

U.S. ARMY SERGEANTS MAJOR ACADEMY (BSNCOC)

W104

JUN 99

COMMAND AND CONTROL FACILITIES

PRERESIDENT TRAINING SUPPORT PACKAGE

WAR FIGHTERS



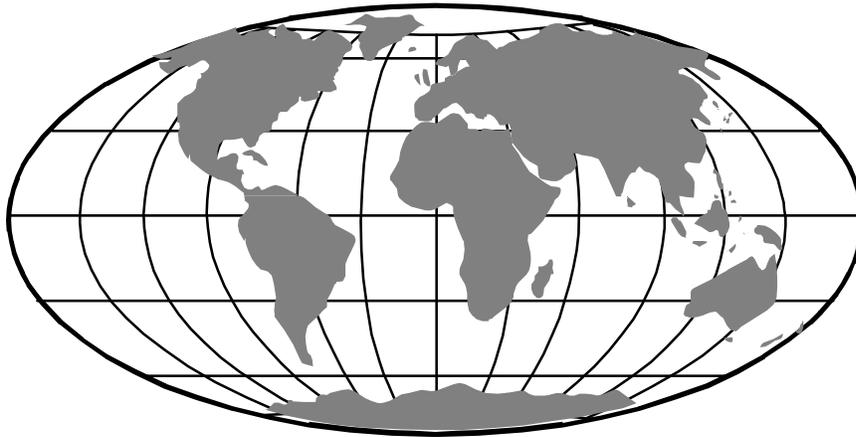
Sergeant Major



Master Sergeant



Sergeant First Class



Staff Sergeant

OF THE 21ST CENTURY

PRERESIDENT TRAINING SUPPORT PACKAGE

**TSP Number/
Title** W104
 Command and Control Facilities

Effective Date JUN 99

**Supersedes
TSPs** W104, Command and Control Facilities, dated AUG 98.

TSP User The following course uses this TSP:

| Course Number | Course Title |
|---------------|-------------------------|
| 250-ASI-2S | Battle Staff NCO Course |

Proponent The proponent for this TSP is the United States Army Sergeants Major Academy.

**Comments
and
Recommendations** Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to:

ATTN ATSS DCR
CMDT USASMA
BLDG 11291 BIGGS FLD
FORT BLISS TX 79918-8002

**Foreign
Disclosure
Restrictions** The course developers in coordination with the USASMA foreign disclosure authority have reviewed the materials contained in this course. This course is releasable to students from all requesting foreign countries without restrictions.

**This TSP
contains**

The following table lists the material included in this TSP:

| Table of Contents | | Page |
|--------------------------|--|-------------|
| Lesson | Section I, Administrative Data | 3 |
| | Section II, Introduction/Terminal Learning Objective | 6 |
| | Section III, Presentation | 7 |
| | Section IV, Summary | 16 |
| | Section V, Student Evaluation | 16 |
| Appendixes | A. Lesson Evaluation, Faculty Graded | Not Used |
| | B. Lesson Exercise and Solutions | B-1 |
| | C. Student Handouts | Not Used |

**Gender
Disclaimer**

Unless otherwise stated, the masculine gender of pronouns used in this lesson refers to both men and women.

SECTION I ADMINISTRATIVE DATA

Task(s) Trained

This lesson trains to standard the task listed in the following table:

| | |
|--------------------|--|
| Task Title: | Assist the commander in the planning and coordinating of command and control facilities. |
| Conditions: | As a member of a unit staff. |
| Standard: | In accordance with FM 7-20, FM 71-2, and FM 71-123. |

Task(s) Taught or Supported

This lesson teaches or supports the following tasks:

| Task Number | Task Title |
|-------------|---|
| 7-1-3901 | Command and Control the Battalion Task Force. |
| 7-1-3904 | Operate Main Command Post. |
| 7-1-3035 | Move a Command Post. |
| 7-1-3036 | Establish a Command Post. |

Task(s) Reinforced

This lesson reinforces the following tasks:

| Task Number | Task Title |
|-------------|--------------------------|
| 7-1-3902 | Perform S-3 Operations. |
| 7-1-3401 | Maintain Communications. |

Prerequisite Lessons

None.

Clearance and Access

There is no security clearance or access requirement for this lesson.

Copyright Statement

This lesson includes no copyrighted material.

References

The following table lists the reference(s) for this lesson.

| Number | Title | Date | Para No. | Additional Information |
|-------------------|---|------------------|-----------------|-------------------------------|
| FM 7-20 | The Infantry Battalion | Apr 92 | NA | NA |
| FM 71-2 w/ch 1 | Tank & Mech IN Bn Task Force | Sep 88 Aug 94 | NA | NA |
| FM 71-123 | Tactics/Techniques for Combined Arms Heavy Forces; Armd Bde, Bn/Task Force & Co Team. | Sep 92 | NA | NA |

**Equipment
Required**

None

**Materials
Required**

None

**Safety
Requirements**

None.

**Risk
Assessment
Level**

Low

**Environmental
Considerations**

None

Lesson Approval The following individuals have reviewed and approved this lesson for publication and incorporation into the Battle Staff NCO Course.

| Name/Signature | Rank | Title | Date Signed |
|-----------------------|-------------|-----------------------------|--------------------|
| George V. Bucher Jr. | GS-9 | Training Specialist, BSNCOC | 20 October 1999 |
| William D. Adams | SGM | Chief Instructor, BSNCOC | 20 October 1999 |
| Alan R. Tucker | SGM | Course Chief, BSNCOC | 20 October 1999 |

SECTION II INTRODUCTION

Terminal Learning Objective

At the completion of this lesson, you will:

| | |
|--------------------|--|
| Action: | Assist the commander in the planning and coordinating of command and control facilities. |
| Conditions: | As a member of a simulated unit staff, in a selfstudy environment using the material contained in this lesson. |
| Standard: | In accordance with FM 7-20, FM 71-2, and FM 71-123. |

Evaluation

Prior to being enrolled into Phase II of the Battle Staff Course you must take a Phase I Exam that includes questions on material from this lesson. You must correctly answer 70% of the multiple choice questions to receive a "GO" on the Phase I exam. A "GO" is required for enrollment into Phase II.

Instructional Lead-in

Success on the battlefield depends on commanders having responsive, efficient command and control systems that provide "real time" information and allow them to think faster than the enemy. The command and control (C2) facilities system provides a rapid and reliable mechanism for command and control. It also provides clear communication of the command's intent and positive control. As a Battle Staff NCO, you must become the technical expert on emplacement, relocations, and configuration of C2 facilities. This lesson describes organizational and operational concepts designed to make command posts (CPs) more effective and responsive to the commander and other key decision makers. It also describes the techniques to make these CPs less vulnerable on the battlefield.

SECTION III PRESENTATION

ELO 1

| | |
|--------------------|--|
| Action: | Describe the functions of command and control facilities. |
| Conditions: | In a self-study environment using the material contained in this lesson. |
| Standard: | In accordance with FM 7-20, FM 71-2, and FM 71-123. |

Learning Step/Activity (LS/A1), ELO 1, Introduction

The task force command and control facilities consist of the vehicles, equipment, and locations from which the task force commander assisted by his staff directs the battle and sustains the force. The exercise of command and control focuses on four major facilities:

- The Main Command Post.
 - The Tactical Command Post.
 - The Combat Trains Command Post.
 - The Field Trains Command Post.
-

Battalion Task Force Main CP

The battalion task force main command post (CP) is the control, coordination and communications center for combat operations. The main CP, normally referred to as the Tactical Operations Center (TOC) consists of:

- S-2 and S-3 sections.
 - Fire Support Element (FSE).
 - Representatives from other attached elements.
 - Tactical CP (when not forward).
-

Personnel and vehicles

The main CP vehicles and personnel must be as few as possible to allow for rapid displacement, but sufficient enough in numbers to accomplish command and control functions in support of the commander.

**LS/A1,
ELO 1,
Functions**

The functions of the main CP are to monitor and assist in command and control by--

- Maintaining contact and coordination with higher and adjacent units.
- Continuously updating the enemy situation.
- Planning operations.
- Analyzing and disseminating tactical information.
- Maintaining situation maps.
- Requesting and synchronizing additional combat support (CS) and combat service support (CSS) for the battle.

Factors that have immediate operational impact are monitored by the main CP and communicated to the commander.

Operations

The primary considerations in positioning the main CP are--

- Communications.
- Accessibility.
- Survivability.
- Size.
- Concealment.
- Shelter.
- Security.

Personnel who operate the Main CP provide both security and continuous operations on a 24-hour-a-day basis.

| | |
|--|--|
| LS/A1, ELO 1, Alternate Main CP | The combat trains CP (CTCP) is normally designated as the alternate main CP. |
|--|--|

| | |
|--------------------------|--|
| Tactical Command Post | A tactical CP may be formed during fast-moving offensive or retrograde operations to maintain communications and facilitate main CP movement. Some or all of the command group may locate at the tactical CP at various times. |
|--------------------------|--|

| | |
|------------------|--|
| Command Group | <p>The composition, nature, and tasks of the command group are determined by the commander to permit the optimum command and control of his unit during battle.</p> <p>The command group consists of the commander and those he selects to go forward to assist him in controlling maneuver and fires during the battle. It normally includes the Fire Support Officer (FSO), Forward Air Controller (FAC), and S-3. There is no requirement for these people to collocate; for example, the commander may be in one part of the battalion sector while the S-3 might be in a separate part of the sector.</p> |
|------------------|--|

| | |
|---|---|
| Combat Trains Command Post (CTCP) | The CTCP is the coordination center for combat service support for the battalion task force and the control element of the combat trains. The positioning of the CTCP is forward of the field trains. |
|---|---|

| | |
|----------------|---|
| Responsibility | The S-4 is responsible for operations, movement, and security of the combat trains, assisted by the S-1. The S-4, S-1, and Battalion Motor Officer (BMO) must continually assess the situation, anticipate the needs of units, and prepare to push support forward. |
|----------------|---|

| | |
|------------|---|
| CSS Status | The combat trains CP maintains the CSS status of the battalion. In preparation to assume the functions of alternate main CP, the combat trains CP monitors the task force command net and maintains charts and tactical situation maps identical to those at the main CP. |
|------------|---|

| | |
|--|--|
| LS/A1, ELO 1, (CTCP), Changes | The Main CP or Tactical CP reports any changes in the main effort to the combat trains CP. Similarly, a major change in the ability of the CSS system to support an operation is immediately reported to the main CP by the combat trains CP. The combat trains CP relays information to the field trains CP (FTCP). |
| <hr/> | |
| Field Trains Command Post (FTCP) | The field trains are under the control of the headquarters and headquarters company (HHC) commander, located at the field trains CP. When the TF commander locates his field trains with the Brigade Support Area (BSA), the HHC commander coordinates with the forward support battalion (FSB) for positioning and a defensive sector for the battalion field trains elements. The FTCP monitors the TF A/L Net and maintains communications with FSB CP. |
| <hr/> | |
| (FTCP) Composition | The field trains CP consists of the HHC commander, and the remaining elements of the S-1 and S-4 sections, support platoon, and maintenance section. It coordinates the collection and movement of CSS from the task force field trains and the FSB to forward elements of the task force. |
| <hr/> | |
| LOGPACs | Supplies, personnel, and mail going forward from the field trains are grouped together into logistics packages (LOGPACs) under the control of the support platoon leader or a company supply sergeant. The field trains CP organizes and dispatches LOGPACs based on instructions from the combat trains CP. |
| <hr/> | |
| Echelon | The battalion trains are normally organized with both a CTCP and a FTCP. The alternative configuration is to form unit trains with a single rear CP which is operated by the S-4. In this case there is no FTCP. |
| <hr/> | |
| Brigade Command Group Functions | <p>The brigade command group has the following functions:</p> <ul style="list-style-type: none"> • Observe the battlefield. • Influence the battle with personal presence. • Control (synchronize) the battle-close, deep, and rear. • Provide planning guidance. |
| <hr/> | |

**LS/A1,
ELO 1,
Brigade
Tactical
Command Post
Functions**

The brigade tactical CP has the following functions:

- Conduct ongoing close operations.
 - Facilitate communications with subordinate commanders.
 - Provide the commander with combat critical information.
 - Disseminate decisions concerning CS and CSS.
-

**Brigade Main
Command Post
Functions**

The brigade main CP has the following functions:

- Assist the brigade and TF commanders.
 - Monitor the close fight.
 - Coordinate CS and CSS.
 - Execute planned deep attacks.
 - Coordinate operations throughout the brigade sector.
 - Fight rear operations.
 - Plan future operations.
 - Keep higher headquarters informed.
-

**Brigade Rear
Command Post
Functions**

The brigade rear CP has the following functions:

- Sustain current operations.
 - Forecast future CSS requirements.
 - Conduct detailed CSS planning.
-

LS/A1,
ELO 1,
Brigade Rear
Command Post
Functions,
continued

- Serve as entry point for units entering brigade rear area.
 - Coordinate with FSB CP (collocate).
 - Serve as alternate main CP.
-

LS/A2,
ELO 1, Lesson
Exercise 1

Click here to go to [Lesson Exercise 1](#).

ELO 2

| | |
|--------------------|--|
| Action: | Describe the positioning and displacement of command and control facilities. |
| Conditions: | In a self-study environment using the material contained in this lesson. |
| Standard: | In accordance with FM 7-20, FM 71-2, and FM 71-123. |

LS/A1,
ELO 2,
Command Post
Positioning

The following areas, are considered when selecting the location of the CP:

- Communications.
 - Access.
 - Survivability.
 - Size.
 - Concealment.
 - Shelter.
 - Security.
-

| | |
|---|---|
| LS/A1, ELO 2, Communica- tions | The main CP must be able to communicate with subordinate and supporting units and higher headquarters on all required nets. The site location varies according to whether the operation is offensive or defensive. The main CP is farther forward during an offensive operation than it is during a defensive one. In the defense, the main CP is as far back as it can be and still maintain adequate communications. Main CP personnel position radios as necessary to provide security and protection. |
| Access | <p>The main CP is centered in the unit area. It should be near, but not next to a high speed avenue of approach. No more than one or two routes should lead into the main CP.</p> <p>These routes are covered, concealed, and connected with other routes of communication that provide access to most of the units. Regardless of whether the operation is offensive or defensive, the physical presence of the main CP must not interfere with the tactical maneuver of friendly units. When possible, a helicopter landing zone (LZ) should be nearby.</p> |
| Survivability | If the main CP is located other than in a built-up area, the best place for it is on a reverse slope with cover and concealment. Avoid key terrain features such as hilltops and crossroads. |
| Size | The area selected must be large enough to accommodate all main CP elements when the command group is not deployed forward. These include liaison personnel from attached and supporting units. The area selected must include space for eating, sleeping, personal hygiene, and maintenance areas. Sufficient area must also be available for positioning security and for vehicle dismount points and parking. |
| Concealment | The main CP must be stationary to be fully effective regardless of its location. Displacements depend on the ability of the enemy to locate and target the TOC. Plan displacements to allow the main CP to remain stationary at critical phases of the battle. |

| | |
|--------------------------------------|---|
| LS/A1, ELO 2, Shelter | <p>Dryness and light are vital when working with maps and producing orders and overlays. Shelter CPs from weather conditions and provide lights for night work. Light use must be disciplined to provide security.</p> <p>If buildings are available, they can provide space and protection from the elements for the CP. Also, vehicles can be hidden in barns or garages with radios placed in positions that will provide security and protection. If buildings are unavailable, use tents. Camouflage enemy detectable CP elements to provide security.</p> |
| Security | <p>The HHC XO, supervised by the battalion XO, is responsible for the security of the main CP from ground and air attack. The best way to secure the CP is to prevent the enemy from detecting it. This is enhanced by good noise, light, and signal discipline and good camouflage from both ground and air observation.</p> |
| Command Post Displacement | <p>Command posts may displace as a whole or by echelon. Displacement as a whole is normally done for short movements, with communications maintained by alternate means. Displacement must be accomplished with minimal risk of degrading CP operations. CPs normally displace by echelon.</p> |
| Jump CP | <p>The jump CP, or jump TOC as it's commonly known, moves to the new location, sets up operations, and takes over operational control of the battle from the main CP. The remaining portion of the CP then moves to rejoin the jump CP. The jump CP consists of the necessary vehicles, personnel, and equipment to temporarily take over CP operations while the remainder is moving.</p> |
| Quartering Party | <p>The XO or S-3 selects a general location for the new CP site. The jump CP can be accompanied by a quartering party. The quartering party may consist of a security element and personnel and equipment for quartering the remainder of the CP. The signal officer, usually part of the quartering party, ensures communications on all nets can take place at the new site.</p> |
| Operational Jump CP | <p>When the jump CP becomes operational, it also becomes the net control station (NCS) for the unit communications. The remainder of the CP then moves to rejoin the jump CP.</p> |

**LS/A1,
ELO 2,
Jump CP at
Brigade Level**

At brigade level, the role of the jump CP can be performed by the TAC CP if necessary. In this case, the TAC CP may or may not be positioned at the new location. Jumping in this manner can be done in both offensive and defensive operations.

Jump CP at
Battalion Level

At battalion level, the jump CP would normally have to come from within the main CP. Another technique is to hand off control to the TAC CP and move the main CP as a whole. The command group can also split. The commander can move with the main effort, while the S-3 moves with the supporting effort.

**LS/A2, ELO
2, Lesson
Exercise**

Click here to go to [Lesson Exercise 2](#).

SECTION IV SUMMARY

Review/ Summarize Lesson

This PTP has provided you with information to familiarize you with command and control facilities to include facilities positioning and displacement. Remember the command and control (C2) facilities system provides a rapid and reliable mechanism for command and control. It also provides clear communication of the commander's intent and positive control. As a Battle Staff NCO, you must become the authority on emplacement, relocations, and configuration of C2 facilities.

Check on Learning

The lesson exercises that you completed during this lesson serve as the check on learning for the TLO.

Transition to Next Lesson

None

SECTION V STUDENT EVALUATION

Testing Requirements

Prior to being enrolled into Phase II of the Battle Staff Course you must take a Phase I Exam that includes questions on material from this lesson. You must correctly answer 70% of the multiple choice questions to receive a "GO" on the Phase I exam. A "GO" is required for enrollment into Phase II.



Lesson Exercise 1: Instructions

The following five questions will test your knowledge of the materials covered in ELO 1. There is only one correct answer for each item. When you answer each question, you will be given immediate feedback. If you answer any question incorrectly, study that part of the ELO again.





Complete the following statement.

The main CP vehicles and personnel must be as few as possible to allow for _____, but sufficient enough in number to accomplish command and control functions in support of the commander.

- A. Rapid displacement
- B. Rapid coordination
- C. Rapid communication
- D. Rapid control





Complete the following statement.

A tactical CP may be formed during fast-moving offensive or retrograde operations to _____ and _____

- A. Maintain command and control.
- B. Facilitate communications and maintain control.
- C. Maintain communications and facilitate main CP movement.
- D. Maintain control and facilitate movement.





Complete the following statement.

The _____ is responsible for operations, movement, and security of the combat trains, assisted by the _____

- A. S-1, S-4.
- B. S-2, S-3.
- C. S-3, S-2.
- D. S-4, S-1.





Who maintains the CSS status of the battalion?

- A. Command Group.
- B. Combat Trains Command Post.
- C. Field Trains Command Post.
- D. Both the Combat and Field Trains Command Posts.





The field trains CP organizes and dispatches LOGPACs based on instruction from whom?

- A. Command Group.
- B. Combat Trains Command Post.
- C. Field Trains Command Post.
- D. Both the Combat and Field Trains Command Posts.



INCORRECT

The correct answer is A.

The main CP vehicles and personnel must be as few as possible to allow for rapid displacement, but sufficient enough in number to accomplish command and control functions in support of the commander. PTP, Page 7.



CORRECT



INCORRECT

The correct answer is C.

A tactical CP may be formed during fast-moving offensive or retrograde operations to maintain communications and facilitate main CP movement. PTP, Page 9.



CORRECT



INCORRECT

The correct answer is D.

The S-4 is responsible for operations, movement, and security of the combat trains, assisted by the S-1. The S-4, S-1, and BMO must continually assess the situation, anticipate the needs of units, and prepare to push support forward. PTP, Page 9.



CORRECT



INCORRECT

The correct answer is B.

The combat trains CP maintains the CSS status of the battalion. In preparation to assume the functions of alternate main CP, the CTCF monitors the task force command net and maintains charts and tactical situation maps identical to those at the main CP.
PTP, Page 9.



CORRECT



INCORRECT

The correct answer is B.

Supplies, personnel, and mail going forward from the field trains are grouped together into logistics packages (LOGPACs) under the control of the support platoon leader or a company supply sergeant. The field trains CP organizes and dispatches LOGPACs based on instruction from the combat trains CP. PTP, Page 10.



CORRECT





Lesson Exercise 2: Instructions

The following four questions will test your knowledge of the materials covered in ELO 2. There is only one correct answer for each item. When you answer each question, you will be given immediate feedback. If you answer any question incorrectly, study that part of the ELO again.





Complete the following statement.

If the main CP is located other than in a built-up area, the best place for it is _____ with cover and concealment.

- A. Next to easily accessible crossroads
- B. On an unsurveyed hilltop
- C. On a reverse slope
- D. At the edge of a tree line





How many routes should lead into the main CP?

- A. One or Two.
- B. Three or Four.
- C. Four.
- D. Five.





Complete the following statement.

The _____, supervised by the _____, is responsible for the security of _____ the main CP from ground or air attack.

- A. HHC CO Battalion CO
- B. HHC XO Battalion XO
- C. HHC CO Battalion XO
- D. HHC XO Battalion CO





Complete the following statement.

At the battalion level, the commander can move with the main effort, while the _____ moves with the supporting effort.

- A. HHC CO
- B. HHC XO
- C. S-1
- D. S-3



INCORRECT

The correct answer is C.

If the main CP is located other than in a built-up area, the best place for it is on a reverse slope with cover and concealment. PTP, Page 13



CORRECT



INCORRECT

The correct answer is A.

The main CP is centered in the unit area. It should be near, but not next to a high speed avenue of approach. No more than one or two routes should lead into the main CP.
PTP, Page 13.



CORRECT



INCORRECT

The correct answer is B.

The HHC XO, supervised by the battalion XO, is responsible for the security of the main CP from ground or air attack. PTP, Page 14.



CORRECT



INCORRECT

The correct answer is D.

At the battalion level, the commander can move with the main effort, while the S-3 moves with the supporting effort. PTP, Page 15.



CORRECT



