USAWC MILITARY STUDIES PROGRAM PAPER

INTELLIGENCE ARCHITECTURE, ECHELONS CORPS AND BELOW (ECB): SOME NEAR TERM ALTERNATIVES

by

Lieutenant Colonel (P) Peter E. Mac Donald
United States Army
and
Lieutenant Colonel William T. Torpey
United States Army

Mr. Douglas H. Dearth
Project Advisor

U.S. Army War College
Carlisle Barrack, Pennsylvania 17013
5 April 1991

91 4 30 075

Unclassified
ECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified	1b. RESTRICTIVE MARKINGS
2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release. Distribution is unlimited.
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE	
4. PERFORMING ORGANIZATION REPORT NUMBER(S)	5. MONITORING ORGANIZATION REPORT NUMBER(S)
6a. NAME OF PERFORMING ORGANIZATION U.S. Army War College 6b. OFFICE SYMBOL (*If applicable*)	7a. NAME OF MONITORING ORGANIZATION
6c. ADDRESS (*City, State, and ZIP Code*) Carlisle Barracks, PA 17013-5050	7b. ADDRESS (*City, State, and ZIP Code*)
8a. NAME OF FUNDING/SPONSORING ORGANIZATION 8b. OFFICE SYMBOL (*If applicable*)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
8c. ADDRESS (*City, State, and ZIP Code*)	10. SOURCE OF FUNDING NUMBERS PROGRAM ELEMENT NO. / PROJECT NO. / TASK NO. / WORK UNIT ACCESSION NO.

11. TITLE (*Include Security Classification*)
Intelligence Architecture, Echelons Corps and Below (ECB):
Some Near Term Alternatives

12. PERSONAL AUTHOR(S)
Mac Donald, Peter E., LTC(P) and Torpey, William T., LTC

13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (*Year, Month, Day*)	15. PAGE COUNT
Final	FROM _____ TO _____	1991 April 05	53

16. SUPPLEMENTARY NOTATION

17. COSATI CODES			18. SUBJECT TERMS (*Continue on reverse if necessary and identify by block number*)
FIELD	GROUP	SUB-GROUP	

19. ABSTRACT (*Continue on reverse if necessary and identify by block number*)

The Army War College encourages its students to challenge the way the Army operates. This paper is an expression of that license. It is a catharsis of the professional frustrations of two heavy division MI battalion commanders concerning the unfulfilled potential of tactical Intelligence and Electronic Warfare (IEW) units. The paper presents a common sense solution for maximizing that potential, in the near term, with the assets currently fielded within the heavy corps.

Since the implementation of the Intelligence Organization and Stationing Study (IOSS) in 1975, tactical intelligence unitshave meandered through a labyrinth of cosmetic name changes, product improvements and structural realignments in search of the right mix of IEW support for maneuver commanders. These incessant attempts at compatibility have created readiness imbalances between intelligence units and the combat arms they are intended to support. IEW warfighting effectiveness has been seriously imperiled by critical personnel shortages, equipment inadequacies, maintenance shortfalls, training detractors, doctrinal
(continued on reverse)

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	21. ABSTRACT SECURITY CLASSIFICATION	
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT ☐ DTIC USERS	Unclassified	
22a. NAME OF RESPONSIBLE INDIVIDUAL Mr. D. H. Dearth	22b. TELEPHONE (*Include Area Code*) (717) 245-3991	22c. OFFICE SYMBOL AWCD

DD Form 1473, JUN 86 *Previous editions are obsolete.* SECURITY CLASSIFICATION OF THIS PAGE
Unclassified

19. ABSTRACT (Continued)

ambiguities, survivability concerns, and a lack of a standard technical evaluation mechanism. The impending force reductions and proposed budget decrements will further exacerbate these systemic operational deficiencies.

The MI Corps must act NOW to salvage its professional credibility at echelons corps and below (ECB). As the Army embarks on an era of new warfighting doctrine, the authors contend that the MI Corps can and must improve its warfighting posture by restructuring its current assets wthin the heavy corps to meet the intelligence requirements of Airland Battle-Future (ALB-F).

ABSTRACT

AUTHORS: LTC (P) Peter E. Mac Donald, USA
LTC William T. Torpey, USA

TITLE: Intelligence Architecture, Echelons Corps and Below (ECB): Some Near Term Alternatives

FORMAT: Individual Study Project

DATE: 5 April 1991 PAGES 53 CLASSIFICATION: Unclassified

The Army War College encourages its students to challenge the way the Army operates. This paper is an expression of that license. It is a catharsis of the professional frustrations of two heavy division MI battalion commanders concerning the unfulfilled potential of tactical Intelligence and Electronic Warfare (IEW) units. The paper presents a common sense solution for maximizing that potential, in the near term, with the assets currently fielded within the heavy corps.

Since the implementation of the Intelligence Organization and Stationing Study (IOSS) in 1975, tactical intelligence units have meandered through a labyrinth of cosmetic name changes, product improvements and structural realignments in search of the right mix of IEW support for maneuver commanders. These incessant attempts at compatibilty have created readiness imbalances between intelligence units and the combat arms they are intended to support. IEW warfighting effectiveness has been seriously imperiled by critical personnel shortages, equipment inadequacies, maintenance shortfalls, training detractors, doctrinal ambiguities, survivability concerns, and a lack of a standard technical evaluation mechanism. The impending force reductions and proposed budget decrements will further exacerbate these systemic operational deficiencies.

The MI Corps must act NOW to preserve its professional credibility at echelons corps and below (ECB). As the Army embarks on an era of new warfighting doctrine, the authors contend that the MI Corps can and must improve its warfighting posture by restructuring its current assets within the heavy corps to meet the intelligence requirements of Airland Battle-Future (ALB-F).

ABSTRACT.....ii

TABLE OF CONTENTS.....iii

SECTION I INTRODUCTION.....1

SECTION II BACKGROUND.....4

SECTION III CRITIQUE OF SYSTEMIC PROBLEMS.....7

SECTION IV PROPOSED ALTERNATIVES.....18

SECTION V CONCLUSIONS AND RECOMMENDATIONS.....33

ENDNOTES.....36

BIBLIOGRAPHY.....37

APPENDIX A: FIGURES.....A1

APPENDIX B: GLOSSARY.....B1

INTELLIGENCE ARCHITECTURE, ECHELONS CORPS AND BELOW (ECB): SOME NEAR TERM ALTERNATIVES

SECTION I

INTRODUCTION

On 5 December 1974, the Chief of Staff, Army (CSA) directed Major General James J. Ursano, Director of Management, Office of the Chief of Staff of the Army (OCSA), to conduct a study of the Army's intelligence organizations and provide recommendations concerning future structures and functional responsibilities. One of the major reasons for the study was that: "It appeared that numerous disparate Army intelligence organizations were on a separate timetable, and to some degree, isolated from the more methodical and integrated development of other Army organizations.[1] MG Ursano's findings were published in the voluminous Intelligence Organizational Stationing Study (IOSS) dated 1 August 1975. This landmark document served as the catalyst for the most sweeping changes to Army intelligence architecture since Military Intelligence (MI) became a branch in 1963. The canons of IOSS have driven intelligence force design and combat developments for the past sixteen years with the intent of providing more responsive intelligence support to Army commanders.

IOSS challenged the MI community to increase its operational effectiveness. In the past sixteen years the MI Corps, as it is now known, has had the opportunity to validate its readiness during numerous Redeployment of Forces to Germany (REFORGER) exercises, hundreds of Combat Training Center (CTC) rotations, Operation Urgent Fury in Grenada, Operation Just Cause in Panama, and most recently Operation Desert Shield/Desert Storm. While national intelligence systems appear to be working, the authors' experiences indicate that intelligence support in the tactical arena has not measurably improved during the years since the Ursano Study. Prominent concerns include: Are divisional MI battalions and corps MI brigades optimally organized and manned to survive and be successful on the airland battlefield? Are MI soldiers adequately trained and sufficiently equipped to meet the challenges throughout the operational continuum? Are MI operations being driven by personalities or MI doctrine? The solution to these questions are the province of this paper. While one can clearly extol the progress MI units have made since the implementation of IOSS, one must also acknowledge that a plethora of systemic problems continues to plague tactical IEW units, inhibiting them from achieving a level of operational readiness envisioned by IOSS and commensurate with needs of the units they support. This is especially

true in the heavy corps and divisions.

As we enter a period of acute budget constraints and inevitable personnel reductions, it is imperative that the MI Corps assess its operational posture at the tactical level and develop near term initiatives to meet the challenges of ALB-F doctrine. The 2 July 1990 MI 2000 White Paper[2] is the most recent attempt at alleviating some of the IEW problems; however, the proposals advanced in that document are long term and do not satisfy the immediate needs of the Army of the 1990's. It is the authors' contention that the readiness posture and warfighting ability of MI units within the heavy corps and divisions can be measureably improved in the near term, through practical and affordable restructuring. This paper calls for the elimination of the heavy division MI battalion, the expansion of the corps MI brigade to five functionally aligned battalions, and the creation of an independent reconnaissance/surveillance company at each maneuver brigade.

It is not the intent of this paper to criticize the MI Corps, but to offer sensible alternatives to current MI architecture at ECB. The IOSS goal of improving intelligence support to warfighters is achieveable if we take immediate action. Let's not perpetuate the problem.

SECTION II

BACKGROUND

The Intelligence Organization and Stationing Study galvanized an Army mindset that a commander's intelligence needs would be served best by having his own organic intelligence organization. Henceforth, "MI sought to calculate optimum mixes of equipment and personnel for the projected battlefield."[3] Following is a review of what has transpired since 1975.

IOSS triggered the demise of the stovepiped Army Security Agency (ASA), the Army's major signals intelligence (SIGINT) organization. ASA comprised a network of direct support units affiliated, but not colocated, with maneuver units from Field Army through division. Critics of ASA complained that the agency's highly sensitive SIGINT products were not readily accessible to the consumers (the "green door" syndrome) and that the direct support units were not responsive to, nor as tactically proficient as, the units they supported. IOSS precipitated a realignment of ASA's direct support SIGINT/EW units to corps and divisions as organic assets. Over time the ASA companies and battalions merged with other tactical intelligence resources to form corps MI brigades and divisional MI battalions. ASA's worldwide network of SIGINT field stations also

merged with other intelligence field operating agencies to form the multidiscipline Intelligence and Security Command (INSCOM). INSCOM has proponency for "...multidiscipline intelligence, security, and electronic warfare functions at echelon above corps."[4] INSCOM organizations are Major Force Program (MFP) 3 assets (strategic) and are routinely funded and manned at a higher priority than their MFP-2 (tactical) counterparts at division and corps. INSCOM is the Service Cryptologic Element (SCE) for the Army. In this capacity, it is chartered to represent and coordinate the SIGINT interests of the entire Army with the National Security Agency (NSA). The execution of this process, however, is often accomplished in isolation of the direct needs of MI units operating at corps and below.

In the tactical arena, corps and division MI units have at best achieved modest improvements in operational capability during the last sixteen years. Many of the impediments to full mission capability that existed in 1975 continue to plague these units today, despite a series of cosmetic name changes and unit reorganizations.

Today's MI Corps has also evolved from the legacies of IOSS. While the MI Corps encompasses all Army intelligence organizations and personnel, it is functionally segregated into three diverse components: Training and Doctrine Command (TRADOC), EAC organizations, and the tactical

intelligence units assigned to ECB. While this paper focuses on the latter, and specifically the heavy corps and heavy division, it is important for the reader to recognize that some of the problems endemic to ECB organizations stem from the very composition, diversity and often competing functional relationships within the Army's intelligence architecture.

The most recent proposal for improving the warfighting posture of the MI Corps has been the MI 2000 White Paper. Although this is an admirable concept, it falls far short of the mark. The health of the MI Corps cannot be measured in the promises of systems that are a decade away from fielding. A shrinking budget and emerging technology are conceivably its greatest enemies. Intelligence support to commanders is routinely evaluated on the unforgiving battlefields of the Combat Training Centers and in the harsh realities of Unit Status Reports (USR). MI performance must be improved in the near term. This can be accomplished by restructuring the currently fielded resources to eliminate the problems that have impaired IEW readiness for years.

SECTION III

CRITIQUE OF SYSTEMIC PROBLEMS

GENERAL.

Following the implementation of the Ursano Study, the Army has twice tested the technical health of tactical Signals Intelligence (SIGINT)/Electronic Warfare (EW) units worldwide. The first assessment, called Technical Evaluation of Army Tactical SIGINT (TEATAC-S) was conducted in 1981 by a team of military and Department of Defense (DOD) civilian subject matter experts. The second was conducted in 1988/89 by a group of contractors and Department of the Army (DA) staff officers. Although these evaluations were conducted seven years apart, and the latter approximately thirteen years after IOSS, both revealed that tactical SIGINT/EW units have been plagued by glaring deficiencies that have persisted since IOSS. These problems can generally be categorized in the following areas:

- Personnel shortages.
- Equipment inadequacies.
- Maintenance shortfalls.
- Training detractors.
- Doctrinal ambiguities.
- Survivability concerns.

- Lack of a standard technical evaluation mechanism.

Based on the authors' personal experiences as former heavy division MI battalion commanders, these problems continue to persist and are further compounded by three additional factors impacting on today's Army: severe budget cuts, radical force reductions, and the implementation of ALB-F doctrine. Following is a detailed discussion of the magnitude of these problems, which serves as the basis for the authors' proposal to restructure corps IEW assets.

SYSTEMIC PROBLEM #1 - PERSONNEL.

- Fill of authorized MI personnel, specifically in the heavy corps and divisions, has been totally inadequate since the onset of IOSS. This shortcoming is not always apparent due to the overfill in non-MI Military Occupational Specialties (MOS's) such as cooks, administrative specialists, supply personnel and communicators.

- Tactical MI units have traditionally been manned at 70%-80% of authorizations for the 98 Career Management Field (CMF), 96 CMF and 33 CMF personnnel. This severely degrades the linguistic, analytical and maintenance capabilities of the unit.

- Tactical MI units must compete with echelon above corps organizations for people and funding. EAC units are routinely manned and budgeted at higher percentages.

- Temporary duty at a myriad of professional

development schools compounds the personnel shortage problem by further reducing manning levels another ten to fifteen percent at any given time.

- In many corps and divisons, duty week/month commitments require units to simply "stand down." This seriously interferes with tactical intelligence proficiency.

- Lag time (seven to nine months) in security clearance verification/validation for newly arrived soldiers further reduces operator availability for classified mission operations.

- The low fill of MI personnel has the following ramifications:

- - IEW equipment being minimally manned or not manned at all.

- - IEW pacing items inadequately maintained.

- - Inordinate amount of time spent by operators in unit motor pools at the expense of technical proficiency and mission accomplishment.

- - MI units requiring personnel augmentation from other MI units to accomplish major training missions such as Combat Training Center rotations. This has a reciprocal effect on personnel fill in the augmenting unit.

- In addition to the personnel problems encountered by divisional MI battalions, each maneuver brigade in the Army is experiencing key intelligence personnel shortfalls

as well.

- - Heavy division maneuver brigades are authorized three officers in the S-2: one Major and two Captains. Typically brigades are staffed with only a senior MI Lieutenant or Captain, many of whom have yet to complete the Military Intelligence Officers Advanced Course (MIOAC).

- - In contrast, the brigade S-2's counterpart, the S-3, also a Major's position, is normally a Command and General Staff College (C&GSC) graduate. This places the brigade S-2 at a serious disadvantage in terms of operational experience, professional competency, and staff authority.

SYSTEMIC PROBLEM #2 - EQUIPMENT.

- Heavy division/Armored Cavalry Regiment (ACR) IEW equipment lacks the mobility commensurate with the highly mobile maneuver units it supports.

- Thin-skinned IEW equipment lacks survivability in forward deployed areas.

- Unique, maintenance-intensive IEW equipment has become a divison and corps level logistical and maintenance burden.

- Due to equipment shortages or maintenance downtime, few heavy corps and divison MI battalion are able to provide full mission support without augmentation of key IEW equipment from other MI units.

SYSTEMIC PROBLEM #3 - MAINTENANCE.

- IEW equipment is sophisticated, complex, unique and maintenance-intensive. Maintenance time in divisional MI battalions is inversely proportionate to operator technical proficiency training.

- IEW operational readiness floats (ORF's) are non-existent. This major deficiency impacts on the following:

- - IEW equipment servicability rates have traditionally been the lowest of all units within heavy corps and divisions.

- - Systems integration is severely degraded as a result of "equipment sets" not being fully mission capable.

- - While readiness rates are a peacetime issue, lack of ORF's in wartime is a critical problem, potentially eliminating divisional MI units from the battle and severely reducing the division's combat capability.

- Critical shortages of 98 CMF (operators) and 33 CMF (repairmen) significantly degrade IEW operational readiness.

- The 33 CMF has been divided into several equipment specific categories. This has created tactical and strategic level IEW repairmen. Given an option, most would prefer the less taxing duty of the EAC 33's.

Consequently, there is a shortage in the tactical arena and no ability to cross level due to mission priorities and MOS disparities.

- A complex and convoluted contract maintenance support system does not enhance the urgency and the responsiveness necessary for sustaining IEW warfighting operations.

- Long maintenance lag times seriously inhibit operators from sustaining crew proficiency.

- Historically poor equipment reliability rates greatly diminish operators' confidence in their IEW equipment's ability to survive in war.

SYSTEMIC PROBLEM #4 - TRAINING.

- Individual and collective training are a challenge for all MI unit commanders. Of course, training begins with having the soldiers to train. Severe personnel shortages, multiple competing priorities and excessive maintenance requirements detract from prime time training.

- The operations tempo (OPTEMPO) of the division and the extensive training support requirements result in the intelligence "bill" being paid last.

- Language and analytical training are routinely subordinated to more visible non-intelligence requirements.

- Technical proficiency is seriously devalued when major training events are neither target nor language oriented.

SYSTEMIC PROBLEM #5 - DOCTRINE.

- Of all the systemic problems, doctrine seemingly gets the least attention, but in reality may be the heart of the matter.

- MI doctrine is written by the United States Army Intelligence Center and School (USAICS). Unfortunately, USAICS has little or no influence on the execution of MI doctrine in the tactical arena.

- Personalities, not doctrine, are driving tactical IEW operations. Tactics, techniques and procedures (TTP's) vary drastically among all the divisons and corps. Consequently, these diverse interpretations of MI doctrine are confusing to both combat arms officers and MI soldiers alike, who must adjust to different TTP's as they transfer among divisions and corps.

SYSTEMIC PROBLEM #6 - SURVIVABILITY.

- Low soldier fill rates result in austere manning of small MI teams and significantly reduces the 24-hour capability that is essential for sustained training/combat operations.

- Current doctrine requires IEW equipment to operate well forward for maximum effectiveness, with the following

shortcomings:

- - IEW equipment is extremely vulnerable to the lethalities of the close-in battle due to its thin-skin and lack of mobility.

- - IEW equipment radiates distinct radio frequency signatures making it vulernable to enemy intercept and fires.

- - Excessive noise due to continuously running generators also presents a unique signature in the forward area.

- - IEW operations are contingent upon line-of-sight (LOS) acquisition and require prominent terrain for depth of collection. Not only is terrain deconfliction with friendly forces a problem but such terrain is typically targeted and extremely vulnerable to enemy fires.

- - Lack of ORF's eliminates MI's ability to reconstitute with any degree of operational effectiveness.

SYSTEMIC PROBLEM #7 - EVALUATIONS.

- No standard evaluation mechanism exists for measuring the technical health of tactical IEW units. consequently we focus on external evaluations (EXEVALS).

- External evaluations assess an organization's tactical proficiency, but are incapable of evaluating both the individual and collective intelligence skills of the unit's personnel.

- Command Inspections and Unit Status Reports (USR's) are designed to assess a unit's ability to perform its designated missions. Unlike in maneuver units, these instruments offer no utility in assessing an MI unit's ability to perform its technical intelligence missions.

- Failure to have an annual "MI Table VIII" type evaluation system keeps MI units in the business of supporting other Table VIII's, rather than focusing on, and ramping up for, its own mission essential training requirements.

ADDITIONAL IMPACTS

Reduction in Defense Budget

Many of the systemic problems cited above could be alleviated by budget increases that would allow greater accessions of intelligence personnel and the acquisition of more reliable and survivable IEW equipment. Such increases will not be forthcoming in the near term, as evidenced by the steadily declining budget outlined in The Secretary of Defense's Annual Report to the President and the Congress dated January 1991. The Army's budget will shrink from 78+ billion in FY 90 to 67+ billion in FY 93.5 We cannot estimate the impact that Desert Storm will have on the Army's operating budget, but the forecast appears bleak. Commanders will be required to prudently manage existing assets in lieu of near term increases in

personnel or acquisition of improved equipment.

Force Reductions

Along with a constrained budget, commensurate force reductions will also seriously effect IEW operations at all echelons. The Army's tentative plan is to draw down from a troop strength of 760+ thousand to approximately 500+ thousand in the next few years. Considering that today's Army is totally non-conscripted, this drawdown has the potential to be the largest since World War II as evidenced by the data drawn from the Selected Manpower Statistics. Fiscal Year 1989.6

World War II.....83%

Korea.....22%

Vietnam.....28%

Projected.....31%+

Tactical IEW units are already operating at a dismal 70-80% strength in intelligence MOS's. Further personnel reductions would literally decimate these units, rendering them combat ineffective.

Airland Battle - Future (ALB-F)

The ALB-F concept suggests that future battlefields will change in several ways. Units will fight in less dense, non-linear engagement areas against a highly sophisticated threat. Corps will orchestrate the battle with precisionly tailored combined arms brigades as their

centerpieces. Surviving and winning in this less structured, but highly lethal environment will require the implementation of new procedures and the perfection of some old techniques. Success will require high mobility and a strong reliance on long-range intelligence acquisition systems and lethal weaponry that can engage and destroy deep targets. "Allowing the corps commander to concentrate his long-range acquisition and firepower indicates that these assets should be assigned to the corps, with the flexibility for them to be mission-assigned to the divisions for the close linear fight."[7]

SECTION IV

PROPOSED ALTERNATIVES

At the risk of overstating the premise of this paper, it is important to remind the reader of the authors' perception that the persistent systemic problems endemic to tactical SIGINT/EW units are arguably insurmountable as long as these units are fielded at division level. The synergistic effect of this collective set of problems, further compounded by a rapidly shrinking operating budget, severe impending force reductions and the ensuing implementation of ALB-F doctrine, dictate that low cost, immediate solutions are essential for the preservation of tactical IEW units. The authors contend that their proposal to restructure corps IEW assets, primarily through consolidation of these assets at corps, will significantly enhance MI operational readiness.

Bear in mind that the magnitude of the shortcomings associated with tactical IEW units varies based on theater, target, force composition (heavy/light), personalities, OPTEMPO, etc. The systemic problems enumerated in the preceeding section, however, clearly represent the salient issues influencing the readiness of these tactical IEW units worldwide. This section focuses on solutions to these problems in the context of heavy forces.

CORPS

Within the heavy corps, many of these persistent systemic problems can be resolved through restructuring of the corps MI organizations, specifically:

- The corps MI brigade.
- The division G-2/MI battalion.
- The maneuver brigade S-2.

Focusing on these specific activities and several peripheral operational initiatives, intelligence production and effectiveness can be substantially ameliorated. This reshuffling of resources would functionally align intelligence disciplines, allow for the allocation of essential IEW systems at all levels and contributes to enhanced training, technical proficiency, productivity and readiness.

The heavy corps MI brigade is currently organized as outlined in figure A-1, Appendix A. In this configuration there are several functional shortcomings that inhibit efficient command and control and present unique training challenges for two of the three battalion commanders. The Operations Battalion (OPS) commander has neither supervisory nor intelligence production responsibilities for his two subordinate companies. One company is assimilated into the corps staff, and the other is directly controlled by the brigade S-3. The Tactical Exploitation Battalion (TEB)

commander has even more pronounced organizational problems. Three of his diverse subordinate units are normally attached to the forward deployed divisions in support of their immediate missions. The TEB commander basically orchestrates the Corps' Long Range Surveillance (LRS) mission. Although he has a direct interest in his units deployed throughout the corps area of operations, he has limited capability to assist them.

The proposed restructured MI brigade is outlined at figure A-2, Appendix A. Essentially, we are advocating a five-battalion brigade comprised of an Operations Battalion, two Forward Support Battalions, a Long Range Surveillance Battalion, and an Aerial Exploitation Battalion. These Battalions are functionally aligned by intelligence discipline, and the battalion commanders have direct intelligence production responsibility for their units. Restructuring offers the following advantages:

- Centralizing the corps IEW systems (less the division TCAE's and the few assets found at the maneuver brigade) in the MI brigade significantly enhances real-world intelligence operations, facilitates individual and collective technical proficiency and subordinates all IEW operations under the two senior MI officers in the corps, the G-2 and the brigade commander.

- This organizational structure complements ALB-F

doctrine by giving the corps commander direct control of all IEW resources and the operational flexibility to employ them in support of the overall campaign plan. It also facilitates the application of MI doctrine by narrowing the scope from divison to corps.

- The OPS battalion would absorb all the Counterintelligence (CI), Interrogation Prisoner of War (IPW) and Battlefield Deception Element (BDE) resources from the divisions, ACR and the TEB. The BDE would operate within the Corps Tactical Operations Center (CTOC) while the IPW/CI assets would principally comprise a third company in the OPS battalion with primary responsibility in the corps IPW processing area, as well as provide "push packages" for the forward deployed divisions. CI assets would focus on corps and division rear area operations. The OPS battalion commander would play a major role at the corps Rear Area Operations Center (RAOC) for the brigade commander.

- Restructuring calls for the creation of a pure LRS battalion with 24-30 LRS teams. Teams would have corps and division responsibilities. Far Base Radio Stations (BRS) would be colocated for fusion of information from <u>all</u> deployed assets and rapid dissemination to all major subordinate commanders. The commander would have single mission LRS (Humint) focus.

- All the division/ACR "quickfix" helicopter assets would be consolidated in the Aerial Exploitation Battalion (AEB). We further propose the inclusion of six MH-60 Blackhawks for LRS operations in addition to the corps Unmanned Aerial Vehicle (UAV) resources. This centralizes all IEW and support aviation assets in the AEB and facilitates maintenance, logistics and mission planning and execution.

- The two forward support battalions are essentially the divisonal MI battalions minus their Technical Control and Analysis Elements (TCAE's). Ground Surviellance Radars (GSR's) and Long Range Surveillance Detachments (LRSD) plus the IEW assets formerly contained in the ACR and the TEB's Electronic Warfare (EW) company. We would add a high frequency (HF) jamming capability (AN/TLQ-15's) to these units. Battalion commanders would have a single focus ground-based SIGINT/EW mission in support of forward deployed divisions as directed by the corps campaign plan. Division TCAE's would provide technical mission steerage. Consolidation of personnel and equipment assets at corps will significantly enhance technical training based on the reduced OPTEMPO at the corps and the opportunity for daily integration of these resources into the operational missions of the corps TROJAN facility, TCAE and the Guardrail Intelligence Processing Facility (IPF). Additionally, this

reduces direct probability coding problems for women and opens up more tactical leadership positions for females.

- Consolidation of assets at the corps centralizes the the intensive maintenance requirements of these units, along with the IEW maintenance repairmen. It places maintenance operations closer to the General Support (GS) facilities at the Corps Support Command (COSCOM), thus simplifying contractor maintenance support.

- Consolidation of IEW equipment within the MI brigade also offers an unprecedented opportunity to generate IEW operational readiness floats (ORF's) from the systems previously located in the divisions and ACR. This action alone will have the most significant impact on operational readiness rates.

- This structure retains five MI battalion command slots within the corps.

DIVISION

Heavy division MI battalions have never operated at maximum efficiency, nor have they ever achieved their warfighting potential. They have been handicapped for years by systemic problems and an operating environment hostile to enhancing critical intelligence skills. These problems can be significantly reduced, and IEW productivity likewise increased, by redistributing the MI battalion's assets among the corps MI brigade, the divison G-2 Section and

the division's maneuver brigades. Figure A-3, Appendix A, depicts the current structure of a heavy division MI battalion and highlights where its assets will be redistributed. This alternative offers the following advantages:

- The MI battalion TCAE would be permanently transferred to the G-2. ALB-F requires a robust intelligence organization at each level of command to provide continuous, deep, real-time surveillance of the battlefield. Since the TCAE is the largest analytical element in the division, and possesses the automated capability to interface with airborne and ground sensors, it would significantly improve the G-2's ability to support the division commander. The G-2 must have the appropriate downlinks from corps, theater and national collection systems (i.e., Guardrail and TR-1 Commander's Tactical Terminals (CTTs), Joint Surveillance Target Aquisition Radar System (J-STARS') Ground Station Module (GSM) and Tactical High Mobility Terminal (THMT)) to meet the deep acquisition and targeting requirements of the division. Retaining the TCAE in the division also allows for the capability to provide technical mission steerage to augmenting corps forward support battalions. While this expansion of the G-2 staff runs counter to TRADOC's standardized command post initiative, it is a plausible trade off if the G-2 is

to assist the commander in "reading" and "shaping" the battlefield.

- The MI battalion is authorized nine interrogators with requirements for as many as three distinct target languages. It is extremely difficult to maintain critical language and interrogator skills for such a low density MOS. Consolidating all of the corps' interrogators in the corps OPS battalion will enhance training and allow commanders the flexibility to tailor "push packages" throughout the corps based on language skills, technical proficiency and target orientation.

- Division Counterintelligence (CI) assets are few in number as well. Traditionally, CI assets are dedicated to personnel security investigations orchestrated centrally from the corps. It would make sense to consolidate all CI assets at corps to assist in prioritization and division of effort. Like the interrogators, CI assets would be deployed to forward divisions in support of the corps campaign plan.

- Divisional Quickfix helicopter assets are assigned to the division Combat Aviation Brigade (CAB) and come under the operational control (OPCON) of the MI battalion only during the alert phasing. Overseas, the flight platoon can be separated by as much as several hundred kilometers from the MI battalion. Crew rest, conflicting priorities, personnel shortages, language training, crew clearances and

flight qualifications have detracted from an efficient operational relationship. Consolidation of the the corps' nine Quickfix helicopters in the AEB places all of the corps Special Equipment Mission Aircraft (SEMA) in one unit and provides the AEB commander more flexibility regarding maintenance, missions qualifications and employment considerations.

- LRS detachments at division have been successful since their activation during FY 1987. Minor problems, such as equipment availability and compatability with other units, can be easily rectified by consolidating all LRS units at corps. Selected teams would continue to have divisional missions with strong habitual support relationships.

- The operational employment of GSR's has been a challenge for years. Regardless of how much coordination takes place between the MI battalion and the supported brigade, it seems that GSR teams wind up being misused and routinely forgotten. Placing four GSR teams organic to the proposed maneuver brigade reconnaissance company will enhance the brigade collection capabilty and eliminate these traditional support problems.

- One of the major inconsistencies among division MI battalions has been the general support (GS) versus direct support (DS) approach to mission accomplishment. Although

METT-T must drive all operations, it is generally accepted that heavy division SIGINT/EW assets are a general support asset. Brigade commanders desiring "slice" elements to be part of their training plans, however, has been a major challenge for MI battalions. Removing the MI battalion from the division and converting it to a corps forward support battalion will eliminate this major impediment to MI doctrine and unit readiness.

BRIGADE

Figure A-4, Appendix A, depicts the current brigade S-2 organization; and figure A-5, Appendix A, its proposed restructuring.

Two major adjustments must take place to improve intelligence operations at the maneuver brigade: increase the manning and experience level of brigade S-2's, and provide the brigade commander with an organic intelligence collection capability.

Brigade and battalion S-2's have been the sacrificial lambs of MI branch for years. These positions have traditionally been manned below grade authorization and routinely short of key personnel. The CTC's have graphically illustrated the importance of the intelligence battlefield operation system; however, brigade intelligence officers continue to be fielded with professional experience and pay grade parity incommensurate with the rest of the

brigade staff. Performance of maneuver unit S-2's drives MI's reputation and credibility among combat arms.

Brigade S-2's must be majors and Command and General Staff College (C&GSC) graduates. They must aso be tactically competent. The brigade S-2 position must carry the same weight with promotion boards as the S-3 position does for combat arms officers. We expect Project Vanguard and the proposed drawdown to alleviate a major portion of this problem.

Once the MI Corps has rectified the problems with S-2 fill, the brigade must have organic intelligence systems. This proposal recommends the establishment of a brigade reconnaissance/surveillance company commanded by an MI captain. This company would consist of four ground surveillance radars (GSR's), one Remote Battlefield Sensor System (REMBASS) set, one Unattended Aerial Vehicle (UAV) ground station with several short range UAV's, twenty to thirty expendable jammmers, and a scout platoon with a mix of M3's and HMMWV's. This organization of approximately 50 soldiers gives the manuever brigade the ability to operate more independently on the future battlefield. During a recent briefing at the Intelligence Center and School, LTG Wishart, the CAC commander, commented about Advanced Course graduates not feeling competent about the mechanics of the brigade fight.[8] This proposal will serve to

develop that proficiency for a significant number of MI captains. Having organic collection assets will also make the brigade S-2 a competent collection manager and personally involve the brigade commander in intelligence planning and the readiness posture of his organic systems.

Let's review where the equipment for this detachment will come from:

- The divisional MI battalion has twelve GSR's in its B Company. We propose that four GSR teams be provided to each of the three maneuver brigades.

- Although REMBASS is organic to only the light divisions, it has clearly proven its operational effectiveness and warrants distribution in the heavy divisions as well. This would require production of more REMBASS systems or reallocation as divisions draw down.

- "UAV's can penetrate enemy airspace, search battlefield areas inaccessible to other collection systems and provide critical targeting data to decision makers."[9] The fielding plan calls for these systems to go to corps and divisions. We propose that sufficient divisional systems be procured to provide ground station modules and platforms at the maneuver brigade.

- Expendable jammers have been in the inventory for years but have had minimal operational use. It is the authors' belief that jamming is most effective when applied

to specific threat operations (i.e., river crossings, minefield breeching, attacks, etc.) In these situations, expendable jammers are more efficient and provide an inexpensive alternative to the more vulnerable and costly man-operated systems.

- "The brigade commander needs scouts."[10] Experience at Fort Leavenworth in the brigade Tactical Commanders Development Course (TCDC) reflects that all brigade command designees strongly favor an organic brigade reconnaissance capability. The NTC has also witnessed the creation of ad hoc brigade scouts in most rotations. The scout platoon must be a by-product of the Army's build-down, rather than a rape of the maneuver Battalions.

OTHER RELEVANT CONSIDERATIONS

- The restructured MI brigade and the proposals contained in MI 2000 are not mutually exclusive. In fact, they compliment each other quite well. Colocation of ground based and Guardrail common sensors in the corps MI brigade will enhance critical collective training and coordination that will facilitate decentralized execution.

- Language proficiency is extremely important in IEW operations although it was not a major consideration in this paper. While consolidation will improve language proficiency, technology will diminish our reliance on linguists. Radio externals will be the focus of the future.

Until that time, however, greater pressure must be brought to bear on the Defense Language Institute (DLI) to produce linguists capable of meeting the needs of intelligence units.

- This paper has focused on the corps and its subordinate organizations. The corps must be integrated into national systems and this is where INSCOM must play a major role. INSCOM operates an Army TCAE at Fort Meade, Maryland, and an Army Europe TCAE in Augsburg, Germany. We propose that INSCOM also establish TCAE's in SOUTHCOM, Korea and Southwest Asia/Middle East (SWA)/(ME) to develop expertise in these critical target areas and establish mechanisms for dispatching augmention packages to reinforce units in the forward deployed areas. Although this can be accomplished through remoting, having troops on the ground and familiar with custom, culture and topography will pay greater dividends in the long run.

- INSCOM should also establish several regional support centers where linguists and analysts focus on lesser contingency areas and develop contingency support packages and "fly-away" teams to augment units that may be deployed to remote parts of the world. Personnel assigned to regional support centers would sharpen technical proficiency through remoting, live environment training in the target areas and through specialized operational training at the

National Security Agency (NSA). These soldiers must be experts in the target areas. Reserve and National Guard units could easily tie into these centers to develop their proficiency as follow-on/reinforcing units.

- The two preceeding initiatives, coupled with a consolidation of linguists at the corps MI brigade will eliminate the need for an INSCOM-manned Corps Military Intelligence Support Team (CMIST) at corps as recommended by enclosure 1, Appendix A, to the MI 2000 White Paper.11

- INSCOM could also serve as the lead agency for developing an annual technical evaluation for the corps MI brigades. A composite team of subject matter experts from various activities, operating under the mantle of Department of the Army Deputy Chief of Staff for Intelligence (DA-DCSINT), could visit each unit annually to measure the technical proficiency of its personnel and the unit's capability to perform its intelligence missions. This would also give the units a training target on which to focus during annual training.

- The Army must do a better job managing Junior Officer Career Cryptologic Program (JOCCP) graduates. Too often these highly trained officers move on to non-cryptologic assignments or remain in EAC assignments. Tactical units are in dire need of this level of expertise

in their TCAE's and S-3 sections. JOCCP candidates should be programmed for specific follow-on assignments so they may structure their training toward that assignment.

- The Army's Battle Command Training Program (BCTP) measures the operational effectiveness of corps and division battle staffs. MI representation at BCTP is austere at best. Three initiatives to enhance MI professional credibility are offered for consideration:

- - Fill BCTP to 100% with quality officers.

- - Coordinate with Major Commands to augment BCTP with serving G-2's and MI commanders during corps and division warfighter exercises. This will provide a better assessment of the unit undergoing the warfighter, allow for the professional exchange of TTP's and prepare augmentees for future warfighters.

- - Develop a program to allow MI command designees and G-2's to participate in at least one warfighter exercise prior to assumption of their new assignments.

SECTION V

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Today's divisional MI battalion can rightfully be compared to a mule in the Kentucky Derby. While some features may be similar to the rest of the field, the thoroughbreds will leave it in their dust when the race starts. In fact, due to a series of nagging physical deficiencies, the MI battalion may never get out of the starting gate. As the Army embarks on the painful process of massive force reductions and severe budget decrements, tactical MI units could become a bill payer for more productive warfighting systems.

ALB-F requires dynamic, highly mobile acquisition systems to meet the challenges of the future battlefield. In their current configuration, divisional IEW units cannot respond to the ALB-F needs of tactical commanders. Until more mobile, reliable and accurate acquisition systems are fielded, the MI Corps must make better use of existing systems. IEW productivity, in the context of ALB-F, can be increased through redistribution of these systems within the corps.

The MI Corps must take some positive steps in the near term or risk the chance of being eliminated as a serious

component of the warfighting team. MI soldiers of all ranks all ranks are frustrated by the issues addressed in this paper. At lower grades, soldiers are departing the Army for lack of job satisfaction and the inability to make a notable contribution to the warfighting effort. More senior soldiers purge their frustrations by trying to improve the system with papers like this.

RECOMMENDATIONS

- Army leadership should seriously consider the contents of this paper and initiate immediate action to improve the warfighting capability of tactical IEW units and preserve the credibility of the MI Corps.

- As the Army begins its massive drawdown, the MI Corps must convince the Army that MI take less cuts than other branches so it may fill the critical shortages it has experienced for years at the tactical level. Having 100% of authorized personnel, in the right grade structure, will not eliminate all the problems, but it will provide the best posture MI has ever had and place the MI Corps firmly on the road to recovery.

- The MI leadership should capture the experience and talent of MI officers at Senior Service Colleges by providing them specific intelligence related research topics that will serve both their professional needs and the requirements of the MI Corps.

ENDNOTES

1. Major General James J. Ursano. "Intelligence Organization Stationing Study (IOSS)," Defense Technical Information Center (DTIC), August, 1975. p. 2 (Secret)

2. U. S. Department of the Army, MI 2000 White Paper, 2 July 1990.

3. Colonel Leonard G. Nowak, US Army, "Division Intelligence: Left in Airland Battle's Dust?" Military Review, November, 1987, p. 53.

4. John P. Finnegan, "Military Intelligence, A Picture History," 1985, p. 180.

5. Dick Cheney, Annual Report to the President and the Congress, January, 1991, p. 110.

6. U. S. Department of Defense, Selected Manpower Statistics, Fiscal Year 1989, May, 1990, pp. 66-69. (Authors' Note: Army force reductions totaled 6,830.877 after World War II. 27,784 after Korea and 312,850 after Vietnam. On a number basis, Vietnam had the largest drawdown since World War II. However, on a percentage basis, the proposal to go from 769,741 to approximately 500,000 is greater. In fact, it will be the first drawdown of non-conscripted forces, which has a greater implication: it is much more difficult to increase the force structure through volunteers than it is through a draft system).

7. Major General Stepehn Silvasy Jr., US Army, "AirLand Battle Future: The Tactical Battlefield," Military Review, February 1991, p. 11.

8. Lieutenant General Leonard P. Wishart III. Commander, United States Army Command and General Staff College (USACGSC), Fort Leavenworth, Kansas, during Intelligence conference at Fort Huachuca, Arizona on 7 March 1991.

9. Captain Bruce K. Bornick, US Army, "Unmanned Aerial Vehicle Support," Military Review, August 1989, p. 44.

10. General John Foss, "Calling The Shots," Army Times, 26 November 1990, p. 24.

11. Enclosure 1, Appendix A, "Corps Military Intelligence Support Concept: MI 2000," U. S. Department of the Army, MI 2000 White Paper, 2 July 1990, p. A-1-1.

BIBLIOGRAPHY

Bornick. Bruce K.. "Unmanned Aerial Vehicle Support." Military Review, August 1989, p. 44.

Cheney. Dick.Annual Report to the President and the Congress. January, 1991. p. 110.

Finnegan. John G.. "Military Intelligence. A Picture History," History Office, Deputy Chief of Staff. Operations. U. S. Army Intelligence and Security Command. Arlington: 1885. p. 180.

Foss. John. General. US Army, "Calling The Shots," Army Times. 26 November 1990. p. 24.

Nowak. Leanard G.. Colonel, US Army "Division Intelligence: Left in AirLand Battle's Dust?" Military Review. November 1987. p. 53.

Silvasy, Stephen Jr., Major General, US Army, "AirLand Battle Future: The Tactical Battlefield." Military Review. February 1991, p. 11.

Ursano. James J.. Major General, US Army, "Intelligence Organization Stationing Study (IOSS): Executive Summary," Defense Technical Information Center (DTIC), Washington: August 1975, p. 2 (Secret)

U. S. Department of the Army. MI 2000 White Paper: Identification of Military Intelligence Missions, Organizations and Functions Thru the Year 2005. Washington: 2 July 1990.

U. S. Department of the Army. Enclosure 1. Appendix A. "Corps Military Intelligence Support Concept: MI 2000." MI 2000 White Paper, Washington: 2 July 1990.

U. S. Department of Defense. Selected Manpower Statistics. Fiscal Year 1989. Washington Headquarters Services. Directorate for Information. Operations and Reports (DIOR). Washington. May. 1990. pp. 66-69.

Wishart. Leonard P. III. Lieutenant General. US Army, Commander. United States Army Command and General Staff College (USACGSC). Fort Leavenworth. Kansas during Intelligence conference at Fort Huachuca. Arizona on 7 March 1991.

APPENDIX A

FIGURES

Figure	Page
A-1	A-2
A-2	A-3
A-3	A-4
A-4	A-5
A-5	A-6

CURRENT MI BDE ORGANIZATION

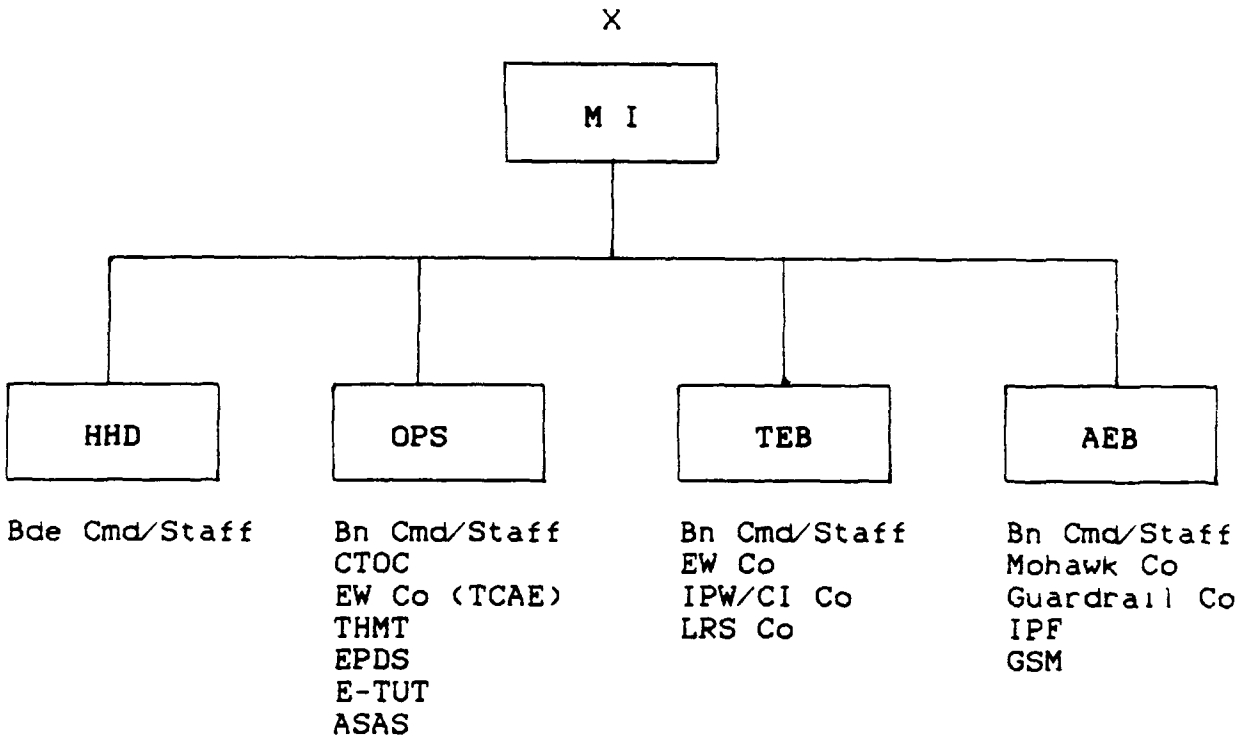
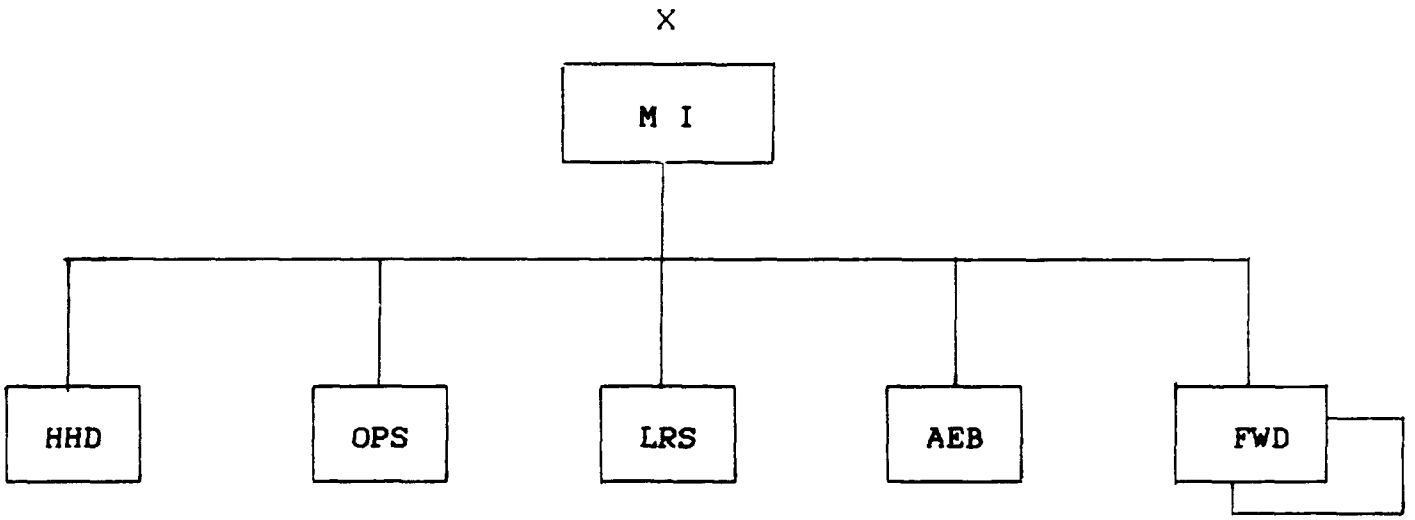


Fig. A-1

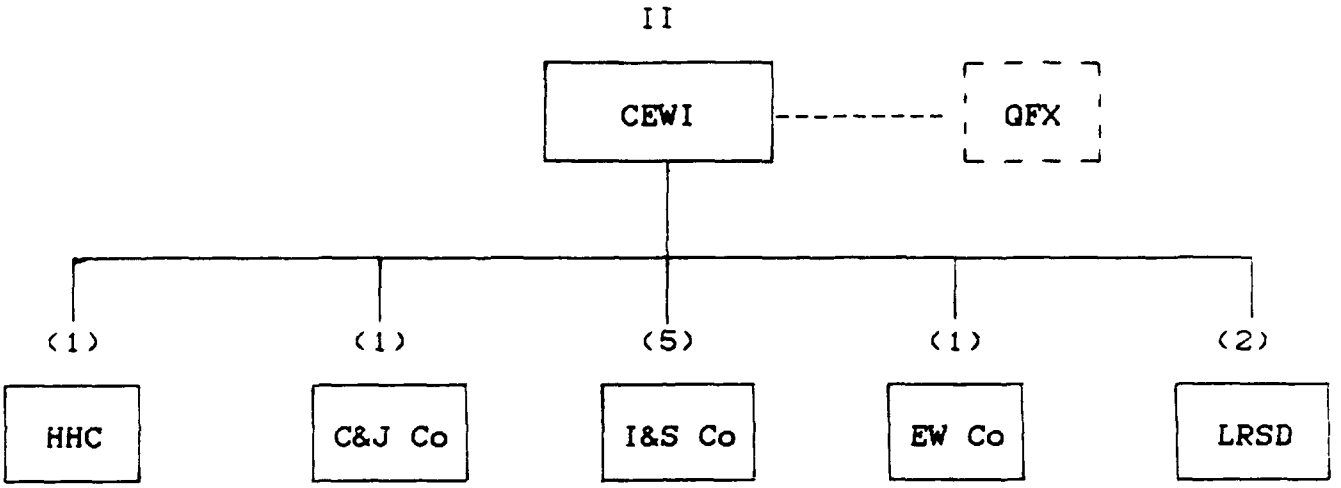
PROPOSED MI BDE RESTRUCTURE



Bde Cmd/Staff	HHC	HHC	HHC	HHC
	Bn Staff	Bn Staff	Bn Staff	Bn Staff
	A Co	BRS	A Co	A Co
	CTOC	A Co	Mohawk	MLQ-34
	B Co	Brs	B Co	PRD-10/11
	TCAE	6xLRS Tms	IGR/IPF	TLQ-17
	EPDS	B Co	GSM	TRQ-32
	E-TUT	Brs	C CoX	B CO
	THMT	6xLRS Tms	AQFX0	MSQ-103
	GSM/J-STARS	C Co	MH-60	TLQ-15
	ASAS	Brs	D Co	TSQ-114A/B
	C CO	6xLRS Tms	UAV	
	IPW	D Co		
	CI	Brs		
	DOCEXP	6xLRS Tms		

Fig. A-2

CURRENT DIVISION MI BN STRUCTURE



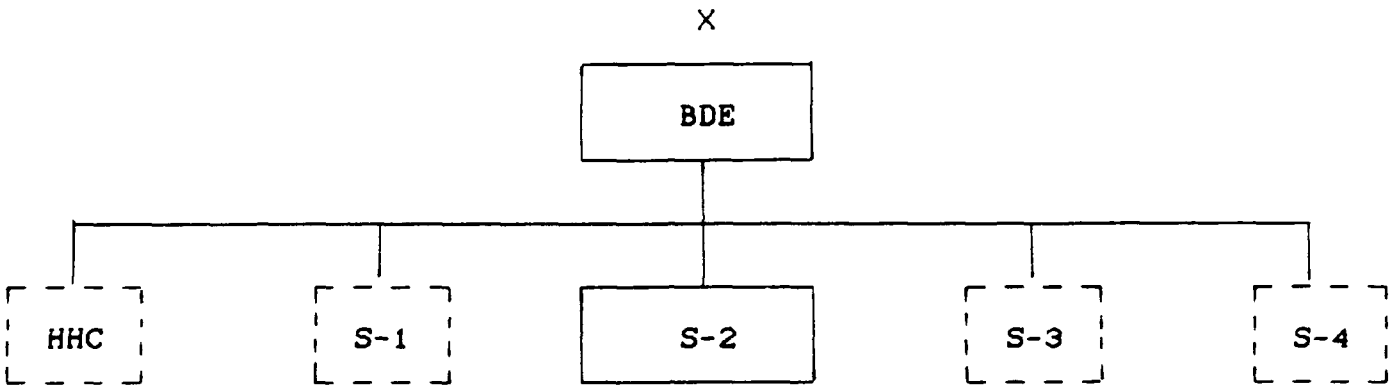
HHC	C&J Co	I&S Co	EW Co	LRSD
Bn Cmd/Staff	Co Hq	Co Hq	Co Hq	Det Hq
Co Hq	3xC&J Plt	GSR Plt	TRAILBLAZER	2xBRS Sec
TCAE (4)		IPW (3)	TEAMPACK	6xLRS Tms
BDE (3)		CI (3)		
Svc Plt				
EW Maint				
Mech Maint				
Food Svc				
Decon				
POL				
Commo				

(1) - Goes to Corps MI Bde FS Bn
(2) - Goes to Corps MI Bde LRS Bn
(3) - Goes to Corps MI Bde Ops Bn
(4) - Goes to Division G-2 Section
(5) - Goes to Division maneuver brigade S-2 Section

NOTE: QUICKFIX element currently organic to divisional Combat Aviation Brigade would go to the Corps MI Bde AEB

Fig. A-3

CURRENT MANEUVER BRIGADE S-2 SECTION



1xMajor
2xCaptains
1xE7 96B
1xE6 96B
2xE4/5 96b
1xM577

Fig. A-4

PROPOSED MANEUVER BRIGADE RESTRUCTURE

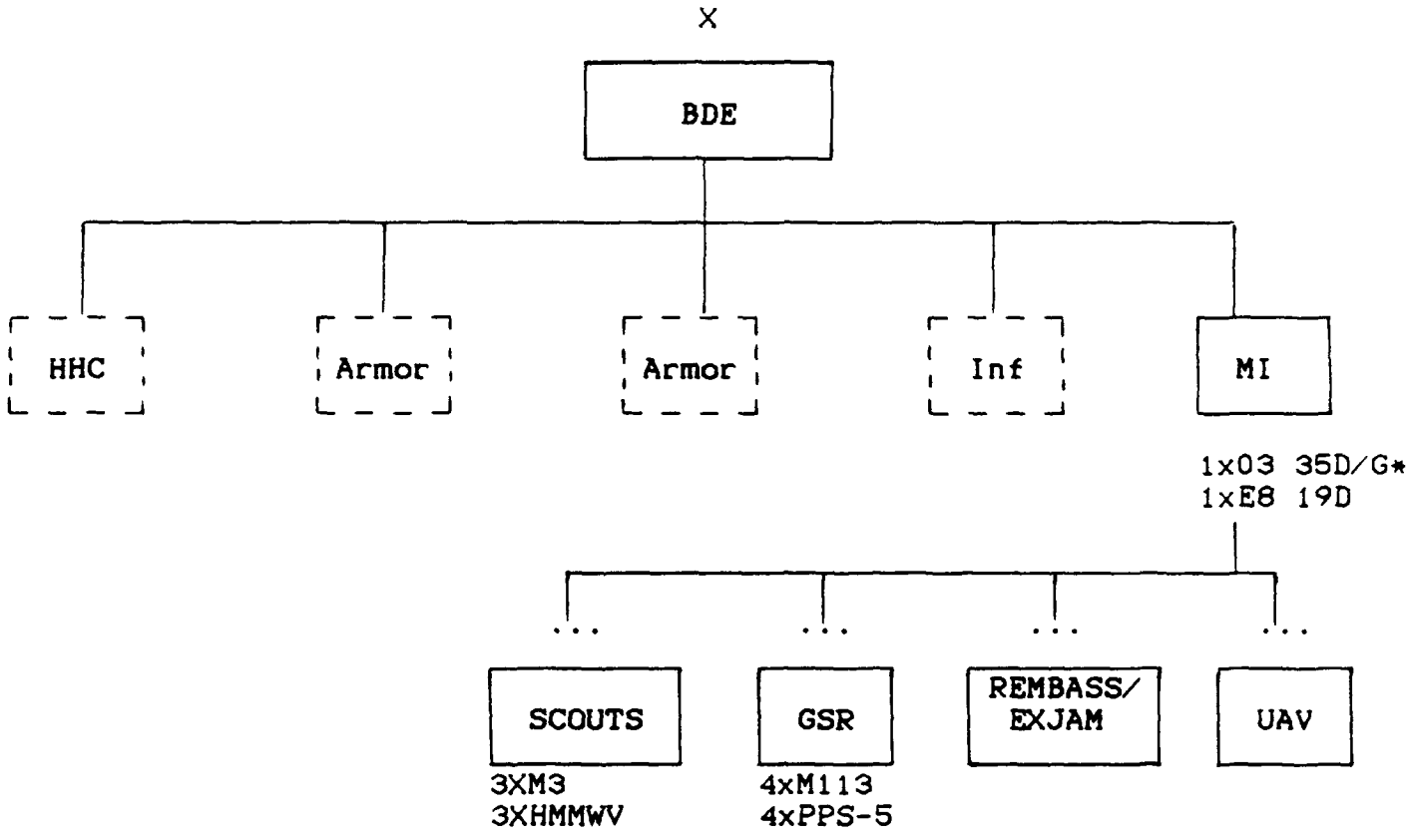


Fig. A-5

* Note: 03 would come from one of the two 03's authorized in the brigade S2 Section and would be a company commander position

APPENDIX B

GLOSSARY

33 CMF: Enlisted Technical Maintenance Career Management Field

98GCMF: Enlisted Signals Intelligence Linguist Career Management Field

ACR: Armored Cavalry Regiment (Corps)

AEB: Aerial Expoitation Battalion

ALB-F: Airland Battle - Future

ALO: Army Level of Organization

ASA: Army Security Agency

ASAS: All Source Analysis System

A-QFX: Advanced Quickfix Helicopter

BDE: Battlefield Deception Element

CAB: Combat Aviation Brigade (Division)

CAC: Combined Arms Center (Ft Leavenworth)

CEWI: Combat Electronic Warfare Inteligence

C&GSC: Command and General Staff College

CI: Counterintelligence

CMIST: Corps Military Intelligence Support Team

COSCOM: Corps Support Command

CTC: Combat Training Center

CTOC: Corps Tactical Operations Center

CTT: Commander's Tactical Terminal

DA: Department of the Army

DCSINT: Deputy Chief of Staff for Intelligence

DLI: Defense Language Institute

DOCEXP: Document Exploitation

JOCCP: Junior Officer Career Cryptologic Program

J-STARS: Joint Surveillance Target Aquisition Radar System
(an airborne high resolution radar system)

LOS: Line of Sight

LRS: Long Range Surveillance

ME: Middle East

METT-T: Mission, Enemy, Terrain (and weather) Troops,
Time Available

MFP: Military Force Program

MI: Military Intellignece

MIOAC: Military Intelligence Officer Advance Course

MOS: Military Occupational Specialty

NSA: National Security Agency

NTC: National Training Center

OCSA: Office of the Chief of Staff of the Army

OPCON: Operational Control

OPTEMPO: Operations Tempo

OPS BN: Operation Battalion

ORF: Operational Readiness Float

Pacing Items: Low density, Unit Status Reportable items

QFX: Quickfix - SIGINT collection, direction finding,
jamming system, helicopter mounted

RAOC: Rear Area OperationsCenter

REMBASS: Remote Battlefield Sensor System

REFORGER: Return of Forces to Germany

DS: Direct Support

EAC: Echelon corps and above

ECB: Echelon corps and below

EPDS: Electronic Processing Dissemination System

EPW: Enemy Prisoner of War

E-TUT: Enhanced Tactical Users Terminal

EW: Electronic Warfare

EXEVAL: External Evaluation

EXJAM: Expendable Jammer

FS: Forward Support

GS: General Support

GSM: Ground Station Module

GSR: Ground Surveillance Radar

GUARDRAIL: (an airborne SIGINT collection and direction finding system)

G-2: Intelligence Staff Officer, Division and Corps level

HF: High Frequency

HMMWV: High Mobility Multipurpose Wheeled Vehicle

I&S: Intelligence and Surveillance

IEW: Intelligence and Electronic Warfare

INSCOM: Intelligence Security Command

IOSS: Intelligence Orgnization and Stationing Study

IPB: Intelligence Processing of the Battlefield

IPF: Intelligence Processing Facility

IPW: Interrogator Prisoner of War

SCE: Service Cryptologic Element

SEMA: Special Equipment Mission Aircraft

SIGINT: Signals Intelligence

SOUTHCOM: Southern Command

SWA: Southwest Asia

S-2: Intelligence Staff Officer, Battalion, Brigade, Regimental levels

TCAE: Technical Control and Analysis Element

TCDC: Tactical Commanders Development Course

TEATAC-S: Technical Evaluation of Army Tactical SIGINT

TEB: Tactical Exploitation Battalion

THMT: Tactical High Mobility Terminal

TRADOC: Training and Doctrine Command, U. S. Army

TTP's: Tactics, Technicques and Procedures

UAV: Unmanned Aerial Vehicle

USAICS: United States Army Intelligence Center and School

USR: Unit Status Report