



# NEW ZEALAND ARMED CONSTABULARY FORCE RE-ENACTMENT SOCIETY INC. A Living History Organisation



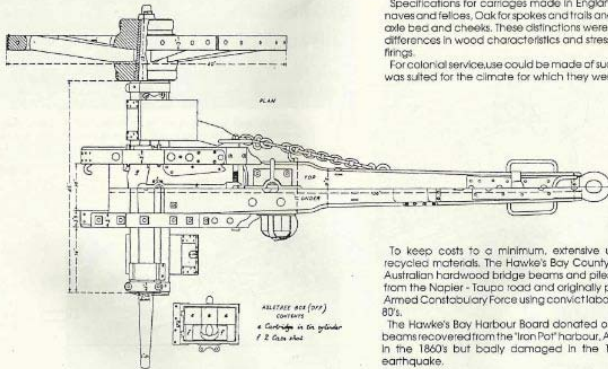
30 years 1982-2012 30th Anniversary Celebrations Pictorials Part 2 Armstrong Guns Manufacture Aug-Dec 1983 Boyd Bicentennial 1809/10-2009/10

Number One Division New Zealand Armed Constabulary Force akin to an Army, was raised in Hawkes Bay in October 1867 to put down rebellion and quell disturbances. After the war's end in 1872, the Armed Constabulary assumed a frontier policing role until 1877 and then as a Field Force Reserve until 1886. The re-enactment society was founded in 1982 to perform in Guards of Honour, Gun Salutes, Parades and Tattoos on special occasions. Using authentic uniforms and costumes, horse drawn Armstrong Field Guns, Coehorn Mortars and Snider Rifles, the NZACFRS creates realistic impressions of bygone days.

The making in 1982 of the New Zealand Epic motion picture "UTU" and involvement by 70 members of the Hawke's Bay Black Powder Club, Inc., acting as the Armed Constabulary, followed by a guard of honour and gun salute for the Governor General at the film's World Premiere in Napier, led to the formation of the New Zealand Armed Constabulary Force Re-enactment Society as a section of the Club.

In August 1983 NZACFRS members obtained c1860 Armstrong gun plans from the Royal Artillery Institution, England. They contracted each other to help manufacture five full size Six Pounder Armstrongs and Limbers, and four full size 12 Pounder Armstrongs and Limbers similar to those used by the Artillery Unit of the New Zealand Armed Constabulary Force c1869.

## FIELD CARRIAGE FOR 12 POUNDER ARMSTRONG GUN - APPROVED FEBRUARY 28, 1860



### MATERIALS

Specifications for carriages made in England required Ash for maces and felloes, Oak for spokes and trails and Oak or Elm for the axle box and cheeks. These distinctions were made because of differences in wood characteristics and stresses caused by gun firings.

For colonial service use could be made of such foreign wood as was suited for the climate for which they were intended.

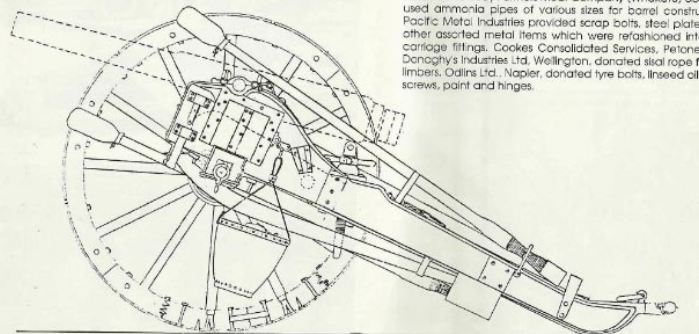
To keep costs to a minimum, extensive use was made of recycled materials. The Hawke's Bay County Council donated Australian hardwood bridge beams and piles, some recovered from the Napier - Taupo road and originally put in place by the Armed Constabulary Force using convict labour in the 1870s and 80s.

The Hawke's Bay Harbour Board donated old wharf piles and beams recovered from the 'Iron Pot' harbour, Ahuriri, constructed in the 1860s but badly damaged in the 1931 Hawke's Bay earthquake.

Plan depicting under and over details for 12 Pounder Armstrong gun field carriage

The Royal Artillery Institute, London.

## FIELD CARRIAGE FOR 6 POUNDER ARMSTRONG GUN - APPROVED AUGUST 31, 1861



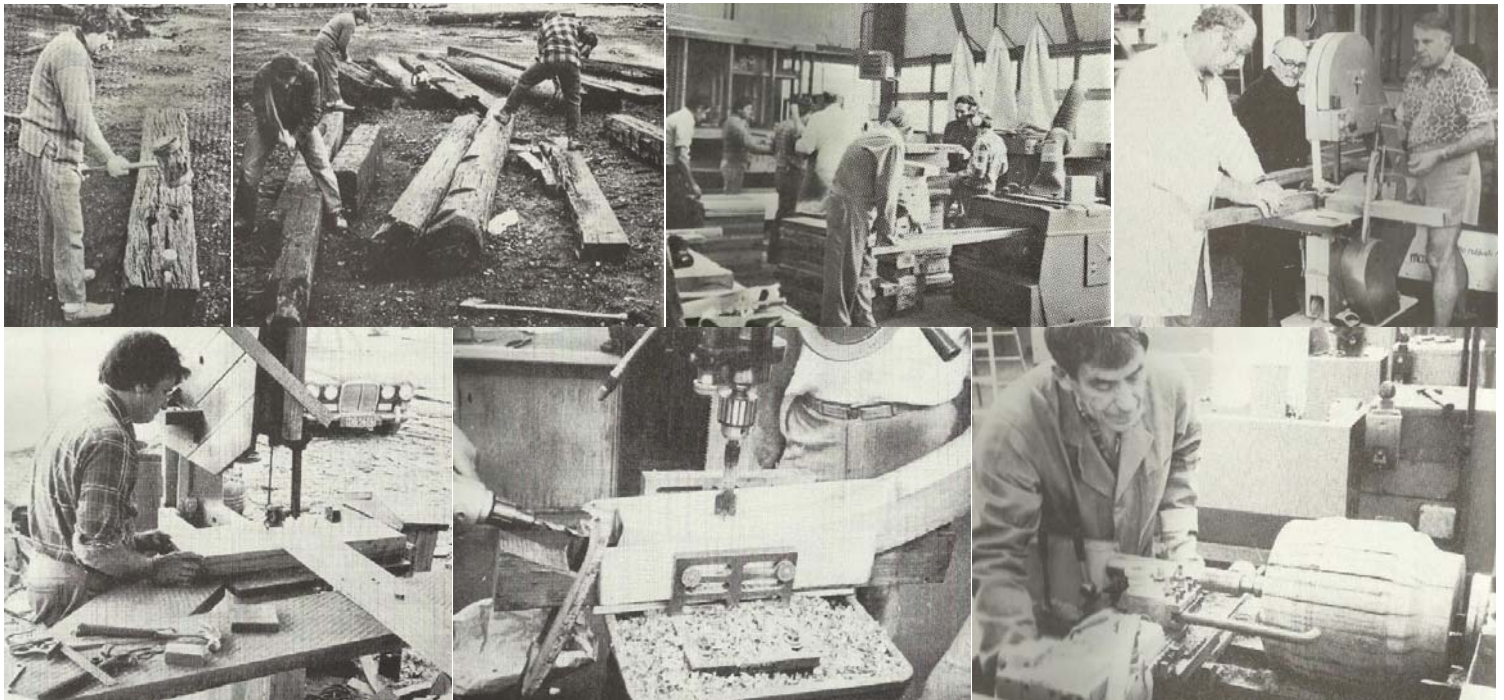
Some mollusc (sea borer) holes have been left showing in the gun carriage components. Other used hardwood piles were purchased of nominal cost (\$10 each) from the Hawke's Bay Electric Power Board.

The trunk of an Oak tree planned in the 1870s, felled in 1984 to make way for road widening on the Hawke's Bay Community College Otakara campus, became cheeks.

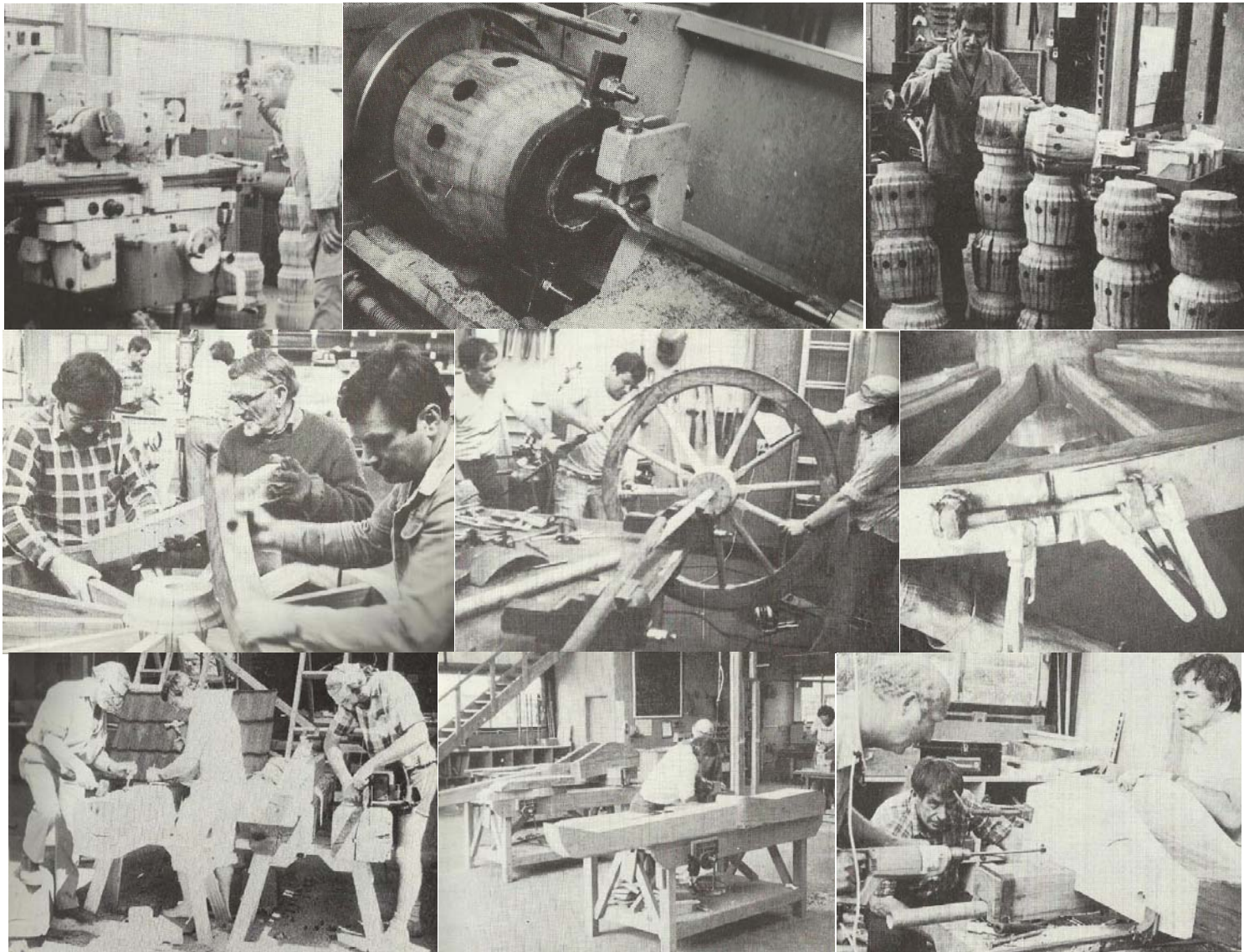
The Hawke's Bay Farmers Meat Company (Whakatu) donated used ammonia pipes of various sizes for barrel construction. Pacific Metal Industries provided scrap bolts, steel plates and other assorted metal items which were refashioned into gun carriage fittings. Cookes Consolidated Services, Petone, and Donaghy's Industries Ltd, Wellington, donated steel rope for the limbers. Odins Ltd, Napier, donated tyre bolts, linseed oil, nails, screws, paint and hinges.

Plan depicts part of the original plan of field carriage for 6 pounder Armstrong gun c1861

The Royal Artillery Institute, London.







## LIMBER

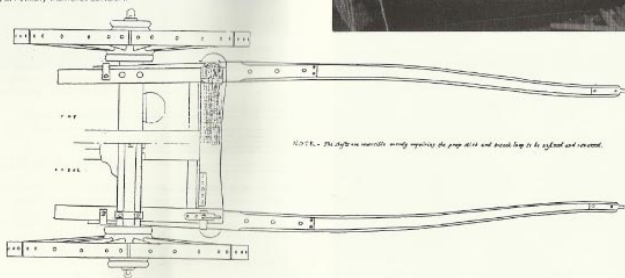
Wheels for the limber and gun carriage are interchangeable. The only limber components that presented a problem were the shafts. Not only to find a suitable strong knot-free wood but also one we could afford.

Permitted limbers Ltd again came to the rescue, offering to supply and mill to our requirements at reasonable costs, an old Tanekeha trunk which had been fire damaged. From it enough timber was salvaged for our needs.

Right: Fred Tasker bandsaws a shaft for a 6 Pounder Armstrong limber from a Tanekeha trunk.

## PLAN OF 6 POUND ARMSTRONG LIMBER C 1860

The Royal Artillery Institute, London.

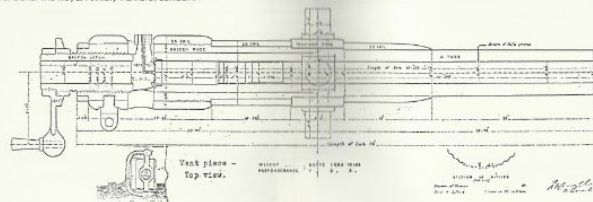


## BARRELS

Armstrong fabricated barrel design, approved for British field service in November 1858, utilized a steel inner tube rifled with a large number of shallow rifling grooves. Ribbons of wrought iron were wound into hoops, fire-welded together and shrunk on around the steel barrel, placing it under compression and building the barrel's hardness and strength. Its gun was breech-loaded, the rear of the barrel being closed by a 'vent piece' (breech block) dropped in and clamped in place by a large breech screw, having a hole through it for loading and cleaning.

The Hawke's Bay Ironworks & Steel Company Ltd, Whakatapu, donated scrap steel tube of various sizes from which we were able to fabricate barrels to look essentially like Armstrongs. The very strong seamless inner tube we used was all that was required to withstand the low pressure generated by firing blank charges. Pacific Metal Industries Ltd, of Napier, donated some scrap steel blocks (ex New Zealand Railways), from which we made breech blocks.

Below: Plan of a 12 Pounder Armstrong barrel showing the various parts and dimensions. The Royal Artillery Institute, London.



Above: Jim Green and Mark Penner work on parts for 6 Pounder Armstrong barrels.



Above: Bill Atkinson bevels a tubular section for a 6 Pounder. In the foreground are partly constructed 12 Pounder Armstrong barrels.

Top right: Before the 1st regimental dinner.

Bottom right: Table set for sixteen.

## REGIMENTAL DINNER

By mid-November 1983 three months after the start of the project the 6 Pounder Armstrongs were starting to take shape. Excuse enough to hold our first Regimental Dinner for the construction team and their wives. Little research had been done on uniforms and accoutrements, hence the variation in hats, belts and breeches shown in the photo at right. This was taken in the twilight in Te Awanga, posed by the nine principal members of the gun-making team.



## FIRST ENGAGEMENTS

On Saturday December 10 1983 20,000 people lined the streets of Napier to witness the first Christmas Parade in that city for almost 30 years. The parade was led by The Armed Constabulary Force Re-enactment Society and the Battery of nine Armstrong guns. Although the guns and limbers were not fully completed the six Pounders were manhandled by two men between the shafts of each limber. Some of the wives dressed in colonial garb c1860s rode on limber frames.

Twelve Pounder Armstrong guns were too heavy to manhandle and there had not yet been time to locate and train horses or consider harness. Our Twelve Pounders were towed by cars following the six Pounders.

Top right: Anne Osborne has an enjoyable but bumpy ride seated on a limber, followed by the authors pulling the next. The Commissioning Dinner and Dance for the Armstrong guns and limbers was held at the Napier Cosmopolitan Club that evening.

Bottom right: Marine Parade, Napier.

Below: NZAFRS Ladies and Children on horse drawn waggons.





## GUN SALUTE

At the official opening of the Colonial Section's exhibition area of the Hawke's Bay Art Gallery and Museum on Sunday December 11, 1983 a full muster of NZACFRS paraded. Members provided a guard of honour and fired a rolling volley and fusillade from original Snider Enfield carbines and rifles. This was followed by an 18 gun salute fired from the five 6 Pounder Armstrongs, bringing alive a period of early New Zealand history as never before. A 'Colonial Afternoon Tea' in the museum for the public further enhanced the atmosphere created by the guns.

Top right: The first bang of the 18 gun salute was another satisfying moment for the construction team. After four months of hard and sometimes tedious work the day to put them to use had arrived. Several hundred people witnessed the display, including some sponsors, and were favourably impressed.

Bottom right: Before the salute.

Below: Napier Mayor, Dave Prebensen, inspects members of the NZACFRS before witnessing the salute. The nine Armstrongs occupied almost 100 metres of Marine Parade. In the distance are the 12 Pounders.



## HORSES AND HARNESS

Several NZACFRS members had previous experience with riding or harness horses. Local clubs were contacted. One club member indicated that he could provide at least five horses with harness. When finally he arrived to see our long-shafted heavy limbers and articulated wide-wheeled gun carriages he reacted with an emphatic 'you'll never get a horse to pull THAT!'

Crestfallen but undefeated - and less than seven weeks until parade day - we began again the task of finding suitable horses and harness. Because of size and colouring the ideal horse was decided as a Standard breed harness racehorse; but finding these with a quiet nature seemed impossible.

After trialing over 30 horses, all supposedly harness-trained, we ended up with two retired Standard breed ex-harness racehorse mares, a mother and daughter. Bruce Adrian and John Osborne retrained them with the assistance of Trevor Pallison, a local farmer and horseman. Wayne Valler spent time training a back-country farm hack he'd located. Lyn Bliss, a keen Te Awanga horse-woman, harness trained from scratch her young Appaloosa gelding, Kit. Jim Webb harness-trained the family riding mare, Pudd.

Simultaneously the design and manufacture of harness to fit any horse was undertaken. British Royal Horse Artillery harness plans formed the basis. Instead of leather, three sizes of discarded fire hose donated by the New Zealand Fire Service, Hastings Branch, became the material.

John Osborne designed saddles using steel liners able to support shafts, bracing straps and rein guide rings. Sloans Saddlery and Canvas Company of Waipukurau contributed skill in the making up, padding and reinforcing the pieces as needed. Cost was a minimal \$130 per set, including trace chains and linkage.

## HASTINGS CENTENNIAL

On February 4, 1984 Hastings celebrated its Centenary. Week long festivities began with a 120 float parade through the city, later described as 'The Cavalcade of the Century'. In it, two drummer boys and Trevor Belcher led five horse-drawn NZACFRS 6 Pounder Armstrongs accompanied by 22 Armed Constabulary. A flat deck waggon pulled by draught horse, Ben, followed. On it were ladies and children in c 1860s colonial dress. Three horse riders similarly garbed brought up our rear.

During the march, balloons, wind-blown paper, wandering dogs, trick cyclists, noisy clowns and the general razzmatazz proved too much for several horses, including our outriders at the rear. Careful selection and training of our horses proved its worth. They seemed to enjoy it all, responding well to rein commands and Trevor Belcher's lusty cries of 'Hold-up' or 'Forward' when brief delays occurred. Hand clapping and cheers measured the appreciation of the huge crowd of spectators.

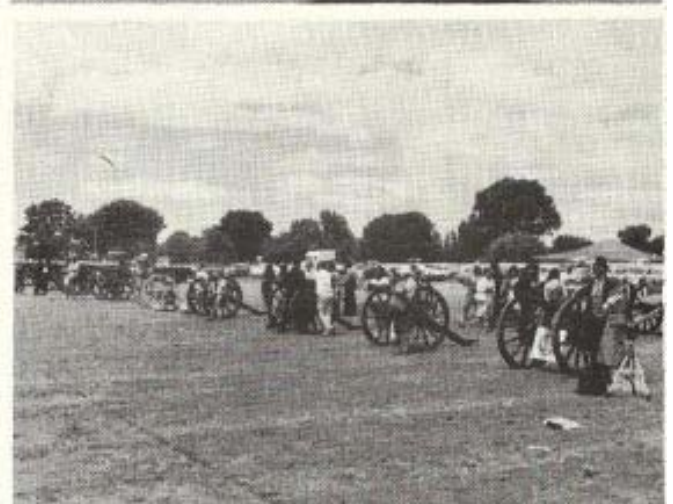
We had our moments. Strange objects encountered by the horses required constant reassurance from reinsmen that all was well. Some hesitation was encountered at railway crossings. Kit, the Appaloosa, tried to side-step shadows cast by tree branches wind-danced on the ground. Centre lines painted on the road at intersections impelled three horses to jump across them.

Ben, the stallion, was a real crowd pleaser and seemed to play to the gallery. Stopping suddenly he would throw up his head and whinny long and loud, but clapping and cheering was greatest for his feet-apart stance bladder relief at the parade's official dals. Reviewing dignitaries headed by Sir Robert Muldoon, the Prime Minister, were visibly amused.

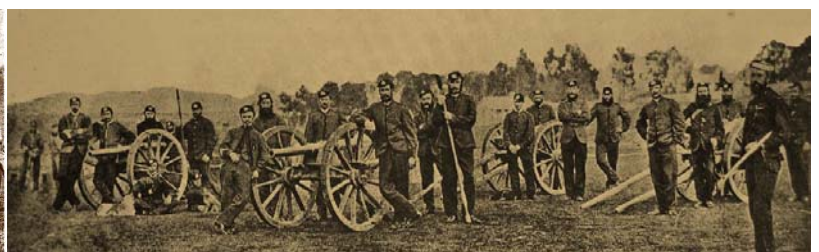
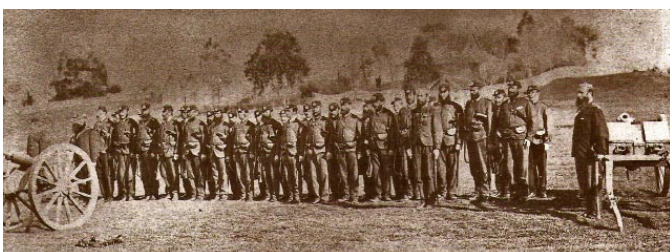
When the Tamoana Showgrounds were reached nearly two hours later the guns were detached and readied for the afternoon's gala and gun salute.

Top right: Bruce Adrian controls Mary as she crosses lines. Hastings Centennial Parade.

Bottom right: Nine Armstrong guns assembled for the salute. Hastings Showgrounds.



Extracts from the book *Armstrong and Coehorn Affair* by Trevor Belcher and John Osborne 1990



New Zealand Armed Constabulary Force with 6 pounder Armstrong Field Guns and Limbers 1869