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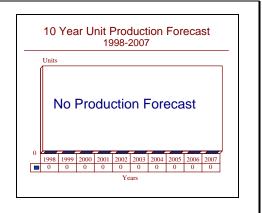
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AMX 13 Véhicule Transport De Troupe - Archived 6/98

Outlook

- Serial production of this vehicle has terminated
- Total of 3,494 vehicles were manufactured
- Vehicle remains in service in at least 15 nations
- Numerous modernization and retrofit programs are in various stages of implementation for this vehicle



Orientation

Description. A tracked vehicle

Sponsor. The development and French procurement of the AMX 13 Véhicule Transport de Troupe was sponsored by the French Ministry of Defense through the Délégation Générale pour l'Armement, Direction des Armements Terrestres and the Direction Centrale du Matériel de l'Armee de Terre (the French Army).

Contractors. This vehicle was manufactured by Creusot-Loire Industrie; Paris, France. In 1992, this firm became a component of Giat Industries. Major subcontractors include Detroit Diesel Corporation.

Licensees. None

Status. The serial production of this long-lived vehicle was completed in the late eighties. The associated marketing effort was terminated in the early nineties in favor of the newer MARS 15, but the development of that armored vehicle family was terminated in 1993. A number of modernization and retrofit programs are in various stages of development and integration for this vehicle which remains in widespread service around the world.

Total Produced. A total of 3,494 AMX 13 Véhicule Transport de Troupe vehicles was manufactured; this includes all models and variants except the Mark F3 self-propelled artillery system and the AMX 13 light tank and their production models and variants.

Application. A family of vehicles based on a tracked armored personnel carrier. Other versions include an armored ambulance, several types of command and control vehicles, anti-tank vehicles, a logistics (cargo) vehicle, an armored mine laying vehicle and several other specialist vehicles.

Price Range. In equivalent 1991 United States dollars, the base vehicle equipped with a 20 millimeter cannon, had a unit price of \$521,200. On the open market, a 1992 sale of two used AMX 13 Véhicule Transport de Troupe Cargo vehicles yielded a unit price equivalent to 39,000 1992 United States dollars. This vehicle is becoming increasingly available through international brokers and arms merchants.

Technical Data

Crew. Three: commander, driver and gunner, plus ten infantrymen.

Armor. This vehicle is manufactured with conventional steel alloy armor with a maximum thickness of three centimeters (1.18 inches) over the front of the troop compartment. The 1.5 centimeter (0.59 inch) thickness on the front of the hull is at a 55 degree angle, equivalent to four centimeters (1.57 inches).

Dimensions. The following data are for the basic armored personnel carrier version of the AMX 13 Véhicule Transport de Troupe family of vehicles.

	SI units	US units
Length	5.71 meters	18.73 feet
Width	2.67 meters	8.75 feet
Height	2.41 meters	7.91 feet
Combat weight	15.01 tonnes	16.54 tons
Fuel capacity	410 liters	109.04 gallons

Performance. The automotive performance is for the basic armored personnel carrier version of the AMX 13 Véhicule Transport de Troupe family of vehicles equipped with the Detroit Diesel engine, and is on a metalled road.

Maximum speed	65 kilometers per hour	40.36 miles per hour
Maximum range	570 kilometers	353.97 statute miles
Step	65 centimeters	2.13 feet
Trench	1.6 meters	5.25 feet
Slope	30%	30%
Gradient	60%	60%
Fording	1.01 meters	3.31 feet

Engine. Early production AMX 13 Véhicule Transport de Troupe vehicles were fitted with the SOFAM 8Gxb eight cylinder liquid cooled spark ignition engine. This engine is rated at 186.43 kilowatts (250 horsepower) at 53.34 revolutions per second (3,200 revolutions per minute). Since 1987, the Detroit Diesel Corporation's 6V-53T V6 supercharged diesel rated at 208.88 kilowatts (280 horse-power) at 46.67 revolutions per second (2800 revolutions per minute) has been the standard engine. The power-to-weight ratio of the basic vehicle with this engine is 13.91 kilowatts per tonne (16.92 horsepower per ton). The Baudouin 6F11 SRY diesel engine rated at 208.88 kilowatts (280 horsepower) at 53.33 revolutions per second (3,200 revolutions per minute) is offered for retrofitting.

Gearbox. An unspecified manually operated unit with five forward and one reverse gear ratios is the standard fit; an unspecified automatic gearbox was optional.

Suspension and Running Gear. This vehicle uses a torsion bar type suspension with five road wheels and three or four track return rollers on each side. The first and last road wheel stations are fitted with hydraulic shock dampers.

Armament. Numerous types of turrets, cupolas and mounts fitted with 25 millimeter and 20 millimeter cannon, 12.7 millimeter or 7.62 millimeter machine guns can be fitted. Examples of turrets commonly installed include the Creusot-Loire Industrie T25, T20, TL20S, and TLi 127.

Variants/Upgrades

Variants. As usual with most French designed vehicles of this type, the AMX 13 Véhicule Transport de Troupe has proven adaptable to a number of mission areas, the specific variants for which we list below:

AMX 13 Véhicule Transport de Troupe/Véhicule de Combat d'Infanterie. This is a mechanized infantry combat vehicle that is very similar to the basic AMX 13 Véhicule Transport de Troupe. In addition to the driver,

a twelve-man section of infantrymen (including the commander) is carried. The armament options are many and varied, ranging from a 7.62 millimeter machine gun to a 20 millimeter cannon and/or a 60 millimeter mortar. Firing ports are provided in the troop compartment for self defense. Access is by two large doors at the rear of the vehicle and four hatches.

AMX 13 Véhicule Transport de Troupe/Transport de Blessés. This is the unarmed ambulance version of the AMX 13 Véhicule Transport de Troupe. A driver, surgeon and two orderlies are carried. Three stretcher and four sitting patients can be transported.

AMX 13 Véhicule Transport de Troupe/Cargo. Up to three tonnes of cargo may be transported in this vehicle. Armament options range from a 7.62 millimeter machine gun up to a 20 millimeter cannon. The vehicle is normally crewed by two men.

AMX 13 Véhicule Transport de Troupe/Post de Commandement. This is an armored command post vehicle with six to eight crewmen and additional communications gear. Armament options range up to a 20 millimeter cannon.

AMX 13 Véhicule Transport de Troupe/Post de Commandement et LT. This is the battery executive command post fire control vehicle developed from the AMX 13 Véhicule Transport de Troupe/Post de Commandement; the armament options are the same. A seven-man crew, fire control equipment, externally mounted loudspeaker and additional radio/land line communication equipment are carried.

AMX 13 Véhicule Transport de Troupe/Véhicule de Combat du Génie. This model is a combat engineer (or pioneer) vehicle. A front mounted hydraulically operated dozer blade, an A frame type crane, a winch with 63 meters of cable rated at 4.5 tonnes, cutting equipment and other specialized military engineer-related equipment are standard on this vehicle. A crew of ten men operates this vehicle.

AMX 13 Véhicule Transport de Troupe/Porte Mortier 81. This is an armored mortar carrier mounting an 81 millimeter mortar of various types; the mortar is mounted in the personnel compartment and fires forward. The range of elevation is from 43 to 80 degrees and total traverse is 40 degrees. Six crew members and 88 long and 40 short 81 millimeter rounds of mortar ammunition are carried. A baseplate is also carried so the mortar can be removed from the vehicle if desired.

AMX 13 Véhicule Transport de Troupe/Porte Mortier 120. This is an armored mortar carrier equipped with a 120 millimeter Thomson-DASA Armements (Thomson-Brandt) MO 120 LT mortar. The mortar is mounted in the personnel compartment and fires forward. The range of elevation is from 45 to 77 degrees and total traverse is 46 degrees. Six crew members and 60 rounds of 120 millimeter mortar ammunition are carried. A baseplate is also carried so the mortar can be removed from the vehicle if desired.

AMX 13 Véhicule Transport de Troupe/Minotaur. This vehicle is a basic AMX 13 Véhicule Transport de Troupe vehicle modified to a flatbed chassis on which is mounted the Minotaur mine scattering system. A crew of three operates the vehicle and mine dispensing system.

AMX 13 Véhicule Transport de Troupe/RATAC. This is the basic AMX 13 Véhicule Transport de Troupe vehicle fitted with the RATAC (Radar de Tir pour Artillerie de Campagne) battlefield radar system which acquires and tracks ground targets. The radar unit is mounted on top of the vehicle to the right side. This vehicle is manned by a crew of five or six men; a machine gun armament is fitted for self defense.

Véhicule Transport de Troupe/ **AMX** 13 ENTAC. This model is the basic Véhicule Transport de Troupe vehicle integrated with a twin launcher for the ENTAC wire guided anti-tank missile. One twin launcher is mounted in a retractable mechanism on each side of the vehicle. The ENTAC is an early generation system that became obsolete in front line nations well over a decade ago. A five-man crew plus a total of 26 missiles are carried. Only Belgium operated this model and some of those were retrofitted with the launcher for the much more modern MILAN anti-tank guided missile system. The Netherlands subsequently fitted some of its AMX 13 Véhicule Transport de Troupe inventory with the BGM-71 TOW anti-tank guided missile system.

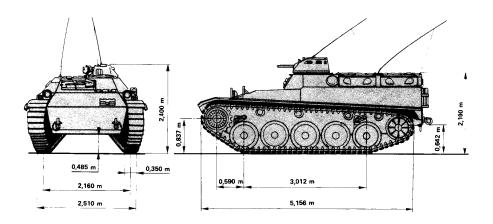
AMX 13 Véhicule Transport de Troupe/Véhicule Chenillé d'Accompagnement. This is a fire support vehicle manned by a crew of eight which is designed to accompany the 155 millimeter Mark F3 self-propelled artillery system in the field. The vehicle carries a portion of the gun crew and 25 complete rounds of ammunition. An ARE 2TF2 ammunition wagon containing 30 additional complete rounds can be towed. This model is normally fitted with a CAFL 38 turret armed with a 7.5 or 7.62 millimeter machine gun. Another popular fitting is the CB 127 shield/gun racer mounting a M2HB 12.7 millimeter machine gun.

AMX 13 Véhicule Transport de Troupe/Char Anti- Aérien. First proposed in 1983, this version of the vehicle deletes the machine gun turret and the commander's roof hatch, which is welded shut. A TA 20/RA 20 turret, armed with two 20 millimeter cannon is fitted. No orders were ever placed for this system.

The other vehicles related to the AMX 13 Véhicule Transport de Troupe are the AMX 13 light tank, covered in Tab A of this book, and the Mark F3 155 millimeter self-propelled howitzer, the technical data for which is found in Tab F and is completely described in

the Munitions and Ordnance book that is a companion volume to this. Two other vehicle variants based on the AMX 13 Véhicule Transport de Troupe are the AMX

13 DCAS, a self-propelled twin 30 millimeter antiaircraft artillery system, and the Mark 61 105 millimeter self-propelled howitzer.



AMX Véhicule Transport de Troupe

Source: Giat Industries/Creusot-Loire Industrie

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