

## Appendix A

# Communications Planning Guide

The signal staff planning process has evolved continually for each of the BOSs. The signal officer must understand what steps and methods make a good, timely staff product that supports the 1/3 - 2/3 rule of planning. Staff estimate planning should always include all assets and not be done in a vacuum. Signal planning must be coordinated with all staff elements that support an operation. Each of the staff supports a different BOS and collectively the BOSs support a combined arms effort that is integrated and synchronized to support an objective. When the commander issues his initial guidance, he is giving his intent (the big picture) on how to accomplish the mission. The XO's job is to maintain control of the staff. He—

- Established a time line for staff planning that supports the 1/3 - 2/3 rule of planning.
- Establishes rehearsal times.
- Is responsible for backward planning and completing a good staff product.
- Is the timekeeper once the staff planning process begins and adjusting the process when necessary.
- Is responsible for keeping the staff focused on each planning step.

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A normal time line covers the following areas:

### **Receive the Order from Higher.**

**Mission Analysis.** Conduct initial mission analysis to include specified and implied tasks. (Individual, staff then collectively.)

**Initial Intelligence Preparation of the Battlefield (IPB) Process.** Does the staff understand what the threat is and how it effects each of the BOSs?

**Commanders Guidance.** This is when the staff states whether their BOS can support the mission. This is really the staff estimate. After the commander has all the staffs input, he then issues further clarifying guidance and refocuses on his intent on how he sees the mission being executed and what he thinks is or will be critical.

**Develop Courses of Action.** Look at and develop the three or four most logical means of accomplishing the mission, for example, right, left, or up the middle.

**Analyze Courses of Action.** As a staff collectively and hypothetically resource and execute each mission course of action (COA) and determine its validity, risk, and chances of success. A decision matrix may be used to verify or support the staffs recommendation of a particular COA to the commander.

**Decision Briefing.** To select a final COA that will be further wargamed and developed by the staff and turned into the final plan/order that is issued to subordinate units.

**Wargame.** This is the most critical part of developing an operation. The XO and staff are tasked to coordinate each BOS and to ensure that their individual staff planning supports the operation/mission. Further, they must ensure their planning does not conflict or hinder any other BOSs operation on the ground/air. Offensive operations are usually planned in phases, but, whatever technique is used coordination is the key. An example of poor wargaming and resource synchronization would be if on a particular mission a key piece of elevated terrain sat at or just behind the forward line of own troops (FLOT). During the execution of the mission, several different separate teams tried to occupy this piece of terrain at the same time and it was only large enough physically and electronically for one of the teams to occupy. This lack of specific coordination may cost the successful employment of several key systems to support the combined arms fight. Do a risk assessment to determine the degree of risk involved in mission accomplishment. See Appendix D.

**Publish the Order.** Have a method to copy and disseminate quickly.

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**Issue the Order.** The commander, XO, and/or the S3 briefs to subordinate units what the mission is and how it is going to be executed from brigade level. At this point only 1/3 of the available time should be used up if the XO/S3 did his job.

**Backbrief.** Done by subordinate commanders to ensure the commanders intent is understood. Subordinate commanders explain their mission and how they are going to execute it (if possible actually talking it out on the ground close to a scale terrain model of the area of operation.) The staff also briefs how their particular BOS will support and any critical points to watch for.

**Rehearsal.** Done at all levels - brigade down to individual teams. This is sometimes done with the backbrief to verify what was briefed by the commander and usually by phase of an operation. The most dangerous thing that can happen during the rehearsal is that it turns into a second wargaming process because the initial wargaming was inadequate or incomplete. This is not a time to be making key staff coordination or changing the plan.

BSOs should address communications problem areas at the maneuver rehearsal. Recommend practical and common-sense advice to the maneuver commander. Address both FM and MSRT communications. Discuss details of the retransmission and antijam plans specifically reference fire support communications if possible.

Reconnaissance and surveillance (R&S) assets such as scouts and other observer teams frequently conduct separate rehearsals run by the S2. These are critical assets requiring detailed instructions and redundant communications. The BSO or his representative should also attend this rehearsal, ensuring various teams fully understand the instructions and contingencies.

Figures A-1 through A-9 give examples of the planning process.

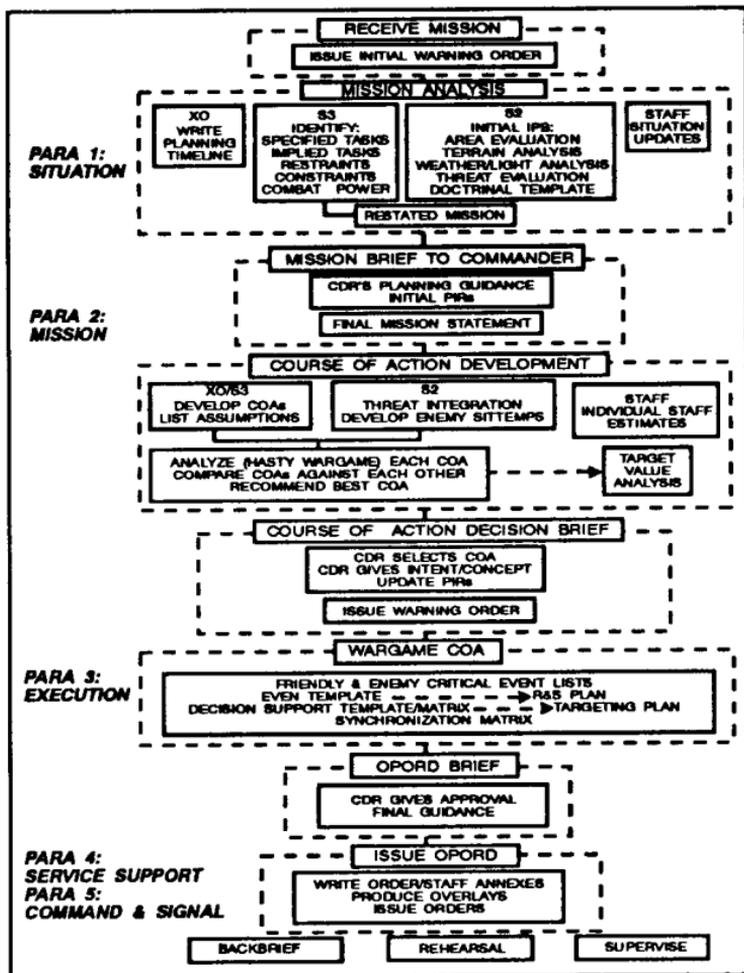


Figure A-1. Maneuver orders process.

<b>WARGAME BRIEFING</b> (for each COA)	
MISSION	BSO, S3
Updated terrain, weather, and enemy situation	BSO, S2
Enemy courses of action wargamed	BSO, S2
The course of action wargamed	BSO, S3
Assumptions	BSO, S3
Wargame techniques used (belt, box, avenue)	BSO, S3
Critical events wargamed	BSO, S3
Visualization of the entire operation (use synchronization matrix and COA worksheet along with COA statement and sketch)  -Each critical event  - Actions one level down  - Combat support and combat service support units needed for mission accomplishment	BSO, S3
Possible enemy actions/reactions considered during wargaming	BSO, S2

*Figure A-2. Wargame outline.*

<b>WARGAME BRIEFING</b> (for each COA)	
<p>Results of the wargame</p> <ul style="list-style-type: none"> <li>- Modifications of the COA (if required)</li> <li>- Proposed task organization and organization for combat to support the COA</li> <li>- Decision support template and decision support matrix (recommend NAIs, TAIs, HVTs, and HPTs)</li> <li>- Priorities for combat and combat service support units</li> <li>- Estimated time required for the operation</li> <li>- Estimated enemy losses (provided by S1)</li> <li>- Estimated friendly losses (provided by S1)</li> <li>- Advantages of the COA</li> <li>- Disadvantages of the COA to include any accepted risk</li> </ul>	BSO, S3
Staff Estimate (decision matrix)	BSO, ALL
Decision by XO on which COA to recommend	BSO, XO

*Figure A-2. Wargame outline (cont).*

<b>COMMUNICATIONS PLANNING PROCESS GUIDE CORPS AND BELOW (MANEUVER UNIT ORIENTED)</b>	
<b>ISSUE WARNING ORDER BEFORE ORDER IS RECEIVED TO SUBORDINATES:</b>	
<ul style="list-style-type: none"> <li>● 1/3, 2/3 RULE</li> <li>● COMM CHIEF</li> <li>● SEN CHIEF</li> </ul> <p>WHERE AND WHAT TIME TO MEET TO DISCUSS NEW ORDER AND ITS IMPACT ON COMMUNICATIONS. (ABOUT 30 MIN AFTER ORDER IS RECEIVED AT MAIN CP). MAPBOARD SHOULD BE AVAILABLE.</p>	
<b>DIV ORDER RECEIVED:</b>	
<ul style="list-style-type: none"> <li>● GET GUIDANCE FROM XO ON STAFF PLANNING TIMELINES</li> <li>● RECEIVE SIGNAL ANNEX AND COPY OF ORDER</li> <li>● TRACE BASIC GRAPHICS WITH AT LEAST BOUNDARIES AND PHASE LINES</li> </ul>	
<b>ORDER/ANNEX INFORMATION TO BE GLEANED:</b>	
<ul style="list-style-type: none"> <li>● LOCATIONS OF:               <ul style="list-style-type: none"> <li>-DTC</li> <li>-DTAC</li> <li>-NODE CENTERS</li> <li>-DIV RETRANS</li> </ul> </li> <li>● SPECIFIED AND IMPLIED</li> <li>● ATTACHMENTS</li> <li>● DETACHMENTS</li> <li>● RESTRICTIONS</li> <li>● CONSTRAINTS</li> </ul>	
<b>INITIAL COMMUNICATIONS PLANNING</b>	
<ul style="list-style-type: none"> <li>● ANALYZE TERRAIN</li> <li>● POSITION OF C2 FACILITIES</li> <li>● COORDINATION WITH:               <ul style="list-style-type: none"> <li>-XO/S2/S3/HHC CDR FOR TAC/TOC LOCATIONS</li> <li>-S1/S4 FOR BSA LOCATIONS</li> <li>-ADSO-NOTIFICATION/PROFILING</li> </ul> </li> <li>● RETRANS POSITIONING--TIME AND LOCATION STATED IN ORDER</li> <li>● OUTSIDE COORDINATION W/ADSO OR OTHER ADJACENT UNITS (PASSAGE OF LINES/RESERVE ROLL, CALL SIGN, FREQ)</li> <li>● ANTIJAM PLAN</li> <li>● SOL/CNV</li> <li>● BDE OP TEAMS/SCOUTS</li> <li>● WHO IS ON THE LEFT AND RIGHT</li> </ul>	

*Figure A-3. Communications planning process guide, maneuver unit oriented.*

<p><b>COORDINATION WITH OTHER STAFF MEMBERS:</b></p> <p><b>S1/S4</b></p> <ul style="list-style-type: none"> <li>• LOCATION OF BSA</li> <li>• MAINTENANCE PRIORITIES (SIGNAL EQUIPMENT)</li> </ul> <p><b>S2</b></p> <ul style="list-style-type: none"> <li>• ENEMY COMM ACTIVITIES, LOCATIONS, OBSTACLES, ARTILLERY ETC. IN RELATION TO C2 FACILITIES</li> <li>• USE OF SIGNAL ACTIVITIES OF DECEPTION OPERATIONS</li> <li>• LIGHT DATA FOR ANY NIGHT MOVES FOR RETRANS</li> <li>• ANY BDE OPS, SCOUT OR OTHER ATTACHMENTS TALKING ON BDE O / I</li> </ul> <p><b>S3</b></p> <ul style="list-style-type: none"> <li>• C2 FACILITY LOCATIONS</li> <li>• PASSAGE OF LINES, COLLOCATION OF C2 FACILITIES</li> <li>• HOW WILL RETRANS GET TO ITS SUPPORTING LOCATION</li> </ul> <p><b>FSO</b></p> <ul style="list-style-type: none"> <li>• NO FIRE AREA AROUND RETRANS</li> </ul>
<p><b>ESTIMATE BRIEF TO COMMANDER:</b></p> <ul style="list-style-type: none"> <li>• GENERAL TERRAIN ANALYZE</li> <li>• COMM STATUS</li> <li>• IMPLIED AND SPECIFIED TASK</li> <li>• RESTRICTIONS</li> <li>• CONSTRAINTS</li> <li>• ATTACHMENT/DETACHMENTS</li> <li>*BOTTOM LINE: CAN WE SUPPORT THE MISSION WITH COMMUNICATIONS?</li> </ul>
<p><b>ORDERS ISSUE BRIEF TO SUBORDINATE COMMANDERS:</b></p> <ul style="list-style-type: none"> <li>• LOCATION OF TAC CP, MAIN CP, AND RETRANS POSTED (INDICATE LOCATION OF EACH ON MAP)</li> <li>• LIKELY AREAS OF COMMUNICATIONS PROBLEMS</li> <li>• ANY RESTRICTIONS-RADIO LISTENING SILENCE ETC.</li> <li>• ANTIJAM PLAN</li> <li>• CHANGES TO SONVARIABLES (CHANGE EDITIONS, OPERATION TO CONTINUE PAST NEW CHANGE OVER PERIOD ETC.)</li> </ul>
<p><b>ISSUE INSTRUCTIONS TO SUBORDINATES AND COORDINATION WITH HIGHER:</b></p> <ul style="list-style-type: none"> <li>• RETRANS WARNING ORDER</li> <li>• ANTIJAM PLAN</li> <li>• PROPOSED C2 LOCATIONS-CONTACT ADSO ABOUT JUMP LOCATIONS-WILL THEY PROFILE, RAU COVERAGE</li> </ul>
<p><b>POST ORDERS ISSUE:</b></p> <ul style="list-style-type: none"> <li>• CHECK WITH FSO ON NO FIRE AREA AROUND RETRANS</li> <li>• CHECK WITH S3 ON CHANGES TO PLAN</li> <li>• CHECK WITH CHEMO-IS RETRANS LOCATION ON HIS TERRAIN MANAGEMENT BOARD</li> <li>• WHAT ATTACHMENTS HAVE BEEN ADDED THAT TALK ON BDE NETS-RESERVE COMPANY, ADA OPS ETC. HOW WILL THEY TALK, WE BRIEF THEM ON: SOI, ANTIJAM, SECURE (CAN BE DONE AT REHEARSAL SITE, MAIN CP)</li> </ul>

Figure A-3. Communications planning process guide,

SIGNAL ANNEX					
OPORD 00-00	PREP RECON-CRECON	OBJ PERRARI	OBJ PORSHE	OBJ VOLKSWAGON	REORG RECONST
RETRANS TM 1	RETRANS REGT CMD NK 278142	NO CHANGE	→	→	REORG RECONST REDEPLOY
RETRANS TM 2	RETRANS RCAT AT NK 258158	NO CHANGE	→	→	↓
NODE CENTER 10	NK 183186	NO CHANGE	→	→	
NODE CENTER 11	NK 335005	% NK 275959	NO CHANGE	→	
REMOTE RAU 14	IN RESERVE AT NC 10	NO CHANGE	→	→	
RTAC	NK 180274	% NK 257215	NK 364153	NO CHANGE	REORG RECONST REDEPLOY
		% NK 364153			
RTOC	NK 180274	NO CHANGE	% NK 305156	NO CHANGE	REORG RECONST REDEPLOY
COORDINATING INSTRUCTIONS: RETRANS RFSE NET, BEGINNING PHASE 2 1/3 AND 2/3 WILL FORM RETRANS TEAMS TO SPT CAT MISSION REGT RETRANS TM 1 WILL BACK UP 1/3 OR 2/3 AS REQUIRED.					
SOC: 2/3, 1/3, 4/3, SPT/3			SIGN: WARDEN C/SIGN: MOTION		
ANTLIAM PLAN					
RADIO NET	FREQUENCY	ALT FREQ 1	ALT FREQ 2	ALT FREQ 3	
COMMAND	CMD	SPARE 3	SPARE 7		
OPS/INTEL	O / I	SPARE 4	SPARE 8		
FIRE SUPPORT	FSE	SPARE 5	SPARE 9		
ADMIN/LOG	AL	SPARE 6	SPARE 10		
SOI INDEX NUMBER: EDITION "B" IN EFFECT					

Figure A-4. Signal annex/matrix.

SIGNAL ANNEX/MATRIX					
FRAGO 00-00	Recon/C-Recon	MTC	Trans. Future	Defense	
RETRANS TMS 1 AND 2	In Reserve at RTAC % Provide Retrans CMD, O/I		NO CHANGE	→	
NODE CENTER 10	NK 621177		NO CHANGE	→	
NODE CENTER 11	NK 335005		NO CHANGE	→	
REMOTE RAJ 10	NK 573107		NO CHANGE	→	
REMOTE RAJ 11 RELAY Z11	NJ 575025		NO CHANGE	→	
FTOC	NK 548156	% Survival NK 548164	NO CHANGE	→	
RTAC	NK 534083	LD 0600 NK 508093	NO CHANGE	→	
COORDINATING INSTRUCTIONS: REGT RETRANS PRIORITY TO 2/3 ACR TO SUPPORT C2 OF ECONOMY OF FORCE. SOI CHANGE AT 1700(L) FAST BREAK WILL OCCUR 1 HOUR PRIOR TO LD.					
SOC: 2/3, 4/3, SPT/3			SIGN: WARDEN C/SIGN: KINGPIN		
ANTIJAM PLAN					
RADIO NET	FREQUENCY	ALT FREQ 1	ALT FREQ 2	ALT FREQ 3	
COMMAND	CMD	SPARE 3	SPARE 7		
OPS/INTEL	O/I	SPARE 4	SPARE 8		
FIRE SUPPORT	FSE	SPARE 5	SPARE 9		
ADMIN/LOG	A/L	SPARE 6	SPARE 10		
SOI INDEX NUMBER: EDITION "A" IN EFFECT					

Figure A-4. Signal annex/matrix (cont).

**ANNEX K, Signal, to 19TH BDE  
FRAGO 00-00-00**

**1. SITUATION:**

a. Enemy: SEE CURRENT INTSUM

b. Friendly: SEE BASIC FRAGO

2. MISSION: COM COMMUNICATIONS IN SUPPORT OF 19TH BDE TASK  
FORCE OPERATIONS TO SEIZE OBJECTIVES JALIBAH (RED) AND TALLI  
(GREEN)

**3. EXECUTION:**

a. Concept of Operations: RETRANS AND RELAY TEAMS WILL PROVIDE PRIMARY, 2<sup>ND</sup>  
AND REDUNDANCY FOR THE BDE CMD NET AND THE FIRE SUPPORT NET.

**b. Mission of Subordinate Units:**

(1) CDR TF 0-00, OPCON IEA RETRANS TEAM WITH VEHICULAR RETRANS SYSTEM AND  
WITH GPS TO BDE SIGNAL OFFICER NLT 161200 APR 94.

(2) CDR TF 0-15, OPCON IEA RETRANS TEAM WITH VEHICULAR RETRANS SYSTEM AND  
WITH GPS TO BDE SIGNAL OFFICER NLT 161200 APR 94.

(3) CDR 0-41, a.) OPCON IEA RETRANS TEAM WITH VEHICULAR RETRANS SYSTEM AND  
WITH GPS TO BDE SIGNAL OFFICER NLT 161200 APR 94. b.) OPCON ZEA TWO MAN TEAMS,  
EACH WITH MPR COMPLETE WITH SINGARS TO THE BDE SIGNAL OFFICER NLT 01200.

(4) CDR HHC 19 BDE, OPCON BDE CDR'S DRIVER WITH VEHICLE AND THE SS'S DRIVER WITH  
VEHICLE TO THE BDE SIGNAL OFFICER NLT 161200 APR 94.

**c. Coordinating Instructions:**

(1) CALL SIGNS, FREQUENCIES, PASSWORD AND CHALLENGES CHANGE AT 1700 HOURS  
(LOCAL) DAILY.

(2) ANTIAM PLAN - NO CHANGE.

4. SERVICE AND SUPPORT: SEE LOGISTICS ANNEX

**5. COMMAND & SIGNAL:****a. Command:**

NTC 501 00-00, EDITION B IN EFFECT:

**b. Signal:**

(1) PHASE I MAIN: NK 197218, TAG: NK 198216

(2) PHASE II MAIN NK 197218, TAG: NK 351086 RETRANS: NK 275086

(3) PHASE III MAIN NK 429197, TAG: NK 504093 RETRANS: NK 443118

(4) PHASE IV MAIN NK 429197, TAG: NK 504093 RETRANS: NK 443118

*Figure A-5. Annex K, fragmentary order (FRAGO).*



System	FA Bn			AVN Bn			BSA			SEP Co		
	Auth	O/H	NMC	Auth	O/H	NMC	Auth	O/H	NMC	Auth	O/H	NMC
SC TAGSAT (HFR)												
PRC-119												
PRC-213												
PRC-104												
(SINCGARS)												
VRC-92												
VRC-90												
VRC-90												
PRC-119												
(Handfield)												
PRC-128												
(MSE)												
MSRT												
DIRT												
FAX												
ROU												
SEN												
NIR												
All Radios												
Remarks	As of _____											
	Reserves _____											

Figure A-7. Communications status.

COMMAND AND SIGNAL					
COMMAND:					
COMMAND ELEMENT	LOCATION	ALT LOCATION	EVENT THAT WILL CAUSE DISPLACEMENT		OIC
CMD GROUP					
SUCCESSION OF CMD		SPECIAL:			
Signal:					
AntiJam Plan					
Event	Radio Net	Frequency	Alt Freq 1	Alt Freq 2	Alt Freq 3
SOI INDEX NUMBER:			DTG:		

Figure A-8. Communications status worksheet.

<u>Vehicle/Generators</u>	<u>Mission Brief</u>
<input type="checkbox"/> PMCS <input type="checkbox"/> Fuel <input type="checkbox"/> Camouflage Nets <input type="checkbox"/> Load Plan Checked/Verified	<input type="checkbox"/> Map/Graphics <input type="checkbox"/> Enemy/Friendly situation <input type="checkbox"/> Mission <input type="checkbox"/> Route <input type="checkbox"/> Operational Time <input type="checkbox"/> Medical Support <input type="checkbox"/> Decon Link Up Points <input type="checkbox"/> Resupply <input type="checkbox"/> Destruction Procedures <input type="checkbox"/> Recall Procedures
<u>C&amp;E</u>	
<input type="checkbox"/> Radio Check w/PRM-34 <input type="checkbox"/> OE-254/RC-292 Complete <input type="checkbox"/> Radio Retrans Both Ways	
<u>Personnel</u>	<u>Freqs</u>
<input type="checkbox"/> Food/Water <input type="checkbox"/> Weapons: <ul style="list-style-type: none"> <li><input type="checkbox"/> Cleaned</li> <li><input type="checkbox"/> Ammo</li> <li><input type="checkbox"/> Test Fired/Zeroed</li> </ul>	<input type="checkbox"/> Antijam Plan <input type="checkbox"/> All Freqs Tested <input type="checkbox"/> COMSEC
<u>NBC:</u>	
<input type="checkbox"/> Complete/Serviceable Suit <input type="checkbox"/> Injectors and M258 Kits <input type="checkbox"/> Extra Suits <input type="checkbox"/> Pretreatment Pills <input type="checkbox"/> M256 Kit <input type="checkbox"/> M8/9 Paper	

**Figure A-9. Retransmission team checklist.**