

NZAR ID 165, Arm Type: AFV, Date: (V2) 24 March 2012, Compiled by : Phil Cregeen

Pattern (name): Tank, Light M3/ M3A1/ M3A3/Hybrid, (Stuart Mk 1, 111, V)

Introduced into NZ Service: November 1941, **Withdrawn** 1952 -70

Crew: 4 (commander/gunner, driver, loader, spare driver/hull gunner), **Battle Weight:** 12.5 tons

Length: 14 ft 10in. **Width:** 7 ft 4 in. **Height:** 8 ft 3 in.

Guns: One 37 mm , 5 x .30 in. Browning MG (1 coax, 3 hull/sponson, 1 AA)

Armour: 44 mm to 16 mm, **Engine:** Continental W970-9A radial petrol, 7 cylinder, 250 hp.

Max Speed: Road 36 mph, **Range:** 70 miles



The **M3 Stuart**, formally **Light Tank M3**, was an American light tank of World War II and supplied to British and Commonwealth forces under lend-lease prior to the entry of the U.S. into the war—and used thereafter by U.S. and Allied forces until the end of the war. Allied light tanks had to be given cavalry and infantry fire support roles since their main cannon armament could not compete with heavier enemy AFVs.

Production of the vehicle started in March 1941 and continued until October 1943. The M3 was armed with a 37 mm M5 gun and five .30-06 Browning M1919A4 machine guns: coaxial with the gun, on top of the turret in an M20 anti-aircraft mount, in a ball mount in right bow, and in the right and left hull sponsons.

M3 (British designation "**Stuart I**"). 5,811 vehicles were produced. 1,285 M3s had Guiberson diesel installed and were called "**Stuart II**" by British. Late production M3s were fitted with turret developed for M3A1, though without turret basket. These tanks were dubbed "**Stuart Hybrid**".

M3A1 (Stuart III). 4,621 were produced from May 1942 to February 1943. New turret with turret basket and no cupola. Gun vertical stabilizer installed. Sponson machine guns were removed. M3A1s with Guiberson diesel were called "**Stuart IV**" by British.

M3A3 (Stuart V). 3,427 produced. Put into production to integrate hull improvements brought by the M5 into the M3 series. Turret with rear overhang to house radio. Welded hull with sloped armor, 20° in from the vertical, on front and sides.



New Zealand Service

Overseas: In North Africa the first Stuarts issued to New Zealanders were four recaptured from the Afrika Corp and given to C Squadron of the 3rd NZ Division Cavalry Regiment on 27 November 1941 during the relief of Tobruk. In July 1942 the Cavalry received 15 Stuarts which stayed with them until the Tunis campaign was finished in April 1943.

Following the battle for Casino in Italy, about May 1943, the Reconnaissance Troop of each armoured regiment of the 4th NZ Armoured Brigade replaced their Lynx Scout cars with Stuart Mk V Light Tanks. The normal mix of these tanks was three turreted versions and eight turretless recce versions. Stuarts remained with the Brigade until August 1944.

At Home: Due to slow deliver of tanks from the UK Stuart were obtained from the USA. The first 24 Stuarts M3s arrived in New Zealand from the USA in June 1942, but without any documentation. It was also found that they contained a number of serious deficiencies being a transition from the M3 to M3A1 version of the tank, consequently it was termed the Stuart Hybrid. It was therefore necessary for the NZ army to carry out a number of modifications in order to make the tank ready for combat, a process that lasted well into 1943. Subsequent deliveries contained the M3A1 and continued through to July of 1943 with a total of 401 tanks received by that date. The Stuart tanks initially equipped the Tank Brigades but later some were transferred to Mounted Rifles, having been replaced by Valentines.

Towards the end of the war the Stuarts were becoming surplus to requirement and at one stage in 1945 it was intended to ship all 401 tanks to India, however this was later cancelled. The Stuart soldiered on forming one squadron in each of the new armoured regiments formed in 1944, however they were eventually disposed of in favour of the Valentine. In 1952 the first 300 were sold for scrap. A number of Stuarts were modified for new roles such as gun tractors for the 17 pdr (1), APCs (13), armoured recovery vehicle(1), the latter remaining in service until 1970.

Acknowledgements:

2nd NZ Divisional Cavalry Regiment in the Mediterranean by J Plowman & M Thomas

4th NZ Armoured Brigade in Italy by J Plowman & M Thomas.

Armoured Fighting Vehicles of New Zealand 1939-59 by J Plowman & M Thomas

Photos <http://kiwisinarmour.hobbyvista.com>

http://en.wikipedia.org/wiki/M3_Stuart