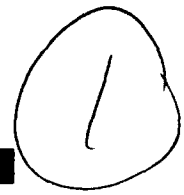

BDM

BDM INTERNATIONAL, INC.
PENINSULA CENTER II
825 DILIGENCE DRIVE
SUITE 200
NEWPORT NEWS, VIRGINIA 23606
(804) 596-6843

INTELLIGENCE AND ELECTRONIC WARFARE (IEW) STREAMLINING PROJECT

Volume III
Reference Documentation (Part 2)
September 1, 1992

IEW STREAMLINING PROJECT

Volume III

Reference Documentation (Part 2)

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David P. Nicholas (co-compiler), Robert E. Klebo (co-compiler)

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BDM International, Inc., 825 Diligence Drive, Suite 200, Newport News, VA 23606

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13. ABSTRACT (Maximum 200 words)

Purpose of study was to recommend improvements in logistics support for Army intelligence and electronic warfare (IEW) equipment. Report analyzes existing sustainment system and recommends a number of systemic improvements to integrate and streamline the sustainment of IEW materiel. The recommended objective concept includes centralized control of regional sustainment assets (including contracts providing sustainment) under Army Materiel Command; organizational changes to integrate soldier, civilian, and contract resources; improved distribution and control of spares; improved deployment capability; and provisions to enhance technology transfer between contractors, civilians, and soldiers.

The IEW Streamlining Study Sustainment Analysis Report consists of four volumes, some multipart. Volume IV, which is classified, may be obtained from the Defense Technical Information Center, Cameron Station, Bldg. 5, ATTN: Acquisition-OCP, Alexandria, VA 22304-6145. Study documents are as follows:

- Volume I, Sustainment Analysis Report, revised 30 Oct 92
- Volume II, Directives and Related Study Documents, revised 18 Nov 92
- Volume III, Reference Documentation (Part 1), 1 Sep 92
- Volume III, Reference Documentation (Part 2), 1 Sep 92
- Volume III, Reference Documentation (Part 3), 1 Sep 92
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Appendix H

CIMMC MFR, 23 Jul 92, Subj: IEW Streamlining Study -Draft Minutes of MACOM IPR, 23-24 Jun 92

SELIM-IEW 23 July 1992

MEMORANDUM FOR RECORD

SUBJECT: IEW Streamlining Study - Draft Minutes of MACOM IPR, 23-24 Jun 92

1. Subject minutes are hereby provided for review and comment.

2. The IPR attendee list and a copy of the agenda are provided as Enclosures 1 and 2, respectively.

3. Minutes herein reflect a) General Administrative Information, b) Detailed Discussions, and c) Current Taskings.

a. **General Administrative Information**

(1) The IPR was conducted in the FORSCOM Conference Room, Building 200, FORSCOM Headquarters, Atlanta, GA, from 0800, 23 June, to 1700, 24 June 1992.

(2) This IPR was conducted mainly in presentation/ briefing format to provide the study group principals and their representatives with an overview of related issues and ongoing IEW support initiatives. The group was also updated on the progress and direction of the study.

(3) Mr. Dutton provided additional copies of the 27-28 May IPR minutes and reminded study group members to provide comments NLT 6 Jul 92. If no comments are received, the minutes will be considered acceptable and will be finalized.

(4) General introductions were made of all attendees. Mr. Dutton introduced Mr. Robert Lovely representing the IEW Division, Directorate of Combat Developments, U.S. Army Intelligence Center and School, Ft. Huachuca and emphasized his position as the TRADOC point of contact for the study.

(5) The next MACOM IPR was tentatively scheduled for 28-29 July 92. CIMMC will provide announcement letter specifying location, time, etc..

b. **Detailed Discussion**

(1) **Objective Supply Capability (OSC)** - Mr. Polanski, PEO-STAMIS, presented an overview of the Standard Army Management Information Systems, Objective Supply Capability. OSC is an automated system currently used at garrison level to enhance logistics support by linking and tracking actions through existing automated supply systems. Controlled by a central OSC Gateway facility located in St. Louis, the process aims to reduce operational costs, stockage levels, order-ship time and provide

greater asset visibility. In addition to the OSC presentation charts (Encl 3), briefing highlights are as follows:

(a) OSC is a garrison system that provides a gateway for SAILS, DS4, SAMS, and ULLS through Defense Data Network (DDN). The present garrison LVST status reflects 208 ULLS loaded with 182 operational, 32 SAMS-1 loaded with 31 operational, eight DS4 loaded with all eight operational, and two SAILS loaded with both systems operational.

(b) The program began in July 91 with software testing, completed a tactical test at Fort Hood in Apr 92, will run a USAREUR LVST test in Aug-Sep 92, and will complete fielding in FY94. PM, OSC hopes to expedite fielding to III Corps with early fielding to Forts Carson, Polk, Riley, Sill, and Bliss through a period ending in July 92.

(c) OSC in USAREUR will accommodate ULLS, SAMS, DS4, and SAILS through modem to the European Telephone System (ETS) and will access the OSC gateway through a packet switching node via the DDN. This arrangement will entail some problematic changes as the ETS lines are not Class A lines. Projected software changes will fix this obstacle. The initial USAREUR slice units are 3d ID (ULLS, SAMS-1, DS4), 19th MMC (SAILS), 149th Maint Co.(DS4), and 596th Maint Co.(DS4).

(d) Korea is projected to have access to OSC in the summer of 1994. This projection may be expedited based on decisions arising out of a meeting to be held in July.

(e) When asked, Mr. Polanski stated the impact of stockfunding on OSC is being looked at. However, conclusions have not yet been made.

(f) In concluding, Mr. Polanski stated OSC will start site surveys for III Corps, will finish LVST at Fort Hood while beginning USAREUR sites, and III Corps site extensions will not be necessary prior to Milestone III approval.

(2) **Fort Bragg Trip Review** - Mr. Nusbaum, BDM International, briefed highlights of the 16-17 June unit visits conducted by Mr. Riddle and Mr. Taillie, CIMMC; Mr. Serrentino and Mr. Greenwalt, FORSCOM; and Mr. Nusbaum, BDM International. Interviewed units included the 313th, 319th, and 519th Military Intelligence (MI) Battalions (Bn), the 158th Maintenance Det. and the ManTech SRA. Findings were as follows:

(a) The units stated only 15-20 percent of the downtime of the IEW systems was due to IEW-peculiar (electronics) problems. The balance of downtime was due to prime mover failures or power generation problems.

(b) Fort Bragg units generally agreed that budgetary allocations are a primary challenge to effective maintenance and operations of the unit. The 313th MI Bn reportedly received a $335,000 budget for FY 92 against a $510,000 requirement. As of 16 June 92, the unit was $75,000 overspent. Mr. Serrentino agreed and added until a more effective method of bringing IEW maintenance into an accountable maintenance system that validates MI unit requirements, budgetary problems would persist. Under stock funding, units with poorly documented demand history will be facing decreasing budgets while having to bear the cost of high dollar LRUs.

(c) Some Ft. Bragg units reported insufficient quantities of TMDE to adequately maintain equipment in their combat deployment scenarios. Although complete duplication of TOE equipment allowances is not necessary, the units require multiple issue of commonly used items such as multimeters. Mr. Serrentino stated this may be true, but units can correct the problem by submitting recommended TOE/MTOE changes through DA Form 2028 channels. Mr. Richardson stated the MI community has undergone several scrubs and substantial fault lies with the military community for not identifying these problems if they exist. Mr. Nusbaum reiterated these units have unique missions and limitations, therefore, information obtained from them must be viewed accordingly.

(d) Some Ft. Bragg units felt very little repair support was done by the 158th GS Maintenance Detachment during DS/S. Most of the interaction between the two units involved the swapping of parts or line replaceable units (LRU). This was however, the intended function of the 158th for standard Army systems. Lengthy discussions concerning the mission, capabilities, and future of GS maintenance units ensued:

* Whether the GS Maint Det functioned as a "paper-forwarding" or repair facility was a point of concern. Mr. Serrentino stated units in DS/S preferred to avoid the "158th bottleneck" which merely served in a "box-swapper" capacity. Mr. Dutton stated there was a definite need to discipline the paper trail, and wondered why the 158th repaired less in DS/S than in a garrison environment. Mr. Carson then discussed management problems and constraints placed on the 158th during DS/S and added that their operational challenges were not all internal.

* Mr. Blackmon stated GS units have neither the equipment nor personnel to accomplish a true GS capability; and since many units knew ManTech elements were backing the GS dets, they felt it easier and faster to deal with them directly for support. Mr. Serrentino stated that GS maintenance is likely to become a three-level system comprised of organizational support, intermediate support, and a sustainment base. He emphasized the

effectiveness of any system will always be influenced by the personalities of the individuals involved.

(e) Authorized personnel for IEW maintenance - One unit's maintenance personnel strength (filled positions -vs- authorized) before and during DS/S was 75% with a benchtime availability rate of 75%. Its present strength is about 150%, with 90% availability. The other unit's pre-DS/S maintenance strength was 60%, with 90% benchtime availability. During DS/S, it rose slightly to approximately 66%, but availability fell to 80%. Currently this unit is at 58% strength, with 55% benchtime availability. The 158th GS Maint. Det's pre-DS/S was at 80% maintainer strength, with 30% availability, during DS/S it was at approximately 110%, with 80% availability, and is currently at 80%, with 20% availability. Discussion ensued on the GS det in general and factors affecting its production:

* Manpower utilization, specifically for MOS 33T, gained group concensus that distractors and poor management severely reduce benchtime availability of soldier technicians. Based on unit interviews thusfar, Mr. Nusbaum estimated green suit maintenance availability time to be 30-40 percent.

* Mr. Serrentino stated four units of the 18th Airborne Corps are basically supported by 3 civilian technicians (MANTECH SRA), while 7 military technicians cannot do the same job. Mr. Monroe stated GS maintenance also needs true integration of contractor and green suit capabilities for MI detachmments to survive. This includes integration of NDI and standard Army systems maintenance.

(f) Ft. Bragg units identified a large scale need for contractor integrated training, assistance, and monitoring of soldiers repairing contracted IEW equipment. This arrangement would lessen the dependence on contractor support in a hostile environment.

(g) The CECOM LAR and the LAO programs did not receive good comments. This assessment applied before, during, and after DS/S. Ft. Bragg either had negative comments about the LAR, or did not know who he was. The units felt it was a personality issue and not necessarily the LAR program. Mr. Riddle stated the problem has already been placed in applicable channels for solution.

(h) During DS/S the primary supply problem faced by Ft. Bragg units was too much supply in too short a period. This was compounded by not receiving initial required materiels or subsequent ordered items. They were burdened with large volumes of other materiel to transport, store, and safeguard.

(i) In contrast to other units interviewed, Ft. Bragg units did not support the concept of having DS, GS, and limited depot responsibilities and resources placed within their area of control. The units were concerned about transport capability based on their airborne mission.

(j) Ft. Bragg units felt there is a problem with MOS 33-series training. The 33-series soldier was too generically trained and too much emphasis is placed on "On-the-Job Training (OJT)." The 33 needs more training in basic TMDE and components of the PRD 10/11. This statement initiated discussions on 33-series MOS training which were deferred to the training portion of the IPR session.

(k) At the conclusion of Ft. Bragg discussions, Mr. Serrentino asked Mr. Carson for a maintenance flow update for GOLDWING, stating that one unit reported four different sources for system repair during DS/S. Mr. Carson agreed to provide this information.

(3) **NDI BOIP/QQPRI Status** (Encl 4) - Mr. Shelton provided a status update on the BOIP/QQPRI process of all NDI systems including the systems "sample" identified by the study group. Highlights include:

(a) Mr. Shelton stated TRADOC had informed AMC of ongoing DA DCSOPS effort to prioritize the total list of IEW systems, as to the order in which BOIP/QQPRI documentation will be completed. He added TRADOC agreed to keep working BOIP/QQPRI in TRADOC order, but will not process documentation in HQDA until DA DCSOPS prioritization is complete. Target date for DA prioritization was mid-June but due to departure of the Project Manager, LTC Thompson, the action will require more time.

(b) Mr. Shelton stated LTC Thompson was working to develop a draft message to TRADOC which prioritizes IEW systems and establishes taskings and suspense dates for completing the documentation. This message will be the basis for a teleconference between TRADOC and DA DCSOPS to decide final positions. The new Project Manager, MAJ Andrews, told Mr. Shelton that LTC Thompson had provided a draft prioritization message, but it does not list all IEW systems. The status of the message is still "working."

(c) Mr. Serrentino observed that once prioritized, any system falling below the number of systems for which money exists will be left unfunded. He questioned what effect this would have on the funding of NDI systems. He added that FORSCOM J2 NDI support has previously been acquired through Unfinanced Requirement (UFR) channels and if UFRs discontinue, there will be no support for NDI.

(d) Discussion of continued updates of BOIP/QQPRI status and its usefulness to the study concluded with the group deciding no further detailed tracking of system specific, NDI BOIP/QQPRI development is required.

(4) **Army Special Operations Force (ARSOF) Operations** - MSG Walensky briefed the Study Group on ARSOF organization, command relationships in theaters, and ARSOF operations. In addition to presentation charts (Encl 5), he provided the following information:

(a) There are five Active Component and four Reserve Component groups. The Special Forces (SF) group is comprised of a headquarters company, a support company, and three SF bns. These battalions are comprised of a headquarters detachment (C Det), a battalion support company, and three SF companies. The MI elements are located within the battalion support company.

(b) The battalion support company is comprised of company headquarters, a service det, a signal det, and an MI det. The MI det is comprised of: Headquarters, All Source Production Section; Collection, Management and Dissemination Section, Technical Control and Analysis Element (TCAE), Counter Intelligence Team, and a Special Security Officer. Most of the SF MI systems are located in the Special Operations Teams (SOT) of the TCAE. These teams might possess PRD-10s, PRD-11s, the SOF SIGINT Manpack System (SSMS), etc.

(c) Repair capability in the Electronic Maintenance Section of the SF Bn Signal Detachment consists of one 33T, Specialist E-4. Mr. Dutton asked if this individual did all IEW-related work in the unit. MSG Walensky stated the 33T was sometimes aided by signal MOS personnel (i.e., 29S, 29U) and some informal crossover of effort, but the 33T did the majority of IEW system repair. Mr. Riddle asked to whom this 33T goes for technical advice or assistance. MSG Walensky stated there is no formal source of assistance. However, in a garrison environment, he is able to get assistance from the 158th GS Det. or from Army schools personnel, ie.; Ft. Devens.

(d) MSG Walensky ended his formal discussion with a dialogue of typical SF deployment and the command and support relationships within three different hostility environments.

(e) Mr. Serrentino discussed the reimbursement situation concerning SOF assets on FORSCOM installations. Based on a FORSCOM memorandum, SOCOM receives all Base Operations support for free. Army standard system and NDI support is paid for by SOCOM. Currently DA has a memorandum of understanding (MOU) between SOCOM and FORSCOM regarding reimbursibles. At this point services are not reimbursible, however SOCOM does use its

own fund cites and DODAAC on requisitions. Mr. Dutton asked who paid for stockfunding of parts. Mr. Serrentino replied that SOCOM does.

(5) **Integrated Sustainment Maintenance** (ISM) - Mr. Bowen, SLA, defined sustainment maintenance as any maintenance done at echelons above direct support. This includes all maintenance performed by Active and Reserve Component GSUs, installations, depots, and contractors. This support may be accomplished in-theater, at government facilities, or at a contractor's plant. He went on to explain the shortfalls of current support structures and the merits of the ISM concept:

(a) The goal of the ISM Concept is to meet maintenance requirements of today's Army and those of the 21st century. The current Army maintenance support structure has multiple levels, varies by commodity (sometimes within commodities), and is difficult to manage in many contingencies. DS/S revealed the present maintenance sustainment system was less than fully effective. There were many challenges faced, including: delayed support response, non-synchronized deployment, periodic overlap of contractor support, improperly utilized GS units, uncoordinated maintenance training, and excessive reliance on host nation support for transportation and evacuation. As resources shrink and world conditions change, this maintenance support structure will not adequately support or sustain rapid force deployment.

(b) Under ISM concept, the Integrated Sustainment Maintenance Manager (ISMM) will be the single manager for sustainment maintenance resources to include rear, theater, and forward support. The ISMM will be responsible for centralized maintenance workloading, with decentralized execution. ISMM functions will also entail contingency support plans, peacetime/wartime maintenance services, and ILS planning.

(c) ISM will tailor on-site maintenance and create regional maintenance centers and specialized maintenance support. It will reduce the levels of maintenance, emphasize teaming between DOLs, depots, contractors, and GS elements, ultimately resulting in shorter repair cycles. Mr. Dutton asked if ISM would breakup total weapon system maintenance. Mr. Bowen stated he did not believe so, but it's too early to determine.

(d) Program implementation will be phased to establish initial operational capabilities with single and multiple weapon systems, then expand to selected systems and equipment as the program matures. Standardizing policy and procedures, and establishing a basic command and control structure is critical to successful implementation. Expansion to other sites begins 3rd QTR FY 92 and will attempt to extend to multiple weapons systems in 4th QTR FY 92.

(e) In summation, Mr. Bowen stated ISM will sustain the battlefield on a preplanned basis. It will ensure matched training requirements, synchronize maintenance with operations, and apply intelligent use of facilities, personnel, and equipment. Mr. Riddle asked about the time phasing and was told that SLA hopes to have full implementation in the 1995-1997 time period. Mr. Serrentino asked what will be tested at Ft. Hood. Mr. Bowen replied that all commodities (excluding medical & possibly munitions), AMC, FORSCOM, SLA, DOL, etc., will be included in the test.

(6) **Single Stock Funding** - Mr. Bowen identified the point of contact for Single Stock Funding (SSF) as Ms. Donna Shands, DSN 284-4525. Mr. Bowen presented an overview of the Stock Fund and supply system as it exists today within retail, intermediate, and wholesale levels. In addition to briefing charts, highlights include:

(a) Objectives of SSF are to: streamline the financial system, prevent excess stock through reduction and redistribution, help achieve DMRD reductions, and eliminate automated systems and processes with duplicate functions. Although these objectives will require changes in stockage policy and requirements computation, the SSF concept will foster more efficient use of Army assets.

(b) There will be an SSF demonstration at Ft. Hood beginning in Oct 92. It will use OSC, "live" data, and will redistribute excess items and high priority fill. Mr. Riddle asked what classes of supply will be addressed. Mr. Bowen replied all classes (except medical), will be included.

(7) **Forward Repair Activity (FRA)** - Mr. Bowen defined the FRA as a responsive, flexible support activity with limited depot and intermediate level maintenance (back-up) capability. It will also maintain on-hand stock of critical/expensive components. During peacetime or war, the FRA would maximize weapons system availability, reduce turn-around time and accomodate operational requirements. This activity would become a "tool" controlled by the ISM manager. Mr. Bowen also stated there is currently little activity on the FRA concept. The maintenance community is awaiting results of Ft. Hood ISM testing before moving ahead. Details include:

(a) Mr. Bowen discussed current "SRAs" and the FRA concept. There are presently three SRAs being supported by maintenance stovepipes: in MICOM for support of missile electronics, CECOM for electronic and communications, and AVSCOM for aviation electronics and optical maintenance. Each SRA has a Contracting Officer's Representative (COR), maintains a facility, performs quality assurance, and provides general maintenance

support. These different SRAs generally require duplicate overhead structures.

(b) In discussing the FRA scope, Mr. Bowen stated FRA management will be weapons system oriented which would likely be accomplished by reorganization, standardization, and regional support. Its peacetime support focus would be towards COR liaison, workload execution, and stockage. Finally, in a deployed support mode, it would focus on damage assessment, workload execution, and stockage.

(c) Maintenance flow would be from the user through intermediate maintenance to the FRA. If the item required evacuation and was not high priority, it would go to a Prime Repair Site (PRS) (depot or contractor plant). Issuable items would then be resupplied to the FRA from the PRS. Prioritized requirements would be sent from the FRAs directly to the materiel readiness commands (MRC), and then on to the PRS.

(8) **CASCOM Support Initiatives (Encl 7)** - Briefers were Maj Reith and Mr. Wilson. MAJ Reith began with an update on FM 100-5 and the direction of future CSS concepts. He stated the need to rewrite the 1986 version of FM 100-5 to take the Army into the 21st century. This requirement is attributed to changes in political situations, resourcing, and threat situations. The challenge is to modify doctrine to accomodate these changes while maintaining maximum readiness of the force. Briefing highlights:

(a) MAJ Reith discussed going from a forward deployed, to a force projection Army. The Army must move from threat-oriented to capability-based, requiring new thinking while keeping its lessons learned close at hand. In this respect, some CSS considerations are: being smart about logistics force structure reductions; building in-theater CSS capabilities; and the realization of "theater logistics" which in turn mean Army, Joint, Combined, and Coalition responsibilities.

(b) A capability driven Army requires a pool of forces to pull from to meet various contingency missions. The CSS must develop a capability to identify "below the line" (echelon above division) elements for force package configuration and to project scenarios of operation. MAJ Reith stated the first doctrinal step towards ensuring a capability driven force is incorporating the required changes into FM 100-5.

(c) Mr. Wilson began his briefing and identified several documents and drivers affecting the update of FM 100-5. 00-5. Among these are national and military security strategies, TRADOC Pamphlet 525-5 (Airland Operations), the 1986 version of FM 100-5, joint doctrine, and visions of combined arms support. He stated ALO is not the main driver and CASCOM's vision of combined arms support will be principle input to the logistic

chapter of FM 100-5. Products will be staffed when ready and there are no deadlines. Currently, there has been little development of CSS modules.

(d) The functional realignment between Signal Corps and Ordnance Corps was discussed. The following positions were stated:

* Signal will remain proponent and retain combat development responsibility for MOSs designated as DS/GS maintainers for telecommunications equipment. ILS documents (minus those for Signal-unique equipment), will be sent to Ordnance Missile and Munitions School (OMMCS) for concurrence.

* OMMCS will remain the Primary Logistics Oriented School (PLOS) proponent for all communication systems/equipment not unique to Signal. It will become hardware/software proponent for special test equipment and sets, kits, and outfits required to perform electronics maintenance functions.

* The proponency realignment will revise CMF 29 by consolidating CMF 27 (Land Combat and Air Defense System Direct and General Support) with CMF 29 (Signal Maintenance, non-signal-unique) to create CMF 35(Electronics Maintenance). CMF 29 signal-unique operator/maintainer MOSs will be changed to consolidate 29V and 29Y into CMF 31 and 39G into CMF 74.

(e) Electronic Maintenance Company concept - See Ref: TRADOC PAM 525-XXX (Encl 8), and Electronic Maintenance Transition Plan (Encl 9). This concept consolidates the heavy division DISCOM's light, heavy, and missile maintenance companies into 2 entities: the electronic maintenance company and the main maintenance company. The electronic maintenance company will support electronics, the main maintenance company will support all other ground maintenance. The electronic maintenance company will consist of support elements and a C-E platoon with a headquarters, electronic repair section, radio/COMSEC section, and a fuel/electronic section. This effort will save 37 personnel spaces and undetermined resources.

* IEW-unique equipment will not fall within this consolidation. Surveillance equipment maintenance will also remain within the MI unit. Mr. Dutton asked if IEW maintenance is going to be relooked, and Mr. Demchek said it was possible.

* Mr. Serrentino questioned the use of automatic test equipment which initiated discussion concerning the value of IFTE and its repair. Mr. Blackmon stated there is no repair capability for IFTE. Mr. Serrentino stated that IFTE is archaic and prompted more discussion concerning the merits of EQUATE and VXI. There was a general consensus that present TMDE is inadequate, but there is no easy solution for the problem.

(9) **Reserve Component Organization, Equipment and Support Requirements (Encl 10)** - The Study Group was addressed by Colonel Mehle, ODCSINT, USARC, who spoke to issues peculiar to USAR IEW problems. The following highlights were expressed by COL Mehle:

(a) Most military assets of the Army are located in the USAR, not in the Active Army or National Guard. COL Mehle beleives the USAR will become a MACOM, which will influence its ability to determine support structure capabilities. USAR elements have historically been on the "short end of the stick" in equipment, money, manpower allocations, and DAMPL.

(b) USAR units are "not in a very healthy condition." IEW assets are hard to maintain in a full time, Active Army environment and virtually impossible to maintain in a stripped down, resource restricted, part time environment such as within the USAR. USAR elements simply do not have the resources to adequately maintain the highly technical and expensive IEW systems to any meaningful standard.

(c) Equipment in the future for the USAR does not appear to be a problem due to the draw down of military assets in USAREUR; however, it is imperative that adequate and correct resources come with this equipment in order to be effective. Applicable maintenance training must be provided for USAR personnel to maintain the "new" systems, and the correct amount and type of TMDE and maintenance equipment must accompany or precede the issuance of the equipment. Correct and "real world" manpower criteria must be followed and provided to USAR units.

(d) If necessary the USARC would like to see a smaller Reserve Component force with a higher ALO.

(e) The general definition and concept of the Expansible Reserve Component CEWI Battalion was discussed. It was created (approved Feb 92), in response to Reserve Component CEWI Battalion readiness deficiencies identified by the MI RELOOK Task Force. This effort indicated that linguist-associated problems were the single most significant factor in Reserve Component CEWI Battalion unreadiness.

(f) The Expansible Reserve Component CEWI Battalion's base organization will retain the non-linguist-oriented functions, personnel, and equipment.

(g) Mr. Riddle asked what IEW equipment was being sent to the Reserve Components. This question introduced a lengthy discussion of the equipment being returned from USAREUR and what would be useful to send to the Reserve Components. In addition, there was extensive discussion of IEW maintainer training.

(10) **CIMMC Reserve Support Planning** (Encl. 11) - Mr. Raymond discussed the Expansible CEWI Battalion, the Reserve Component Regional Training Sites-Intelligence, and the SRA. Mr. Raymond described some of the rationale of the SRA concept for Reserve Components such as: building on existing SRA systems (Ft. Bragg, Ft. Hood, Ft. Lewis); using contractor support to augment military; seeding Reserve Components with systems experts from existing SRAs and the realization of substantial cost savings.

(a) By FY93/94, there would be AN/TLQ-17As, AN/TSQ-138s, and AN/TRQ-32s at each RTS-I. In addition, there will be tactical command and control functions, single source processor-SIGINT, AN/TRQ-32 product improvement program, and Common Sensor programs.

(b) Mr. Raymond briefly described some of the support provided by the SRA such as maintenance support capabilities, supply support, packaging and transportation, and system calibration support. At this juncture Mr. Raymond described four CIMMC support options for RTS-I SRAs.

(c) It was reiterated that FORSCOM J4 and not J2 now handles IEW logistics policy. Mr. Serrentino stated this was the first time he had seen the plan and reminded the group it was for information only, not decision.

(11) **Follow-up with Training Issues** (Encl. 12) - Mr. Lovely described the Systems Approach to Training (SAT) process and model. The SAT application applies the processes of evaluation, analysis, design, development, and implementation to determine the basic requirements of training.

(a) Mr. Shelton asked if this process was not a part of the New Equipment Training (NET) plan. Mr. Lovely replied that it was not; that would come later. Mr. Lovely went on to describe the phases of SAT (analysis, design, development, implementation, and evaluation). SAT is initiated from the System Training Plan (STRAP), which is also used for establishing milestones and is considered the master training plan required for all new or improved systems. The STRAP for any new system is developed by the New Systems Training Office (NSTO) of the proponent school. STRAP addresses who will be trained, and when, where and how training will be conducted. The STRAP is then staffed within TRADOC, AMC, and the DA staff. Once staffed, it is forwarded to HQ TRADOC for approval.

(b) Mr. Dutton expressed concern with the ability of a "reactive" training methodology (SAT) to keep pace with evolving technology. Considering the condensed life cycles inherent of new NDI systems, Mr. Dutton questioned SAT capabilities to produce trained technicians in time to meet

actual maintenance requirements. Mr. Lovely stated the SAT process was structured to be reactive rather than proactive to training requirements. Mr. Serrentino asked what turned on the school training or POI. Mr. Lovely stated the proponent school only has to be told to do it. Mr. Lovely stated the SAT process could take up to three years depending on the situation. In regard to new equipment training development, the training is turned on by the approval of the STRAP.

(c) Mr. Riddle asked if the school trained on NDI equipment. Mr. Lovely said NDI is taught but on a case-by-case basis and based on the requirements of the Army.

(d) Mr. Lovely was asked to brief the background and status of the 33CMF consolidation. The consolidation issue is based a Decision Action Paper for the CSM/G2 SGM Conference, 20 Feb 92, suggesting the CMF restructure would help IEW maintenance. A final position is still being considered by TRADOC CG.

(e) Mr. St. James continued the briefing with some of the ongoing initiatives within the schoolhouse towards the 33 CMF. He spoke to the interface of SAT and STRAP in the development of 33 CMF training and of the Graduate Follow Up Program. Mr. Dutton asked how the schoolhouse develops new and updated training requirements. Mr. St. James replied the schoolhouse does not generate training requirements or changes to the task list. The system reacts to external requirements directed to them.

(f) Mr. Riddle asked how long it takes to respond to a SAT/STRAP training requirement. Mr. St. James stated that it could take three months or three years based on researching.

(g) In response to questions concerning the material being instructed to 33 CMF personnel at Ft. Devens, Mr. St. James admitted current instruction may be short of requirements in some cases. However, the user, through the Graduate Follow-Up Program Survey and DA Form 2028, must tell what is required. Using SAT and STRAP, the school will then evaluate and modify the POI as required. He added Ft. Devens has a hard time recognizing actual critical training requirements for tactical systems.

(h) Extensive discussion followed concerning the Graduate Follow-Up Program and its perceived role in changing training tasks and updating training requirements for the 33 CMF. Mr. St. James stated that the survey did not drive changes to the task list. The school reacts to external direction. Mr. St. James stated the school would like to begin training the actual systems prior to the systems being fielded. This is somewhat the case with the SUN Computer Workstation program initiated by Ft. Devens. The school has recognized technology advances and has

taken a proactive risk to train for an anticipated proliferation of SUN type systems in the Army. The program has been put in place without external tasking and has put the school ahead of conventionally identified training requirements.

(11) **IEW Tactical Proficiency Trainer** - Mr. Acuesta described some of the lessons learned from southwest Asia (SWA). Many operators had lost their training proficiency and units needed a non-encumbering means of providing realistic training, both in a garrison and wartime environment. This trainer, the Tactical Proficiency Trainer (TPT), must allow the individual to self-train and must not affect the capabilities of the system in any manner.

(a) The TPT is presently in the conceptual stage, and a technical control cell is being considered for inclusion. Each unit will have a different target array, and the trainer will be able to create a realistic traffic flow which will virtually mirror actual environments. The sets will not weigh more than 75 pounds and will be no bigger than 36 square feet in size. The BOIP supports 36 sets, which will be supplied to divisions, corps, brigades, separate brigades, and to Reserve Component units.

(b) Mr. Acuesta stated there are presently no sets in the BOIP for SOCOM, but he will look into the matter.

(c) Maintenance support for TPT has not yet been determined. Current concepts are dependent on its physical interface with the host system, either "strap-on" or embedded hardware/software. STRICOM would maintain with CLS for strap-on configuration, the PM would maintain embedded configuration.

(12) **IPR Wrap-up** - Mr. Dutton ended the formal portion of the IPR by reiterating the Study Group's charter and requirements. Closing IPR highlights:

(a) There are three major stovepipes which the Study Group must continue to review and analyze: the Project Manager, MACOM-unique, and AMC. In the future, any stovepipe actions should be approved by DA.

(b) At the next IPR CIMMC will lay out some strawman proposals for the October VCSA briefing which the Study Group would need to work with and massage.

(c) Discussion of the "XRA" included:

* This Study Group must look at time phased transitioning of current IEW logistics structures.

* There will always be a need for some contractor support. There is no way the Study Group can recommend a total organic organization and still retain credibility.

* Organizationally, the military maintainers will come from the GS platoons with DAC and omnibus contractor staff. In addition, the XRA could expand to include necessary OEM contractor support. Software is also a consideration to be reviewed

* The XRA must be capable of supporting deployable operations and must be able to provide immediate forward support.

* The omnibus contract is essential to the XRA concept because it provides competition, breaks the dependency on OEM, and provides continuous skills enhancement for military maintainers.

(13) **Current Taskings**

Number	Action Item	POC	Suspense
I2100-008	Set up interview w/CWO Perez	INSCOM	**June IPR**
I2119-002	Interview OEM contractor	IMMC	**TBD**
I2149-005	Revise flowcharts	MACOMS	**ASAP**
I2149-006	Provide feedback on NDI systems	FORSCOM	**19 June**
I2149-010	Develop audit trail for unserv/reparable doc.	IMMC	**12 June**
I2149-011	Provide TROJAN SPIRIT info and revise flowcharts	INSCOM	**8 June**
I2149-012	Provide remaining data requirements	USASOC	**12 June**
I2149-016	Identify General Officers to be briefed	MACOMs	**25 June**
I2149-019	Develop strawman recom-mendations	IMMC	Pending
I2176-002	Provide Ft. Bragg trip report	IMMC	10 Jul
I2176-003	Laydown of BOIP/QQPRI cycle	TRADOC	Jul IPR

I2176-004	Approve/release June IPR minutes	IMMC	20 Jul

Highlighted suspenses reflect overdue status or immediate requirments.

IEW STREAMLINING STUDY GROUP IN-PROCESS REVIEW

List of Attendees

23-24 June 1992

Attendee	Office	Telephone Number
Mr. Donald J. Demchak	HQ DA, DALO-SMC	DSN 225-3280
Mr. Ralph Riddle	CIMMC, SELIM-IEW	DSN 229-5047
Mr. Dennis Dutton	CIMMC, SELIM-IEW	DSN 229-5794
MSG Richard Lawrence	CIMMC, SELIM-IEW	DSN 229-5794
Mr. Glenn Taillie	CIMMC, SELIM-IEW	DSN 229-5794
Mr. Rex Monroe	CIMMC, SELIM-T	DSN 229-5082
Mr. Dick Serrentino	FORSCOM J4-SM	DSN 367-7284
Mr. David Skinner	FORSCOM J4-SME	DSN 367-7263
Mr. Dwight DeVoss	FORSCOM J2	DSN 367-6429
Mr. Kit Carson	FORSCOM J2	DSN 797-3173
COL Mehle	ODCSINT, USARC	DSN 367-6510
LTC Hegland	ODCSINT, USARC	DSN 367-6510
Mr. Tony Acuesta	STRICOM	DSN 960-8735
Mr. Roy Bazemore	INSCOM	DSN 229-2840
Mr. Bill Shelton	HQ,AMC, AMDLG-SI	DSN 284-9311
Mr. Michael Travisano	CECOM, SMD	DSN 992-5108
MSG Douglas McQuad	HQ, AWS/PML	DSN 576-4643
Mr. Samuel Blanco	USAF, SMALC, LHFBB	DSN 633-0590

Enclosure 1 to IEW Streamlining Study Group IPR Minutes, 23-24 June 92

Mr. Robert Lovely	HQ, TRADOC, IEW DIV DCD, USAIC	DSN 821-5579
Major John Reith	CASCOM, Concepts and Doctrine	DSN 687-2063
Mr. Robert St. James	MTD, USAISD, ATSI-EAC-T	DSN 256-2508
Mr. Don Wilson	OMMCS, ATSK-CCI	DSN 746-8816
Mr. Stan Polansky	SFAE-PS-P	DSN 687-1177
Mr. Bill Richardson	USASOC DCSLOG	DSN 239-6442
MSG John Walensky	USASOC DCSINT	DSN 239-5357
Mr. Charles Nusbaum	BDM, International	804-596-6843

IEW SUSTAINMENT STREAMLINING STUDY
MACOM IPR
HQ, USA FORSCOM
FORT MCPHERSON, GA
23-24 JUN 92

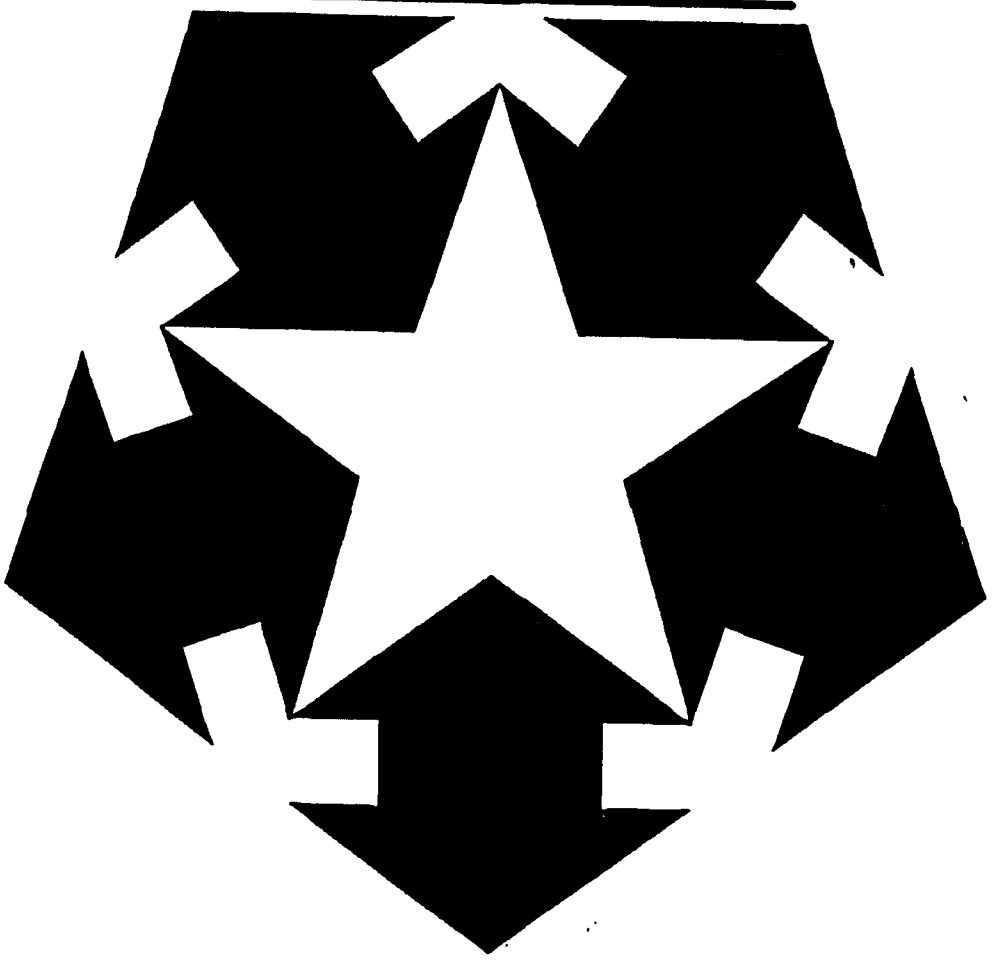
DAY 1	23 JUN 92	
0800-0810	WELCOME	CIMMC
0810-0900	OBJECTIVE SUPPLY CAPABILITY	PM-STAMIS
0900-0930	ADMINISTRATIVE INFORMATION REVIEW/INTRODUCTIONS	CIMMC
0930-0945	---BREAK---	
0945-1000	FORT BRAGG TRIP REVIEW	CIMMC/FORSCOM
1000-1045	NDI BOIP/QQPRI STATUS	AMC
1045-1130	SPECIAL OPERATIONS DEPLOYED SUPPORT	USASOC
1130-1300	---LUNCH---	
1300-1430	INTEGRATED SUSTAINMENT MAINTENANCE; FORWARD REPAIR ACTIVITY; SINGLE STOCK FUND	SLA
1430-1445	---BREAK---	
1445-1630	CASCOM SUPPORT INITIATIVES/ CONCEPTS; HEAVY DIVISION BASED MAINTENANCE CONCEPT	CASCOM

Enclosure 2 to IEW Streamlining Study Group
IPR Minutes, 23-24 June 92

DAY 2	24 JUN 92	
0800-0930	RESERVE COMPONENT ORGANIZATION, EQUIPMENT AND SUPPORT REQUIREMENTS	J2 RESERVE
0930-1000	CIMMC RESERVE SUPPORT PLANNING	CIMMC
1000-1050	FOLLOW-UP WITH TRAINING ISSUES	FT DEVENS
1050-1315	---EXTENDED LUNCH--- (MUST CLEAR CONFERENCE ROOM)	
1315-1400	IEW TACTICAL PROFICIENCY TRAINER	STRICOM
1400-1430	FORCE STRUCTURE STATUS/ISSUES	CIMMC/FORSCOM
1430-1445	---BREAK---	
1445-1630	OPEN DISCUSSION/IPR WRAP-UP	GROUP

Enclosure 3 to IEW Streamlining Study Group
IPR Minutes, 23-24 June 92

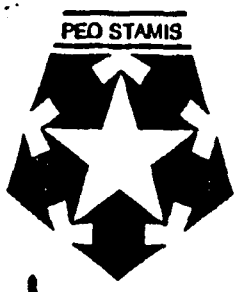
PEO STAMIS



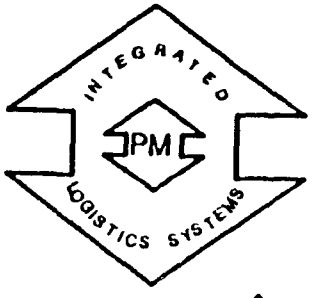
OBJECTIVE SUPPLY CAPABILITY (OSC)

PM OSC, STAN POLONSKY

23 JUNE 1992



PURPOSE



Provide an update on the Objective

Supply Capability (OSC).

PEO STAMIS

OBJECTIVE SUPPLY CAPABILITY

INTEGRATED PM LOGISTICS SYSTEMS

GOALS

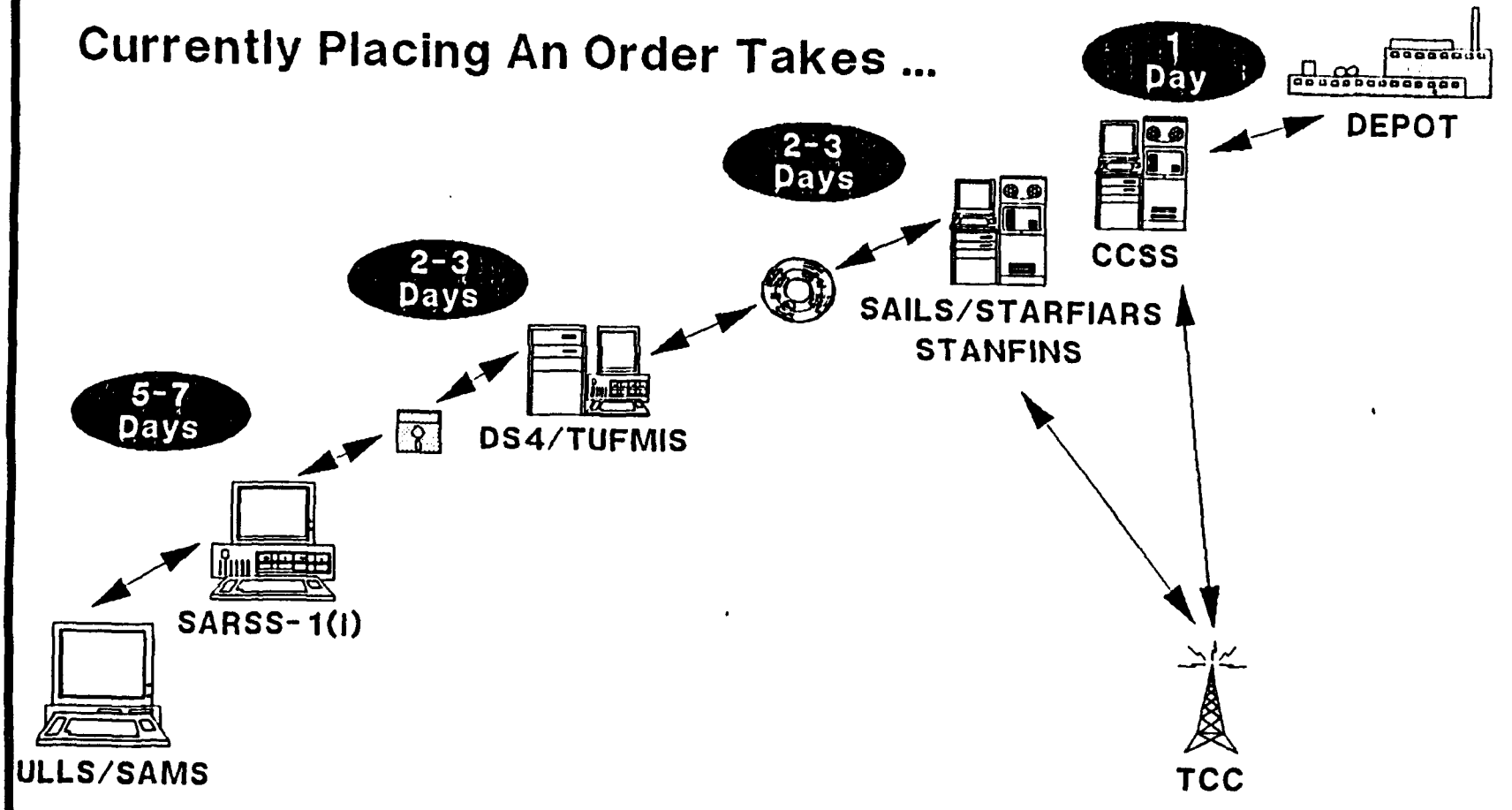
- Reduce order segment of order-ship time (OST) resulting in:
  - Reduced pipeline cost
  - Reduced stockage levels
  - Reduced stockage handling costs
- Increase asset visibility
- Provide soldier with quick status of requests
- Support DRMD 927 logistics system improvement

PEO STAMIS

CURRENT SUPPLY SYSTEM

INTEGRATED IPDM LOGISTICS SYSTEMS

Currently Placing An Order Takes ...



... Up To Fourteen Days

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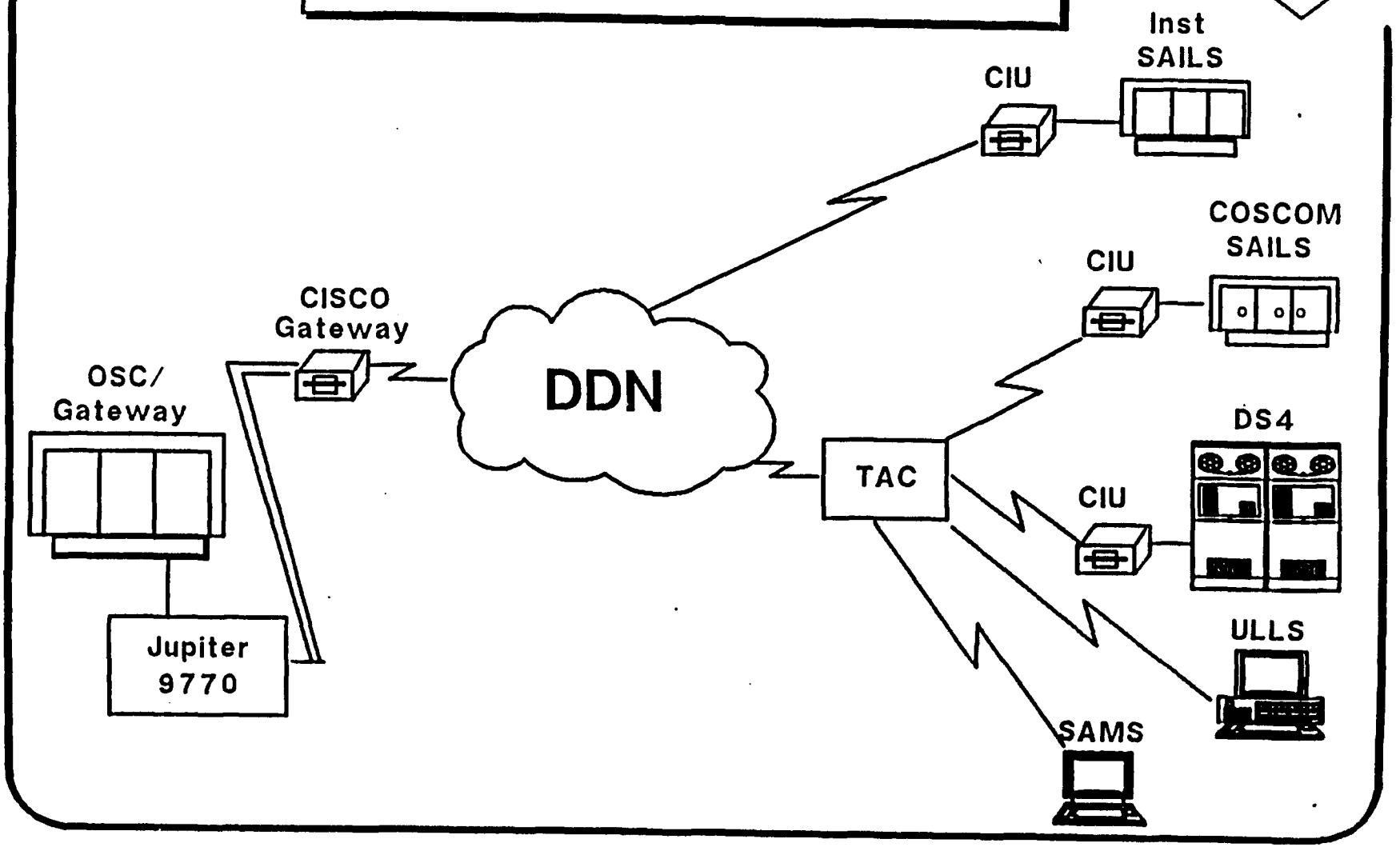
OSC GARRISON

COMMUNICATIONS HARDWARE ARCHITECTURE

INTEGRATED LOGISTICS SYSTEMS PM



6/12/92

PEO STAMIS

OSC PROGRAM SCHEDULE

INTEGRATED LOGISTICS SYSTEMS PM

	BEGIN	Target Date For Completion
OSC Milestone 0/I		Feb 91 (Completed)
Software Development Test	22 Jul 91	22 Nov 91 (Completed)
Software Qualification Test	2 Dec 91	20 Jan 92 (Completed)
Tactical Test at Fort Hood	8 Apr 92	14 Apr 92 (Completed)
OSC RUMP MAISRC		21 Apr 92 (Completed)
Test at Fort Hood (Garrison)	21 Jan 92	Jul 92
OSC Milestone II/III MAISRC	--	Aug 92
USAREUR LVST	Aug 92	Sep 92
Complete Fielding		FY 94

PEO STAMIS

GARRISON LVST STATUS

INTEGRATED PM LOGISTICS SYSTEMS

STAMIS	LOADED	OPERATIONAL
ULLS	208	182
SAMS-1	32	31
DS4	8	8
SAILS	2	2

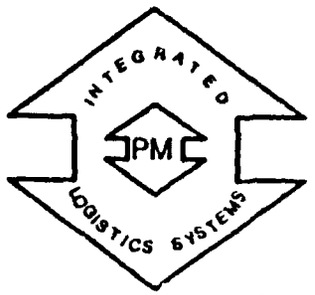
PEO STAMIS

INTEGRATED PM LOGISTICS SYSTEMS

TRANSACTION SUMMARY
21 JAN - 6 JUN 92

	NUMBER	DOLLAR VALUE
Fort Hood Requests Submitted	181,426	$ 513,855,681
Referral Orders Created (Majority From Excess)	18,955	$ 4,441,947

GARRISON LVST
OUTSTANDING EVENTS



- **STARFIARS Problem Report outstanding**

- **Extended time line**

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EXPEDITE FIELDING III CORPS

INTEGRATED PM LOGISTICS SYSTEMS

- PM OSC briefing MG Robison
- Achieve OSC benefits sooner
- Forts Carson, Polk, Riley, Sill, Bliss
- OSC Rump MAISRC

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INTEGRATED PM LOGISTICS SYSTEMS

SITE SURVEY SCHEDULE

III CORPS

SITE	SURVEY DATES	STATUS	INSTALLATION * TARGET DATE
Fort Polk	18 - 29 May 92	Completed	3 Aug 92
Fort Carson	1 - 12 Jun 92	Completed	TBD
Fort Bliss	8 - 19 Jun 92	In Process	24 Aug 92
Fort Sill	15 - 26 Jun 92	On Target	TBD
Fort Riley	22 Jun - 3 Jul 92	On Target	TBD

* Installation dates are determined during site survey.

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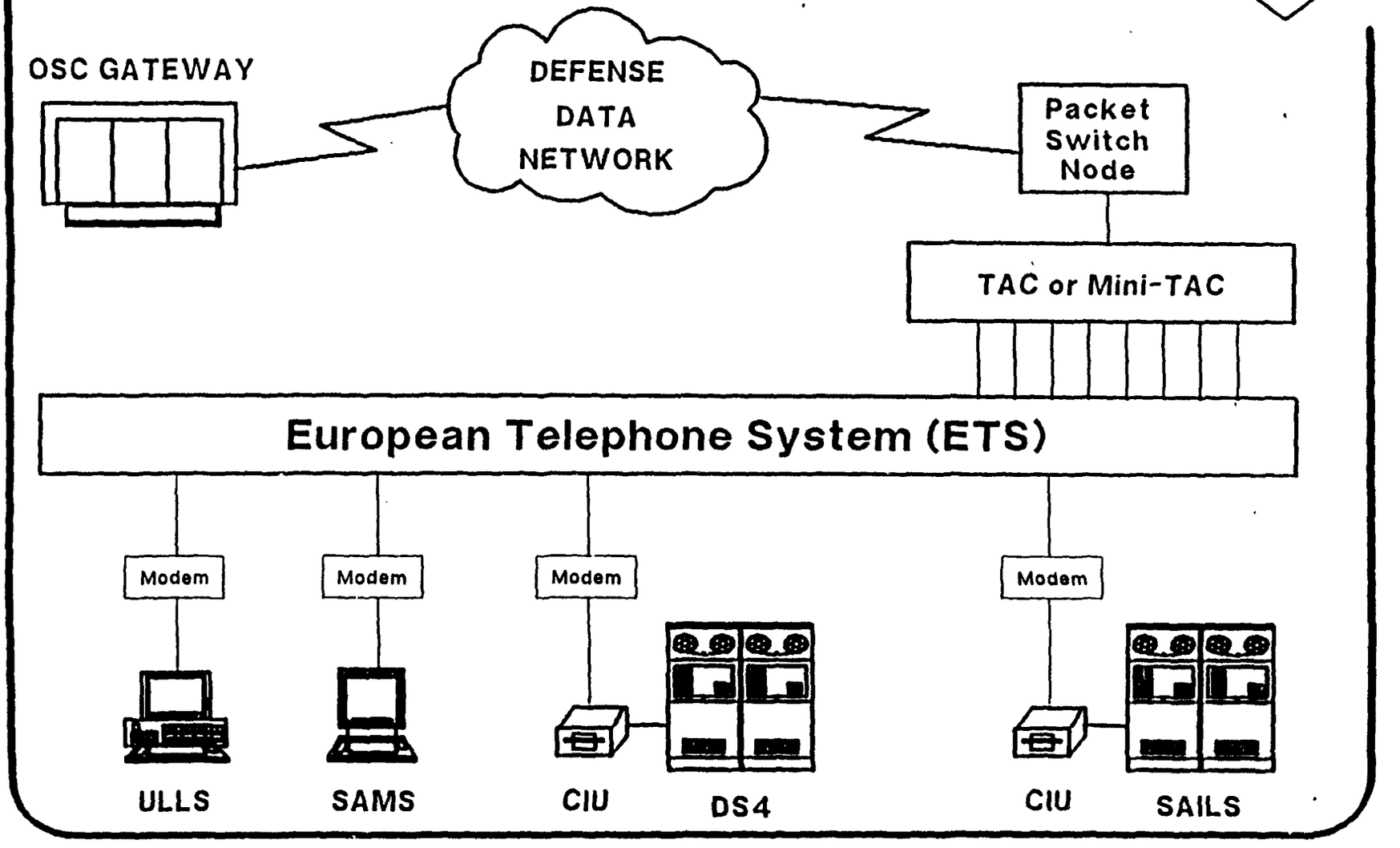
OSC IN USAREUR

INTEGRATED PM LOGISTICS SYSTEMS



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INITIAL USAREUR CORPS
SLICE UNITS

INTEGRATED LOGISTICS SYSTEMS PM

- 3D ID (ULLS, SAMS-1, DS4)
- 19TH MMC (SAILS)
- 149TH MAINT CO (DS4)
- 596TH MAINT CO (DS4)

PEO STAMIS

CONCLUSION

PM INTEGRATED LOGISTICS SYSTEMS

- Start Site Surveys for III Corps;

  Flag Extension Dates

- Finish LVST at Fort Hood;

  Begin USAREUR Lead Sites

- III Corps Site Extensions not

  necessary prior to MS III Approval

29 May 92

STATUS OF DOCUMENTATION FOR SELECTED IEW SYSTEMS

AN/PRD-11 MINIFIX - TRADOC (CAC) has action for processing the BOIPFD which was received from CECOM July 91.

AN/TRQ-32 TACFIX - CECOM requested Type Classification change from LCC A to LCC B. Change should be published in the next (Sep 92) update to SB 700-20.

AN/ULQ-19(V)2 RACJAM - Initial BOIP was approved by HQ DA DCSOPS in 1987. Amendment 1 to this BOIP was documented and loaded into the TRADOC data base in 1991. Ms Shirley Clark, CAC, advised on 28 May 92 that the documentation should be sufficient for type classification.

AN/ULQ-19(V) 3 HACJ - CECOM expects to forward BOIPFD to U.S. Army Force Integration Support Agency (USAFISA) by 9 June 92.

AN/TSQ-164 DRAGONFIX - CECOM sent BOIPFD to TRADOC Jan 90. Documentation sent to Intel School for action Feb 91. Action pending approval by TRADOC.

AN/GRQ-27(V)1 GOLDWING - FORSCOM has action to provide Requirements Document to CECOM to allow development of BOIPFD. Action first given to FORSCOM (FCJ2-AS) during meeting with HQ AMC (AMCLG-SI), TRADOC (CAC), HQ DA (DALO-SMC), PEO-IEW (SFAE-IEW-SE), AMSSA (AMXSY-LX), USAFISA (MOFI-TED-T) AND CECOM (AMSEL-LC-SM-S2), 5-6 FEB 92. HQ AMC to follow up with message.

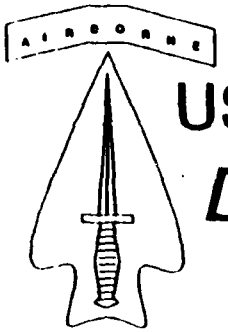
AN/UYK-71A FAISSNFIX - CECOM sent BOIPFD to USAFISA for action 13 May 92.

TRADOC (CAC and Intel School) reps advised HQ AMC (AMCLG-SI) in meeting at HQ AMC on 19 Mar 92, following their meeting with HQ DA on 18 Mar 92, that DA DCSOPS will prioritize the total IEW list of systems as to the order that they should be documented (BOIP/QQPRI). TRADOC reps agreed to keep working the documentation in the TRADOC priority order, however, they will not process the documents to HQ DA until the DA prioritization effort is complete. Target date for the DA prioritization is mid June 92.

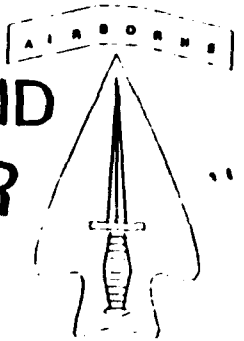
Per FONECON between LTC Thompson, DAMO-FDI, and Mr. William Shelton, HQ AMC on 29 May 92 - LTC Thompson advised that he is working with the DA DCSOPS Organization Integrator to first develop a draft message to TRADOC which prioritizes the IEW systems and establishes taskings, with suspense dates, for completing the documentation. This draft message will be the basis for a Tele conference between TRADOC and DA DCSOPS in early June 92. It is his objective to send out the final message before he leaves for his next assignment at Fort Meade in mid June 92. The fact that TRADOC (CAC) did not provide him their recommended prioritization, as agreed to in the TRADOC/DA DCSOPS meeting on 18 Mar 92, will not delay the DA DCSOPS objective of completing their prioritization effort by mid June 92.

William Shelton

Enclosure 4 to IEW Streamlining Study Group IPR Minutes, 23-24 June 92



USA SPECIAL OPERATIONS COMMAND
DEPUTY CHIEF OF STAFF FOR INTELLIGENCE

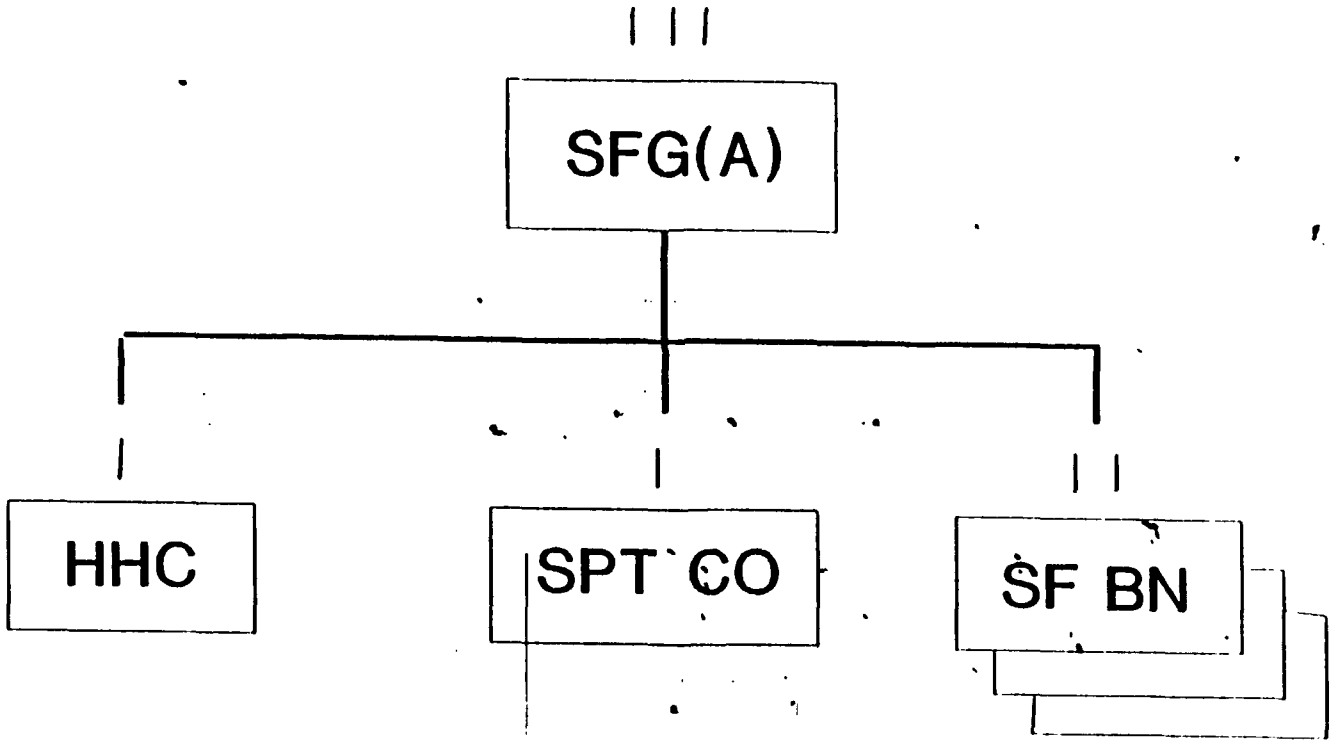


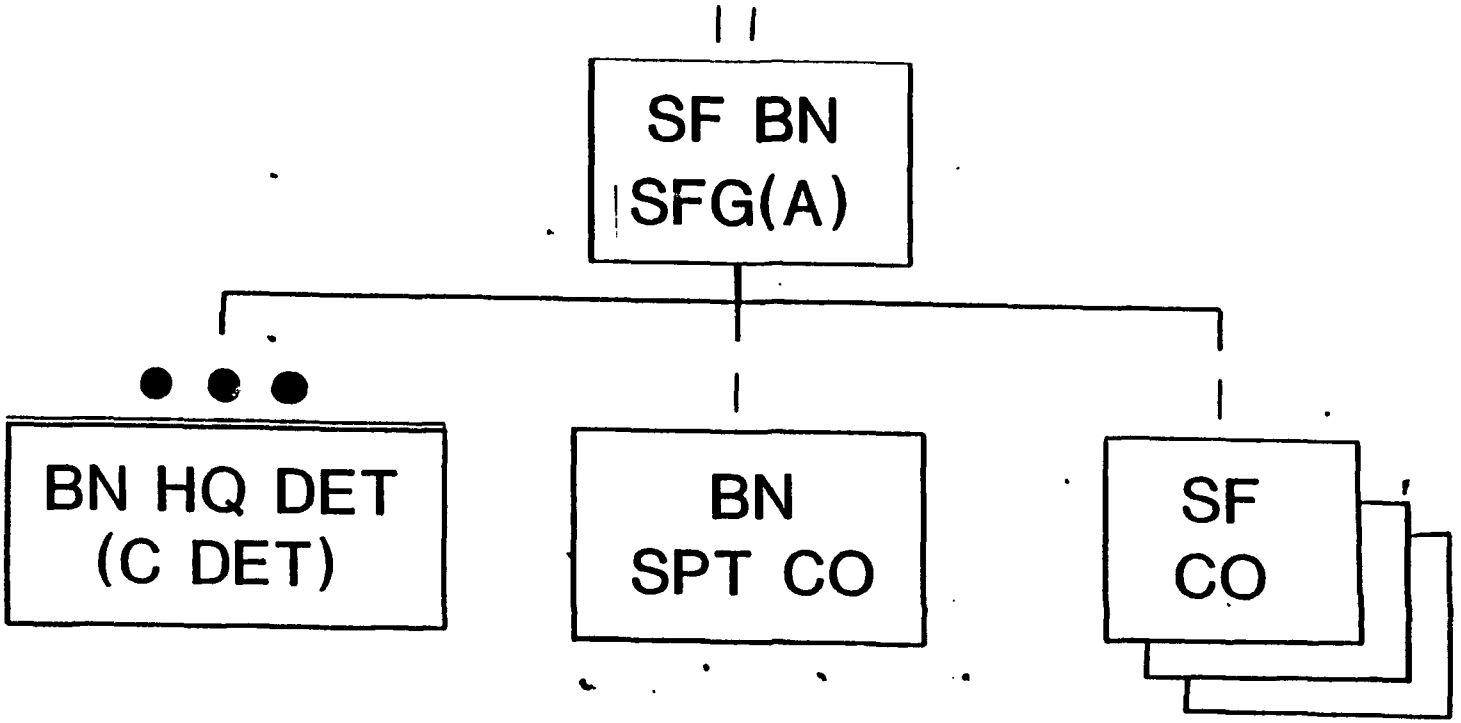
ARMY SPECIAL OPERATIONS (ARSOF) OPERATIONAL CONCEPT

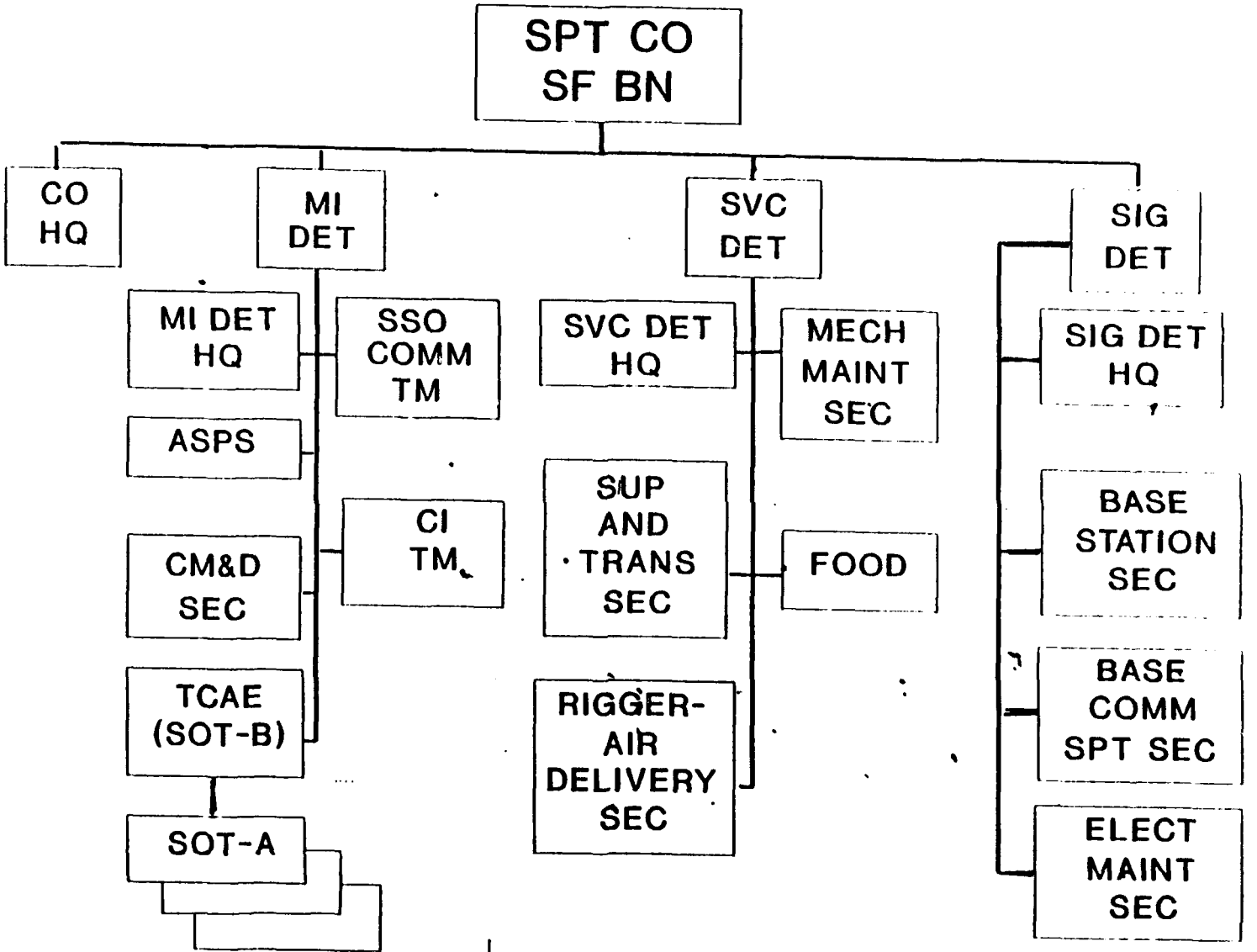
JUNE 1992

MSG WALENSKY

SPECIAL FORCES GROUP




SF BN
SFG(A)
BN HQ DET
(C DET)
BN
SPT CO
SF
CO


SPT CO
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SEC
FOOD
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(SOT-B)
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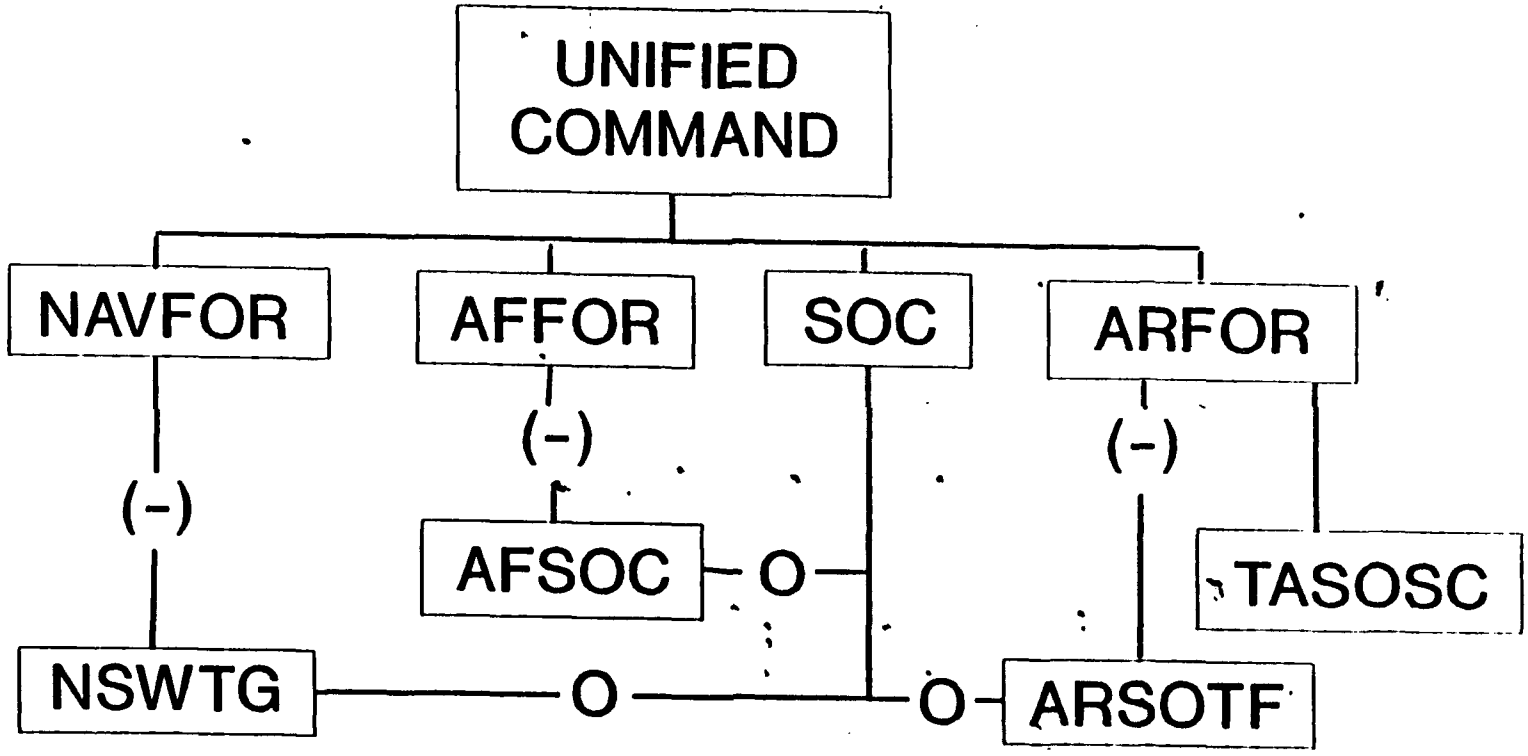
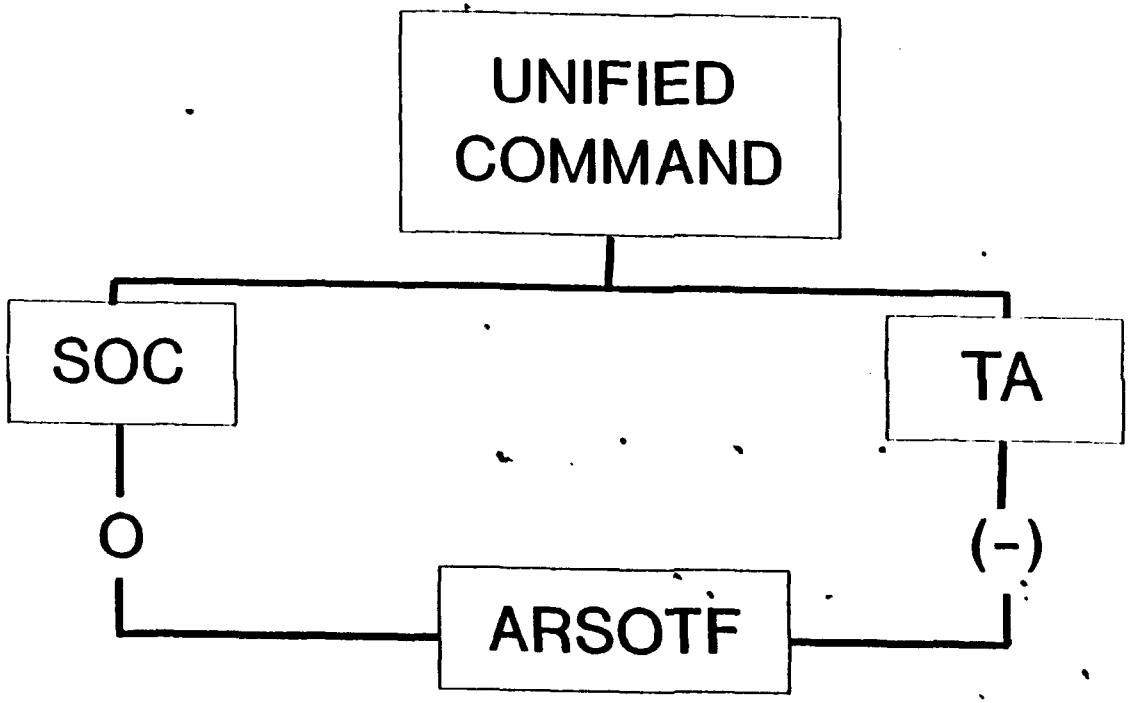
THEATER SOF COMMAND RELATIONSHIPS



THEATER SOF COMMAND RELATIONSHIPS

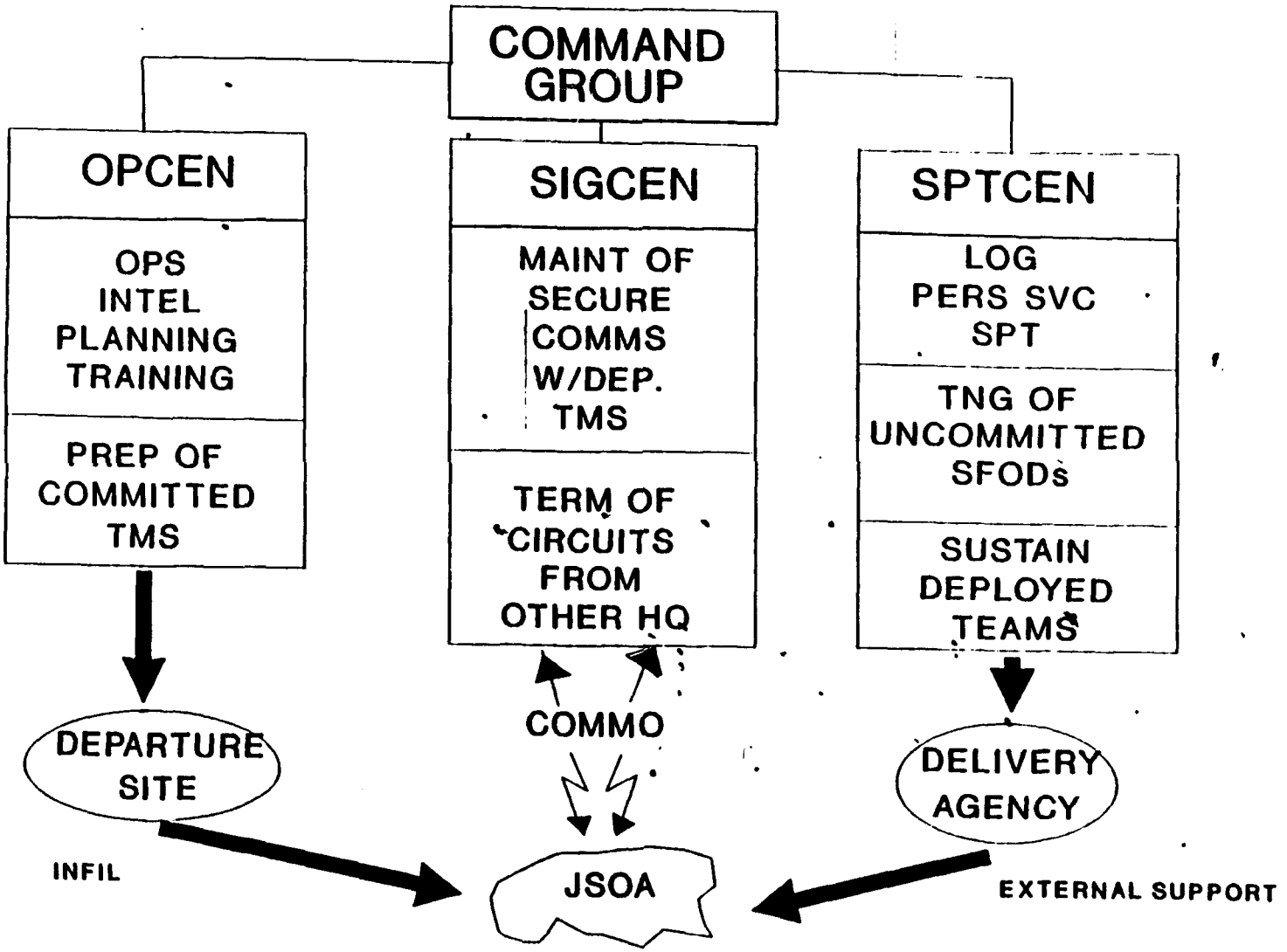


——— COMMAND OR COCOM

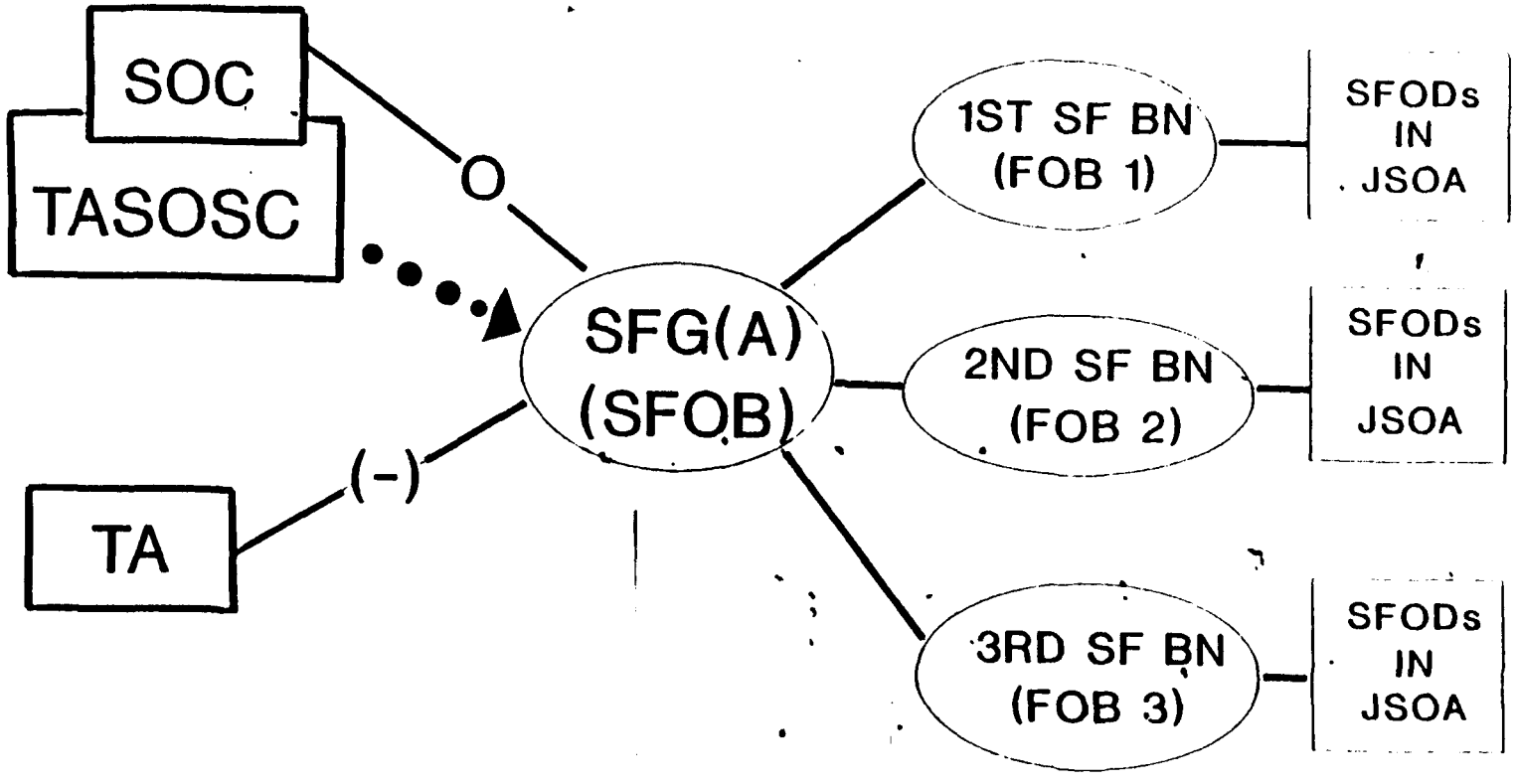
— O — OPCON

— (-) — COMMAND LESS OPCON

TYPE SPECIAL FORCES OPERATIONAL BASE

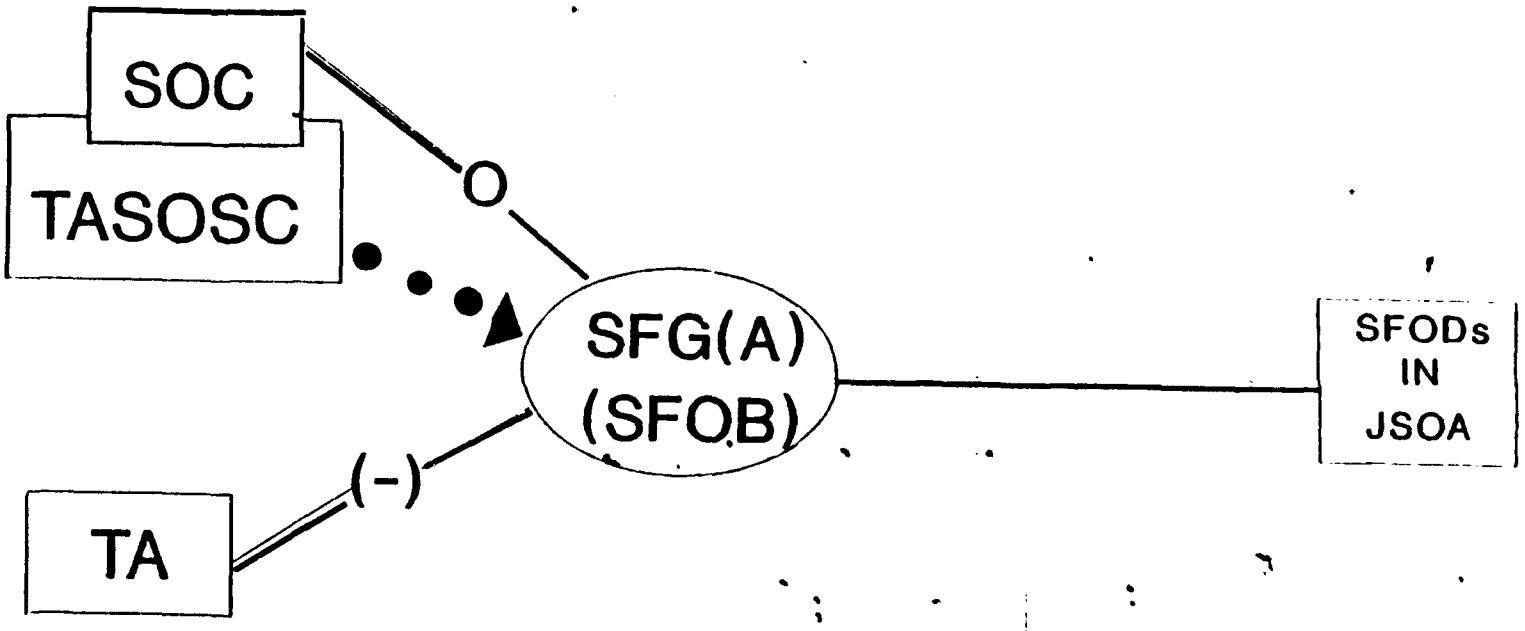


THEATER SOF DECENTRALIZED C2



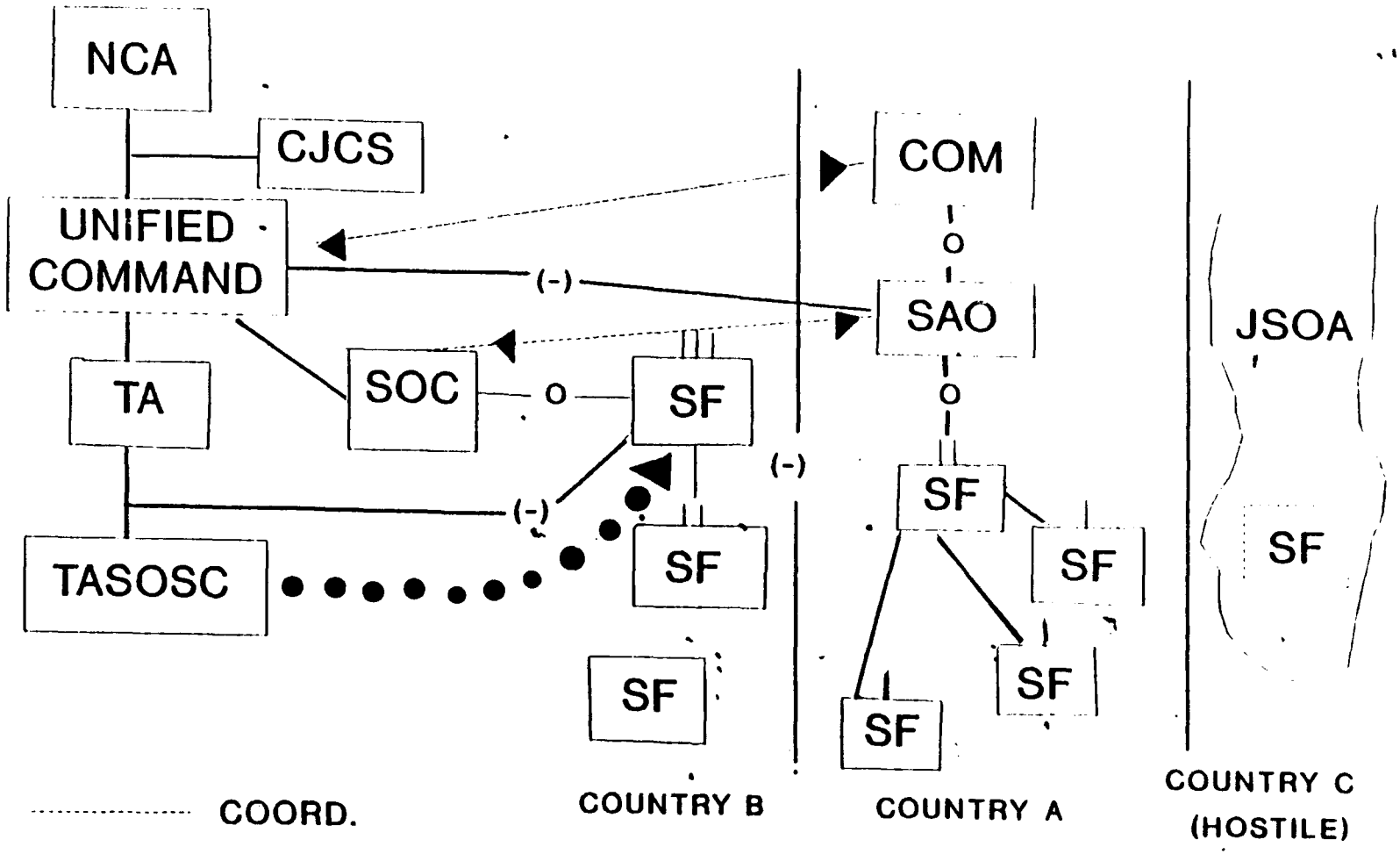
——— COMMAND OR COCOM
— O — OPCON
—— (-) —— COMMAND LESS OPCON
●●●●●● SUPPORT

THEATER SOF CENTRALIZED C2

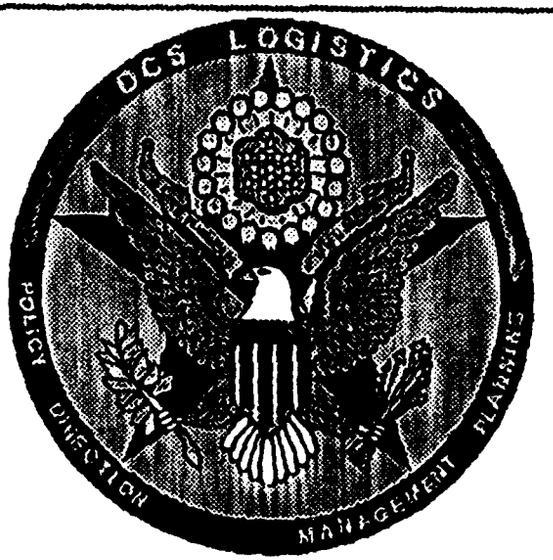


COMMAND OR COCOM
— O — OPCON
— — (-) — COMMAND LESS OPCON
SUPPORT

SF BN DEPLOYMENT

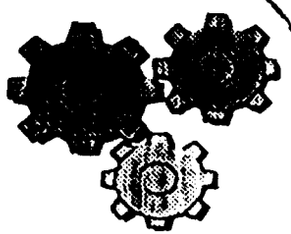


Enclosure 6 to IEW Streamlining Study Group
IPR Minutes, 23-24 June 92



Concept for Integrated Sustainment Maintenance

Definition

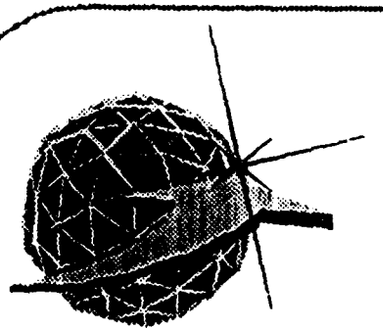


SUSTAINMENT MAINTENANCE

IS ANY MAINTENANCE DONE AT ECHELONS ABOVE DIRECT SUPPORT.

- THIS INCLUDES MAINTENANCE PERFORMED BY AC/RC GSU's , INSTALLATIONS, DEPOTS, AND CONTRACTORS.
- MAY BE DONE IN-THEATER, AT GOVERNMENT FACILITIES, OR AT A CONTRACTOR'S PLANT.

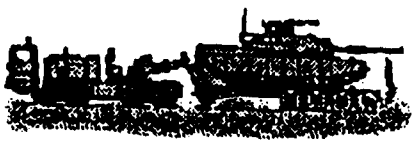
Objective



Propose an Integrated Sustainment Maintenance Concept to Meet Army's Needs Now and Into 21st Century

Current Maintenance Structure

- MULTIPLE LEVELS
- VARIES BY COMMODITY / WITHIN COMMODITY
- DIFFICULT TO MANAGE IN CONTINGENCIES



4 LEVEL

(50 / 30) DEPOT / SRA ⟷ (40) GS ⟷ (30) DS ⟷ (20/10) UNIT

3 LEVEL

(50 / 30) DEPOT / SRA ⟷ (40/30) AVIM ⟷ (30/20/10) AVUM

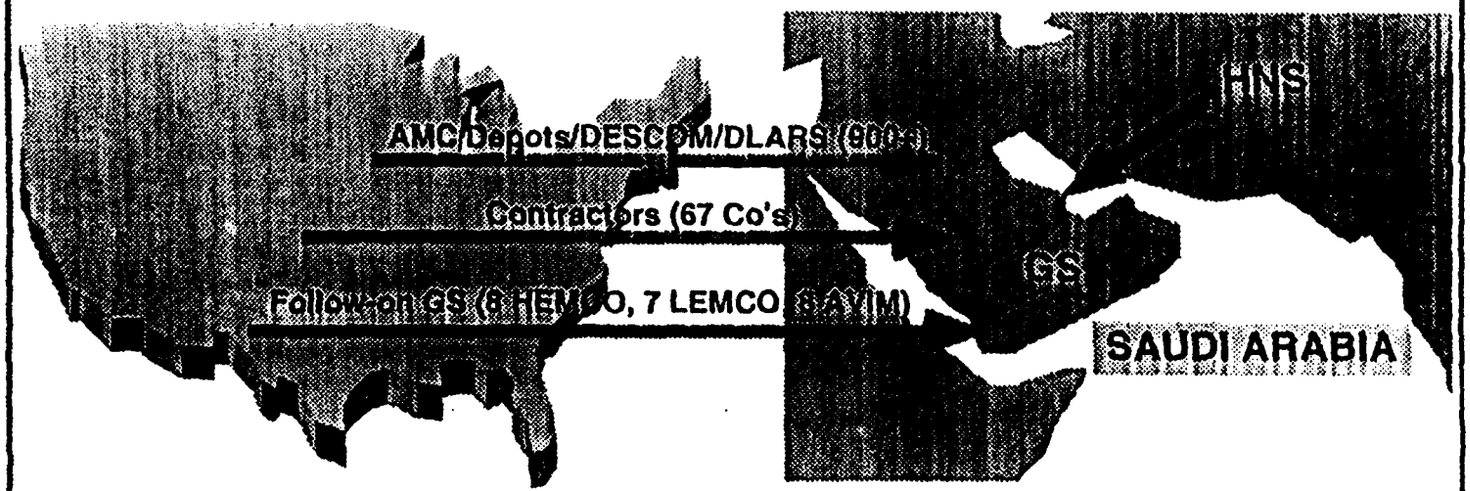
2 LEVEL

(50 / 30) DEPOT / SRA ⟷ GS THRU DS ⟷ (10) UNIT

TMDE

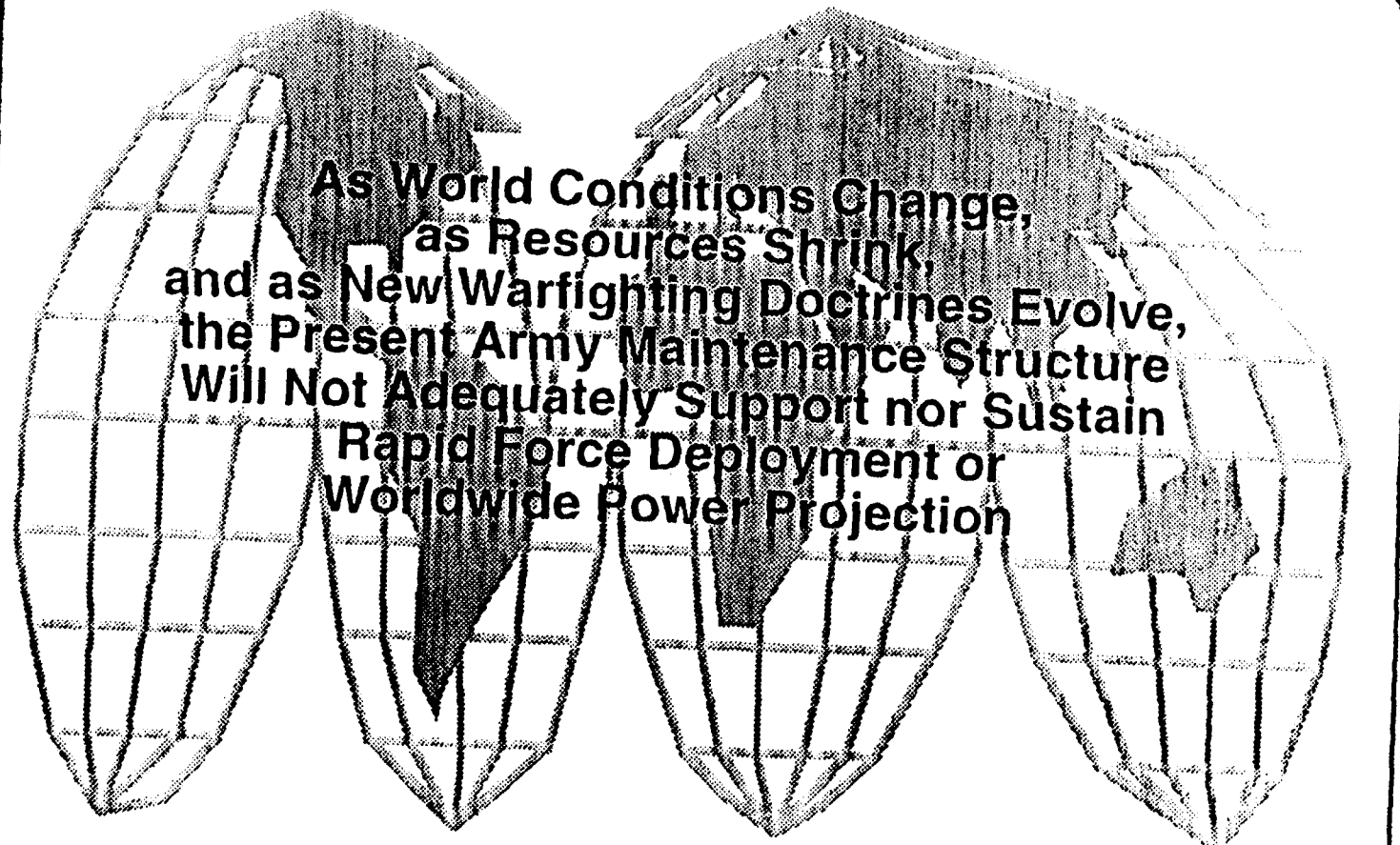
DEPOT	50 - 10	ALL

Maintenance Support - SWA

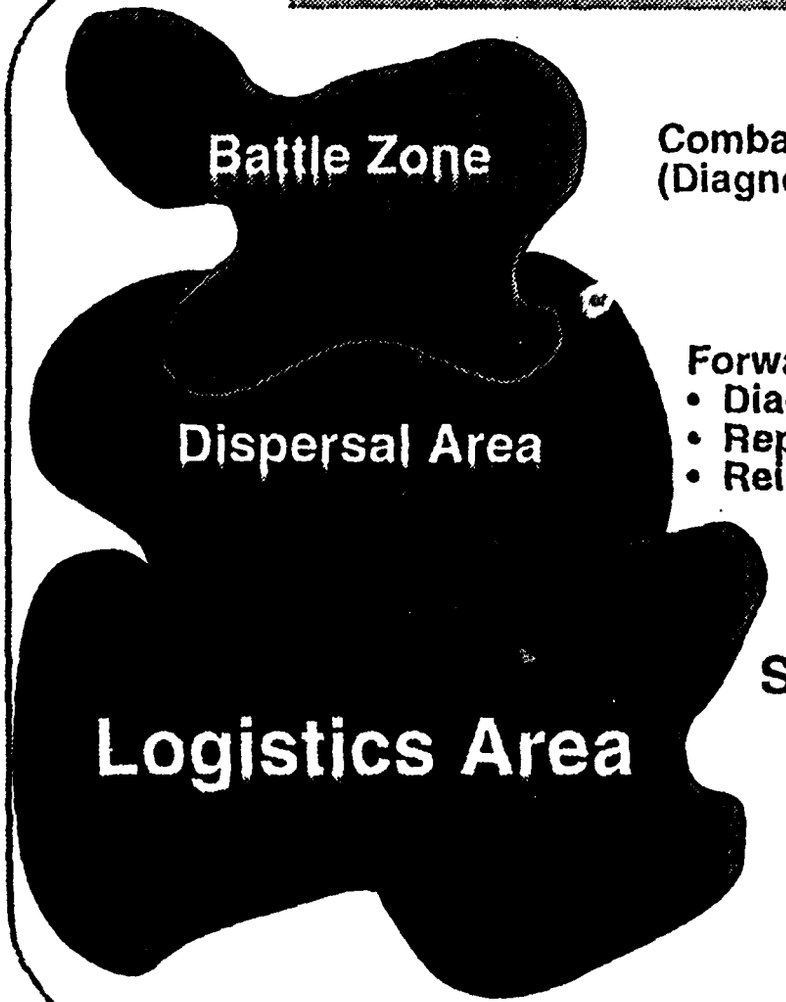


- AD HOC / DELAYED SUPPORT RESPONSE
- NON-SYNCHRONIZED DEPLOYMENT
- MULTIPLE / OVERLAPING CONTRACTOR SUPPORT
- GS UNITS IMPROPERLY UTILIZED
- UNCOORDINATED MAINTENANCE TRAINING / PRE-PLANNING
- EXCESSIVE RELIANCE ON HNS (TRANS/EVAC)

The Problem


As World Conditions Change,
as Resources Shrink,
and as New Warfighting Doctrines Evolve,
the Present Army Maintenance Structure
Will Not Adequately Support nor Sustain
Rapid Force Deployment or
Worldwide Power Projection

Operational Maintenance



Combat Repair
(Diagnose/Replace/BDAR)

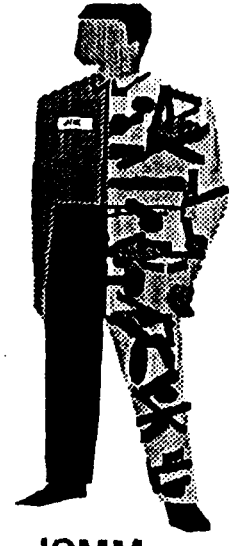
Forward Maintenance Support
- Diagnose
- Repair / Cannibalize / Evacuate
- Reinforcing Support to Combat Repair

Sustainment Maintenance
- LRU / End Item Repair
- Reconstitution Overhaul
- Reinforcing Support
- Depot -Level RR/RX

Concept

Integrated Sustainment Maintenance

Integrated Sustainment Maintenance Manager



ISMM

Centralized Workloading for Sustainment Maintenance with Decentralized Execution

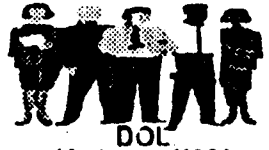
PEACE ➡ MOBILIZATION ➡ POWER PROJECTION

Single Manager for Sustainment Maintenance Resources

Forward Projected Sustainment Maintenance

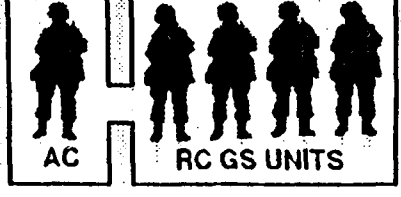
Rear

DEPOTS



DOL
(At Least IMO)

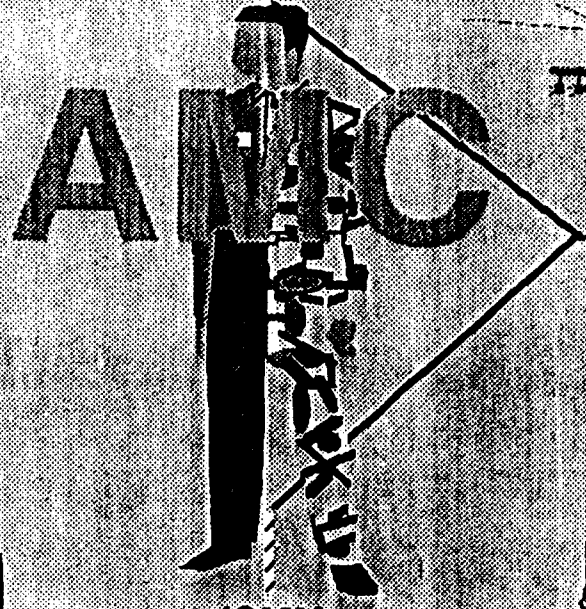
CONTRACTORS



AC RC GS UNITS

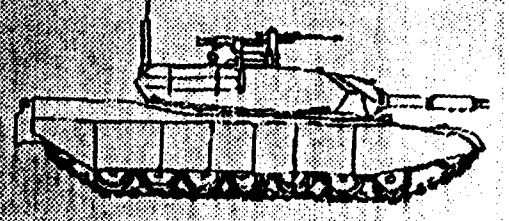
In Theater

Combat
Repair

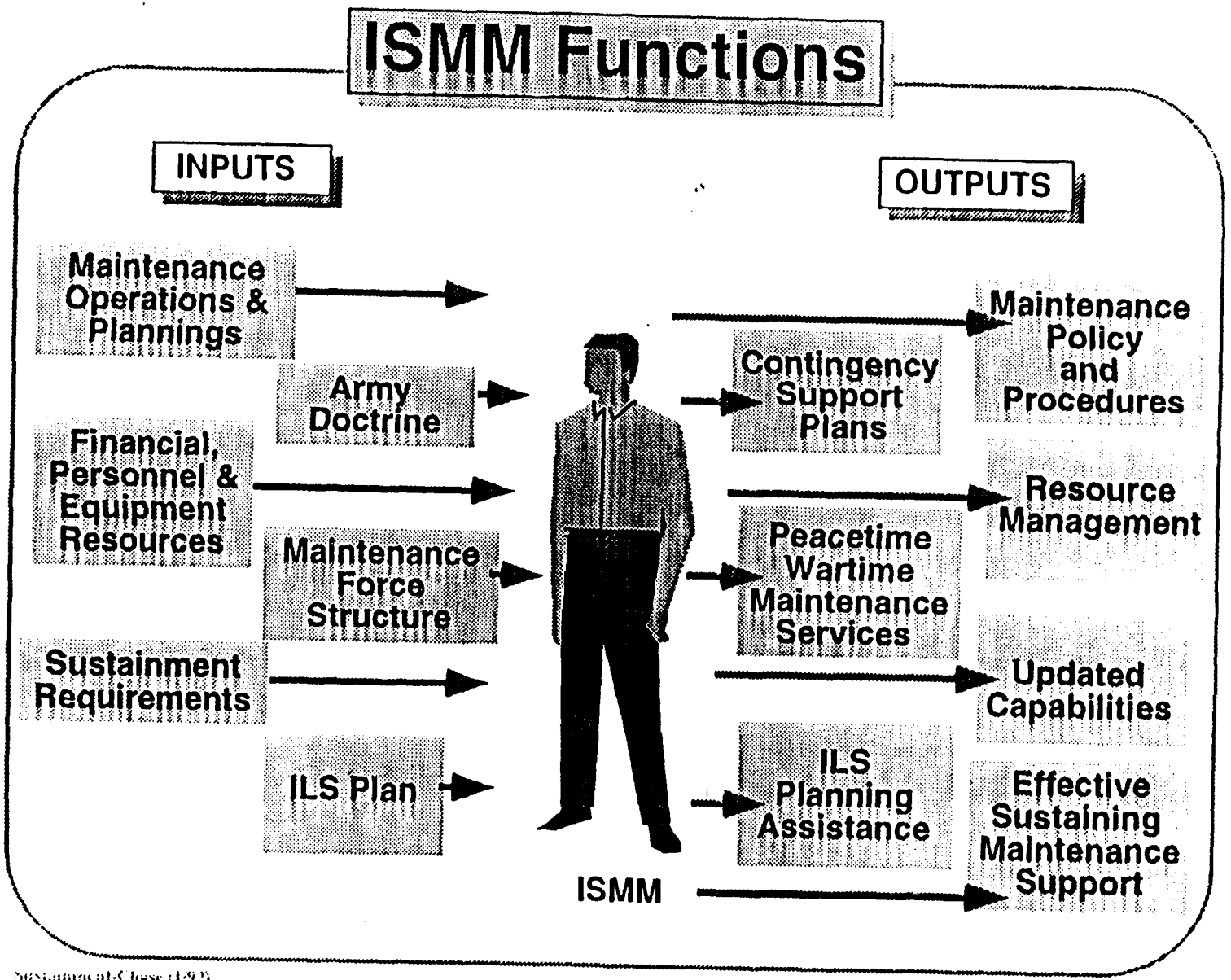


ISMM

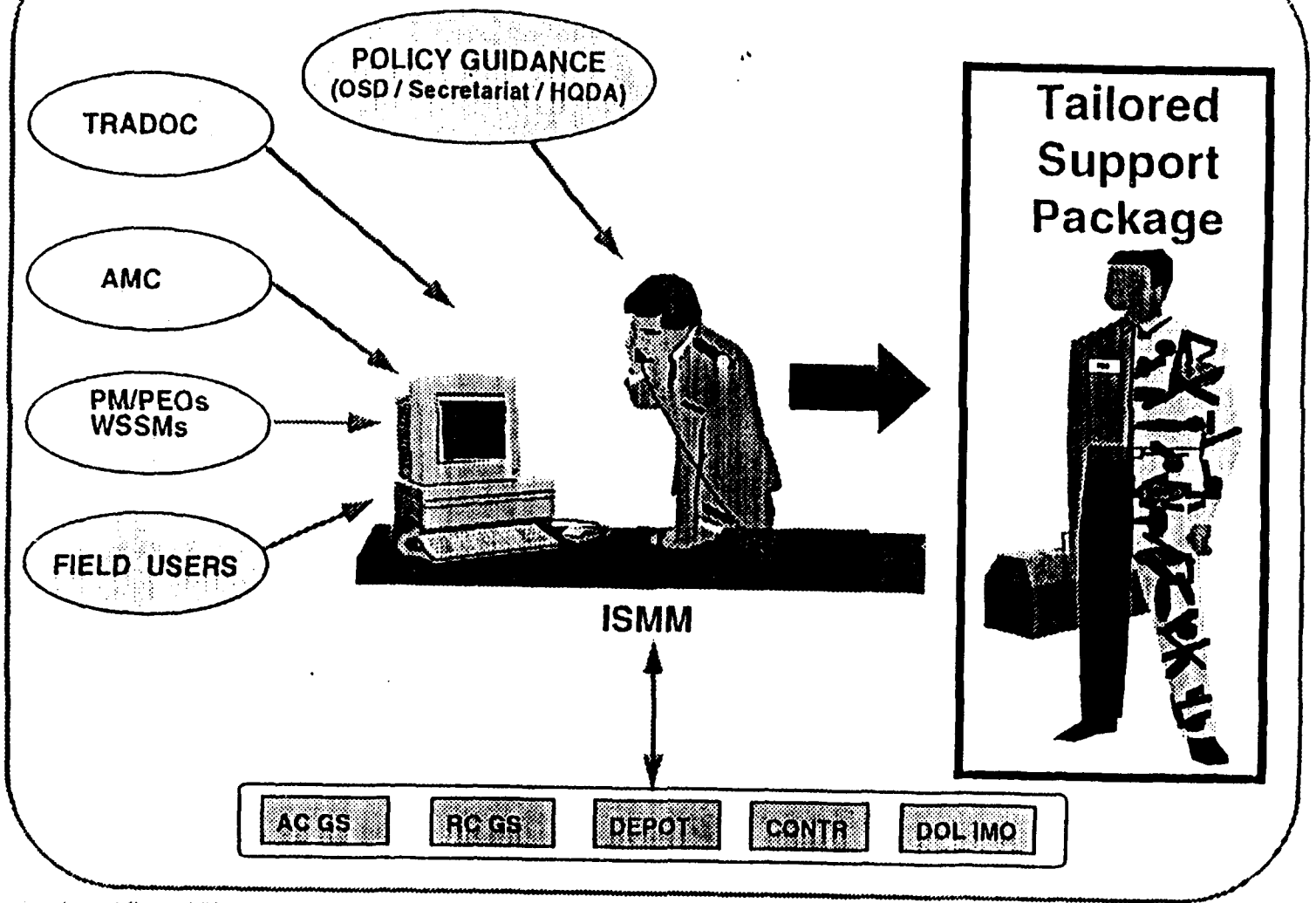
Forward
Maintenance
Support



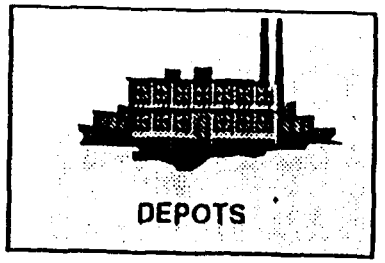
ISMM Functions

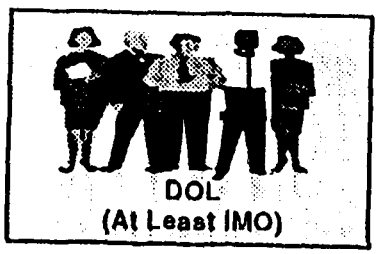


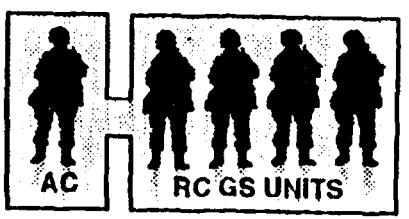
Functional Concept

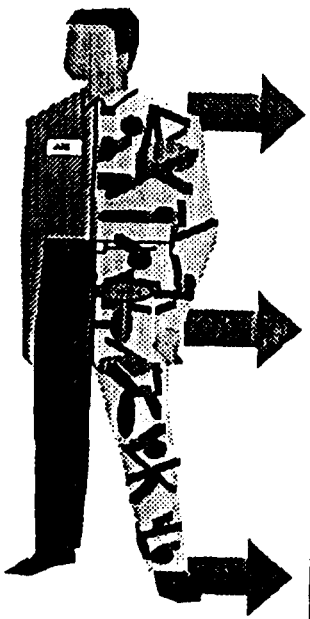


Peacetime









SINGLE MANAGER

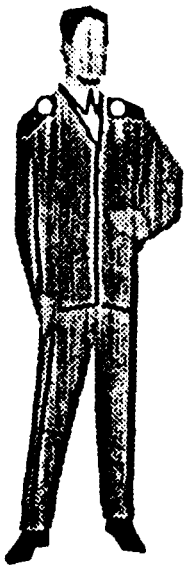
(Supported By Single Stock Fund)

TAILORED ON-SITE MAINTENANCE

REGIONAL MAINTENANCE CENTERS

SPECIALIZED MAINTENANCE SUPPORT (TMDE, MSE, TACCS)

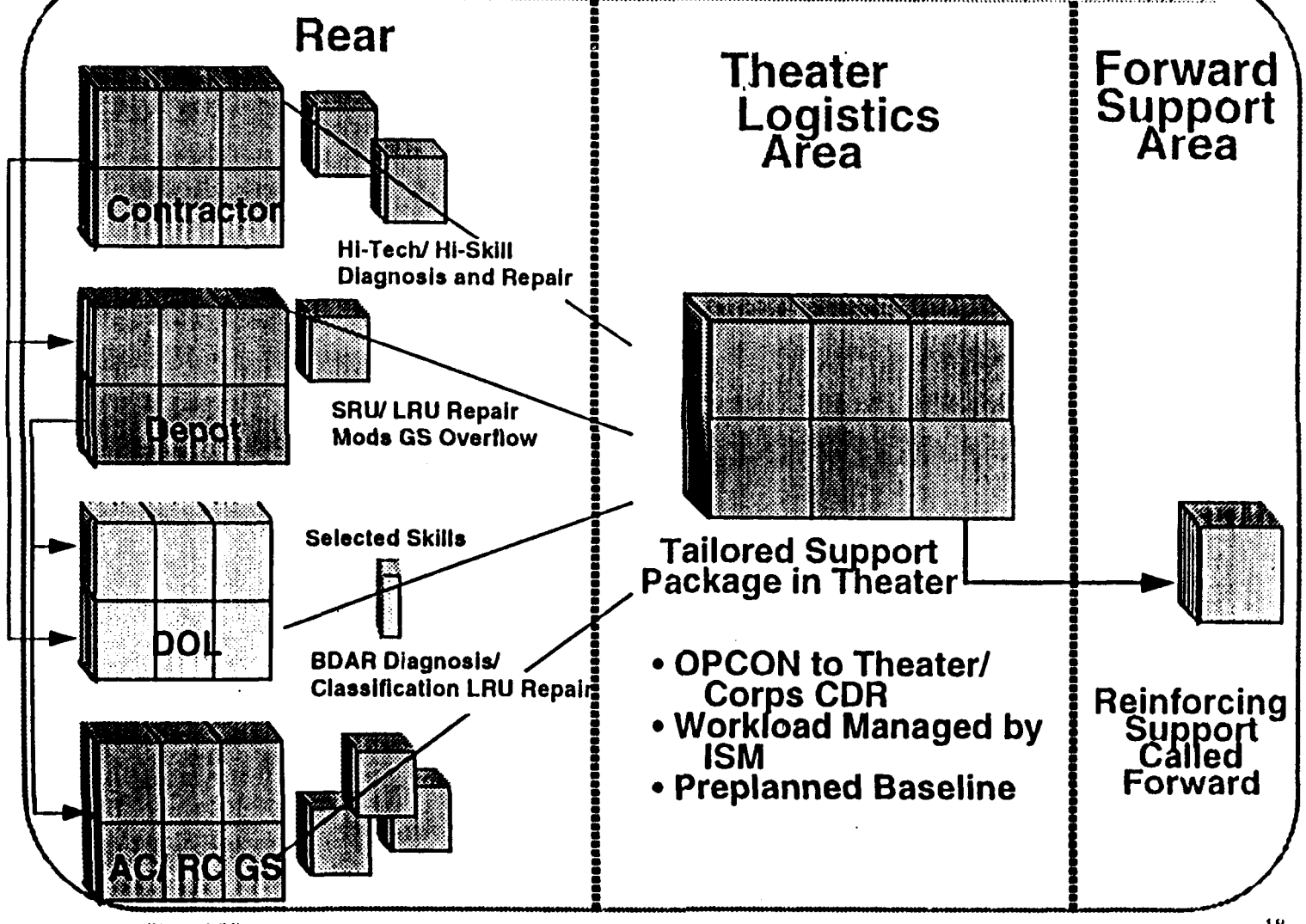
OVERHAULS AND MODIFICATIONS



INSTALLATION/ UNIT COMMANDER

NICP/NMP

Wartime/National Contingencies



Possible Evolution of Maintenance

- Reduced Levels of Maintenance
- Emphasis on Teaming
  - DOL/ Depot/Contractor/GS
- Potentially Shorter Repair Cycle Times
  - More RX/ RR
  - Regional Maintenance Centers
  - Multi-Commodity FRAs
- Integrated S/ M/ T System

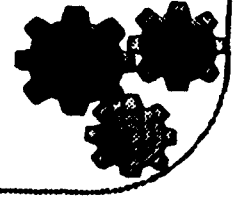
Implementation Issues

Revolutionary Departure from Traditional Concepts

- Policy/Force Structure Changes
- Management and Operating Practice Changes
- PEO / PM / WS Manager Relationship to ISMM
- Interface with MACOMs / RC / NGB
- Contractor-Government Relationships
- SFDLR / Budget / Accounting Implications
- Training / Deployment Processes
- Overcome "not the way it's done" Paradigm

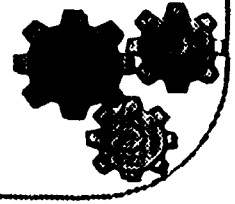
Summary

- Integrated Maintenance Above Direct Support
- Evolutionary Process
- Centralized Management with Decentralized Execution
- Sustainment on the Battlefield on Preplanned Basis



Summary

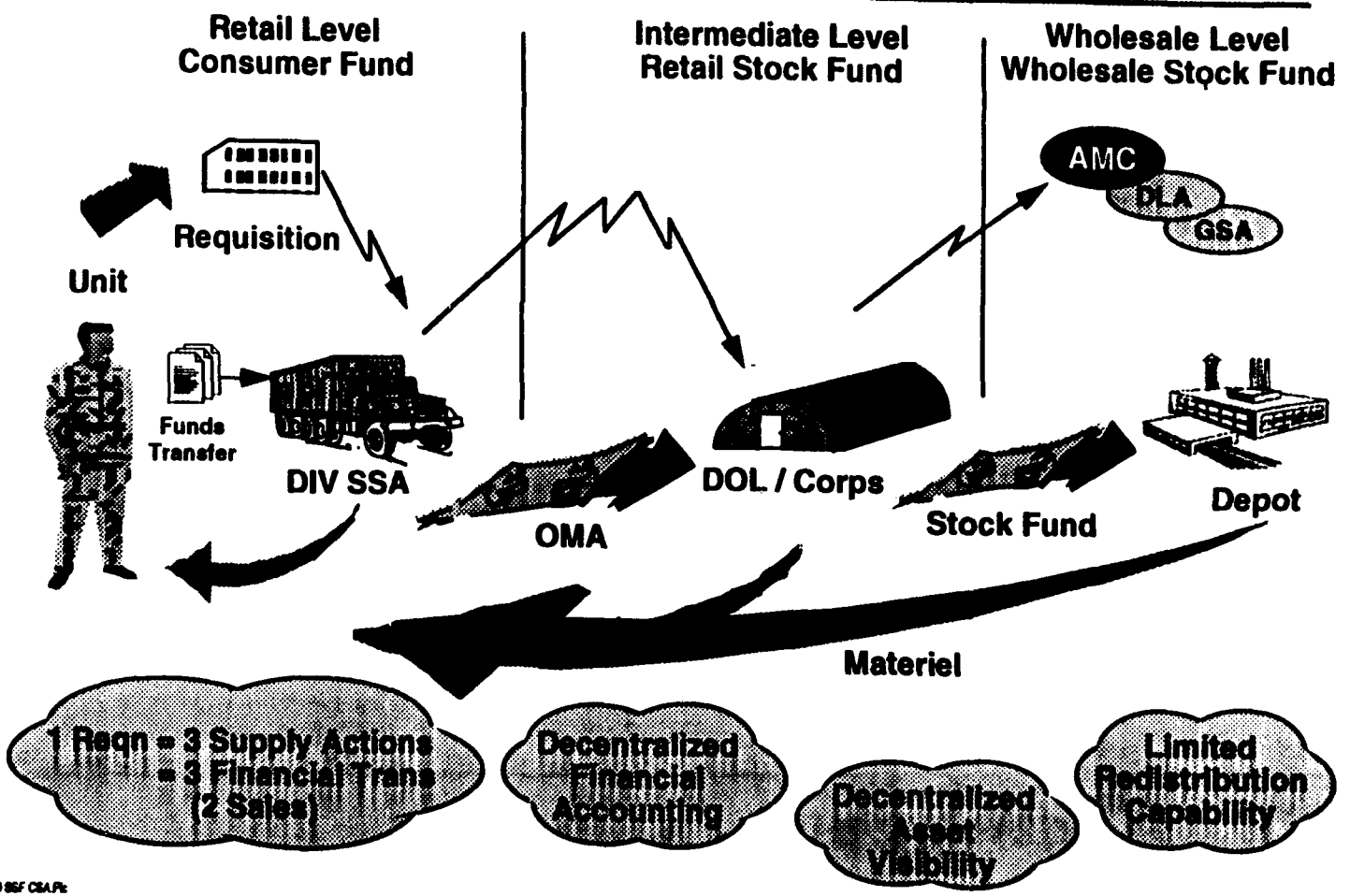
- Ensures Training Matches Requirement
- Synchronized Maintenance with Operations
- Standardizes Previous"Ad Hoc" Practices
- Focuses and Delineates Responsibility
- Intelligent Application of Facilities, Personnel, Equipment



Strategic Logistics Agency

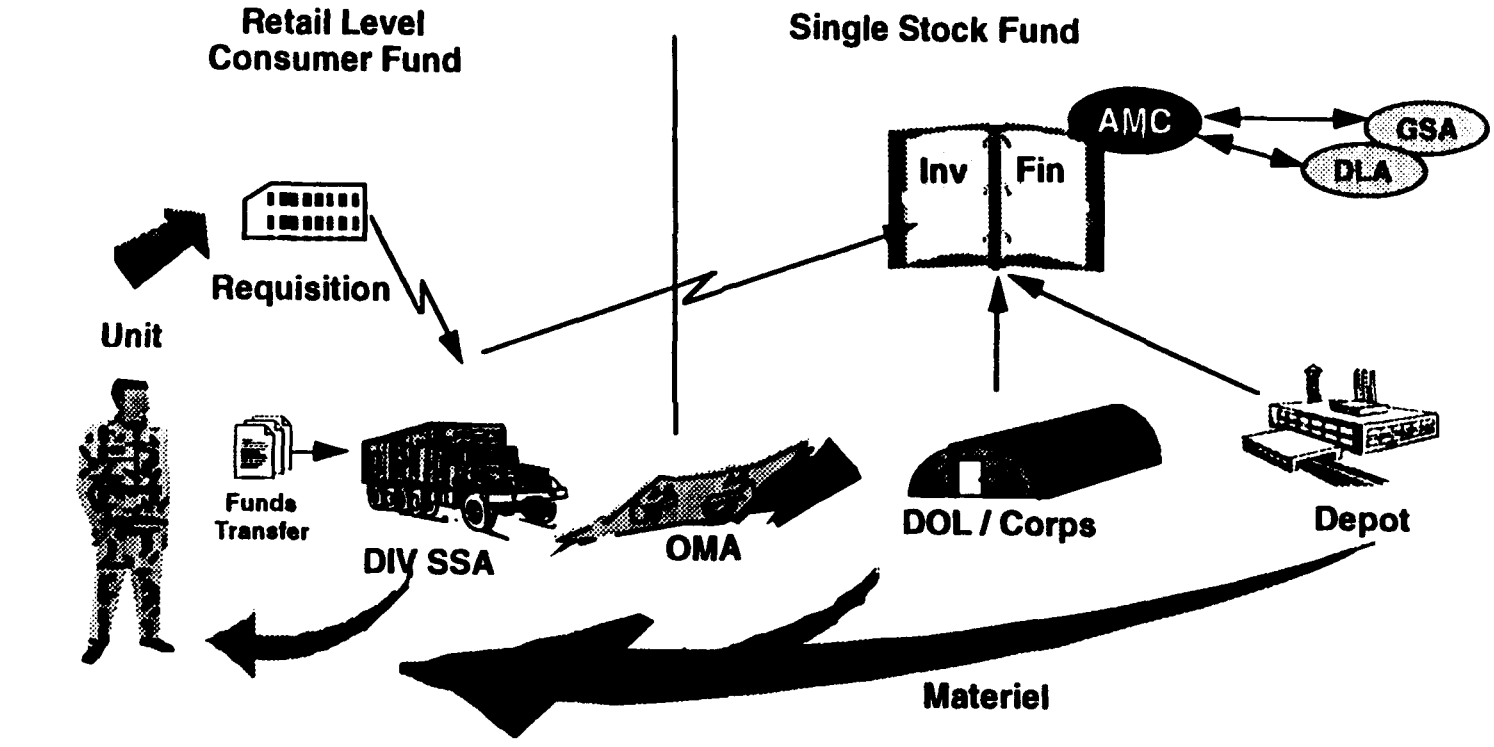
Single Stock Fund

Army Stock Fund & Supply System - Current

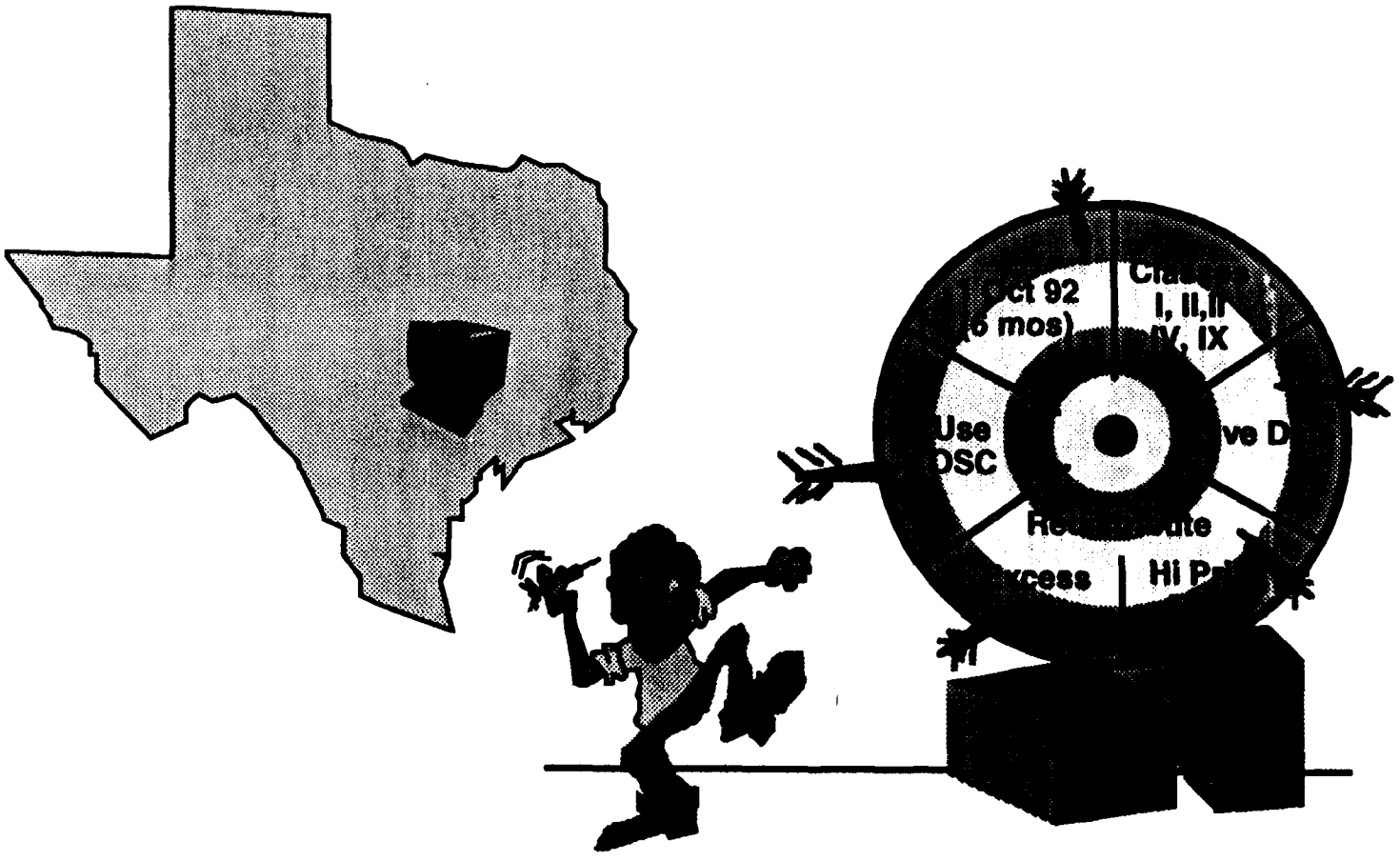


100 BSF CSA/Pc

Army Single Stock Fund Structure



Single Stock Fund Demonstration



Benefits

Change in Stockage Policy
Change in Requirements Computation

- Streamline Financial System
- Enable Redistribution of Excess
- Reduce And Prevent Excess
- Help Achieve DMRD Reductions Already Taken
- Eliminate Automated Systems / Processes with Duplicative Functions

Strategic Logistics Agency

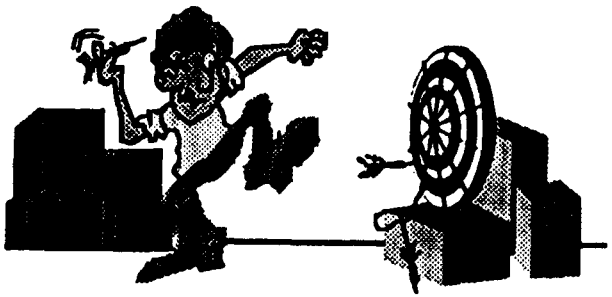
FORWARD REPAIR ACTIVITY (FRA)

FRA . . .

Forward Repair Activity

What is it?

- More Responsive, Flexible Support
  - Limited Depot Level / Intermediate Back-up
  - Critical, Expensive Components
- Standardization
  - Command and Control – Peace and War
  - Business Practices



Why?

- Maximize Weapon System Availability
  - Reduce Turn-Around-Time
- Improve Responsiveness – Peace and War
  - Accomodate Operational Requirements

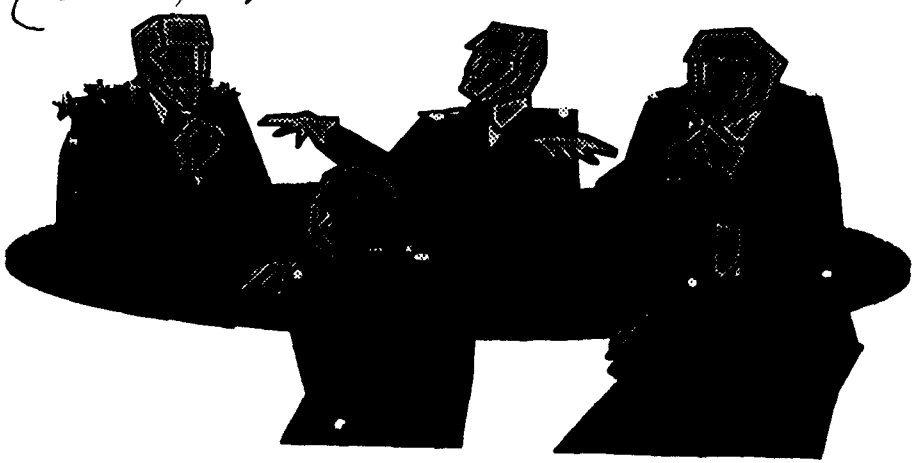
Background

Apache experience (TADS/PNVS)
"special" Repair Activity
to shorten pipeline

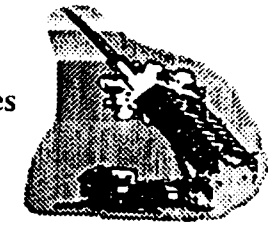
Aviation System Program Review

Forward Repair Activity

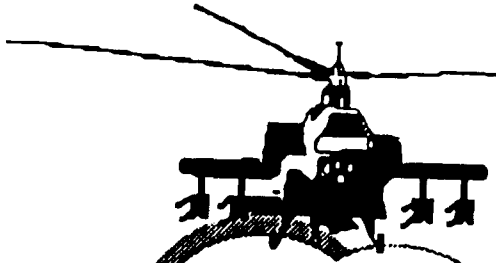
- **FY90 ASPR G⊙SC Guidance**
- **FY90 G.⊙. "SRA" Conference** – Salomon hosted as CG CASCOM
- **SLA Charter**
- **ODS Experience**
  - legal issues
  - I.D./escorts
  - Housekeeping
  - Comms/life support



Today's "SRA"* / FRA



AMC ... Weapon System Support : Commodity Oriented



"Stovepipes"

Duplicate Overhead Structures

"SRA" X
Micom
- COR
- Overhead/Admin
- Facility
- QA
- MWO, etc
- Electronic

MSC

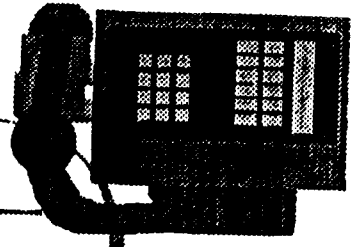
**

MSC

MSC

"SRA" Z
AVSCOM
- COR (off-site)
- Overhead/Admin
- Facility (off-post)
- QA
- MWO, etc
- Electro / Optica

**



"SRA" Y
CECOM
- COR
- Overhead/Admin
- Facility
- QA
- MWO, etc.
- Electronic / Commo

** Not Specialized Repair Activities IAW AR750-I*

*** No realtime mechanism to integrate effort on-site*

FRA Scope

Forward Repair Activity

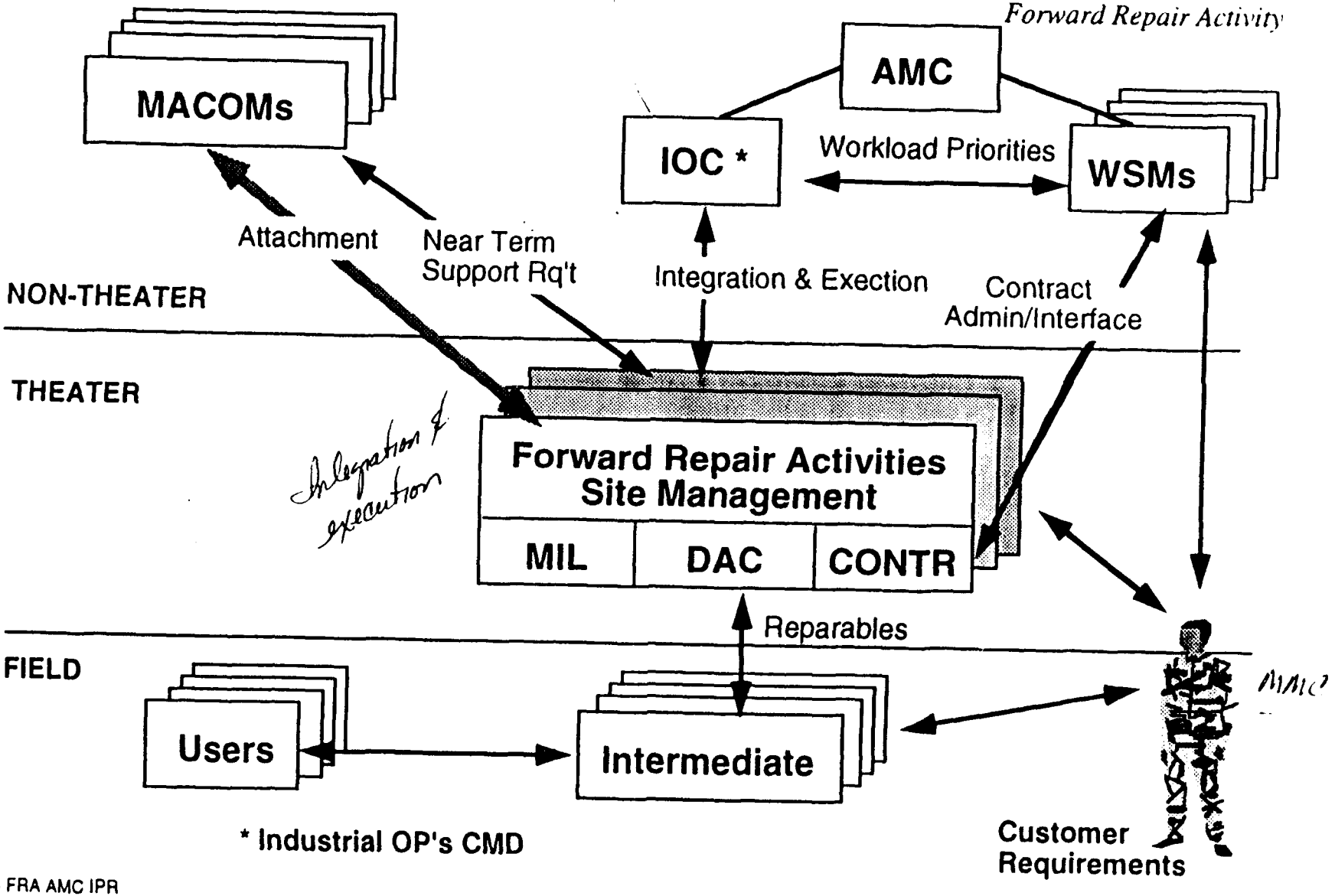
Management Focus
- Wpn Sys Oriented
- Peace/War Mission
- Standardized
- Customer Focal Point
- Regional Support

Military
- Training
- Deployability

Peacetime Support
- COR Liaison
- Wpn Sys Mgt Supplement
- Workload Execution
- Stockage

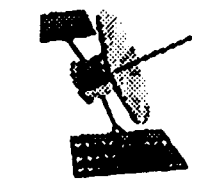
Deployed Support
- Structure
- Damage Assessment
- Workload Execution
- Stockage

Structure


Forward Repair Activity
MACOMs
AMC
IOC *
Workload Priorities
WSMs
Attachment
Near Term Support Rq't
Integration & Exection
Contract Admin/Interface
NON-THEATER
THEATER
Forward Repair Activities Site Management
MIL
DAC
CONTR
Reparables
FIELD
Users
Intermediate
* Industrial OP's CMD
Customer Requirements

Flow – FRA Items Only

Forward Repair Activity



Prioritized Rqts

Data

WSMs (MSCs)

User

Intermediate

Rx

FRA (IOC)

Issuable Items

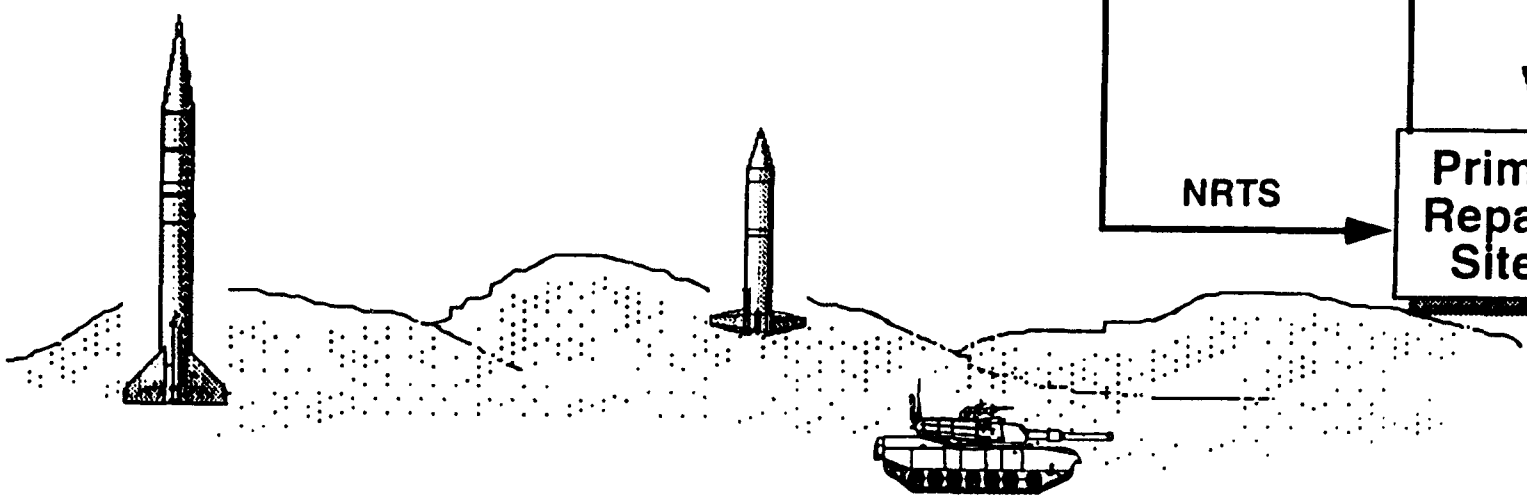
TAV

2

NRTS

Prime Repair Site

depot / Contractor plant



Implementation Strategy

- **Phased Implementation**
  - **Establish Initial Capability**
    - **Single Weapon System**
    - **Multiple Weapon Systems**
  - **Expand to Other Selected Systems/Equipment**
- **Standardize Policy and Procedures**
- **Establish Basic Command & Control Chain**

Milestones

Forward Repair Activity

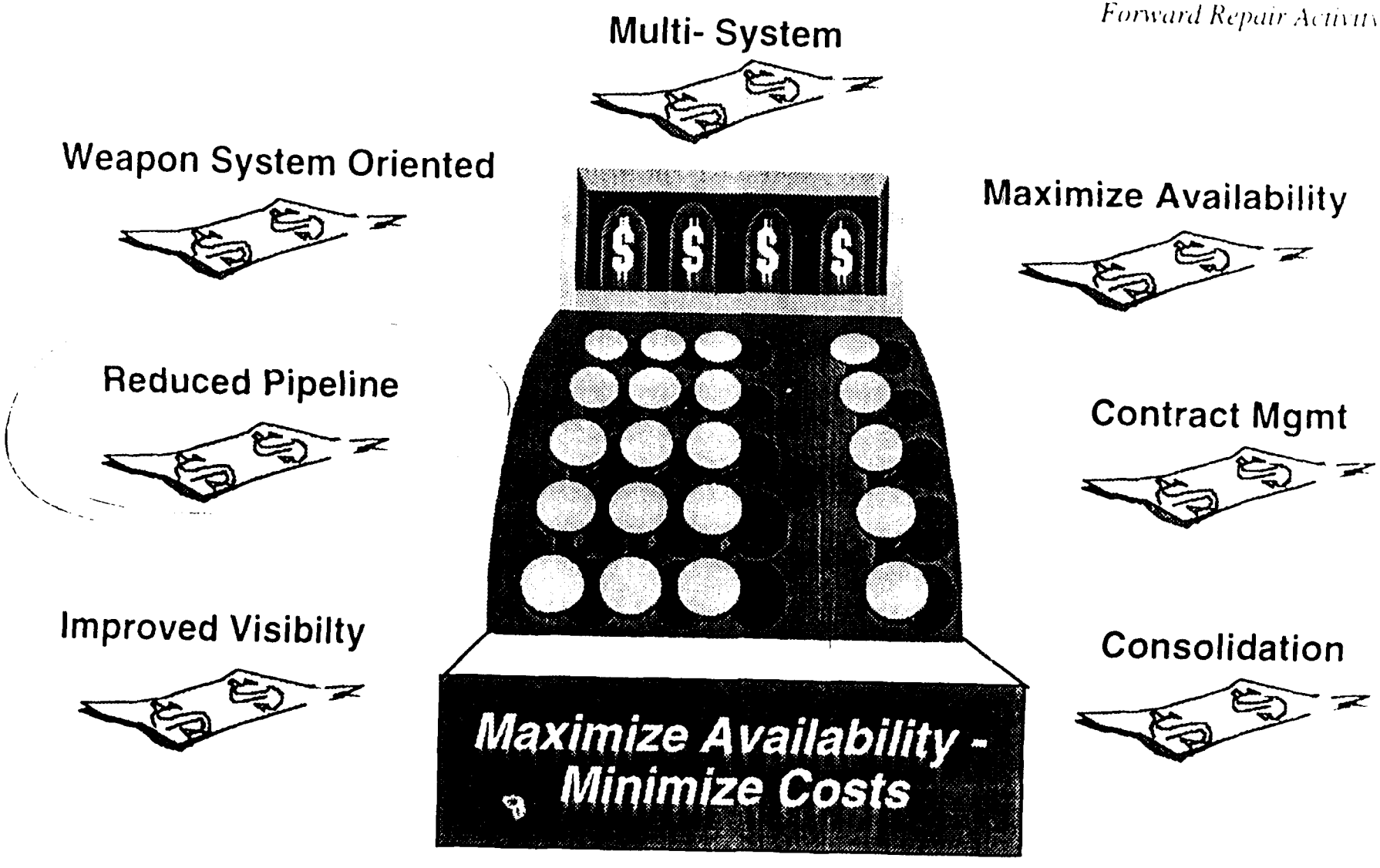
Establish Initial Operational Capability

Expand Initial Operational Capability to Other Sites

Extend to Mutiple Wpn Sys/Equip

Value Added....

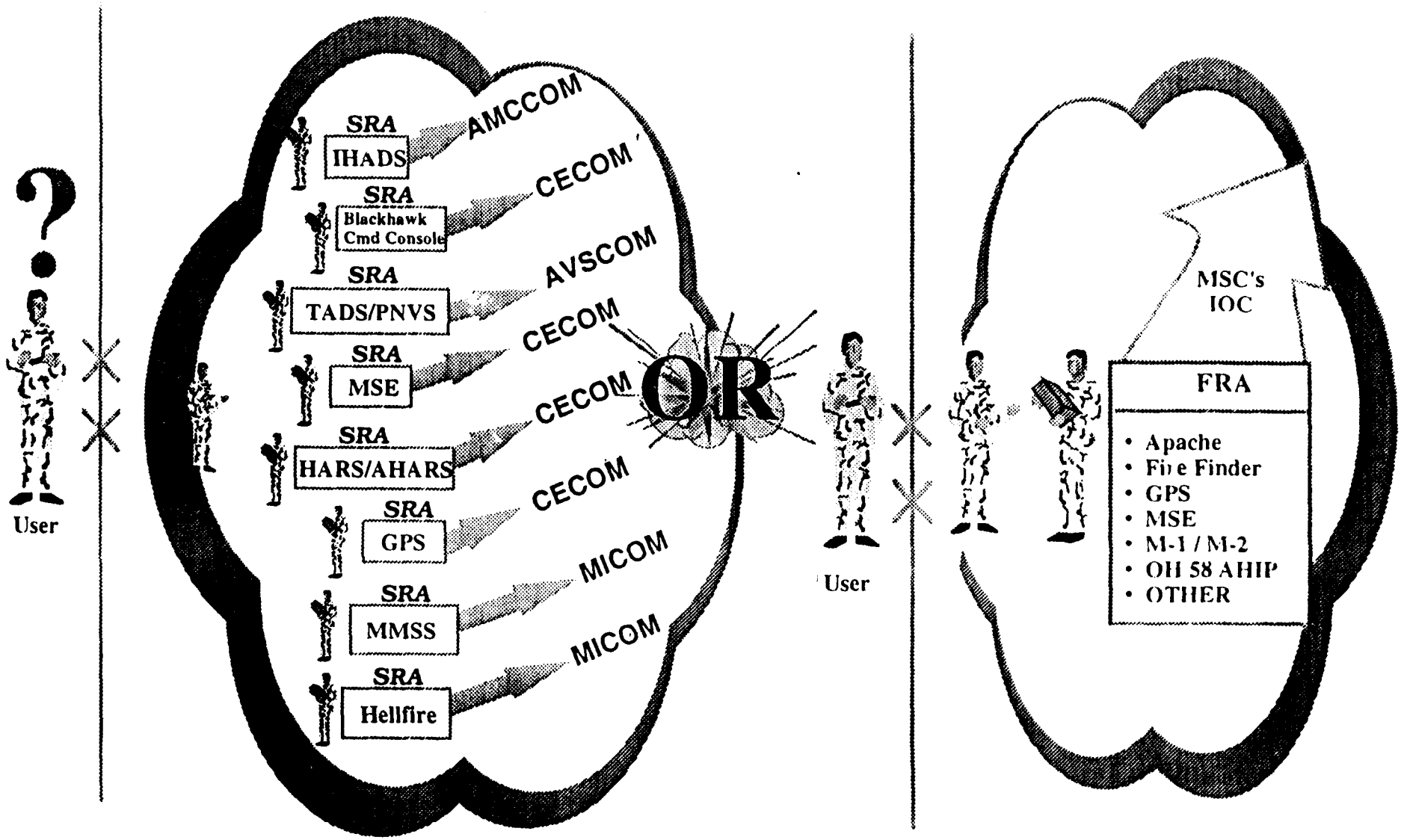
Forward Repair Activity



Choice . . .

Current Commodity /Components Orientation

Future Wepaon System Orientation



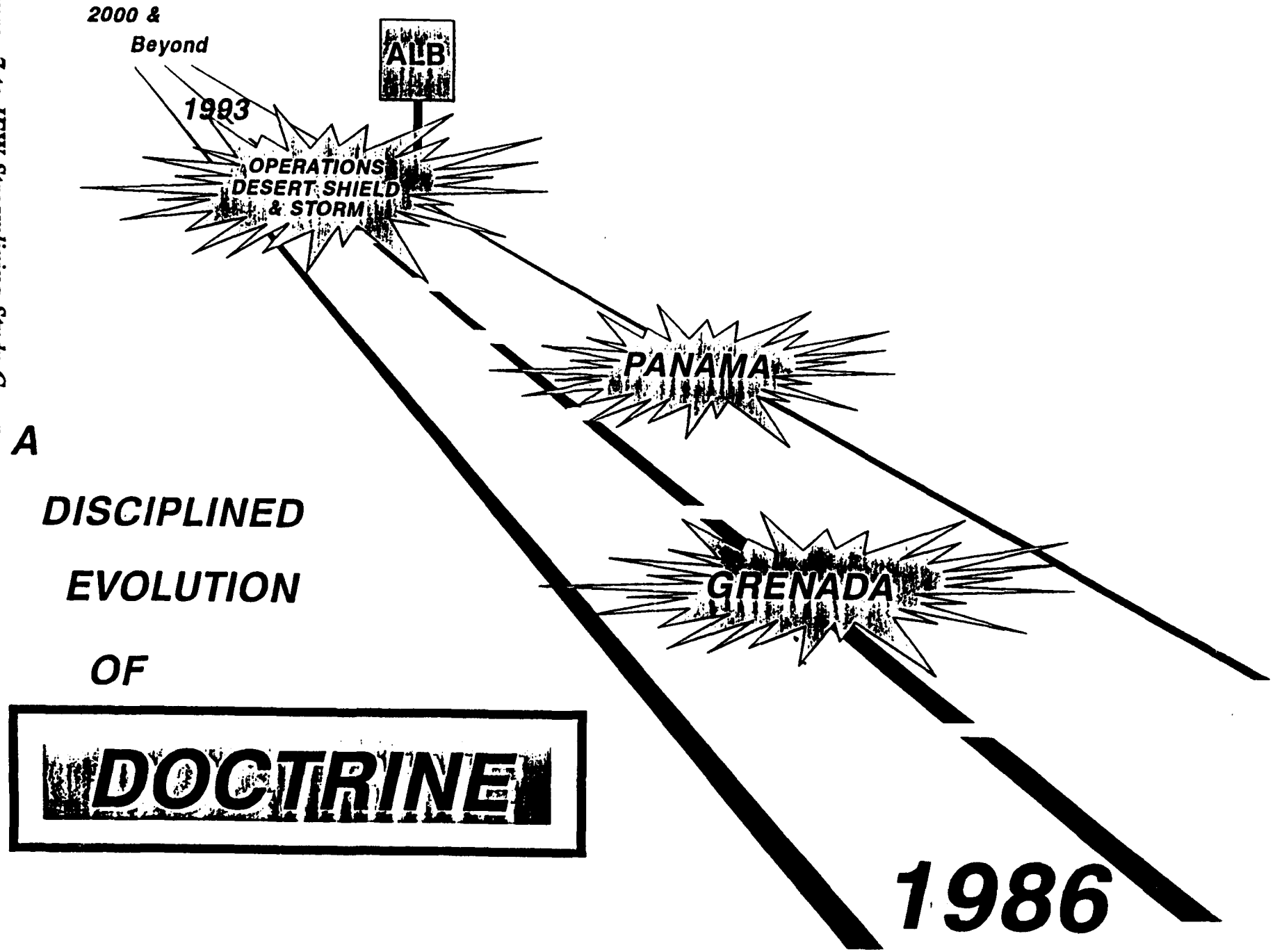
FRA . . .

Forward Repair Activity

- **OSD Reinforced Need**
- **Hi Tech/Op Tempo Driven**
- **Weapon System Orientation**
- **Responsive to Combat Commander**
- **Maximize Availability**

.....Bottom Line

Enclosure 7 to IEW Streamlining Study Group
IPR Minutes, 23-24 June 92

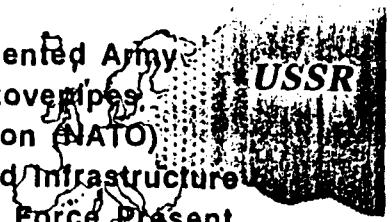


A DISCIPLINED EVOLUTION OF DOCTRINE

FROM Forward Deployed TO Force Projection

FROM

- Threat Oriented Army
- Service Stovepipes
- Set Coalition (NATO)
- Established Infrastructure
- Deterence Force Present
- Established Cmd & Control



TO

- Capability Based Army
- CINC Organizes Theater Force
- No Set Coalition
- Potential for No Infrastructure
- Must Project Deterence Force
- Evolving Cmd & Control

FROM

USAREUR | FORSCOM | KOREA

- Built to End State Needs
- Characterized by Treaties
- Force Generation-Low Risk Early

SOFAs STANAGs MOUs

TO

Army Pool of Capabilities

- Build Force from a Pool
- May Have No Prior Agreements
- Force Generation-High Risk Early

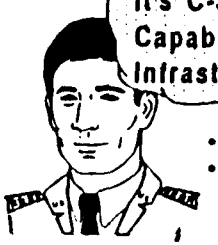
Required Force → Theater of Operation

FROM

"I Know: Force Size, Equipment Doctrine, Terrain, etc."

- Less Ambiguous Intell
- Soldiers Know the AO

TO



"It's C-30, Need Threat Size, Capabilities, Terrain Analysis, Infrastructure, etc."

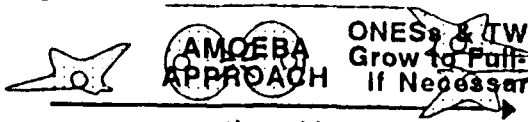
- More Ambiguous Intell
- Most Soldiers Do Not Know the AO

Logistic Considerations in a Force Projection Army

Log Now → Log Future

Total CSS Force Will Shrink...
Build Req'd CSS from Pools

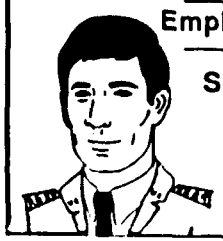
Theater Logistics
- Based on Deployment Capacity
- Not Solely a National Mission



time (t)

Employ FMS - Training Teams

Single Log Commander



Theater of Operation

Req'd Log Force

METT-T drives the "Below-the Line" Force to ensure there is a Logistics Force Pool

No Prior Agreements →

RELOOK:
- LOGPAC
- SPT TECHNIQUES
- CONSUMPTION FACTORS
- EMPLOYMENT OF CIVILIANS

Log Force Competes for Early Lift

Greater Unknowns Require Logistics to be:

VERSATILE
FLEXIBLE
EXPANSIBLE

- LINKED TO ALL LEVELS
- ANTICIPATORY
- SPT OPERATIONAL CONTINUUM
- EMPLOY CIVILIANS
- ASSURED COMMO
- POSITION SYSTEMS
- LOG DATABASES

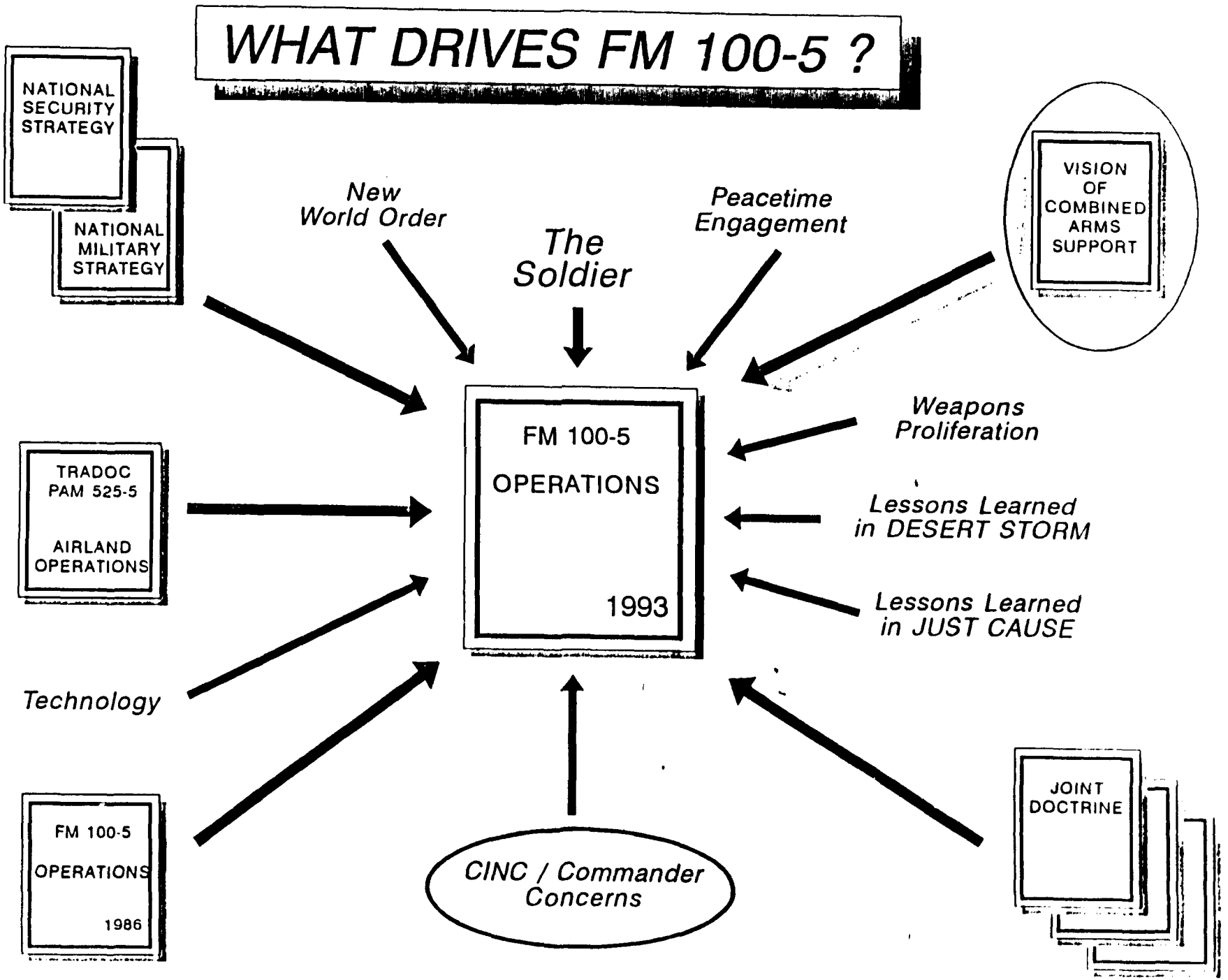

WHAT DRIVES FM 100-5 ?
NATIONAL SECURITY STRATEGY
NATIONAL MILITARY STRATEGY
New World Order
The Soldier
Peacetime Engagement
VISION OF COMBINED ARMS SUPPORT
TRADOC PAM 525-5
AIRLAND OPERATIONS
FM 100-5
OPERATIONS
1993
Weapons Proliferation
Lessons Learned in DESERT STORM
Lessons Learned in JUST CAUSE
Technology
FM 100-5
OPERATIONS
1986
CINC / Commander Concerns
JOINT DOCTRINE

CHART 4

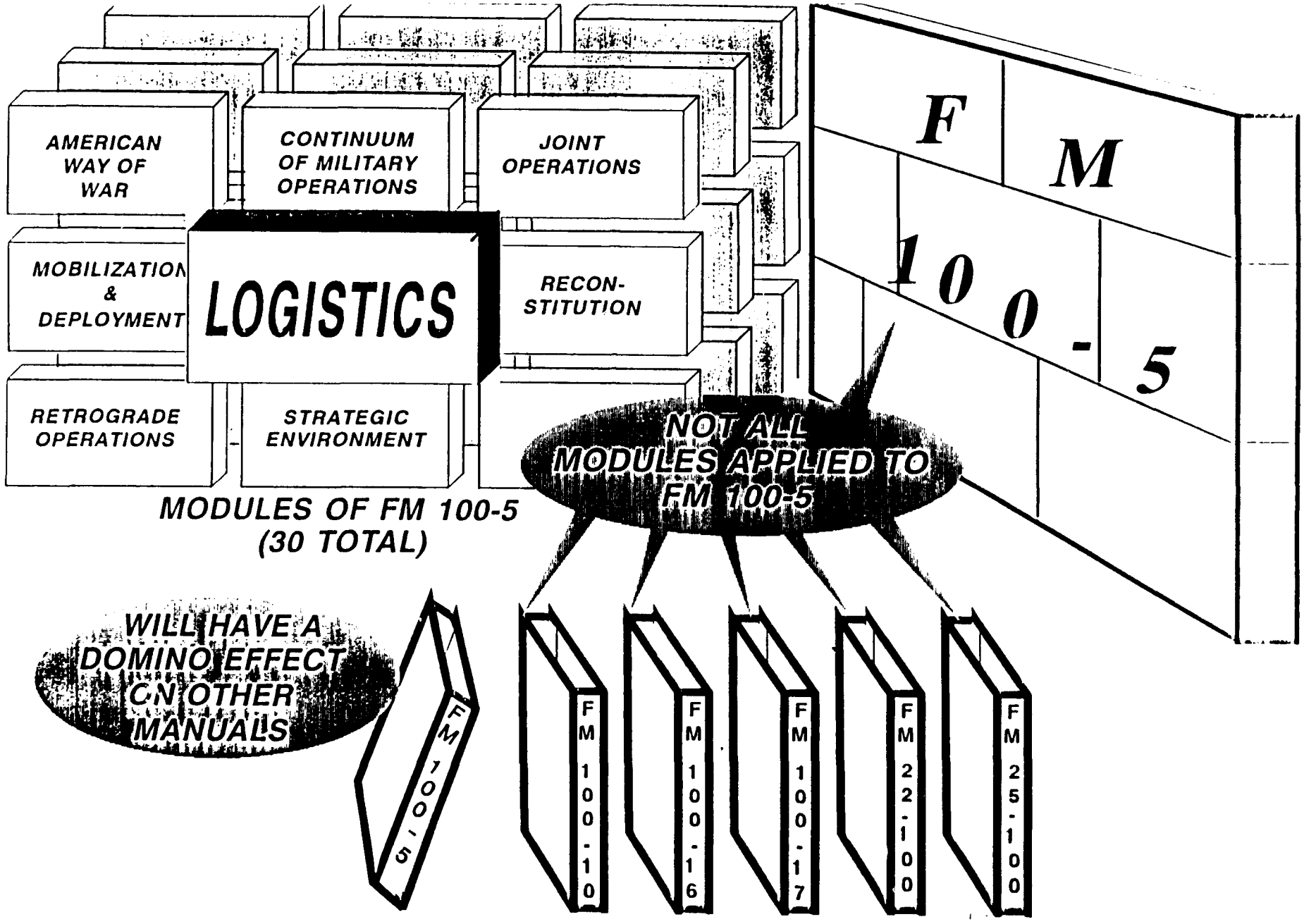

AMERICAN WAY OF WAR
CONTINUUM OF MILITARY OPERATIONS
JOINT OPERATIONS
MOBILIZATION & DEPLOYMENT
LOGISTICS
RECON-STITUTION
RETROGRADE OPERATIONS
STRATEGIC ENVIRONMENT
F M 100-5
MODULES OF FM 100-5 (30 TOTAL)
NOT ALL MODULES APPLIED TO FM 100-5
WILL HAVE A DOMINO EFFECT ON OTHER MANUALS
FM 100-5
FM 100-10
FM 100-16
FM 100-17
FM 22-100
FM 25-100

CHART 5

THE FM 100-5 MODULE PROCESS
The Road to the First Draft

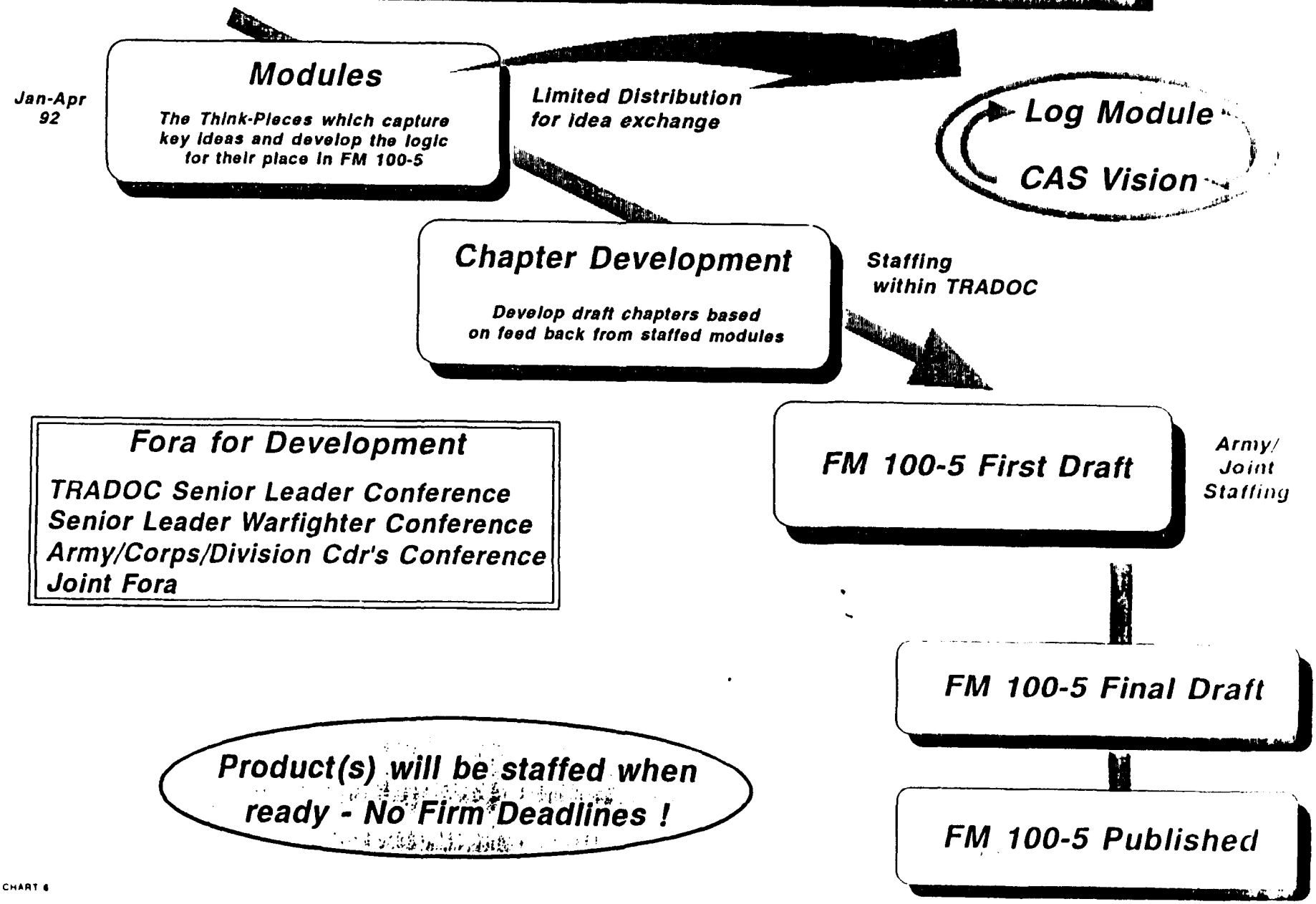
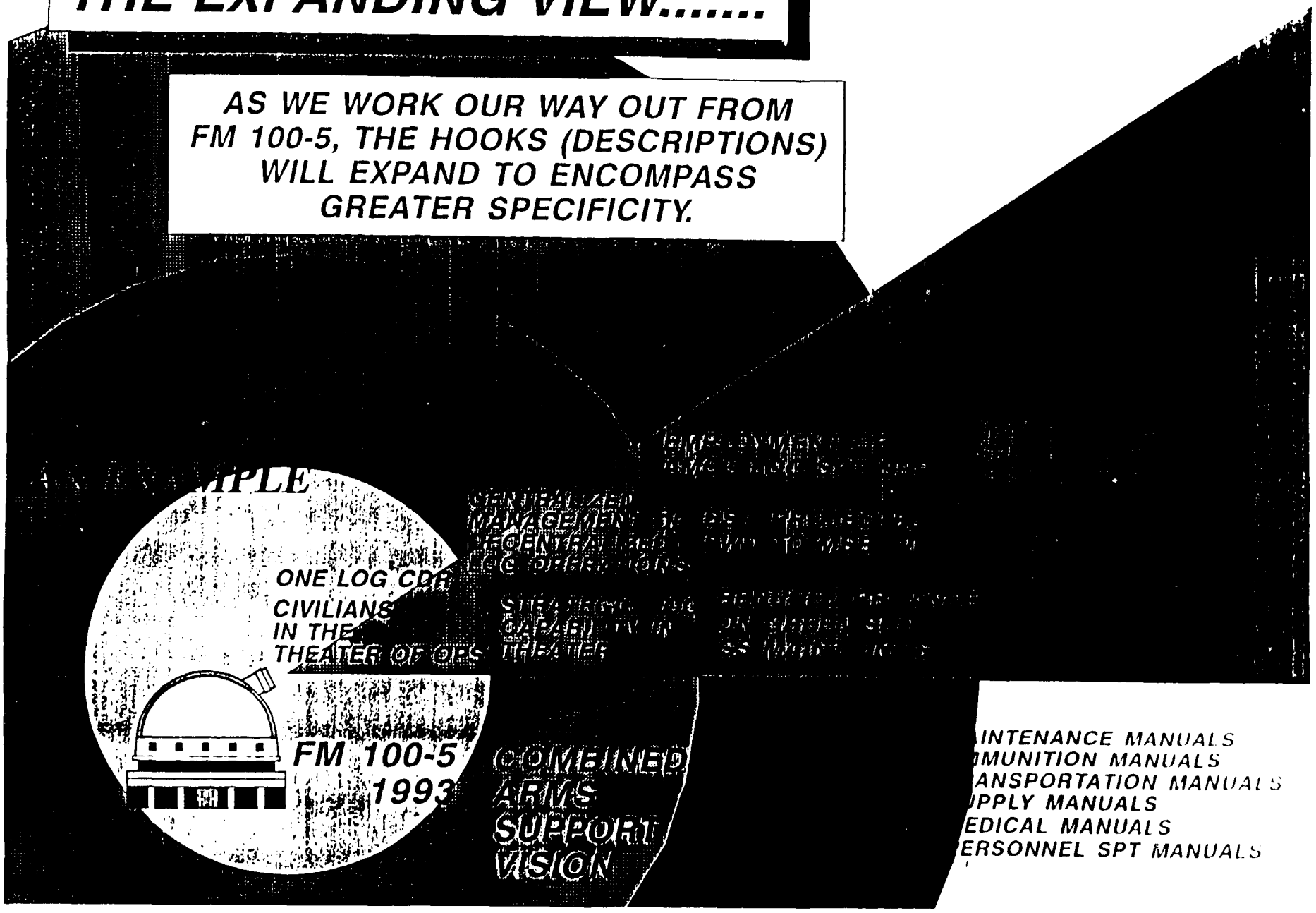


CHART 6

THE EXPANDING VIEW.....

AS WE WORK OUR WAY OUT FROM FM 100-5, THE HOOKS (DESCRIPTIONS) WILL EXPAND TO ENCOMPASS GREATER SPECIFICITY.



FUNCTIONS REALIGNMENT BETWEEN U.S. ARMY SIGNAL CORPS AND U.S. ARMY ORDNANCE CORPS

SIGNAL: Remain proponent and retain combat development responsibility for MOSs designated as DS/GS maintainer for telecommunications equipment. Integrated Logistics Support (ILS) documents, minus documents for Signal unique equipment, will be sent to ORDMMCS for concurrence.

ORDMMCS: Primary Logistics Oriented School (PLOS) proponent for all communication systems/equipment not unique to Signal. Become hardware/software proponent for special test equipment and sets, kits, and outfits (SKOs) required to perform electronics maintenance functions.

Executive Summary

CMF 27
(Land Combat and Air Defense System Direct and General Support Maintenance)

+

CMF 29
(Signal Maintenance)
(NON SIGNAL UNIQUE)

=

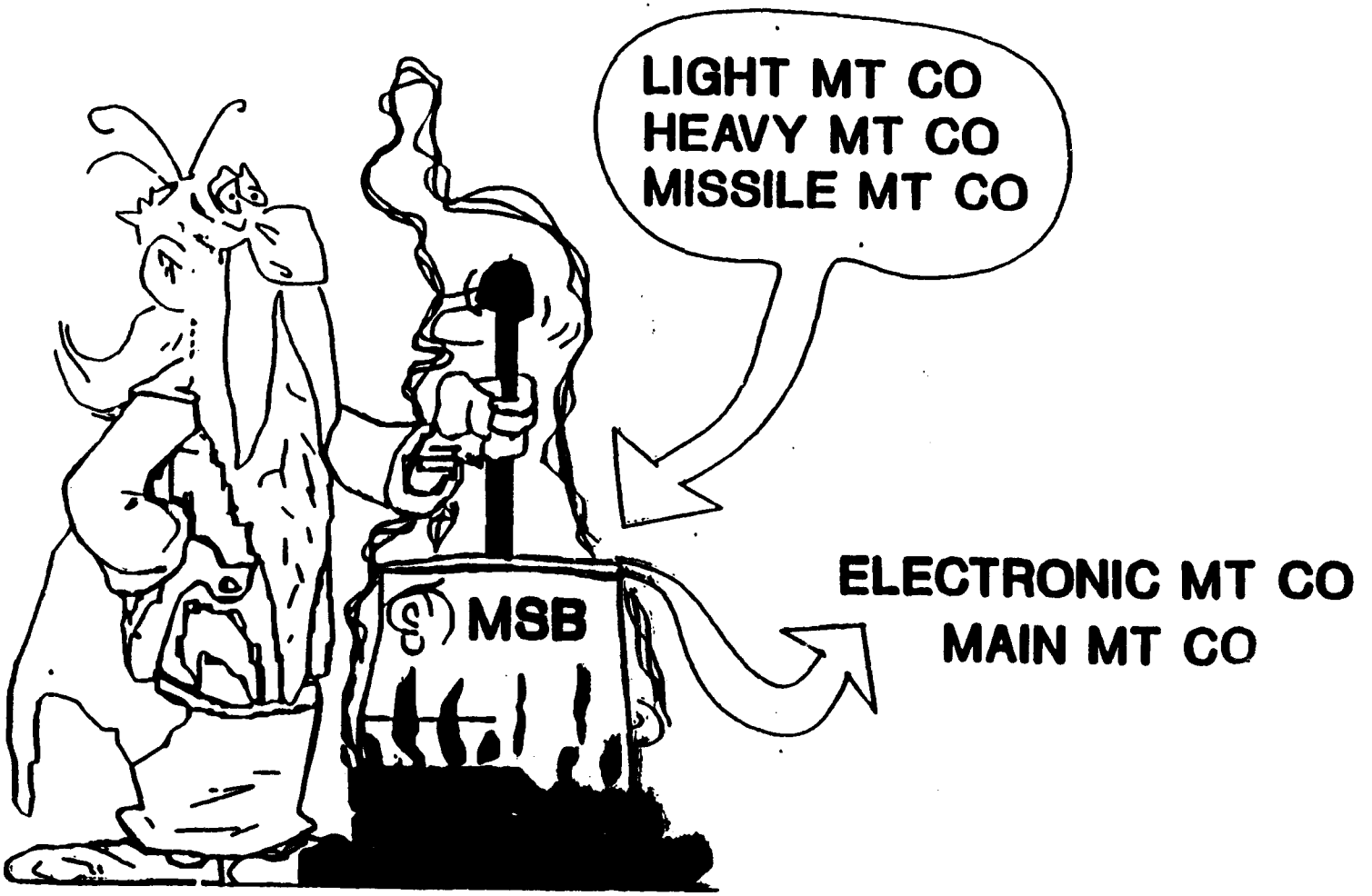
CMF 35
(ELECTRONICS MAINTENANCE)

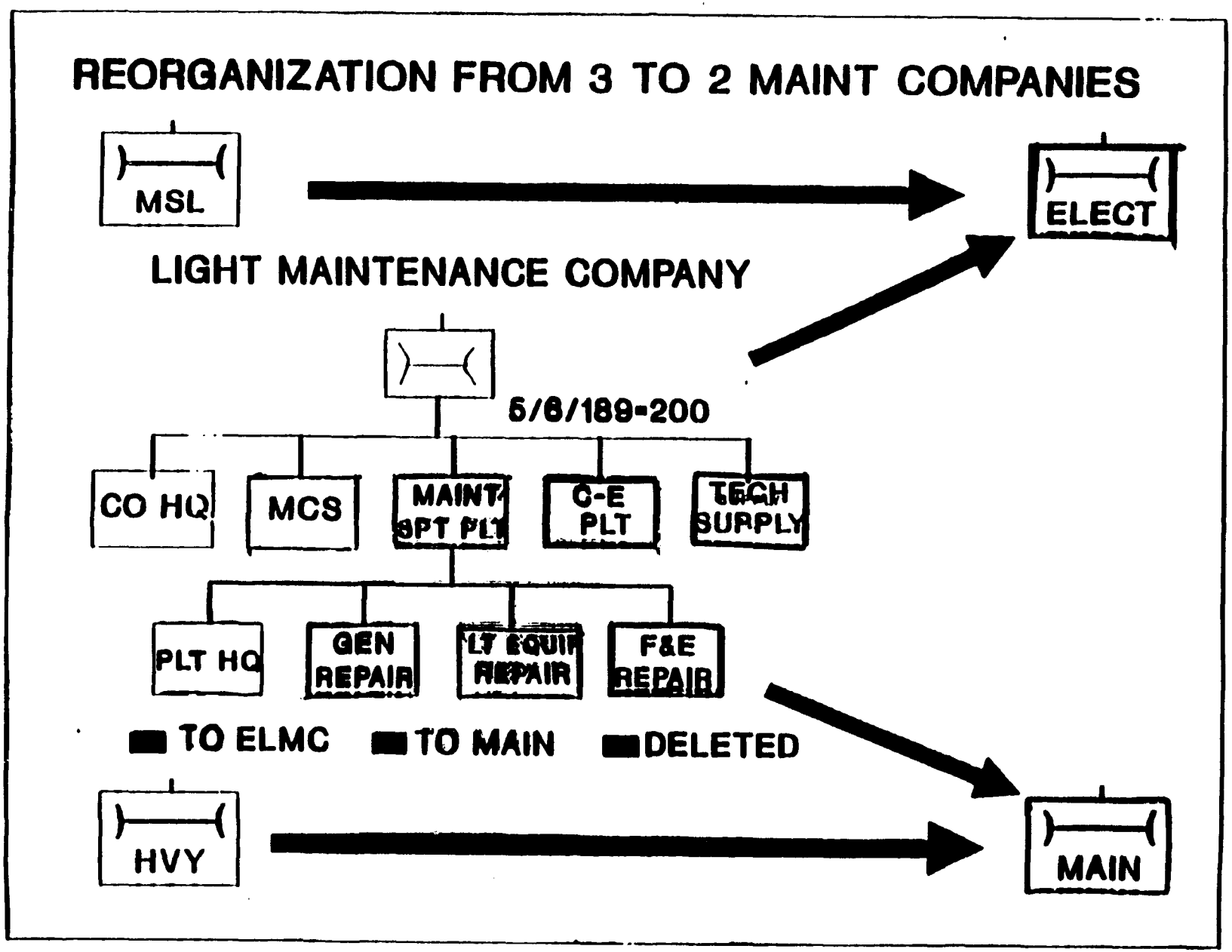
CMF 29
(Signal Maintenance)
(SIGNAL UNIQUE)
(Operator/Maintainer)

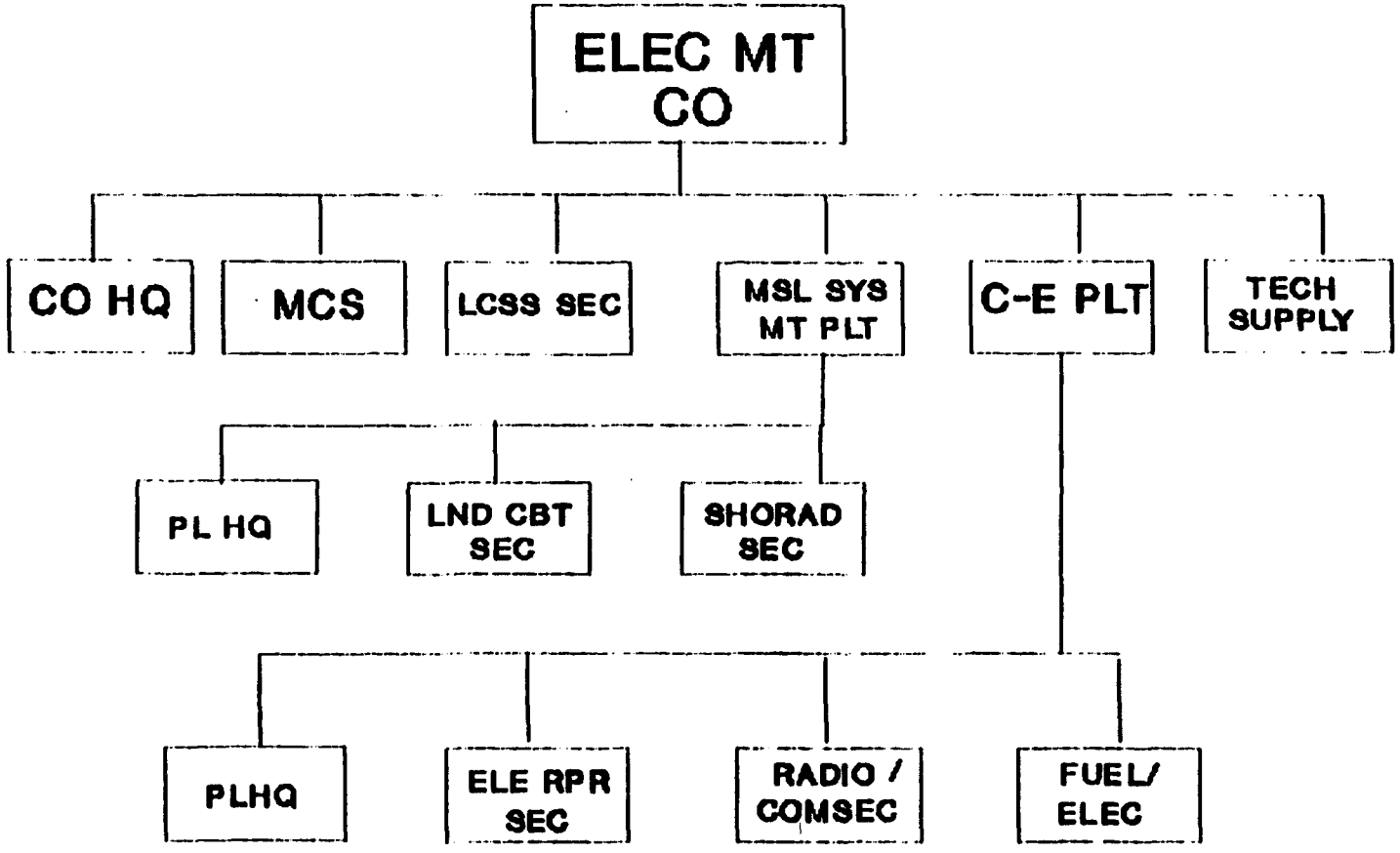
29 V
29 Y
39 G

→ CMF 31
→ CMF 74

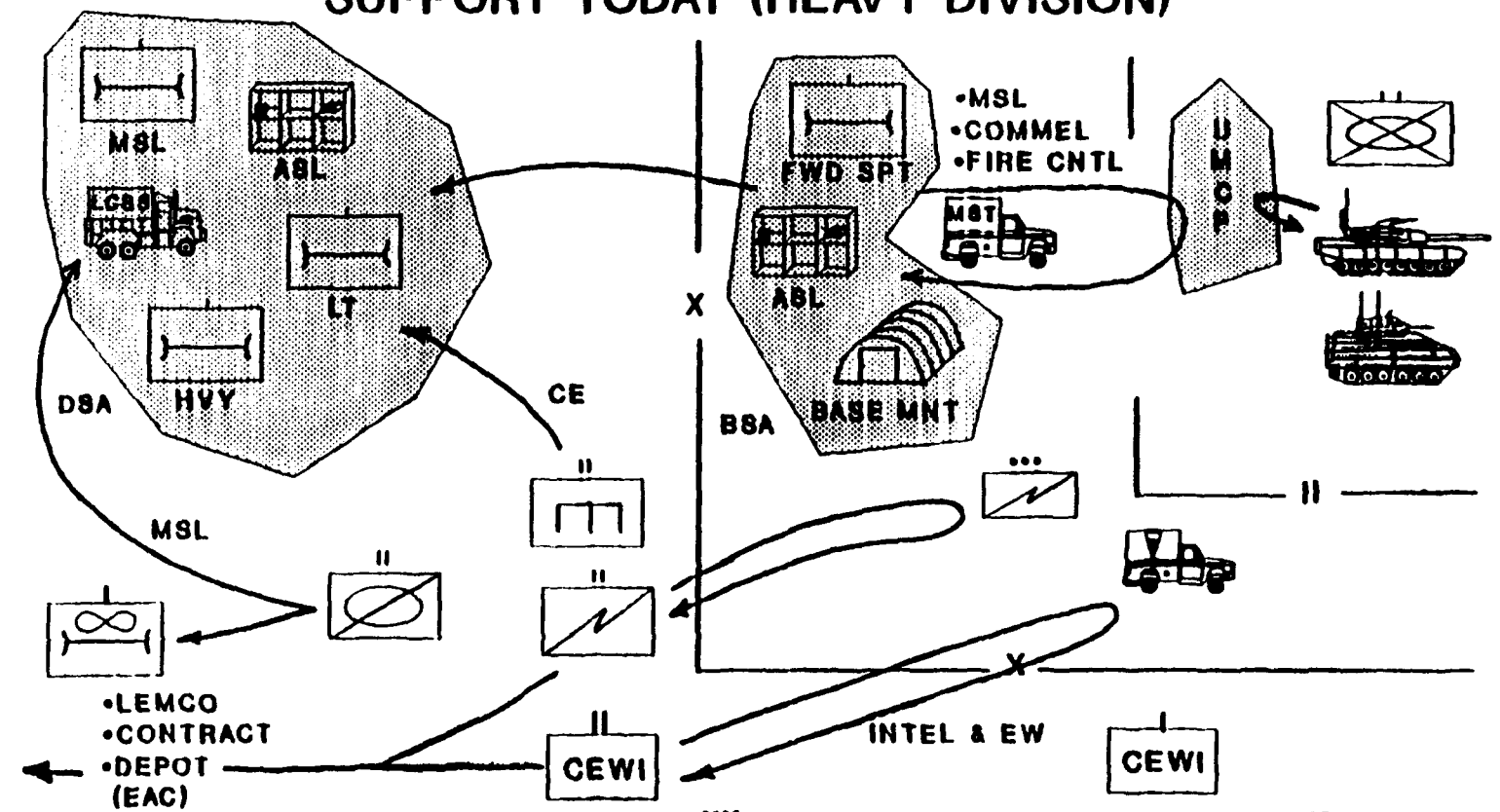
5.


LIGHT MT CO
HEAVY MT CO
MISSILE MT CO
MSB
ELECTRONIC MT CO
MAIN MT CO


REORGANIZATION FROM 3 TO 2 MAINT COMPANIES
MSL
ELECT
LIGHT MAINTENANCE COMPANY
5/6/189-200
CO HQ
MCS
MAINT SPT PLT
C-E PLT
TECH SUPPLY
PLT HQ
GEN REPAIR
LT EQUIP REPAIR
F&E REPAIR
TO ELMC
TO MAIN
DELETED
HVY
MAIN

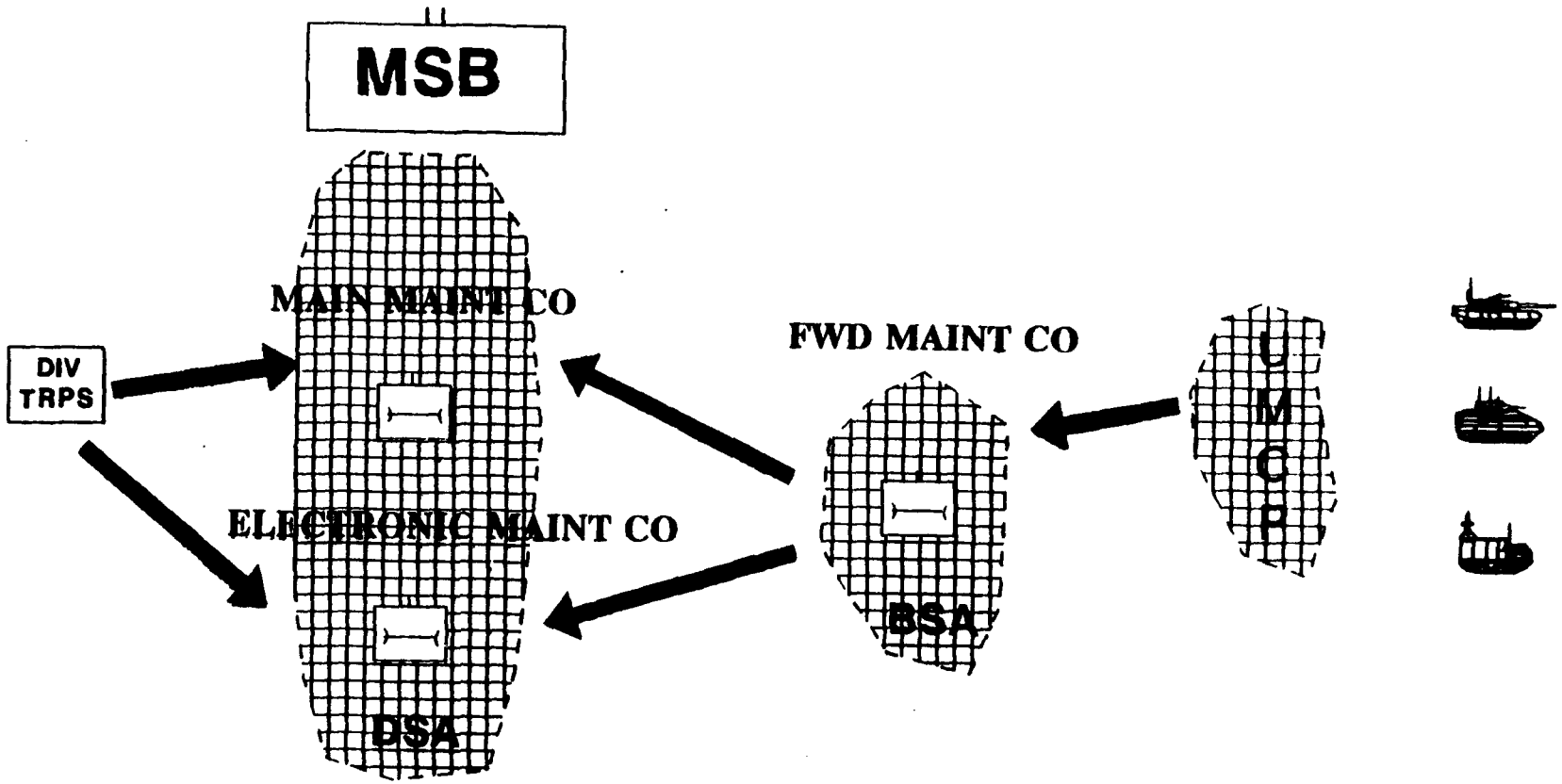

ELEC MT CO
CO HQ
MCS
LCSS SEC
MSL SYS MT PLT
C-E PLT
TECH SUPPLY
PL HQ
LND CBT SEC
SHORAD SEC
PLHQ
ELE RPR SEC
RADIO / COMSEC
FUEL/ ELEC

SUPPORT TODAY (HEAVY DIVISION)



FUNCTIONS	DS MAINT REAR:	DS MAINT FWD:	UNIT MAINT:
	• REPAIR LRU (BDE UNITS) • REPAIR SYSTEM (DIV UNITS) • R/R SRU • PROVIDE CL IX & RX	• REPAIR SYSTEM • R/R LRU • ALIGN/ADJUST • REPAIR LRU - COMMEL - FIRE CONTROL • PROVIDE CL IX	• REPAIR SYSTEM • R/R LRU • MINOR ALIGN/ADJUST

DIV BASED MAINTENANCE CONCEPT



* LESS SIG/IEW/AVIATION MAINT SPT

HEAVY DIVISION BASE MAINTENANCE
(The Electronics Maintenance Company)

A CONCEPT
FOR
MAINTENANCE SUPPORT TO THE HEAVY DIVISION
OF THE 1990s AND BEYOND

TRADOC PAM 525-XX
24 APRIL 1992

Enclosure 8 to IEW Streamlining Study Group
IPR Minutes, 23-24 June 92

DEPARTMENT OF THE ARMY
HEADQUARTERS
UNITED STATES ARMY COMBINED ARMS SUPPORT COMMAND
Fort Lee, Virginia 23801-6000

FOREWORD

24 APR 1992

HEAVY DIVISION BASE MAINTENANCE
(The Electronics Maintenance Company)
A Concept for the evolution of maintenance support to the Heavy Division as we move toward the year 2000.

This is one of a series of CASCOM pamphlets used to disseminate concepts.

Concepts describe how future operations are to be conducted by the various levels of command during war, conflict, and peacetime competition. Doctrine writers, combat developers, and trainers use them to develop their various programs.

This pamphlet sets forth maintenance operations in the heavy division. It was originally developed by the Ordnance Missile and Munitions Center and School under the title "Electronics Maintenance Company." The concept serves as the bridge between where the Army is now and the future.

It is not an umbrella concept for electronics maintenance because it does not include provisions for maintenance of signal/CEWI peculiar equipment found in Signal and Military Intelligence Battalions, which remains a goal for the future; nor does it address electronics maintenance in the corps or theater Army areas.

The concept reorganizes the Main Support Battalion's maintenance companies from the Missile, Heavy, and Light Maintenance Companies into a Maintenance Company (MAIN) and an Electronics Maintenance Company (ELMC) within the Main Support Battalion of the DISCOM of a Heavy Division.

SAMUEL N. WAKEFIELD
Lieutenant General
Commanding

CONTENTS

When used in this publication, "he," "him," and "his" represent both the masculine and feminine genders unless otherwise stated.

OPERATIONAL CONCEPT FOR HEAVY DIVISION BASE MAINTENANCE (ELECTRONICS MAINTENANCE COMPANY)

TRADOC Pamphlet 525-XX 24 April 1992

1. PURPOSE. To provide the operational concept for reorganizing the main support battalion's maintenance companies from the missile, heavy, and light maintenance companies into the electronics maintenance company (ELMC) and the main maintenance company, main support battalion (MSB) within the division support command (DISCOM) of a Heavy Division.

2. GENERAL.

a. Need. The concept is needed to provide the transition pathway toward effective support for the Army's future and to help resolve problems with our current maintenance structure as described below.

(1) Inefficiency and no unity of support. In a heavy division, electronics maintenance actions take place in nine units: forward support battalion (FSB) (3); heavy, light, and missile maintenance companies; and the signal, aviation support, and communications, electronic warfare, intelligence (CEWI) battalions. Repair parts, tools, test equipment, and repair MOSs proliferate, redundancies can exist in some support areas while others fall woefully short of requirements. By its nature this structure is inefficient, as each type of equipment must "wait its turn" in its own maintenance queue.

(2) Transition to the future. No clear transition pathway exists which moves the Army from present FM 100-5 driven doctrine of providing support to the weapon to future requirements of providing support to the force.

b. Threat. The heavy division DISCOM, both personnel and equipment, is vulnerable to the entire spectrum of threat weaponry and forces to include: armor; artillery; mines; small arms fire; grenades; missiles & mortars; nuclear, biological, and chemical munitions; electromagnetic pulse effects; directed energy weapons, i.e., lasers and radio frequency weapons; special purpose, reconnaissance, airborne, air assault, penetrating enemy.

and tactical air force terrorists; agents; insurgents; and signal and imagery intelligence. The likelihood of encountering these threats will vary depending on the DISCOM's proximity to other targets; the level of conflict; and the region of the world in which the division is deployed.

(1) In low-intensity conflicts, the DISCOM could be targeted by insurgents, saboteurs, guerrillas, and terrorists in possession of sophisticated weaponry purchased on the international market or provided by sponsoring nations or by criminal elements with weapons and private armies funded with the proceeds from drug sales. This type of conflict would most likely take place in Latin America. A low-intensity conflict could easily escalate to a higher level of intensity due to the increasing proliferation of sophisticated weaponry available to threat forces.

(2) The most likely region for a mid-intensity conflict would be in the Middle East and Southwest Asia region. Many countries in this region have sophisticated weaponry, both Western and Soviet, and sizable armed forces, e.g., Iraq, Iran. Some are developing and exporting their own weapons, to include chemical warfare equipment and ballistic missiles. Weaponry in these countries it growing in quality and quantity, and an cassation to a high-intensity conflict is possible.

(3) A high-intensity conflict would, undoubtedly, be the most lethal of possible conflicts. Because of the recent changes in Europe, this scenario is unlikely at the present time. However, we must be prepared for such a conflict because of the potential] for escalation of a mid-intensity conflict.

c. Environment. We are relying to an ever greater extent on high technology to make us more effective in battle. Relying on technology in this way, however, has caused an unprecedented increase in complicated "things electronic" which require repair, especially in our main fighting force, the division. Combat effectiveness of future divisions will to a greater extent be inexorably tied to effective operation of its electronic systems. Thus, maintenance of electronics in future divisions, both

from item criticality and from overall workload aspects, will place ever increasing demands on the ability of the division to provide responsive, effective maintenance support. Under present support concepts, the division will not be able to cope with these increasing demands unless additional personnel are provided or the division restructures its support concepts and units so that they are more effective and efficient.

d. This concept supports AirLand Battle by integrating maintenance resources and efforts.

e. This concept does not affect current proponencies and training requirements. However, evolving MOS consolidations and proponency changes may affect this concept in the future.

f. This operational concept does not depend upon fielding of the integrated family of test equipment (IFTE) however, use of the IFTE will streamline maintenance operations and allow future MOS consolidations.

3. This concept is applicable to heavy divisions.

4. THE OPERATIONAL CONCEPT. The operational description will be in four parts. Part 1 outlines the goals and the physical reorganization of the MSB. Part 2 describes maintenance in the brigades. This brigade maintenance does not change because of the implementation of this concept. The description of brigade maintenance is provided for information and to facilitate understanding of the total maintenance system when the concept is implemented. Part 3 describes the operation of the ELMC in the DISCOM. Part 4 describes the operation of the main maintenance company.

a. The goal is to streamline maintenance in the heavy division DISCOM. To work toward this goal, the MSB of the DISCOM will be reorganized. The missile maintenance company will receive the electronics repair platoon, fuel and electrical section, and class IX platoons from the light maintenance company and become the ELMC. The heavy maintenance company will receive all other maintenance resources from the light maintenance company which dealt directly with "maintenance customers" and become the MSB's

main maintenance company. The light maintenance company will be deactivated (Figure 1). The two remaining maintenance units in the MSB would be organized as shown in Figures 2, 3 and 4. Figure 5 depicts divisional maintenance using the new structure.

b. Maintenance in the Brigade.

(1) System operators using built in test/built in test equipment (BIT/BITE and unit maintainers using BIT/BITE and appropriate test measurement and diagnostic (TMDE) identify faulty line replaceable units (LRUs) on the weapon and replace these with serviceable LRUs from the unit's prescribed load list (PLL). When the operator or unit maintainer cannot repair the system, a maintenance support team (MST) from the maintenance company, forward support battalion (FORWARD), operating at the Unit Maintenance Collection Point (UMCP) uses the appropriate TMDE to further attempt to isolate the faulty LRUs. If the MST's attempts fail, the weapon is evacuated to the brigade's maintenance collection point (MCP) operated in the brigade support area by the FORWARD. There, further attempts are made to repair the end item. If all attempts to repair the system at the MCP are unsuccessful, the maintenance control officer in the FORWARD decides whether to evacuate the system or use the system as a source of supply. He bases this decision upon evacuation and cannibalization criteria established by the DMMC. Repaired end items are returned to the user.

(2) Faulty LRUs, once identified, are removed and replaced with operational LRUs maintained in the unit PLL. LRUs not carried or available in the unit PLL are obtained through the forward support battalion.

(3) Defective LRUs removed from weapon systems in the brigade are evacuated to the FORWARD. There a screening is conducted to quickly identify LRUs which should or must be repaired by the FORWARD, depending on mission, enemy, time, terrain, and troops (METT-T). LRUs not repaired by the FORWARD are evacuated to the ELMC for repair. Here, the evacuation channel for LRUs can be envisioned as a pipeline from the UMCPs directly back to the ELMC, with the FORWARD determining how much and what

flows back, based upon the brigade's needs and the FORWARDs capabilities.

(4) The FORWARD uses the appropriate TMDE to screen, identify problems in, and attempt repair of the faulty LRUs accepted for repair. Normally, repairs are effected by the TMDE operator finding and replacing the faulty shop replaceable units (SRUs) with serviceable ones from the FORWARD's ASL. Repaired LRUs are returned to serviceable repairable exchange (RX) stocks or the owning unit. LRUs which cannot be repaired at this level are evacuated to the ELMC for further disposition. The FORWARD maintains a limited stockage of shop replaceable units (SRUs) based upon storage capacity and anticipated future demand.

c. The Electronics Maintenance Company. (Fig 3)

(1) Mission. Provide DS electronics test and diagnostic maintenance to divisional elements, to include DS base maintenance and MSTs for land combat missile systems, divisional air defense systems, target acquisition and surveillance radar, and class IX technical supply for supported units.

(2) Assignment. Organic to the Main Support Battalion (MSB) TOE 63135L000, Heavy Division.

(3) Capabilities.

(a) Provides electronics test and diagnostics down to the SRU level, to include SRU screening, for divisional units (less signal, CEWI, and aviation battalions).

(b) Provides base maintenance for all air defense systems, target acquisition and surveillance radars, land combat systems, manportable common thermal night sights (MCTNS), communications electronics, radio, and fuel and electric devices.

(c) Within capabilities, provides MSTs for: divisional Air Defense Artillery Systems, Multiple Launch Rocket System (MLRS), Target Acquisition Radar, and the signal and missile systems in the divisional cavalry.

(d) Maintains and operates a technical supply section, consisting of approximately 9,000 lines of class IX supplies, to include a reparable exchange (RX) service for missile, electronic, and conventional LRUs.

(e) Provides QA/QC inspection of all maintenance performed.

(f) Provides technical assistance to using units, as required.

(g) Provides annual maintenance manhours (AMMH) of support.

(h) Individuals can participate in the coordinated defense of the units area or installation.

(i) This unit is capable of performing organizational level maintenance on its organic equipment.

(j) Maintenance support teams and some base maintenance capabilities can be detached from the ELMC and deployed with the units they habitually support when the units are detached or deployed as part of a task force. MSTs are capable of carrying only limited repair parts.

(k) Within capabilities, the ELMC will provide area support for units attached to, passing through, or in direct support of the division.

(l) Maintenance of signal/CEWI battalion peculiar equipment. At the current time, signal and CEWI battalions will retain their organic DS maintenance capability. However, if the IFTE is adopted as the Army's standard automatic test equipment, it is probable that the ELMC will repair LRUs for these units.

d. The Main Maintenance Company. (Fig 4 & 5)

(1) Mission. Provide DS maintenance, commensurate with stated capabilities, to division units not supported by the maintenance companies of the forward support battalions. Provides reinforcing DS maintenance for the maintenance companies of the forward support battalions.

(2) Assignment. Organic to the Main Support Battalion, Heavy Division, TOE 631351000.

(3) Capabilities.

(a) Annual Maintenance Manhours, (AMMH) of productive direct support maintenance

(b) Technical assistance to units in the division rear area.

(c) Backup recovery capability to support units.

(d) Common repair parts supply support to organic maintenance platoons and sections only.

(e) Limited backup maintenance support less repair parts to the maintenance companies of the Forward support Battalion (FSB).

(f) Pending approval of the Division Aviation Support Battalion (DASB), Cavalry Systems Support Teams (CSST) provide on-site combat system oriented DS maintenance support to the Division Cavalry Squadron. Upon approval of the DASB, CSSTs will be deleted from the TOE of the Main Support Company and added to the TOE of the DASB.

(g) Unit maintenance on construction equipment organic to the supply & service company of the MSB.

(h) On-site DS maintenance support for automotive and power generation equipment consistent with tactical limitations and support capabilities.

(i) Individuals of this organization can assist in the coordinated defense of the unit's area or installation.

(j) This unit performs unit maintenance on all organic equipment.

APPENDIX A

IFTE DEFINED

This operational concept does not depend upon fielding of the Integrated Family of Test Equipment (IFTE). However, use of the IFTE will streamline maintenance operations and allow future MOS consolidations. The IFTE system is comprised of the following systems:

a. The Contact Test Set (CTS). The CTS gives the "on system" maintainer (be he the operator, or at organizational, or direct support level) the capability to augment system BIT/BITE and determine faulty LRUs on the system. Also, electronic technical manuals and expert system diagnostics capabilities are planned.

b. The Base Shop Test Facility (BSTF). The BSTF provides direct support maintenance units a full capability to troubleshoot and repair faulty electronic LRUs.

APPENDIX B

IMPACT ASSESSMENT

1. Units.

a. This concept will directly impact units with the following table of organization and equipment (TOE)

HEAVY DIVISION

63136L000	HHD, Main Support battalion
43007L000	Light Maintenance Company, MSB
43008L000	Heavy Maintenance Company, MSB
09008L100	Missile System Support Company, MSB, HVY DIV
09008L200	Missile System Support Company, MSB, HVY/LT DIV

INFANTRY DIVISION (NATIONAL GUARD)

63135L000	HHD, Main Support Battalion
43037L000	Light maintenance Company, MSB
43038L000	Heavy Maintenance Company, MSB
09007L000	Missile System Support Company, MSB

b. This concept also indirectly affects maintenance and supply operations in the signal and CEWI battalions for equipment which is supported by the BSTF of the IFTE, since repairs to faulty LRUs from these battalions are accomplished by the ELMC.

2. Other impacts.

a. By integrating the division's primary maintenance

resources, this concept gives the division more capability to satisfy the increasing demands of electronics repair without resorting to personnel strength increases. The structure is more efficient in its application of people, test equipment, and repair parts toward solving the division's most pressing maintenance problems.

GLOSSARY

1. ASL - Authorized Stockage List The stocks of repair parts which permit the division's support units to effect repairs on the equipment they support. ASL also carries replenishment stocks for unit PLLs.

2. BSA - Brigade Support Area. That area in the brigade trains where the majority of retail support functions occur. Commonly operated by the forward support battalion, in coordination with the brigade S-4.

3. BSTF - Base Shop Test Facility. The "bench shop" of electronics repair. This system will provide the division all the capability it needs to perform off equipment repair to all LRUs which can be repaired in the division.

4. CTS - Contact Test Set. A test set which plugs into the inoperable weapon or system (i.e., right into the Bradley or tank test connectors) and shipments the weapon's own built in test/built in test equipment (BIT/BITE) to help determine the cause of system faults.

5. DSA - Division Support Area. Operated by the DISCOM. This is the primary area where logistics support to the division happens. The DSA normally contains all supply, maintenance, transportation, and medical service functions not found in brigades.

6. IFTE - Integrated Family of Test Equipment. IFTE will provide the division a robust capability to diagnose, fault isolate, and repair LRUs within the division and corps. The two basic components of the IFTE system are defined below. Judiciously employed, IFTE will substantially improve sustainability of divisions and corps:

a. The Contact Test Set (CTS) permits unit maintainers or DS contact teams to identity faulty LRUs on the system. The CTS will also Have electronic technical manual and prog.ostic capabilities.

b. The Base Shop Test Facility (BSTF) permits the direct support maintenance unit to identify faults in and repair the LRU (normally by finding and replacing a faulty SRU).

7. LRU - Line Replaceable Unit. One which can be replaced on the equipment to restore that equipment to operable condition. Commonly thought of as a "chassis," an LRU is anything which can be removed and replaced directly on the weapon. Thus, cables, light bulbs, sights, barrels, roadwheels, etc. are all considered LRUs.

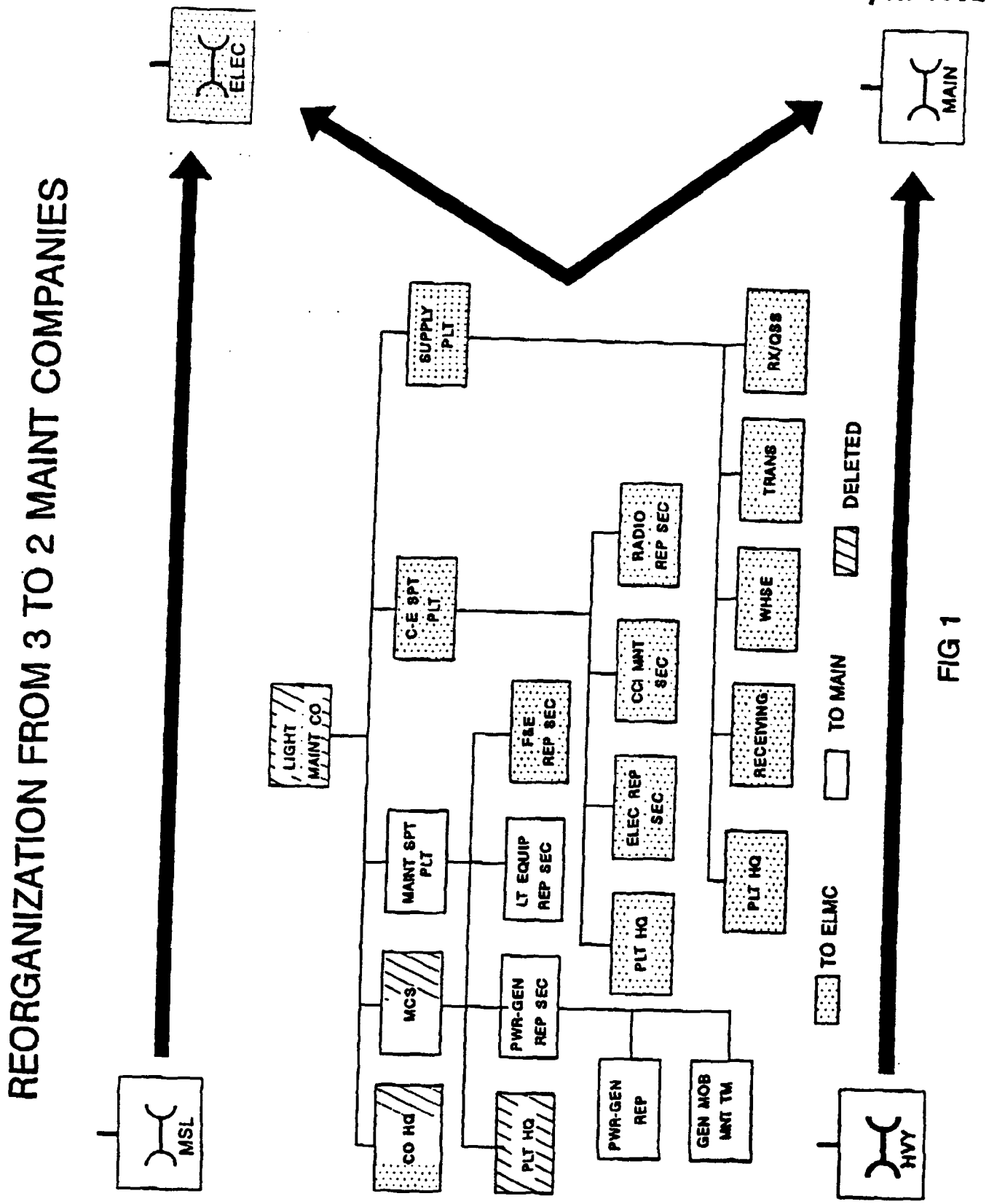
8. METT-T . Mission, Enemy, Terrain, Troops, and Time Available.

9. MST - Maintenance support Team (contact team). In brigades MSTs normally operate out of the UMCP, helping unit organizational mechanics restore their systems to operable condition by finding and replacing faulty line replaceable units (LRUs). MST assistance is normally called for when the Organizational mechanic cannot determine the cause of the system's inoperable condition.

10. PLL - Prescribed Load List: That quantity of supplies which is established to support unit combat operations for a limited period (usually about 15 days in peacetime). It is the repair parts which each equipment owning unit carries with it into combat to support its own equipment.

11. SRU - Shop Replaceable Unit. Part of an LRU which can He replaced to restore the LRU to operable condition (usually with the help of test equipment to identify which SRU[s] are faulty).

12. UMCP - Unit Maintenance Collection Point. A designated area in the unit trains where inoperable equipment can be restored to operable condition without risking direct enemy fires.


REORGANIZATION FROM 3 TO 2 MAINT COMPANIES
MSL
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CO HQ
LIGHT MAINT CO
MCS
MAINT SPT PLT
PLT HQ
F&E REP SEC
LT EQUIP REP SEC
PWR-GEN REP SEC
PWR-GEN REP
GEN MOB MNT TM
C-E SPT PLT
PLT HQ
ELEC REP SEC
CCI MNT SEC
RADIO REP SEC
SUPPLY PLT
PLT HQ
RECEIVING
WHSE
TRANS
RX/OSS
TO ELMC
TO MAIN
DELETED

FIG 1

MAIN SUPPORT BATTALION

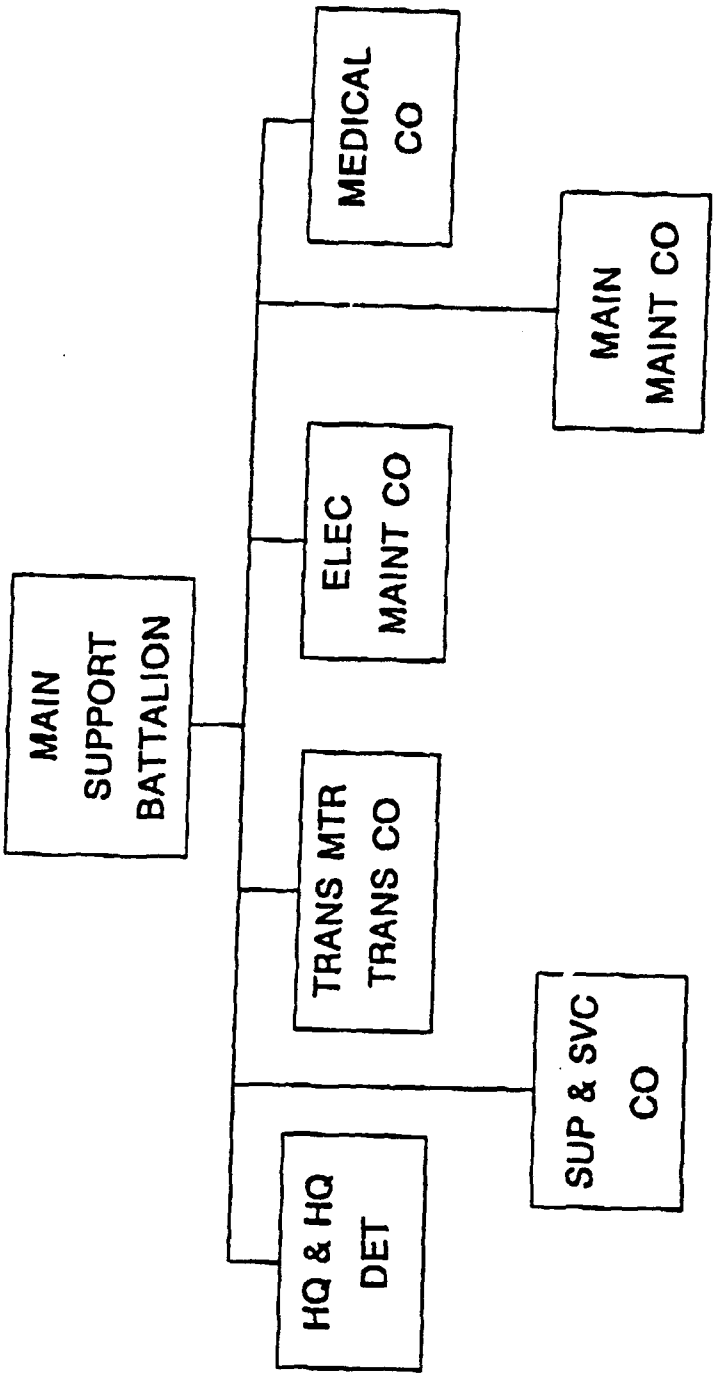
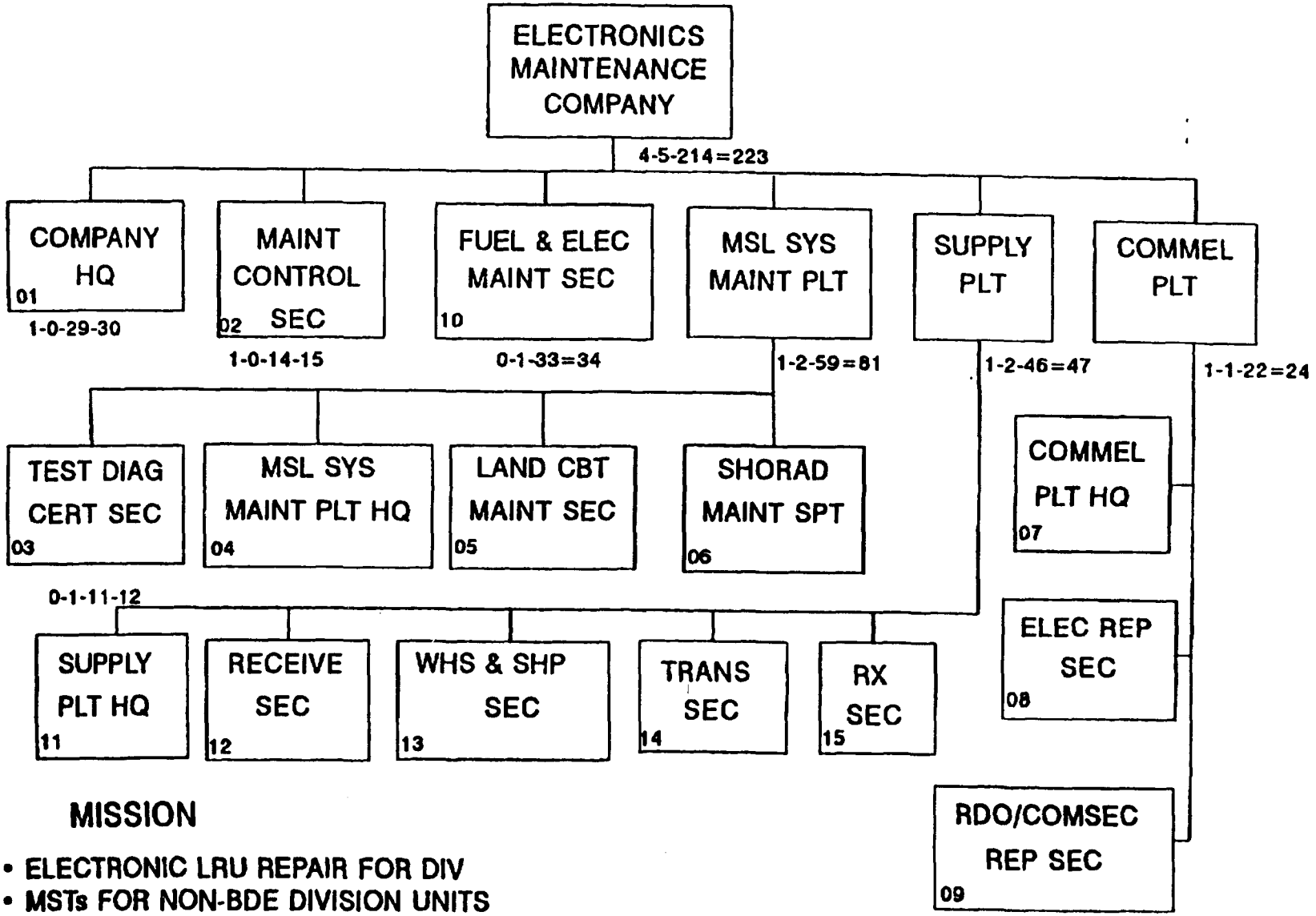


FIG 2

ELECTRONICS MAINTENANCE COMPANY



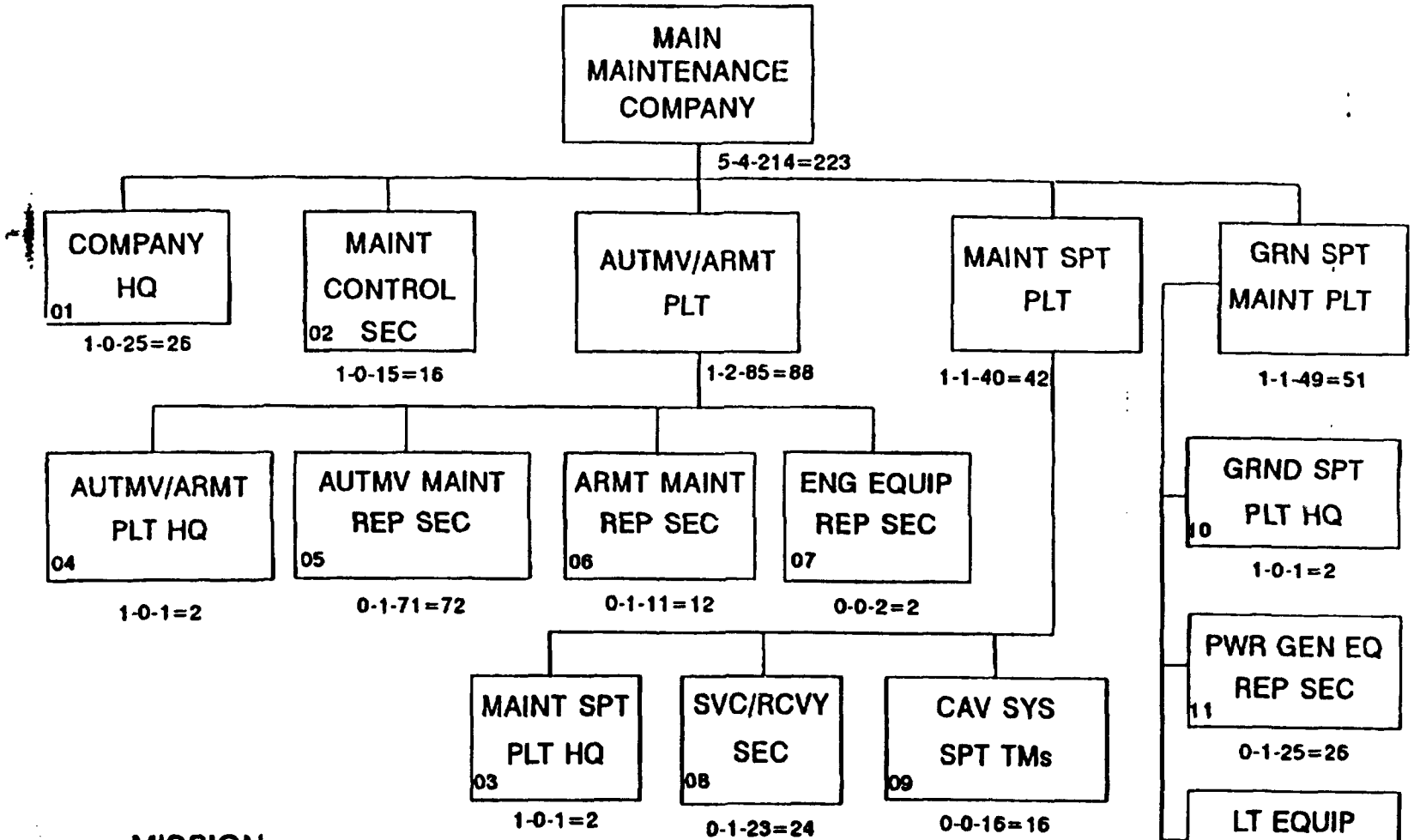
MISSION

- ELECTRONIC LRU REPAIR FOR DIV
- MSTs FOR NON-BDE DIVISION UNITS
- MAINTAIN DIV BASE ASL

TOE# 09018L100 DATE: 11/13/91

FIG 3

MAIN MAINTENANCE COMPANY



MISSION

- PROVIDE CONV DS MAINT TO DOV UNITS NOT SUPPORTED BY THE FSBs
- BACK-UP DS TO THE FSBs

TOE# 43108L000 DATE: 11/13/91

FIG 4

HEAVY DIVISION BASE MAINTENANCE CONCEPT

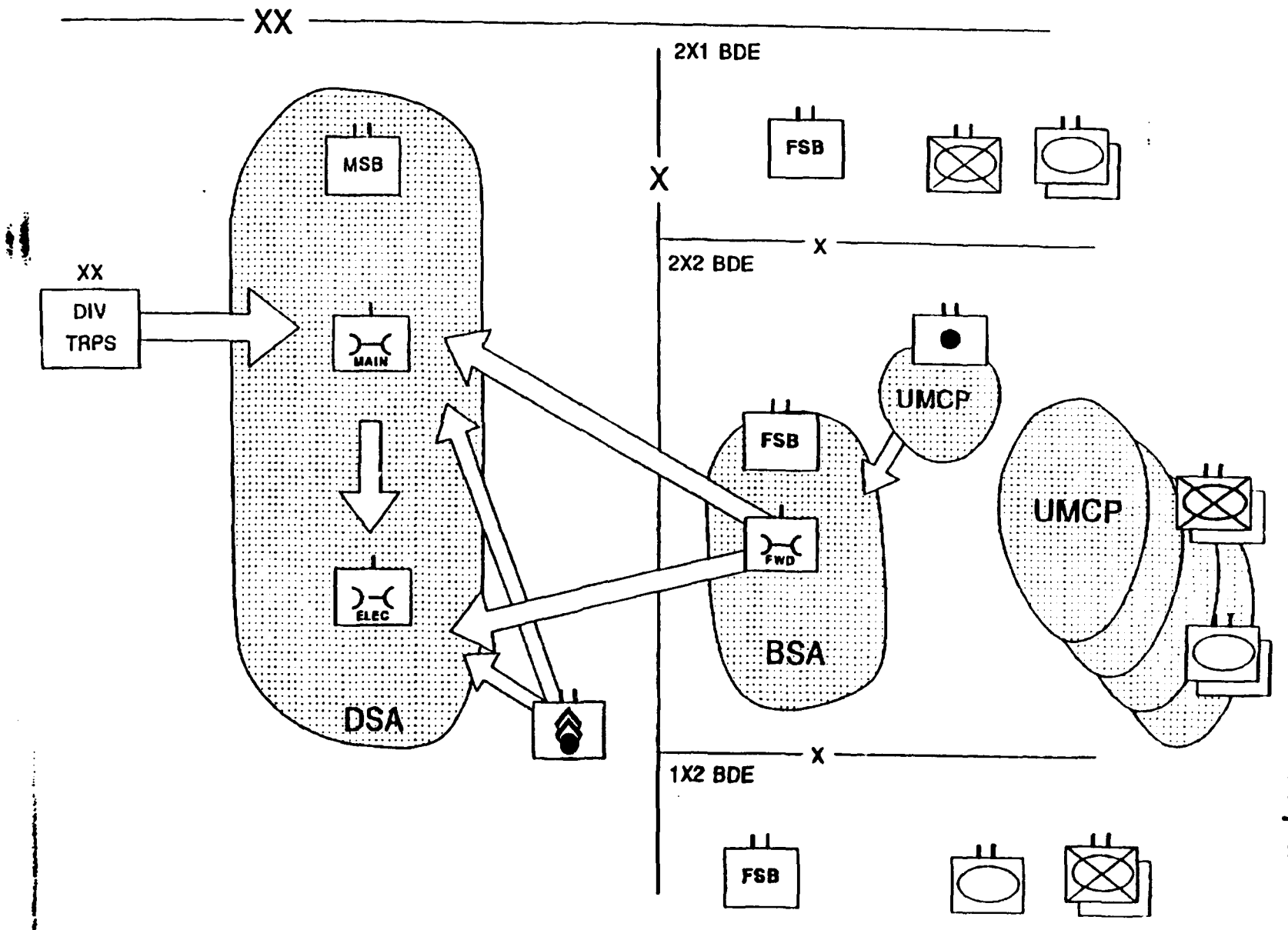


FIG 5