FRATRICIDE PREVENTION

Fratricide is as old as warfare itself, a complex problem that defies simple solutions. Fratricide can be broadly defined as the employment of friendly weapons and munitions, with the intent to kill the enemy or destroy his equipment or facilities, that results in unforeseen and unintentional death or injury to friendly personnel. This appendix focuses on actions leaders can take with current resources to reduce the risk of fratricide.

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Section I. MAGNITUDE OF THE PROBLEM

The modern battlefield is more lethal than any in history. The pace of operations is rapid, and the nonlinear nature of the battlefield creates command and control challenges for all unit leaders.

The accuracy and lethality of modern weapons make it possible to engage and destroy targets at extended acquisition ranges. At the same time, however, the ability of US forces to acquire targets using thermal imagery and other sophisticated sighting systems exceeds our ability to accurately identify these targets as friend or foe. As a result, friendly elements can be engaged unintentionally and destroyed in a matter of seconds. Added to this is the problem of battlefield obscuration, which becomes a critical consideration whenever thermal sights are the primary source of target identification. Rain, dust, fog, smoke, and snow degrade identification capability by reducing the intensity and clarity of thermal images.

On the battlefield, positive visual identification cannot be the sole engagement criteria at ranges beyond 1,000 meters. Situational awareness is the key; it must be maintained throughout an operation.

Section II. STOPPING A FRIENDLY FIRE INCIDENT
The tank platoon may become involved in a friendly fire incident in one of several ways: as the victim of the fire; as the firing element; or as an observer intervening in an attack of one friendly element on another. This section covers actions leaders and crewmen must be prepared to take when they encounter such situations.

**Actions as Victim of Friendly Fire**

The following are recommended actions at crew and leader level in the event the crew falls victim to friendly fires:

- React to contact until you recognize friendly fire.
- Cease fire.
- Take immediate actions to protect soldiers and vehicles.
- Use a visual recognition signal directing the firing unit to cease fire.
- Report the following on the next higher unit net:
  - Announce that you are receiving friendly fire.
  - Request medical assistance as needed.
  - Give the location and direction of the firing vehicles.
  - Warn the higher unit not to return fire if you identify the firing unit as friendly.

**Actions as Firing Element**

The following are recommended actions at crew and leader level when the crew has engaged friendly forces:

- Cease fire.
- Report the following on the next higher net:
  - Identification of the engaged friendly force (if the unit is unidentified, report number and type of vehicles).
  - The location.
  - Direction and distance to victims.
  - The type of fire.
  - The target effects.

**Actions as Observer of Friendly Fire**

The following are recommended actions at crew and leader level in the event the crew observes a friendly fire incident:

- Seek Cover and Protect Yourself.
- Use a visual recognition signal directing the firing unit to cease fire.
- Report the following on the next higher net:
- Identification of the engaged friendly force (if the unit is unidentified, report number and type of vehicles).
- The location of the incident.
- Direction and distance to the victim and the firing unit.
- The type of fire.
- The target effects.
- Provide assistance as needed (when safe to do so).

**Leader Responsibilities**

In all situations involving the risk of fratricide and friendly fire, leaders must be prepared to take immediate actions to prevent casualties as well as equipment damage or destruction. Recommended actions in fratricide situations include the following:

- Identify the incident and order the parties involved to cease fire.
- Conduct an in-stride risk assessment.
- Identify and implement controls to prevent the incident from recurring.

**Section III. RISK IDENTIFICATION AND PREVENTIVE MEASURES**

Reduction of fratricide risk begins during the planning phase of an operation and continues throughout preparation and execution. Risk identification must be conducted at all levels during each phase; the results then should be clearly communicated up and down the chain of command so that risk assessment can begin. This section covers considerations that influence risk identification; it also focuses on measures the platoon leader can implement both to make the identification process more effective and to help prevent friendly fire incidents from occurring. Section IV of this appendix covers the risk assessment process. Section V lists additional fratricide reduction measures and guidelines.

**Planning Phase**

A plan that is thoroughly developed and understood helps to minimize fratricide risk. The following considerations will give leaders an indication of the potential for fratricide in a given operation:

- The clarity of the enemy situation.
- The clarity of the friendly situation.
- The clarity of the commander's intent.
- The complexity of the operation.
- The planning time available at each level.
Graphics are a basic tool that commanders at all levels use to clarify their intent, add precision to their concept, and communicate their plan to subordinates. As such, graphics can be a very useful tool in reducing the risk of fratricide. Commanders at all levels must understand the definitions and purpose of operational graphics and the techniques of their employment. See FM 101-5-1 for the definitions of each type of graphic control measure.

**Preparation Phase**

The following factors that may contribute to fratricide risk are the focus of risk identification during the preparation process:

- Training and proficiency levels of units and individuals.
- The habitual relationships between units conducting the operation.
- The physical readiness (endurance) of the troops conducting the operation.

Confirmation briefings and rehearsals are primary tools in identifying and reducing fratricide risk during the preparation phase. The following are some considerations for their use:

- Use confirmation briefings or rehearsals to ensure subordinates know where fratricide risks exist and what to do to reduce or eliminate the risk.
- Confirmation briefings ensure subordinates understand the commander's intent. They often highlight areas of confusion, complexity, or planning errors.
- The number and type of rehearsals that the unit conducts will determine what types of risks can be identified.
- Rehearsals should extend to all levels of command and involve all key players.

**Execution Phase**

During execution, in-stride risk assessment and reaction are necessary to overcome unforeseen fratricide risk situations. The following are factors to consider when assessing fratricide risks once the operation has begun:

- Intervisibility between adjacent units.
- Amount of battlefield obscuration.
- Ability or inability to positively identify targets.
- Similarities and differences in equipment, vehicles, and uniforms among friendly and enemy forces.
- Vehicle density on the battlefield.
- The tempo of the battle.
Maintaining situational awareness at all levels and at all times is another key to fratricide reduction as an operation progresses. Units must develop and employ effective techniques and SOPs to aid leaders and crewmen in this process. These measures can include the following:

- Eavesdropping on the next higher net.
- Radio cross-talk between units.
- Accurate position reporting and navigation.
- Training and use/exchange of LOs.

Section IV. RISK ASSESSMENT

Risk assessment must be conducted whenever fratricide risks factors are identified. It must take place at all levels during each phase of operations. As with risk identification, the results of the assessment must be passed on to all levels of the chain of command so that fratricide reduction measures can be developed and implemented. Refer to Section V for a list of specific reduction measures.

Figure F-1 is a worksheet for evaluating fratricide risk in the context of mission requirements. The worksheet lists six mission-accomplishment factors that affect the risk of fratricide, along with related considerations for each factor. Assess the potential risk in each area as low, medium, or high, and assign a point value to each (one point for low risk, two for medium risk, three for high risk). Add the point values for the overall fratricide assessment score. Use the resulting score only as a guide. Your final assessment must be based both on observable risk factors like those on the worksheet and on your "feel" for the intangible factors affecting the operation. Note that descriptive terms are listed only in the low- and high-risk columns of the worksheet. Your assessment of each factor will determine whether the risk matches one of these extremes or lies somewhere between them as a medium risk.
Section V. FRATRICIDE REDUCTION MEASURES

The measures outlined in this section provide the platoon with a guide to actions it can take to reduce fratricide risk. They are not directive in nature, nor are they intended to restrict initiative. Apply them as appropriate based on the specific situation and METT-T factors. At the heart of fratricide reduction and prevention are five key principles:

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### Table: Fratricide Risk Assessment Worksheet

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>LOW(I)</th>
<th>MEDIUM(2)</th>
<th>HIGH(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. UNDERSTAND PLAN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Command's intent</td>
<td>Clear</td>
<td></td>
<td>Foggy</td>
</tr>
<tr>
<td>Complexity</td>
<td>Simple</td>
<td></td>
<td>Complex</td>
</tr>
<tr>
<td>Enemy situation</td>
<td>Known</td>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>Friendly initiative</td>
<td>Clear</td>
<td></td>
<td>Unclear</td>
</tr>
<tr>
<td><strong>2. ENVIRONMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervisibility</td>
<td>Favorable</td>
<td></td>
<td>Unfavorable</td>
</tr>
<tr>
<td>Obstruction</td>
<td>Clear</td>
<td></td>
<td>Fast</td>
</tr>
<tr>
<td>Battle tempo</td>
<td>Slow</td>
<td></td>
<td>Dull</td>
</tr>
<tr>
<td>Positive target ID</td>
<td>100%</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td><strong>3. CONTROL MEASURES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Command relationships</td>
<td>Organic</td>
<td></td>
<td>Joint/Combined</td>
</tr>
<tr>
<td>Audio</td>
<td>Loud/Clear</td>
<td></td>
<td>Assumed</td>
</tr>
<tr>
<td>Visual</td>
<td>Wall/Clear</td>
<td></td>
<td>Obscured</td>
</tr>
<tr>
<td>Graphics</td>
<td>Standard</td>
<td></td>
<td>Not understood</td>
</tr>
<tr>
<td>SOPs</td>
<td>Standard</td>
<td></td>
<td>Not used</td>
</tr>
<tr>
<td>Uniform personnel</td>
<td>Proficient</td>
<td></td>
<td>Untrained</td>
</tr>
<tr>
<td>Location/navigation</td>
<td>Sure</td>
<td></td>
<td>Unsure</td>
</tr>
<tr>
<td><strong>4. EQUIPMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td>Similar</td>
<td></td>
<td>Different</td>
</tr>
<tr>
<td>Enemy</td>
<td>Different</td>
<td></td>
<td>Similar</td>
</tr>
<tr>
<td><strong>5. TRAINING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual proficiency</td>
<td>MOS Qualified</td>
<td></td>
<td>Untrained</td>
</tr>
<tr>
<td>Unit proficiency</td>
<td>Trained</td>
<td></td>
<td>Untrained</td>
</tr>
<tr>
<td>Radio reliability</td>
<td>Ready/Reliable</td>
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<td>None</td>
</tr>
<tr>
<td>Habitual relationship</td>
<td>Yes</td>
<td></td>
<td>Faded</td>
</tr>
<tr>
<td>Endurance</td>
<td>Alert</td>
<td></td>
<td>Fatigued</td>
</tr>
<tr>
<td><strong>5. PLANNING TIME</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(20 - 24 Hour)</td>
<td>Adequate</td>
<td></td>
<td>Inadequate</td>
</tr>
<tr>
<td>- Higher HQ</td>
<td>Adequate</td>
<td></td>
<td>Inadequate</td>
</tr>
<tr>
<td>- Own HQ</td>
<td>Adequate</td>
<td></td>
<td>Inadequate</td>
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</table>

<table>
<thead>
<tr>
<th>OVERALL FRATRICIDE ASSESSMENT</th>
<th>20-40</th>
<th>41-60</th>
<th>61-78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>points*</td>
<td>points</td>
<td>points</td>
</tr>
</tbody>
</table>

- Commander may use total points as the situation dictates.
- Point totals alone may not reflect fratricide risk accurately.

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*Figure F-1. Fratricide risk assessment worksheet.*
- Maintain situational awareness, focusing on such areas as current intelligence; unit locations/dispositions; denial areas (minefields/FASCAM); contaminated areas, such as ICM and NBC; SITREPs; and METT-T factors.

- Ensure positive target identification. Review vehicle and weapons identification (ID) cards. Become familiar with the characteristics of potential friendly and enemy vehicles, including their silhouettes and thermal signatures. Know at what ranges and under what conditions positive identification of various vehicles and weapons is possible.

- Maintain effective fire control. Ensure fire commands are accurate, concise, and clearly stated. Make it mandatory for crewmen to ask for clarification of any portion of the fire command that they do not completely understand. Stress the importance of the chain of command in the fire control process; ensure crewmen get in the habit of obtaining target confirmation and permission to fire from their leaders before engaging targets they assume are enemy elements.

- Establish a command climate that emphasizes fratricide prevention. Enforce fratricide prevention measures, placing special emphasis on the use of doctrinally sound TTP. Ensure constant supervision in the execution of orders and in the performance of all tasks and missions to standard.

Additional fratricide reduction guidelines and considerations include the following:

- Recognize the signs of battlefield stress. Maintain unit cohesion by taking quick, effective action to alleviate stress.

- Conduct individual, leader, and collective (unit) training covering fratricide awareness, target identification and recognition, and fire discipline.

- Develop a simple, decisive plan.

- Give complete and concise mission orders.

- To simplify mission orders, use SOPs that are consistent with doctrine. Periodically review and update SOPs as needed.

- Strive to provide maximum planning time for you and your subordinates.

- Use common language/vocabulary and doctrinally correct standard terminology and control measures, such as the fire support coordination line (FSCL), zone of engagement, and restrictive fire line (RFL).

- Ensure thorough coordination is conducted at all levels.

- Plan for and establish effective communications.

- Plan for collocation of CPs whenever it is appropriate to the mission, such as during a passage of lines.

- Designate and employ LOs as appropriate.

- Make sure ROE are clear.

- Conduct rehearsals whenever the situation allows you the time to do so.

- Be in the right place at the right time. Use position location/navigation devices (GPS and POSNAV); know your location and the locations of
adjacent units (left, right, leading, and follow-on); and synchronize tactical
movement. If you become lost or misoriented, contact your higher
headquarters immediately for instructions and assistance.
- Include a discussion of fratricide incidents in all after-action reviews
(AAR).