

APPENDIX B

HOSPITAL PLANNING FACTORS

B-1. General

This appendix provides information for the hospital commander, his staff, and assigned personnel. It contains planning factors for personnel, transportation and movement, supply, personnel service support, CHS planning for hospitalization, engineer, and force requirements as of 1 January 1993. The data is an estimate and is not intended to be all inclusive. Fluctuations and changes in the data presented are contingent upon modifications to the TOE, its mission, and the scenario. The data is based upon TOE 08-705L00, Medical Force 2000 Hospital Planning Factors prepared by the Directorate of Combat and Doctrine Development, Army Medical Department Center and School; FM 101-10-1/2 (Staff Officers' Field Manual—Organizational, Technical, and Logistical Data Planning Factors, Volume 2); and mobilization planning factors obtained from the US Air Force (USAF).

B-2. Personnel and Equipment Deployable Planning Factors

a. Personnel.

Officer	175
Enlisted	<u>429</u>
TOTAL	604

b. Weight and Cube—Personnel and Equipment.

Personnel-weight (combat equipped, includes 15 lb hand-carry bag)	190 lb/man (303)	57,570 lbs
Personnel-weight (with M-16)	200 lb/man (275)	55,000 lbs
Personnel-weight (with 9 MM)	195 lb/man (26)	5,070 lbs
Personnel-cube	11 cu ft/man	6,644 cu ft
Mobilization bag-weight	25 lb/man	15,100 lbs
Mobilization bag-cube	1 cu ft/man	604 cu ft
Check-in baggage-weight	70 lb/man	42,280 lbs
Check-in baggage-cube	3 cu ft/man	1,812 cu ft
TOTAL		
Personnel-weight and cube with all gear	175,020 lbs	9,060 cu ft
Weight and cube TOE equipment	1,373,943 lbs	339,175 cu ft
Weight and cube, common table of allowances (CTA) deployable equipment	245,763 lbs	25,296 cu ft
Weight and cube of personnel, TOE equipment and CTA deployable equipment	1,794,726 lbs	373,531 cu ft

c. *Transportation Reference Data.*

(1) *Semitrailer requirements.*

M871 semitrailer, platform, break-bulk,
 container transporter, 22½ ton,
 length = 29.8 ft; width = 8 ft,
 height = 4.6 ft 30 each

(2) *Railcar transportation requirements.*

Railcar = 80 ft 38 each

(3) *Tactical aircraft airlift requirements.*

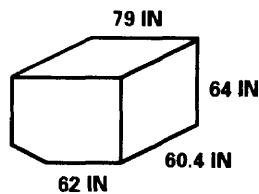
Cargo compartment data:	C-141	vs	C-5A
Length (inches)	840		1,454
Width (inches)	123		228
Height (inches)	109		162
Allowable cargo load (lbs)	50,000		150,000
Troop Seats	102		20/73
Aircraft Requirement	15		11
Strategic Deployment			

(4) *Commercial cargo capacities and configurations.*

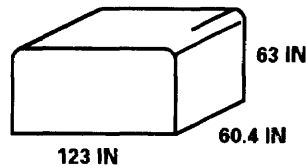
Cargo Capacity (cu ft)	Bulk Bin (cu ft)	Number of Containers	Maximum Capacity Cargo Bins (lbs)	Cargo Door Sizes (inches)
TRISTAR L-1011-250				
2,385	700	16 (LD-3)	53,650	FWD 70W 68H AFT 70W 68H Bulk compartment 44W 48H
TRISTAR L-1011-500				
2,831	435	19 (LD-3)	61,500	FWD 104W 68H AFT 70W 68H Bulk compartment 44W 48H

Cargo Capacity (cu ft)	Bulk Bin (cu ft)	Number of Containers	Maximum Capacity Cargo Bins (lbs)	Cargo Door Sizes (inches)
BOEING 767-200				
2,508	430	22 (LD-2)	46,050	FWD 70W 69H AFT 70W 69H Bulk compartment 38W 48H
BOEING 767-300				
4,770	430	30 (LD-2)	69,850	FWD 70W 69H AFT 70W 69H Bulk compartment 38W 48H
BOEING 757-200				
1,728			25,700	FWD 55W 42H AFT 55W 44H
BOEING 727-200				
1,454			19,000	FWD 55W 42H AFT 55W 44H Rear compartment 48W 30H
MD-88				
1,253			21,855	Three cargo bin doors 44H 53W 29H
BOEING 737-200				
850			12,985	FWD 48W 34H AFT 48W 35H
BOEING 737-300				
1,068			12,634	FWD 48W 34H AFT 48W 35H
DOUGLAS DC-9-32				
750			11,150	FWD 53W 31H AFT 36W 30H

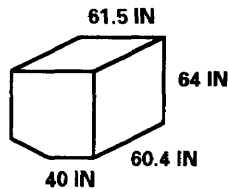
COMMERCIAL CONTAINER DESCRIPTION



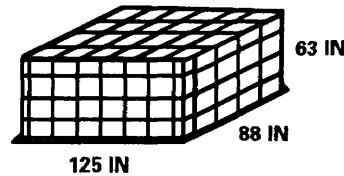
LD-3
CARRIER OWNED
155 CUBIC FEET
3,500 LBS MAXIMUM GROSS WEIGHT
CARRIED ON L-1011 AIRCRAFT
(TYPE 8 - WHEN USING INTERNATIONALLY)



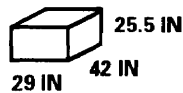
LD-11
CARRIER OWNED
260 CUBIC FEET
7,000 LBS MAXIMUM GROSS WEIGHT
CARRIED ON L-1011 AIRCRAFT



LD-2
CARRIER OWNED
124 CUBIC FEET
2,700 LBS MAXIMUM GROSS WEIGHT
CARRIED ON 767 AIRCRAFT



L-7
PALLET
9,500 LBS MAXIMUM GROSS WEIGHT
(TYPE 5 FOR INTERNATIONAL USE ONLY)
CARRIED ON L-1011 500 AIRCRAFT



E
SHIPPER OWNED
18 CUBIC FEET
500 LBS MAXIMUM GROSS WEIGHT



EH
SHIPPER OWNED
12 CUBIC FEET
250 LBS MAXIMUM GROSS WEIGHT
CARRIED ON ALL DELTA AIRCRAFT

(5) Sealift planning factors.

Ship Type	Square Foot Capacity
Fast-sealift ship	150,000 sq ft
Roll-on/roll-off	100,000 sq ft
Break-bulk	40,000 sq ft
Container ship	600 containers

B-3. Hospital Operational Space Requirements

It is estimated that the hospital will require an area approximately 350 meters X 350 meters for its full complement of personnel and equipment.

B-4. Logistics Planning Factors (Class I, II, III, IV, VI, VIII)

a. *Classes of Supply Planning Factor Rates.*

(1) *Planning factor rates.*

Class I	A Ration	2.410 lbs/meal
	B Ration	1.278 lbs/meal
	T Ration	2.575 lbs/meal
	MRE	1.470 lbs/meal
	Medical B Ration	1.393 lbs/meal
	RSSP	0.410 PMD
	LRPP	0.900 PMD
	FHC	0.030 PMD
Class II		3.670 PMD
Class III	(Packaged)	0.590 PMD
Class IV		8.500 PMD
Class VI		2.060 PMD (Temperate)
		3.400 PMD (Tropic/Arid)
		1.790 PMD (Arctic)
Class VIII		1.550 PMD

Legend: MRE Meal(s), Ready to Eat
 RSSP Ration Supplement Sundries Pack
 LRPP Long-Range Patrol Pack
 FHC Female Health and Comfort Items
 PMD Pounds Per Man Per Day

(2) *Class VI requirements (personal demand items).*

Departments	Arid/Tropic	Temperate	Arctic
Tobacco Products	0.055	0.055	0.055
Snacks	0.455	0.455	0.455
Beverage	2.800	1.467	1.186
Personal Hygiene	0.047	0.047	0.047
General	0.048	0.048	0.048
TOTAL (lbs/man/day by climate)	3.395	2.058	1.791

Female health and comfort packets are made available in a TO for issue, pending establishment of adequate exchange facilities. A packet weight is not available, but planners can use an estimated factor of 0.03 lbs/person/day based on the FHC items listed in AR 700-23.

(3) *Female health and comfort items.*

Item Number	Item Description	Unit of Issue	Allowance
1	Cream, Cleansing, 2 oz	Tube	25
2	Lotion, Hand/Body, 2 oz	Tube	40
3	Napkin, Sanitary, 12S	Box	25
4	Paper, Toilet, 24 Sheets	Package	500
5	Tampon, Sanitary, 12S	Box	25
6	Tissue, Cleansing, 12S	Package	250

(1 Pack/25 Females/30 Days)—Federal Stock Number 8970-01-185-2590

b. *Class I Subsistence.* Description of rations and packets.

(1) A Rations consist of both perishable and semiperishable food. It is intended for use primarily under stable conditions and during static phases of military operations when normal cooking and refrigeration are available.

A Ration Planning Factors

Factor	Percent of Total Weight	Per Man Per Day	Per 100 Men Per Day	Per 1,000 Men Per Day
Average weight including packing	100	7.23	723	7,230
Semiperishable	35	2.56	256	2,560
Perishable	65	4.67	467	4,670
Chill	48	3.50	350	3,500
Freeze	16	1.18	118	1,180
Ventilated	9	0.67	67	670

(2) B Rations consist of approximately 100 semiperishable items, mainly canned and dehydrated, and are supplied in bulk. B Rations are used when there are kitchen facilities but no refrigeration.

Standard B Ration Planning Factors

	Factor	Per Man Per Day	Per 100 Men	Per 1,000 Men
Net Weight (Pounds)	Regular Menu Items	3.198	319.80	3,198.0
	Alternate Menu Items	3.683	368.30	3,683.0
Gross Weight (Pounds)	Regular Menu Items	3.834	383.40	3,834.0
	Alternate Menu Items	4.368	436.80	4,368.0
Gross Cube (Cubic Feet)	Regular Menu Items	0.1226	12.62	122.6
	Alternate Menu Items	0.1200	12.00	120.0

(3) The MRE is designed for use as individual meal packets, or in multiple of three for a complete ration. This packet is not to be used for extended periods. It comes in a pouch that can be torn open. Heating of meat components is desirable. Twelve different menus are available.

(4) The MRE is not authorized as the sole ration source for a period in excess of 10 days per guidance from the current Surgeon General. They are not authorized for patient use at any level within the theater medical system unless it is the only ration available because the effect on immobilized, traumatized patients is unknown.

(5) T Ration is a ready-to-heat and serve tray pack. It is used under conditions when kitchen facilities and normal refrigeration do not exist. The container package is designed for immersion heating in boiling water. Included are disposable eating utensils. There are a total of 28 T Rations menus; 10 breakfasts with 4 alternates, and 10 dinners with 4 alternates. T Rations are not authorized for feeding hospitalized patients except in emergencies when other rations are not available.

(6) Ration supplement sundries pack is composed of items necessary to the health and comfort of troops such as essential toilet articles, tobacco, and confections that are usually obtained at an exchange. This packet is made available in a TO for issue, pending establishment of adequate service facilities. (See AR 700-23.) National Stock Number (NSN): 8970-00-268-9934.

c. Planning Guidance for Operational Rations.

Time	Rations Served Daily	Guidance
D—D-10	3 MRE	Order pouch bread, and flameless ration heater
D-11—D-30	2 MRE, 1 T Ration	Augment with milk, fresh fruit, vegetables, and pouch bread
D-31—D-90	1 MRE, 2 T Rations	Augment with milk, fresh fruit, vegetables, and pouch bread

d. *Characteristics of Rations and Subsistence Items.*

Item	Contents	Net Weight (Pounds)	Volume (Cubic Feet)	Cases Per Pallet
Standard B Ration Regular Menu	300 Meals (100 men per day)	319.8	12.26	
MRE NSN 8970-00-149-1094	12 meals	17	0.83	48
Unitized Tray Pack (T-Ration)	36 trays	80--90	2.67	
LRP Food Packets NSN 8970-00-926-9222	40 packets	36	1.84	24
Ration Supplement Sundries Pack NSN 8970-00-268-9934	1 packet (100 men per day)	41	1.67	24
Ration Supplement Beverage Pack NSN 8970-01-108-2858	2 packs serve 200 men	22	0.99	
Ration Supplement Aid Station NSN 8970-00-128-6404	1 packet (100 8-oz drinks)	16	1.01	39
General-Purpose Food Survival Packet NSN 8970-00-082-5665	24 packets	20	0.43	90

e. *Army Medical Field Feeding Policy.* The medical Army feeding policy for hospitalized patients is three hot meals daily. The meals will consist of Medical B Rations. A Ration meals or components will be used when the tactical and logistical situation permits. Meals, ready to eat and T Rations are **NOT AUTHORIZED** for feeding hospitalized patients **EXCEPT IN EMERGENCIES** when other rations are not available.

f. *Army Medical Field Feeding Inpatient Census and Accounting.*

(1) Inpatient census is obtained from the Recapitulation Table of the Admissions and Disposition Report, which is prepared daily by the hospital PAD. Inpatient figures reflect the number of hospital beds occupied as of 2400 hours of the previous day.

(2) Inpatient (accounting) strength will be recorded in the Remarks Section of the DA Form 5913-R (Strength and Feeder Report) for information purposes. Patient strength will not be included in the present-for-duty section of DA Form 5913-R.

g. *Standard Medical B Ration Purpose/Policy.*

(1) Standard Medical B Ration is planned for subsisting patients in Armed Forces MTFs when semiperishable food is required.

(2) Patients are exempt from the theater ration policy and will receive three hot prepared meals per day.

(3) Staff assigned to medical units will be fed according to the service theater ration policy. To simplify procurement, menu preparation, and service when hot meals are served to medical personnel, they will be served the regular diet from the Medical B Ration.

(4) In unusual circumstances (for example, facility relocation/movement), operational rations may be required for staff (not to exceed ten days).

h. *Standard Medical B Ration Meals.*

(1) To support 24-hour patient care, the hospital must prepare four meals per day: breakfast, lunch, dinner, and a night meal. The night meal may utilize a breakfast or lunch/dinner menu according to local procedures.

(2) Patients requiring late meals will be served as complete a meal as possible with items from the preceding meal.

(3) Late meals will be served in accordance with dietary constraints, local procedures, and PVNTMED sanitation guidelines.

i. *B Ration Weight and Cubage.*

Net Weight of Ration	3.0857 lbs
Gross Weight of Ration	3.6390 lbs
Gross Cube of Ration	0.1173 cu ft

VIII). j. *Estimated Combat Support Hospital Logistics Planning Factors (Class I, II, IV, VI, and VIII).*

Class		Lbs/Man/Day	Lbs/Unit/Day	STONS/Unit Day
I	Subsistence	4.47	2,699.88	1.35
II	Supplies	3.67	2,216.68	1.11
IV	Barrier	4.00	2,416.00	1.21
		0.00	2,727.00	1.36
VI	Personal	2.06	1,244.24	0.62
VIII	Medical	1.55	936.20	0.47
	TOTAL		<u>12,240.00</u>	<u>6.07</u>

k. *Planning Combat Support Hospital Blood Requirements.*

(1) The management and distribution of resuscitative fluids in the TO, including blood and blood products, are functions of health service logistics. In the mature theater, blood management is based on resupply of needs from the CONUS donor base. In a developing theater during the buildup period, immediate blood requirements may be provided by pre-positioned frozen blood. These pre-positioned stocks are designed to meet initial blood requirements until the logistical system can deliver liquid blood to the TO.

(2) Blood and blood products enter the theater through the USAF Blood Transshipment Centers for further distribution to the Army blood bank platoons located in the MEDLOG battalion (forward or rear). The CSH is supplied with blood and blood products by a blood bank platoon assigned to the MEDLOG battalion (forward).

(3) Blood shipped into the AO will be packed RBCs only. Frozen plasma and platelets are also available. Subject to availability, RBCs shipped from CONUS are packed with the following unit group and type distribution:

Blood Group/Type	Distribution
O Rh Positive	40%
O Rh Negative	10%
A Rh Positive	35%
A Rh Negative	5%
B Rh Positive	8%
B Rh Negative	2%

(4) Blood planning factors.

Blood Component	Planning Factor
RBCs	*4 units for each wounded in action (WIA) and each nonbattle injury (NBI) casualty initially admitted to a hospital
Frozen Plasma	0.08 units for each hospitalized WIA or NBI
Frozen Platelet Concentrate	0.04 units for each hospital WIA or NBI

* For blood planning purposes, only count the WIA or NBI once in the system, not each time the patient is seen or admitted.

(5) The expected admission rates per day are critical in computing initial blood requirements. These rates, along with the above blood planning factors, provide the planner with an initial estimate of daily blood requirements.

Sample Calculations for Initial Blood Requirements.

Expected Initial Admission Rate for WIA and NBI = 8 per 1,000 per day
 Total Personnel = 10,000
 RBC Planning Factor= 4 units

Formula:

$(\text{Total Personnel}/1,000) \times \text{Admission Rate Per Day} \times \text{Factor} = \text{Blood or Blood Component Per Day}$

Example: $(10,000/1,000) \times 8 \times 4 = 320$ units of RBCs per day

(6) It is estimated that the CSH will require 113 units of blood per day. It has the capability to store 160 units. It stores RBCs of various groups and types. The CSH has emergency blood collection capability but does not have the capability to perform serological testing of the donor units (for example, hepatitis, human immunodeficiency virus, and syphilis testing). Blood collection in the theater is governed by theater policy, but normally is done to provide platelets for emergency situations. Limited testing of blood drawn in the theater is done to minimize danger to recipients.

1. *Estimated Combat Support Hospital Oxygen Planning Factors and Requirements.*

(1) *Estimated planning factors.*

OR Table: 2.8 liter/min during operational time.
 ICU Beds: 4.5 liter/min for 17 percent of the total ICU beds (patients on resuscitator/ventilator).
 ICU Beds: 3.1 liter/min for 17 percent of the total ICU beds (patients on nasal cannula/mask).

Miscellaneous

Requirements: An additional factor of 10 percent is applied to the total of OR and ICU requirements to account for oxygen requirements in other areas of the hospital.

(2) *Oxygen conversion factors.*

1 gallon (gaseous oxygen)	=	0.1333 cu ft
95 gallon "D" cylinder	=	12.7 cu ft
1,650 gallon "H" cylinder	=	220 cu ft
1 cu ft (gaseous oxygen)	=	28.317 liters
95 gallon "D" cylinder	=	359.63 liters
1,650 gallon "H" cylinder	=	6229.74 liters

(3) *Estimated oxygen requirements.*

OR Table Hours (HUB)	96,768 liters/day
OR Table Hours (HUS)	193,536 liters/day
ICU Beds On Vent (HUB)	191,601 liters/day
ICU Beds On Vent (HUS)	266,112 liters/day
EMT and Other Oxygen Requirements	77,760 liters/day
Pneumatic Instruments	17,340 liters/day
TOTAL DAILY REQUIRED	843,117 liters/day

m. *Class VIII Planning Factor.*

(1) *Class VIII composition.*

FSC	Item	Percentage of PMD
6505	Drugs/biologicals and other official reagents	77.1
6510	Surgical dressings	6.8
6515	Medical/surgical supplies	8.0
Other FSCs	X-ray film/development lab reagents, test kits, patient care accessories	8.1

(2) *Class VIII PMD planning factors (based on TAA 93 NATO scenario).*

Troop Level	Weight Strength	Planning Factor (lbs/day)	PMD
Division	412,001	269,413	0.65
Combat Zone	668,607	978,712	1.46
Theater	834,014	1,297,156	1.55

(3) *Supply requisitions.*

924 per day 10,499 per month

(4) *Class VIII weight and cube (Codes P, G, W, and Q and R).*

	Weight	Cube
Code P (potency period/expiration date)	29,369.59 lbs	1,013.496 cu ft
Code G (between 35 to 46 degrees Fahrenheit)	1,493.14 lbs	67.15 cu ft
Code W (must be frozen for preservation)	0.04 lbs	0.003 cu ft
Code Q/Code R	573.11 lbs	32.111 cu ft

n. *Estimated Combat Support Hospital Petroleum, Oil, and Lubricants/Fuel Consumption.*

(1) *HUB*

	Gal/Day	Weight	Cube
Gasoline	661.10	4,098.87 lbs	88.588 cu ft
Diesel	<u>1,129.06</u>	<u>7,937.28 lbs</u>	<u>151.293 cu ft</u>
TOTAL	<u>1,790.16</u>	<u>12,036.15 lbs</u>	<u>239.881 cu ft</u>

(2) *HUS*

Gasoline	68.88	427.05 lbs	9.229 cu ft
Diesel	<u>254.81</u>	<u>1,791.31 lbs</u>	<u>34.144 cu ft</u>
TOTAL	<u>323.69</u>	<u>2,218.36 lbs</u>	<u>43.373 cu ft</u>

(3) *HUB/HUS TOTAL*

Gasoline	729.98	4,525.92 lbs	97.817 cu ft
Diesel	1,383.87	9,728.59 lbs	185.437 cu ft

(4) *Petroleum storage capability (based on hospital TOE):*

Lin/Nomenclature	Quantity	Gallons
V15086		
Tank fabric collapsible 3,000 gallons	1	3,000
Z94047		
Truck tank POL MTV W/E 1,500 gallons	1	1,500
Total Storage capability (gallons):		4,500

o. *Water Planning Factors (Gallons of Water Per Day).*

- (1) Total patients (beds) X 17.25 gal= _____
 Surgical cases X 13.0 gal= _____
 Staff X 10.25 gal= _____
 Bed patients X 22.0 gal = _____
 Minimal care patients X 10.0 gal= _____
 Staff X 9.4 gal= _____
 Decontamination
 7 gallons per individual
 380 gallons per major end item
 Vehicle maintenance
 1/2 gal per vehicle (temperate)
 1 gal per vehicle (hot climate)
 Loss/waste factor = 10 percent of total requirement

(2) Hospital water requirement (consumptive factors).

Staff	Water Requirement
Drinking	1.5 gal/man/day
Hygiene	1.7 gal/man/day
Food prep	1.75 gal/man/day
Extra showers	5.3 gal/man/day
Unit wastewater generation	7 gal/man/day

Patient Care	Water Requirement
Cleanup	1.0 gal/bed/day
Heat treatment	0.2 gal/bed/day
Bed bath	5.0 gal/bed/day
Hygiene	1.7 gal/bed/day
Bed pan wash	1.5 gal/bed/day
Laboratory	0.2 gal/bed/day
Sterilizer	0.2 gal/bed/day
X-ray	0.2 gal/bed/day
Handwashing	2.0 gal/bed/day
Cleanup	1.0 gal/bed/day
Unit wastewater generation	12 gal/bed/day

Surgical	Water Requirement
Scrub	8.0 gal/case/day
Instrument wash	2.0 gal/case/day
OR cleanup	3.0 gal/case/day
Unit wastewater generation	13 gal/case/day

Hospital Laundry	Water Requirement
Bed patients	22.0 gal/bed/day
Ambulatory patients	10.0 gal/bed/day
Staff smocks	9.4 gal/bed/day
Unit wastewater generation	41.4 gal/bed/day

Decontamination	Water Requirement
Individual	7 gal/decon
Major end item	380 gal/decon
Vehicle	450 gal/decon
Wastewater generation	To be determined

(3) Water usage table for food and beverage preparation patient menu (gallons per meal per 100 portions).

	Menu				Alternate Menu			
	B	L	D	Total	B	L	D	Total
Day 1	52	29	32	113	45	28	35	108
Day 2	50	40	39	129	44	35	33	111
Day 3	48	34	32	114	23	29	18	71
Day 4	56	40	37	132	45	34	34	114
Day 5	49	42	35	126	48	37	34	118
Day 6	53	34	35	123	35	34	31	100
Day 7	51	35	36	122	45	38	33	117
Day 8	44	38	36	118	41	35	31	107
Day 9	51	35	36	122	44	33	37	114
Day 10	52	36	39	127	46	31	31	108
TOTAL				<u>1225</u>				<u>1079</u>

Note: Per 100 patients an additional 30 gallons of water per meal is required to preheat insulated food and beverage containers for decentralized ward service.

(4) Water usage table for food and beverage preparation staff menu (gallons per meal per 100 portions).

	Menu				Alternate Menu			
	B	L	D	Total	B	L	D	Total
Day 1	36	27	28	91	30	25	32	87
Day 2	35	39	38	112	29	33	30	91
Day 3	31	32	30	92	25	37	33	95
Day 4	42	39	35	116	30	32	31	94
Day 5	32	44	32	108	31	37	31	100
Day 6	42	31	34	107	36	31	31	98
Day 7	35	34	34	102	29	38	30	97
Day 8	25	38	35	98	24	33	29	85
Day 9	35	32	33	101	29	30	34	92
Day 10	36	33	38	108	30	28	30	88
TOTAL				<u>1035</u>				<u>927</u>

Daily water consumption (patient and staff): 12,180 gal/day.
 Laundry daily water consumption (patient and staff): 11,650 gal/day.
 TOTAL water consumption: 23,830 gal/day.

(5) Estimated water consumptive factors (under chemical environment, 72 hour scenario).

Staff	
Drinking (1.5 gal/man/day)	905
Hygiene (1.0 gal/man/day)	604
Feeding (0.25 gal/man/day)	453
Patient Care (4 gal/patient/bed/day)	1,184
Surgical (3 gal/case/day)	72
TOTAL DAILY WATER REQUIREMENT:	3,218

(6) Water storage capability (based on hospital TOE):

Lin/Nomenclature	Quantity	Gallons
D69050		
Drum, fabric, collapsible, 500 gal	6	3,000
G68998		
Drum, fabric, collapsible, 250 gal	4	1,000
T19033		
Tank assembly, fabric, collapsible, 3,000 gal	6	18,000
W98825		
Trailer tank 11/2 ton 2 wheel 400 gal	2	800
TOTAL STORAGE CAPABILITY (GALS):		22,800

p. *Laundry.*

(1) The Surgeon General’s policy statement (theater hospital laundry support). Hospitals operating in the CZ will have a basic organic laundry capability to meet mission needs. As a minimum, this is the capability to process hospital linens, patient hospital clothing, and unit-owned duty personnel work garment. Bath capability and laundry support for hospital staff may be obtained from available quartermaster sources.

(2) Basic formulas for determining laundry requirements for permanent party hospital personnel are—

- Formula 1: 42 lbs (6 lbs clothing per person per day X 7 days) X 75 percent of assigned personnel = weekly laundry requirement for patient care personnel.
- Formula 2: 6 lbs clothing per person per week X 25 percent of assigned personnel = weekly laundry requirement for hospital support personnel.
- Weekly laundry requirement (Formula 1 + Formula 2) divided by number of assigned personnel = average laundry requirement per person per week.

q. Showers. Minimum frequency for showering and laundering from a health maintenance perspective is deemed to be once weekly regardless of location, season, or level of combat activity. (Source: Office of The Surgeon General, Department of the Army, 31 January 1983.)

r. Solid Waste Factors.

(1) Solid waste calculation (estimated):

Total patients (beds) X 15 lbs = total patient solid waste
 Staff X 12.5 lbs = total staff solid waste

(2) Hospital infectious waste planning factors (estimated):

3 lbs per cubic foot of infectious waste
 3 lbs of infectious waste generated per bed per day

(3) Hospital infectious waste:

888 lbs per day 296 cu ft per day

s. Wastewater Planning Factors.

Wastewater calculations (estimated):

Total wastewater 21,394 gallons per day (estimated).

Assume that 80 percent of patient care and staff water requirements become wastewater, and all laundry water requirements become wastewater.

t. Power Requirements. It is estimated that 823.1317 kilowatts of power will be required on a daily basis.