



Flag description: two vertical bands of red (hoist and fly side, half width), with white square between them; an 11-pointed red maple leaf is centered in the white square; the official colors of Canada are red and white.



Canada Background: A land of vast distances and rich natural resources, Canada became a self-governing dominion in 1867. Economically and technologically the nation has developed in parallel with the US, its neighbor to the south. Canada's paramount political problem is meeting public demands for quality improvements in health care and education services. Canada also faces questions about integrity in government following revelations regard-

ing a corruption scandal in the federal government that has helped revive separatists in predominantly francophone Quebec.

Geography Canada: Location: Northern North America, bordering the North Atlantic Ocean on the east, North Pacific Ocean on the west, and the Arctic Ocean on the north, north of the conterminous US. Area: total: 9,984,670 sq km. Area - comparative: somewhat larger than the US. Land boundaries: total: 8,893 km. Border countries: US 8,893 km (includes 2,477 km with Alaska). Coastline: 202,080 km. Climate: varies from temperate in south to subarctic and arctic in north. Terrain: mostly plains with mountains in west and lowlands in southeast. Natural resources: iron ore, nickel, zinc, copper, gold, lead, molybdenum, potash, diamonds, silver, fish, timber, wildlife, coal, petroleum, natural gas, hydropower. Natural hazards: continuous permafrost in north is a serious obstacle to development; cyclonic storms form east of the Rocky Mountains, a result of the mixing of air masses from the Arctic, Pacific, and North American interior, and produce most of the country's rain and snow east of the mountains. Geography - note: second-largest country in world (after Russia); strategic location between Russia and US via north polar route; approximately 90% of the population is concentrated within 160 km of the US border. (CIA World Factbook)

Military Notes: Canada is currently (2007) active with other NATO countries in Afghanistan.

1914 Car, Armd, 4x2. Case Armoured Car.



1914 Car, Armd, 4x2. Autocar UF21 MG Carr.

1915 Car, Armd, 4x2. Packard Mod 1915 (made in USA for Canada)

1915 Car, Armd, 4x4, Russell (aka) Jeffery Quad AC, (see US (Jeffery Quad) for vehicle details).

1915 Veh, Recce, 4x2. Russell-Knight. Armored sedan.

1916 Carr, Wpns, Carr, Machine gun, Motor.

1939 Car, Armd, 4x2. Hamilton.

Remarks: Experimental car based on a US International Harvester Corporation (IHC), chassis. Engine was at the front and the design included a six-sided turret. No series production.

1941 Car, Armd, 4x4. Hamilton Bridge Ford Wheeled Tank.



Above: The single completed Hamilton Bridge Wheeled Tank. The two spares were mounted on free wheeling hubs to help keep the vehicle from being "high-centered". (Author's Collection).

Remarks: In 1941, one pilot vehicle of a 4x4 armored car was produced by the Hamilton Bridge Company using a Canadian Ford rear engine chassis. At first listed as a Wheeled Tank, had development continued it would have been changed to a reconnaissance vehicle. As it was, any further work was diverted to the development of the GM Chassis based Fox armored car.

Vehicle Data: Weight loaded, 13,200 lbs (5993 kg). Length (est), 170 in (4318 mm). Width, (est), 86 in (2184 mm). Height (est), 90 in (2286 mm). Wheel Base, 101 in (2565 mm). Drive, 4x4. Armor, n/a soft steel. NBC protection, individual. **Armament:** (1) 2-pdr (proposed) and (1) .30 cal. LMG. Elevation & traverse, power (proposed). Fire control, optical. Aux wpns, crew sidearms. **Capacity:** Fuel, gasoline. Crew, 3. **Engine:** Ford gasoline V8 producing 95 hp (70 kW) @ 3600 rpm. Location, rear. Cooling, liquid. **Transmission:** Type, manual. Speeds Fwd/Rev, 4/1. Mfr, Ford. **Suspension System:** Coil & leaf-spring. Wheels steerable, front axle. No of wheels, 4 (spares center mounted). Tire size (est), 9.00x16. **General Data:** Elec Voltage, 6V. **Performance:** Speed/Land, 55 mph (88.5 km/h). Range, 300 mi (483 km). **Usage:** Prototype only, no production. **Manufacturer:** Hamilton Bridge Company, Canada.

1941 Car, Armd, 8x8. Ford (Canada) Wolf.



Above: The single Wolf armored car, only the RAM I turret with 2-pounder gun was fitted. (Photos: Author's Collection)

Remarks: The development of the Wolf arose from an August 1940 proposal by the Dept. of Munitions and Supply. DM&S was concerned that Canada might lack the heavy-engineering capacity required to produce tracked vehicles and that rather than build tanks they should take advantage of Canada's auto-motive industry to build "wheeled tanks" instead. Two designs were commissioned from Ford, a 4x4 with two extra floating wheels completed in late 1940 and quickly consigned to oblivion by the Canadian Army, which opted for the GM Fox I. The other was to be 8x6 (again with two extra floating wheels - DM&S had engaged the services of an exiled French Colonel, J. Martin-Prevel, who claimed to have experience designing AFVs. The Wolf grew into a 8x8 with eight-wheel steering. As there was no firm requirement the project was canceled in May 1942.

Vehicle Data: Weight empty, 32,000 lbs (14,528 kgs). Length, 228 in (5791 mm). Width, unk. Height, 96 in (2438 mm). Wheel base, 150 in (3810 mm). Drive, 8x8. Armor, .12 to 1.7 in (3 to 43.75 mm). NBC protection, individual. **Armament:** (1) 40mm (2-pounder). Elevation & traverse, manual. Fire control, optical. Auxiliary wpn, (1) .30 cal LMG. **Capacity:** Fuel, gasoline. Crew, 5. **Engine:** (3) liquid-cooled, Mercury, gasoline engines producing 283 hp (209 kW). Location, rear. **Transmission:** Manual with 4-forward and 1-reverse gear. **Suspension System:** Leaf spring. Wheels steerable, 8. Turning radius, 19 ft 6 in (5.9 m). No of wheels, 8. Tire size, 10.50x20. **General Data:** Intercom, yes. **Performance:** Speed, 45 mph (72 km/h). Range, 250 mi (402 km). **Usage:** Only one Wolf was completed. **Manufacturer:** Ford of Canada.

1942 Car, Armd, 4x4, GM (Canada) Fox Mk 1

1942 Veh, Recce, 4x4, GM Otter Mk 1.



Above, Otter Mk I in NW Europe with a full load of kit. (Photo: Author's collection)

Remarks: The Canadian Otter Mk I was developed as an alternative to the British Humber Light Recon-naissance Car, Mk III. A closed 4x4 vehicle, the Otter carried a crew of three in an armored compartment mounted on a front engine chassis designed by General Motors for road and cross country operations. During operations the driver and vehicle commander usually occupied the front seats (driver on the right, commander on the left while facing forward) with the gunner in a small open topped turret which could be manually traversed through a full 360 degrees, while the weapon itself was fitted in a spring loaded combination AA or ground mount. An armored truck was also made from the same basic design.

Vehicle Data: Weight empty, 9,700 lbs (4404 kgs). Weight loaded, 10,961 lbs (4976 kgs). Length (OA), 177 in (4496 mm). Width (OA), 85 in (2159 mm). Height (OA), 96 in (2438 mm). Ground clearance, 8.75 in (222 mm). Wheel base, 101.5 in (2578 mm). Wheel tread, 71 in (1803 mm). Drive, 4x4. Armor: Front .47 in (12 mm). Sides, .24-.32 in (6-8 mm). Rear .24, .32 & .39 in. (6, 10 & 12 mm). Top .47 in (12 mm). Engine .24-.32 in (6-10 mm). Hull .32 in (10 mm). NBC protection, individual. **Armament:** (1) BREN .303 cal LMG & (1) .55 cal. BOYS AT rifle. Elevation & traverse, manual. Fire control, optical. **Capacity:** Fuel, gasoline 32 (US) gals (121 liters). Crew/Passengers, 3. Cargo, Vol/Weight, 1,648 lbs (748 kg). **Engine:** Type, gas. HP at Rev/Min, 104 hp (77 kW) @ 3000 rpm. Model, GM 270, 6-cyl. Location, front. Cooling, liquid. **Transmission:** Manual with 4-fwd and 1-Rev gear. **Suspension System:**

Leaf spring. Wheels steerable, front axle. Turning radius, left 47 ft 11 in (14.6 m), right 49ft (15 m). No of wheels, 4. Tire size, 9.00x16. **General Data:** Elec Voltage, 12V. Radio, No. 19 W/T. **Performance:** Speed/Land, 45 mph (72.5 km/h). Range, 260 mi (418 km). Forging depth, 24 in (610 mm). Max grade, 46 %. Trench crossing, sand channels. **Usage:** 1761 Otter I Mark I were produced by 1944. Used by Great Britain, Canada, Aden, Belgium, France, Greece, Indonesia, Israel, Jordan, Netherlands, South Vietnam, and Syria. (Vehicle sometimes operated without turret). **Manufacturer:** General Motors of Canada, Ltd., (Hull) Hamilton Bridge Company.

1942 Carr, Wpns, Carr, 4x4, Gun, 6 lb.

1943, Car, Armd, 4x4. T17E1 Staghound.



Above: T17E1 Staghound of the 12th Manitoba Dragoons in England, 1943. (Photo: Canadian Photo Archives)

Remarks: Canadian Staghounds came from the British Lend-Lease order, only one vehicle was delivered directly to Canada as part of Lend-Lease to that country (see US for vehicle details).

1943 Veh, Recce, 4x4, Car, Scout, Ford Lynx I

1943 Veh, Recce, 4x4, Car, Scout, Ford Lynx II.

1943 Carr, Wpns, 4x4, Artillery, SP, 2-Pdr.

1943 Veh, Util, Truck, 15-cwt, 4x4, Armd (GM C15TA)



Above: Canadian GM 15-Cwt armored truck in Northern Europe, 1944. (Photo: Canadian Photo Archives)

1944 Car, Armd, 6x6. M8 Light Armored Car.

Remarks: A total of four M8s were delivered directly to Canada from US stocks as part of the Lend-Lease program by the end of 1946 (see US for vehicle details).

1944 Veh, Recce, 4x4, Car, Scout, 4x4, Universal.

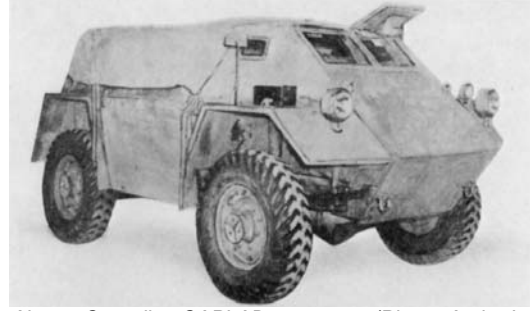
1944 Veh, Recce. Humber LRC 4x4.



Above: Canadian Humber LRC in NW Europe. (Canadian Official)

Remarks: (See UK for Humber LRC details).

1944 Carr, Pers, Armd, 4x4. Car, Armored, CAPLAD.



Above: Canadian CAPLAD prototype. (Photo: Author's Collection)

Remarks: Design started as a wheeled armored universal vehicle (Car, Armored, LAD) or Ambulance or Demolition. Vehicle was based on the Canadian Fox armored car with a GM chassis (there was a British (Ford) and Canadian (GM) version). Development stopped with the ending of WWII.

1952 Truck, Utility, 1/4-ton, 4x4, M38A1



Above: Canadian M38A1 with .50 caliber HMG during firing exercise in 1960. (Photo: Author's Collection)

Remarks: Canadian military jeeps were built by Ford of Canada (see US for vehicle details).

1960 Truck, Utility, 1/4-Ton, 4x4, w/106mm RR, M38A1C.

Remarks: (see US for vehicle details).

1962 Truck, Utility, 3/4-ton, 4x4, M37CDN.



Remarks: During the early 1960's tests were carried out on using the M37CDN as the base carrier for a set of French designed SS11 anti-tank missiles. This project was canceled in favor of the ENTAC missile system. Approximately 4500 M37CDN utility vehicles were completed between 1951 and 1955. (see US for vehicle details)

1965 Truck, Utility, 1/4-Ton, 4x4, M38A1 w/ENTAC Anti-Tank Missiles.

Remarks: These missiles were set up to fire along the forward portion of the vehicle.

1978 Carr, Pers, Armd, 6x6. MOWAG Cougar Fire Spt Veh.



Above: Canadian Cougar on exercise with Reserve component soldiers during an exercise. (Photo: CFC)

Remarks: The Cougar series of vehicles was withdrawn from service circa 2004.

1980 Car, Armd, 8x8. LAV-25

1980 Carr, Pers, Armd, 6x6. GM (Canada) Grizzly

1994 Carr, Pers, Armd, 8x8. GM Bison.



Above: Canadian Bison in Afghanistan circa 2006. (Photo: CFC)

1994 Carr, Wpns, GM Bison (Mortar Carr)

1994 Veh, Util, GM Bison (Recovery Veh).



Above: Canadian Bison Recovery Vehicle in Afghanistan circa 2006. (Photo: CFC)

1995 Veh, Recce, GM LAV Coyote 8x8.



Above: Circa 2002, a Coyote reconnaissance armored vehicle of the Lord Strathcona's Horse (LdSH) "B" Squadron, passes through the city of Kijuc, Bosnia-Herzegovina. (Photo: CFC)

1995 Carr, Pers, Armd, 8x8. GM MOWAG Piranha 8x8 (Cdn/Switz).

1998 Car, Armd, 8x8. LAV-III.

Remarks: As of 2005 the LAV-III was no longer in production and parts were beginning to become a problem in 2007 when it became necessary in Afghanistan to replace lost vehicles from existing stocks rather than trying to rebuild damaged vehicles.

1999 Car, Armd, 8x8. LAV III w/105mm LPT

2000 Car, Armd, 8x8. LAV III w/25mm turret.



Above: Lord Strathcona's Horse (Royal Canadians) Light Armoured Vehicle (LAV III). (Photo: CFC)

2003 Carr, Pers, Armd, 4x4. RG-31 Mine-Protected Vehicle.

Remarks: South Africa delivered at least one of these vehicles to Canada in 2003 for use in Afghanistan. As of 2007 these vehicles were all wearing out and in need of rebuild and/or replacement (see South Africa for vehicle details).

2006 Carr, Pers, Armd, 4x4. RG-32 Nyala.



Above: RG-32 Nyala in service with Canadian Forces in Afghanistan as of 2007. (Photo: CFC)