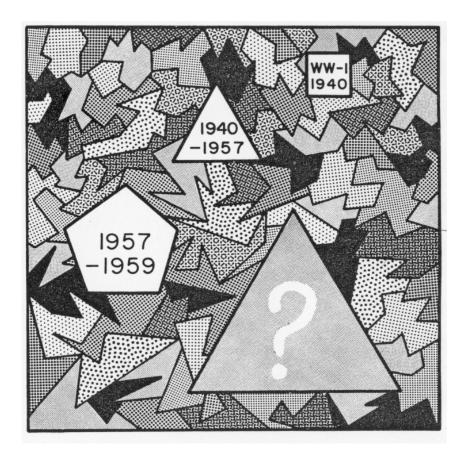
ARTILLERY TRENDS



U S Army Artillery and Missile School



August 1961

UNITED STATES ARMY ARTILLERY AND MISSILE SCHOOL Fort Sill, Oklahoma



This supplemental issue of ARTILLERY TRENDS is devoted exclusively to the reorganization of the infantry and armored division artillery and the organization of the new mechanized division artillery. It is intended as a general guide until the approved tables of organization are published.

The organizational structure of the artillery for all type divisions are being finalized for approval by the US Continental Army Command. Personnel and equipment numbers quoted in this issue were taken from draft copies of the tables of organization and equipment and are subject to change.

ARTILLERY

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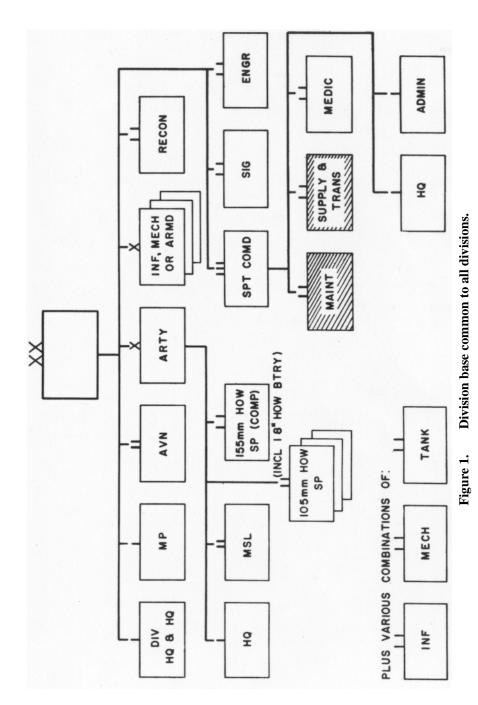
Introduction

The reorganization of the army divisions develops a new degree of standardization in organization, which will allow tailoring of divisions to suit the mission and the terrain in which they will fight. There will be four types of division—infantry, armored, mechanized, and airborne. Divisions are constructed by adding varying mixes of combat maneuver battalions to a common division base. The maneuver battalions are infantry, tank, mechanized infantry, and parachute infantry. Under the new proposal, units will have the flexibility to accept new weapons and equipment as they become available without major reorganization or change in concept of employment.

The division base includes the command and control elements, reconnaissance elements, combat support elements, and administrative support elements. Command and control is enhanced with the introduction of three brigade headquarters within the division base which are capable of controlling the tactical operations of several attached maneuver battalions and appropriate combat support and administrative support elements. The brigade headquarters will not normally, however, enter administrative channels between the division and the attached battalions.

The combat maneuver battalions, which are added to the division base to construct individual strength divisions, are as nearly the same in organization as possible, consistent with their individual roles. Some of the characteristics common to all battalions are that they are all organized under Tables of Organization and Equipment; they are administratively and tactically self-sufficient; they are all of essentially one combat arm, i.e., armor in the tank battalion and infantry in the mechanized and infantry battalions. This facilitates training. Tailoring of the division is facilitated by having battalions capable of giving up a company of one type temporarily, and accepting for a time a company of another type; this tactical tailoring has proven its effectiveness through the years in our armored divisions.

The various types of divisions are constructed by combining different mixes of the combat maneuver battalion building blocks with the common division base. An armored division will be a division with approximately equal numbers of tank and mechanized infantry battalions, for instance, six tank battalions and five mechanized battalions. A mechanized division will have a greater proportion of mechanized infantry battalions—seven mechanized battalions and three tank battalions. An infanry division, on the other hand, will be a division with predominantly infantry battalions, but with some tank battalions—perhaps eight infantry battalions and two tank battalions. Airborne divisions will consist usually of eight parachute infantry battalions and one Assault Gun battalion. Any type of division may have *all three* types of battalions if the mission or the operational environment warrant this organization. There could be



as many variations of battalions as there are divisions, with total number of maneuver battalions ranging from six to fifteen, each division being tailored to the mission of the division and to its expected operational environment. The strength of a typical division would be approximately 15,000. Once it is organized for a particular strategic mission and operational environment, the composition of the division will tend to remain relatively stable.

The organization returns to the triangular concept, but provides flexibility in tailoring of combat forces to meet world-wide requirements as well as internal flexibility not included in former triangular divisions. The new triangular concept does not mean that the division will readopt the "two up and one back" deployment. The division commander has the option of using echelon variation, while the brigade may also use any echelon variation of the attached maneuver elements appropriate to the mission.

THE DIVISION ARTILLERY

Structurally, the division artillery, as reorganized, is identical in the infantry, armored, and mechanized divisions. There are three battalions of 105-mm howitzers (direct support) with three batteries each; one 155-mm/8-inch howitzer battalion (general support) with three batteries of 155-mm and one battery of 8-inch howitzers; and a missile battalion of two batteries of the 762-mm Honest John Rocket with each battery consisting of two launchers. Also included in the division artillery is a headquarters and headquarters battery, division artillery.

The howitzer organizations are self-propelled in the armored and mechanized divisions, towed in the infantry division, and the missile battalion is identical for these three divisions.

The airborne division artillery consists of three 105-mm towed direct support battalions, and one rocket/missile unit of two Little John rocket and one 155-mm howitzer batteries.

NEW ADDITIONS TO DIVISION ARTILLERY

Artillery aviation has again become organic to the division artillery after a long sojourn with the division aviation company. The assignment of the aviation section with its twelve aircraft to the division artillery headquarters provides more immediate responsiveness to the artillery commander's needs for reconnaissance and observation.

The Visual Airborne Target Location System (VATLS) represents a forward step in the target acquisition area. The system consists of two L-20 aircraft and a Visual Airborne Target Locator AN/USV-1.

Although the aircraft designated to carry the airborne portion of the system are assigned to and maintained by the division aviation battalion, they will always be available for employment with the system.

The division artillery supports three brigades of two to five combat maneuver battalions.

Organization charts and major items of equipment for units of division artillery are shown on the following pages.

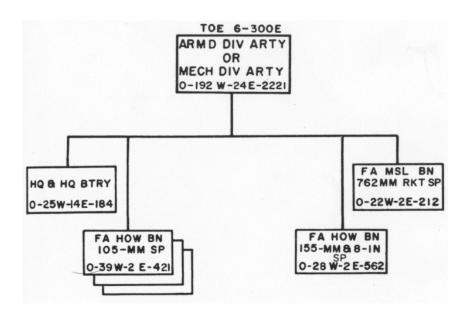


Figure 2. Division artillery: armored/mechanized division.

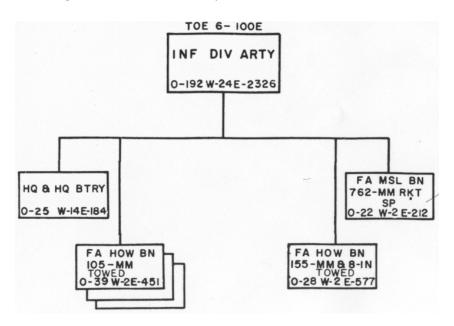


Figure 3. Division artillery: infantry division.

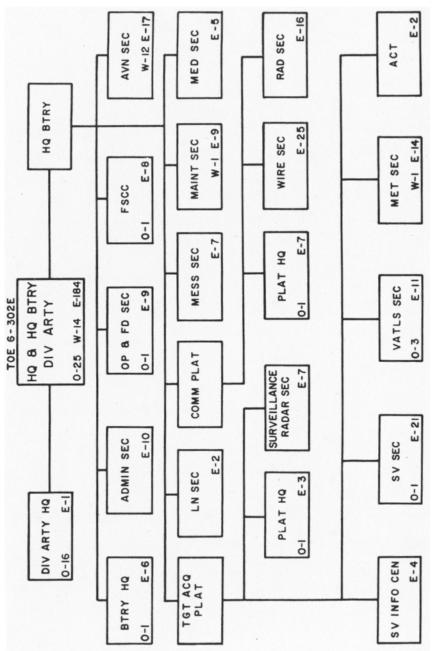


Figure 4. Headquarters and headquarters battery, all divisions.

Shoot	Move	Communicate	Locate
.45 cal. pistols—37 7.62-mm rifles—185 7.62-mm MG's—12 3.5-in rocket launcher—9 40-mm grenade launcher—4	Trucks: 1/4-ton—17 3/4-ton—34 2 1/2-ton—11 5-ton—1 Ambulance: 3/4-ton—1 Shop Van: —3 Tank, Gasoline: —1 Trailers: 1/4-ton—4 3/4-ton—24 1 1/2-ton—10 water —2	Radios: AN/GRC-19—3 AN/GRR-5—6 AN/PRC-9—6 AN/VRC-24—2 AN/VRC-9—18 AN/VRC-9—18 AN/VRC-10—4 (Armor) AN/VRC-10—4 (Inf/Mech) AN/VRQ-2—2 Switchboards: TA-207/P—2 SB-22—3 SB-22—3 SB-22—3 TA-207/P—2 Telephones: TA-264—3 TA-264—3 TA-264—3	Surveying instrument, azimuth-gyro—2 Survey set 3d order—2 Survey set 4th order—1 Tellurometer master—2 Tellurometer remote—4 Theodolite (0.002 Mil)—6 Radar set AN/TPS-25—1 Binoculars: 6 × 30—12 7 × 50—9 Circle, aiming—1
		AN/GRA-4—1 RC-292—5	

Headquarters and headquarters battery equipment, all divisions. Figure 5.

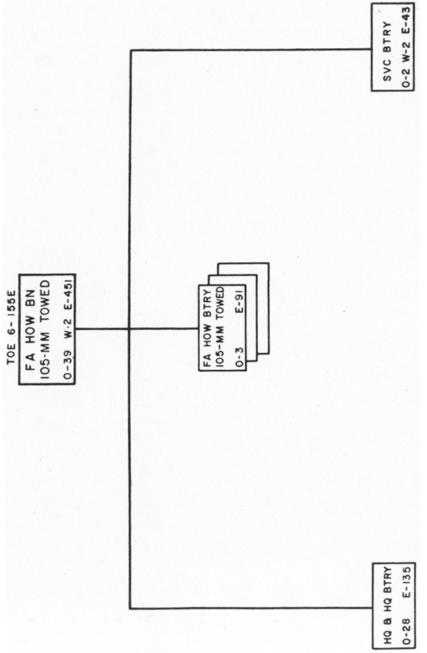
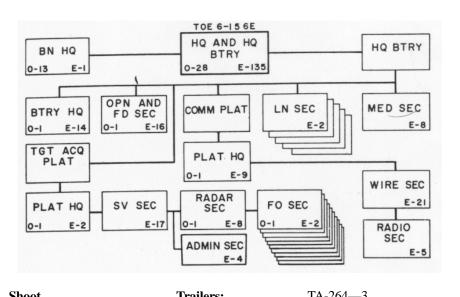
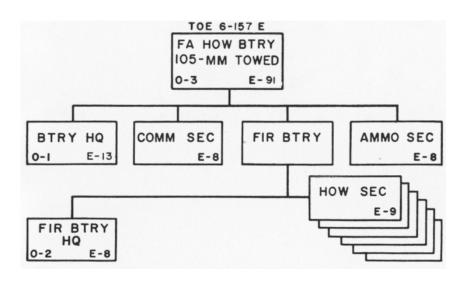


Figure 6. FA howitzer battalion, 105-mm towed, infantry division.



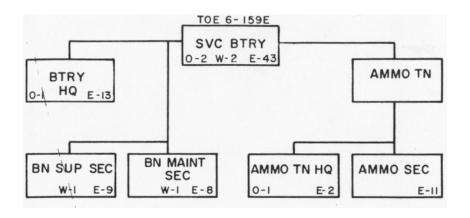
Shoot	Trailers:	TA-264—3
	1/4-ton—17	TA-312—71
45 cal. pistols—18	3/4-ton—11	
7.62-mm rifles—145	1 1/2-ton—2	Antennas:
7.62-mm MG's—10	water —1	RC-292—8
3.5-in rocket launcher—7		
40-mm grenade launcher—4	Communicate	Locate
Move	Radios:	Binoculars:
	AN/GRR-5 —2	6×30 —22
Trucks:	AN/PRC-9 —15	7×50 —10
1/4-ton—24	AN/VRC-9 —26	Survey set 3d order survey—2
3/4-ton—16	AN/VRC-17—1	Survey set 4th order survey—1
2 1/2-ton—4	AN/VRQ-2—6	Theodolite (0.2 Mil)—2
	AN/GRC-46—2	Circle, aiming—3
Shop Van:	AN/PRC-10—10	
—1	AN/VRC-10—1	
Ambulance:	Switchboards:	
—1	SB-993—4	
	SB-22—10	
	Telephones:	

Figure 7. Headquarters and headquarters battery, FA howitzer battalion, 105-mm towed, infantry division.



Shoot 105-mm Howitzer—6	Trailers: 3/4-ton—3 1 1/2-ton—1	Telephones: TA-312—19
.45 cal. pistols—6 7.62-mm rifles—88 7.62-mm MG's—7	water —1 ammo —4	Antenna: RC-292—1
3.5-in rocket launcher—6 40-mm grenade launcher—5	Communicate	Locate
Move	Radios: AN/GRR-5 —1	Binoculars: 6×30 —3
Trucks: 1/4-ton—1	AN/VRC-9 —3 AN/VRC-17—1	Circle, aiming—2
1/ 1 ton 1	1110, 1110, 17, 1	

Figure 8. FA howitzer battery, 105-mm towed, infantry division.



Shoot

.45 cal. pistols—8 7.62-mm rifles—37 7.62-mm MG's—7 3.5-in rocket launcher—6 40-mm grenade launcher—3

Move

T	rucks:
	1/4-ton—3
	3/4-ton—1
2	1/2-ton—15
W	recker—1
T	railers:
	1/4-ton—2
	3/4-ton—1
1	1/2-ton—7
	ammo —5
	water —1

Communicate

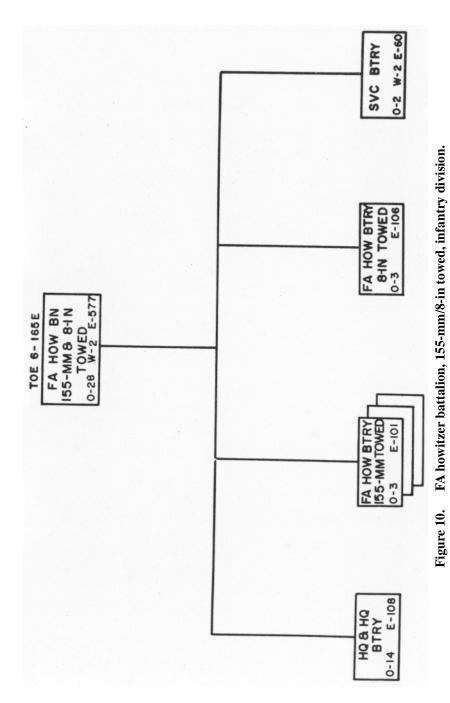
Radios: AN/GRR-5 —1 AN/VRC-9 —4

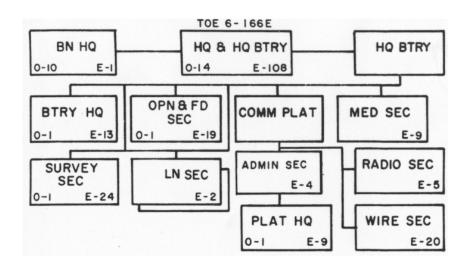
Switchboard: SB-22—1

Telephones: TA-312—11

Antenna: RC-292—1

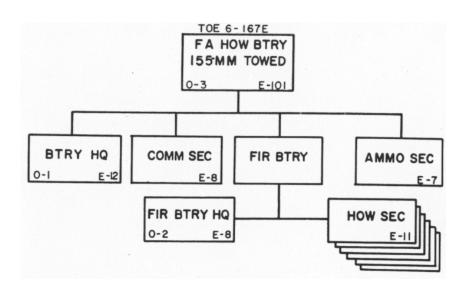
Figure 9. Service battery, FA howitzer battalion, 105-mm towed, infantry division.





Shoot	Trailers:	Antennas:
	1/4-ton—3	RC-292—7
.45 cal. pistols—15	3/4-ton—12	
7.62-mm rifles—107	1 1/2-ton—3	Locate
7.62-mm MG'S—11	water —1	
3.5-in rocket launcher—7		Surveying instrument,
40-mm grenade launcher—3	Communicate	azimuth gyro—1
_		Binoculars:
Move	Radios:	$6 \times 30 - 12$
	AN/GRR-5 —2	7×50 —2
Trucks:	AN/PRC-9 —8	Circle, aiming—3
1/4-ton—11	AN/VRC-9—15	Survey set 3d order Survey—3
3/4-ton—20	AN/VRQ-2 —3	Theodolite (0.2 Mil)—3
2 1/2-ton—4	AN/GRC-46—2	
	Switchboards:	
Shop Van:	SB-22—4	
—1	Telephones:	
	TA-264—3	
Ambulance:	TA-312—43	
—1		

Figure 11. Headquarters and headquarters battery, FA howitzer battalion, 155-mm/8-in towed, infantry division.



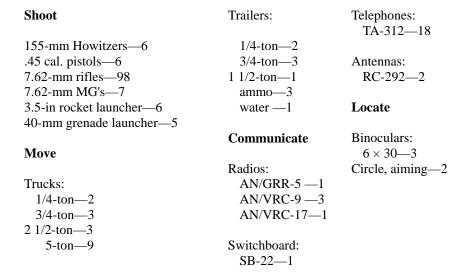
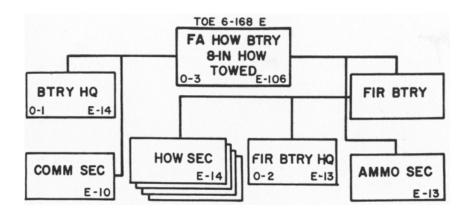
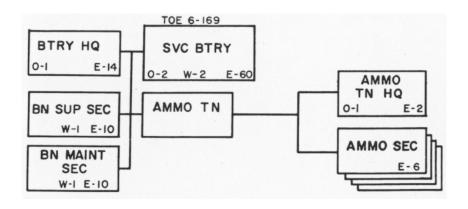


Figure 12. FA howitzer battery, 155-mm towed, infantry division.



Shoot 8-Inch howitzer—4	Trailers: 1/4-ton—3 3/4-ton—4	Telephones: TA-312—19
.45 cal. pistols—8 7.62-mm rifles—103 7.62-mm MG's—11	1 1/2-ton—2 ammo—6 water —1	Antennas: RC-292—3
3.5-in rocket launcher—6 40-mm grenade launcher—7	Communicate	Locate
Move Trucks: 1/4-ton—3 3/4-ton—4 2 1/2-ton—3 5-ton—6	Radios: AN/GRR-5 —2 AN/VRC-9 —4 AN/VRC-17—1 AN/GRC-46—1 Switchboards: SB-22—2	Binoculars: 6×30 —3 Circle, aiming—2
shop van—1 10-ton—4		

Figure 13. FA howitzer battery, 8-in towed, infantry division.



Shoot	3/4-ton—1 1 1/2-ton—7
.45 cal. pistols—9	ammo —10
7.62-mm rifles—55	water —1
7.62-mm MG's—8	
3.5-in rocket launcher—8	Communicate
40-mm grenade launcher—3	
	Radios:
Move	AN/GRR-5 —1
	AN/VRC-9 —4
Trucks:	
1/4-ton—3	Switchboards:
3/4-ton—1	SB-22—1
2 1/2-ton—11	
5-ton—10	Telephones:
wrecker—1	TA-312—10
	Antenna:
Trailers:	RC-292—1
1/4-ton—2	
	TOE 6-169E

Figure 14. Service battery, FA howitzer battalion, 155-mm/8-in towed, infantry division.

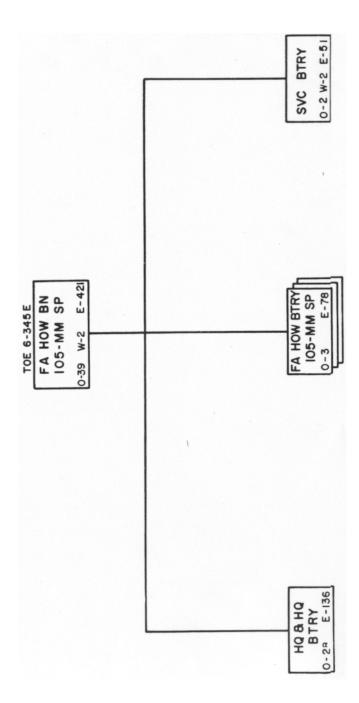
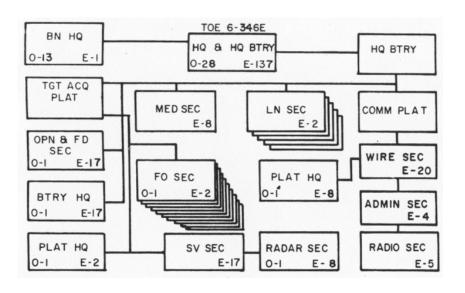
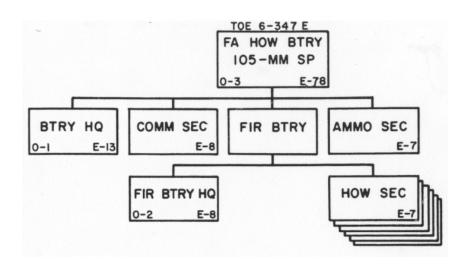


Figure 15. FA howitzer battalion, 105-mm SP, armd/mech divisions.



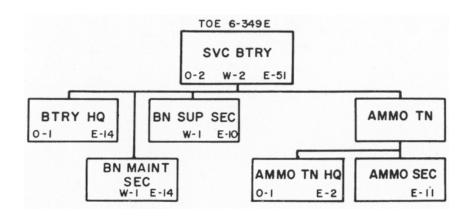
Shoot	Trailers:	Telephones:
	1/4-ton—17	TA-264—3
.45 cal. pistols—18	3/4-ton—11	TA-312—71
7.62-mm rifles—146	1 1/2-ton—2	
7.62-mm MG's—10	water —1	Antennas:
3.5-in rocket launcher—7	APC —8	RC-292—8
40-mm grenade launcher— 4	111 0 0	NC 2/2 0
	Communicate	Locate
Move		
	Radios:	Surveying instrument,
Trucks:	AN/GRR-5 —2	azimuth gyro—1
1/4-ton—24	AN/VRC-9 —26	Survey set 3d order survey—2
3/4-ton—16		Survey set 4th order survey—1
2 1/2-ton—4		Theodolite (0.2 Mil)—2
	AN/VRC-17—1	Radar AN/MPQ-4A—1
Ambulance:	AN/GRC-46—2	Binoculars:
3/4-ton—1	AN/PRC-9 —10	6×30 —22
	AN/PRC-10-10	7×50 —10
Shop Van:		Circle, aiming—3
—1	Switchboards:	<i>5</i> -
	SB-993—4	
	SB-22—10	

Figure 16. Headquarters and headquarters battery, FA howitzer battalion, 105-mm SP, armd/mech divisions.



Shoot	Trailers: 3/4-ton—2	Antennas: RC-292—2
105-mm howitzer SP—6	1 1/2-ton—1	Locate
.45 cal. pistols—6	ammo —3	
7.62-mm rifles—75	water —1	Binocular:
7.62-mm MG's—7		$6 \times 30 - 3$
3.5-in rocket launcher—6	Communicate	Circle, aiming—2
40-mm grenade launcher—5		
	Radios:	
Move	AN/GRR-5 —1	
	AN/VRC-9 —3	
Trucks:	AN/VRC-17—1	
1/4-ton—1		
3/4-ton—3	Switchboard:	
2 1/2-ton—3	SB-22—1	
5-ton—3		
APC—1	Telephones:	
	TA-312—19	

Figure 17. FA howitzer battery, 105-mm SP, armd/mech divisions.



Shoot	3/4-ton—1
	1 1/2-ton—5
.45 cal. pistols—8	ammo —5
7.62-mm rifles—51	water —1
7.62-mm MG's—7	
3.5-in rocket launcher—6	Communicate
40-mm grenade launcher—3	
	Radios:
Move	AN/GRR-5 —1
	AN/VRC-9 —4
Trucks:	
1/4 ton—3	Switchboard:
3/4-ton—1	SB-22—1
2 1/2-ton—7	
5-ton—8	Telephones:
	TA-312—9
Tank recovery:	
vehicle—2	Antenna:
wrecker—1	RC-292—1
Trailers: 1/4-ton—2	

Figure 18. Service battery, FA howitzer battalion, 105-mm SP, armd/mech divisions.

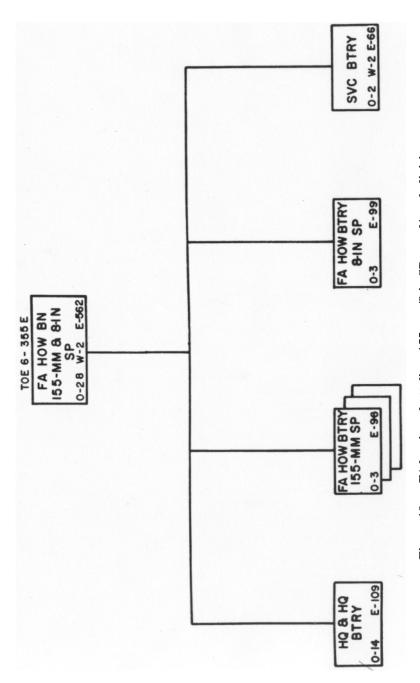
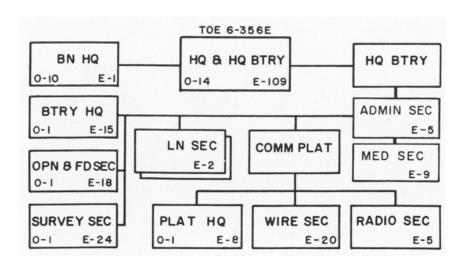
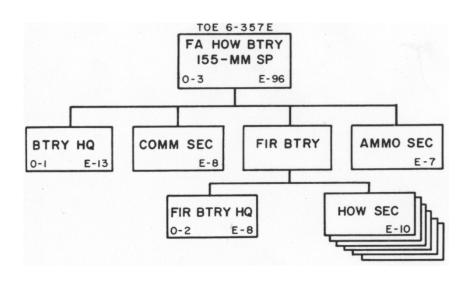


Figure 19. FA howitzer battalion, 155-mm/8-in SP, armd/mech divisions.



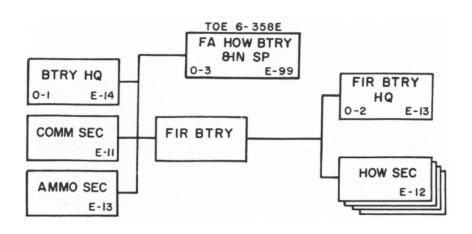
Shoot	Trailers:	Switchboards:
	1/4-ton—5	SB-22—4
.45 cal. pistols—15	3/4-ton—14	
7.62-mm rifles—108	1 1/2-ton—1	Telephones:
7.62-mm MG's—11	water —1	TA-264—3
3.5-in rocket launcher—7		TA-312—43
40-mm grenade launcher—3	Communicate	
		Antennas:
Move	Radios:	RC-292—7
	AN/GRR-5 —2	
Trucks:	AN/PRC-9 —8	Locate
1/4-ton—12	AN/VRC-9 —15	
3/4-ton—20	AN/VRQ-2 —3	Survey instrument,
2 1/2-ton—3	AN/GRC-46—2	azimuth gyro—1
		Survey set 3d order survey—3
Ambulance:		Theodolite (0.2 Mil)—3
3/4-ton—1		Binoculars:
APC—3		$6 \times 30 - 12$
		7×50 —2
		Circle, aiming—3

Figure 20. Headquarters and headquarters battery, FA howitzer battalion, 155-mm/8-in SP, armd/mech divisions.



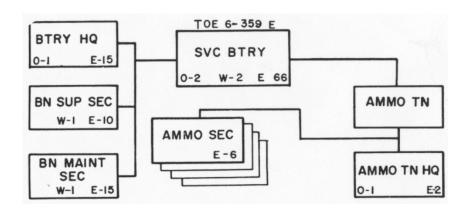
Shoot	5-ton—3 APC—1	Switchboard: SB-22—1
155-mm howitzer SP—6		
.45 cal. pistols—6	Trailers:	Telephones:
7.62-mm rifles—93	3/4-ton—2	TA-312—18
7.62-mm MG's—7	1 1/2-ton—1	
3.5-in rocket launcher—6	ammo —3	Antennas:
40-mm grenade launcher—5	water —1	RC-292—2
Move	Communicate	Locate
Trucks:	Radios:	Binoculars:
1/4-ton—1	AN/GRR-5 —1	$6 \times 30 - 3$
3/4-ton—3	AN/VRC-9 —3	
2 1/2-ton—3	AN/VRC-17—1	

Figure 21. FA howitzer battery, 155-mm SP, armd/mech divisions.



Shoot	Shop Van: —1	Switchboards: SB-22—2
8-in howitzer SP—4	Trailers:	Talambanası
.45 cal. pistols—8 7.62-mm rifles—94	1/4-ton—1 3/4-ton—3	Telephones: TA-312—19
7.62-mm MG's—11	1 1/2-ton—2	111 312 17
3.5-in rocket launcher—6	ammo —6	Antennas:
40-mm grenade launcher—7	water —1	RC-292—3
Move	Communicate	Locate
Move Trucks:	Communicate Radios:	Locate Binoculars:
Trucks:	Radios:	Binoculars:
Trucks: 1/4-ton—2	Radios: AN/GRR-5 —2	Binoculars:
Trucks: 1/4-ton—2 3/4-ton—3	Radios: AN/GRR-5 —2 AN/VRC-9 —4	Binoculars:

Figure 22. FA howitzer battery, 8-in SP, armd/mech divisions.

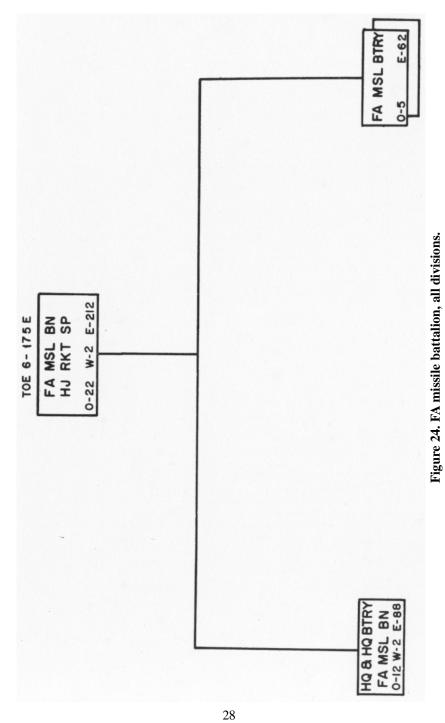


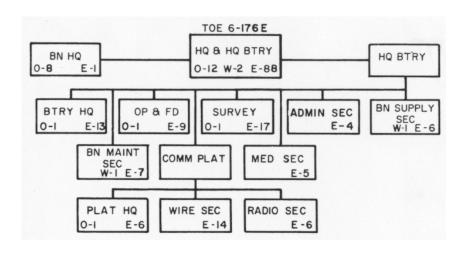
3/4 ton 1

Snoot	3/4-ton—1
	1 1/2-ton—6
.45 cal. pistols—9	ammo —10
7.62-mm rifles—65	water —1
7.62-mm MG's—8	
3.5-in rocket launcher—8	Communicate
40-mm grenade launcher—3	
-	Radios:
Move	AN/GRR-5 —1
	AN/VRC-9 —4
Trucks:	
1/4-ton—3	Switchboard:
3/4-ton—1	SB-22—1
2 1/2-ton—7	
5-ton—14	Telephone:
	TA-312—9
Tank recovery:	
vehicle—2	Antenna:
wrecker—1	RC-292—1
Trailers:	
1/4-ton—2	

Shoot

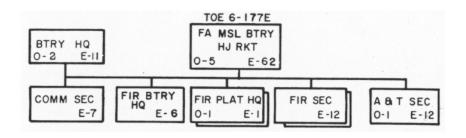
Figure 23. Service battery, FA howitzer battalion, 155-mm/8-in SP, armd/mech divisions.





Shoot	Trailers:	Telephones:
	1/4-ton—8	TA-264—2
.45 cal. pistols—14	3/4-ton—13	TA-312—29
7.62-mm rifles—88	1 1/2-ton—5	
7.62-mm MG's—7	water—1	Antennas:
3.5-in rocket launcher—4		RC-292—3
40-mm grenade launcher—5	Communicate	
		Locate
Move	Radios:	
	AN/GRR-5 —2	Surveying instrument,
Trucks:	AN/PRC-9 —4	azimuth gyro—2
1/4-ton—12	AN/VRC-9 —15	Survey set, 3d order survey—2
3/4-ton—16	AN/VRQ-2 —1	Theodolite (0.2 Mil)—2
2 1/2-ton—7	AN/GRC-46—2	Binoculars:
wrecker—1		$6 \times 30 - 7$
5-ton—1	Switchboards:	7×50 —2
	SB-22—4	Circle, aiming—2
Ambulance:		
—1		

Figure 25. Headquarters and headquarters battery, missile battalion, all divisions.



Shoot	Trailers:	Telephones:
	1/4-ton—2	TA-312—25
762-mm rocket launcher—2	3/4-ton—3	
.45 cal. pistols—7	1 1/2-ton—1	Antennas:
7.62-mm rifles—60	water —1	RC-292—2
7.62-mm MG's—6		
3.5-in rocket launcher—8	Communicate	Locate
40-mm grenade launcher—4		
	Radios:	Binoculars:
Move	AN/GRR-5 —2	$6 \times 30 - 3$
	AN/VRC-9 —5	$7 \times 50 - 1$
Trucks:	AN/VRC-17—1	Circle, aiming—4
1/4-ton—5	AN/GRC-46—1	
3/4-ton—6		
2 1/2-ton—5	Switchboard:	
wrecker—2	SB-22—1	

Figure 26. FA missile battery, missile battalion, all divisions.

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