



Background: The Swiss Confederation was founded in 1291 as a defensive alliance among three cantons. In succeeding years, other localities joined the original three. The Swiss Confederation secured its independence from the Holy Roman Empire in 1499. Switzerland's sovereignty and neutrality have long been honored by the major European powers, and the country was not involved in either of the two World Wars. The political and economic integration of Europe over the past half century, as well as Switzerland's role in many UN and international organizations,

has strengthened Switzerland's ties with its neighbors. However, the country did not officially become a UN member until 2002. Switzerland remains active in many UN and international organizations, but retains a strong commitment to neutrality.

Geography Switzerland: Location: Central Europe, east of France, north of Italy. Area: total: 41,290 sq km. Area - comparative: slightly less than twice the size of New Jersey. Land boundaries: total: 1,852 km. Border countries: Austria 164 km, France 573 km, Italy 740 km, Liechtenstein 41 km, Germany 334 km. Climate: temperate, but varies with altitude; cold, cloudy, rainy/snowy winters; cool to warm, cloudy, humid summers with occasional showers. Terrain: mostly mountains (Alps in south, Jura in northwest) with a central plateau of rolling hills, plains, and large lakes. Elevation extremes: lowest point: Lake Maggiore 195 m, highest point: Dufourspitze 4,634 m. Natural resources: hydropower potential, timber, salt. Natural hazards: avalanches, landslides, flash floods. Geography - note: landlocked; crossroads of northern and southern Europe; along with southeastern France, northern Italy, and southwestern Austria, has the highest elevations in the Alps.

1954 Car, Armd, 4x4, Selbstfahrgeschutz, 90mm, MOWAG-AG.

1956 Truck, Utility, .25-Ton, 4x4, w/106mm RR, M38A1C.



Remarks: (see US for vehicle details).

1957 Carr, Wpns, Armd, Mortar, 4x4, MR 9-32

1957 Carr, Wpns, Carr, Armd, Rkt, 4x4, MOWAG

1958 Car, Armd, 4x4, Schutzen Panzerwagen, MOWAG

1958 Carr, Anti-Aircraft, Carr, 20mm, AA, 4x4, MOWAG

1958 Carr, Armd, 4x4, Schutzen Panzerwagen, MOWAG

1959 Car, Armd, 4x4, Car, Armd, MOWAG MR 8-01

1959 Car, Armd, 4x4, Panzerspahwagen, MR 8-23

1959 Carr, Wpns, Carr, Armd, 4x4, MOWAG

1960 Car, Armd, 4x4, MOWAG 8-09

1960 Carr, Wpns, MOWAG 8-30 (80mm Rkt)

1963 Carr, Armd, 4x4, Carr Pers, Amph, MOWAG

1964 Carr, Pers, Armd, 4x4. MOWAG Roland. Carriers were delivered to: Iraq (100) 1981, Peru (100)

1966 Carr, Pers, Armd, 6x6. MOWAG Puma 6x6

1969 Carr, Pers, Armd, 4x4. MOWAG Grenadier.

1973 Carr, Pers, Armd, 4x4. MOWAG Piranha 4x4 Mod 1973.



Remarks: Developed as part of the MOWAG Piranha family during the early 1970s, the 4x4 version failed to arouse any real interest. While the 6x6 and 8x8 versions went into quantity production for a number of different countries, it appears that only Liberia purchased an unknown number of 4x4 variants.

Physical Data: Weight empty, 12,841 lbs (5830 kg). Loaded, 15,419 lbs (7000 kg). Length, 207 in (5260 mm). Width, 98 in (2500 mm). Height, 73 in (1850 mm). Ground Clearance, 15.5 in (390 mm). Wheel Base, 98 in (2500 mm). Drive, 4x4. Armor, proof against NATO 7.62mm ball. NBC Protection, Vehicle over-pressure system. **Armament:** Main, Light machine gun as fitted. Elevation & traverse, manual. Fire Control, optical. Aux wpns, Individual. **Capacity:** Fuel, 72.5 gals (275 Liters) gasoline. Crew/Passengers, 2/7. **Engine:** Type, gasoline (later Detroit diesel). HP at Rev/Min, 190 hp @ 4,000 rpm. Location, right front. Cooling, liquid. **Transmission:** Chrysler manual (later Allison automatic) with 5-Fwd/1-Rev gear. **Suspension System:** Torsion bar and coil spring. Wheels Steerable, front pair. Turning Radius, 36.7 ft (11.2 m). No of wheels, 4. Tire Size, 11.00x16 runflat. **General Data:** Elec Voltage, 24 V. Intercom, yes. Night Vision Devices: Driver & Cdr, IR. **Performance:** Speed/Land, 62 mph (100 km/h). Speed/Water, 6 mph (9.5 km/h). Range, 466 miles (750 km). Fording Depth, amphibious. **Usage:** Only used by the Liberian Army, the MOWAG Grenadier and Roland were more successful vehicles in the 4x4 category. **Manufacturer:** MOWAG AG, Switzerland.

1973 Carr, Pers, Armd, 6x6. MOWAG Piranha 6x6

1973 Carr, Pers, Armd, 8x8. MOWAG Piranha 8x8. Switzerland delivered 18 Piranha IIIs to Spain in 2003/04.

1980 Carr, Pers, Armd, 4x4. MOWAG Piranha 4x4 Mod 1980.



Above: Piranha 4x4, no series production undertaken. (Photo: MOWAG AG)

Remarks: A further development of the original 1972 version of the Piranha 4x4, the engine had been changed to a diesel and the transmission to an automatic. Fittings and parts were common to the other Piranha series. Although the weight had gone up the vehicle still had basically the same range and speed as the original design. The 4x4 APC version didn't find any users and remained a prototype only.

Physical Data: Weight empty, 14, 758 lbs (6700 kg). Loaded, 17, 181 lbs (7800 kg). Length, 209 in (5320 mm). Width, 98 in (2500 mm). Height, 73 in (1850 mm). Ground Clearance, 19.8 in (500 mm). Wheel Base, 95 in (2420 mm). Wheel Tread, 86.5 in (2200 mm). Drive, 4x4. Armor, proof against 7.62mm ball. NBC Protection, vehicle over-pressure system. **Armament:** Light machine gun as fitted by user. Elevation & traverse, manual. Fire Control, optical. **Capacity:** Fuel, 53 gals (200 Liters) diesel. Crew/Passengers, 2/8. **Engine:** (1) Detroit Diesel V-6 (6V-53) liquid cooled engine producing 216 hp @ 2800 rpm. Location, right front. Cooling, liquid. **Transmission:** Allison MT-653 automatic with 5-fwd and 1-rev gear. **Suspension System:** Torsion bar and coil spring. Wheels Steerable, front pair. Turning Radius, 20.5 feet (6.3 m). No of wheels, 4. Tire Size, 11.00x16 runflat. **General Data:** Elec Voltage, 24 V. Intercom, yes. Night Vision Devices: Driver & Cdr, as fitted by user. **Performance:** Speed/Land, 62 mph (100 km/h). Speed/Water, 6 mph (9.5 km/h). Range, (700 km). Fording Depth, amphibious. Max Grade, 70%. Step, 19.5 in (500 mm). **Usage:** Prototype only. **Manufacturer:** MOWAG AG, Switzerland.

1981 Veh, Recce. MOWAG Spy 4x4.



Above: MOWAG Spy reconnaissance vehicle. (Photo: MOWAG A.G.)

Remarks: Developed from the Piranha 4x4, 6x6 and 8x8 program, the Spy was designed as a reconnaissance vehicle carrying three men rather than a small APC like the Piranha 4x4 with which it shared many parts and assemblies. Although different weapon stations could be fitted the view shown is the one-man non-powered turret with one .50 caliber and one 7.62mm machine gun fitted. It was also possible to fit a remote control 7.62mm turret, or a 20mm cannon. Provision was made for a variety of radio installations as well.

Physical Data: Weight empty, 12,995 lbs (5900 kg). Loaded, 16,520 lbs (7500 kg). Length, 178 in (4520 mm). Width, 98 in (2500 mm). Height, 65 in (1660 mm). Ground Clearance, 19.8 in (500 mm). Wheel Base, 98.5 in (2500 mm). Wheel Tread, 86.5 in (2200 mm). Drive, 4x4. Armor, proof against 7.62mm AP. NBC Protection, vehicle overpressure system. *Armament:* As fitted by user. Elevation & traverse, manual. Fire Control, optical. *Capacity:* Fuel, 53 gals (200 Liters) diesel. Crew, 3. *Engine:* (1) Detroit Diesel V8 producing 206 hp @ 3000 rpm. Location, right front. Cooling, liquid. *Transmission:* Allison AT-540 automatic with 4-fwd and 1-rev gear along with a 2-spd trnsf case. *Suspension System:* Type, torsion bar (rear), coil spring (front). Wheels Steerable, front pair. Turning Radius, 20.5 ft (6.3 m). No of wheels, 4. Tire Size, 11.00x16 runflat. *General Data:* Elec Voltage, 24 V. Intercom, yes. *Night Vision Devices:* Driver, Cdr, Gunner, as fitted by user. *Performance:* Speed/Land, 68 mph (110 km/h). Range, 435 mi (700 km). Fording Depth, 51 in (1300 mm). Max Grade, 60%. Step, 19.5 in (500 mm). *Usage:* Prototype only, no series production. *Manufacturer:* MOWAG AG, Switzerland.

1985 Car, Armd, 8x8. MOWAG Shark

1994 Carr, Wpns, MOWAG Piranha 10x10

1995 Veh, Recce, MOWAG Eagle.



Above: With the Danish contingent in Iraq. 10 vehicles were delivered to Denmark in 1996.

1997 Veh, Cmd, ACV, 10x10, Piranha III.

2003 Carr, Pers, Armd, 4x4. Mamba Mine-Protected Vehicle. South Africa delivered nine of these vehicles in 2003 to support Swiss efforts with the UN (see South Africa for vehicle details).

2004 Veh, Recce, MOWAG Eagle IV.



An additional order of cars was made by Denmark; the Mk IV using a DURO chassis (also built by MOWAG).