | Request Indirect Fire Support | New |
| PLS-11 | Request TAC Air Support | New |
| PLS-12 | Request Attack Helicopter Support | New |
| PLS-13 | Platoon Sergeant Relieving Platoon Leader of Fire Support Duties | XMI-Spt. Pkg. |

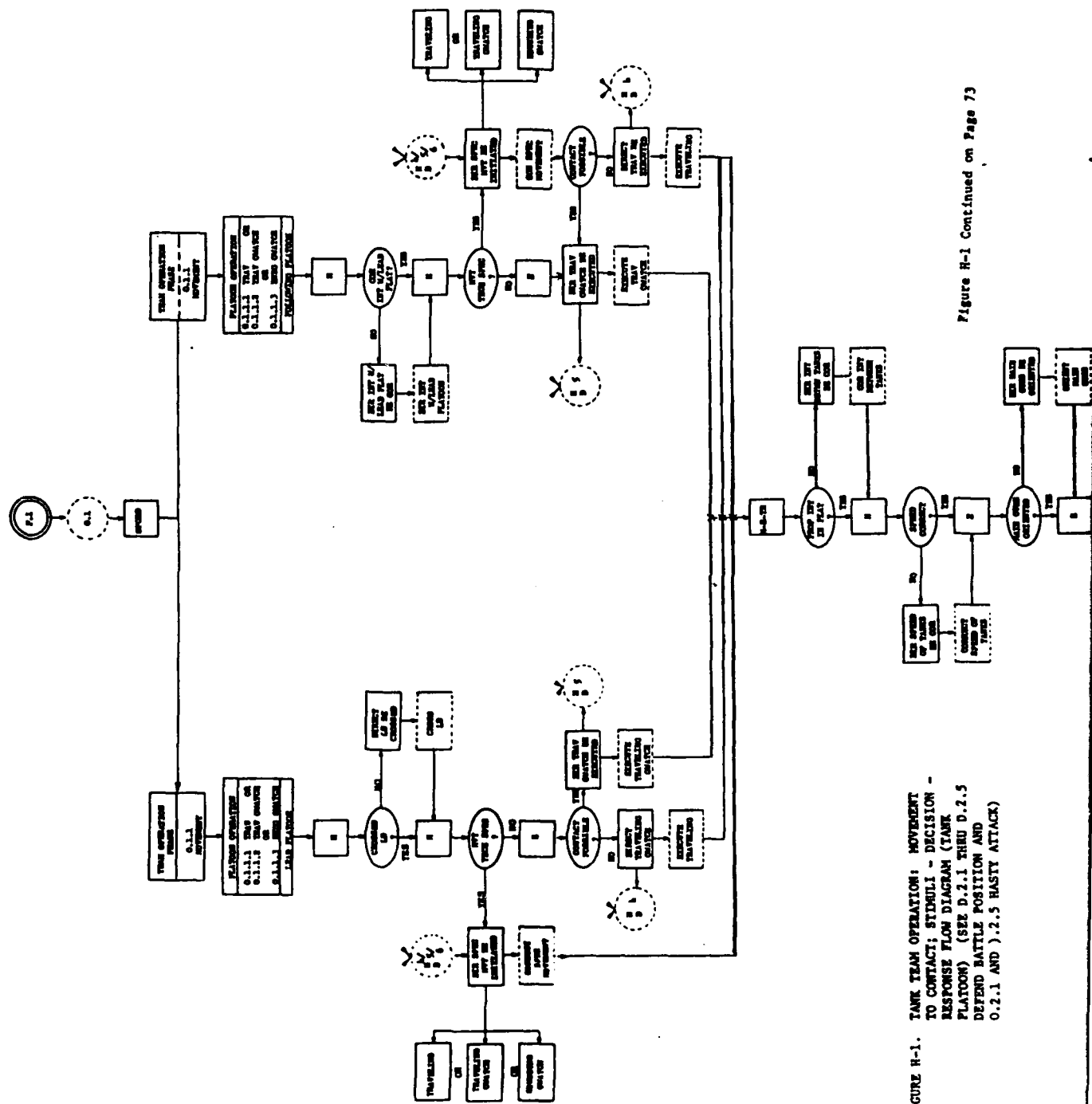


FIGURE H-1. TANK TEAM OPERATION: MOVEMENT TO CONTACT; STIDRILI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON) (SEE D.2.1 THRU D.2.5 DEFEND BATTLE POSITION AND 0.2.1 AND).2.5 HASTY ATTACK)

Figure H-1 Continued on Page 73

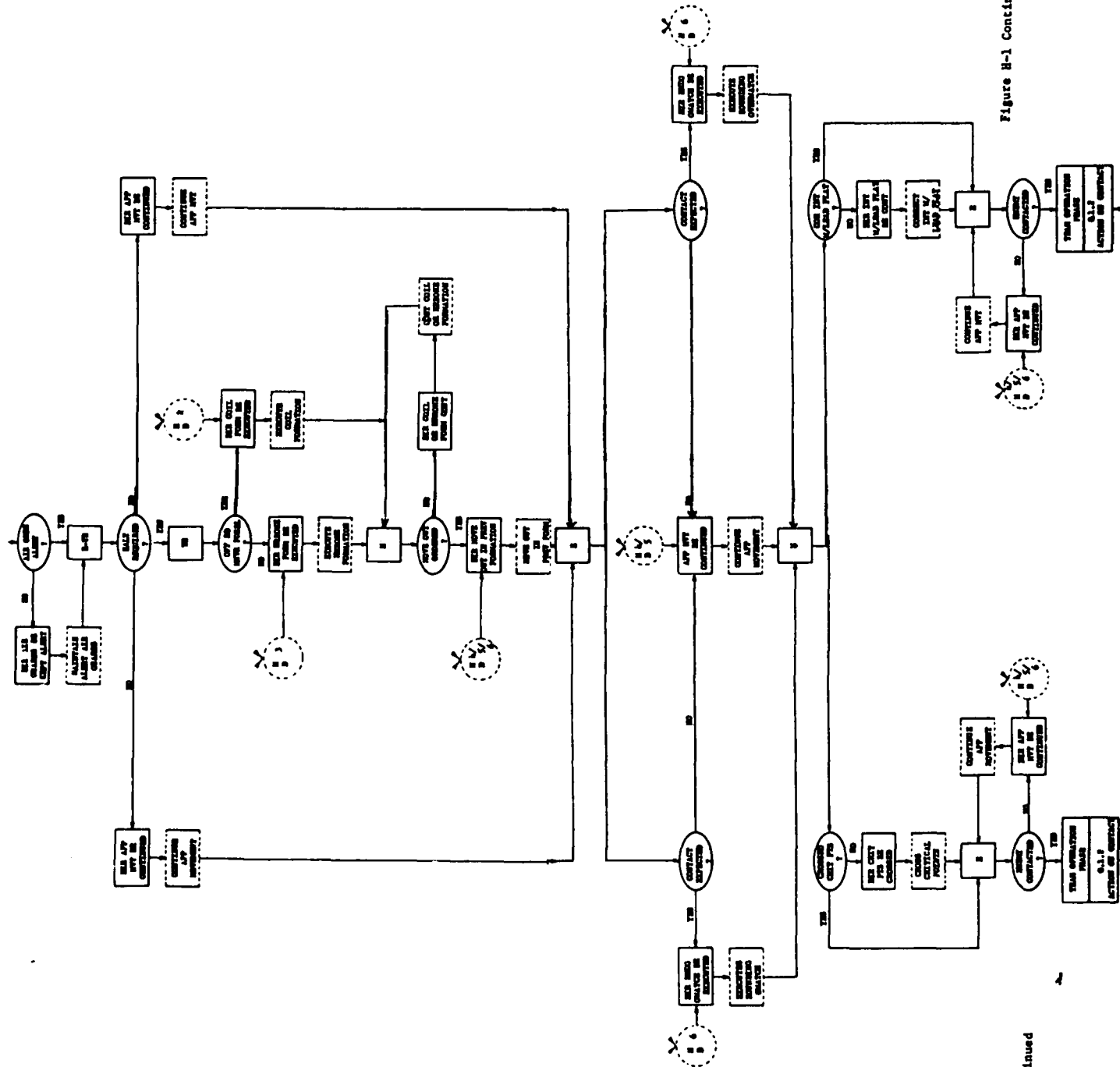


Figure H-1 Continued on Page 74

Figure H-1 Continued

Figure H-1 Continued on Pages 75a and 75b

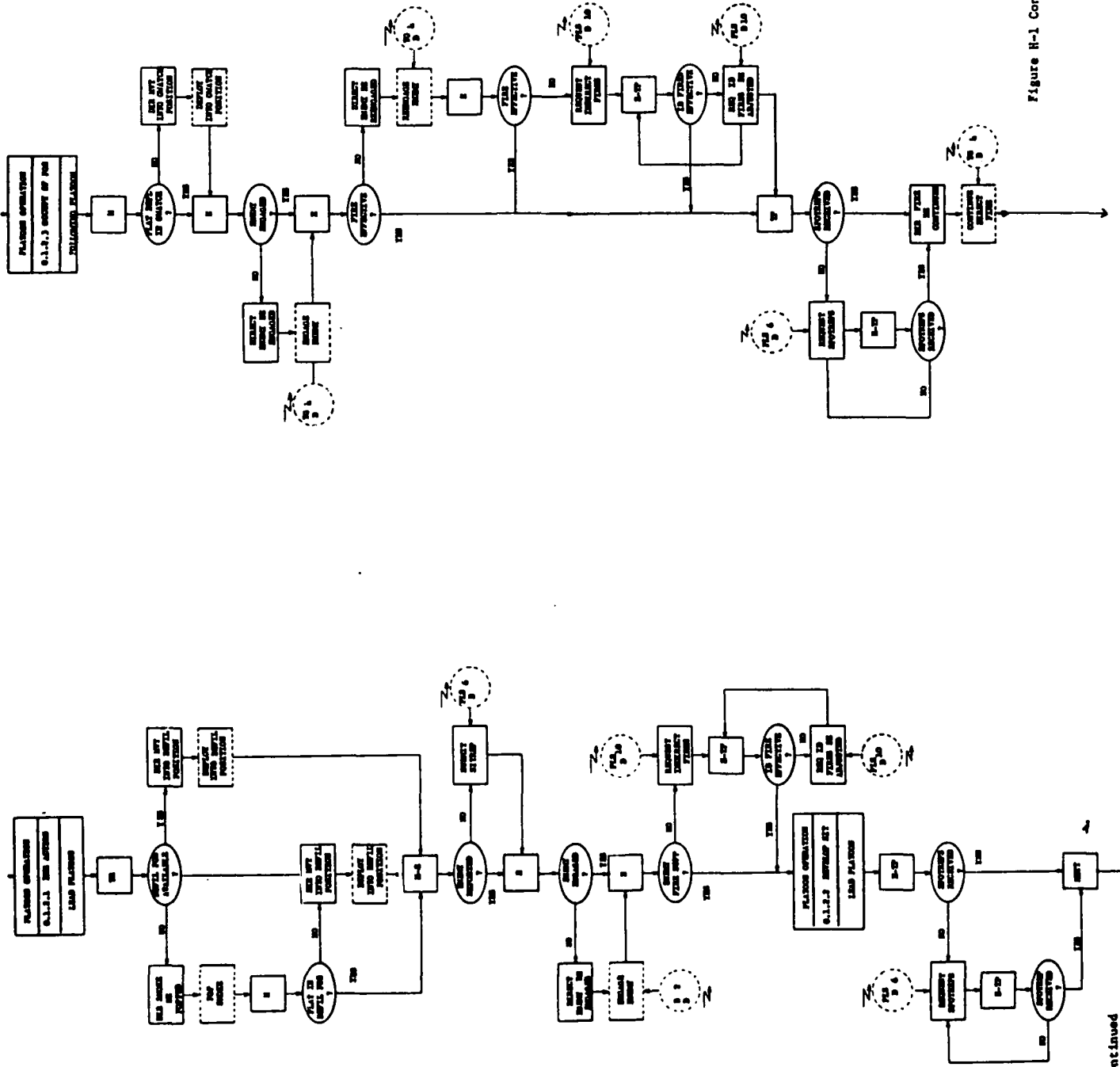


Figure H-1 Continued

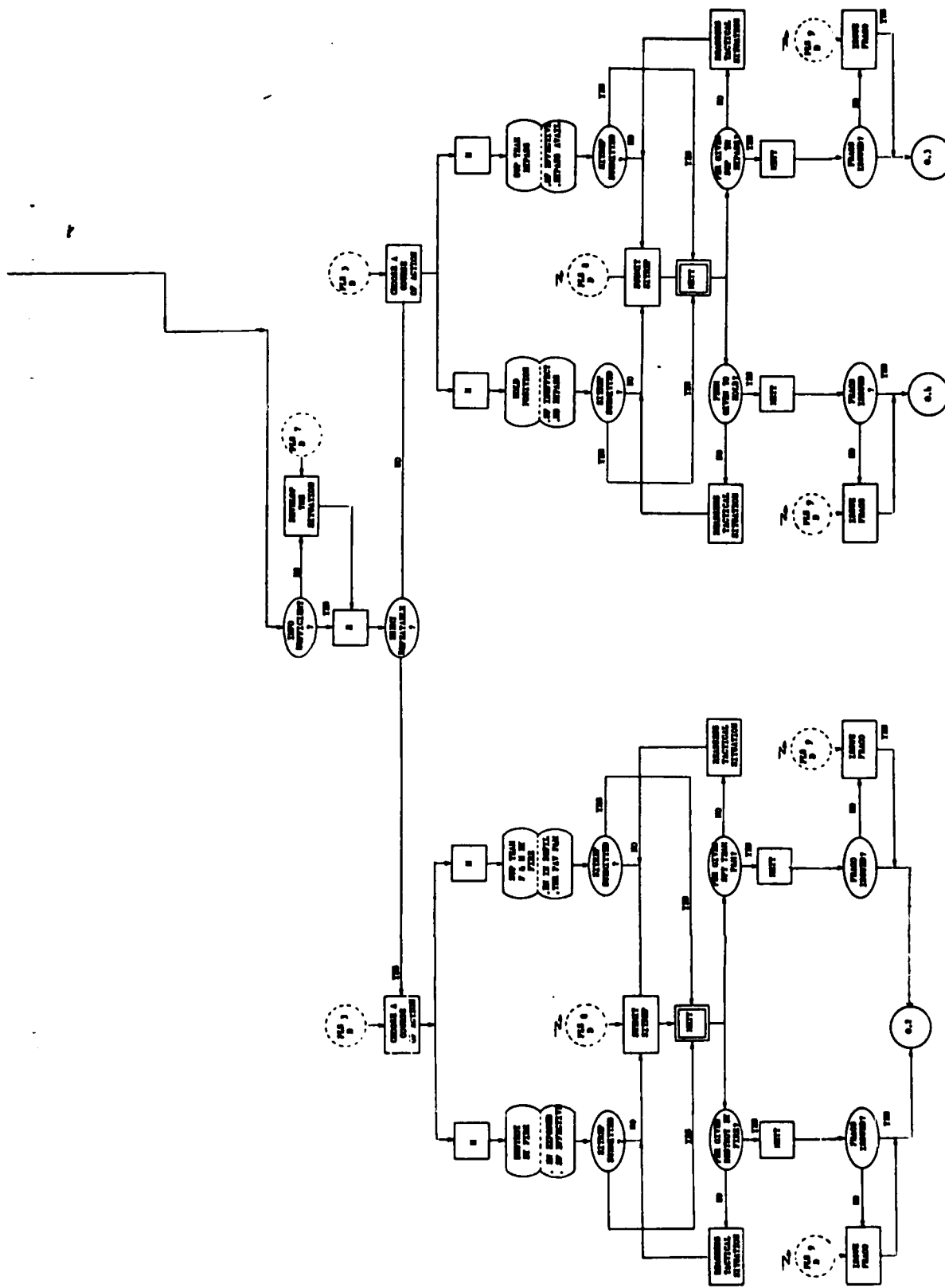


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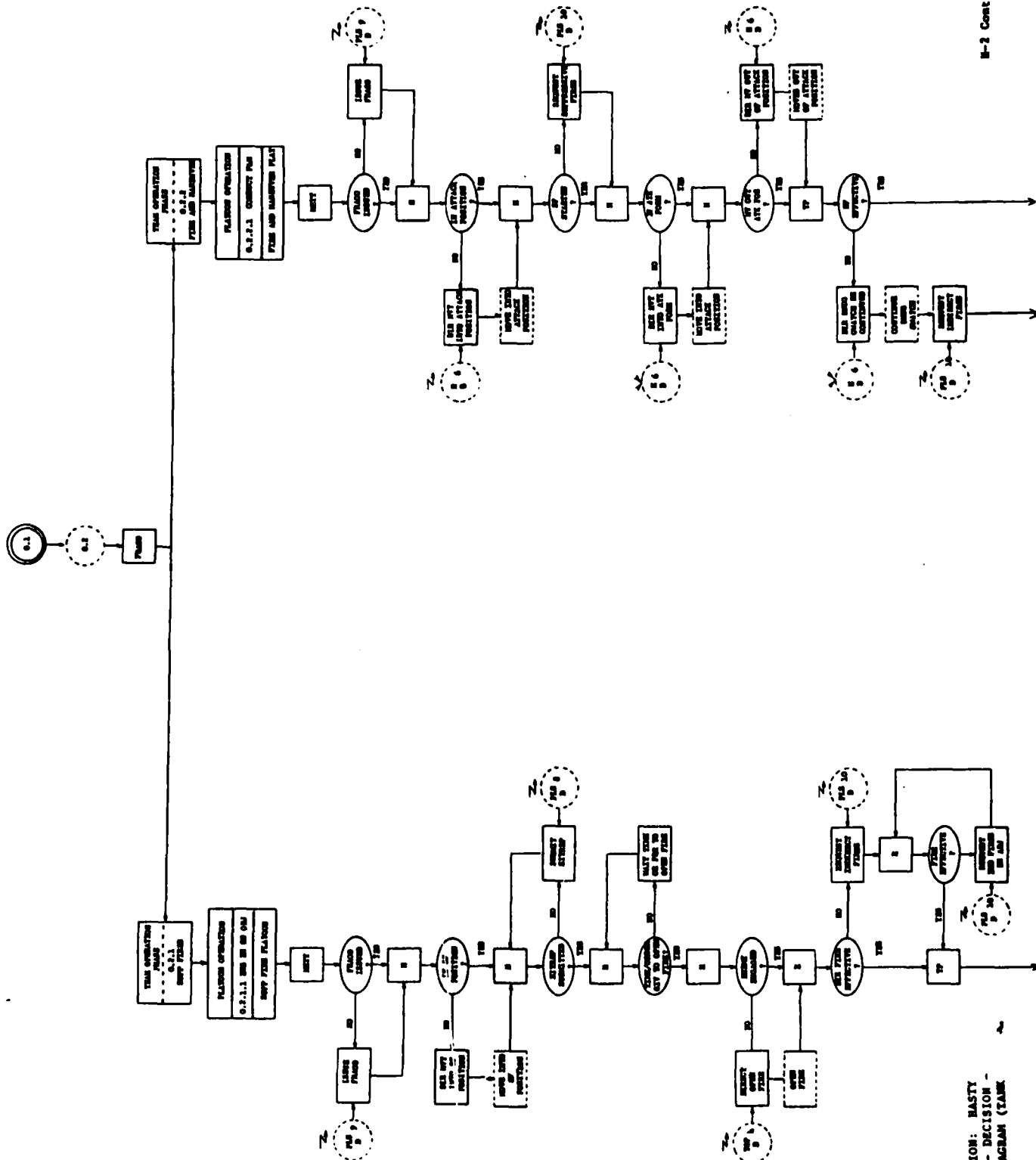
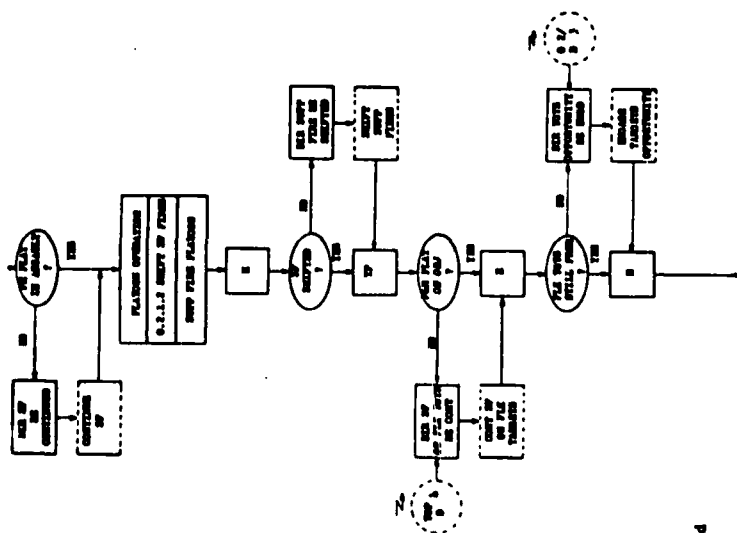
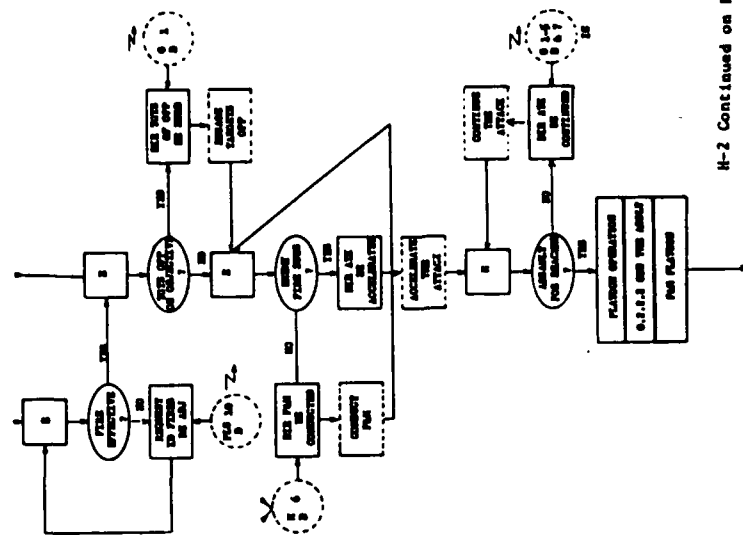


FIGURE B-2. TANK TEAM OPERATION: BASTY ATTACK; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)



H-2 Continued



H-2 Continued on Page 78

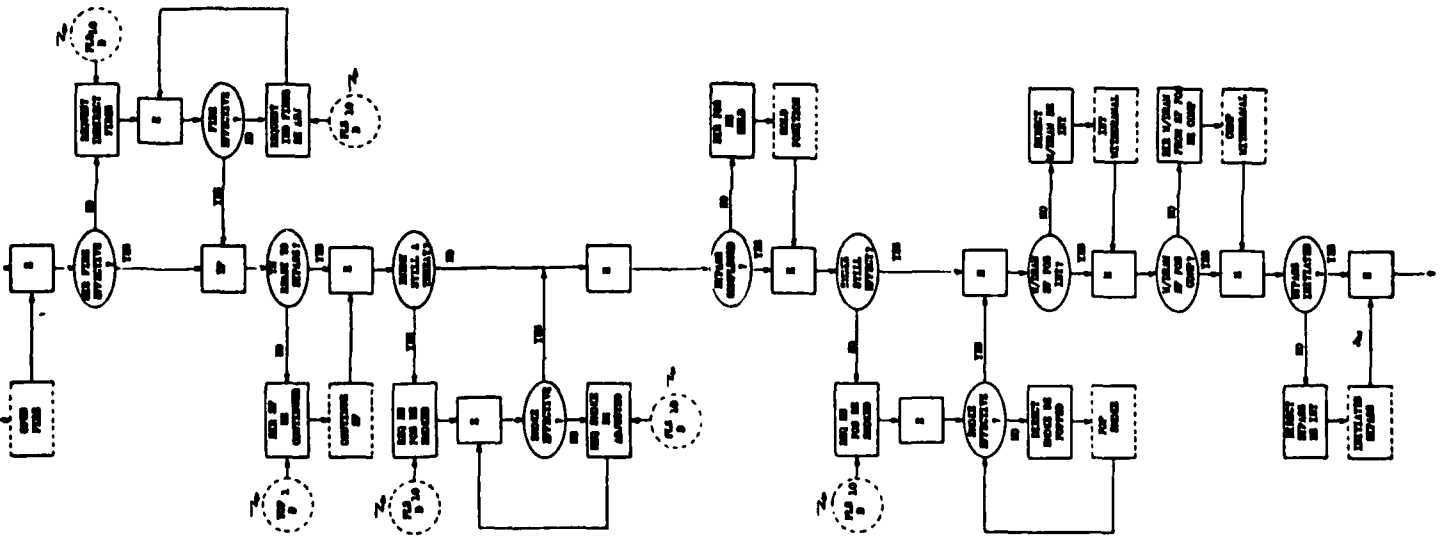
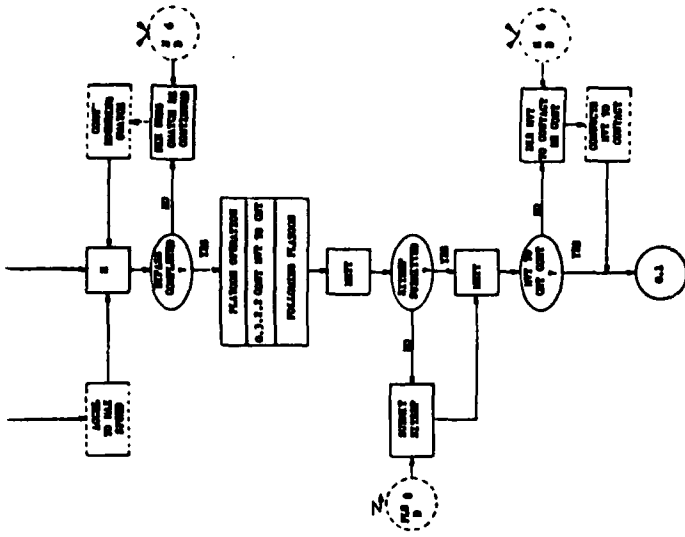


Figure H-3 Continued on Page 81

Figure H-3 Continued

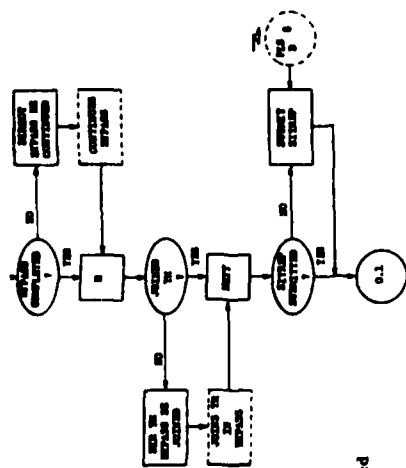


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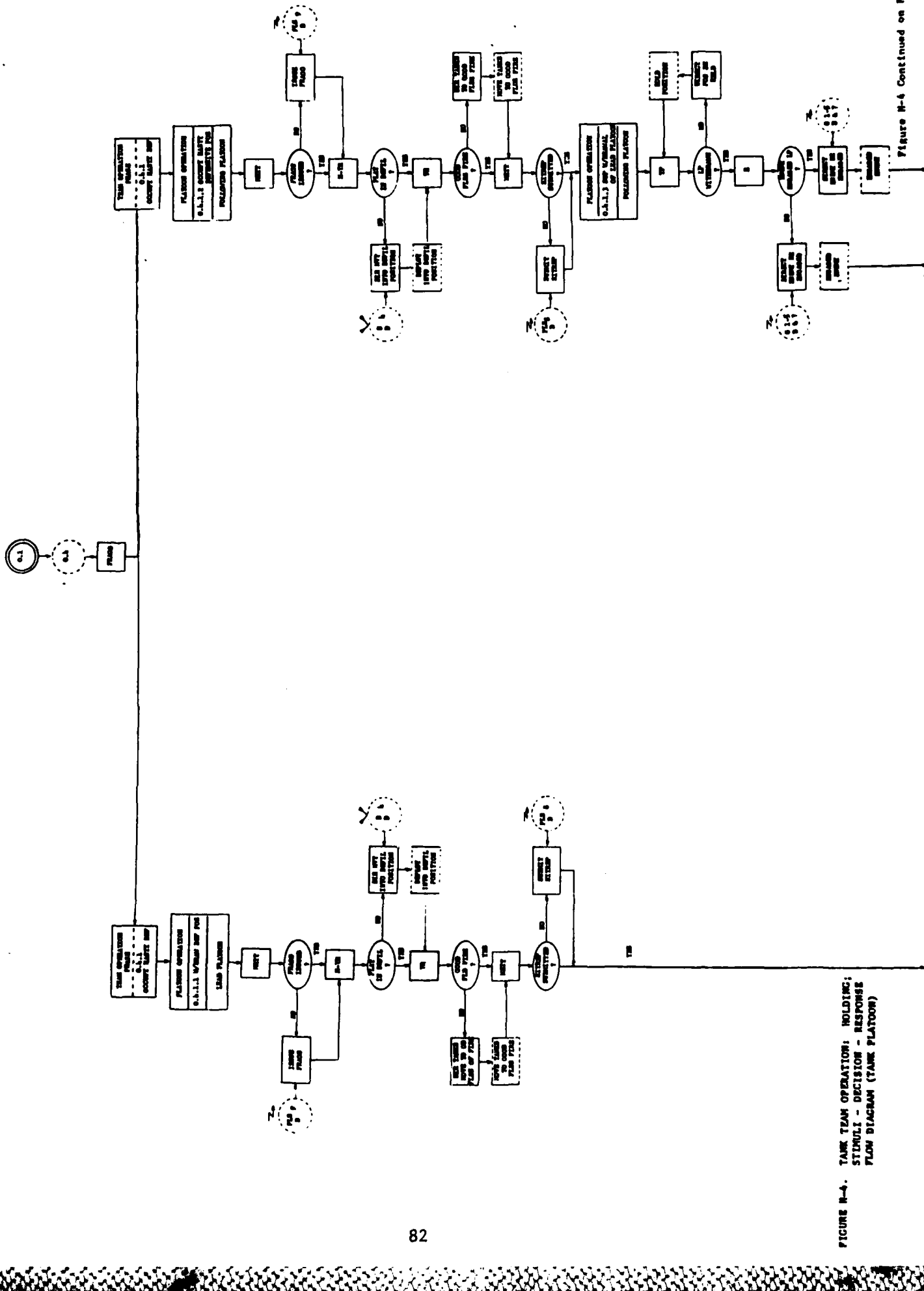
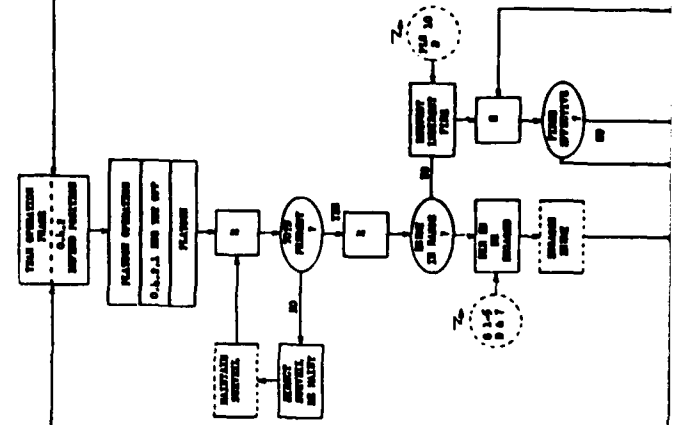
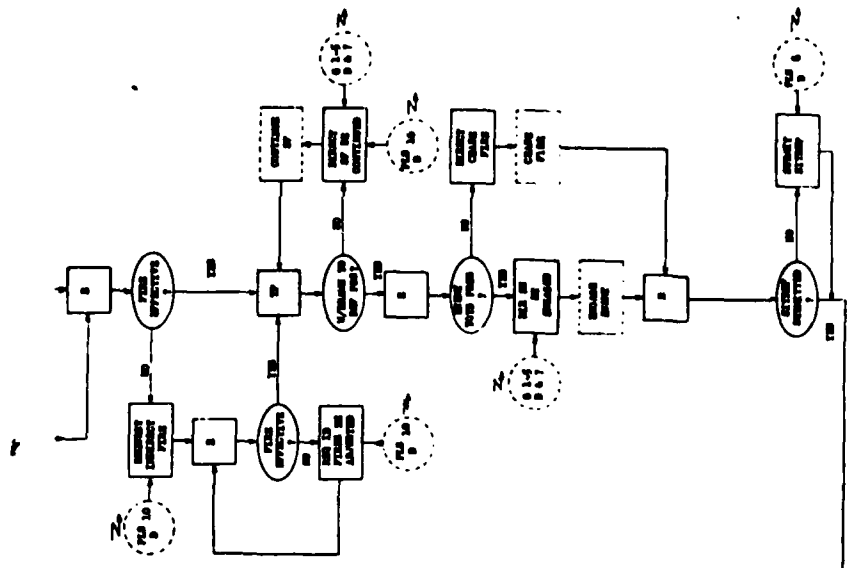


Figure H-4 Continued on Page 83

FIGURE H-4. TANK TEAM OPERATION: HOLDING; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)



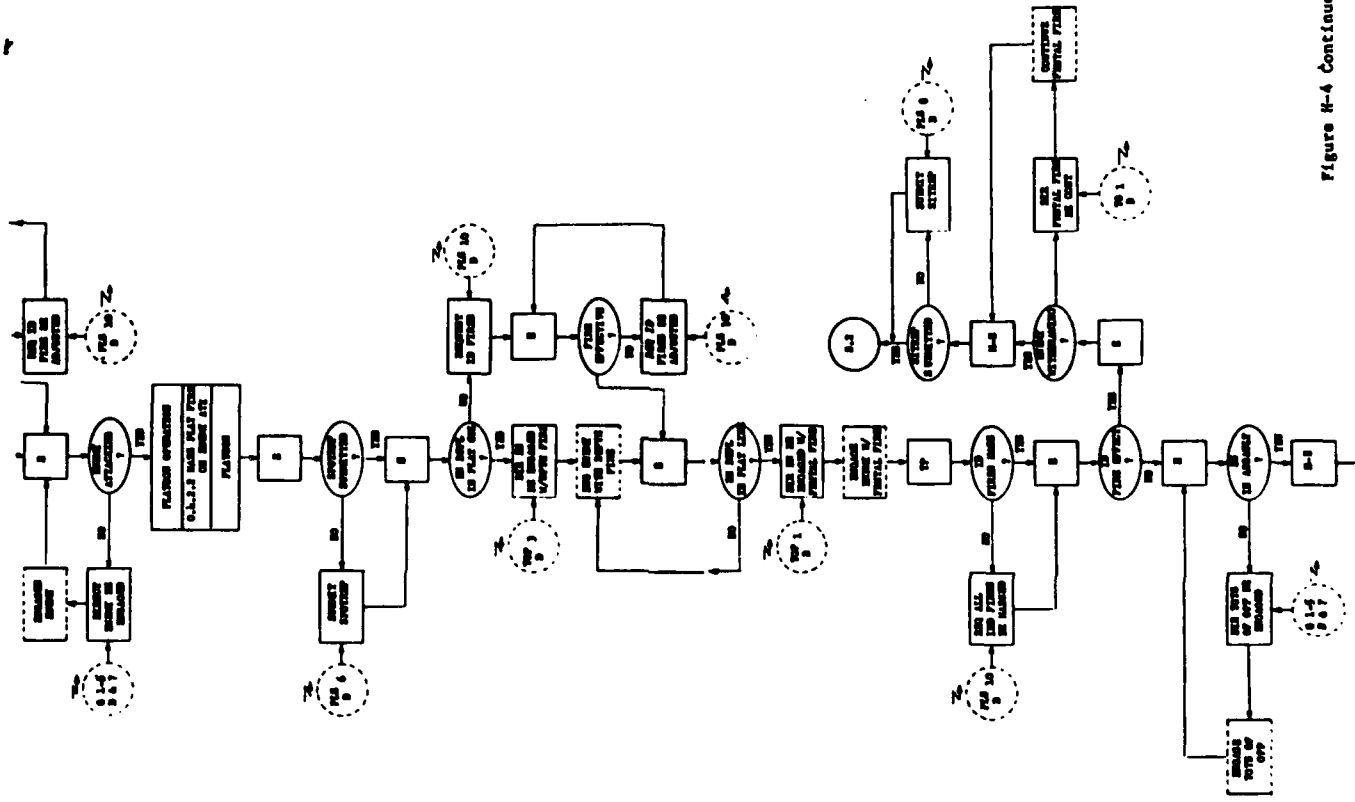


Figure H-4 Continued on Page 85

Figure H-4 Continued

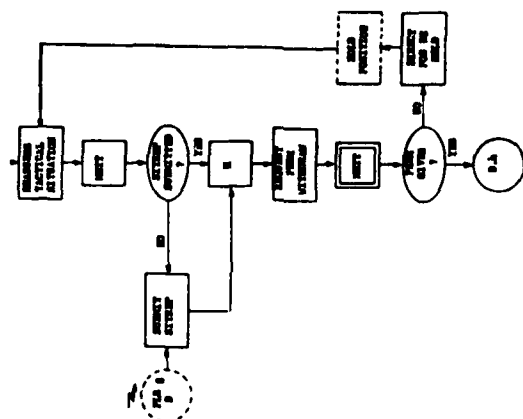


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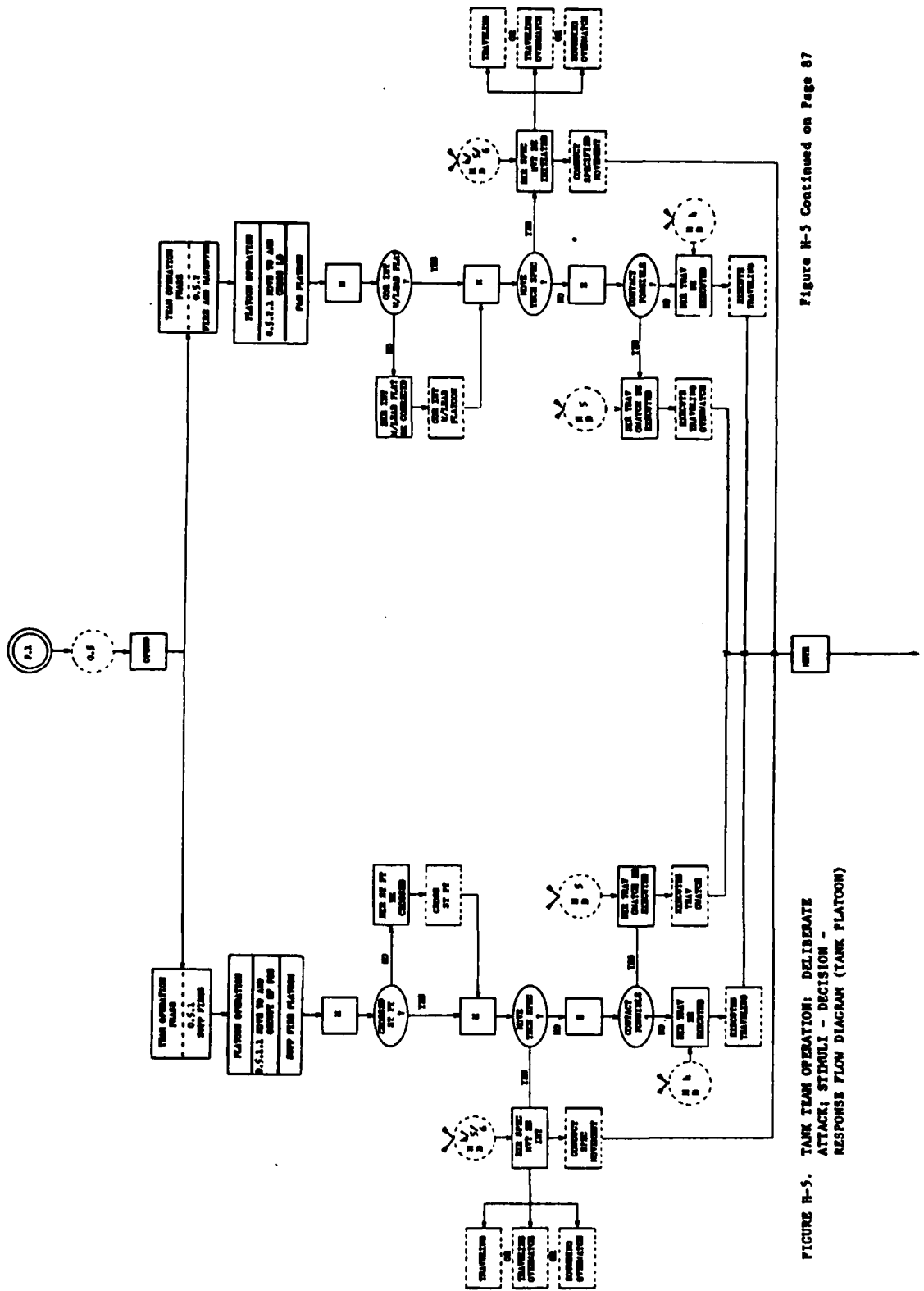


Figure H-5 Continued on Page 87

FIGURE H-5. TANK TEAM OPERATION: DELIBERATE ATTACK; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)

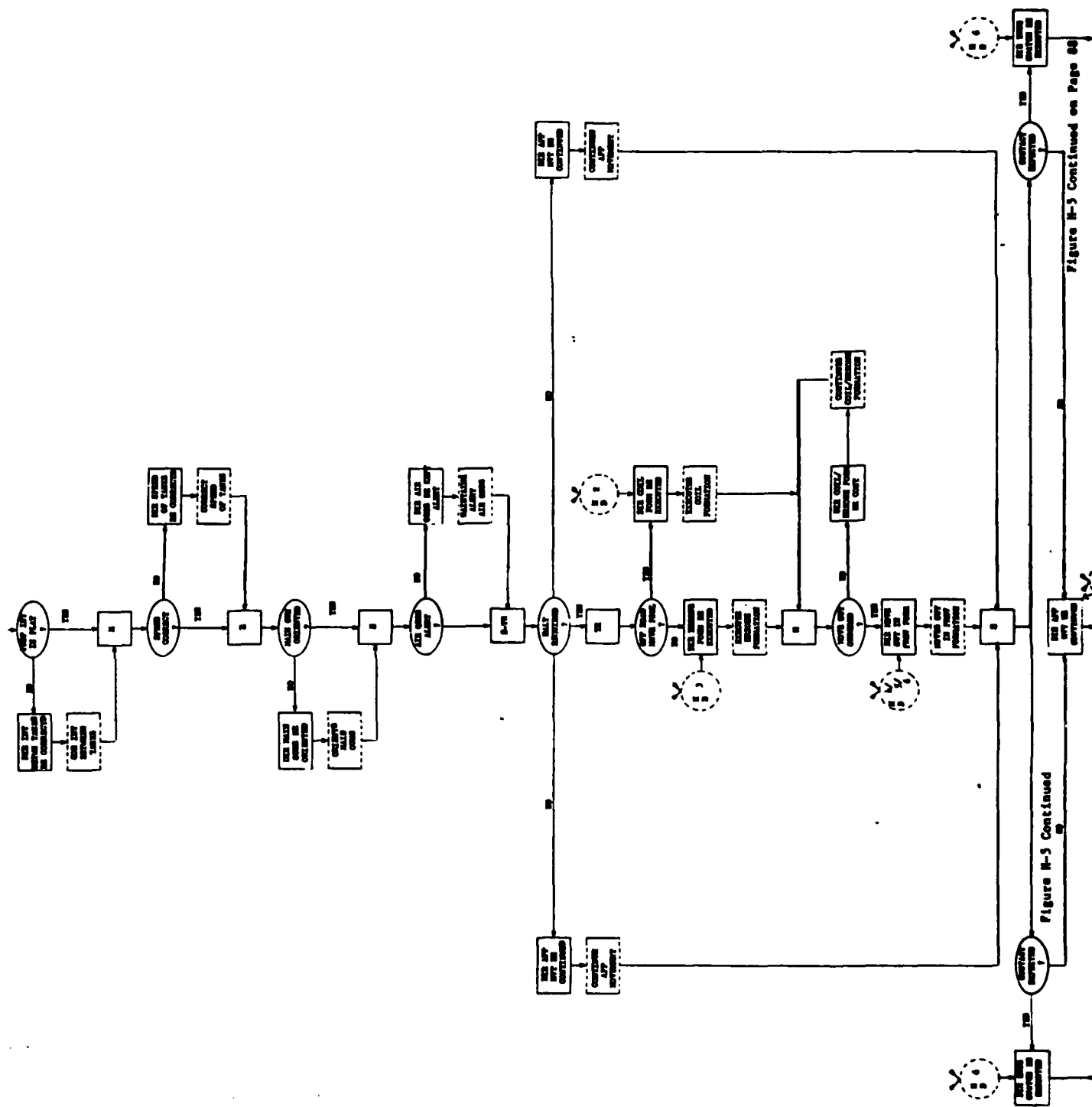


Figure M-3 Continued

Figure M-3 Continued on Page 88

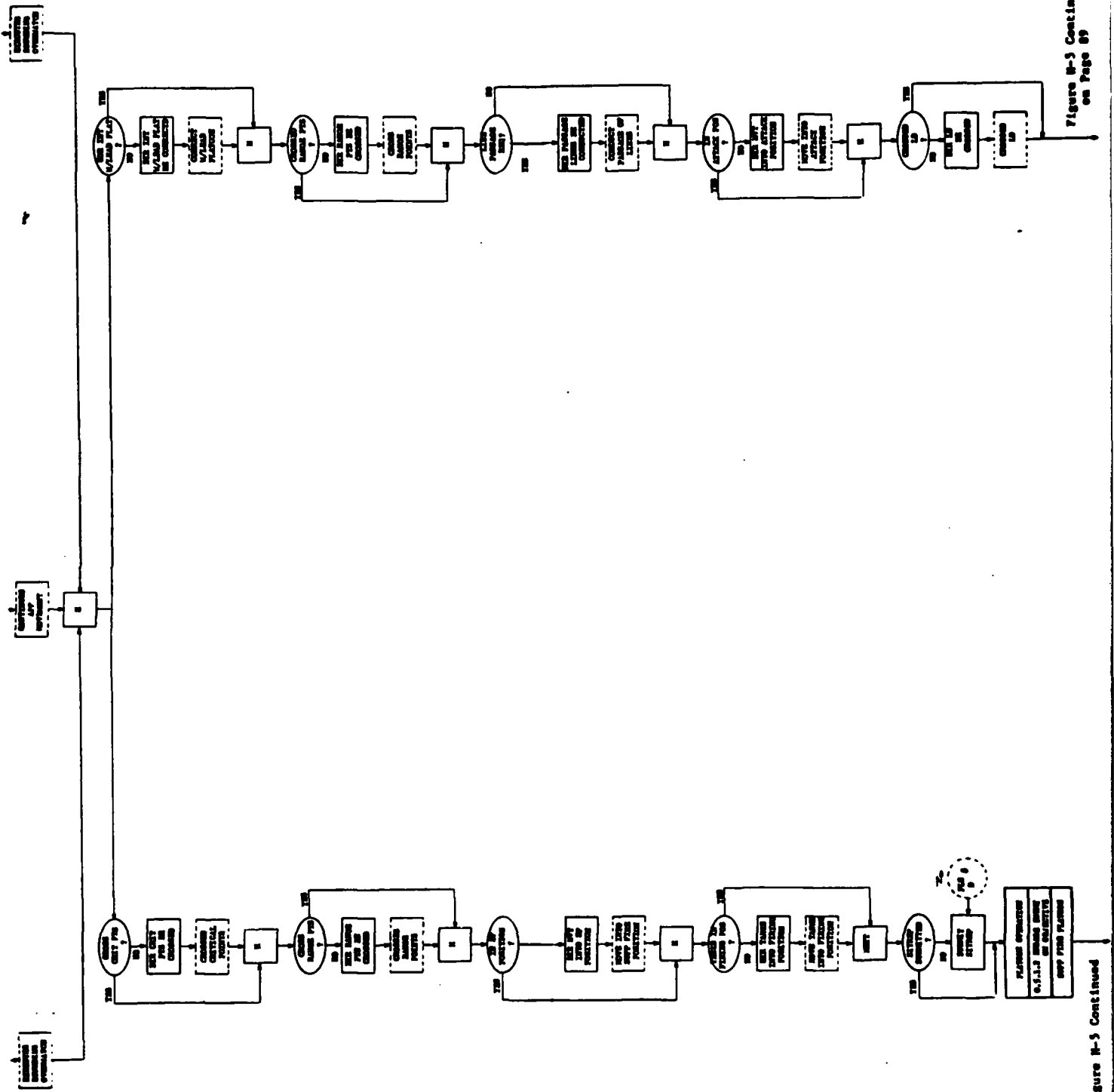


Figure B-3 Continued on Page 89

Figure B-3 Continued

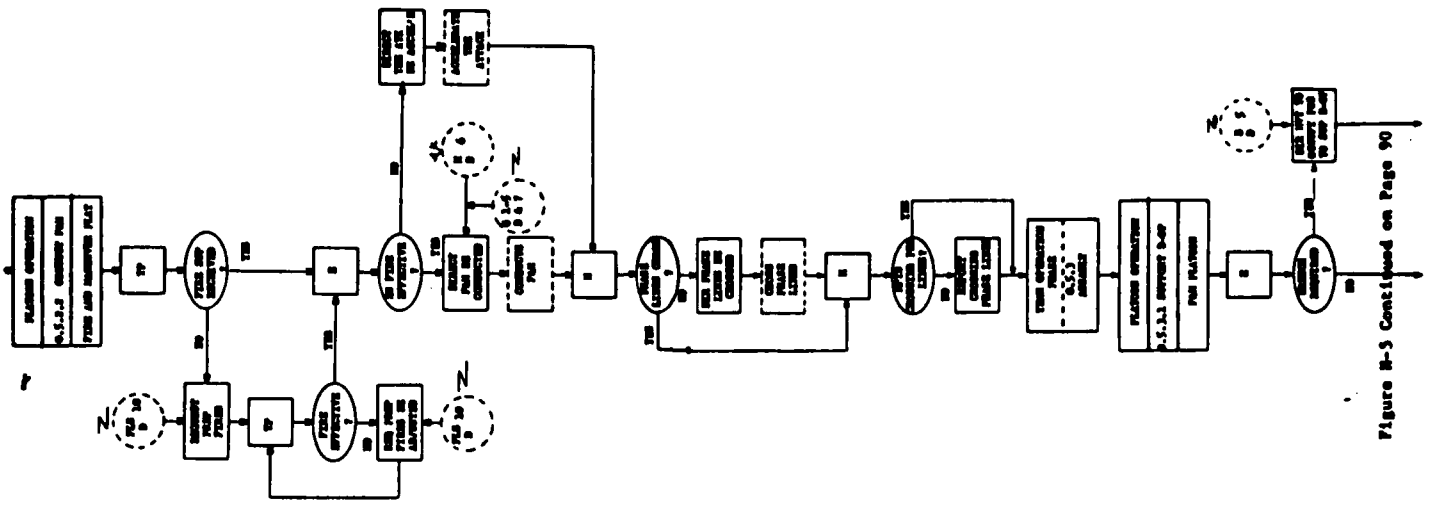
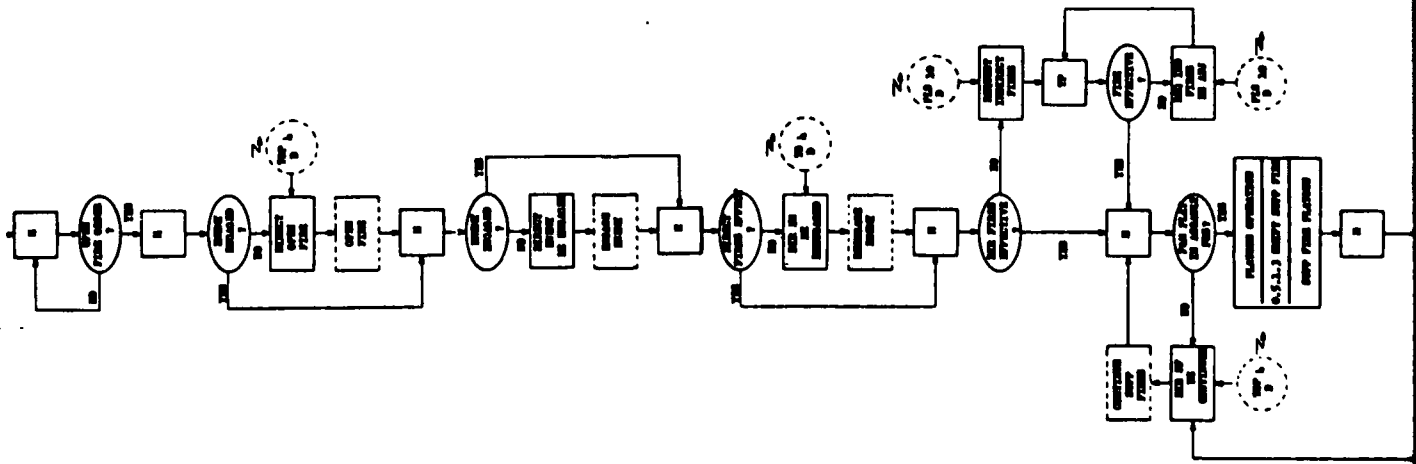


Figure M-3 Continued on Page 90



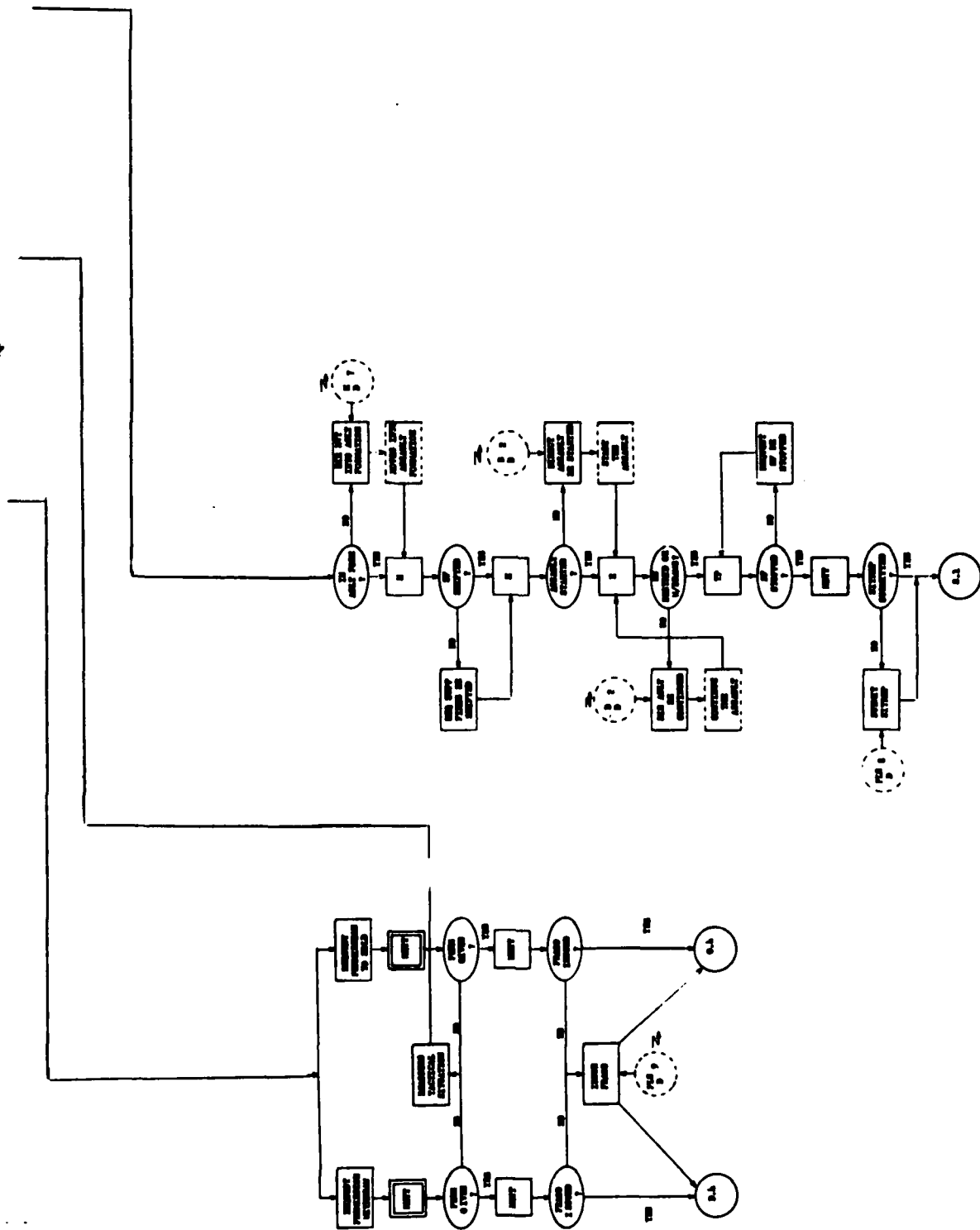
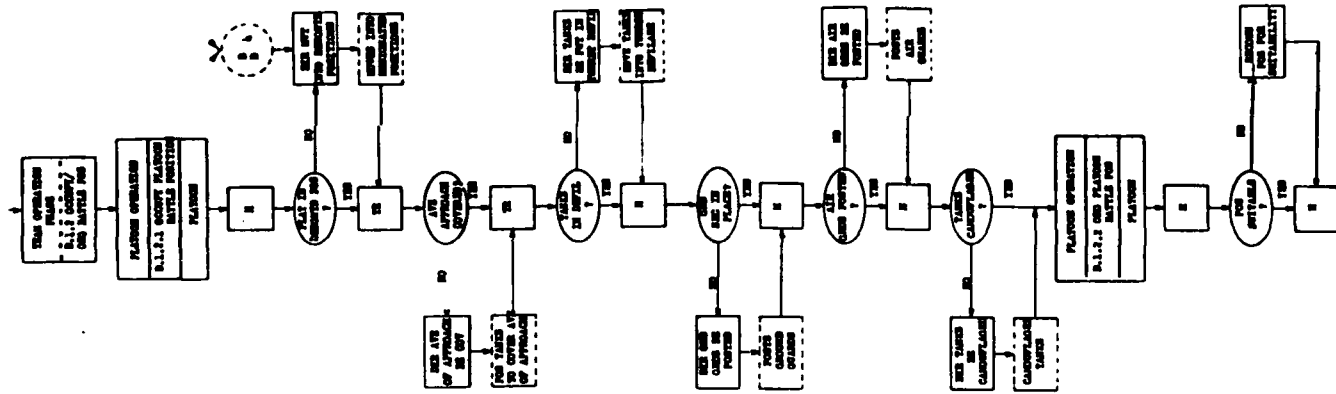


Figure H-5 Continued



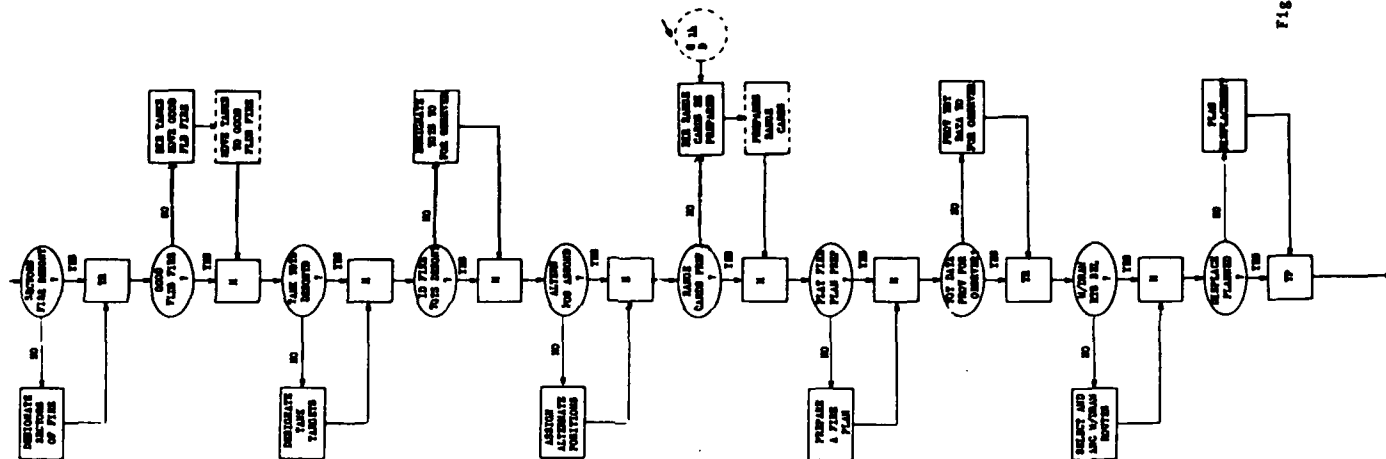


Figure H-7 Continued on Page 97

Figure H-7 Continued

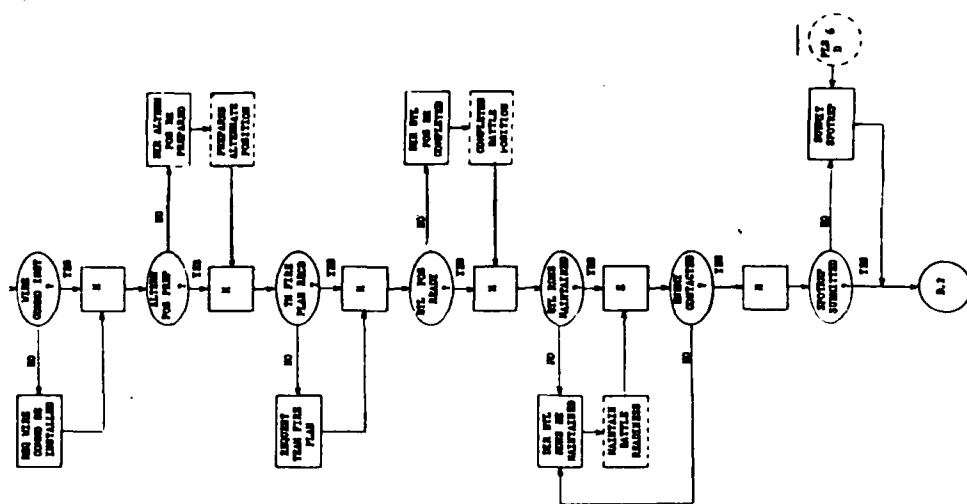


Figure H-7 Continued

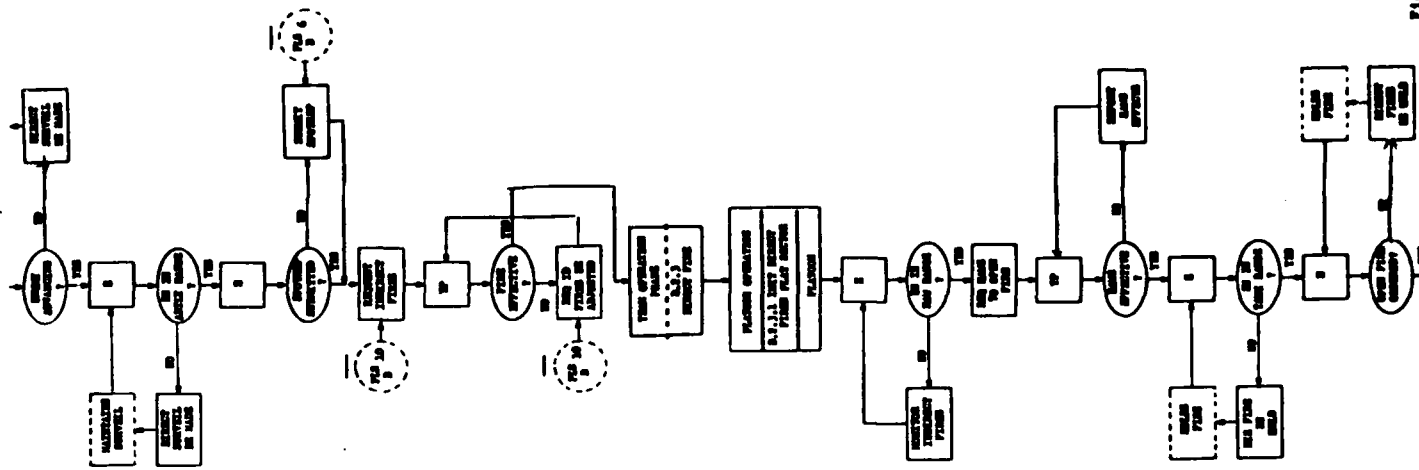


Figure H-8 Continued on Page 100

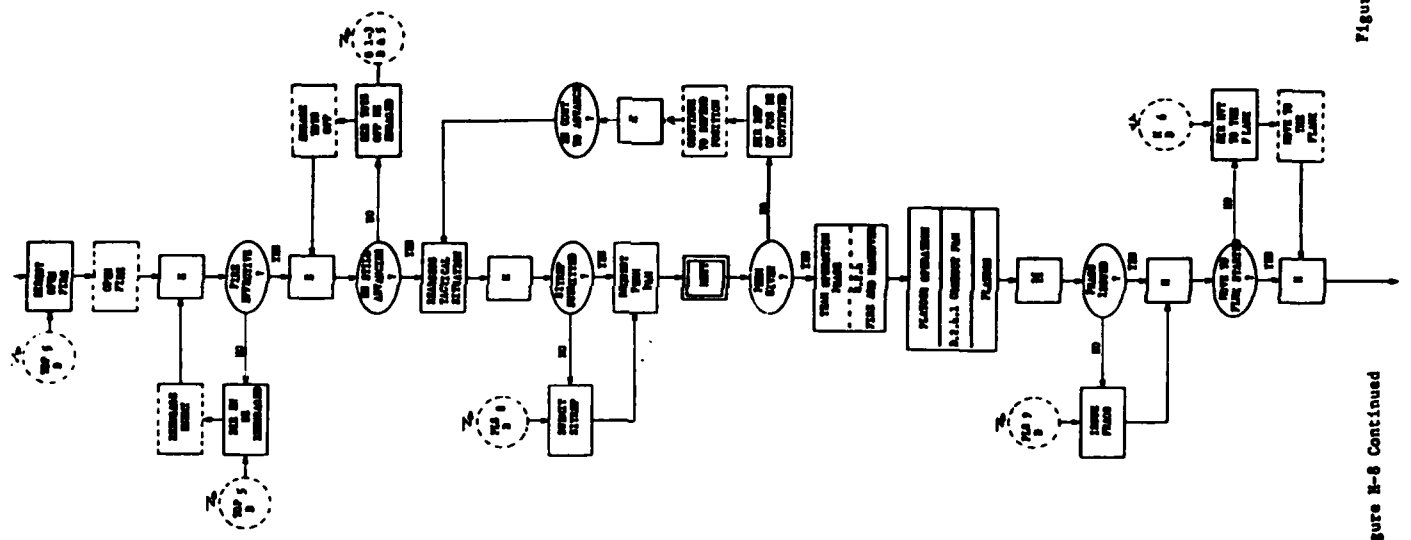


Figure H-8 Continued on Page 101

Figure H-8 Continued

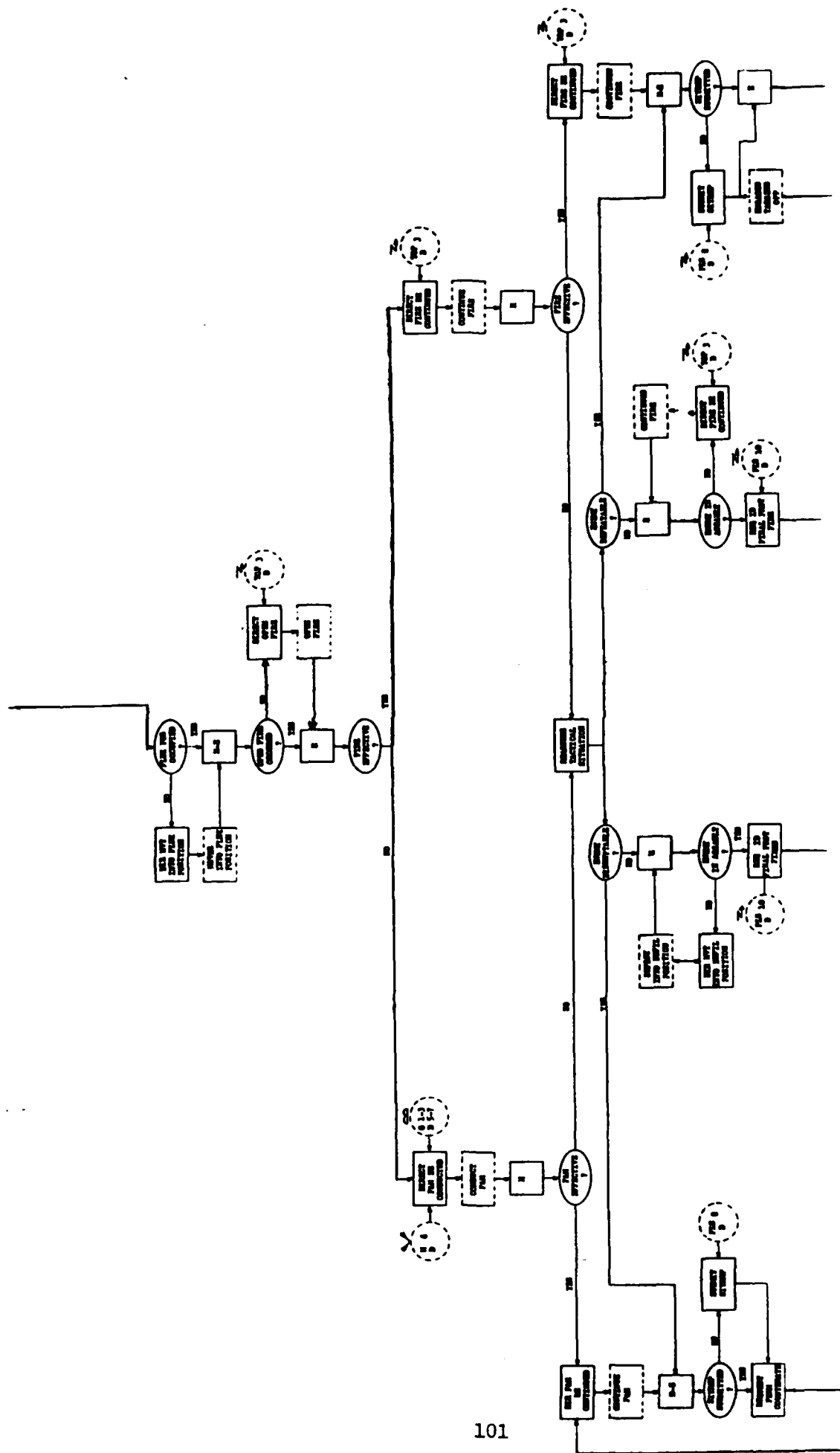


Figure H-8 Continued on Page 102

Figure H-8 Continued

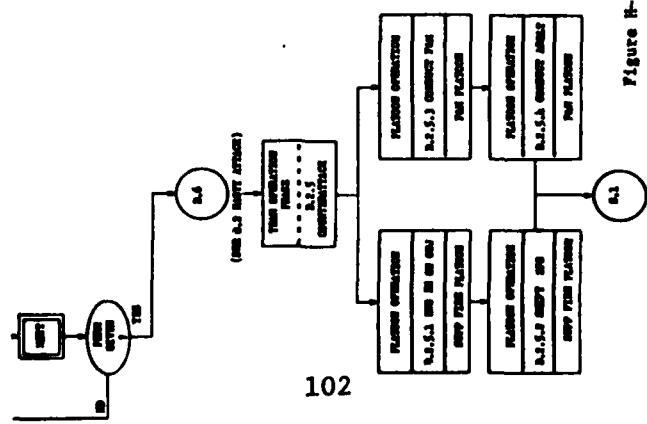
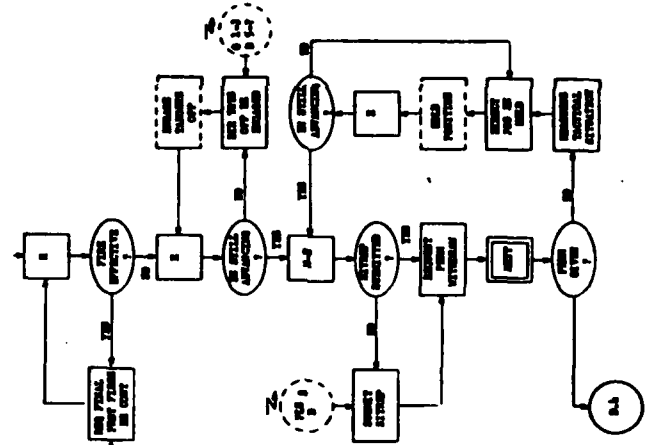
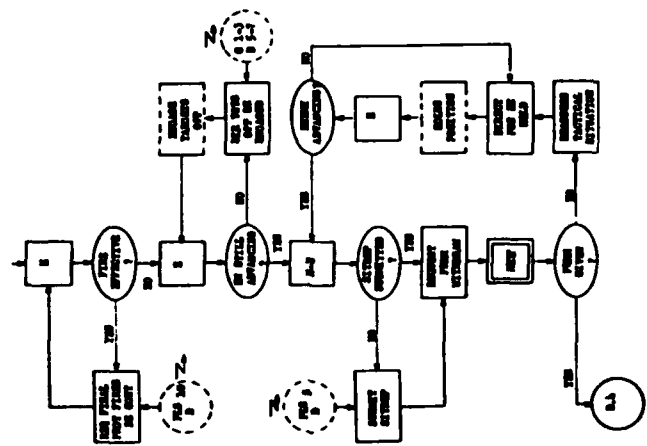
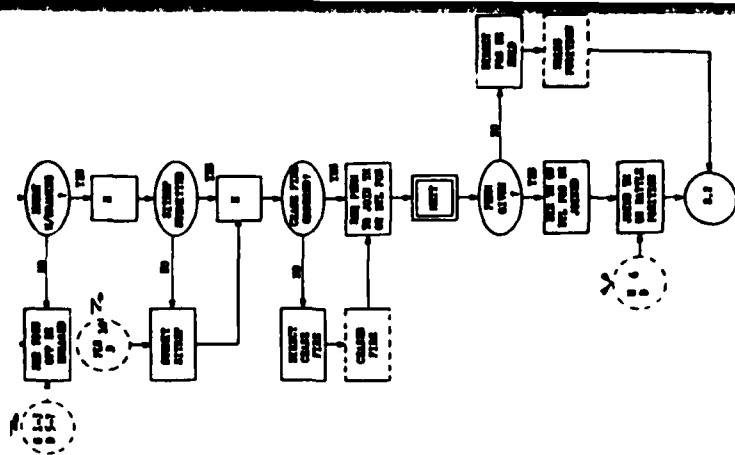


Figure H-8 Continued

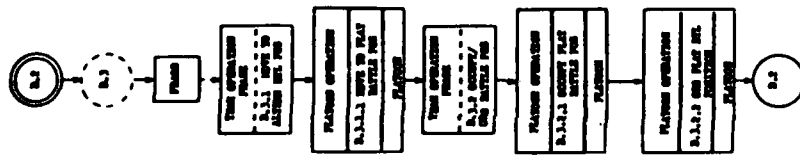
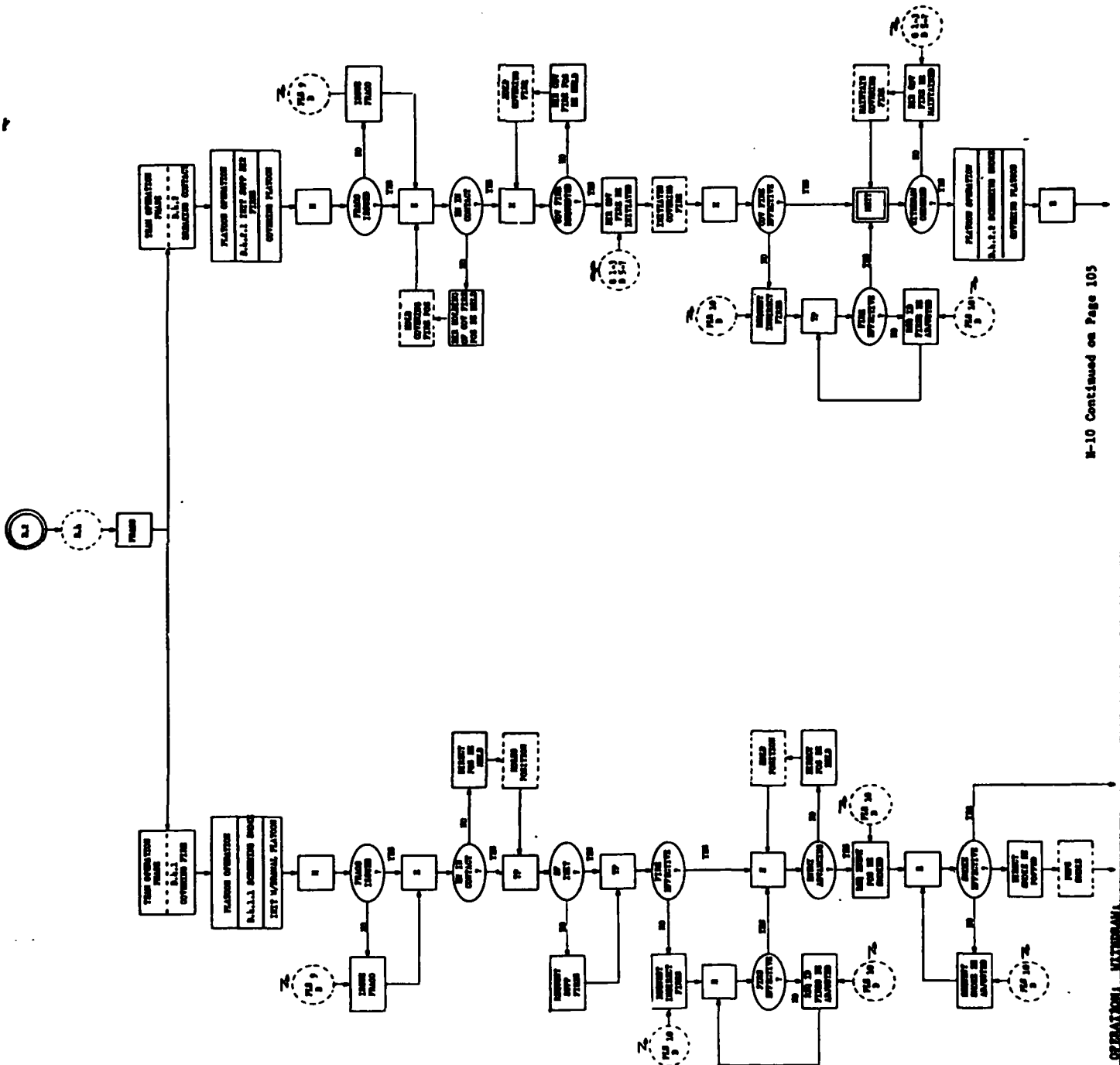


FIGURE H-9. TANK TEAM OPERATION: DISPLACE TO ALTERNATE BATTLE POSITION; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON) (SEE D.1 OCCUPY BATTLE POSITION)



M-10 Continued on Page 105

FIGURE M-10. TEAM TEAM OPERATIONAL NETWORK

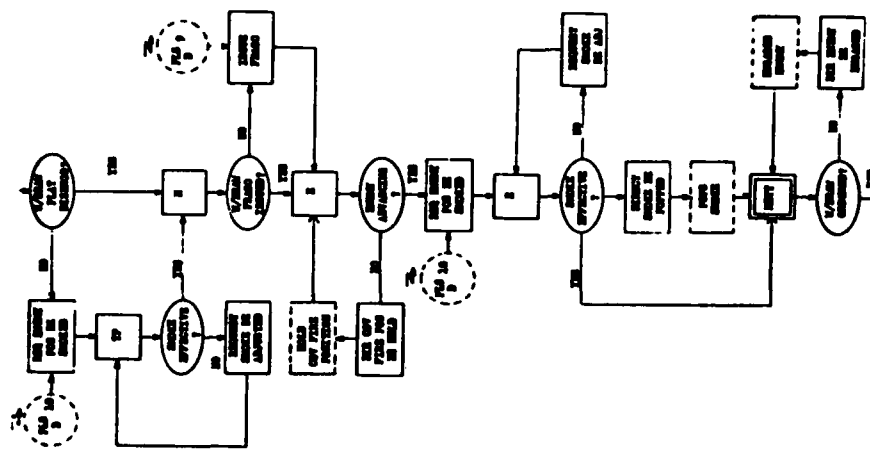
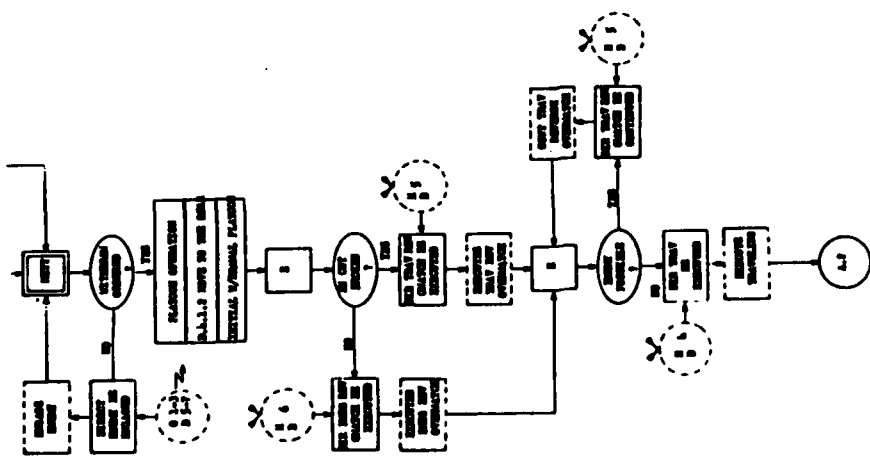


Figure B-10 Continued on Page 106



B-10 Continued

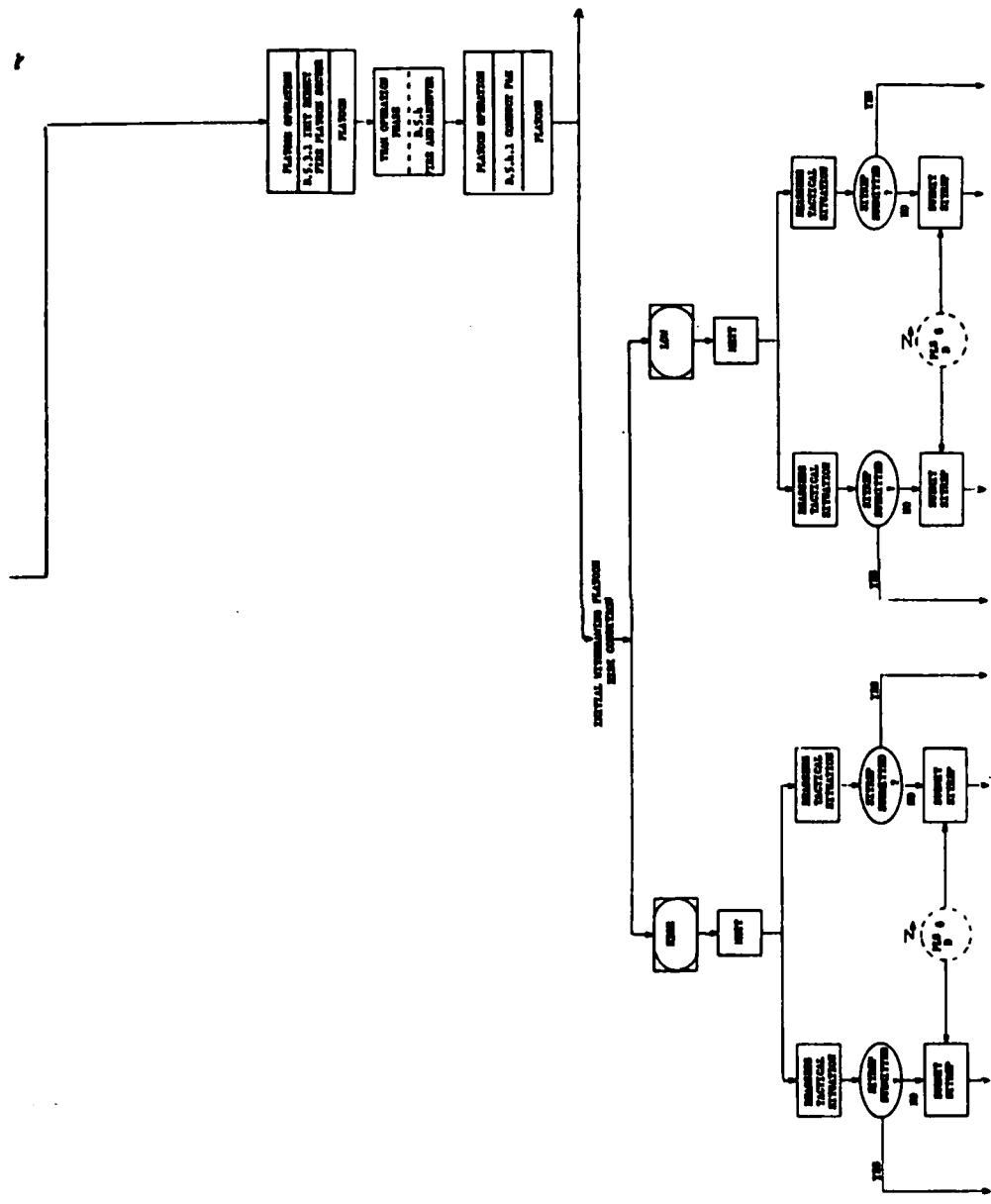


Figure M-11 Continued

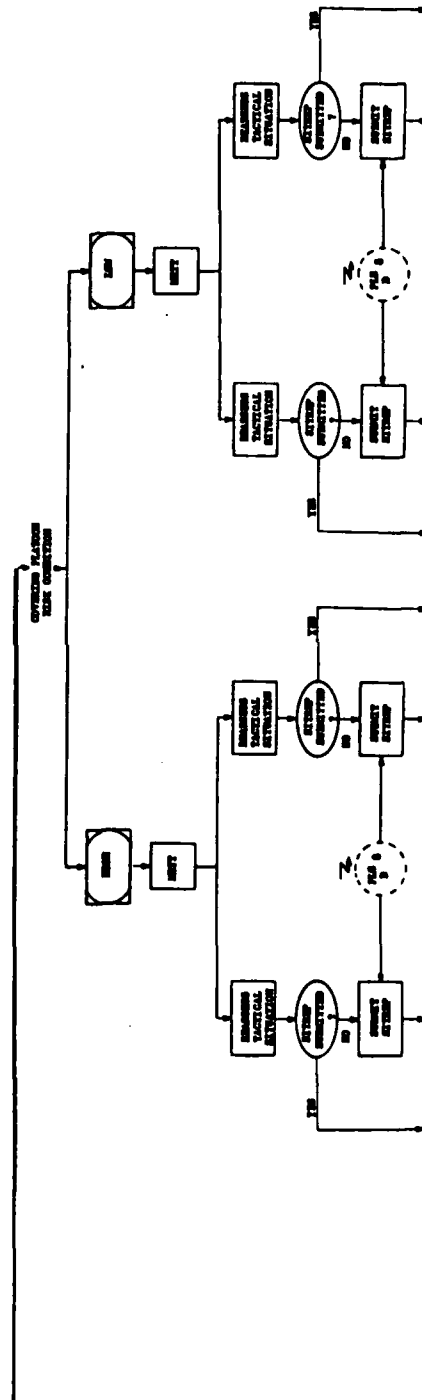


Figure R-11 Continued on Pages 109a and 109b

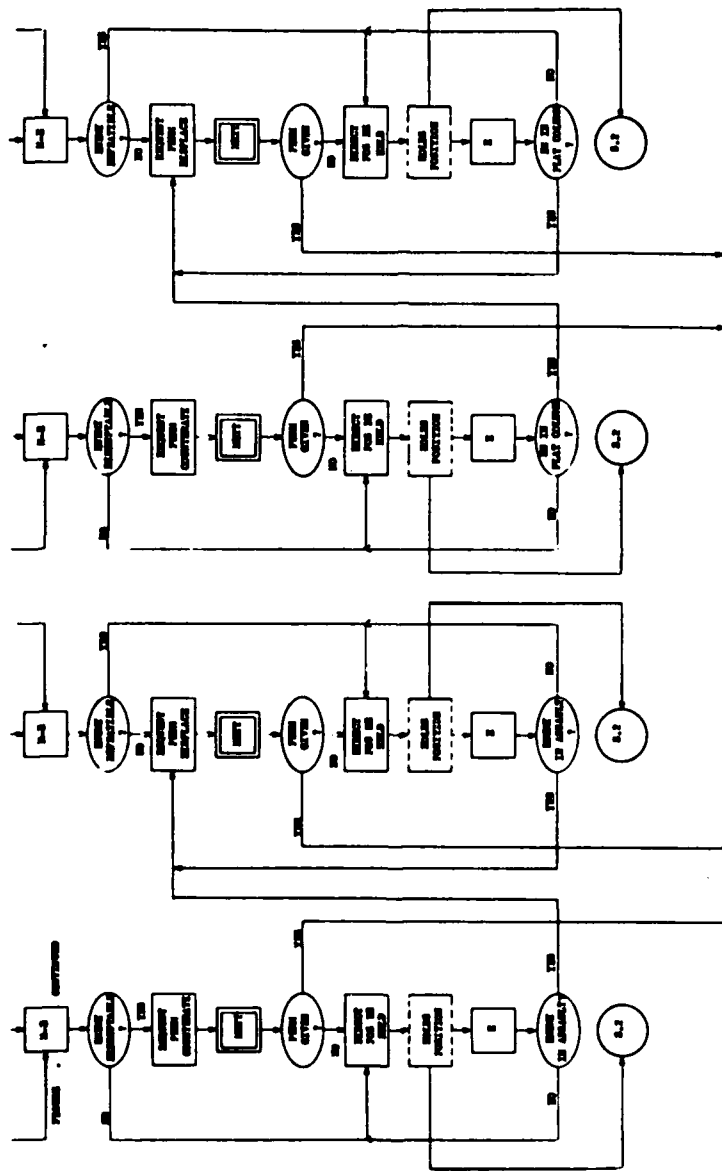


Figure H-11 Continued

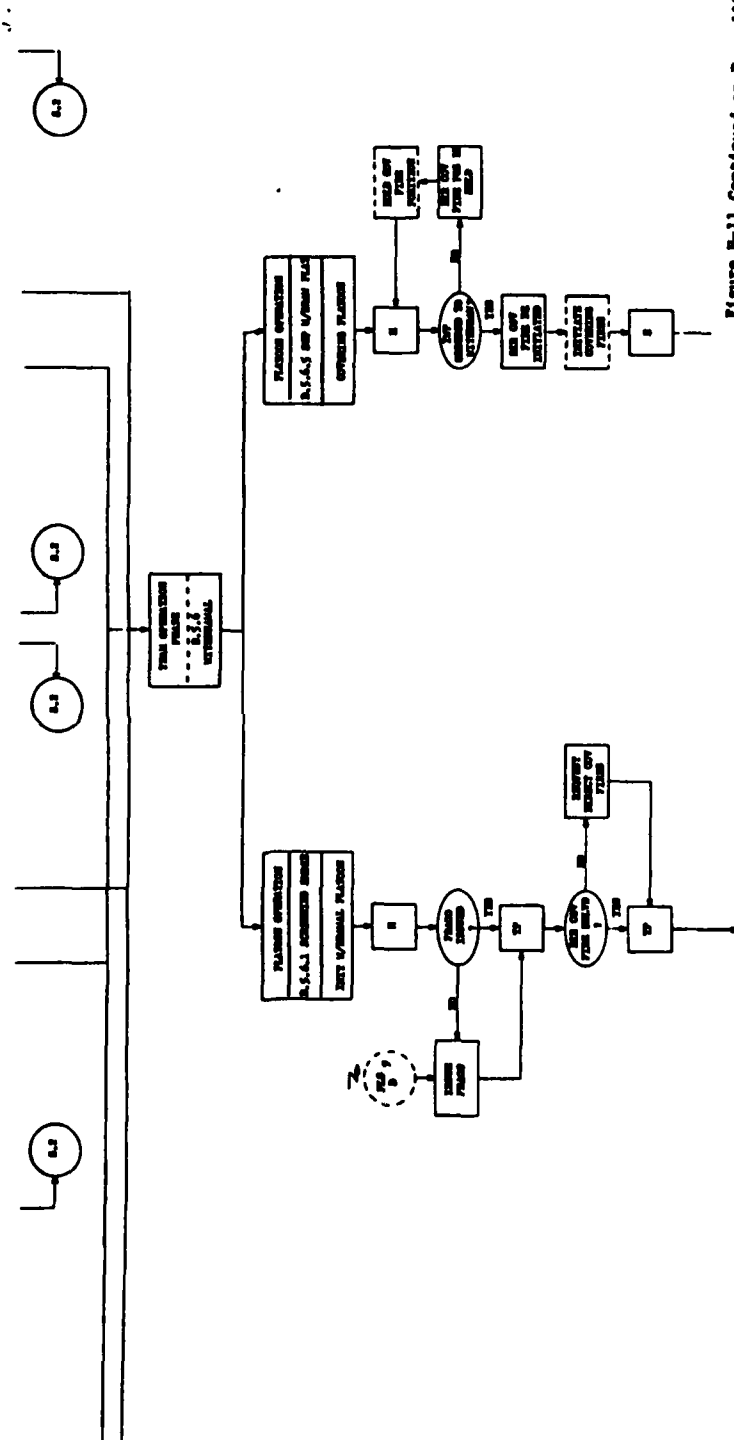


Figure B-11 Continued on Page 111

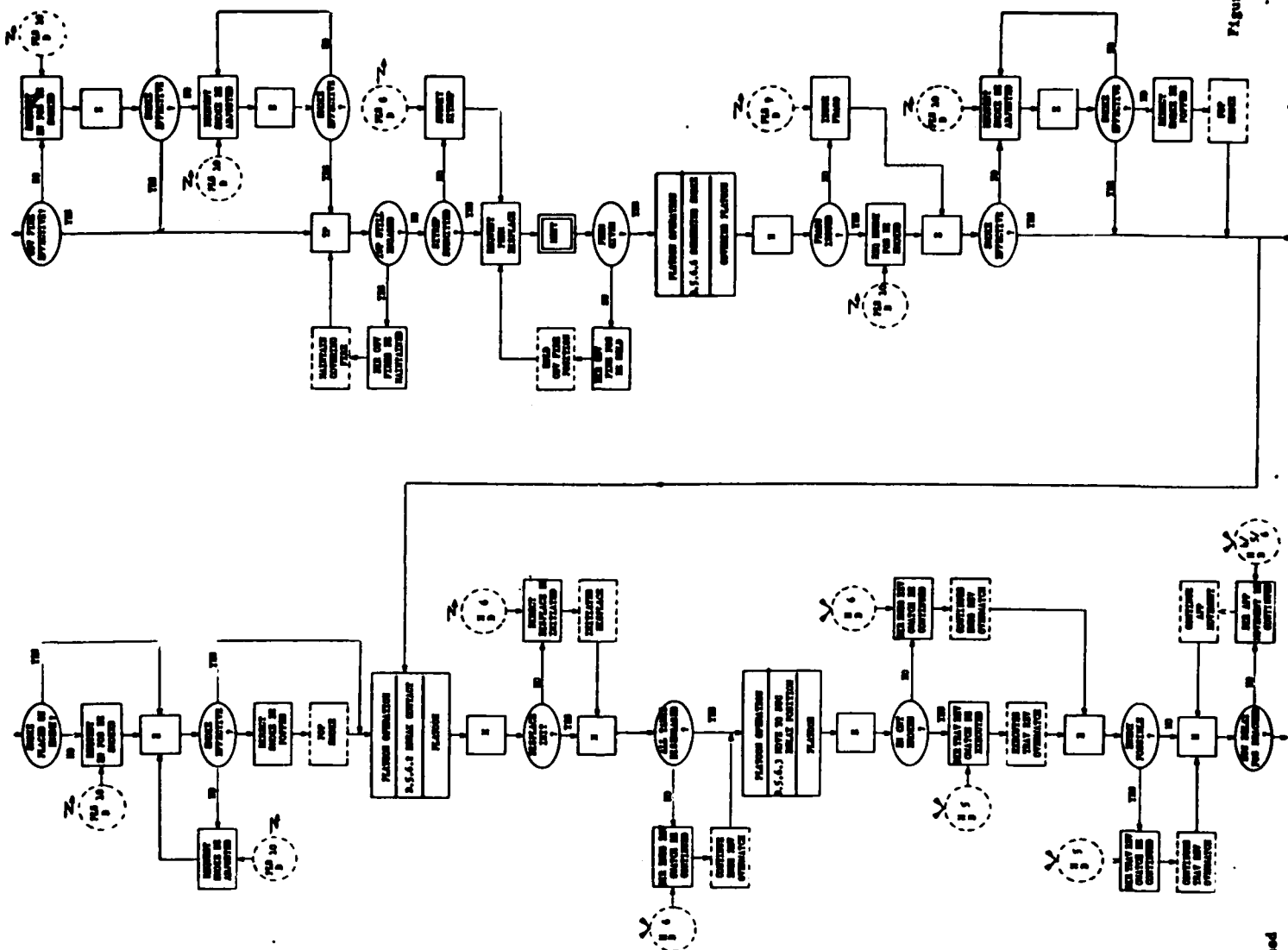


Figure B-11 Continued on Page 112

Figure B-11 Continued

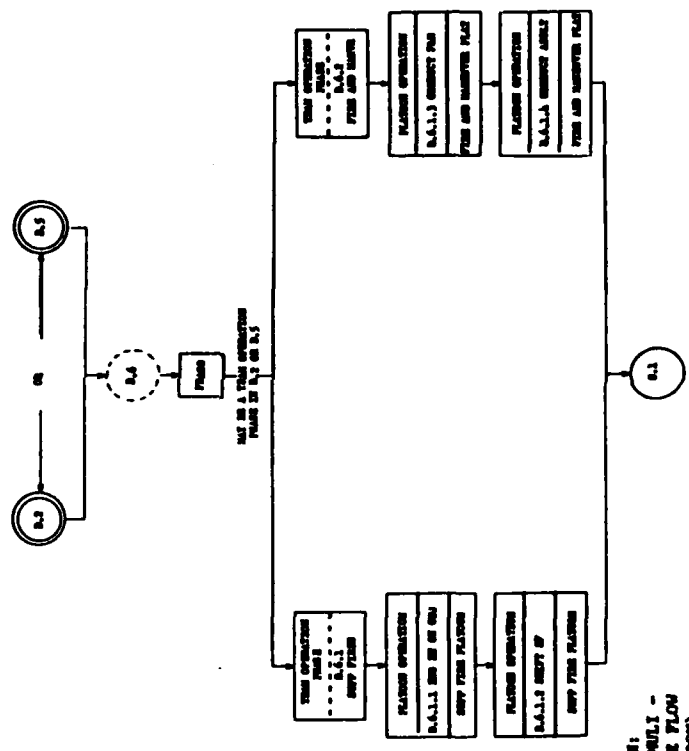


FIGURE B-12. TANK TEAM OPERATIONS: COUNTERATTACK; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON) (SEE 0.2 NASTY ATTACK)

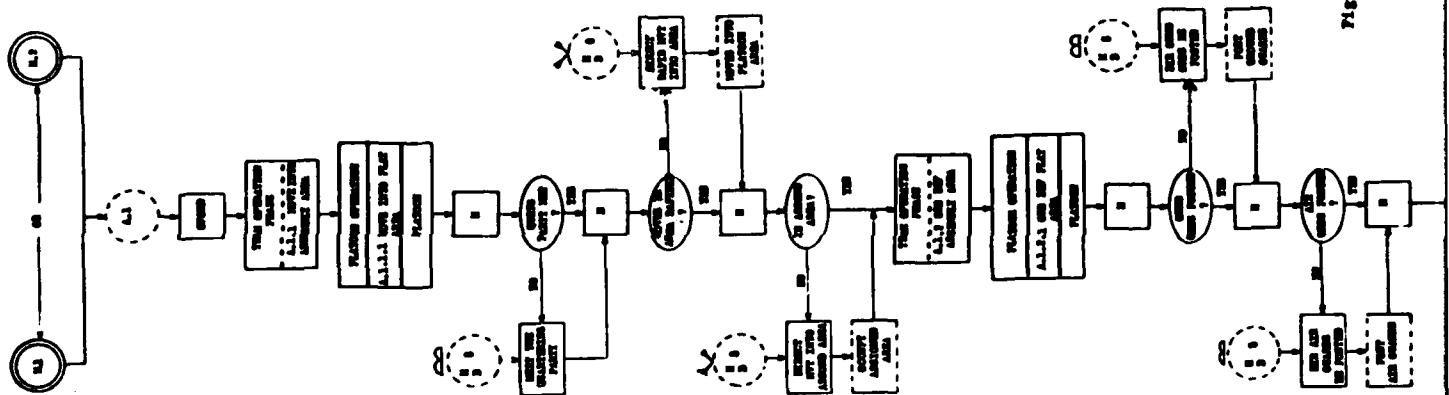


FIGURE B-13. TANK TEAM OPERATION: OCCUPY REAR ASSEMBLY AREA; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)

Figure B-13 Continued on Page 11b

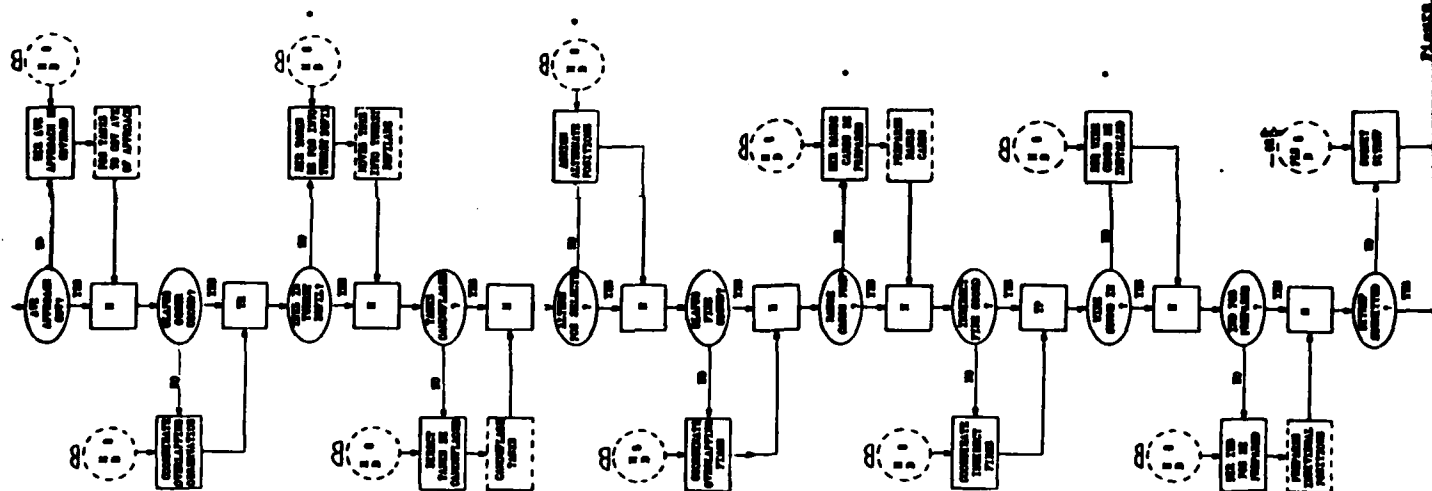
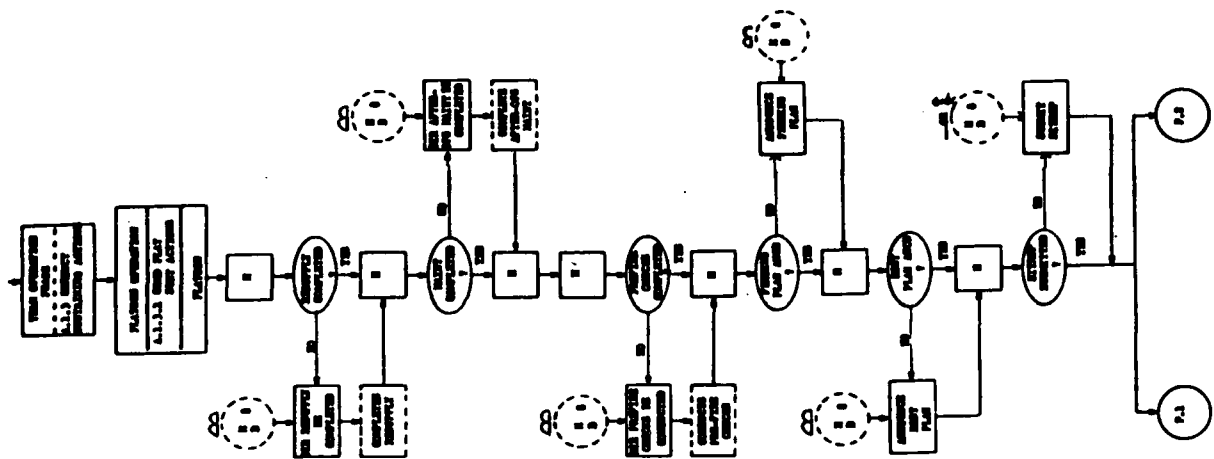


Figure B-13 Continued



• ACTION INDICATED BY '8' IS REVISION REQUIRED.

Figure H-13 Continued

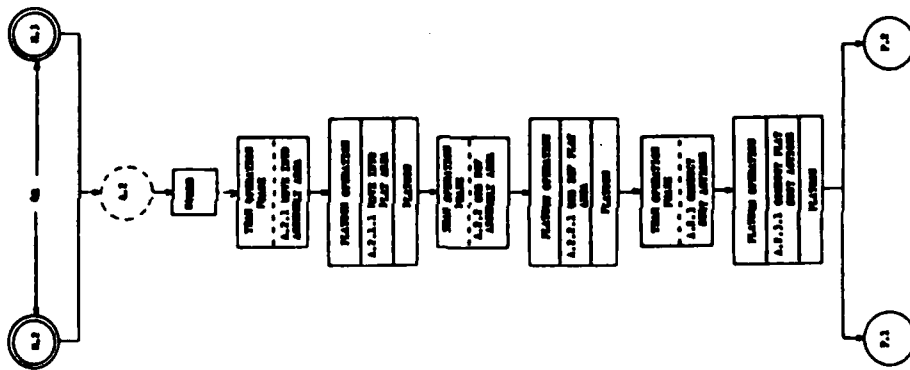


FIGURE H-14. TANK TEAM OPERATION: OCCUPY FORWARD ASSEMBLY AREA; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON) (SEE A.1 OCCUPY FORWARD ASSEMBLY AREA)

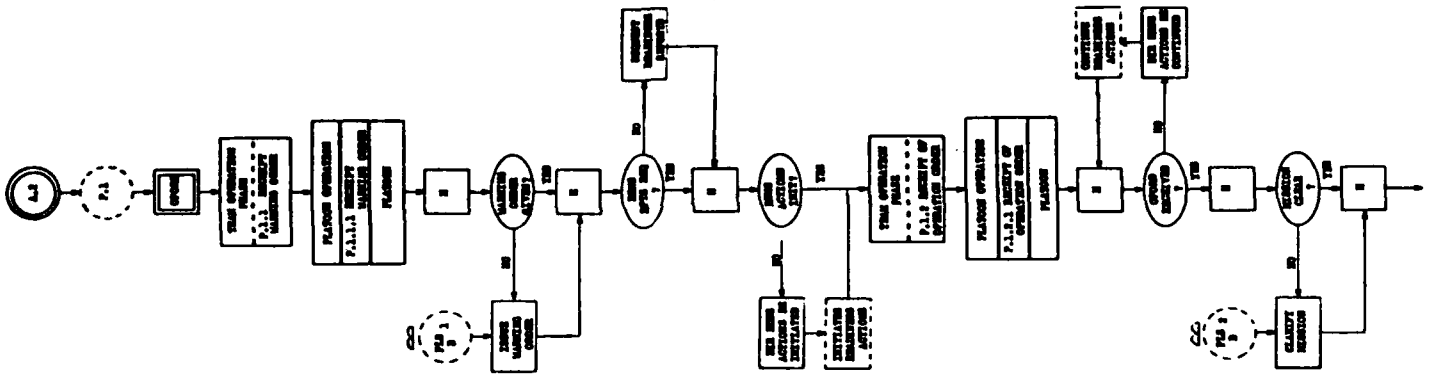


FIGURE H-15. TANK TEAM OPERATION: PLAN OFFENSIVE OPERATIONS; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)

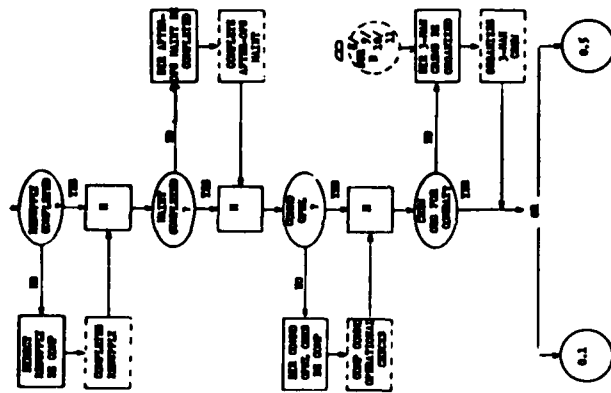


Figure H-15 Continued

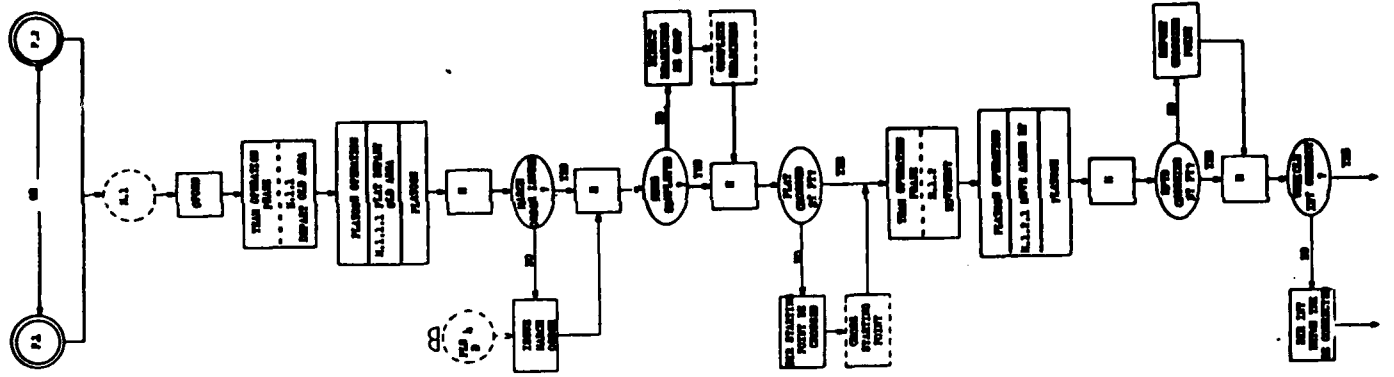


FIGURE B-17. TANK TEAM OPERATION: ADMINISTRATIVE ROAD MARCH; SIDROL1 - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)

Figure B-17 Continued on Page 124

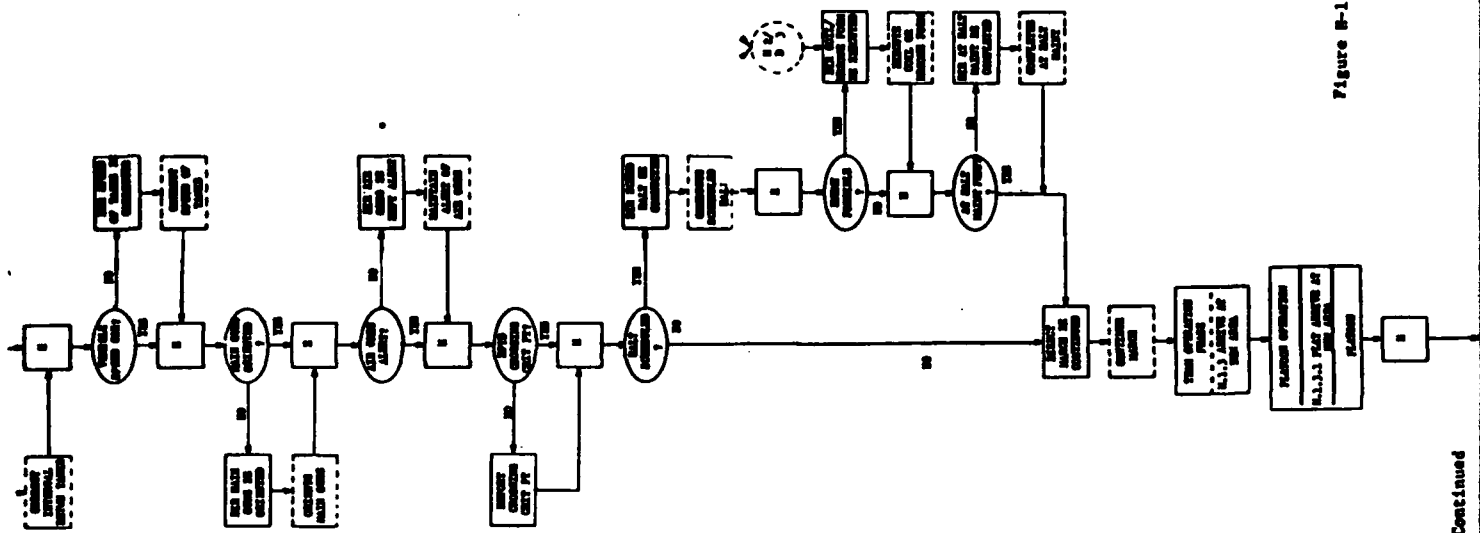


Figure B-17 Continued on Page 125

Figure B-17 Continued

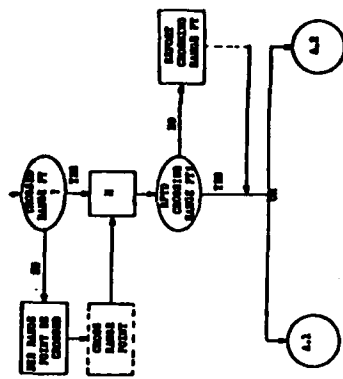


Figure R-17 Continued

• ACTIONS NORMALLY DONE ONLY DURING A TACTICAL ROAD MARCH.

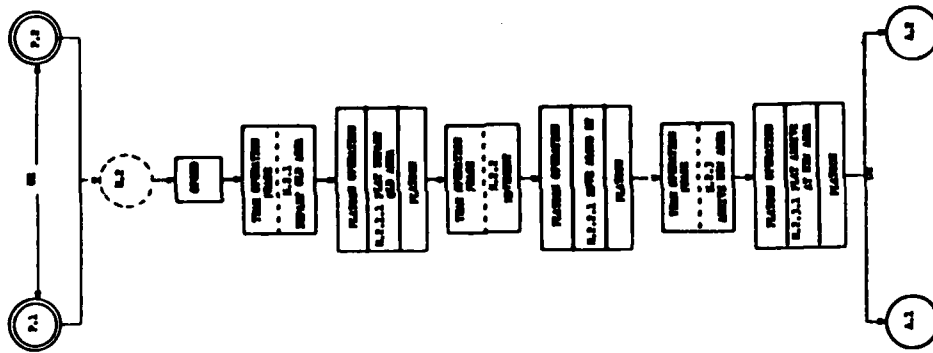


FIGURE E-18. TANK TEAM OPERATION: TACTICAL ROAD MARCH: STINGOLI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON) (SEE H.1 ADMINISTRATIVE ROAD MARCH)

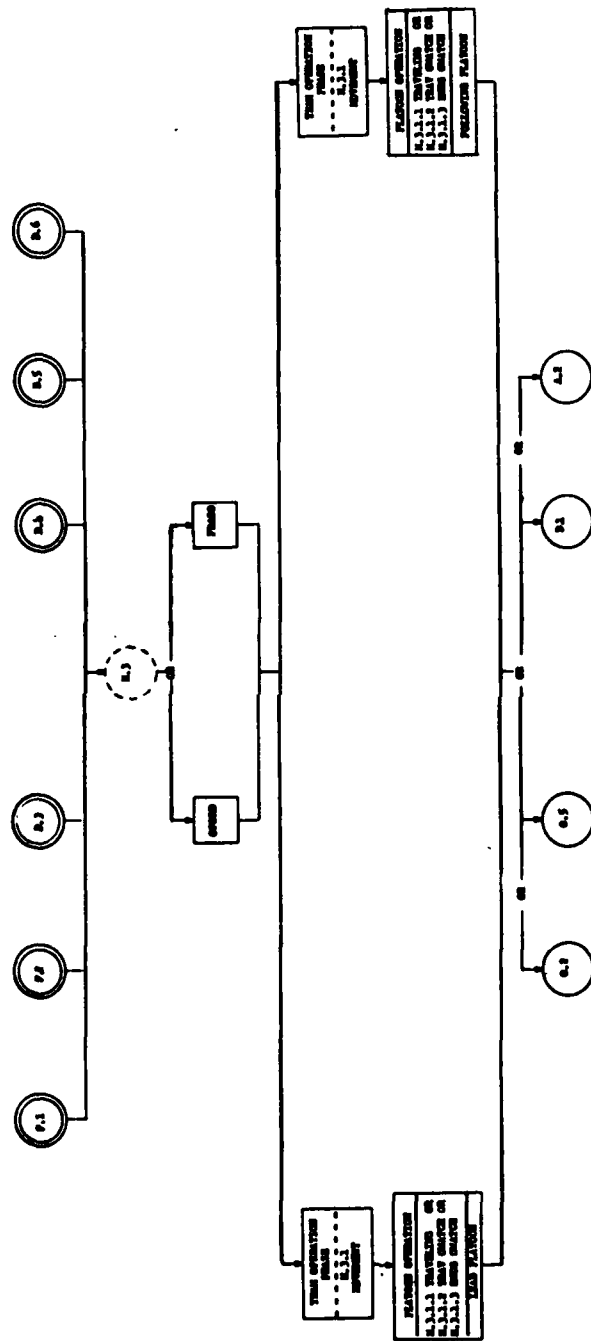


FIGURE B-19. TANK TEAM OPERATOR: TACTICAL MOVEMENT; STIMULI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON) (SEE 0.1 MOVEMENT TO CONTACT)

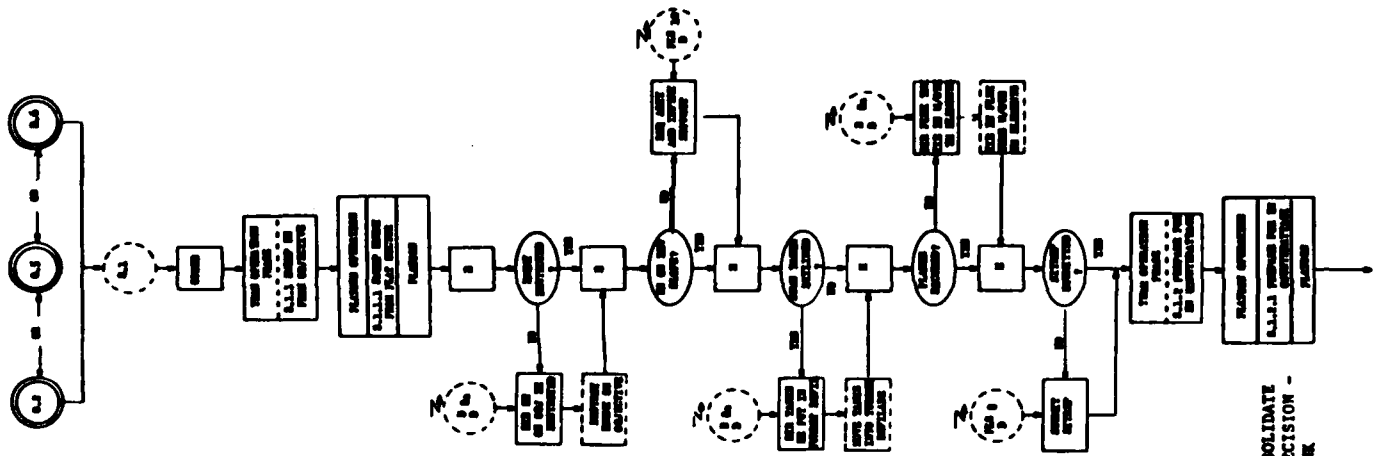


FIGURE H-20. TANK TEAM OPERATION: CONSOLIDATE ON OBJECTIVE; STIMOLI - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)

Figure H-20 Continued on Page 179

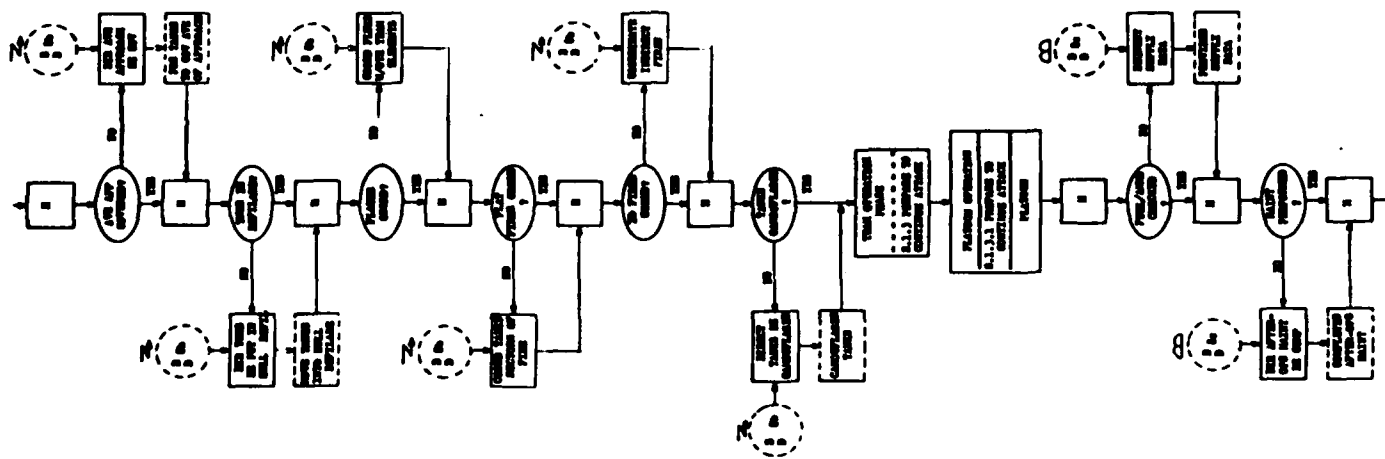


Figure B-20 Continued on Page 130

Figure B-20 Continued

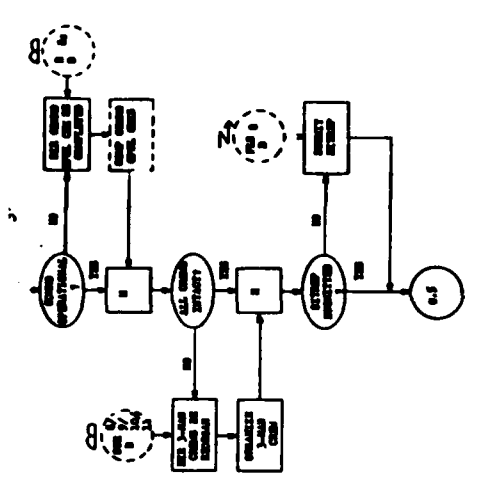


Figure H-20 Continued

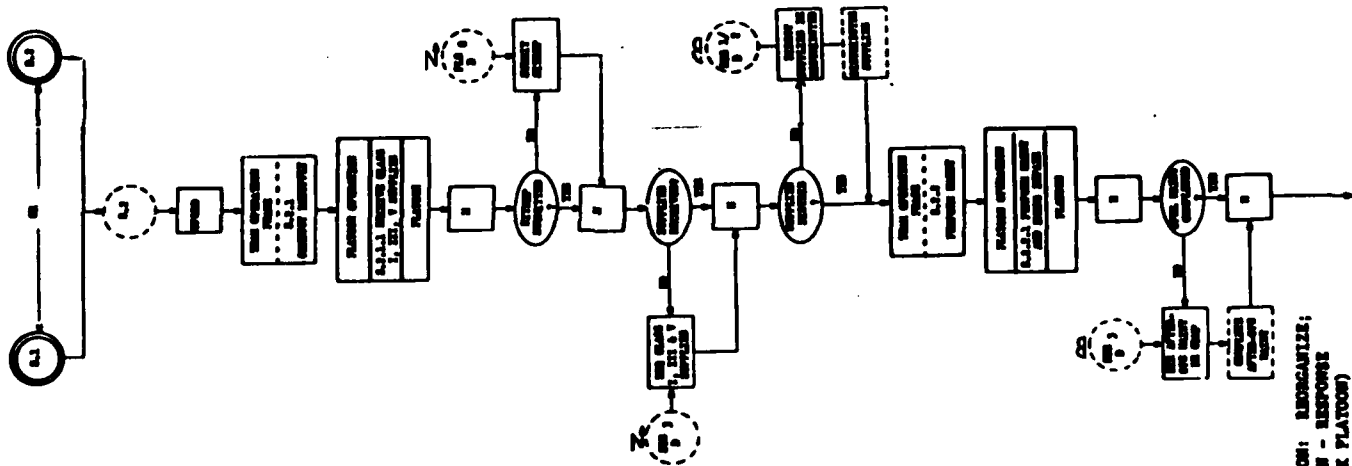


Figure B-21 Continued on Page 132

FIGURE B-21. TANK TEAM OPERATION: REORGANIZE; STANDARDIZE - DECISION - RESPONSE FLOW DIAGRAM (TANK PLATOON)

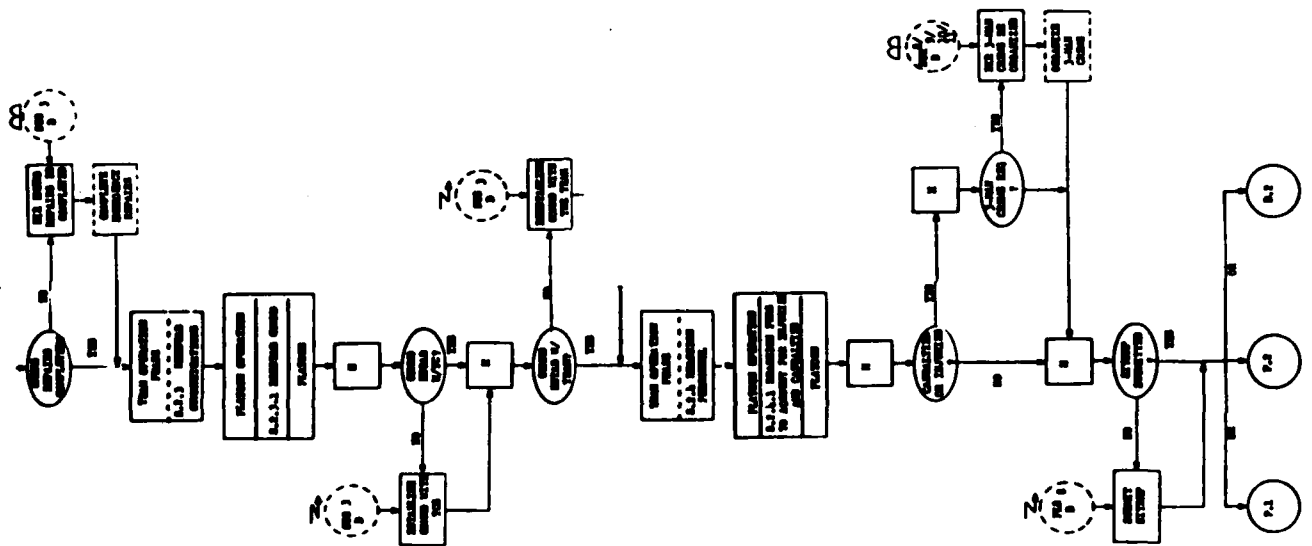


Figure H-21 Continued