

APPENDIX G

TARGET VALUE ANALYSIS

Description

Targeting is the process of selecting targets and matching the appropriate response, taking into account operational requirements and friendly force capabilities. Attacking targets that the enemy can least afford to lose strips him of his initiative and forces him to conform to our battle plan. Targeting requires interaction between fire support, intelligence, engineer, and maneuver personnel. Target value analysis is an analytical tool to be used in the targeting process by which the maneuver commander –

- Provides focus for his target acquisition effort.
- Identifies priorities for the engagement of enemy targets that will facilitate the success of his mission.
- Identifies effects criteria.
- Permits planning for identified contingencies based on enemy options available when the enemy operation fails.
- Better estimates friendly unit capabilities.

Target value analysis is described in Chapter 3 of the Fire Support Mission Area Analysis (FSMAA) (classified SECRET) and in FM 6-20-10. The complete FSMAA is normally distributed to FSEs at division and higher echelons. Selected extracts may be distributed to brigade and battalion levels.

Definitions

High-value targets (HVTs) are targets deemed important to the enemy commander for the successful accomplishment of his mission. The

loss of HVTs can be expected to contribute to a substantial degradation of an important enemy battlefield function. High-value targets are developed by using the TVA tools based on the interpretation by the friendly intelligence system of the enemy course of action.

High-payoff targets are HVTs that must be successfully acquired and attacked to contribute substantially to the success of friendly operations. They are developed on the basis of METT-T and are not dependent on the ability of the unit to acquire or attack them. If an HPT is beyond the capability of the unit to acquire, then it should be passed to the next-higher echelon as a priority intelligence requirement.

Attack criteria are a compilation of the commander’s guidance, desired effects of attack, high-payoff target lists, and attack priorities.

The **attack guidance matrix** is a compilation of attack criteria in a format that can be understood by fire support and targeting agencies.

Time-sensitive targets are those targets requiring immediate response because they pose (or will soon pose) a clear and present danger to friendly forces or are highly lucrative fleeting targets of opportunity.

Target development is the process of providing direct combat information, targeting data, and correlated targeting information. It gives the commander and his attack managers timely and accurate locations of enemy weapon systems, units, and activities that may impact on current or projected operations.

TVA Tools

Integral to the performance of duties by the targeting officer is the use of the IPB and the TVA. The TVA tools in the FSMAA include the spread sheets and the target sheets. The high-payoff target list is a product of target value analysis.

Spread Sheets

On the front side of each spread sheet (example below) is information about Threat forces at regiment, division, army, and front with respect to the operations the forces are expected to conduct. On the back side of the spread sheet (example on page G-5) is a summary of information about the enemy

doctrine and tactics. It indicates how the Threat is expected to fight, what his operation is intended to accomplish, and what alternatives he has if he fails to accomplish his primary mission. The major sections of the spread sheet are as follows:

- Title and sheet number (front and back) (A).
- Relative value matrix (front) (B).
- Attack rationale column (front) (C).
- Specific high-value targets (front) (D).
- Doctrinal template (back) (E).
- Threat force doctrinal resume (back) (F).
- Fallback option statement (back) (G).

EXAMPLE SPREAD SHEET (FRONT)												
2	REGIMENTAL MEETING ENGAGEMENT							2	(A)	(C)	(CLASSIFICATION)	(D)
D I S R U P T	D E L A Y	L I M I T	TARGET SET		RELATIVE WORTH							
X	X		C ³				Lead elements concentrated on to slow momentum of attack and cause compression of enemy forces with resulting vulnerability to heavy missile/nuclear strikes.					
X	X	X	FIRE SPT				C ³ attacked to disrupt sequence of attack.					
X	X	X	MANEUVER				LOC attacked to prevent reinforcement or resupply.					
X			ADA				FS attacked to prevent use of additional firepower from reinforcing lead element attacks.					
X			ENGINEER				ADA attacked to allow friendly aircraft to canalize main forces into undesirable areas.					
X			RSTA				RSTA deceived as to actual strength of friendly forces, canalized to lead main forces into indefensible terrain, or neutralized.					
X			REC				POL storage and transport allow enemy to maintain momentum.					
*	*	*	NUKE/CHEMICAL				REC attacked as a priority, since enemy forces will not rely on C ² and thus will be more likely to utilize REC with more frequency than usual.					
			CLASS III POL				ENGR attacked to limit the enemy ability to break obstacles.					
			CLASS V AMMO									
			CLASS IX MAINT									
			LIFT									
X	X	X	LOC									
(CLASSIFICATION)												
NOTE: This is not an actual spread sheet. It is an example using a notional situation and is not to be used as an actual targeting aid.												

Title and Sheet Number

These specify the unit level and enemy mission of interest. This header is shown on the front and back of the spread sheet.

Relative Value Matrix

The relative value matrix is the part of the spread sheet that indicates which of the 13 target sets are high value in that situation. The matrix presents information that aids managers of attack assets (both maneuver and fire support) and collection managers in establishing priorities.

The 13 target categories (center of the matrix) represent target groupings based on their battlefield functions, not on the associated equipment. The categories (also known as target sets) cover all of the major battlefield functions of the Threat. The categories are as follows:

- **C³ targets** are command, control, and communications centers that affect maneuver or combined arms.
- The **FIRE SPT** category covers the entire Threat fire support system.
- **MANEUVER** targets are combat arms tactical subunits in various postures.
- **ADA** refers to air defense system targets, including missile unit headquarters and processing centers, radar sites, and short-range air defense platoons.
- **ENGINEER** denotes engineer targets, including crossing sites, snorkeling sites, and movement support elements.
- **RSTA** assets include ground surveillance radars, reconnaissance patrols, and airborne sensor systems.
- The **REC** category is radio-electronic combat, known as offensive electronic warfare. Because of the nature of the Soviet

system, some dedicated collection target acquisition assets are listed in this category instead of under RSTA.

- **NUKE/CHEMICAL** targets are major firing positions and nuclear and chemical support elements.
- **CLASS III POL** refers to petroleum, oil and lubricants support and includes transport and pipeline units and POL points.
- The **CLASS V AMMO** category covers the ammunition support targets.
- **CLASS IX MAINT** covers maintenance and repair capabilities.
- **LIFT** refers to general transport units in the Threat.
- **LOC** represents lines of communication for which no specific target types are designated. However, any target attacked that would interfere with the ground or air lines of communication is a candidate.

The right side of the matrix indicates the relative worth of target sets that are considered high value for the situation. This part of the matrix uses a simple bar chart to show the relative worth of the target sets with respect to each other for the specific operation depicted by the spread sheet. The relative worth of a target refers to the relative effect that successful attack of the target will have on the friendly operation and the friendly scheme of maneuver. The stated relative worth is confirmed by the staff during the war-gaming process. The target sets that are not considered to be of high relative worth are not assigned a value bar.

The left side of the matrix consists of three columns, labeled **DISRUPT**, **DELAY**, and **LIMIT**. An X in the column associated with the target set indicates that a benefit may be accrued by attacking the target with one of these particular goals in mind.

An X in the DISRUPT column indicates that attacking a target with the goal of disrupting its function may be of considerable benefit. Such attack can be by continuous suppression, neutralization, or destruction of the target by lethal means or by offensive EW for some types of targets. The enemy function represented by the target is considered unacceptable on the battlefield and must be removed.

An X in the DELAY column indicates that a benefit can be gained by attacking the target to delay its arrival on the battlefield. In some cases, a commander could opt to use a smaller amount of ammunition and slow a second-echelon force for a period of time. This would allow his maneuver forces to recover and conduct a coordinated effort when the enemy second echelon arrives at the FLOT. In this case, the unacceptable aspect of the target set function is its time of arrival at the battlefield. The implication is that the combined arms team can defeat such a target if it is given enough time to prepare.

An X in the LIMIT column indicates that a benefit can be gained if the target approach is limited, thus shunting the enemy unit to another portion of the battlefield. This either puts the target into a portion of the battlefield where it can be better handled or puts the enemy on terrain not suitable to his purposes. The unacceptable aspect of this target set function is where it is employed on the battlefield.

Attack Rationale Column

The attack rationale column in the center of the spread sheet provides a guide of the benefits to be derived by attacking targets of a particular category. This column discusses the desired objectives for attack of the target in the category. Each description is connected to the appropriate category by lines. A solid line indicates the primary results of attacking targets in the category from which the line is

drawn. (Solid lines should be traced from left to right.) Some descriptions are further attached to other categories by dotted lines. This indicates that a secondary benefit is achieved for that category when the primary target is attacked. Dotted lines are traced from the attack rationale column back to the category (right to left).

Two type styles are used in the attack rationale column. Descriptions in normal type indicate that the greatest benefit is achieved by attacking targets in their associated groups sequentially from the top of the matrix to the bottom. Descriptions in italics indicate that the categories always have the same value throughout the operation, regardless of posture.

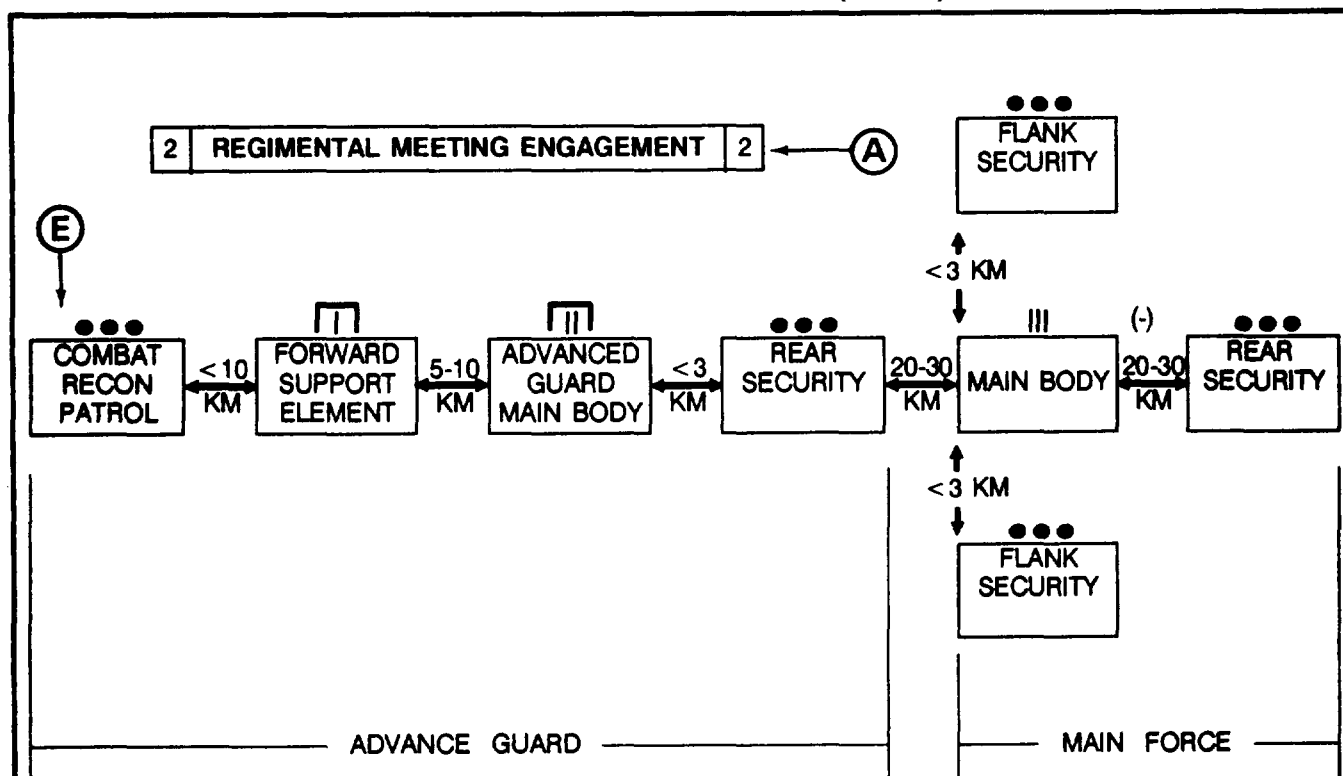
Specific High-Value Targets

The high-value target column of the spread sheet specifies the high-value targets for each set. Numbers in parentheses refer to specific target sheets containing individual target descriptions for the high-value target type given. Usually, there are some high-value targets for each category even though the set itself might be given a low relative value. When formulating detailed attack guidance, one should be aware of all of the specified high-value targets, not just those in the higher-value categories. In developing the high-payoff target list, targeting personnel should consider all of the high-value targets in the context of the situation in addition to the commander's directive.

Doctrinal Template

The doctrinal template indicates the major subunits of the unit considered, deployed to scale, without regard to the effects of terrain and weather. Fire support personnel can use the template to plan acquisition coverage and likely areas of interest. However, it should be used cautiously and only as a guide, because of the effects of terrain.

EXAMPLE SPREAD SHEET (BACK)



REGIMENTAL MEETING ENGAGEMENT

(F) → **Objective:** Destruction of the enemy forces, seizure of key terrain, and continuation of the advance.

Doctrinal Approach: The regiment is normally part of a division meeting engagement. Continuous and thorough reconnaissance is conducted. The enemy goal is to achieve the initiative immediately. The regiment will deploy into combat from the march at a high rate of speed. The combat recon patrol and forward support element will attempt to penetrate the enemy upon contact. Deployment of the main body depends on the outcome of the advance guard action. The regiment may attempt an envelopment, a flank attack, or a frontal attack (normally conducted with an envelopment or flank attack). Adequate flank and rear security will be maintained throughout the operation.

(G) → **Fallback:** Given a successful US effort, the following options are available to the Soviet commander:

The division attacks and seizes subsequent objectives (18).

Hasty defense (14).

Withdrawal (16).

Doctrinal Resume

The doctrinal resume is a synopsis of the major features of the operation. This portion indicates the objective of the force and the tactical principle that governs how the unit is supposed to fight.

Fallback Option Statement

The fallback option portion details what we can expect the enemy to do if he fails to accomplish his mission. Contingency plans and high-payoff target recommendations based on the most likely outcome of the current battle can be prepared and presented. Fallback options are referenced to other spread sheets in the FSMAA.

Target Sheet

The target sheet is made up of seven major sections:

- Target category.

- Target sheet number and title (incorrectly labeled in the FSMAA as high-payoff target).

Ž Function.

- Description.
- Signature.
- Degradation effect.
- Some form of graphic representation.

Target Category, Sheet Number, and Title

The target category indicates in which of the 13 sets the target belongs,

The sheet number can be used to cross reference the target sheet with the spread sheet. The target title refers to the target type and function. The label “high-payoff target” from the FSMAA is a misnomer. This section really represents the high-value target cross-reference number (as shown on pages

EXAMPLE TARGET SHEET

	<u> </u> (Classification)
TARGET CATEGORY:	Engineer
HIGH-PAYOFF TARGET:	Target 75. Ferry crossing site.
FUNCTION:	Provide rapid crossing of water obstacles for tanks and other nonamphibious systems.
DESCRIPTION:	Target radius – point target. Posture – exposed on water surface FEBA distance.
Composition:	Vehicles normally two ferries or rafts (if river over 300 meters wide, may be as many as five).
Personnel:	
SIGNATURE:	Visual – see graphic. Electronic – Other –
DEGRADATION:	Nonamphibious forces must find alternate means to cross. Force that secured bridgehead is not reinforced.
GRAPHIC REPRESENTATION:	(Omitted)
	<u> </u> (Classification)

G-8 through G-11). The other portions of the target sheet are more complex and contain most of the information useful to targeting personnel.

Function

The function section details the specific operations and tasks that the target is expected to perform. It includes the primary and secondary functions and indicates any relationship to the other target categories or types.

Description

The description of the target details the number and type of vehicles and equipment in a position and specifies the approximate number of personnel associated with the position. It details the usual distance from the FEBA and indicates the normal posture of the target with respect to camouflage and orientation and the amount and type of terrain occupied. The description is useful in considering what types of attack systems and munitions are to be used. It also helps to discriminate between targets of a similar function.

Signature

The signature section describes signatures ranging from visual and electronic to auditory and infrared.

Degradation

The degradation portion indicates what happens to the parent unit or an associated unit when the target function is removed. This section can be used by operations and fire support personnel to help determine effects desired against a target.

Graphic Representation

The graphic representation shows in a general overlay format how the target would be arrayed doctrinally on the battlefield.

GLOSSARY FOR TARGET CATEGORIES GRAPHIC

A/C	= aircraft	MTR	= motor transport regiment
AD	= air defense	off	= offense
ARPD	= army missile transport battalion	ORPD	= independent missile transport battalion
CGI	= control group intercept	PMP	= heavy folding pontoon (bridge type)
comm	= communications	POZ	= mobile obstacle detachment
COP	= command observation post	PRTB	= mobile repair technical base (rocket and missile)
CRTA	= chief of rocket troops and artillery	PSNR-1	= battlefield surveillance radar
DAG	= division artillery group	RAG	= regimental artillery group
DARM-4	= mobile artillery repair shop complex (type)	regt	= regiment
def	= defense	R/R	= radio/radar
DF	= direction finding	SASP	= special ammunition supply point
div	= division	SIGINT	= signal intelligence
ERP	= engineer reconnaissance patrol	SP	= self-propelled
how	= howitzer	SSM	= surface-to-surface missile
hvy	= heavy	TA	= target acquisition
Inter	= intercept	tac	= tactical
MR	= motorized rifle	TACAN	= tactical air navigation
MRL	= multiple rocket launcher	TR	= tank regiment
MRR/TR	= motorized rifle regiment/tank regiment	trans	= transport
MTB	= motor transport battalion	UHF	= ultrahigh frequency
mtr	= motor		

TARGET CATEGORIES CROSS-REFERENCE

CATEGORY	NUMBER AND TITLE
Fire Support Command, Control, and Communications	<ol style="list-style-type: none"> 1. Bn FDC (SP) 2. Bn COP 3. RAG COP 4. DAG COP 5. Div arty command battery/CRTA/div COP 6. Btry FDC (SP how) 7. Bn FDC 8. Btry COP 9. Combat control group (air) and forward air controller 10. Vectoring target designation point (air) 11. Radio navigation point (air) 12. CGI radar site

TARGET CATEGORIES CROSS-REFERENCE (CONTINUED)

CATEGORY	NUMBER AND TITLE
Target Acquisition	13. TA btry CP, arty regt, div/army 14. Countermortar/counterbattery site 15. Sound ranging site 16. Radar intercept/DF site (pole dish–twin box) 17. Battlefield surveillance radar site (Big Fred, Small Fred)
Weapons	18. Arty battery firing position 19. MRL firing position 20. SSM firing position 21. Mortar btry firing position 22. Attack helicopter flight 23. Tac air flight
Logistics	24. Ammo resupply trucks/convoy
Command, Control, and Communications Maneuver CPS	25. MR regiment main CP 26. MR regiment forward CP 27. MR regiment rear CP 28. MR battalion main CP/COP 29. Division main CP 30. Division forward CP 31. Division rear CP 32. Division alternate CP 33. Radio relay site 34. Army main CP 35. Army forward CP 36. Army alternate CP 37. Army rear CP 38. TR main CP 39. TR forward CP 40. TR rear CP 41. Tank battalion main CP/COP 42. Traffic control point
Maneuver	43. Advanced guard battalion 44. Advanced detachment 45. Accompanying artillery 46. MR company reinforced (off) 47. MR company reinforced (def) 48. Tank company reinforced (off) 49. Tank company reinforced (def) 50. Tactical march column 51. Battalion assembly area 52. Administrative march column

TARGET CATEGORIES CROSS-REFERENCE (CONTINUED)

CATEGORY	NUMBER AND TITLE
ADA	53. SA-4 brigade CP 54. SA-6 regiment CP 55. SA-8 regiment CP 56. SA-4 battalion CP 57. SA-6 btry CP 58. SA-8 btry CP 59. SA-4 btry CP 60. AD EW/TA radar site, long range 61. ZSU-23-4 platoon 62. SA-9 platoon 63. AD EW site, low level 64. AD EW site, medium range
Engineer	65. Assault crossing company 66. Pontoon bridge company 67. Tracked amphibian company 68. Tracked ferry company 69. Mobile obstacle detachment 70. Movement support detachment 71. Engineer reconnaissance patrol 72. Tank snorkeling site 73. PMP bridge 74. Tracked amphibian crossing site 75. Ferry crossing site
Nuclear/Chemical	76. ORPD 77. PRTB 78. ARPD 79. Nuclear depot/SASP 80. SSM met station 81. 203-mm howitzer firing position 82. 240-mm mortar firing position
RSTA	83. Battlefield surveillance radar site (PSNR-1) 84. Combat reconnaissance patrol 85. Recon patrol, regt, reconnaissance company 86. Recon patrol, regt, div reconnaissance company 87. Airborne sensors 88. HF comm jamming site 89. I band noise jamming site 90. TACAN jamming site

TARGET CATEGORIES CROSS-REFERENCE (CONTINUED)

CATEGORY	NUMBER AND TITLE
	91. Radio/radar intercept/DF site(division) 92. Radio/radar intercept/DF site (front) 93. I band noise jamming site 94. J band noise jamming site 95. A/C comm jamming site 96. HF DF site, army 97. HF DF site, front 98. Processing group, R/R recon company, recon bn, div 99. Airborne SIGINT platform 100. Radar DF site (mobile co, radar ranging intercept regiment, front) 101. Tropospheric scatter intercept site 102. Radio relay airborne jamming system 103. Radar intercept site (hvy co, R/R inter regt, front) 104. Radio inter and DF site 105. VHF/UHF jamming site 106. HF jamming site 107. Radar intercept and DF site 108. Radar intercept and DF site (radio inter regt, front and R/R inter regt, front) 109. VHF jamming site 110. Radio intercept and DF site (radio inter and DF co, radar inter bn, army)
Class III (POL)	111. Mtr trans co, regt 112. POL trans co, MTB, div 113. POL regt, MT bde, front 114. Pipeline bn, front 115. Regt POL point 116. Div POL depot 117. Army POL depot
Class V (Ammo)	118. Ammo transport co, MTB, div 119. Regt ammo depot 120. Div ammo depot 121. Army ammo depot 122. Front ammo depot 123. Front supply base section
Class IX (Maint, Repair Parts)	124. Regt maint co, MRR/TR 125. Bn repair and evacuation group 126. Damaged vehicle collection point 127. DARM-4 mobile artillery repair shop complex
Lift	128. MTR, trans bn, div

High-Payoff Target List

The high-payoff target list identifies the HPTs for a specific point in the battle in the order of their priority for acquisition and attack. While target value is usually the greatest factor contributing to target payoff, other things to be considered include the following:

- Sequence or order of occurrence.
- Ability to locate and identify the target.
- Degree of accuracy and identification available from the acquisition system.

• Ability to engage the target.

- Ability to defeat the target.

• Resource requirements necessary to accomplish all of these.

The PRIORITY column simply lists the priority order of the list. The list may have any number of target priorities.

The CATEGORY column identifies the target category from which each listed high-payoff target comes. Time-sensitive (TS) targets may be identified in this column.

The SHEET NUMBER column identifies the target sheet number of each high-payoff target.

The DESCRIPTION column identifies the target description from the appropriate target sheet.

EXAMPLE HIGH-PAYOFF TARGET LIST

PRIORITY	CATEGORY	SHEET NUMBER	DESCRIPTION
1	8 N/CH (TS)	77, 79	PRTB, nuclear depot
2	1 C ³ (TS)	29, 34	Division, army main CP
3	2 FS (TS)	5	Div arty command btry
4	2 FS	1, 2, 18	Arty bn FDC, COP, FA btry
5	1 C ³	25, 30	Regimental main CP, div fwd CP
6	3 MAN	50, 51, 46, 48	Bn assembly area, march column, MR/TK co
7	4 ADA 7 REC	63, 64 91, 92	AD EW site, radio/radar inter sites
8	9 POL	115, 116	Regimental/division POL points
9	10 AMMO	120, 121	Division/army ammo depots

The TVA Process

The following paragraphs present a divisional how-to guide with enough detail to provide a transition from concepts to workable TVA attack guidance. The specific tasks discussed are not normally done at levels below division. However, similar tasks are done as part of normal operations of a brigade battle staff. In performing its own target value analysis, the brigade concentrates on division-level spread sheets and target sheets. The brigade attack guidance addresses assets the brigade controls. The brigade targeting effort always occurs within the context of the decision support template. The high-payoff target list and attack guidance at brigade and task force or battalion are normally more detailed and focused than those at higher levels. This discussion is presented to facilitate an understanding of the requirements and products of the TVA process that may impact at brigade level and below. Tasks identified are done at division by the field artillery intelligence officer (FAIO) in conjunction with the targeting team and at brigade and below by the targeting officer in conjunction with the battle staff. For a more detailed discussion of specific TVA tasks and the targeting process, see FM 6-20-10.

As soon as a likely enemy course of action is determined, determine the tactical situation and find the appropriate spread sheet. Then, identify the target sets with the highest relative worth.

Coordination

Coordinate with G2 and G3 plans as follows:

- From the G2 and G3, get any commander's guidance for relative worth or delay or limit modifications.
- With the G2 and/or G3, integrate finding high relative worth target sets into division priority intelligence requirements.

Get G2 input for the high-value target list based on the G2 estimate of the enemy situation.

Coordinate with G2 for planning target areas of interest and decision points. The FS cell should brief the G2 on the deep attack assets available, their ranges and capabilities, and their reaction times.

Use of Spread Sheets

From the selected spread sheet, extract the following:

- The relative worth for each set. The relative worth will drive target attack guidance.
- Target sets to be delayed or limited. These sets will drive the attack in depth (interdiction) effort.
- High-value targets. Develop the list of high-value targets from the mission area analysis and the commander's guidance. This list will drive the development of the high-payoff target list.
- Enemy fallback options. These will drive preparation of TVA for future operations.

Development of the High-Payoff Target List

Start with the list of identified high-value targets, and prioritize the targets according to their relative worth and the commander's guidance.

Eliminate all targets beyond the range of division-level weapons. When the commander has approved the high-payoff target list, coordinate with the next-higher FS cell and the ALO to engage these targets.

Eliminate those targets that are too large or too hard to engage with division-level assets. Consider these targets for engagement by corps, CAS, and nuclear and chemical weapons.

Coordinate with the G2 and/or ASPS. Eliminate targets to be engaged that cannot be regularly acquired in a timely manner.

The remaining high-value targets, which can be acquired and effectively attacked once they are acquired, comprise the high-payoff target list,

Coordinate with the G2, ASPS, and/or div arty targeting personnel to search for the targets on the high-payoff target list.

Disseminate the high-payoff target list to all fire support agencies.

Preparation of Target Attack Guidance Matrix

The attack guidance matrix is a means used to present the attack guidance for specific high-payoff targets. This guidance is recommended by operations and fire support personnel for approval by the commander. The procedure for preparing a target attack guidance matrix is described below.

Target Category and High-Payoff Target Numbers

First, list the 13 target categories in the CATEGORY column. Transfer all the target sheet numbers for these categories from the high-payoff target list to the HIGH PAYOFF column.

Effects Levels

Determine what effect (suppress, neutralize, or destroy) the commander wants on each target set. Determine if the effect the commander wants requires that a modification be recommended. If ammunition and fire units are plentiful, greater effects may be achievable. If ammunition and fire units are limited, decrease the effects levels for borderline categories. On the basis of this determination, insert the appropriate effects in the HOW column of the attack guidance matrix. Enter the letter *S* for suppress, *N* for neutralize, or *D* for destroy. If a modification or a specific effects level is required, indicate that in the HOW column.

When to Attack

Determine when to attack each target set. Indicate in the WHEN column the decision for each target set. Enter the letter *I* for immediate, *A* for as acquired, and *P* for plan.

Immediate attack should be limited to not more than two target categories. The nuke/chemical target category is always **immediate**. If there is another category that has very high relative worth and is highly mobile, make it **immediate**.

Most targets will fit in the **as acquired** category. In general, any target that is worth shooting and is expected to move will be classified **as acquired**. Targets that are worth shooting and are not expected to move may be classified **as acquired** or **plan**.

NOTE: The term *expected to move* means that the target is likely to move before fires on the target are planned and executed. The exact length of this time will depend on both technical considerations (how long it will take to compute the fire plan, move fire units into position, break out ammunition, and so forth) and operational considerations (for instance, SEAD plans will not be fired until nearly the time of the air strike, preparations will not be fired until nearly H-hour, and so forth).

The **plan** attack guidance should apply to two different types of target categories:

- **Target** categories that, in the current situation, are not worth shooting at this time.
- Targets that may be used in future schedules of fire (such as preparations, counterpreparations, and programs) and are not likely to move before the schedule of fires is expected to be shot.

Determine any exceptions to the I, A, and P guidelines given above and adjust guidance accordingly. For example The guidance might be “Don’t shoot C³ targets because we are getting good intel from radio intercepts,” This

guidance would make C³ a **plan** target set instead of **as acquired**.

Restrictions and/or Remarks

In the RESTRICTIONS column, identify targets that are to be coordinated with or engaged solely by EW assets. Coordinate with the G3 EW officer for guidance on what can be effectively jammed and how jamming can be coordinated.

Identify targets that are well suited for engagement with nuclear and/or chemical weapons. Note which targets should go in the nuclear development file.

Identify targets that should be nominated for attack by CAS or Army aviation assets.

Identify any special ammunition or weapon systems considerations.

Identify specific targets within a category that are much more important than the category as a whole. For instance, if a maneuver commander is particularly concerned about ATGMs, maneuver as a whole might be a category to suppress. To indicate this, include the remark *Neutralize A TGMs*.

Dissemination of Matrix

Finalize the attack guidance matrix as shown below. Disseminate the attack guidance matrix so that all fire support agencies have it.

EXAMPLE ATTACK GUIDANCE MATRIX

CATEGORY	HIGH PAYOFF	WHEN	HOW	RESTRICTIONS
1 (C ³)	25, 29, 30, 34	I	N/EW	Coordinate attack with EW
2 (FS)	1, 2, 5, 18	I	N	Plan all calibers greater than 122 mm
3 (MAN)	46, 48, 50, 51	I	10%	
4 (ADA)	63, 64	A	N	
5 (ENGR)	69, 70	P	N	Not high-payoff target
6 (RSTA)	14, 16, 17, 84, 85, 107	A	D	Not high-payoff target
7 (REC)	91, 92	A	S/EW	Coordinate attack with EW
8 (N/CH)	77, 79	P	D	Forward targets to division
9 (POL)	115, 116	A	D	
10 (AMMO)	120, 121	A	N	
11 (MAINT)		A	S	
12 (LIFT)		A	S	
13 (LOC)	118	A	N	Not high-payoff target

Preparation for Future Operations

To prepare TVA for future operations, identify enemy fallback options. As time permits, perform TVA through the identification of high-payoff targets for each enemy fallback option. Coordinate with G3 plans to update and modify TVA for future operations.

Integration of TVA Process Into Fire Support Planning

In the conduct of combat operations, the TVA process described in this appendix must be modified at brigade level according to the time and resources available for planning. This is because TVA is not conducted formally below brigade level. Targeting at the brigade is focused on close operations, the nature and posture of the opposing force, and the resources available to the commander. Targets of interest are primarily tactical CPs, small combat and combat service support units, and possibly key terrain of immediate concern to the brigade.

If the brigade is deployed as part of a division, the brigade S2 should receive the results of a detailed IPB from the division G2. The brigade S2 will further develop the IPB within the brigade zone in an attempt to identify likely enemy avenues of approach and possible enemy courses of action. The targeting officer, with the maneuver brigade S2, uses target spread sheets (if available) to identify potential high-value targets. Spread sheets are based on the size of the opposing enemy force and a possible enemy course of action. A list of these targets prioritized on the basis of their relative worth to the enemy commander becomes the high-value target list associated with that particular enemy course of action.

As the staff prepares their estimates, staff members consider the high-value target list in determining the friendly course of action. During the staff war-gaming process, the targeting officer (in conjunction with the S2,

S3, and FSO) develops the high-value target list into a high-payoff target list based on the targets that are of concern to the friendly maneuver commander and that will facilitate the success of the friendly course of action. The high-payoff target list is sent to the maneuver commander for his approval and to allow him to modify the list as he deems necessary.

The targeting officer recommends attack guidance from the high-payoff target list to describe how targets are to be attacked (effects criteria), when they are to be engaged (prioritization in the engagement of specific target types), and any restrictions that may apply in terms of target dwell time, target location error, or munition type. Some target categories may be restricted from engagement, because of the limited availability of assets or because the target can be exploited for SIGINT information. Attack guidance is disseminated to all fire support attack and acquisition agencies available to the brigade.

The targeting officer recommends changes to the attack guidance based on events that occur during the battle and on target damage assessment (TDA) reports.

Integration of TVA Process into TACFIRE Operations

The primary means of integrating the high-payoff target list and the attack guidance into TACFIRE operations is by establishing fire mission modifications in the FM; MOD file. Select the HPT types identified on the attack guidance matrix for immediate attack, and identify them by target type or subtype in the PTYPE field of the FM; MOD file.

Target attack modifications must then be made to the FM;ATTACK file to override default attack criteria with any modifications from the attack guidance matrix. First, review the default attack criteria for target types or subtypes in the FM; ATTACK file. Then,

modify the default guidance to conform to the commander's attack guidance contained in the approved matrix.

Specific changes to TACFIRE default criteria must be published in the operation order. In addition to other tactical fire support files, the FM; MOD and FM;ATTACK files should be

reviewed by TACFIRE shift personnel at least as often as shifts change to ensure that the current commander's guidance is reflected in the files.

For specific procedures and mnemonics for the FM; MOD and FM; ATTACK files, see the current edition of TM 11-7440-240-10.
