

**CHAPTER 3**  
**Command and Control**

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**PRINCIPLES**

Commandant control is the system used by the FSB to direct, coordinate, and control the activities used to accomplish the logistics and medical mission. The processes complicated by the FSB's terrain management and BSA defense responsibilities, as discussed later. Command and control involves the personnel, equipment, facilities, and procedures for gathering and analyzing data. They also involve planning what is to be done, issuing instructions for doing it, and supervising how it is done.

The complexity of the mission and dynamic battlefield of today require flexibility, creativity, and initiative by subordinate commanders. Command and control must be mission oriented. Just as the DISCOM commander must give the FSB commander the resources and authority to accomplish his mission, so too must the FSB commander ensure subordinate commanders and leaders have the assets and willingness

to innovate to get the job done. They must be well trained in communications and decision making. They must also understand doctrine and their organization. They must know when and in what circumstances they have the prerogative to act.

Commanders and leaders in the FSB must—

- Understand their responsibilities.
- Be familiar with responsibilities and capabilities of higher, lower, and supporting units. They must know the support required and what support each level can provide.
- Maintain contact with higher, lower, adjacent, supported, and supporting units.
- Write clear directives, reports, orders, and studies.
- Use effective oral communications.

- Understand the information systems related to CSS.
- Ensure radio and data transmission nets are used effectively.
- Be able to execute a well-rehearsed plan for command succession.
- Provide capability in meaningful terms to the brigade commander.

- Stay personally involved in and appraised of the CSS and tactical situations.
- Be familiar with the law of land warfare with respect to civilians, civil affairs, and civil-military operations.
- Understand their responsibility to the soldiers under their command.

## **ORGANIZATIONAL RELATIONSHIPS**

To perform its C2 functions, the FSB must develop and maintain a variety of relationships. They include relationships with—

- Higher organizations—DISCOM.
- Lateral organizations—MSB, other FSBs, and corps logistics task forces.
- Supported organizations—supported division and corps units in the brigade area, in particular, the brigade rear CP.
- Subordinate organizations—FSB companies.
- All organizations in the BSA (for defense and terrain management).

### **FSB AND DISCOM HEADQUARTERS**

While the FSB supports the divisional brigade, it remains under the command of the DISCOM commander. Requests for support beyond the FSB's capability flow through the FSB support operations section to the DISCOM staff and MMC. This ensures logistics and medical needs are staffed with the DISCOM S2/S3, DISCOM medical operations center, DMMC, and MSB. The FSB keeps the DISCOM aware of the support status in the brigade area and anticipated requirements beyond capability of the FSB. The DISCOM commander will make decisions on cross-leveling assets among the

MSB and the FSBs. The FSB/DISCOM relationship is depicted in Figure 3-1.

### **FSB AND DMMC**

The DMMC provides supply and maintenance management for the FSB. The DMMC manages all classes of supply except class VI, VIII, and X, and classified maps. It develops and manages the authorized stockage lists. It maintains division property book and Army equipment status reporting data. The DMMC also specifies the items and amounts of class I, III, IV, and IX materiel to be physically located in the BSA. It provides instructions for turn-in of excess items and for evacuation of items that cannot be expeditiously repaired by the FSB maintenance company. The technical relationship between the FSB supply and maintenance companies and the DMMC is illustrated in Figure 3-2.

### **FSB AND MSB**

The MSB provides designated DS supply support, backup DS maintenance, motor transport support, some field service functions, and limited medical reinforcement and augmentation of the FSB. The companies of the FSB maintain technical relationships with their related companies in the MSB. These technical relationships simplify technical training and operations. However,

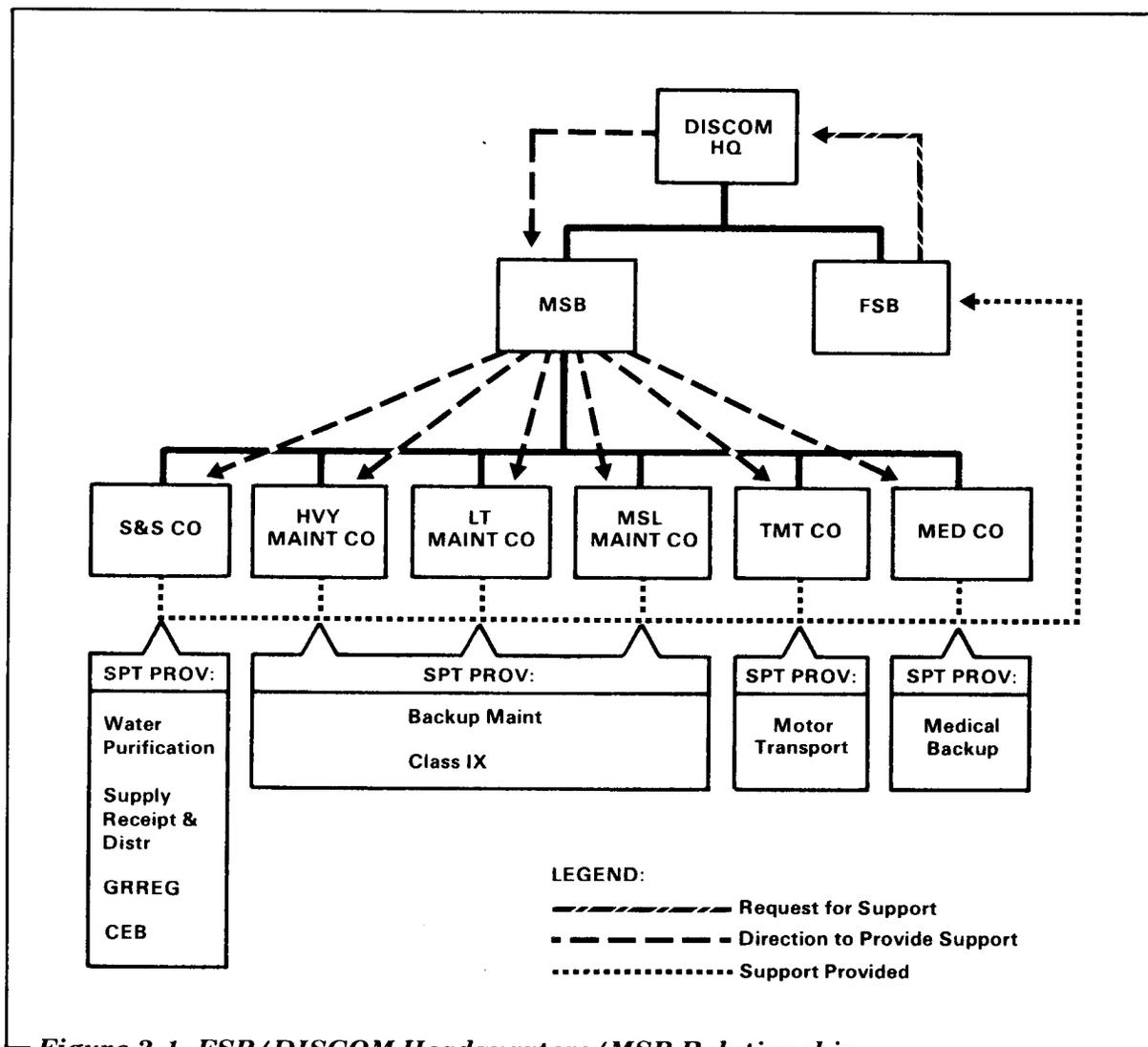


Figure 3-1. FSB/DISCOM Headquarters/MSB Relationship

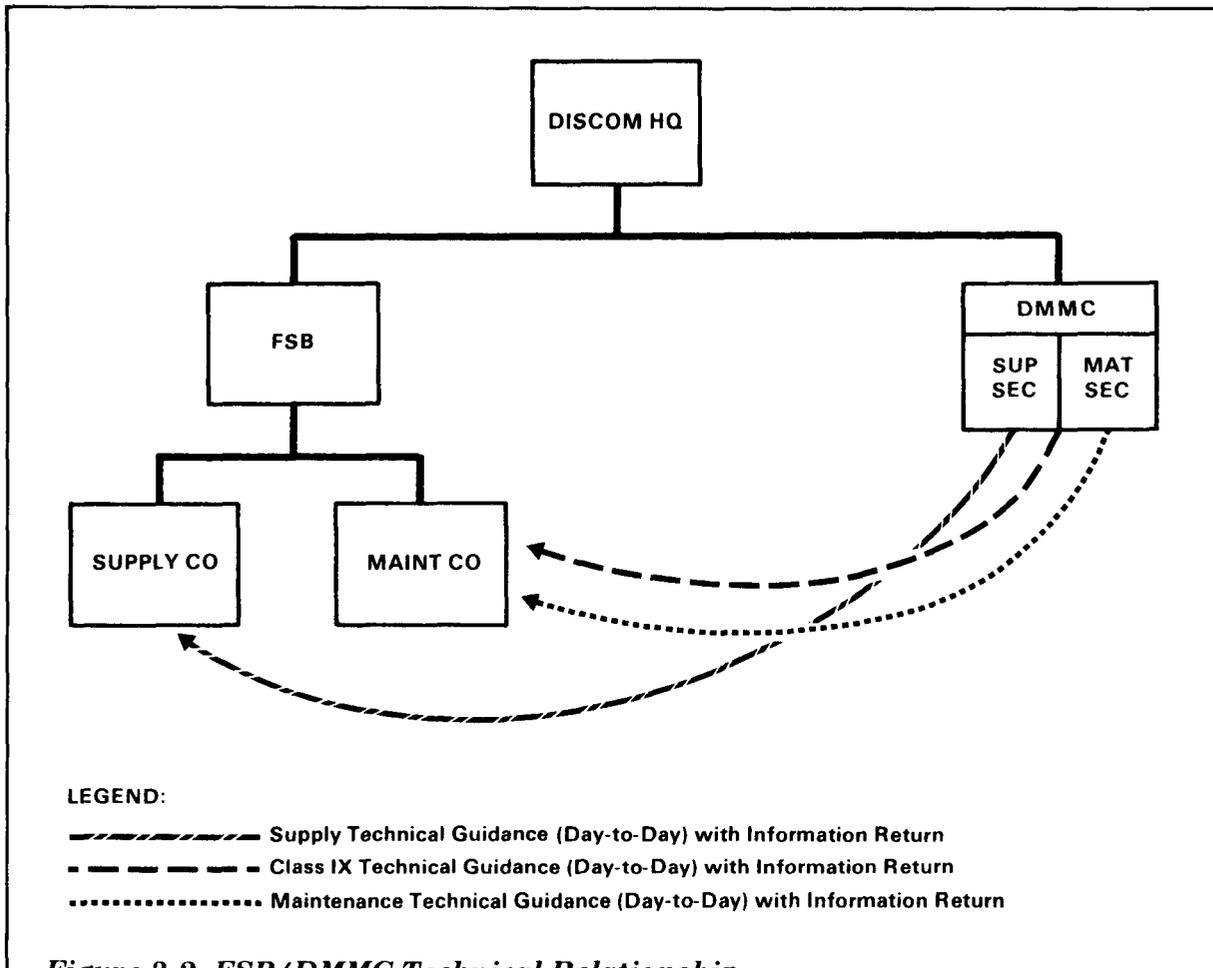
### FSB AND OTHER FSBs

these relationships do not take the place of command channels. Questions of who will support and with what priorities are decided within command channels. When FSB companies need reinforcing support from the MSB, the FSB support operations section coordinates with the support operations branch of the DISCOM S3 section. For medical support, the S3 will work with the medical operations center. Figure 3-1 shows the relationship between the FSB and MSB.

FSBs are normally widely dispersed and operate independently of each other. However, as discussed in Chapter 2, the DISCOM commander may choose to cross-level assets between FSBs to most effectively support the units in each brigade area.

### FSB AND SUPPORTED DIVISION UNITS

The FSB provides direct support to a divisional maneuver brigade. It thereby



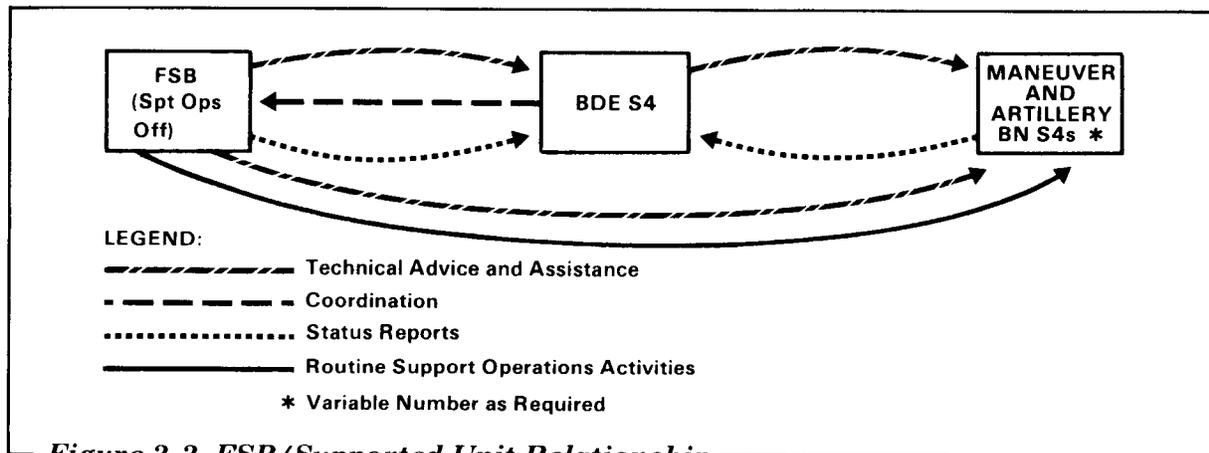
**Figure 3-2. FSB/DMMC Technical Relationship**

establishes a close working relationship with the supported brigade commander and staff, as well as the subordinate battalions and other attached and assigned units.

The brigade commander is responsible for planning all aspects of brigade operations, including logistics. The staff officer charged with assisting in the area of logistics is the brigade S4. He provides logistics information to the commander and acts as the brigade's logistics planner. As such, he coordinates the status of supplies and equipment with the maneuver battalion XO's and S4's and with representatives of CS elements attached and assigned to the brigade. He also maintains continuous contact with the FSB commander

and support operations officer to keep track of the FSB's status and capabilities, -and to ensure they understand the commander's priorities. To maintain this coordination, the brigade rear CP normally collocate with the FSB CP, and the brigade S4 has representatives there at all times.

The FSB deals directly with the battalion S4's and the designated logistics representatives of the other division elements in the brigade area. Together they work out the day-to-day details of logistics operations in the brigade. These include specific requirements and time schedules. Figure 3-3 depicts the relationship between the FSB and the supported brigade and maneuver and artillery



**Figure 3-3. FSB/Supported Unit Relationship**

battalions. For routine operations, the FSB companies also develop relationships with supported unit CSS operators such as support platoon leaders, battalion maintenance officers, and medics.

Division aviation elements may also require support from the FSB. When a unit assigned to the division aviation brigade (cavalry squadron, AHB) will be operating in a maneuver brigade sector and require support from that sector, the AB S4 will notify the DISCOM support operations branch and arrange for support to be provided by the FSB. The DISCOM support operations branch will coordinate with the MSB and the affected FSB support operations sections for any cross-leveling of DISCOM assets required. The CSST from the MSB will accompany the cavalry squadron. If JP-4 support is required from a maneuver BSA, the FSB will require additional assets. Other assets that must be considered include maintenance, class V, ground fuel, medical, and general supply elements. General principles of task organizing described in Chapter 2 also apply.

Support relationships may have to be adjusted in extreme circumstances. For instance, if a unit is cut off from its parent unit, one task of the senior maneuver commander is to reorganize logistics assets. All assets, both unit and DS level, are put under

the centralized control of the senior logistics or other designated individual. If the whole brigade with the FSB is cut off, the FSB commander will normally be given control. He must take several actions. He must gather information on all available assets as well as the personnel and equipment in the supported force. He will advise the maneuver commander who will select the best alternative—break out, defend encircled, attack deeper, or exfiltrate. On the basis of the commander's intent, the logistician rations key supplies, authorizes cannibalization, develops plans to destroy equipment, and develops a casualty evacuation plan.

In addition to its support relationship to the brigade and other division elements in the brigade area, the FSB has terrain management responsibilities and operational control for all elements located in the BSA for security. This topic is discussed in depth in Chapter 5.

### **FSB AND CORPS UNITS IN THE BRIGADE AREA**

As noted above, a number of corps units are likely to be operating in the brigade sector. Examples of such units include—

- Elements of a combat engineer battalion.
- Military intelligence teams.

- Platoons from Chaparral and Hawk batteries.
- Field artillery battalions/batteries (155-mm, 203-mm, Lance, MLRS/Army TACM).
- Air and ground ambulances.
- Motor transportation elements.
- Finance support unit.

These corps units receive medical support from the nearest medical facility regardless of unit affiliation. This may require moving some MSB medical assets forward. To coordinate logistics support to these units, the forward corps support group or logistics battalion task force operating in the DSA will send a liaison officer to coordinate with the support operations section. The LO and support operations officer together work the most efficient and effective way to support these units. If the corps elements are in the brigade rear and the number of personnel and items of equipment to be supported are small enough, the FSB may support them on an area basis. If the numbers are substantial or dispersion taxes the FSB's assets, the logistics task force must augment the FSB with corps assets. The principle of the FSB as the single logistics supporter in the brigade area must be followed to ensure the brigade retains control over unit locations and to avoid confusion on support relationships.

In addition to these elements which operate in the brigade area, corps forces may move through the area. For instance, corps units withdrawing from a covering force mission may pass through the brigade area. In addition to having to coordinate movement through the area, the FSB may be tasked to provide minimal support to assist the units in reaching their destination. Support most likely to be required will be supplemental maintenance and fuel. The FSB will provide support within its capability.

### FSB AND FSB COMPANIES

The FSB commander must maintain close personal contact with his subordinate company commanders. He depends on them to provide timely information on the status of their companies. In addition, the company commanders must understand the FSB commander's intent to perform their roles with initiative. This understanding is enhanced through frequent face-to-face discussion.

Though the company commanders will likely be in the vicinity of the FSB CP to facilitate coordination, they must not tie themselves to one spot. They command their companies from the locations where they can best assess and influence the support operation. These commanders use verbal orders, radio, visual signals, or wire among themselves, the FSB staff, their platoon leaders, and the supported elements.

### PROCESS

As with any other Army organization, the FSB commander and staff use the command and control process outlined in FM 101-5 to make decisions and supervise execution of orders. This process is a continuous one; the FSB commander and staff are always involved in estimating and planning. However, the focus becomes more precise

when the FSB receives a mission. Typically, it has already received a warning order when the commander, XO, S3, or support operations officer attends a DISCOM or brigade staff meeting. In some cases, the FSB commander must deduce the mission, but usually he receives the planning guidance and a restated mission from the DISCOM and

brigade commanders. He also obtains the brigade OPLAN/OPORD, and throughout the planning process, he and his staff work closely with the brigade S3 and S4 sections.

When it receives or infers its mission, the FSB begins mission analysis. The commander and staff take into account all the planning considerations discussed in Chapter 2. These include the force to be supported, FSB capabilities, and the brigade commander's priorities of support. The command section identifies tasks required to accomplish the mission, restates the mission, and issues a warning order along with the commander's planning guidance to all FSB elements.

The FSB commander provides his subordinate commanders and staff with planning guidance as often as required. The frequency, as well as the amount and content of the guidance, will vary with the mission, available time, tactical situation, available information, and historical data. Planning guidance is used to prepare estimates. Therefore, the commander must ensure the nature of the guidance does not bias staff estimates. The purpose of the estimate is to provide a common start point for staff planning. Planning guidance may include a restated mission, specific courses of action to develop or eliminate from consideration, assumptions, constraints, critical information required, or specific considerations (such as NBC, deception, or EW).

The FSB staff provides functional area estimates as discussed in Chapter 6 and

FM 101-5. On the basis of these estimates, the FSB commander finalizes his concept of operations. The XO then gives guidance on preparation of the OPLAN/OPORD. The S2/S3 consolidates the input and publishes and distributes the OPLAN/OPORD after the FSB commander approves it.

The FSB command section must keep in mind two points related to the decision making process summarized above. First, planning is continuous. It does not begin on receipt of a mission. The commander and staff are always gathering data and anticipating future requirements. When the mission is received, however, steps must be taken to finalize all the operational details of the CSS and BSA security plans. In addition, the command section must adjust to time constraints. In some cases, time is the most critical factor in the planning process. In such cases, planning guidance may have to be less specific and formal. When appropriate, FRAGOs on previous orders are preferable to a new orders. They save time.

After the order is issued, the FSB commander and staff supervise its execution. The primary purpose of the staff is to assist subordinate units to carry out the intent of the FSB commander's order. Plans and orders are refined as the situation changes. Information comes back to the command section through reports and personal observations of the commanders and staff. On the basis of this information, they evaluate whether the mission is being accomplished. When required, instructions are revised.

### HEAVY/LIGHT MIXES

To capitalize on the strength of each type of unit, heavy and light forces may be cross-attached. The decision on such cross-attachments will likely be made at corps or

division level. The FSB staff must be prepared to support them. The mixes with which the FSB may be involved include the following:

● *Division heavy brigade OPCON to LID.* This mix is viable for a short mission (48 hours or less) when the heavy division can support it without negatively affecting the overall mission. A key consideration for supporters would be distances from the heavy division DSA to the location of the brigade OPCON to the LID. The requirements of the rest of the heavy division must also be considered. Normally, the heavy brigade would deploy with its associated FSB and elements of the MSB. The MSB elements may include HETs, 5,000-gallon tankers, water purification and distribution assets, and maintenance assets including the brigade portion of the class IX ASL. Because of the austere CSS structure of the LID and differences in the support concepts, attachment of a heavy division brigade to a LID is the least preferred option. If it becomes necessary, the heavy brigade FSB with MSB elements should plug directly into the corps support structure, rather than the LID's DISCOM.

● *Heavy battalion OPCON to light brigade.* Again, OPCON is the preferred relationship for cross-attachment at this echelon if the situation allows. Because of different requirements and austere support capabilities, the light brigade will not be able to support a heavy battalion attached to it. FSB

assets likely to be required to accompany the battalion include the associated MST, a portion of the class IX ASL, a recovery vehicle, and fuel tankers. In addition, HETs from the MSB would be required.

● *Light battalion attached to heavy brigade.* Attachment of a light battalion to a heavy brigade is preferred to OPCON. Therefore, if the brigade supported by an FSB receives a light battalion, the FSB will likely be required to provide support. The FSB staff can expect the battalion to bring with it a battalion slice of maintenance and food service assets from its parent brigade in addition to the battalion's organic assets. It will also require transportation support, maintenance assets, and assets to deliver water to the battalion.

The actual combination of support assets accompanying units in a heavy/light mix will depend on the following factors:

- Distance from the parent unit.
- Duration of the mission.
- Support requirements.
- Proximity to other similar light or heavy units.
- Intensity of conflict.

## FACILITIES

Command and control facilities include command posts and supporting automation and communications systems. These facilities make possible processing and transmission of information and orders necessary for effective C2. C2 automation and CP guidance

are discussed below. Communications is covered in Chapter 4.

### C2 AUTOMATION

Automated systems throughout the DISCOM are designed to allow commanders

to manage information to optimize use of limited resources. The systems include the machinery, programs, specialists, and organizations which process data through the use of computers.

Past automation has been ineffective to support logistics C2 operations. Staff estimates and plans have been developed manually based on data collected through voice, message, or courier-based communications. Use of technical data for command and control has been hampered by the fact that data has been too detailed, in unusable formats, and not readily accessible from current automated functional systems. There are some one-to-one interfaces between functional systems, but there is no integration of data bases to support cross-functional decision making. This deficiency is being corrected through a new command, control, and subordinate system that includes a CSS control system.

#### **Command, Control, and Subordinate System Structure**

CCS2 will provide the means of interfacing the five battlefield control functions of maneuver, air defense, CSS, intelligence/EW, and fire support. This interface is called the Army Tactical Command and Control System. (Note: Initial fielding will begin in the second quarter of FY 90. A full interactive, automated system is expected in 1995 when the objective CCS2 is realized. )

The CSS Control System of the ATCCS will be an automated system that provides logistics, medical, and personnel command and control information. It will rapidly collect, analyze, project, and distribute this information to the maneuver commander. This allows timely and sound tactical decisions to be made. This information will also help CSS commanders perform their command and control functions. In addition, this information helps combat support commanders to

execute their missions. The CSSCS retrieves data from CSS subordinate units and systems, called Standard Army Management Information Systems. The CSSCS will be employed at maneuver brigade, division, corps, and echelons above corps. (Note: At EAC, the CSSCS will also provide C2 financial information.)

At brigade level, there will be two CSSCS devices. The CSSCS node of the ATCCS at the brigade will be located in the FSB support operations section. This device will respond to information requirements generated by the DISCOM commander, the brigade commander, and the other ATCCS nodes at brigade level. The FSB-DISCOM S2/S3 interface will pass information requirements from the brigade area to the DISCOM commander and staff to permit more informed and responsive decisions. It also will provide the means for the DISCOM commander and staff to disseminate information, such as OPLANS, orders, and inquiries, to the FSB. The interface with the other CCS2 nodes (fire support, air defense, IEW, and maneuver) will permit integration of all battlefield control functions to synchronize activities.

Another CSSCS device will be located in the brigade rear CP to support the brigade S1 and S4 sections. This device will enable the S1 and S4 to conduct planning for personnel and internal logistics support operations. It will also be used to feed brigade personnel and logistics data to the brigade commander. Figure 3-4 depicts CSSCS in support of the brigade.

#### **Functional Systems**

Besides providing information to the CSSCS for command and control purposes, the CSS automated systems will continue to perform the functional missions for which they were originally designed. These systems operate on TACCS and the unit-level logistics system. Operator input automatically

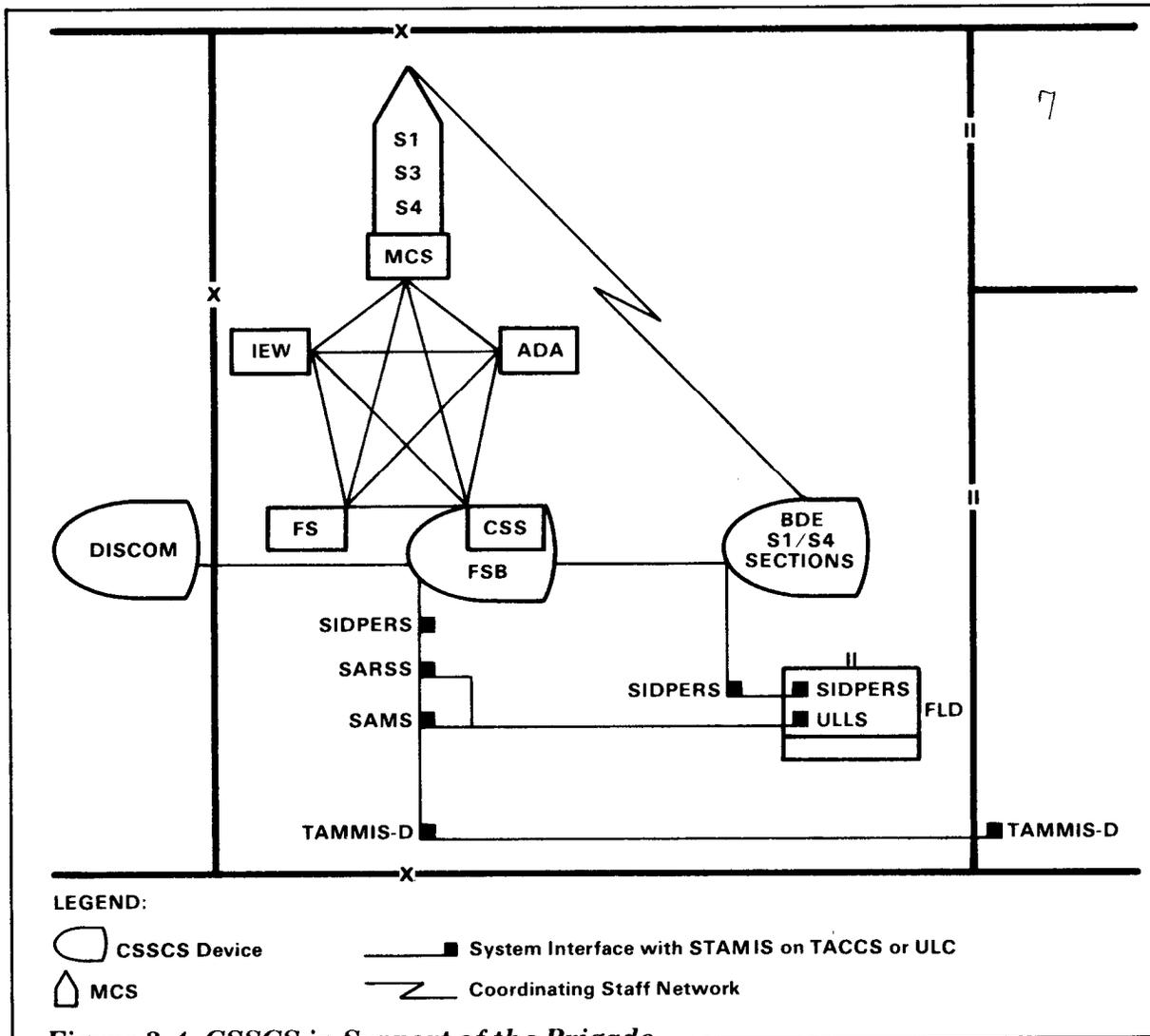


Figure 3-4. CSSCS in Support of the Brigade

updates data within files which are stored on magnetic media. Transactions are transmitted either electronically or through use of magnetic media. The systems used by the FSB are discussed below.

**Standard Army Maintenance System.**

At the FSB maintenance company, SAMS-1 operates on TACCS and receives data from and transmits them to all supported maintenance elements via an interface with the ULLS. SAMS-1 automates production control, providing immediate job order and

backlog status information. It provides, through file inquiry, critical repair parts and shop stock asset status. It screens production parts requirements against on-hand assets and automatically generates, edits, and passes requests to the supply system via SARSS-1. The maintenance company SAMS-1 interfaces with SAMS-2 at the DMMC. SAMS-2 receives SAMS-1 data and provides immediate production and supply requirements to managers. It gives daily visibility to deadlined equipment.

***Standard Army Retail Supply System.***

SARSS-1 operates on TACCS hardware in the FSB supply and maintenance companies. SARSS-1 automates class II, III (packaged), IV, VII and IX supply actions. It performs time-sensitive functions such as receipt, storage, issue, replenishment, inventory adjustments, supply performance reporting and excess identification. It also maintains accountable stock record balances. Normally, SARSS-1 interfaces directly with SARSS-2A on TACCS at the DMMC. SARSS-2A receives asset balance reports from SARSS-1 and routes unfilled requisitions received from SARSS-1 activities to the appropriate source of supply. It also performs lateral transfers, substitutes item identification and release, submits catalog changes to SARSS-1, and maintains asset balance visibility for all SARSS-1 subordinate activities. In contingency operations, SARSS-1 can operate in the autonomous mode without SARSS-2A support and route requisitions directly into the wholesale system.

***Standard Installation/Division Personnel System.*** SIDPERS automates strength accounting, assignment, organization recordkeeping, personnel recordkeeping, and labor-intensive military personnel operations within the S1 section. SIDPERS operates on TACCS hardware.

***Tactical Army Medical Management Information System—Division.*** TAMMIS-D consists of two subsystems:

- ***Medical Patient Accounting and Reporting—Division.*** MEDPAR-D is used by medical platoons and sections at battalion and brigade level, medical companies at division level, and medical staff agencies. It allows users to maintain patient demographic data and to initiate and maintain individual soldier medical files. It provides command roll-up reports on the medical

situation and resources, patient status, and patient evacuation and mobility.

- ***Medical Logistics—Division.*** MEDLOG-D accommodates management of medical supplies and equipment. It identifies authorized levels of medical supplies and allows rapid reordering of medical assemblage items. It maintains a log of medical equipment, accumulates repair cost data, and identifies calibration safety testing and preventive maintenance schedules. It also maintains data on critical items and sends them through command channels as required.

***Unit Level Logistics System.*** ULLS is a standard automated logistics system for unit class IX PLL and maintenance management operations. It automates repair parts supply documentation, maintenance management operations, and historical document data. It will be employed in unit maintenance sections. It will interface with both the SAMS-1 and SARSS-1 in the FSB maintenance company.

## **COMMAND POST**

The primary C2 facility in the FSB is the command post. The brigade rear CP collocated with the FSB CP. Together they plan and coordinate the logistics support of the brigade. They actively track the battle. The brigade rear CP must be ready in the event it becomes necessary to assume control. Both CPs must track the situation to anticipate support requirements.

The FSB commander identifies FSB CP functions that must be done on a routine basis to support operations and those which require command approval. He sets priorities and defines levels of authority in SOPS. Also defined in SOPS are staff responsibilities and interrelationships.

CP personnel normally operate in a two-shift mode to permit continuous operations. Table 3-1 is an example of how the FSB CP positions could be organized into two shifts. This is only an example of minimum staffing. During intense activity, all available personnel may be required for short periods. However, maximum staffing cannot continue indefinitely. FSB commanders and staffs must consider fatigue and sleep loss that occur during combat. Fatigue caused by lack of sleep is a major source of battlefield stress. Leaders are particularly susceptible. Principles to minimize fatigue include the following

- Specific sleep plans must be developed and enforced.
- Plans should allow for at least 3 to 4 hours of sleep every 24 hours. Even at this rate, performance, especially decision making skills, will become degraded in several days.
- Priority of sleep must go to those whose decision making is critical to the mission.

In order for sleep plans to work, soldiers must be cross-trained. One technique which may help is to develop performance supports to simplify critical tasks. These include aids such as specific SOPS or checklists.

**Site Selection**

The FSB commander and S2/S3 in coordination with the brigade S4 select the location of the BSA which is approved by the brigade S3. (Considerations are discussed in Chapter 5.) Positioning of elements within the BSA is the responsibility of the FSB commander and is performed by the FSB S2/S3.

A key consideration in determining the location of the CP within the BSA is the

*- Table 3-1. FSB CP Organized — in Two Shifts*

PEAK ACTIVITY	REDUCED ACTIVITY
Spt Ops off	S2/S3 Off
Ops Sgt	Intel Sgt
Bn Comm Ch	Swbd Op
Maint Off	Mech Maint Sgt
(Covered by OIC)	Spt Ops Sgt
NBC NCO	Ops Sgt (Meal Spin Spt Ops)
Spt Ops Typist	S2/S3 Typist

ability of the site to provide for good communications with higher, lower, and adjacent units. Considerations must include capability to remote antennas and to use terrain to mask transmission. FM 24-1 has details. The CP should be near enough to the road network to allow relatively easy access. However, prominent terrain features and major road junctions should be avoided for security reasons.

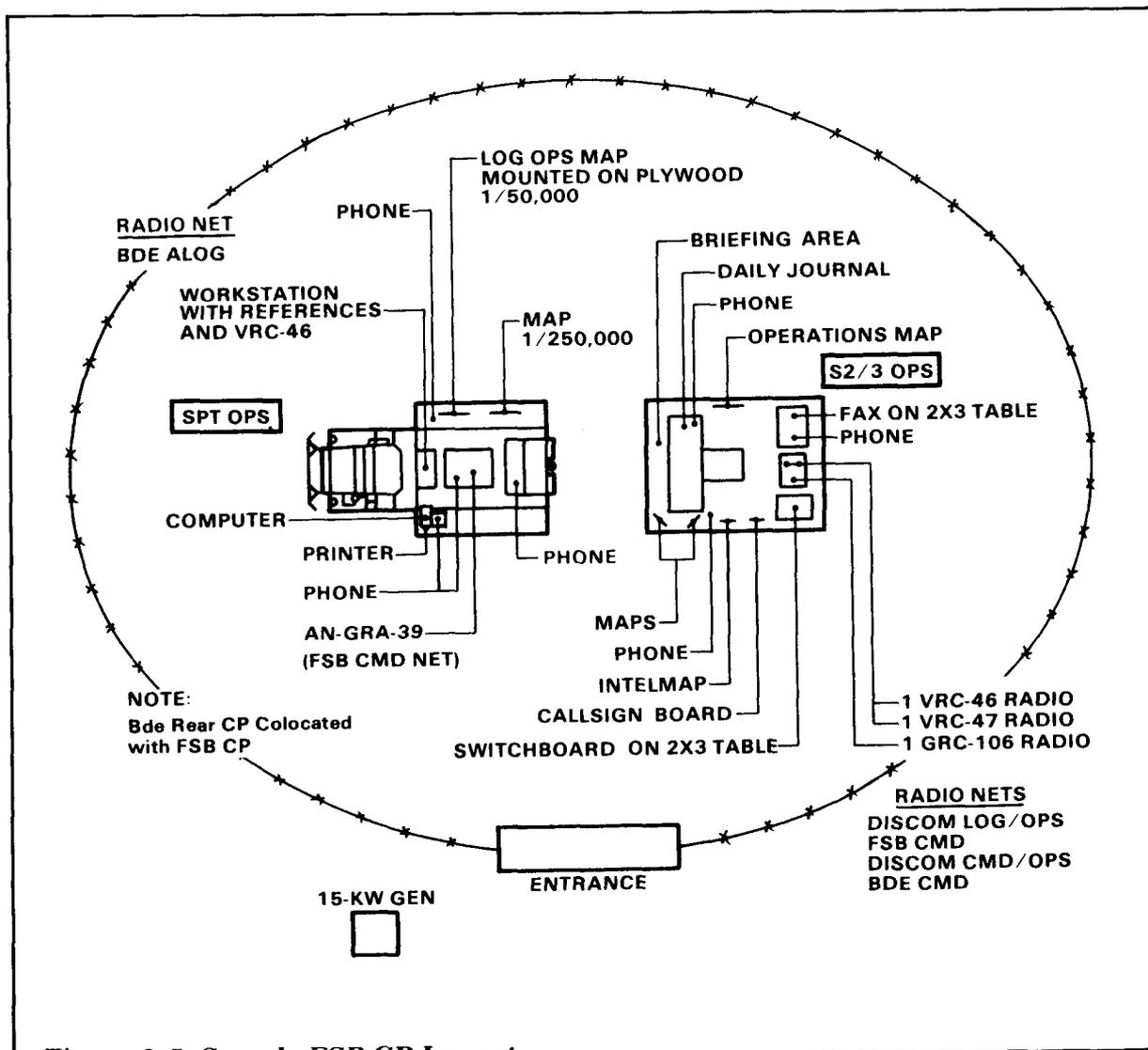
When possible, the CP should be located in built-up areas. Barns, garages, and warehouses eliminate the need for extensive camouflage. Basements provide protection from enemy fires. Using basements or covering windows enhance noise and light discipline. Use of built-up areas also reduces infrared and electromagnetic signatures. However, commanders must also consider the risk of undue injury to the civilian populace or protected places when selecting the CP site. When use of a built-up area is not feasible, the CP should be located on the reverse slope to provide cover and concealment from both ground and air observation and fires. In addition, the ground must be firm enough to support vehicle traffic, have good drainage, and provide enough space to disperse vehicles.

**Layout**

The CP may be laid out in a number of different arrangements and still perform its functions effectively. Obviously, if it is located in a built-up area, the layout will have to conform to the structure of the available buildings. What follows here is one way to organize the CP in a field environment.

This sample CP is organized into a dual shelter configuration, as depicted in

Figure 3-5. The CSS mission is managed in the direct support operations van. The communications, intelligence, and operations missions are performed in the S2/S3 tent. To ensure the best possible communications and coordination, the brigade rear CP is collocated with the FSB CP.



**Figure 3-5. Sample FSB CP Layout**