# ARCHIVED REPORT

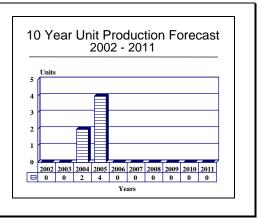
For data and forecasts on current programs please visit

www.forecastinternational.com or call +1 203.426.0800

# AMX-10P/AMX-10RC - Archived 3/2003

### Outlook

- Production of the tracked AMX-10P is dormant but expected to be restarted for new export orders
- Promotion on the international market continues but at a reduced level
- The wheeled AMX-10RC is no longer marketed



#### Orientation

Description. Tracked and wheeled vehicles.

Sponsors. The development and French procurement of these vehicles has been sponsored by the French Ministry of Defense through Délégation Générale pour l'Armement, Direction des Armements Terrestres and Direction Centrale du Matériel de l'Armee de Terre (the French Army).

Contractors. These vehicles were developed and are manufactured by Atelier de Construction de Roanne, a manufacturing component of Giat Industries under the firm's Armored Systems Division. Giat Industries is headquartered in Versailles, France. Major subcontractors include Compagnie Industrielle des Lasers, Messier Auto-Industrie, Moteurs Baudouin through Renault Vehicles Industriels, Societe d'Applications des Machines Motrices, Societe d'Optique, Electronique et Mecanique and Thales (Thomson-CSF).

Licensees. None

Status. The serial production of the tracked AMX-10P series is dormant, but the line remains available for new production orders. The vehicle is still being

promoted on the international market. The wheeled AMX-10RC program has been terminated by the contractor. The vehicles are in service in France and with a number of export customers. Several modernization and retrofit programs are in various stages of development and implementation for these vehicles.

Total Produced. As of January 1, 2002, a total of 1,817 AMX-10P in all versions and 44 AMX-10 PAC 90 and 509 AMX-10RC vehicles had been manufactured.

Application. A family of vehicles based on the tracked AMX-10P mechanized infantry combat vehicle which was designed as a battle taxi with armament sufficient to give the transported troops defensive/offensive fire power on the battlefield. Other applications include anti-tank, ambulance, command, communications, and fire support vehicles.

Price Range. In equivalent 2000 United States dollars, the wheeled AMX-10RC had a unit price of \$1.217 million; this could vary depending on options. In equivalent 2002 United States dollars, the basic tracked AMX-10P vehicle with a 20 millimeter cannon in the Toucan II turret costs \$1.502 million, and the PAC 90 version has a unit price of \$1.587 million.

### **Technical Data**

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

Dimensions. The following data are for the AMX-10P, with the AMX-10 PAC 90, where different, in parentheses. The length is with the cannon forward.

<u>SI units</u>	<u>US units</u>			
5.78 (7.22) meters	18.96 (23.68) feet			
2.78 (2.83) meters	9.12 (9.28) feet			
2.57 (2.73) meters	8.43 (8.96) feet			
14.49 (14.80) tonnes	15.97 (16.31) tons			
528 liters	140.42 gallons			
	5.78 (7.22) meters 2.78 (2.83) meters 2.57 (2.73) meters 14.49 (14.80) tonnes			

Performance. The maximum speed and range figures are for use on a metaled road. The maximum water speed is seven kilometers per hour (4.35 miles per hour).

	<u>SI units</u>	<u>US units</u>
Maximum speed:	65 kilometers per hour	40.37 miles per hour
Maximum range:	600 kilometers	372.6 statute miles
Step:	70 centimeters	2.29 feet
Trench:	2.1 meters	6.89 feet
Slope:	30%	30%
Gradient:	60%	60%
Fording:	amphibious	amphibious

Engine. The AMX-10 and AMX-10P vehicles use the Hispano-Suiza (manufactured by Renault Vehicles Industriels) HS 115-2, liquid-cooled, supercharged V8 diesel engine rated at 223.8 kilowatts (300 horsepower) at 50 revolutions per second (3,000 revolutions per minute) in its latest version. The power-to-weight ratio with this engine for the basic model is 15.45 kilowatts per tonne (18.79 horsepower per ton). The power-to-weight ratio for the AMX-10 PAC 90 is 15.12 kilowatts per tonne (18.39 horsepower per ton). A 24-volt electrical system with six 12-volt/100-ampere-hour batteries is standard on all vehicles.

Gearbox. These vehicles are fitted with an unspecified semi-automatic gearbox with one reverse and four forward gears. The clutch is electro-magnetically operated. A power take-off unit operates the two waterjets. The AMX-10 is skid steered.

Suspension and Running Gear. The AMX-10P and AMX-10 PAC 90 use a torsion bar suspension with

five single-tired road wheels and three return rollers on each side. The first and fifth road wheel stations are provided with hydraulic shock dampers.

Armament. The basic mechanized infantry combat vehicle version of the AMX-10 is fitted with a 20 millimeter M693 (F2) dual-feed cannon mounted in a Giat Industries Toucan II two-man turret. A 7.62 millimeter machine gun is mounted coaxially to the main armament. Numerous other armament options are available.

Fire Control. The basic mechanized infantry combat vehicle with the Toucan II turret has an OB-40 dual-power (x5 and x10) day/night periscopic sight for the gunner; this can be replaced by a M406 day sight or the OB-37 image intensification sight. The vehicle commander has an M731 dual-power (x1 and x6) sight and a direct fire anti-aircraft sight.

#### AMX-10RC

Crew. The AMX-10RC has a crew of four: commander, gunner, driver, loader.

Dimensions. The following data are for the latest production example of the AMX-10RC fitted with the Moteurs Baudouin 6 F11 SRX supercharged diesel engine. The length is with the cannon forward.

<u>SI units</u>	<u>US units</u>			
9.15 meters	30.02 feet			
2.95 meters	9.68 feet			
2.66 meters	8.73 feet			
	9.15 meters 2.95 meters			

SI unitsUS unitsCombat weight:15.88 tonnes17.50 tonsFuel capacity:528 liters140.42 gallons

Performance. The maximum speed and range figures are on a metaled road.

	<u>SI units</u>	<u>US units</u>
Maximum speed:	85 kilometers per hour	52.79 miles per hour
Maximum range:	987 kilometers	612.9 statute miles
Step:	80 centimeters	2.62 feet
Trench:	1.65 meters	5.41 feet
Slope:	30%	30%
Gradient:	50%	50%
Fording:	amphibious	amphibious

Engine. The AMX-10RC uses the Hispano-Suiza (manufactured by Renault Vehicles Industriels) HS 115-2, liquid-cooled, supercharged V8 diesel engine rated at 193.9 kilowatts (260 horsepower) at 50 revolutions per second (3,000 revolutions per minute). The power-to-weight ratio with this engine is 12.21 kilowatts per tonne (14.86 horsepower per ton).

The French AMX-10RC vehicles use the Moteurs Baudouin 6 F11 SRX supercharged diesel engine. This powerplant was selected in 1985 to equip the last production AMX-10RC vehicles as a production cut-in as well as for eventual retrofit to all AMX-10RC vehicles of the French Army. This engine is rated at 208.88 kilowatts (280 horsepower) at 50 revolutions per second (3,000 revolutions per minute). The power-to-weight ratio for the AMX-10RC with this engine is 13.15 kilowatts per tonne (16 horsepower per ton).

No matter which engine is fitted, a 24-volt electrical system with six 12-volt/100-ampere-hour batteries is standard. Two waterjets, mounted on each side of the hull at the rear, are used for water propulsion.

Gearbox. The AMX-10RC vehicles use an unspecified semi-automatic gearbox with four forward and four reverse gear ratios. The clutch is electromagnetically operated. A power take-off unit operates the two waterjets. The AMX-10RC is skid steered.

Suspension and Running Gear. The 6x6 AMX-10RC is fitted with a hydropneumatic suspension system provided by Messiere Auto-Industry; a centralized lubrication and tire inflation system is fitted. A shock damper is mounted at each wheel station.

Armament. The AMX-10RC is fitted with a 105/48 F2 MECA 105 millimeter gun mounted in a Giat Industries Toucan three-man turret; this medium-pressure cannon fires French pattern ammunition. The turret is controlled by a Societe d'Applications des Machines Motrices CH49 electrohydraulic control system, but no stabilization system is fitted. A 7.62 millimeter machine gun is mounted coaxially to the main armament, and two electrically operated smoke grenade launchers are mounted on each side of the turret. A total of 40 main armament and 4,000 rounds of 7.62 millimeter ammunition are carried.

Fire Control. The COTAC modular fire control suite of the AMX-10RC includes the Societe d'Optique, Electronique et Mecanique M504 gunner's telescope, M550 laser rangefinder and M553 boresight unit. For night engagements, the Thales (Thomson-CSF) DIVT 13 low light electro-optic viewing system is fitted. The commander is provided with six periscopes, and a M389 panoramic periscope with automatic graticule projection. The commander can override the gunner in laying the 105 millimeter cannon. Several sensors feed data into the ballistic computer which then generates changes to the sighting system.

## Variants/Upgrades

The basic AMX-10, designated AMX-10P by the French, has proven to be an exceedingly versatile and adaptable piece of equipment. At least 16 different production models and variants have been developed from the base vehicle. Among these is the AMX-10 PAC 90 fire support vehicle. A detailed discussion of this important variant of the AMX-10 will be presented

following a brief listing of the other models and variants.

<u>AMX-10P</u>. This is the basic vehicle for which the above data are pertinent.

<u>AMX-10 Ambulance</u>. An unarmed version with a driver and two orderlies. Three stretcher patients or one stretcher and four seated patients can be accommodated.



A fixed commander's cupola with three forward facing vision blocks is provided, as are an air conditioning system, oxygen system, washing facilities, and blood transfusion equipment.

AMX-10 SAF/AMX-10 PC SAF. This variant is known under two designations and is designed to work within the ATILA fire control system; both vehicles have a crew of five. An auxiliary power unit is fitted in the forward part of the vehicle, along with two air conditioning systems for the electronics bay and crew compartment. A multipurpose computer, interface and data processing equipment, along with three radios, are fitted.

AMX-10 SAO. This model is used for artillery observation and fire control. The Toucan II turret is replaced with an electrically operated two-man turret with an externally mounted 7.62 millimeter machine gun, a night sight and a laser rangefinder with an integral day sight. Other viewing aids, such as telescopes, position determining devices, and extensive radio equipment, are fitted. The ATILA system message transmitter can be optionally fitted; a crew of five operates the vehicle.

<u>AMX-10 VLA</u>. An artillery liaison vehicle used to integrate components of the ATILA fire control system.

<u>AMX-10 VFA</u>. Similar to the VLA above, but is used at the regimental and battery level. This vehicle contains the fire control computer.

<u>AMX PC</u>. This variant is the command version of the AMX-10 which is identical to the standard AMX-10P except for an additional generator and radio equipment. A crew of six is carried.

AMX-10 ECH. This repair vehicle can be fitted with either a Toucan I one-man turret with the M691 20 millimeter cannon and one 7.62 millimeter machine gun or a TOP 7 cupola armed with a 7.62 millimeter machine gun. A crew of five, including three mechanics, is carried. A crane with a six tonne (6.61 ton) lifting capacity is mounted at the rear of this vehicle.

AMX-10P 25 ICV. First shown in 1983, this version is the basic vehicle with the original turret replaced with the Dragar one-man turret, with an M811 25 millimeter cannon and a 7.62 millimeter machine gun coaxially mounted. A total of 220 rounds of 25 millimeter and 200 ready-use rounds of 7.62 millimeter ammunition is carried. Turret operation is electric and stabilization is optional. The gunner has four M336 periscopes and a day/night sight; a thermal imaging sight is optional. A crew of three plus eight infantrymen can be carried. An amphibious version has been developed; it is in use by Singapore.

AMX-10P Marine. This vehicle was developed for the Indonesian Marine Corps. This variant has the uprated (223.71 kilowatt, 300 horsepower) 6 F11 SRX engine with an emergency pneumatic starting system and other changes (anti-corrosion treatment, bilge pumps, a trim vane, watertight inlets and outlets) and other features needed to optimize the vehicle for marine operations. Water propulsion is by 30.5 centimeter waterjet units. The CIBI 50 turret with a 12.7 millimeter machine gun is fitted. Other turret options include the TLI 127 with an M2HB machine gun, the Dragar with the M811 25 millimeter cannon and a coaxially mounted 7.62 millimeter machine gun, and the TS 90 with the 90 millimeter F4 cannon and a 7.62 millimeter machine gun coaxially mounted. A crew of two plus 13 men are carried.

<u>AMX-10P Driver Training</u>. This is the driver training vehicle with the turret removed and replaced by an observation position for the instructor.

AMX-10P/RATAC. This model has no turret and is fitted with a RATAC pulse Doppler radar scanner. The RATAC (radar for field artillery fire) has four operating modes: ground surveillance; acquisition; angular deviation measurement; and automatic tracking. The radar is mounted on the forward portion of the vehicle on the right side. A crew of five is carried; vehicle height is 2.84 meters (9.32 feet).

AMX-10/HOT. This is the basic AMX-10P modified by removing the Toucan II turret and replacing it with a two-man Lancelot fully powered turret mounting for four ready-to-launch HOT missiles. An additional 14 missiles are carried in the hull. An M427 laser rangefinder, M509 telescopic sight, vision blocks and six periscopes are fitted to the turret. The CASTOR thermal imaging system can be optionally fitted. A crew of five is carried in this vehicle, which so far has been ordered only by Saudi Arabia.

<u>AMX-10/SAT</u>. Basically an AMX-10 PC command vehicle equipped with a gyroscopically stabilized theodolite, topographic survey theodolite, distance measuring equipment and a navigation system to yield an artillery survey vehicle.

AMX-10P/TMR 81. This version of the AMX-10 vehicle mounts the TMR 81 mortar turret and a SOPTAM fire control suite. The turret traverse is electric while the mortar can be elevated between 38° and 83°. A crew of three is carried.

AMX-10 TM. This model is designed to tow, deploy and support the DaimlerChrysler 120 millimeter MO-120-RT-61 rifled mortar. A six-man crew is carried, as well as 60 rounds of 120 millimeter ammunition. A Toucan I manually operated one-man

turret equipped with the M691 20 millimeter cannon and a 7.62 millimeter machine gun is fitted.

AMX-10P/120 millimeter Mortar. This vehicle integrates the DaimlerChrysler 120-RT-61 rifled mortar with the AMX-10P vehicle with the turret removed. The turntable-mounted mortar fires toward the rear.

<u>AMX-10 RAV</u>. This is an ammunition resupply vehicle for the 155 GCT self-propelled artillery system. A hydraulically operated crane is fitted to handle the pallets of ammunition.

AMX-10 VOA. This variant is based on the AMX-10 PC command vehicle; it has been modified for use as an artillery observation vehicle somewhat similar to the AMX-10 SAO. A crew of four is carried and the turret,

<u>Si units</u>
5.98 meters
2.83 meters
3.34 meters
14.8 tonnes

AMX-10 PAC 90. This version of the AMX-10 was developed primarily for the export market. Its application is fire support and anti-tank operations out to 1,700 meters (1,859 yards). The secondary applications include as an armored personnel carrier or reconnaissance vehicle, or for the transportation of anti-tank missile teams such as MILAN.

	SI units US units				
Caliber:	90 millimeters	3.54 inches			
Barrel length:	52 calibers-4.68 meters	52 calibers-15.35 feet			
Weight:	570 kilograms	1,254.17 pounds			
Effective range:	1,200 meters	1,312.33 yards			

The gun is equipped with a double baffle muzzle brake and thermal sleeve. The breech block is a 35° oblique sliding wedge type. The gun's recoil system is hydropneumatic. Twenty rounds of ammunition are carried; the load is usually 12 High Explosive Anti-Tank and eight High Explosive. Sixteen of the rounds are carried in the turret bustle.

The PAC 90's hull is the same as the base vehicle, with the fighting compartment and turret to the rear. The turret is of all-steel welded construction. Standard equipment in the turret includes an M563 telescopic sight, seven periscopes for the commander, five periscopes for the gunner, a ventilator, a 120 watt searchlight, and an 80 watt searchlight. Optional equipment includes 7.62 millimeter or 12.7 millimeter machine guns, a TVC 107 laser rangefinder, a Canasta low-light television and a day/night sight from the Societe d'Optique, Electronique et Mecanique. Other fire control system options are available. Up to four infantrymen can be carried in this vehicle; they enter

armed with a 7.62 millimeter machine gun, is fitted with additional day/night observation devices and target location equipment as well as a laser rangefinder. Additional radio equipment is also fitted.

AMX-10 TMC-81 Fire Support Vehicle. This version of the AMX-10, developed specifically for the export market, fits a modified AMX-10 PAC 90 turret (see below) to the basic chassis. The turret is fitted with the DaimlerChrysler CL 81 smoothbore 81 millimeter cannon with an elevation of +66° and depression of -7°; traverse is 360°, and all operations are manually controlled. A total of 108 rounds of ammunition is carried, along with a crew of four. Except for the following data, this vehicle is the same as the AMX-10P.

<u>US units</u>
19.62 feet
9.28 feet
10.96 feet
16.31 tons

The vehicle is basically an AMX-10P fitted with the TS 90 turret mounting a Giat 90 millimeter CS Super 90 gun, the specifications for which follow. The effective range figure is with High Explosive Anti-Tank ammunition. When firing Armor Piercing Fin Stabilized Discarding Sabot ammunition, the effective range is 1,700 meters (1,859.14 yards).

and leave the vehicle by a large ramp at the rear. This ramp is fitted with two doors, each with a firing port. Four periscopes are also fitted to the crew compartment.

AMX-10RC. A wheeled 6x6 variant of the AMX-10 was developed in 1970 in response to a French Army requirement for a replacement for the Panhard EBR vehicle. Prototypes were completed in 1971, and operational trials of the new vehicle were completed in 1977. The AMX-10RC became operational with the French Army in 1979. A crew of four is carried: commander, driver, gunner and loader.

The AMX-10RC is based broadly on the AMX-10P chassis including the automotive components. The 6x6 suspension system is hydropneumatic and can be adjusted by the driver to suit the terrain being covered. A centralized tire pressure system is fitted, as is a central lubrication system for the suspension. The vehicle is fully amphibious, with propulsion via waterjets.

The electro-hydraulically operated turret is in the center of the vehicle and is equipped with extensive day/night vision equipment and the COTAC fire control system with the M550 laser rangefinder from Compagnie Industrielle des Lasers and the M504 telescope and M553 bore sight unit from the Societe d'Optique, Electronique et Mecanique. For night engagements, a Thales (Thomson-CSF) DIVT 13 low-light electro-optic viewing system is integrated with the COTAC fire control system. Night vision components are from Sintra, and turret stabilization is from the Societe de Fabrication d'Instruments de Measure. The TK105 turret mounts the F2 (MECA) 105 millimeter gun which is designed specifically for light vehicles. Ammunition types include High Explosive Anti-Tank, High Explosive and Armor Piercing Fin Stabilized Discarding Sabot; 38 rounds are carried. A 7.62 millimeter machine gun is coaxially mounted. Air conditioning, heating, a vehicle navigation system, a nuclear, biological and chemical defense system and amphibious operating equipment are standard with this vehicle. In 1987, the AMX-10RC was offered with a new low recoil version of the 105 millimeter cannon.

<u>AMX-10RP</u>. In the late 1970s, an armored personnel carrier version of the AMX-10RC designated the AMX-10RP was developed. It was never sold and was eventually replaced by the AMX-10 RTT described below.

AMX-10RTT. First announced in 1983, the AMX-10RTT is an armored personnel carrier version of the AMX-10RC. Although similar to the AMX-10RC, the driver's compartment is forward on the left with the engine compartment on the right. A CIBI 12.7 millimeter weapon station is placed on top of the vehicle. A crew of three plus 10 fully equipped infantrymen are carried.

AMX-10RAA. At the 1981 Satory arms fair, another new version of the AMX-10RC, designated the AMX-10RAA, was revealed. This version of the AMX-10RC replaces the TK105 turret with a Societe d'Applications des Machines Motrices Sabre turret with twin 30 millimeter HSS-831A or KCB-B cannon with 300 rounds or ammunition for anti-aircraft use. Alternatively, the Thales (Thomson-CSF) Sabre turret fitted with twin 30 millimeter cannon with 1,200 rounds of ammunition can be fitted.

AMX-10RAC. The AMX-10RAC is the basic AMX-10RC with the original turret replaced with the TS 90 turret fitted with the CS Super 90 cannon. A crew of three is carried; other details of the CS Super 90 cannon, see "AMX-10 PAC 90" above.

 $\underline{AMX-10C}$ . This is a tracked version of the  $\overline{AMX-10RC}$ .

AMX-10RC TML 105. This version of the AMX-10RC was first made available in 1992. It mounts the TML 105 turret from Giat Industries. The 105 millimeter gun is compatible with NATO-standard 105 millimeter ammunition. The modular design turret can integrate a wide variety of sighting and fire control equipment.

All of the above versions of the AMX-10 are either available for purchase or in production for various customers, as detailed below.

**Note:** Details on the numerous turret/armament options for the AMX-10 family of vehicles are provided in Appendix II of this book.

Modernization and Retrofit Overview. Until late 1994, only a very few modernization and retrofit programs had been developed for any of the AMX-10 vehicles. One upgrade involved the integration of the enhanced Moteurs Baudouin 6 F11 SRX supercharged diesel engine in the French AMX-10RC inventory. Another has been the retrofit of higher rated HS 115 engines for the RC and other versions of the AMX-10.

In 1994, the French Army decided to implement a major modernization and retrofit program for its inventory of 325 AMX-10RC vehicles. This program was to include the following:

- Installation of the SAT VG4 thermal sight, replacing the earlier DIVT 13 and DIVT 16. An unspecified number of DIVT 16 installations were made for the French involvement in the Second Gulf War.
- The integration of appliqué armor on the hull and turret.
- Integration of an unspecified decoy system. This is in addition to the EIREL infrared jamming system fitted to the AMX-10RC vehicles for the Second Gulf War.
- The retrofit of the TML 105 turret mounting the G2 rifled 105 millimeter gun compatible with NATO-standard ammunition.
- The integration of a central tire pressure regulation system.
- The fitting of an automatic electronic control system for the gearbox.

The integration of these components will mean that the AMX-10RC will no longer be amphibious.

Early in 1999, Giat Industries developed a Kit Basique de Countre Mesures defensive aids system. The system has since been installed on an AMX-10RC which underwent trials in 1999. This upgrade includes

infrared jammers, a missile launch detector, four laser-warning detectors, a radar warning receiver, and the Galix system, capable of launching a variety of grenades. The system's man-machine interface can be tied in directly to the vehicle's existing combat system and databus. Development of this system was funded by the French Procurement Agency.

However, the above two programs were curtailed by funding problems, and in 2000 a modified upgrade program was implemented. This took the form of the integration of the SIT-V1 battlefield management system provided by the prime contractor Giat Industries and Matra Systemes et Information. Based on the FINDERS (Fast Information, Navigation, Decision and Reporting System) battlefield management system, the ST-V1 allows AMX-10RC vehicles to exchange and display battlefield information. Also being retrofitted is a microprocessor electro-pneumatic command system which interprets the driver's actions and controls the

engine and components. The turret is upgraded and fitted with the Galix protection system and PR4G radio. Under this program, Giat Industries is doing the turret-related work while the rest of the work is being undertaken in French Army workshops. The entire inventory is being upgraded, and the first vehicles were redelivered in 2002.

In 1998, Giat Industries proposed a modernization and retrofit for the AMX-10P. This kit would replace the HS 115 engine with an unspecified diesel engine with a higher power rating of 223.71 kilowatts (300 horsepower). Along with the new engine, an unspecified automatic gearbox would be fitted. A modern Dragar turret mounting a stabilized 25 millimeter cannon with a 7.62 millimeter machine gun coaxially mounted would be retrofit for enhanced firepower. Several options are offered for fire control equipment.

### **Program Review**

Background. In 1965, in response to a French Army requirement, the Atelier de Construction d'Issy-les-Moulineaux began development of a new tracked mechanized infantry combat vehicle/armored personnel carrier to replace the older AMX Véhicule Combat d'Infanterie, Véhicule Transport de Troupe, and Engin Blindé de Reconnaissance vehicles, all based on the long-lived AMX 13 light tank. The first prototypes, completed in 1968, were equipped with a Hispano-Suiza 186.5 kilowatt (250 horsepower) multi-fuel engine and a 20 millimeter cannon. After a design review, several major changes in the vehicle were ordered including a switch to a new two-man turret designated Toucan II and the dual-feed M693 20 millimeter cannon. The new vehicles were also slightly wider and higher than the AMX Véhicule Transport de Troupe for more internal room. After these changes were incorporated, the new vehicle was put into production by Atelier de Construction de Roanne as the AMX-10 in 1972. The first export sales followed shortly thereafter. In 1984, Giat Industries proposed, without success, the wheeled AMX-10RC to the United States Army for the 10,000-man light divisions.

Description. The hull is of all-welded aluminum construction with three compartments plus the two-man turret. The driver's and engine compartments are to the front with the troop compartment to the rear. The

gunner and commander sit in the turret; both are provided with hatches. The eight infantrymen have individual seats in their compartment. Their entrance and egress is via an electrically operated ramp at the rear. While the entire ramp is normally used, two doors are also provided in the ramp should they be needed.

The two-man Toucan II-powered turret is mounted in the center of the vehicle and slightly offset to the left. The commander has an M731 optical sight along with an external sight for direct fire. The gunner has an OB 40 day/night periscope, which can be replaced by a day-only M406 sight or an OB 37 image intensification sight.

The commander and gunner have seven periscopes affording a 360° field of vision. Two electrically operated smoke grenade launchers are mounted on each side of the turret. A PH 9A searchlight is also coaxially mounted. Standard fittings include firefighting apparatus in the engine compartment, nuclear, biological and chemical defense gear, and auxiliary amphibious equipment.

While the Toucan II turret comes standard with the M693 cannon, other 20 millimeter cannon such as the Rheinmetall DeTec Rh202 can be mounted, as can other turrets such as the one-man Toucan I equipped with similar cannon.

### **Funding**

Funding for the development and French procurement of the AMX-10 has been provided 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).

### **Recent Contracts**

Not available, as contractual information is not released.

### **Timetable**

This timetable is for all versions of the AMX-10.

<b>Month</b>	<u>Year</u>	Major Development
	1965	Development begun
July	1968	First two prototypes completed
Early	1970	Modified prototypes completed
	1970	AMX-10RC fabricated
July	1972	First production of standardized vehicle completed
February	1973	First production deliveries made
June	1977	AMX-10 ECH variant unveiled at Satory
	1978	AMX-10 PAC 90 announced
October	1979	AMX-10RC became operational
	1980	AMX-10 SAO production begun
November	1981	AMX-10 PAC 90 ordered by Indonesia
	2000	Marketing of RC version terminated
Mid	2002	Production dormant; low-rate marketing of P series continues

### Worldwide Distribution

Export Potential. The multi-faceted AMX-10 tracked and wheeled vehicle program is one of the main reasons for France's dominance in the light wheeled and tracked vehicle market. Historically, the program has been one of the best generators of foreign currency for France. The AMX-10 program, like the M3/Buffalo, AMX Véhicule Transport de Troupe, Véhicule de l'Avant Blindé, and so many other French programs, exemplifies the French military/marketing doctrine of maximum versatility from one basic vehicle design. And on the export market, of course, such a doctrine pays off handsomely, especially when selling to nations with minimal funding resources. The doctrine is especially beneficial when large sales, such as to Saudi Arabia, are made.

Countries. France currently operates 325 AMX-10RC vehicles and 1,225 AMX-10P vehicles in several variants.

The identified export customers and types of vehicles in service are as follows: **Greece** (69 AMX-10P, 23 AMX-10 PC, 6 AMX-10SAN), **Indonesia** (24 AMX-10P Marine, 10 PAC 90), **Iraq** (29 AMX-10P, 9 AMX-10/VLA, 7 AMX-10/VFA), **Morocco** (108 AMX-10RC), **Qatar** (6 AMX-10PC, 24 AMX-10P, 14 AMX-10RC), **Saudi Arabia** (201 AMX-10P, 156 AMX-10 PC, 17 AMX-10 VTT RATAC, 24 AMX-10PM120, 27 AMX-10SAN, 58 AMX-10 ECH and 92 AMX-10/HOT), **Singapore** (22 AMX-10P Marines, 22 AMX-10 PAC 90), and **United Arab Emirates** (8 AMX-10/HOT, 10 AMX-10P, 2 AMX-10 ECH and 3 AMX-10 PC).

#### **Forecast Rationale**

The marketing of the wheeled RC version of the AMX-10 was terminated in 2000. However, the tracked P line remains warm for new orders, and, indeed, this family of vehicles is still being promoted on the international export market. Furthermore, the French vehicles, except for the P series, are being kept up to par by the implementation of several modernization and retrofit programs, a trend that should continue among the non-French users.

At the same time, the contractor Giat Industries has been pushing the much newer and more capable Vextra

for some years now, and, more recently, the Véhicule de Combat d'Infantry program has been developed as a direct replacement for the AMX-10 family of vehicles. This program, covered separately in the Tab C of this book, should soon replace the AMX-10 entirely.

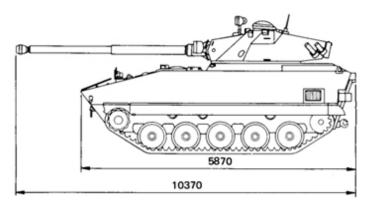
There is still interest in parts of Africa and Southeast Asia for the tracked AMX-10 vehicles. We therefore continue to forecast the sale of a few additional AMX-10 vehicles over the next several years.

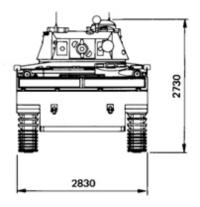
### Ten-Year Outlook

#### **ESTIMATED CALENDAR YEAR PRODUCTION**

			High Confidence Good Confidence Level Level				<u>ce</u>	<u>Speculative</u>					
Vehicle	(Engine)	through 01	02	03	04	05	06	07	08	09	10	11	Total 02-11
GIAT INDUSTRIES													
AMX-10 PAC 90 (a)	HS 115	44	0	0	2	4	0	0	0	0	0	0	6
AMX-10 RC (b)	HS 115	509	0	0	0	0	0	0	0	0	0	0	0
AMX-10P (c)	HS 115-2	1817	0	0	0	0	0	0	0	0	0	0	0
Total Production		2370	0	0	2	4	0	0	0	0	0	0	6

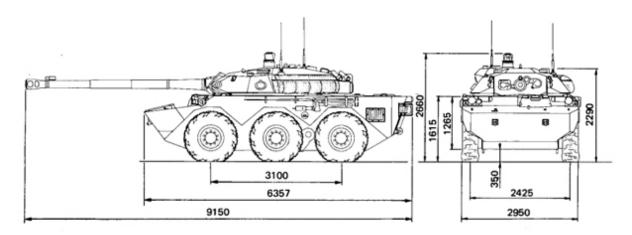
- (a) The through 2001 production includes two prototype and developmental vehicles.
- (b) The through 2001 production includes three prototype and developmental vehicles
- (c) The through 200
- 01 production includes seven prototype/developmental vehicles.





AMX-10 PAC 90

Source: Giat Industries



AMX-10RC

Source: Giat Industries