



United States Army Hospital Trains; A Brief History of American Rail Casualty Transportation

By Michael T. Fleming, MD

Military transport of the wounded by rail began on a large scale during the Civil War. Many of the battles were fought over the control of rail centers and casualties needed to be removed from the areas of combat to more sanitary and better equipped locations in the rear. The Sanitary Commissions in the north were eventually able to provide clean dedicated cars for this service.

The cars were mainly box cars and passenger cars with minimal modification. One innovation was the use of rubber slings to support the litters of the wounded to decrease bumping during transport. The trains carried red flags on the cars and the smokestacks of the locomotives were painted red to indicate priority handling and

cars. Loading doors for litters were cut into the sides.

Three additional trains were constructed in



Mortuary car train leaving Brooklyn Naval Yard



the same manner at the start of the American involvement in the First World War. The greatest use of the trains was after the Armistice to transport the sick and wounded returning from Europe. The port at Hoboken, New Jersey originated 46 trips using 3 trains carrying a total of 55,200 casualties during a 15 month period. None of the cars or trains remained in service or reserve after 1920.

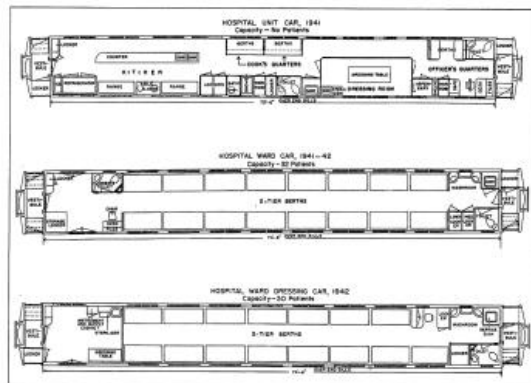
World War II

Planning for new trains began in 1939. The initial phase was the purchase of approximately

to indicate to the enemy the nature of the train.

The next major American conflict was the Spanish-American War. No special cars were built or modified. A single train of parlor cars was used.

The first real hospital train was put together for General John J. Pershing's Mexican Expedition in 1916. The cars were modified wooden parlor



PLANS FOR HOSPITAL CARS, 1941-42

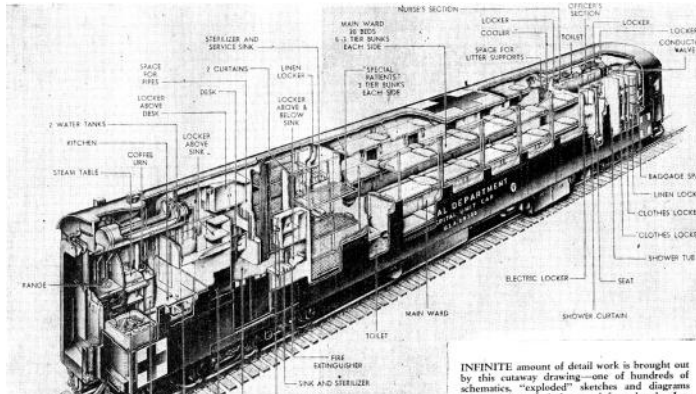
200 heavyweight parlor cars and Pullmans. Air conditioning was a requirement. The side doors for the receiving space were added. The regular passenger entrance was blanked off.

Most of the cars had two levels of bunks for the wounded. There were Kitchen cars and the floor plan on the left shows a modified Pullman



with a kitchen on one end and an operating table on the other. This car had too many functions and few were built.

Plans of the hospital ward car shows a receiving area at the baggage doors with storage. The hospital ward dressing car shows



an operating table and sterilizing equipment in the receiving area. The New York central ad, below, shows the usual arrangement of the trains: Baggage car, Ward dressing car, 2 Ward Cars, Kitchen Car, Ward Dressing Car, 2 Ward Cars and a Pullman for personnel but a train could be as long as seven-teen cars with the addition of Pullmans for the ambulatory wounded.



The Heavyweight cars were modified after the war for Mortuary Service. Families could request that remains be returned home after WW II. It took two years for ship and train car modification before this could be accomplished. The photo below shows the cars with the same configuration



1945 Cars

The majority of the 1945 car order was built by American Car & Foundry in St. Charles , Missouri. The cars were of modern round roof configuration with riveted sides. The cars had



Former Hospital Car bought by Ringling Brothers for their circus train is retired and is on display at the Circus World Museum in Baraboo, Wisconsin.

individual kitchens at the brake end. They rode on 3 axle trucks. The internal configuration is similar to that of the converted heavyweights but with three levels of beds in-stead of two. The beds could all be folded up.

The cars were to carry one doctor, two nurses and four service personnel. Up to 33 patients could be carried. Planning for these cars started in 1943 with the expected increased casualties from Europe in 1944 to be followed in 1945 by the Pacific casualties. 200 of these cars were built for use in the United States. 100 of these cars were retained in reserve.

The remaining cars were sold to the Ringling Brothers Circus, the Monon Railroad and the Alaska Railroad and others. The majority of the





cars were changed in many ways, but almost always their heritage shown through.

Dining Cars and Kitchens

The medical service had difficulty relying on the diners of regular trains because these



Conrail 24 was used in MOW service. Pro Custom Hobbies makes laser-cut sides to model this and other versions of Hospital cars.

cars were frequently dropped at division points leaving no food service available. Work procedures on the diners also did not fit a hospital schedule. The diners were also not equipped for mass feedings that a military movement required. New kitchen cars were built in the modern configuration and the troop box car kitchens after 1943. Individual kitchens in the hospital cars were necessary because small groups of cars would be sent to specialty hospitals directly in 1943 and thereafter rather than to a major receiving hospital as in the early part of the war. The combination of kitchen cars for large movements and the kitchen compartment in the cars for smaller movements and special meal service worked well.

Korean War Cars

The casualties had all been transported by the end of 1947, and the military began the development of a more modern car of welded construction with 2-wheel trucks. The casualty doors are in the same location but the side windows are different. I have not been able to find an interior diagram, but by the size and shape of the windows on one side it appears that there were bathrooms in the middle of the car.

Airplane transport of casualties became increasingly common and it is uncertain how

much use these cars had. Several trains of the 1945 build were sent to Korea but there were problems with poor roadbed and minimal clearance in tunnels. Also, hospital trains were not respected by the North Koreans or Chinese and so artillery riding on flatcars accompanied the trains.

Final Disposition

There was a hospital train stored serviceable in Fort Gillem in Forest Park, Georgia until the early eighties but all cars have been scrapped or sold with several being preserved at Fort Sam Houston, Ogden and other railroad museums.

Modeling the cars

The heavyweight cars can be modeled using Rivarossi or Walthers cars and cutting the casualty doors and modifying the window configuration. Rivarossi made a hospital train 20 years ago and it is often still available on eBay. The lettering is quite good, however, the Pullman and Diner are the only two Rivarossi cars that are anywhere close to prototypical.

The cars were painted standard Army olive drab, although I have seen various interpretations of this color. The prototype preserved cars appear to have a light Pullman green color.

The cars in service had a flat color but some pictures show a gloss coat. Some cars have a dark tan color. This appears to be from the sixties and it is unknown if all cars were painted this way. Or this could be what olive drab looks like after sitting in the sun and weather for 20-plus years.

Model Railroad Warehouse offers numerous craftsman type kits and decals for the troop sleepers, kitchen cars and postwar modifications. There is a brass wrap around kit for the 1943 hospital car and a plastic craftsman kit for the hospital kitchen.

Walthers made kits of the 1945 cars as hospital cars or in Circus modifications until the mid 1970s. I have one of these cars and am planning to use the metal sides as templates to cut plastic sides for use with E and B Valley core kits that contain the roof, ends and floor.



Overland imported a Brass model five years ago. The kitchen cars were made for the troop sleeper train by Walthers several years ago but are not lettered for hospital service.

Laser cut sides are available from Pro Custom Hobbies. Conrail car 24 which was used in their track service train and is one of the sides manufactured. You have to call and ask about them. Their phone is (410) 549-9169.

The January 2011 Model Railroad Hobbyist has a very thorough article about building this car.

One day, I hope to have a hospital train on my layout but this is a long term project.

References & Resources

Model Railroad Warehouse

<http://www.prototypespecificproducts.com/military-cars/>

Pro Custom Hobbies

¹<http://www.procustomhobbies.com/sales@procustomhobbies.com>

Model Railroad Hobbyist-January 2011

<http://model-railroad-hobbyist.com/magazine/mrh-2011-01-Jan>

<http://www.thenursingbible.com/10-snapshots-of-life-aboard-hospital-trains-in-wwi/>
WW I pictures from different countries.

<http://railwaysurgery.org/Army2.htm>



Posed U.S. Army photos of hospital car interior



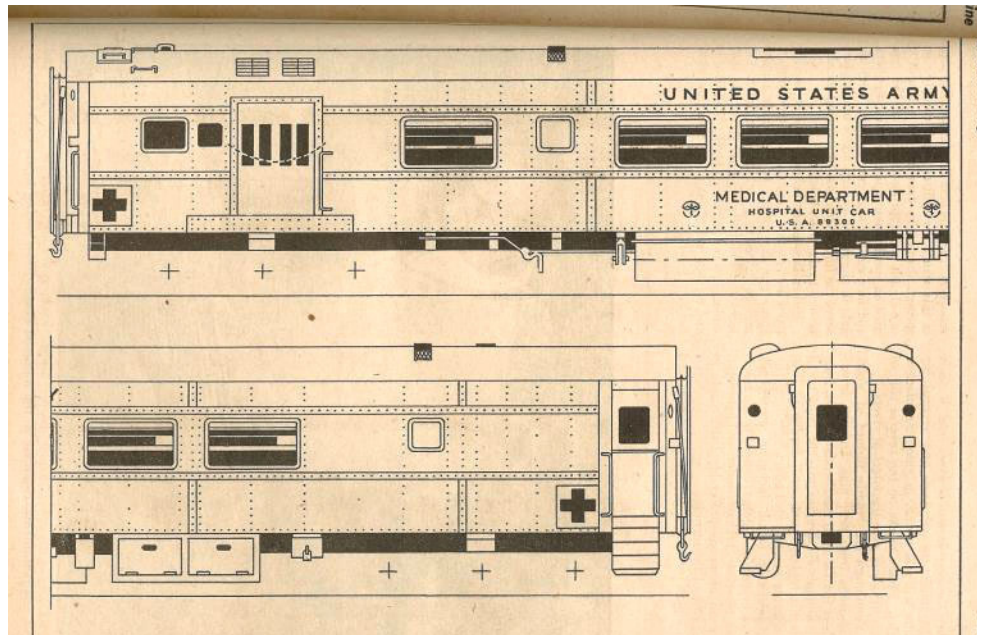


Plans and other pictures from car construction at ACF facility in St. Charles, Missouri from a reprint of Railroad Magazine, 1945

<http://railwaysurgery.org/Army.htm> Good general article about hospital car and trains

<http://railwaysurgery.org/Army2.htm> Reprint of Railroad Magazine about the 1945 cars

[http://history.amedd.army.mil/booksdocs/ww II/the technical services/the technical services/hospitalization/evacuation/chapter22.htm](http://history.amedd.army.mil/booksdocs/ww%20II/the%20technical%20services/the%20technical%20services/hospitalization/evacuation/chapter22.htm) Official Army

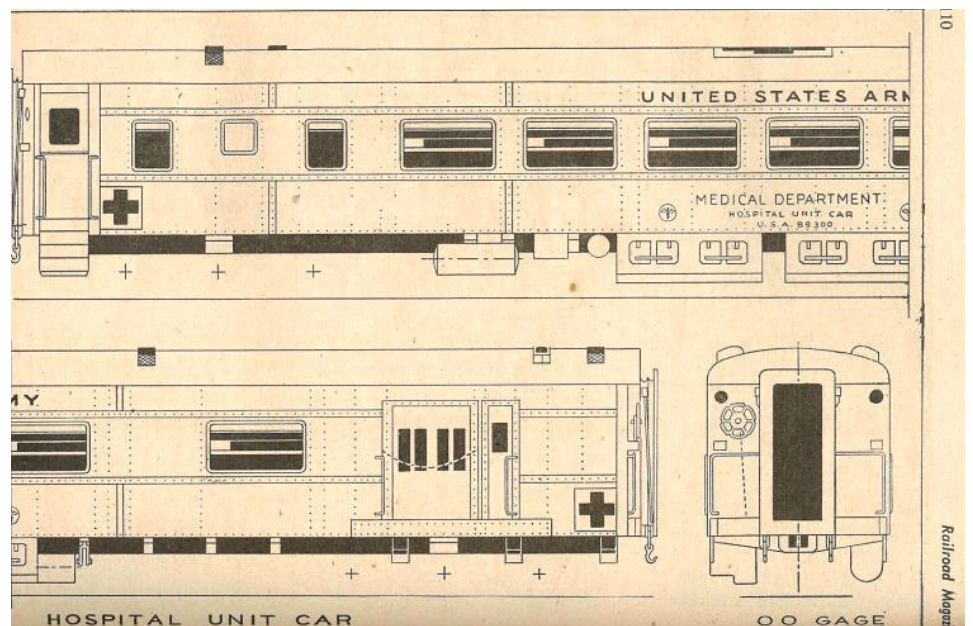


Medical History about ambulances and hospital cars in WW II

<http://www.med-dept.com/articles/ww2-hospital-trains/> and <http://www.med-dept.com/articles/the-hospital-train-in-the-e-t-o-1944-1945/> WW II hospital trains general articles with pictures about the European theater.

<http://members.trainweb.com/bedt/milrr/batbtww2repat.html> Impressive Life Magazine photography of the loading of

Website: <http://www.piedmont-div.org>

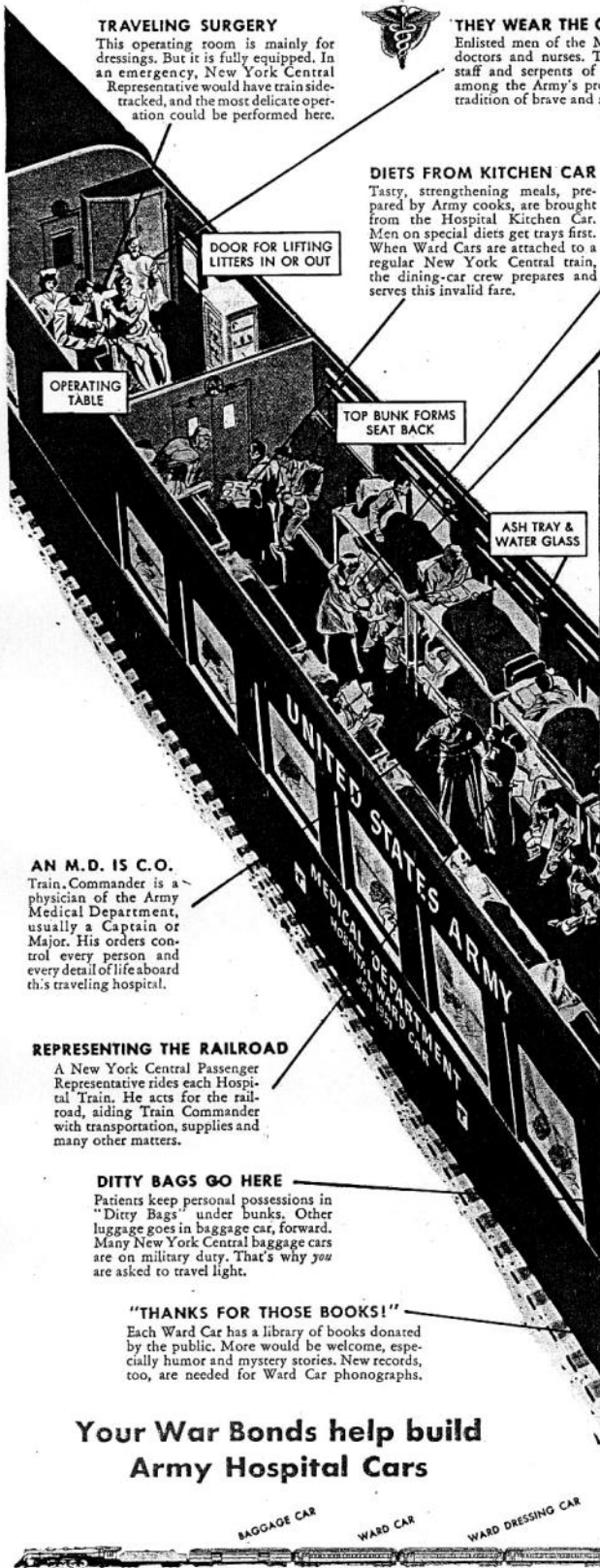




remains at the Brooklyn Naval terminal and the transport of the cars by barge.

<http://www.med-dept.com/veter->

ans-testimonies/veterans-testimony-theodore-ross-willits/ World War II diary and history of a soldier assigned to hospital train 23 in the European theater. Korean War Cars



TRAVELING SURGERY
This operating room is mainly for dressings. But it is fully equipped. In an emergency, New York Central Representative would have train sidetracked, and the most delicate operation could be performed here.



THEY WEAR THE CADUCEUS
Enlisted men of the Medical Corps aid doctors and nurses. Their emblem, the staff and serpents of the Caduceus, is among the Army's proudest . . . with a tradition of brave and selfless service.

SHE RATES A SALUTE
The Army Nurse rates a salute . . . not only because she's a Lieutenant . . . but for her superb, often heroic service. The Army urgently needs 2,000 more trained nurse volunteers each month this year.



DIETS FROM KITCHEN CAR
Tasty, strengthening meals, prepared by Army cooks, are brought from the Hospital Kitchen Car. Men on special diets get trays first. When Ward Cars are attached to a regular New York Central train, the dining-car crew prepares and serves this invalid fare.

SCHOOL BOYS MADE THESE
Bath trays, designed by the Army Medical Department, hold basin, alcohol and powder. They are made in manual training by Junior Red Cross boys.

Trains in White

How Army Hospital Trains speed wounded fighters homeward over the Water Level Route

MILE AFTER MILE, these travelers drink in each new picture framed in the windows of their Ward Dressing Car. It may be the scenic Hudson River, the rich fields of the Mohawk Valley, or the blazing furnaces of some war production center. But, always, it's *home* . . . "the good old U.S.A."

This is the last lap of the long, long journey through which the Army Medical Department has brought these wounded fighters. A journey that may have begun on a stretcher, under fire . . . but is ending now amid the care and comfort of a modern "hospital on wheels."

In this supreme service, New York Central is proud to share. Special schedules are timed to fit Medical Department needs. Speeds are planned for maximum comfort over every part of the route, and engineers exert all their skill in smooth train operation. For aboard these "trains in white" ride America's most honored passengers.



New York Central

ONE OF AMERICA'S RAILROADS—ALL UNITED FOR VICTORY



Your War Bonds help build Army Hospital Cars

BAGGAGE CAR WARD CAR WARD DRESSING CAR WARD CARS KITCHEN CAR WARD DRESSING CAR WARD CARS PERSONNEL CAR