

4-1 GENERAL:

a. **MANEUVER BATTALIONS:** deploys with organic fire support assets. Field artillery tactical missions and amount of support provided are contained in the Corps, Division and Brigade OPLAN and OPORD. Planning and coordination of fire support assets are the responsibility of the Fire Support Coordinator at the respective unit level. The EXCON controls close air support allocations. Other fire support assets may be requested IAW UR 350-50.

b. **CL V APPROVAL AUTHORITY:** The EXCON in coordination with the CMTc DIVARTY (Vampire TAF) approves unit basic loads and establishes controlled supply rates for each weapon system through higher headquarters orders. Forward positioning and emergency requisitions for ammunition are requested through CMTc DIVARTY (Vampire TAF) operational and ADMIN/LOG channels, and approved by EXCON.

c. **TRAINING LOCATIONS:** All Battalion TOCs, combat trains (if operating in a dual trains configuration), field trains, firing platoons with howitzers, MLRS battery and platoon elements, and radars participating in the rotation must physically occupy positions within the training area (or Maneuver Coordination Areas/Local Training Areas). No notional grids are permitted for these elements unless already coordinated through Operations Group S3 Plans or EXCON.

d. **WHITE CELL UNITS:** Battalion Emergency Operations Centers (EOCs), and other administrative elements not participating in the rotation, cannot assist or pass tactical communications to units in training.

4-2 CMTc DIVARTY OPERATIONS: The Vampire Training Analysis and Feedback facility (TAF) functions as the DS FA Battalion's higher headquarters throughout the rotation, replicating limited functions of a DIVARTY headquarters. All operational requests are submitted to DIVARTY (Vampire TAF) for approval by the DIVARTY Commander (V07). These include requests for counter-fire coverage, additional Q37 coverage, changes to the FA Organization for Combat, changes to the RSR, MET support, and requests for ammunition for immediate consumption.

a. **COMMUNICATIONS:** The DS FA Battalion Tactical Operations Center is required to maintain 24 hour voice and digital communications with DIVARTY (Vampire TAF). Voice communication is maintained on 33.800 and digital communications is maintained on 58.350. Both nets are single channel secure on

the rotational unit fill. Frequency hopping is not permitted with CMTc DIVARTY.

b. **Q37 RADAR COVERAGE:** It is a unit responsibility to request Q37 coverage of their sector. The DS FA Battalion may request Q37 Counterfire coverage in support of planned or emergency displacements of the Q36 radar. Requests for Q37 coverage should be planned in advance to ensure coverage during Q36 displacements.

1. Pre-planned Requests. Must be received NLT 18 hours prior to LD and must specify duration, starting, and ending DTGs.

2. Immediate requests must be received 30 minutes prior to the coverage requirement. If the coverage requested does not conflict with DIVARTY and Corps requirements, the request may be approved.

3. The DIVARTY Commander (V07) or the DIVARTY S3 (V03) approves radar coverage requests.

4. Coverage requests are submitted digitally to DIVARTY. Q-37 support for a brigade will not exceed 1 CFFZ and 2 CFZ's. (See the CMTc DIVARTY TACSOP).

5. Radar Positioning: DIVARTY will position the Q-37 radars to best support Division Operations.

c. **ADDITIONAL COUNTER FIRE COVERAGE:** The general positioning of the Common Sensory Boundary (CSB) will be established by DIVARTY (V07). The DS FA Battalion may request a change to the Common Sensor Boundary (CSB) and GS Counterfire coverage from DIVARTY. If approved, DIVARTY assumes counterfire responsibility against BTG elements beyond the new CSB for the time period requested. The DIVARTY Commander, (V07) approves all Counterfire coverage requests.

d. **MET SUPPORT:** DIVARTY (FWD) provides METRO support to the DS FA BN upon request. Units submit a requested MET schedule NLT D+3 to DIVARTY (Vampire TAF). DIVARTY is capable of providing Computer and/or Ballistic METs upon request. (See DIVARTY TACSOP).

4-3 REQUIRED FIRE SUPPORT REPORTS:

Fire support plans consisting of target lists, worksheets, target overlays, schedules of fire, fire support execution matrices, and fire support coordination measures will be provided to the fire support/mortar O/C as they occur (2 copies). Two copies of the FA support plan with annexes including survey tab, radar tab, DIGITAL tab, FA

support matrix, target list, RDO; and two copies of all overlays will be provided to the Artillery Battalion TOC O/C. All changes to fire support/FA support plans must be provided to the O/C as they occur. Units will transmit target list, fire plans, and FSCM to DIVARTY digitally.

4-4 FIRE CONTROL:

a. **HOWITZER CREWS:** will perform all crew drills and fire an M30 Pyrotechnic from the MGSS or a shotgun shell (M119) to replicate firing the howitzer. Each howitzer will fire one M30 Pyrotechnic for each round fired. Additionally, for ammunition accountability purposes the unit will hand one round, fuze, and charge card for each round fired to its respective residue pit or Observer Controller. The number of M30 Pyrotechnic rounds loaded into the MGSS will not exceed the current Turret load for the howitzer. Units will reload the MGSS IAW their crew resupply SOP. Only howitzers firing a M30 Pyrotechnic or blank shotgun shell will be credited for casualty assessment.

b. **IF SHOTGUN SHELLS ARE UNAVAILABLE:** the observer/controller for M119 howitzers will detonate one hand grenade simulator to replicate signature effects for each volley from a platoon or battery.

c. **MLRS CREWS:** will perform all crew drills to standard. The O/C will detonate one hand grenade simulator and one smoke grenade to replicate signature effects for each volley. Additionally, for ammunition accountability purposes the unit will hand one rocket or missile pod to its respective Observer Controller for those missions fired.

d. **MORTAR CREWS:** will perform all crew drills. The mortar O/C will detonate one hand grenade simulator for each volley fired.

e. **PRIOR TO FIRING A MISSION:** or subsequent corrections, the FDC must give the O/C an accurate artillery mission card (bucksip) to receive any replication of fires. The card must include:

1. Target number
2. Target location
3. Pieces to fire
4. Special instructions
5. Type of projectile
6. Charge
7. Fuze time setting when applicable
8. Number of rounds
9. Range to fuze function
10. Range to impact

f. FIRE MISSION TIME STANDARDS:

All units will fire at their sustained rate of fire. Standards for notional firing units are listed for that weapon system in the applicable MTP. After the second battle, the notional unit fire mission time standards are adjusted to approximate the average fire mission times of the rotational firing units in training.

1. The following times apply to notional FA batteries and are applied by the FDC O/C:

- (a) Initial mission receipt to first shot: 3 minutes.
- (b) Subsequent volley request to shot: 1 minute.
- (c) Shift time between targets: 1 minute.

2. The following initial times apply to notional MLRS launchers and are applied by the BOC O/C:

- (a) Hot launcher at a hide point: 6 minutes.
- (b) Hot launcher at a firing point: 4 minutes.
- (c) Cool launcher at a hide point: 14 minutes.

4-5 DIRECT FIRE ENGAGEMENTS: At the beginning of the rotation, a firing unit must demonstrate to its O/C its proficiency in direct fire techniques against dismounted and mounted threats.

a. **PALADIN SECTIONS:** will demonstrate its ability to direct fire with, one-man, one-sight or with an AFCS. To fire Killer Junior, it must have correctly computed Killer Junior tables posted in its howitzer.

b. **AN M119 SECTIONS:** will demonstrate the one-man, one-sight method. It must demonstrate it knows how to employ an APERs round and the area it affects. To fire Killer Junior, it must have correctly computed Killer Junior tables at its howitzer.

c. **ENGAGEMENT CREDIT:** An O/C must observe an engagement for the unit to receive credit. The howitzer must orient its tube toward the enemy and apply the correct quadrant at the range determined.

d. **MGSS/BLANK SHOTGUN SHELLS:** The howitzer is equipped with an MGSS system (M109 series) or blank shotgun shells (M119 series), it will fire a M30 Pyrotechnic or shotgun shell for each round of the engagement. For safety reasons, the enemy must be beyond 50 meters to fire the M30/shotgun shell. If the MGSS rack is expended, the crew will conduct

reload procedures IAW their unit SOP and reload the MGSS rack with one M30 Pyrotechnic per round loaded into the turret.

e. BLANK SHOTGUN SHELL

SAFETY: If the enemy is closer than 50 meters, or if the howitzer is not equipped with blank shotgun shells (M119), the section chief will cross his arms over his head to signify that he is engaging. This is a safety stop.

f. MORTAR PLATOON DIRECT LAY

PROCEDURES: The mortar platoon must show the mortar O/C on the ground the target, calculate the mortar mission card, and demonstrate minimum range for the system. The O/C will throw a hand grenade simulator to replicate a signature.

4-6 FIRE MARKING: The Dragon fire marker team will replicate the effects of all indirect missions. The fire markers will replicate specific missions as follows:

a. ARTILLERY MISSION (HE /DPICM):

1. Initial volley: 1 air burst simulator, 1 artillery simulator, 1 hand grenade simulator, 1 HC smoke grenade.

2. Duration: 1 hand grenade simulator every 30 seconds.

b. MORTAR MISSION:

1. Initial volley: 1 air burst simulator, 2 hand grenade simulators, 1 HC smoke grenade.

2. Duration: 1 hand grenade every 30 seconds.

c. MLRS/MRL:

1. Initial: 5 air burst simulators, 5 hand grenade simulators.

2. Duration: 1 hand grenade simulator every 30 seconds.

d. FA DELIVERED SCATTMINE (FASCAM): see Chapter 5, paragraph 5-6d. Marking Artillery Scatmine.

e. CHEMICAL STRIKE: 5 air burst simulators, 1 yellow smoke grenade.

f. ILLUMINATION: 1 illumination flare every 30 seconds or as directed by Vampire TAF.

g. SMOKE (HC AND WP):

1. Duration less than 10 min: required number of smoke grenade for target size.

2. Duration for over 10 min: required number of smoke pots for target size.

3. Extended duration: Mechanical smoke generator vehicle.

h. AIR DELIVERED VOLCANO MINEFIELD: see chapter 7, paragraph 7-11c.

i. COPPERHEAD/KRASNAPOL:

Mission as directed by Vampire TAF.

4-7 ATTACK CRITERIA: CMTC casualty assessment tables are unclassified approximations of Joint Munitions Effectiveness Manuals for Surface-to-Surface weapons (JMEM-SS) tables. Units may use the CMTC casualty assessment tables to assist in planning the volume of fires for a particular target. Units should also determine their attack criteria on the basis of the JMEM, GMET or LCU solution in conjunction with the commander's intent for fire support and attack guidance.

4-8 MOVEMENT AND POSITION REQUIREMENTS:

a. TACTICAL MOVEMENT: All units or elements (firing units, mortar platoons, radar sections, TOCs, trains) will move consistent with the tactical situation.

b. NOTIONAL FIRING UNITS: Defined as firing platoons without howitzers, SPLs or fire direction centers/TOCs, move on the battlefield at a rate of 3 minutes per road distance kilometer (rate of 20 km/hr). All planned or unplanned subsequent moves done by notional units must have a designated route, and that route must be given to the O/C in order to determine the time and distance for the move. Units must designate SP, RP, and CPs as required. Notional battery commanders will provide OUTTIL times to the field artillery battalion. The unit will not proceed to the next position until directed by the field artillery battalion TOC. Units, which are not ready to fire, will not be credited with the fire missions.

Displacement and Emplacement time standards will be added to the total computed movement time.

SYSTEM	DISPLACEMENT	EMPLACEMENT
PALADIN/	2	3
MLRS	2	3
Q36	10	15
Q37	20	30

Table 4-1. Notional Unit Emplacement/Displacement Times.

c. NOTIONAL UNIT MOVEMENT: Upon receiving the order to move, notional units cannot begin movement until the displacement

time is complete and the unit has finished firing its current mission. Actual movement will be based on a rate of march of one kilometer every three minutes. Early notice to move does not decrease the displacement time. If a HQ wants a notional unit to begin moving at a specified time, it also must direct displacement to begin at the appropriate amount of time prior to the move time. Units cannot fire while displacing. Once movement is complete, a notional firing unit cannot fire until emplacement is complete. If a HQ wants to direct an in-place, ready to fire time, it must include emplacement time in its planning factors. After subsequent battles, the displacement, movement, and emplacement times are based on the average times of the rotational firing unit in training.

d. NOTIONAL UNITS FIRING ON THE MOVE: Notional firing units can be directed to fire while on the move. The emplacement time will remain the same as above, to reflect the time it takes to notify the unit and for the unit to stop at a suitable location and prepare to fire. The TOC O/C will inform the BN FDC of the notional unit's location. Upon receiving end of mission, the unit will begin to displace according to the times above, and continue to its original destination. The unit will only remain in place if directed by its headquarters.

e. RECYCLE TIME FOR NOTIONAL BLUFOR AND OPFOR UNITS: Recycle time for notional BLUFOR and OPFOR MLRS launchers that have expended one or both LP/Cs is 20 minutes. This includes movement time to the reload point, reloading of 1 or 2 LP/Cs, survey update, and movement to the next hide area or firing point within the same platoon OPAREA. If the subsequent hide area/firing point is in a different platoon OPAREA, the straight-line distance from the old to the new OPAREA will be determined. A time factor of 3 minutes/kilometer will then be added to the 20-minute recycle time. Recycle, displacement, movement, and emplacement times of notional launchers will be adjusted after the second battle to correspond with the average times of the rotational MLRS Platoon in the training area for these actions.

f. SURVEY: All fire units and supporting radars require accurate survey data to be effective. Failure to survey firing locations with PADS, conventional survey parties, celestial, global positioning system (GPS) or hasty survey may result in inaccurate FA fires. To accurately portray the time required to provide survey for firing units, observers, attached radars, MLRS,

engineers, and target area survey, the following guidance applies:

1. When the real PADS provides survey to notional units, the PADS will move on the battlefield at a rate of 3 minutes per road distance kilometer and 10 minutes to establish two position azimuth survey control points (SCP) for each firing unit. Moved to RID

2. When real POCs participate in a rotation, representing their platoons, the survey section is still required to establish survey control at the applicable platoon FDC, which will be verified by the platoon O/C prior to the next mission.

g. PENALTIES FOR NOT FIRING AT MY COMMAND MISSIONS: Notional BLUFOR and OPFOR Batteries must wait an additional 15 minutes to punch tubes before resuming fire missions.

4-9 COUNTER FIRE AND SURVIVABILITY:

a. BLUFOR will conduct counterfire operations, normally targeting OPFOR mortars and BTG artillery assets

b. BLUFOR units may receive counterfire from OPFOR artillery. BLUFOR notional MLRS units will adhere to the survivability move criteria established by the BLUFOR MLRS battery commander, when participating in training.

c. When a notional unit receives a volume of fires sufficient to destroy 1 tube or launcher according to manual adjudication, the following actions will occur:

1. The unit must conduct a move of at least 500 meters.

2. The headquarters element must direct the unit to move to a new location along a specified route, provided to the O/C.

3. The unit may begin displacing while being suppressed. Units will displace, move and emplace according to the notional unit movement table.

d. Acquisition is determined based on duration of radiation and type of radar site. Q-36 Radar systems that radiate for a cumulative 30 minutes in one location without displacing will be "acquired" and a four digit grid to the radar location reported through enemy fire support channel. The OPFOR will receive a six-digit grid to the radar for excessive cueing beyond 60 minutes, which will be repeated every 30 minutes.

4-10 ACCURACY OF FIRES: In order to provide more realistic battlefield effects, the accuracy of fires for the unit will be adjusted for inaccuracies

in the 5 requirements for accurate, predicted fire. The following are examples of such applications:

a. Orienting station errors over 150 meters incorrectly determined or entered into the Lightweight Computer Unit (LCU)/BUCS/ or manual chart. ORSTA errors of less than 150 meters will result in cumulative effects on accuracy.

b. Firing units or radars not on common survey/PDS updates not accomplished.

c. **MUZZLE VELOCITY VARIANCES:** Failure to apply MVVs when computing firing data.

d. Firing units not using the most current available MET. Radars not using the most current available MET when wind speeds exceed 20 knots/hour.

e. **SPECIAL SHEAF/TGPCS VERSUS BATTERY/PLATOON DISPLACEMENT:** Firing unit fails to utilize the LCU or compute TGPCs for manual gunnery.

f. **MINIMUM QUADRANT:** If the minimum quadrant for a firing position is incorrect, the O/C will make an immediate assessment of any possible effects (casualties/vehicle damage) within the platoon position.

1. Failure to declinate aiming circles and advance party compasses.

2. SPLs with non-operational fire control panels or occupying firing points having excessive cant will not be credited with missions fired.

i. **INCORRECT COMPUTATIONAL PROCEDURE:**

1. Incorrect target altitude: Varies with the degree of altitude discrepancy.

2. Failure to correct known errors such as 155 mm IFSAS/LCU work-arounds.

j. Unit accuracy is affected for a combination of the following:

1. Aiming points (primary and/or alternate) emplaced improperly.

2. Gunner's reference data incorrect. Lay/Safe/ Alternate aim point deflections incorrect.

3. Failure to bore sight when occupying a new position or when the tactical situation allows.

k. Failure to use a second means to verify the lay of the howitzers.

4-11 LASER OPERATIONS: Force on Force. The HELLFIRE GROUND SUPPORT SYSTEM

(HGSS), MELIOS and M1/M2/M3 family of vehicles with eye safe laser filters (ELF) are the only laser range-finders/designators allowed to actually lase or designate in Force-on-Force. The HGSS devices may be used to replicate the capabilities of the G/VLLD.

4-12 SPECIAL AMMUNITION

CONSIDERATIONS: The firing battery in rotation must demonstrate proficiency prior to release of those munitions for firing by notional units. These munitions must be of available USAREUR inventory. Notional Firing Units can fire subsequent missions if the firing battery in the box demonstrates proficiency in firing Special Munitions (FASCAM, Copperhead, Smoke, Illumination).

a. **COPPERHEAD:**

1. When the platoon in training is selected to conduct a Copperhead mission it will have a M823 Copperhead trainer on board at least one of its howitzers. Each section must demonstrate proficiency in preparing a Copperhead trainer round for firing before it can be selected to fire the round. The round may be prepared during pre-combat checks in the presence of a firing battery O/C. Notional firing batteries may be selected to fire Copperhead. The platoon in training must have previously demonstrated that it can properly prepare a Copperhead trainer round for firing. If the platoon in training is proficient at the task, the notional unit receives credit for being able to prepare the round for firing.

2. The effectiveness of Copperhead missions will be determined by O/Cs based on factors of angle T, observer location and how it was determined, cloud height, G/VLLD codes matching, site picture, range to target from the observer, computational procedures, and the timing and length of the simulated lase.

3. The POC must compute and conduct all copperhead fire missions IAW procedures outlined in FM 6-40, ST 6-40-2, and their unit SOP for targets of opportunity and priority planned targets. Failure to meet these criteria will result in no effects on target.

b. **ILLUMINATION:** Mortar and artillery illumination will be simulated with hand-held parachute flares. Fires cannot be adjusted for height or spread. One flare represents one illumination round. Moved to RID. These missions will not exceed the weapon's sustained rate of fire.

c. **SMOKE:** Mortar and artillery smoke is replicated using smoke grenades, smoke pots

and smoke generators based on the type of mission. Target attitude and duration are replicated as computed by the FDC.

d. **FASCAM:** The unit is limited to a maximum of 144 RAAM and 18 ADAM munitions for each battle which is enough to establish a 400x400 meter medium density minefield. The unit may employ only one 400x400, 200x800, 200x400 or 200x200 minefield. This ammunition can be drawn with the CSR, but will not exceed the before-mentioned totals. If a mission has a prep day before execution, the unit will not be able to draw an additional 144/18 munitions and thereby, have more than 144/18 for a battle.

4-13 COMBAT SERVICE SUPPORT:

a. All casualties will be handled IAW Chapter 8 of this EXROE with the following exception: Upon receiving casualties, notional platoons of the DS unit (represented by FDCs only) will send casualty feeder reports. No evacuation is required. Self and buddy aid will be rendered. Casualties will be in effect for 5 hours.

b. **MAINTENANCE:** must be performed in the training area as a part of the exercise. Non-mission capable vehicles must be recovered to the combat trains/UMCP or to the BSA. Vehicles road-marching out of Albertshof will not return to Albertshof if they become non-mission capable. They must be recovered forward to the units in training. Units may only repair vehicles in Albertshof when the training scenario allows the appropriate CSS elements for the level of repair to operate in Albertshof.

c. **LOGISTICS:** All logistical support will be conducted tactically and based from field locations. No logistical support will be based out of Camp Albertshof or other cantonment area, unless coordinated with CMTC S3 for the training exercise.

1. Classes I, II, III, and VI will be handled on an actual basis, with no simulations granted.

2. Classes IV, VII and VIII of supply will be requested through appropriate channels to the FSB. An O/C at the Brigade Support Area will verify/approve the request.

3. Class IX will be handled on an actual basis except for Simulated Battle Damage Assessments (SBDA). Chapter 8 of this EXROE describes the procedures for SBDA repair.

4. Class V for ESX units: inert rounds and canisters must be off-loaded and

reloaded on 2:1 basis to constitute a valid resupply. Inert rounds may not be considered for ammunition accountability purposes.

(a) Blank ammunition for 5.56 mm, 7.62 mm, .50 caliber, MGSS M30 rounds, blank shot gun shells, and AT-4 (VIPER) ATWESS cartridges will be issued in a tactical manner. Ammunition supply procedures will be conducted IAW Chapter 8 of this EXROE and the remainder of this paragraph.

(b) Upon the conclusion of O/C link up (MILES check and safety brief), the DS battalion begins with their START-EX UBL on hand and uploaded on their vehicles. An FA CSS O/C must authenticate subsequent DA FORM 581s to replace ammunition expended/destroyed, not to exceed the CSR. Copies of the authenticated DA FORM 581s must be provided to the FA CSS O/C or individual designated by the CSS O/C. An O/C must sign the DA FORM 581 prior to the battalion ammunition officer physically drawing the ammunition from the ATP/ASP/CARP. Ammunition is requisitioned IAW unit FSOP. Failure to have these forms or another local form that serves the same purpose will result in the platoon not receiving resupply. Units will draw UBL and re-supply ammunition out of the following tables:

DODAC	105 mm	NOM
C449	ILLUM	M314A3
C445	HE	M1
C463	RAP	M913
C473	CH68	M760
C442	WP	M60
C479	HC SMK	M84 HC
C513	APERS-T	M546
C463	HERA	M548
C448	HEP-T	M327
C462	HE/AP	M444

DODAC	155 mm	NOM
D563	DPICM	M483A1
D864	DPICM-ER	M864
D544	HE	M107
D579	RAP	M579
D505	ILLUM	M485
D528	WP (M825)	M825
D550	WP (M110)	M110
D506	SMK-HC	M116A1
D502	ADAM-SD	M731
D509	RAAM-SD	M741
D510	CPHD	M712

CHAPTER 4 FIRE SUPPORT

DODAC	FUZE	DODAC	CHARGES
N340	PD (M739)	D540	GB, M3A1
N464	VT (M732)	D541	WB, M4A2
N285	MTSQ (M577)	D533	7-RB
N286	MTSG (M582)	D532	8-RB

DODAC	MLRS	NOM
H104	JED	M26 DPICM
PL81	JEE	M39 Missile
H108	JEL	M77 DPICM

(c) Unit CSR is published in the Corps/Division OPLANs and OPORD. The CSR reflects day X2 of the exercise.

(d) If a 155 mm battalion is given a reinforcing mission, the CSR for both white bag and green bag are the reverse of the DS battalion and will not draw any special munitions (Copperhead, APS, AMS, and WP). The battalion will draw SMB and SMC. However, all munitions except for Copperhead can be cross-leveled between the DS and R battalions as directed by the FSCoord.

(e) Notional firing units of the reinforcing/GS/GSR battalion/battery will receive delivery of their CSR at 2400 hours daily. They will begin the exercise with their START-EX UBL on hand. The unit must request ammunition using DA FORM 581, signed by the FA CSS O/C to replace ammunition expended/destroyed, not to exceed the CSR.

(f) Units may request additional allocations of ammunition beyond their CSR. The two types of requests are Immediate Consumption and an Adjustment to their CSR.

(1) Immediate consumption is designed to supplement the CSR when a majority of the ammo has been consumed beyond the planned amount on a given battle. It is not intended as a combat multiplier. In order to force units to prioritize missions, an immediate consumption request must be submitted through the BDE S4 to the DIVISION G3, with a copy furnished to the DIVARTY S4 (FA CSS O/C). Moved to RID. The request for immediate consumption must be submitted at least 24 hours before the DS BN intends to use it. The immediate consumption request will never exceed 50% of the CMTc CSR, since its intent is to replace class V expended in a heated battle and "get the battalion through" until they can next draw their CSR. If the immediate consumption ammunition isn't entirely expended, DIVARTY will decrease the next CSR by an amount equal to the remaining ammunition.

(2) An adjusted RSR is a forecasting tool BN XO's and S3's can use to weight a battle on a certain day. DS BN's can submit adjustments to their RSR NLT 48 hours prior to the requested pick-up time for the CSR. The adjustment is sent through the BN S3 to the BDE S3, with a copy furnished to the both the DIVARTY S3 and DIVARTY S4. Adjustment documentation to the RSR is a DA Form 581s along with an analysis memorandum that expresses the adjusted RSR in terms of rounds by type by tubes per day. BDEs will then coordinate the adjusted RSR with DAO. DAO will forward RSR adjustment documentation through the EXCON to the FS TAF. The DIVARTY Commander will review changes to the RSR and the DIVARTY staff will coordinate changes to the CSR based on the RSR documentation. Once coordinated, the Battalion Ammo Officer takes the DA Form 581 and the required amount of haul capability to the ATP at the same time as the CSR is being drawn for the requested date.

(g) 105 mm Howitzers, 155 mm Howitzers, MLRS: Vehicle ammunition carrying capacity for 105 mm, 155 mm, and 227 mm ammunition is IAW the appropriate TM -10 for that vehicle.

(h) Vehicles carrying artillery ammunition will be loaded according to doctrinal/unit load plans and will not have any other items present inside the vehicle or in the bed of the vehicle where ammunition is intended to be carried. The only exception is for CMTc-issued MILES carrying cases. Paladin Battalions will be issued 80mm ammunition boxes to be used for carrying simulated ammunition cards. One ammunition box will replicate one flat rack of ammunition. Only one ammunition box may be carried by one PLS unless specified by the CSS OC ie. Utilization of notional PLS vehicles.

(i) Any artillery ammunition left in the previous position without guards will be considered destroyed, once the firing unit has left the position. The same applies for ammunition stockpiled at proposed locations.

(j) Due to limited maneuver space, ammunition HEMTTs may be replicated at a ratio of 1 actual HEMTT to represent a total of 3 HEMTTs. The only exceptions are HEMTTs carrying MILES cases and mortar Class V HEMTTs. Actual HEMTTs on a 1:1 basis must accomplish resupply of the firing platoons and mortar platoons in the training area.

(k) Units may resupply themselves with Class V via airdrop. Units must request the ammunition before it is delivered, in order to have it added to their ammo on hand.

(l) All ammunition to be resupplied must be requisitioned; for the battery in the training area, the powder canisters and projectiles must be physically delivered and off-loaded. The firing platoon O/C will inspect the DA Form 5515-R from the BAO to the firing platoon after it arrives at the platoon location and note the ammunition delivered. Simulation ammunition cards will also be drawn at the ATP and hauled by the PLS, not to exceed normal ammunition hauling capacity. Each card replicates one actual round. However, the cards are counted and uploaded to replicate the number of rounds required during upload. When firing, the cards are used to replicate actual round usage during missions. The records of fire must be consistent with the number of rounds (cards) fired. Once the rounds are expended, the card must be placed in a residue pit. The cards are then processed back into the system through the BSA, for future use.

(m) Artillery ammunition will not exceed 3 x PLS haul capacities worth of rounds above a DS battalion's UBL. Ammunition that exceeds this will not be delivered to or stored at the BSA, and will be removed from the BSA by division and transported to the main effort brigade. Ammunition for immediate consumption can still be pushed by Corps based on requirements in the Brigade plan.

(n) M109A6s and M998 (Carrier Ammunition Track) will be reconstituted with 27 M483A1 (DPICM), 10 M107 (HE), 2 M712 (Copperhead), 29 M4A2 (WB) and 10 M3A1 (GB). The M998 will have 80 M483A1, 10 M825 (Smoke), 3 M712 (Copperhead), 63 M4A2 (WB), 20 M3A1 (GB) and 10 M119A2 (RB). PLS' are not a WSRO item and will be resupplied from unit CSR. See Chapter 8, Paragraph 8-4.a.4.

4-14 FS in MOUT: See Chapter 2, paragraph 2-5k.