SESSION II.
1906.

NEW ZEALAND.

DEFENCE FORCES OF NEW ZEALAND

(REPORT OF THE), BY MAJOR-GENERAL J. M. BABINGTON, COMMANDANT OF THE FORCES.

Presented to both Houses of the General Assembly by Command of His Excellency.

SIR,— 1st August, 1906.

I have the honour to forward, for the information of His Excellency the Governor and Commander-in-Chief of New Zealand, my annual report on the Defence Forces of the colony.

The revision of the fixed defences is still under consideration, but it is expected a conclusion as regards this important matter will shortly be arrived at, and the work can then be proceeded with. Two defended ports are the most that should be required in New Zealand, and this colony cannot maintain more in an efficient state; it is waste of money to continue inefficient defences.

Magazines where necessary have now been arranged for, and their construction should shortly be proceeded with.

The existing forts are kept in good order, and many improvements in connection with their working have been effected.

The establishment of drill-guns, &c., at the various centres has now been completed, and with much benefit to the Force. Dummy breech-blocks for guns have also been constructed for drill purposes, and much wear-and-tear and consequent expense is saved.

As regards field artillery, my recommendations that six 15-pounder guns be purchased from England have been approved. These are being supplied at half vocabulary rates, and when received will give four four-gun batteries at each of the centres—Wellington, Auckland, Christchurch, and Dunedin—and a section of 15-pounders to replace the obsolete 6-pounders now in use at Nelson. The Westport field battery should be replaced by mounting the guns there on trucks; this would provide a more efficient defence than can be at present supplied by a field battery there.

The proposals for the reorganization of the Permanent Force, which I referred to in my report of last year, are still under consideration. It is hoped some conclusion may shortly be arrived at concerning this important matter. Similarly, my proposals for the reorganization of the Volunteer Force have not yet been seriously considered. These latter recommendations are, in brief, to the effect that a smaller and better-trained force should be substituted for the present unwieldy and expensive machine. I believe political reasons are looked upon as a bar to the carrying-out of the main portion of the scheme, but I cannot think that the country would raise any serious objection to a more efficient and less expensive force replacing that now existing, and would, I feel confident, welcome greater efficiency and less expense which the reorganization I propose would give it.

The difficulty of obtaining suitable officers is increasing in New Zealand. No leisured class—as in England—practically exists, and every Volunteer officer has his own private business to attend to. Recruiting, too, is becoming a very much more difficult matter, and the less cordial relations which apparently now exist between employer and employee, as compared to a few years ago, is a serious menace.

The training of the Force during the last year has proceeded as satisfactorily as the present conditions of service admit. An advance in efficiency has been made, and the returns show an improvement both in gun and in musketry practice.

The physique of some of the town corps is very poor. The question of how to attract the athlete has been carefully considered, but no solution to this problem is so far forthcoming. In

order to improve matters in this respect, gymnasia should be established; with an attractive as well as a useful course much benefit, both directly and indirectly, would be acquired.

Endeavour is being made to inaugurate challenge shields for all branches of the Volunteer Force for efficiency tests. To carry this out the sum of £163, which Government has undertaken to subsidise £1 for £1, is required. An appeal made to the civil authorities in each district has resulted in the following amounts being collected: Wellington District, nil; Auckland District, £17 10s.; Canterbury District, £100 (donated by Mr. G. G. Stead); Otago District, £7 2s.; Nelson District, nil. This result does not indicate a great interest on the part of the public in the efficiency of the Volunteers. The competitions for the shields in the cases of the Field and Garrison Artillery Volunteers were carried out last year, with very satisfactory results. The reports on these are contained in Appendix I, and the conditions for challenge shields for the other branches of the Force in Appendix II.

Field firing on an extended scale was, for the first time in New Zealand, carried out last Easter at several centres in each district. In some cases reality as regards the situation, and execution of the practice as it would be carried out on service, was sacrificed to over caution, presumably for fear of accidents; but in future exercises of a similar nature an improvement in this may be confidently looked for. The results on the whole were, considering the exercise was new to the very large majority of those present, satisfactory. To make Easter manœuvres of real value to the Force, however, attendance must be made obligatory, and the Saturady declared a statutory holiday for defence purposes. I have recommended that a Manœuvre Act should be submitted for consideration of Parliament; this is essential if satisfactory instruction is to be carried out, especially at the larger centres.

While much remains to be done towards educating the public to a sense of their requirements as regards defence, it is very gratifying to find that much is done by certain individuals towards encouraging Volunteering. I may mention as an instance that this year in North Canterbury 900,000 acres of land were placed at my disposal for manœuvres; the gentlemen who did so also generously volunteered to supply mutton to such troops as might be assembled, free of cost. Many individuals, too, very liberally give trophies and money prizes for shooting, and otherwise assist towards encouraging the Volunteers.

The defence scheme has been revised and brought into line with existing local conditions. The remarks also of the Colonial Defence Committee in respect to this matter have received due attention.

The Defence Act still requires amendment, and it is hoped such portions as are found unsuitable may receive revision.

The establishment of half-yearly conferences of Volunteer officers has been productive of most satisfactory results, and has also gone far to establish a closer touch between the various grades and branches of the Force than previously existed. Officers Commanding Districts confer with officers commanding units on any points they consider bearing on the welfare of the Defence Forces, and these are carefully considered by the Commandant in company with Officers Commanding Districts, and their recommendations submitted to the Hon. Minister of Defence.

The command of a division of Garrison Artillery and of a battalion of Mounted Rifles and Infantry is now limited to five years. Under the old system the command was interminable, causing stagnation and its consequent evils.

The conference of Officers Commanding Districts has strongly recommended that the Act applying to the election of officers should be altered, and that Imperial custom be observed in this matter. In every report I have rendered I have strongly advocated this, and pointed out the evils of the present system; so far, however, nothing has been done to effect a change in this most important matter.

The establishment of an educational system to take the place of the late School of Instruction is a question which should receive very early and serious consideration. I have recommended that the services of a Staff College officer for each Island should be obtained, and that these officers should carry out, so to speak, peripatetic courses all the year round; much also could be done by a system of instruction by correspondence, which they could easily inaugurate. The want of the means for improving themselves is much felt by Volunteer officers, and these should most certainly be afforded them. The Volunteers are intelligent enough to realise that to be trustworthy their officers must be efficient, and thus they will all the more highly appreciate the properly trained officer. Trust, too, in their leaders engenders the best kind of discipline, which is intelligent obedience to power. I have shown, too, how the cost to the country would not be increased by the engagement of officers to carry out this work.

The pay of staff and other officers must be considered. I have frequently urged that the scale of pay should be fixed and adequate. At present there is no system as regards pay; it is entirely at the discretion of the Hon. Minister of Defence what remuneration an officer receives for his services, and the pay is such that the wonder is any one is found to accept appointments. Officers' pay should enable them to live as befits their position, and to allow a margin for insuring their lives, and, if they choose to do so, to save a little. It must be remembered they have no pension to look forward to, and they cannot engage in any civil or business occupation, so have no means of making money to provide against the time when they must retire.

As regards pension, the Defence Department should be brought under a scheme similar to that pertaining in the Police and Railway Departments. It reflects but little credit on the appreciation or generosity of a country to turn its servants adrift after they have faithfully performed their duties—at times arduous and dangerous—without any provision for themselves or their families.

It is to be hoped that the suggestion of the Imperial authorities be agreed to that a system of an interchange of officers may be established. By this means the colony would have the benefit of the services of Imperial officers, and colonial officers would receive training with Imperial

troops, which would fit them for the higher commands in this colony. At present, and under present conditions, officers to command districts could not be obtained, and where such vacancies in these appointments occur before the foregoing interchange has been established, I strongly recommend Imperial officers be applied for to fill them. No one realises more than do the Volunteers the necessity for officers who hold the higher commands being thoroughly competent.

Opportunity has been given by the Imperial authorities for an officer from the colony to pass through a course of instruction at the Staff College, and the name of an officer it is proposed should go through this course has been submitted.

The terms for earning capitation are not satisfactory. Proposals regarding this are embodied in my scheme for reorganization, and even if the present regulations regarding training are to be continued, an alteration is this respect should be made. Payment for daylight parades, too, should be granted where the numbers present admit of useful work being done. It is unfair on those present to withhold payment because, owing to other men stopping away, the number required by present regulations are not on parade.

The Government grant to each district for rifle-shooting has been increased by £50, the extra £50 being earmarked for competitions restricted to Volunteers.

A grant of £5 per annum has been approved for officers' and non-commissioned officers' clubs.

As regards Instructors, the pay formerly granted to Instructors of the Permanent Force should be restored to them. This point has been dealt with among my recommendations for the reorganization of the Permanent Force. The system of obtaining Instructors for Mounted Rifles and Infantry from the Permanent Force is not satisfactory. These men cannot be expected to be conversant with the work of these branches of the service, and know little or nothing of Imperial military habits or customs, and are unable to answer questions which they are frequently asked by the Volunteers on such points. There are plenty of excellent ex-non-commissioned officers of the Imperial service residing in the colony and available for this work, and their services should be utilised as opportunity occurs.

Judging-distance practice is now compulsory, but the carrying-out of this most important part of a Volunteer's training still leaves a good deal to be desired.

I have frequently stated that in my opinion every English-speaking boy should be trained as a cadet. Cadets, too, should continue their service in adult corps until fit to take their place in the ranks should occasion demand. Where cadets have been well trained two, or, at the most, three years with an adult corps should suffice.

I have before referred to the very unsatisfactory state as regards the relationship of the Under-Secretary for Defence's section to the Commandant's section of the Defence Department; a vast amount of extra correspondence and very considerable friction is the inevitable result. The officer dealing directly with units, as regards pay, &c., should be under the Commandant, as in the Imperial service, and all questions relating thereto should be dealt with by the Commandant under the direction where necessary of the Hon. Minister of Defence. The duties of a financial secretary should be kept apart.

The extreme centralisation and its consequent evils, to which I have also frequently referred, still continues. If officers are to carry out their duties they must, from the Commandant downwards, be accorded the responsibility and authority pertaining to their appointments. In war this would have to be done whether rules and regulations permitted it or not, but the most pernicious results of the present system would be then only too apparent, and confusion and disaster would be the result. Given the machine and the means for fashioning it, the method of doing so should be left to those who will have to control it on service. The system of having what represents the ordnance department under the Under-Secretary for Defence is also wrong, and could not be continued in war-time.

Permanent Force.

The Permanent Force is, as I have before reported, composed of a highly educated, well-trained body of men. The efficiency of the Force is much impaired in that, comparatively, a large number of men take their discharge to serve with the Police Force, tramway service, &c., where their prospects are improved. In my proposals for the reorganization of the Permanent Force all such points were carefully considered. The discipline of the Force has improved, but so long as so many men are allowed to marry and no married quarters exist, discipline can never be entirely satisfactory. The Defence Act as regards the discipline of the Permanent Force requires amendment on some points. For instance, a non-commissioned officer drunk on duty must under the existing Act be discharged, no matter what his length of service or previous conduct may have been. The system of clothing the Force is unsatisfactory, and no matter what trouble the men take they cannot turn out as smart as they might otherwise do. The R.N.Z.A. turn out as well as circumstances admit, but the R.N.Z.E. do not. Pending the decision as to whether mine defence is to be intrusted to the Royal Navy as is now done in the Imperial service, the application for an officer to superintend this branch has been withheld, and in its present condition the mine defence could not be relied on. It is to be hoped a definite conclusion on this important point may shortly be arrived at. Men from the R.N.Z.E. are now to replace the civilian captain and engineer on the "Lady Roberts," and similar action as regards the "Janie Seddon" is under consideration. A considerable saving is effected thereby, and the course is that carried out in the Imperial service. The regulations regarding age-retirement should be carried out; it is only a useless expense to the country retaining men who have passed the age where they are physically fit. Such men should have preference as regards employment as messengers, &c., and, with the establishment of a provident fund such as I have suggested, their future would be secured.

Lieutenants Duigan and Mickle have proceeded to England to undergo courses of instruction. Lieutenant Chesney, who went Home in 1904, is shortly returning to the colony.

VOLUNTEERS.

The strength of the Volunteer Force (inclusive of cadets and rifle clubs) on the 1st July was distributed as follows:—

Auckland (Officers and Men).

1	battery of Field Artillery	72
3	companies Garrison Artillery	181
2	companies Engineers	119
4	battalions Mounted Rifles (in all, 23 companies)	1,283
2	battalions Infantry (in all, 16 companies)	979
1	Field Hospital and Bearer Company	34
5	defence cadet companies	286
12	defence rifle clubs	261
1	garrison band	30

Wellington (Officers and Men).

1	battery of Field Artillery	83
2	companies of Garrison Artillery	245
2	companies Engineers	178
4	battalions Mounted Rifles (in all, 19 companies)	1,006
5	battalions Infantry (in all, 38 companies)	2,074
1	Field Hospital and Bearer Company	31
23	defence cadet companies	1,158
60	defence rifle clubs	1,628
1	garrison band	28

(Four corps Mounted Rifles and one rifle corps in process of disbandment, also one cadet corps.)

Canterbury (Officers and Men).

1	battery of Field Artillery	78
2	companies Garrison Artillery	192
1	company Engineers	96
3	battalions Mounted Rifles (in all, 14 companies)	775
3	battalions Infantry (in all, 21 companies)	1,133
1	Field Hospital and Bearer Company	29
8	defence cadet companies	486
14	defence rifle clubs	289
1	garrison band	26

Otago (Officers and Men).

1	battery of Field Artillery	67
2	companies Garrison Artillery	248
1	company Engineers	93
2	battalions Mounted Rifles (in all, 13 companies)	880
4	battalions Infantry (in all, 34 companies)	1,944
1	Field Hospital and Bearer Company	42
15	defence cadet companies	881
15	defence rifle clubs	329
1	garrison band	30

Nelson (Officers and Men).

2	batteries of Field Artillery	148
1	battalion Mounted Rifles (in all, 4 companies)	304
1	battalion Infantry (in all, 11 companies)	651
1	Field Hospital and Bearer Company	56
8	defence cadet companies	332
16	defence rifle clubs	464
1	garrison band	27

(One cycle corps and one cadet corps in process of disbandment.)

Summary (Officers and Men).

6	batteries of Field Artillery	448
9	companies of Garrison Artillery	866
6	companies of Engineers	486
14	battalions of Mounted Rifles (in all, 73 companies)	4,248
16	battalions of Infantry (in all, 120 companies)	6,781
5	Field Hospital and Bearer Companies	192
59	defence cadet corps	3,143
117	defence rifle clubs	2,971
5	garrison bands	141
		19,276

After taking into consideration the corps noted as in process of disbandment, there still remains an increase on the total strength for 1st July, 1905.

FIELD ARTILLERY VOLUNTEERS.

Officers and men during the winter drill regularly in the drill-sheds, and learn the actual service of the gun, and a certain amount of fire discipline, but opportunities for going into the country, and working under more nearly service conditions are non-existent, and real efficiency cannot be obtained. It should be made possible to take these batteries completely away from the towns for at least one week, working all day. Manœuvres with a tactical idea could then be practised. Officers could be taught to quickly pick up natural targets, to observe, to move their batteries across country in the face of an enemy, to take up positions, and, in fact, to acquire the eye for ground without which a Field Artillery officer is enormously handicapped. Range-finders could be taught. Layers could also apply the knowledge they had acquired in the drill-sheds, and learn to lay quickly and accurately on natural targets.

Directors and gun arcs have now been supplied to the New Zealand batteries, but the problem remains: How, under present conditions, the batteries can be taught their use in drill-sheds?

As far as direct laying is concerned, these batteries have enormously improved during the year. This I think is due to the drill appliances which have been fitted up in the various drill-sheds.

Should it be considered sufficient for these batteries to be able to take up a position, not under cover, time not being a great object, and to pour an accurate fire on a fairly distinct target in slow time, in my opinion, most of these batteries fulfil these requirements; on the other hand, should they be required to fire from behind cover, either at ordinary or concealed targets, they would be practically useless. They would in fact be useful against guns landed by ships and manned by sailors or marines, but would be of no use against a modern field battery.

Two batteries qualified for first, two for second, and one for third class; one battery was not classified. In addition to causes mentioned above, this improvement is largely due to the increased allowance of ammunition which permitted of instructional practice being carried out previous to service class-firing. Hitherto batteries have carried out the whole of their annual practice on one day, and it was impossible to get good results, as it often occurred that a large percentage of the gunners were recruits and had not previously taken part in service practice. In order to obviate this, arrangements were made to carry out the practice on two separate days, the first day for "instructional practice," and the second day for "service class-firing." This enabled a thorough criticism to be made of the "instructional practice," and all ranks were able to benefit thereby, previous to commencing their service class-firing.

The difficulties of the battery commanders are still very great, in having to start every camp with so many untrained men, which makes it almost impossible for a battery to classify as first, under any scheme carried out strictly in accordance with the present regulations. The standard now laid down by the local regulations for the Field Artillery is all that can be expected from Volunteers under existing conditions.

Nearly the whole of the practice was carried out with surprise targets, direct laying being used.

A supply of "directors" demanded from England last year arrived just before the camping season, and were consequently not used for the practice, although most of the batteries received instruction in their use.

Firing from behind cover was carried out by some of the batteries at the Easter manœuvres, and experiments were carried out by D Battery with a field telephone, for flank observation purposes, with satisfactory results, and it is now proposed to gradually equip all field batteries with field telephones.

In some batteries there was difficulty in getting the required number of qualified layers, too little attention having been paid to laying instruction, and the quarterly tests had not been carried out.

All the practice was conducted in accordance with a tactical scheme, but as it had to be carried out chiefly over closely settled country battery commanders were not allowed to select their own position in all cases, and consequently were restricted in the tactical handling of their commands. The chief errors were: (1) Careless reconnaissance of position; (2) battery leader not going far ahead enough of his battery when leading it into action; (3) little attempt at concealment; (4) signals by battery leaders badly made; (5) communication between gun and wagon line not good; (6) detachments working the guns standing when they should have adopted the kneeling position.

The fire discipline was good as regards drill, the chief causes of failures in shooting being due to (1) bad range-finding; (2) defective observation; (3) inaccurate laying; (4) careless fuse-setting.

It will be necessary for batteries to work very hard before the next camping season, in order to be thoroughly conversant with the various systems of ranging laid down in F.A.T., 1906, and a great deal of time should be devoted to training in fire discipline and instruction in laying from behind cover. The system of drill-shed instruction should be carried out in as practical a manner as possible, with a view to instructing all ranks in firing from behind cover and communicating results from a flank observing station, as well as direct laying.

When daylight parades are held they should be devoted almost solely to taking up positions and laying out lines of fire.

Laying instruction should be more thoroughly carried out, and quarterly tests held in all batteries.

Officers should practise observation of fire as far as is possible with disc and drill-shed appliances.

The following tables show the average results of battery practice and of laying and fuze setting; the results of battery classification are also shown:—

AVERAGE RESULTS OF BATTERY PRACTICE AT STATIONARY TARGETS.

Battery.	No. of Series.	Time. Orders to "Action."	Time. "Action" to 1st Gun.	Time. 1st Gun to 1st Time Shrap.	Time. 1st Gun to Section Fire.	Time. 1st Gun to Last Gun.	Time. Last Gun to Order "March."	Rate of Section or Rapid Fire.*	Elevation on Sight.	Elevation as verified by Guns.	No. of Rounds. Percussion.	No. of Rounds. Time. Effective.	No. of Rounds. Time. Total.	Effect. Hits.	Effect. Men.	No. of Dummies Fired at.	Hits per Shell.	Men hit per Shell.	Percentage of Effective Time Shell.	Percentage of Target destroyed.
		M. s.	Min. sec.	Min. sec.	Min. sec.	Min. sec.	Min. sec.		Yards.	Yards.										
A ..	5	27 36	3 24	7 54	11 37	14 18	9 12	2·5	2,525	2,602	13·16	4·8	14·4	10·2	4·4	20	0·39	0·15	35	39
B ..	6	8 34	2 35	6 29	8 49	13 45	3 11	2·8	3,134	3,168	8·66	4·6	14·3	15·5	6·5	11·3	0·66	0·33	30·8	55
D ..	5	4 0	1 35	5 12	6 5	10 20	2 30	3·91	2,810	2,795	8·4	13·7	20·2	45·5	11	12·5	1·75	0·41	70·5	88
E ..	6	5 24	1 43	6 35	8 7	11 15	2 15	3·96	2,787	2,767	14·2	6·5	15	6·5	6	12·5	0·23	0·22	33·5	55
H ..	5	10 42	1 47	8 30	10 57	13 46	4 0	5·3	2,825	2,820	14	13·5	22	10	8·75	15	0·30	0·29	60	68
I ..	6	18 0	3 0	9 23	12 29	16 35	6 50	3·16	2,800	2,373	16	4·8	17	7	4·5	11·7	0·22	0·14	27	42·5

*In rounds per minute. To calculate this divide one less than the number of rounds of section or rapid fire by the time (in minutes) from the first to the last round of section fire.

AVERAGE RESULTS OF EXAMINATION IN LAYING AND FUZE-SETTING.

Battery.	Tangent Sight. Average Error. Elevation.	Tangent Sight. Average Error. Direction.	Tangent Sight. Percentage of Correct Settings.	Tangent Sight. Average Time.	Telescopic Sight. Average Error. Elevation.	Telescopic Sight. Average Error. Direction.	Telescopic Sight. Percentage of Correct Settings.*	Telescopic Sight. Average Time.	Indirect Laying. Average Error. Elevation.	Indirect Laying. Average Error. Direction.	Indirect Laying. Percentage of Correct Settings.	Indirect Laying. Average Time.	Setting Fuzes. Percentage of Correct Settings.	Setting Fuzes. Average Time.
				M. s.				M. s.				M. s.		M. s.
A	1·5	1·5	100	16 0	0·38	0·49	100	34 0	1	3	97	38 0	96	1 5
B	1·45	2·1	100	22 7	0·19	1·2	91	41 0	1	3	96	26 0	99·5	1 18
D	2	1·5	100	20 0	0·01	0·5	89	25 0	0·5	2	96	27 0	99·5	1 15
E	2·74	1·46	95	23 1	0·44	0·31	90	33 17	1·44	1·77	85	39 3	98	1 2
H	1	1·1	99	15 0	..	..	..	..	..	..	..	..	99·5	1 5
I	2·5	3	90	22 0	..	..	..	..	..	..	..	..	99·5	1 18

*Including horizontal level.

RESULTS OF BATTERY CLASSIFICATION PRACTICE, 1905.

Station.	Battery.	Battery Commander.	Marks. Fire Tactics, and Fire Discipline, 40. (A.)	Marks. Fire Effect, 60. (B.)	Marks. Total 100.	Class. Qualified for (A.)	Class. Qualified for (B.)	Class. Awarded.
Auckland ...	A	Captain Bosworth	29	31	60	2nd	2nd	2nd
Dunedin ...	B	Captain Ritchie	31	36	67	1st	1st	1st
Wellington ...	D	Captain Courtney	35	44	79	1st	1st	1st
Christchurch ...	E	Captain Treleaven	23	30·83	53·83	3rd	2nd	3rd
Nelson	H	Captain Madigan	28	32	60	2nd	2nd	2nd
Westport ...	I	Captain Carr ...	12	27	39	Nil	3rd	N.C.

(A.) For 1st class, 30 marks; for 2nd class, 24 marks; for 3rd class, 20 marks. (B.) For first class, 36 marks; for 2nd class, 28 marks; for 3rd class, 20 marks.

GARRISON ARTILLERY VOLUNTEERS.

Throughout the colony, except Auckland (which now, however, are decidedly improving), the Garrison Artillery Volunteers may be considered very efficient, as a rule well officered, with the right stamp of non-commissioned officers and men for the work. I cannot report too favourably on their keenness, fire discipline, and drill; an excellent spirit pervades all ranks, and there is a great deal of *esprit de corps*.

During 1905–6 training season nine garrison companies have each undergone sixteen days' training in coast defence.

The records for the shooting show a slight improvement as compared with the previous year. There is, however, room for improvement in the Auckland companies. Of the nine companies that

fired, three qualified for first class, two qualified for second class, three qualified for third class, and one did not classify.

All companies have had the services of the officers, non-commissioned officers, and men of the Royal New Zealand Artillery, who spared no efforts in the conscientious discharge of their duties in connection with the instruction, as assistant umpires, recorders, &c.

Tactics and Drill.

The new features of the practice as compared with previous years were: (1) The introduction of "instructional practice" previous to class-firing; (2) special allowance in calculating figure of merit for companies firing from low-site batteries; (3) changing from electric to percussion firing during the firing of a series; (4) all practice conducted in accordance with some practical scheme; and (5) a time-allowance for ranging.

The instructional practice enabled all ranks to get experience previous to the class-firing, and resulted in better figures of merit being obtained in nearly all cases.

The allowance for low-site batteries was found in some cases too liberal, detachments in several instances scoring more marks than their shooting justified.

The changing from electric to percussion firing during the practice has resulted in more attention being paid to the drill for percussion firing.

Orders were issued for each practice in accordance with a tactical scheme, and officers had to study, and, previous to each series, lecture on the vessels reported as liable to attack. This system has caused all officers to take a keener interest in studying war-vessels of all nations.

A syllabus of instruction for a company training-camp was published in the "Instructions for Practice" in order to insure uniformity of training throughout the colony, the syllabus including lectures to officers on coast-defence subjects generally.

A local drill-book has been rewritten and issued during the year to all concerned. It is specially written for local requirements, and is of great value to a Volunteer, containing as it does all the gunnery drills required locally.

A book of questions and answers on gunnery, &c., has also been issued to all concerned, and has greatly added to the efficiency and general knowledge of the rank and file.

Material and Equipment.

The installation of the order dials, the invention of Master Gunner Richardson, has resulted in better fire discipline being obtained. It is hoped that before the next season all forts will be supplied with them.

Range-indicators on the same principle as the order dials have been experimented with, and appear very satisfactory, as they obviate the necessity for installing the more expensive electric dials.

Drill-guns are being gradually supplied to companies, and are proving of great value for training purposes.

It is proposed to make 6 in. B.L. Mark VII drill-guns on the same principle as the 12-pounder Q.F. drill-gun; this will prevent unnecessary wear of breech mechanism of service guns through constant drill.

The value of drill-guns as a means of preliminary training was clearly shown, the standard of efficiency of those companies using them being much higher at the commencement of the training-camp than in companies where such facilities did not exist.

Excellent instruction has been given by the R.N.Z.A. to the G.A.V. throughout the colony, but there is a tendency on the part of some officers to rely absolutely on the R.N.Z.A. Instructors to carry out the instruction of their units, the company officers taking no active part.

Lieutenant-colonels of divisions should personally superintend the instruction of their officers, and the training of the men should be almost wholly carried out by the officers and non-commissioned officers of the company, special parades during the year being set apart for the instruction of units by the R.N.Z.A.

The laying generally has been very good, but there are insufficient layers in some companies, and officers commanding must be held responsible for the carrying-out of the quarterly tests. A similar arrangement to that suggested for the layers of Field Artillery is recommended for the garrison companies.

ENGINEER CORPS.

The field engineering companies at the various centres are very fairly efficient. There has been a most marked improvement in one company.

A new equipment has been sanctioned, but the stores are not yet in the colony; this should increase the efficiency of the companies very materially.

A challenge shield has been inaugurated for the best engineering company in the colony, but too late for competition last year.

The camps were well attended, and the examinations were on the whole satisfactory.

One company has taken advantage of the new establishment, and has elected an officer with special knowledge of electrical work. This has materially improved the field-telegraph section.

The submarine mining engineers have much to learn, and some arrangement must be come to by which they can receive more daylight instruction. The officers and non-commissioned officers, too, should attend courses of from one to two months at the submarine-mining stations. The corps both at Auckland and Wellington are much below their establishments, and efforts must be made to bring the numbers up to requirements. The summer months, when more interesting work can be done than in the winter, should bring about a change as regards this.

Mounted Rifles.

The Mounted Rifles are a very fairly efficient body of men, and are of excellent material. The majority of corps go into camp for seven whole days annually, and derive very great benefit therefrom, but owing to their civil occupations these camps are for the most part held in the winter months, and the bad weather then experienced much interferes with their training. Their training too is carried out under greater difficulties than in any other branch of the Defence Forces. The men are good horsemen, and their horses, though not showy, are for the most part hardy and serviceable; the stamp of horse too is improving.

The recruiting of corps over too large an area is to be discouraged; it entails bad attendance and consequent inefficiency. Those men, too, who are irregular attendants at parade should not be retained; they cannot be properly trained, and consequently are of no value to the State, and are detrimental to the corps they belong to; this remark applies to all branches. A valuable addition to the Defence Forces of the colony might be made by the raising of more Maori corps; these men can give very much more time to the work than Europeans can. The Maoris are fond of military life, and, properly officered, such corps could be made very efficient. I submitted a scheme for this in 1903, but no action was taken.

The saddlery is not, as a rule, very satisfactory, nor is it very well fitted, and in general smartness improvement is to be looked for. The distance men have to ride to parade goes a long way to fit them for the duties they would have to carry out on active service, and with the training proposed in the scheme for reorganization the mounted force of the colony would be a very efficient one. Very considerable improvement has taken place in the manner dismounted duties are performed. The musketry practices, too, shows an improvement. Greatcoats, messtins, and nose-bags should be supplied to mounted corps.

Infantry.

The training of the Infantry is much impeded by their being able to devote so little time to outdoor work. It is impossible to thoroughly train infantry in drill-halls, and under the present system they cannot become efficient. The Infantry camps, too, where men only work in the evening and for a short time, if any, in the early morning give no scope for rendering corps efficient; these camps are not worth the money spent on them, and should be replaced pending the reorganization of the Force by such parades as were recommended last year.

I have endeavoured to get such alterations made to the regulations as will admit of, so to speak, week-end training of corps. Were provision made for men to go into camp from Saturday afternoon till Sunday evening, the greatest possible benefit would accrue. Open-air training, and as much of it as is possible, should be aimed at for all arms of the service. The erection of huts at such places as Trentham, &c., where good training-grounds exist, and where men would be comfortably housed and well fed, would, I believe, also attract a good many young men who now spend their Saturday afternoons and Sundays in idleness. Some opposition to such a scheme may, and will no doubt, be advanced on religious grounds, but such appear to me to be more than met by the following remarks which I have lately read on this subject: "The 'unco' guid' can console themselves with the thought that these men, who, if left to themselves, would most of them certainly not attend any place of worship, will join in prayer and hymns before beginning their work (recreation to them), and will thus come under the influence otherwise more or less remote from them. 'The better the day the better the deed'; and it is hard to see how else the necessary minimum of field training can be carried out. Our forefathers practised with the long bow on the Sabbath, and thought no shame; why should not our young men of the present age fit themselves on the holy day for one of the most holy of all tasks—namely, the safekeeping of their native land."

The Infantry are without entrenching tools, and this most important part of their training is consequently entirely neglected. No force can operate with any hope of success against civilised troops unless the use of entrenchments is well understood.

The Infantry are well armed and fairly well clothed and equipped; the boots of the large majority of men are, however, unserviceable. Very few corps are in possession of greatcoats, and the bandolier equipment approved in 1903 has not yet been issued to all corps.

No small-arm ammunition-carts are in possession of battalions.

The range practices of Infantry corps show an improvement on previous years; field firing must, however, receive more attention, and be carried out under more service-like conditions than has yet, for the most part, been done. Judging distance, too, must receive more attention.

While the physique of country corps is satisfactory, and in many cases very much so, that of many of the corps at the larger centres is very poor, and such men could not for even a short time stand the strain of active service. It is much to be regretted that the athlete cannot in the larger centres be attracted to serve; practically none enrol, apparently considering their amusements more important than their duty to the State. To improve the physique of these corps gymnastic training should be introduced.

Cycle Corps.

Of the four cycle corps one (Nelson) is, through lack of recruits, about to disband. I have had no opportunity of observing the work of cycle corps at manœuvres since my last report. An allowance for wear-and-tear to bicycles should be made to these corps.

Medical Department.

While recording some progress in the organization and equipment, there is little in the machinery of the department. There is still not sufficient provision for the Surgeon-General or

the principal medical officers to inspect or make themselves acquainted with details which should come within their view, their administration practically being limited to the town in which each resides. I need not point that this is almost fatal to the proper administration of the service.

From reports furnished I judge that on the whole medical officers are taking more interest in their work, a larger number having earned capitation than formerly. There is still, however, a great deal of room for improvement, and there are a certain number of officers whose names are on the medical list, but whose civil duties apparently preclude their being able to attend to their military ones; these should be struck off.

Authority has now been granted to add to the establishment four men per company to act as regimental stretcher-bearers or "first-aid men," and earn capitation purely as such. In training these men the medical officers will have the opportunity afforded them of having these definite duties to do, and of being something more than honorary members of their units, and therefore should take more interest in their work.

There is an improvement in the standard of education in the Field Hospital corps, and these men are gradually growing into a useful body of trained hospital orderlies who can be of considerable benefit to their respective districts. The strength of the companies remains about the same as last year, while the Wellington company which was disbanded has been started again with a respectable roll, and will, I have little doubt, now prosper.

Certain equipment is still required, such as medicine-chests for camps, stretchers, &c.; these should be provided in the form of "medical companions" such as I have already recommended, also a supply of "first field dressing-pads" for use in emergencies at field training, &c. The training of the new regimental stretcher-bearers will require more stretchers, as at present each battalion has only one. One of the new ambulance wagons is just finished, of the two authorised, and will shortly be sent to headquarters for approval. A second one should be supplied for each district. The equipment on issue to field hospitals and forts is reported to be in good condition.

I am entirely against purchasing more stores or equipment than are actually required; they soon become obsolete, and the money is wasted, and my recommendations only include what is necessary—such articles as could not be readily obtained on the outbreak of war.

Transport and Supply Corps.

No transport or supply corps exists. I have repeatedly applied to be allowed to establish the nucleus of such a corps, and pointed out how necessary it is men should be trained to these duties. It is unnecessary that companies such as exist in standing armies should be formed, but sufficient to meet the requirements of peace manœuvres, capable of expansion to what would be required for the work connected with the troops called out for the defence of the country in the event of war should be available.

As has been truly said, "No part of the military mechanism is more delicate or more important than the question of providing the men with the right kind of food, in the right quantity, and at the right time."

Certain corps have generously volunteered to establish company and battalion carts in return for a pound-for-pound subsidy, but I am not in favour of this arrangement. A mixed lot of transport impossible to control would be created, and confusion would result.

Veterinary Corps.

No veterinary corps—except on paper—exists. I applied for the appointment of a gentleman as principal veterinary officer, but the application was not approved. With a principal veterinary officer the corps could very soon be organized, and regulations have been approved which, with the exception that capitation is not to be granted to veterinary officers, are suitable. Capitation should certainly be granted; it is given to medical officers, and veterinary officers should not be treated differently. Much benefit would result from the establishment of this corps, and officers and men would receive instruction as to the care of horses, &c., which, in very many cases, is greatly required. The cost to the country would be very small; indeed, a saving might possibly result, as regulations now admit compensation for accident to horses, and loss in such cases would often be avoided were the services of such officer available.

Cadet Corps.

There are fifty-nine cadet corps under the Defence Department. So far as has been possible cadet battalions have been formed, and seven of these now exist; this organization has been productive of satisfactory results.

Nearly all corps went into camp during the past year, and derived much benefit therefrom.

The capitation grant has been increased to 7s. 6d., but is still too low, especially in the case of senior cadet corps—*i.e.*, those composed of boys who have left school; even the £10 per annum granted to these corps in addition to their capitation does not enable them to exist.

The corps attached to schools are in a very satisfactory state as regards efficiency. Of those outside schools, some corps are not in a very satisfactory state, mainly owing to want of funds.

The system of training has been improved, and more attention is now paid to thorouhgly grounding the cadets in the fundamental portions of a soldier's training. It is a mistake to try and teach cadets too much, and gives them an idea they know all there is to be learnt and a disinclination to join adult corps.

I would recommend an increase of fifty rounds of ammunition per cadet. No corps can afford to buy ammunition, and the extra practice would be very beneficial in many ways.

Under present regulations little or no control can be exercised over cadets in the senior cadet corps; they cannot be sworn in, and the personal influence of their officers is the only controlling

authority—this is not satisfactory. It is not easy to suggest a remedy, but some system of personal payment in the way of a grant might meet the case.

The training of boys to the use of arms is so important and may save a country so much inconvenience, that the cadet movement should be fostered in every possible way, and if conscription at some future time is to be avoided, it must be so; at present the low rate of capitation is keeping it back.

The arms of the cadets are on the whole kept in good order.

Corps are very deficient in the matter of equipment, and this is discouraging to them; haversacks, too, should form part of their equipment.

It is a matter for regret that a rifle of a different calibre to that in use with the Defence Force has been introduced for the Education cadets. If a boy is not strong enough to fire with a ·303 carbine he should be armed with a dummy rifle only.

Rifle Clubs.

There are now 117 rifle clubs in the colony, and the services of nineteen have been accepted during the last year.

I have asked captains of rifle clubs to meet me when carrying out inspections at various centres, and they have been given facilities for doing so. I have received no complaints.

During the past year eight rifle clubs have disbanded, and the services of newly formed ones accepted; the causes in each case of disbandment were, I believe, that the members ceased to take any interest in shooting, and not, as is sometimes asserted in some quarters, owing to want of support from the Government.

I have recommended that the grant of ammunition to rifle clubs be increased, and that in return more systematic training be carried out by them; this, I have reason to believe, they are quite willing to do. The price of rifles to rifle club men has been reduced by 11s.

The privileges formerly enjoyed by rifle clubs as regards railway passes have been restored to them.

New Zealand Defence Forces Rifle Association.

Since last meeting considerable improvements have been made on the range by the Government, which enabled the 1906 meeting to be got over within a week. There are fifty targets now available at distances from 200 yards to 600 yards, twenty-nine at 700 yards, and twelve at 800, 900, and 1,000 yards. The latter was found insufficient, and should be increased to twenty-five, if the men are to fire under equal conditions as to light and wind.

The annual meeting was held at Trentham on the 5th to 10th March. There was a record entry of 433 competitors (283 Volunteers and 150 rifle club men), of whom 180 were tiros—*i.e.*, had never won a prize of £1 at any previous meeting of the Association.

The average of hits gave a much lower figure than that of the previous year. In some respects the long-distance shooting was responsible for this, this being the first year that shooting at any longer distance than 700 yards has been included in the championship.

A "running-man" competition was introduced for the first time, and created a keen competition.

The championship was won by Lieutenant Irvine, of Nelson, with a score of 431. It is worthy of note that the championship of the colony has for the last three years been won by competitors from the Nelson District.

The entries for the different teams matches were also much larger than previous years, no less than thirty-two teams entered for the companies teams match, and fifteen for the field firing and other matches.

The finances of the Association are very satisfactory; the balance of the previous year was not trenched upon, the income of the present year being more than sufficient to carry out the meeting. The receipts were as follows: Government grant, £1,253; disputed shots, £66; and sale of empty shells, £24. Expenditure, £1,173; Ralston targets, £133; wages, £181; material, £96; cartage, &c., £45; other expenses, including loss on catering, £70, leaving a balance on the year's working of £155, against which there are liabilities of about £50.

The marking was most efficiently carried out by the members of the Permanent Force.

The meeting was most successful in every way, the only matter to complain of being the want of target accommodation at the long ranges, as, owing to the number of competitors, it took all day to fire one distance, so that the men who fired in the afternoon fired under different weather and light conditions to those who fired in the morning; this is not desirable, and should be avoided if possible.

I would recommend that huts be erected at Trentham; they would be a great convenience, both for this meeting and for such camps as might be held there, and save a great wear-and-tear to tents. Trentham is practically the only manœuvre ground available in the vicinity of Wellington.

Staff and Organization.

For the present New Zealand is divided into five military districts. When communication between Canterbury and the West Coast is improved, Nelson District should be absorbed into the Canterbury command.

The difficulty of finding suitable officers to command districts is very great; the pay is poor, and no pension is to be earned. Until by an interchange of officers with England, and the training of officers at the Staff College is carried out, the services of Imperial officers to command districts should be obtained if thoroughly satisfactory officers cannot be found in the colony. Formerly Imperial officers were in some cases appointed as adjutants of districts, but such a system is bad, is subversive of discipline, and weakens the authority of the Officer Commanding the District.

A temporary staff has been appointed to districts, consisting of Volunteer officers who give part of their time to this most important work. These officers have necessarily but little knowledge of their duties, and but little time to learn them; but if my recommendations regarding military educations are carried out, they should in course of time be able to qualify themselves sufficiently to discharge their duties satisfactorily in such situations as are likely for the present to occur.

School of Instruction and Instructional Staff.

At present no school of instruction exists, the officer lately in charge of it having left the colony at the expiration of his engagement.

The late system of conducting the school was unsatisfactory, in that few centres were visited in the course of the year, and a very small proportion of officers and non-commissioned officers benefited by it. I have recommended that the services of two Staff College officers be applied for from England to carry out this most important duty. One would be appointed to each island, and he would carry out courses of instruction all through the districts, and also by means of correspondence. I have shown, too, in my proposals for this, that the cost to the country would be no more than under the late system.

During the past year 154 officers and fifteen non-commissioned officers presented themselves for examination; of these 139 officers and fourteen non-commissioned officers passed. There has been a distinct improvement in the knowledge shown by candidates. The recent revision of the syllabus for examination will have a good effect.

As regards the staff instructors, it is found that the system of appointing those from the Permanent Force is unsatisfactory. It could not well be otherwise, for a man trained as a Garrison Artilleryman cannot have the necessary knowledge to act as an instructor for Mounted Rifles or Infantry. I have always urged the employment of ex-Imperial non-commissioned officers, plenty of whom are available in the colony, for these duties, and the Volunteers themselves would prefer them.

Instructors should not be allowed to remain too long in one district; there were till lately cases of men being ten or twelve years in the same district—this could not be but detrimental. Where also an instructor through age or inefficiency becomes unfit for his position, his retirement should be carried out. Unless sound education of officers and proper instruction of non-commissioned officers is carried out, no force can be efficient.

Signalling.

The new equipment mentioned in my last report has arrived in the colony, and has been issued. The following companies have been increased by two officers and thirty-four non-commissoned officers and men, this increase being specially trained as signallers: College Rifle Volunteers (Auckland), Welington Post and Telegraph Rifle Volunteers, Nelson Rifle Volunteers, Christchurch Volunteer Cycle Corps, Dunedin Volunteer Cycle Corps.

"Qualifications for earning capitation and personal payments and efficiency badges" have been published, but it has not as yet been practicable to hold examinations for these sections.

Arms and Ammunition.

There are sufficient guns, were all mounted for such defences of ports in New Zealand as the country can afford to maintain; and as regard rifles there is a satisfactory reserve now established. The guns and rifles for the most part are kept in good order.

With regard to rifles, a supply of the short rifle has been received, and as those of the mounted corps require to be replaced, this pattern should be issued to them. The rifles have not been converted into clip loaders as in England, and it is not considered, having regard to the service they would be required for, that the expense of doing so would be warranted; but when new rifles are ordered, the clip-loading ones should be obtained.

A satisfactory reserve of gun and small-arm ammunition has been created.

The ammunition supplied by the Colonial Ammunition Company continues to be very satisfactory. During the past year there have been four cases of burst rifle-barrels, but in each case I am satisfied obstruction was the cause, and as it has been found ammunition other than that supplied by Government has in some cases been used, the Colonial Ammunition Company can in no way be held responsible for this. Orders regarding this matter have been issued, and if carried out, I do not anticipate further accidents.

Clothing and Equipment.

The Defence Forces are now with very few exceptions clothed in a service dress, in which, however, there is still a considerable want of uniformity; most corps are also in possession of a full dress. The principal wants now in the matter of clothing are greatcoats, and these should most certainly be supplied.

As regards equipment, mess-tins, and nose-bags for mounted corps should be also supplied; also haversacks to cadets. The question, too, of saddlery for the mounted corps must be considered. No entrenching tools are available; it is most necessary that Infantry should be in possession of these, and instructed in that very important portion of their training—entrenching. The bandolier equipment approved in 1903 has not yet been issued to all corps. One or two representations have been made that the ammunition-pouches of this equipment are defective, in that rounds of ammunition sometimes drop out; but if the magazine of the rifle is charged and only packets of ammunition used this could not occur.

A supply of camp equipment is on order, and when this is received there will be sufficient for present needs.

Rifle Ranges and Drill-halls.

The position as regards rifle ranges and drill-halls still continues to be satisfactory.

In the Auckland District a new range has been gazetted at Paeroa, and a new range will be formed at Thames on land recently taken. In the Wellington District the Trentham Range has been very much improved. These improvements were very greatly appreciated at the N.Z. D.F.R.A. meeting. In the Nelson District new ranges have been taken at Hokitika and Greymouth. In the Canterbury District the range accommodation is to be increased on the Sumner Range.

A large number of reserves have been vested in trustees.

The situation as regards drill-halls is as follows: In Auckland a new hall has been erected at Paparoa. A new hall is in course of erection at Waihi. At Thames the Volunteers have secured the title to a drill-hall site; this site will be vested in the Department, and a new hall will be erected. In the Wellington District a new hall is to be erected at Pahiatua; the site of the hall at Napier is being enlarged, and plans have been drawn for a new hall in Wellington. In the Nelson District a new hall has been erected at Nelson, and the area of the Westport drill-hall site is to be enlarged. In the Canterbury District the Christchurch drill-hall has been completed. In the Otago District a mobilization store and offices are to be built at Dunedin at a cost of £1,350; a new drill-hall has just been erected at Oamaru; a new hall is to be erected at Winton; and that at the Bluff is to be improved.

A large number of drill-halls in the various districts have been improved, and several fresh sites have been gazetted and placed under trustees.

While drill-halls and rifle-ranges are necessities, they entail a very large expense to the country, and in the scheme for reorganization which I have referred to elsewhere an economy is shown in these respects.

Conclusion.

I have endeavoured since my arrival in New Zealand to point out what I consider is required to render the Force of the colony an efficient one. It does not appear to me that the colony takes the question of defence seriously, or gives due attention to a subject that is so important, and one that may at very short notice become of vital interest to her. It will be well for New Zealand if by any means she can be persuaded before it is too late to look seriously upon and also to thoroughly appreciate her Defence Forces, and to listen more attentively than she has yet done to the advice of those whose duty it is to offer it as to the measures necessary to render such Forces really efficient.

J. M. Babington, Major-General,
Commandant of the New Zealand Defence Force.

The Hon. the Minister of Defence.

APPENDIX I.

Conditions for the Competition for the "New Zealand Garrison Artillery Challenge Shield," 1905–6.

The shield will be awarded to the company that obtains the highest number of marks in the examination for efficiency as laid down in these conditions, and is therefore by examination found to be the most efficient company of Garrison Artillery in New Zealand.

Any infringement of these instructions will disqualify a company.

The Artillery staff officer will depute officers to carry out the examinations at the various stations, and he will decide the results and make his award, which will be final.

The award will be published in "General Orders," and the shield will be held by the winning company until the publication of the next year's awards.

On the results of the examinations Garrison Artillery companies will be graded thus:—

A grade, for each company that obtains 70 per cent. of the total marks allotted if the company has not classified lower than second class in its annual service class-firing.

B grade, for each company that obtains over 60 per cent. and under 70 per cent. of the total marks allotted, providing the company has not classified lower than third class.

C grade, for all companies that obtain over 50 per cent. and under 60 per cent. of the total marks allotted, irrespective of the classification, for shooting-companies that obtain a less percentage than 50 will not be graded, whatever their classification may be for practice.

Discipline.

A corps is to be considered as under examination from the commencement to the termination of its annual training-camp.

Special attention is to be paid to the discipline of the corps, and marks will be deducted by the Artillery staff officer, or the officer deputed by him, for any slovenly work throughout the camp, such as—

(*a.*) Late falling-in on parade.
(*b.*) Bad discipline on parade, or lack of smartness.
(*c.*) Bad discipline in camp, such as disturabnce after "Lights out," camp routine not properly carried out, tents and lines or barracks not clean, &c.
(*d.*) Men improperly dressed when outside the precints of camp.
(*e.*) Lack of smartness in saluting officers, &c.

Penalties for bad discipline in accordance with the above will be made by deductions from the total number of marks awarded for efficiency and attendance, which deductions must not exceed 5 per cent.—*i.e.*, a maximum of 1 per cent. each of the above sub-headings.

Attendance.

For every parade held during the annual training-camp, excluding Sundays, 1 point will be awarded for each attendance.

Example.—If the strength of the corps is 100 all ranks, and twenty-eight parades were held during the camp, the possible marks would be 2,800; but if there were only 2,600 attendances, the percentage for attendance would be $\frac{2,600}{2,808} = 0{\cdot}93$.

The attendance of all parades will be checked by an officer of the R.N.Z.A., or the senior R.N.Z.A. instructor present.

Half a mark may be deducted from the attendance-marks of any man who is late for parade.

Marks will not be lost by the absence of men through sickness as a result of injury incurred on duty.

Officers, non-commissioned officers, and men absent from the district will not count as on the strength of the corps for this calculation.

Gunnery.

Every non-commissioned officer and man, except the D.R.F. and signalling specialists in the corps, will be examined as laid down in section 39.

The average percentage is to be worked out and multiplied by the number of non-commissioned officers and men examined and divided by the total number of non-commissioned officers and men in the corps who have not been examined either as signallers or D.R.F specialists.

Example.—A corps has a strength of 100 all ranks—viz., four officers, four trumpeters, twelve D.R.F. specialists, eight signallers, and seventy-two available for the gunnery examination (*i.e.*, all except officers, trumpeters, D.R.F., and signalling specialists)—only sixty of whom present themselves for examination. The average percentage for the sixty being seventy-five, therefore the marks awarded the company in gunnery for the Challenge Shield are $\frac{72 \times 60}{72} = 0{\cdot}75$.

In this examination the non-commissioned officers are to be put through a more thorough examination than the men, the senior non-commissioned officers being examined as G.G.C.s, &c., but the same number of marks will be awarded as in the case of gunners.

This examination is to be conducted during the annual training-camp.

Signalling.

The examination for signalling specialists will be carried out by a qualified officer of the R.N.Z.A. at some convenient time during the training-camp, in accordance with instructions in section 37. The average percentage gained by the squad at this examination will be multiplied by the number of men examined and divided by 8.

If there are more than eight men in the squad, the average percentage of the eight best men will equal the marks awarded for the Challenge Shield.

Example.—Average percentage of a squad of seven signallers = 91. Points for the Challenge Shield gained by the company in signalling = $\frac{91 \times 7}{8} = 0{\cdot}75$.

Depression Range-finding.

All the D.R.F. specialists will be examined by an officer of R.N.Z.A., in accordance with instructions in section 36.

The average percentage gained by the whole of the men examined will be multiplied by the number of specialists and divided by 12.

If more than twelve men are examined, the average percentage of the twelve best men will be taken as the award for the Challenge Shield competition.

Example.—Average percentage of a squad of ten D.R.F. specialists was 90. Points for Challenge Shield gained by the company in D.R.F. = $\frac{90 \times 10}{12} = 0{\cdot}75$.

Gun-laying.

All the gun-layers of the company will be examined either just previous to or during the annual training-camp by the Officer Commanding R.N.Z.A. in accordance with the instructions in section 8.

In order to compute the marks for Challenge Shield the average percentage of the twelve best layers (twenty best layers for companies on the higher establishment) will be the marks awarded; but should there be less than that number tested, the average percentage will be multiplied by the number of layers and divided by the number allowed for the establishment of the corps.

Example.—Average percentage of fourteen layers (higher establishment company) was 95. Points for Challenge Shield gained by the company in gun-laying = $\frac{95 \times 14}{20} = 65{\cdot}5$.

Trumpeters.

Each trumpeter to be examined in—

(*a.*) Sounding the calls as laid down for Garrison Artillery.

(*b.*) Duties of an orderly for fort-manning.

(*c.*) Telephone operating.

Five marks will be awarded as full points for efficiency for each trumpeter. The possible marks to count for the Challenge Shield are 20 for the four trumpeters allowed on the establishment of the corps.

Fort-manning.

The examination in fort-manning will be conducted by the A.S.O., or an officer of the R.N.Z.A. deputed by him.

For this examination the fort is to be fully manned as for service practice—once by day and once by night. The inspecting officer will note the fire discipline, and will cause every probable casualty to be made in both *matériel* and *personnel*, so as to thoroughly test all ranks in their duties. He will note all errors made, and deduct marks accordingly.

Full instructions as to how this is to be carried out will be supplied confidentially to officers who are deputed to act for the A.S.O. in the absence of the latter. Full marks, 100.

As soon as the examination of the whole company has been completed, the Officer Commanding R.N.Z.A. will furnish the following return to the A.S.O., together with a detailed report on the company, explaining how marks were awarded. This report is to be forwarded separate from the practice report. It is to be made confidential, and the marks gained by the company are to be kept confidential until the publication of the results in "General Orders."

CONDITIONS FOR THE COMPETITION FOR THE NEW ZEALAND FIELD ARTILLERY CHALLENGE SHIELD, 1905–6.

Section 1. Grading of Batteries.

The New Zealand Field Artillery Challenge Shield will be awarded to the battery that obtains the highest number of marks in the examination for efficiency as laid down in the following conditions, and is therefore by examination found to be the most efficient battery of Field Artillery in New Zealand.

Any infringement of these regulations will disqualify a battery.

The Artillery staff officer will depute officers to carry out the examinations of the various batteries, and he will decide the results and make his award, which will be final.

The award will be published in "General Orders," and the shields will be held by the winning battery until the publication of the next year's awards.

On the results of these examinations field batteries will be graded thus:—

A grade, for each battery that obtains 70 per cent. of the total marks, if the battery has not classified lower than second class in its annual classification practice.

B grade, for each battery that obtains over 60 per cent. and under 70 per cent. of the total marks, providing the battery has not classified lower than third class.

C grade, for all batteries that obtain over 50 per cent. and under 60 per cent. of the total marks, irrespective of the classification for practice.

Batteries that obtain a less percentage than 50 will not be graded, whatever their classification may be.

Section 2. Discipline.

A battery is to be considered as under examination from the commencement to the termination of the training-camp.

Special attention is to be paid to the discipline of the corps, and marks will be deducted by the Artillery staff officer, or the officer deputed by him, for any slovenly work throughout the camp, such as—

(*a.*) Late falling-in on parade.

(*b.*) Bad discipline on parade, or lack of smartness.

(*c.*) Bad discipline in camp, such as disturbance after "Lights out," camp routine not properly carried out, tents and lines not clean, &c.

(*d.*) Non-commissioned officers and men improperly dressed outside the precints of the camp.

(*e.*) Slackness in saluting officers, &c.

Penalties for bad discipline in accordance with above will be made by deductions from the total marks awarded for the efficiency and attendance, which deductions must not exceed 5 per cent.—*i.e.*, 1 per cent. under each of the above sub-headings.

Section 3. Attendance.

For every parade held during the training-camp, 1 point will be awarded for each attendance.

Example.—If the strength of the corps is eighty all ranks, and thirty-one parades were held during the training-camp, the possible number of marks would be $80 \times 31 = 2,480$; but if there were only 1,984 attendances, the percentage for attendance would be $\frac{1,984}{2,480} = 0{\cdot}80$, or 80 marks.

The attendance at all parades must be checked by an officer of the staff or the senior instructor present.

Half a mark may be deducted from the attendance-marks of any man for each parade that he attends late.

Marks will not be lost by the absence of men through sickness as a result of injury incurred on duty.

Officers, non-commissioned officers, and men absent from the district will not count as on the strength of the corps for this calculation.

Section 4. Gunnery.

Every non-commissioned officer and man in the corps (excepting drivers and trumpeters) will be examined as laid down in section 2, chapter vii.

The average percentage gained by all those examined is to be calculated and multiplied by the number of non-commissioned officers and men examined and divided by the number of non-commissioned officers and gunners in the corps.

Example.—A battery is eighty strong all ranks (four officers, two staff sergeants, four sergeants, eighteen drivers, two trumpeters, and fifty gunners), therefore there are fifty-six available for gunnery examinations. Only forty-eight present themselves for examination, and the average percentage gained by that number was 80 per cent., and the marks gained by the battery for the Challenge Shield in this subject was $\frac{80 \times 48}{56} = 0{\cdot}68$, or 68 marks.

In this examination staff sergeants are to be examined in their special duties, and the remaining non-commissioned officers are to be put through a more thorough examination than the men, both in theoretical and practical, but the same number of marks will be awarded as in the case of gunners.

This examination is to be conducted during the annual training-camp.

Section 5. Signalling.

The examination for signalling will be carried out by a qualified officer, deputed by the A.S.O., during the second week of the training-camp and some time previous to the service practice. It will be conducted in accordance with instructions contained in section 5, chapter vii.

The total marks to count for the Challenge Shield in this subject is 50.

If there are more than four men in the squad of signallers, the average of the four best signallers will be divided by 2 to obtain the marks to count for the shield.

Example.—The average percentage of a squad of four signallers is 0·78. Points for Challenge Shield = $\frac{0{\cdot}78}{2} = 0{\cdot}39$, or 39 marks.

Section 6. Range-finding.

All the range-takers in the battery will be examined previous to the annual service practice in accordance with instructions contained in section 4, chapter vii.

The points to count for the Challenge Shield will be obtained by dividing the average results of the three best range-takers by 2. Full marks to count for this examination towards the shield = 50.

Example.—Average percentage of the three best range-takers = 96. Points to count for Challenge Shield = $\frac{96}{2} = 48$.

Section 7. Gun-laying.

All the gun-layers of the battery will be examined just previous to the annual service practice by an officer deputed by the A.S.O. The examination will be conducted in accordance with the instructions contained in chapter viii.

Full marks to count for Challenge Shield in this subject are 72, which will be computed by taking the average results of the twelve best layers in the battery.

Example.—If the average results of the best layers in a battery are 69, the points for the shield will also be 69.

Section 8. Trumpeters.

The two trumpeters on the strength of the corps will be examined in—

(*a.*) Riding.
(*b.*) Semaphore signalling.
(*c.*) Sounding camp calls on the trumpet.
(*d.*) Sounding bugle calls mounted at the trot.
(*e.*) Turn out.

Two points will be awarded for each of the above sub-headings.

Full marks to count for the shield in this subject = 20—*i.e.*, 10 for each trumpeter.

Section 9. Driving.

All drivers will be examined in accordance with instructions contained in section 3, chapter vii. Full marks, 50. The points to count for the shield will be obtained by taking half the percentage of the twelve best drivers.

Example.—The average percentage of the twelve best drivers examined = 0·92; therefore $\frac{0{\cdot}92}{2} = 46$ marks to count for shield.

If less than twelve are examined, the average number examined will be multiplied by the number of men examined and divided by 24.

Section 10. Battery Turn-out and Route March.

Each battery will be tested in rapidity in turning out in marching order and taking up a position for action.

Conditions.—Horses will be picketed, guns parked, as in camp. The "Alarm" will be sounded, and the battery will turn out fully horsed and take up a position for action at a point indicated by the inspecting officer. The time will be taken from the sounding of the "Alarm" until the first round in fired. All mistakes will be noted, and the battery inspected, and errors in harnessing, &c., noted.

In order to insure all batteries in the colony being tested on uniform lines, the details for carrying out this test will be supplied to the officer deputed to conduct the examinations.

Sixty points will be awarded for the turn-out as above, and 40 points for a subsequent route march. Distance, about fifteen miles. All military precautions to be taken.

Section 11. Battery Drill.

Batteries will be inspected by the A.S.O. in battery gun drill, fire discipline, &c. At this inspection casualties will be made to both *personnel* and *matériel*, so as to thoroughly test all ranks in their duties.

The inspecting officer will note all errors made, and deduct marks accordingly. Full marks, 100.

Section 12. Return of Results.

As soon as the examination of the whole of the battery has been completed, the officer who conducted the examination will forward the following return to the A.S.O., together with a detailed report explaining how marks were gained or deducted in each subject. This report is to be forwarded separate from the practice report, and made confidential. The battery will not be informed as to the results until the publication of the awards in "General Orders."

REPORT ON RESULTS OF CHALLENGE SHIELD COMPETITION FOR GARRISON ARTILLERY VOLUNTEERS.

Wellington, New Zealand, 1st April, 1906.

The introduction of this competition has resulted in considerable improvement in the efficiency of the Garrison Artillery Volunteers, and the tabulated results show in a marked degree the weak points in the training of some of the companies, which should be remedied before the next camping season.

The awarding of marks for attendance at the annual training-camps has caused better attendance than in previous years, the attendance of Nos. 2, 3, 4, and 6 Companies being particularly good.

The examinations were carried out chiefly by the officers of the Permanent Force at each station, all records being finally checked at headquarters in order to insure that the regulations had been strictly complied with, and the awards, &c., made under uniform conditions throughout the colony.

The standard of efficiency in gunnery is very high in most of the companies, the highest marks being awarded to the companies in Dunedin, No. 3 Company gaining 93·36 per cent., No. 2 Company being next with 92·08 per cent. The average marks awarded to these companies for the shield in gunnery were, however, reduced on account of a number of men absenting themselves from the examination, as was also the case in several other companies. For this reason it will be seen that the marks for gunnery vary in almost the same proportion as the marks for attendance. In No. 6 Company every available man was examined in gunnery.

The regulations provide for a minimum number of gun-layers, D.R.F., and signalling specialists, and those corps that had neglected to keep the proper number of specialists in training found it impossible to get sufficient men trained in time for the examination, and were penalised accordingly, notably Nos. 7, 8, and 9 Companies.

The use of D.R.F. model targets for training purposes resulted in great improvement in range-finding in companies where these targets have been used at the weekly drills continuously throughout the year, as in the case of Nos. 4 and 6 Companies.

Only two companies had the full complement of signallers—viz., Nos. 4 and 6 Companies—the signallers of No. 6 Company being very efficient.

The standard of efficiency laid down for Garrison Artillery signallers is not a high one, and there is no reason why eight men per company should not be kept in training in this most important subject. Nos. 7 and 9 Companies had no trained signallers. Owing to the difficulty of teaching heliograph to Volunteers, it was decided to eliminate this test from the examination. International Code signalling was omitted from the examination of the Dunedin signallers.

The gun-laying of Nos. 2, 3, 4, 5, and 6 Companies was very good. Too little attention had been paid to this all-important subject by the companies in the Auckland District. Owing to the difficulty in getting Volunteers to attend daylight laying parades, most of the failures were in Case I method, which can only be really well taught at daylight parades.

The trumpeters of Nos. 2 and 3 Companies are very efficient.

The examination in fort-manning was, with one exception, satisfactory throughout, all the companies having been carefully trained in fire discipline.

The discipline of the various companies was very good, but more instruction should be given in saluting, general bearing, and camp duties.

The order of merit for the various companies is as follows:—

1st.	No. 6 Company (Petone Navals) ...	Winners of Challenge Shield for 1905–6.
2nd.	No. 4 Company (W.N.A.V.) ..	All these four companies qualified for A grade.
3rd.	No. 2 Company (D.N.A.V.) ...	
4th.	No. 3 Company (P.C.N.A.V.) ...	
5th.	No. 5 Company (L.N.A.V.) ...	
6th.	No. 7 Company (N Battery)	Qualified for B grade.
7th.	No. 8 Company (Ponsonby) ...	Not qualified. Insufficient marks to be graded.
8th.	No. 9 Company (Devonport) ...	

No. 1 Company, N.Z.G.A.V.

This company did not hold a training-camp in 1905–6, and was not, therefore, examined for Challenge Shield.

No. 2 Company, N.Z.G.A.V.

This corps is very efficient. The attendance was good throughout. Those non-commissioned officers and men who presented themselves for gunnery examination obtained very high marks—viz., 92·08 per cent.—but as only 116 out of an available 130 non-commissioned officers and men presented themselves for examination the average for the corps was reduced to 86 per cent.

In range-finding there were eleven non-commissioned officers and men examined, nine of whom passed an excellent examination, the average percentage for the nine being 98·4 per cent., but as twelve was the number required by regulations as the minimum for this corps the average marks was reduced to 81·75 per cent.

There are only six signallers in this company, two below the establishment. Three of them are very good, the remainder only fair. International Code signalling has not been taught to this company.

The gun-laying was very good.

Trumpeters are very efficient.

The fort-manning of this company is particularly good.

Discipline, good.

No. 3 Company, N.Z.G.A.V.

Attendance, very good. Marks for gunnery, 87·2 per cent.—*i.e.*, higher than No. 2 Company, chiefly owing to the fact that only six men absented themselves from the gunnery examinations. Those who were examined obtained very high marks, the average being 93·36 per cent., the highest of any corps in the colony for this subject.

Eleven of the range-finders are very efficient.

There are seven signallers in the company, only four of whom, however, are really well trained. International Code omitted from the examination.

Discipline, good.

This corps has its full complement of layers and trumpeters, and its general efficiency is of a high standard.

No. 4 Company, N.Z.G.A.V.

This company is in a very efficient state. The attendance throughout the camp was excellent, there being practically full musters at both morning and evening parades right up to the termination of the camp.

The average percentage of marks for gunnery was not so high as in other A grade companies, but very few marks were lost for absentees, as nearly all available men were examined, consequently the marks for shield in this subject are high—87·6 per cent.

The range-finding was excellent. Twenty men qualified in this subject, the twelve best obtaining 98·63 per cent.

Only six of the signallers are really well qualified. Their work was excellent in Morse and in International Code, but they require more practice in operating the semaphore instrument.

A great deal of time has been devoted by this company to gun-laying, with the result that twenty-three men qualified.

One trumpeter is very efficient, the remainder are not well up in their duties.

This company mans six works of defence, and consequently scored less marks in fort-manning than most companies that were examined in manning the one work.

Discipline, good.

No. 5 Company, N.Z.G.A.V.

The attendance of this company was not as satisfactory as in some companies, owing to the nature of work of some of the men, who, being employed on the wharves, often during the camp worked up to midnight loading and unloading cargo from ships in port, after which they rowed over to the fort in boats in order to be in time for the morning parade. Such keenness is beyond all praise.

The range-finding was excellent, there being fourteen qualified non-commissioned officers and men for this work.

There are only three qualified signallers in this company, consequently the marks awarded are very low—39 per cent.

The layers are very good.

The marks awarded for fort-manning are the highest in the colony.

The discipline during the camp was excellent, there being no penalties.

No. 6 Company, N.Z.G.A.V.

This company has been awarded the Challenge Shield, having gained 93·35 per cent. of the possible marks. So keen were all ranks that practically every man attended throughout the camp.

The gunners, signallers, range-finders, and gun-layers of this company are very efficient, and should have enabled the corps to obtain a high figure of merit for its service practice, as has been the case for years past, but owing to defective observation of one officer the company only obtained second class.

The discipline of the company is good.

No. 7 Company, N.Z.G.A.V.

This company has been graded B, having obtained less than 70 per cent. marks—viz., 66·7 per cent.

The comparatively low percentage of marks for gunnery is due to the fact of the company manning B.L. guns this year for the first time, and also to several absentees.

The D.R.F. specialists are good.

There are no signallers in this company, consequently 100 marks were lost through neglect to have trained men in this subject.

The gun-layers are good, but only eleven men qualified.

Deductions for discipline up to 2 per cent. have been made for various reasons.

No. 8 Company, N.Z.G.A.V.

This company did not obtain sufficient marks to be graded.

The low marks for attendance are due chiefly to the company not parading more than once a day—*i.e.*, in the evenings—morning parades being only occasionally held.

Only forty-three gunners were examined in gunnery out of a total of sixty-seven available, thus the reason for low marks in gunnery.

Only seven men qualified in D.R.F.

There are eight signallers in the corps, but as signalling was only taken up recently the men had not time to qualify in all the subjects.

Only six men qualified as gun-layers, or 7 per cent. of the whole corps—*i.e.*, 3 per cent. below the number allowed by regulations.

Two trumpeters passed a satisfactory examination.

The fort-manning was fairy good. The practice was bad—third class.

No. 9 Company, N.Z.G.A.V.

This company did not obtain sufficient marks to be graded. Its attendance marks are not good, for the same reason as given in No. 8 Company. There is a large percentage of recruits in the company, consequently the marks for gunnery are low.

There are no qualified signallers in the corps, and only four D.R.F. specialists qualified.

As in the case of No. 8 Company, there are too few gun-layers in the company, only eight being examined, six of whom qualified, or 8 per cent.—*i.e.*, 2 per cent. below the number required by regulations.

The trumpeters are not efficient.

Most of the officers and men being inexperienced, the marks for fort-manning are lower than in any other company.

RETURN showing RESULTS of EXAMINATION of NEW ZEALAND GARRISON ARTILLERY VOLUNTEERS for the New Zealand Garrison Artillery Challenge Shield, 1905–6.

Company.	Station.	Attendance.	Gunnery.	Range-finding.	Signalling.	Gun-laying.	Trumpeters.	Fort-manning.	Total Marks. (620.)	Percentage.	Penalties.	Marks to count for Shield.	Classification for Practice.	Grade.	Order of Merit.
											Per Cent.				
1. (A.N.A.V.) ..	Auckland	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. (D.N.A.V.) ..	Dunedin ..	94	86	81·75	52	89	19	94	515·75	83·18	1	82·18	1st	A	3
3. (P.C.N.A.V.) ..	Dunedin ..	86	87·2	86·4	51·96	84	17	95	507·56	81·86	0·1	81·76	2nd	A	4
4. (W.N.A.V.) ..	Wellington	93·79	87·6	98·63	83	89·97	12	90	554·99	89·51	1	88·51	1st	A	2
5. (L.N.A.V.) ..	Lyttelton	85	73·8	92·1	39	90	7	97	483·9	78·49	Nil	78·49	2nd	A	5
6. (P.N.A.V.) ..	Wellington	98·88	90·79	94·47	96·42	92·4	16	96	584·96	94·35	1	93·35	2nd	A	1
7. (N Battery) ..	Lyttelton	86	78·4	75·3	Nil	78·6	13	85	416·4	67·16	2	66·16	1st	B	6
8. (Ponsonby) ..	Auckland	66·27	47·21	51·55	38·77	28·61	7	80	319·41	50·15	1	49·15	3rd	Nil	7
9. (Devonport Coast Guards)	Auckland	71·15	60·83	26·75	Nil	31·73	6	75	266·46	45·39	1	44·39	3rd	Nil	8

REPORT ON NEW ZEALAND FIELD ARTILLERY CHALLENGE SHIELD COMPETITION FOR GENERAL EFFICIENCY, 1905–6.

Wellington, New Zealand, 2nd April, 1906.

The whole of the field batteries were examined this year, in accordance with the new conditions laid down in "Instructions for Practice, 1905–6."

Of the six field batteries in the colony, two qualified for A, three for B, and one for C grade of efficiency.

Attendance.

The attendance was much better than in former years, B and D Batteries having a particularly good record. Throughout the colony, both in Garrison and Field Artillery Volunteers, where the attendance has been good the general efficiency has been relatively good.

Gunnery.

The general knowledge of gunnery is not of such a high standard as in the Garrison Artillery Volunteers, but this is partly due to the want of a local drill-book containing questions and answers on gunnery, &c., as issued to the Garrison Artillery Volunteers; that is, however, being remedied by the issue of a similar book to the Field Artillery.

In many instances there were a number of men absent from the gunnery examinations, which further reduced the average marks.

The gun drill is fairly smart in most batteries, but a number of non-commissioned officers are weak in detailing drill and imparting instruction. It is not necessary for a Volunteer non-commissioned officer to be able to detail the drill off by rote, but he should have a good style and good word of command, and know his work thoroughly.

Officers commanding batteries should hold half-yearly examination of non-commissioned officers for redrilling and imparting instructions, when, if any non-commissioned officers are not up to the standard, they should be replaced by better men.

Signalling.

With the exception of A, B, and D Batteries, the signallers had very little practice previous to the training-camps, consequently the marks awarded in this subject are low. Field sketching and reconnaissance have also been neglected. It is most important that these subjects should be thoroughly taught during the present year, as they are absolutley necessary for a field battery, particularly now that firing from behind cover is so much used. The winter months should be devoted to training special men in the above subjects, and every officer, non-commissioned officer, and man should be taught semaphore signalling.

Range-finding.

Three batteries are equipped with mekometers, and three with telemeters.

In most cases range-takers passed a good examination, but at service practice failed to give good results, owing to indistinct targets being used. The men apparently have always practised taking ranges to conspicuous objects. Some range-takers are bad riders, and unfitted for reconnaissance duties.

Gun-laying.

In A, B, D, and H Batteries the laying was very good. Too little attention has, however, been paid to laying instruction throughout the year in most batteries.

Trumpeters.

There are some very good trumpeters in all except I Battery, but their training in semaphore signalling has been in some cases neglected.

The calls sounded in each battery are different, owing to various trumpet and bugle calls books being on issue. The 1903 edition must be used and strictly adhered to.

Drivers.

Several of the batteries are below the establishment in drivers, and consequently scored a low percentage of marks. The driving is generally good, but more care should be taken in enlisting men as drivers; they should be good horsemen before enlistment, as in a Volunteer battery there is insufficient time to teach men how to ride. They can be quickly trained to drive if they are good drivers.

D, H, and I Batteries had the use of twelve trained horses for the training-camp.

BATTERY TURN-OUT AND ROUTE MARCH.

The turn-out was fairly satisfactory as regards time, but several batteries were severely penalised for careless harnessing. For this test all teams were picketed to gun and limber as in bivouac. Four-horse teams were used. H and I Batteries had no wagons. B Battery had only two-horse teams for wagon-limbers.

Times were as follows: A Battery, 10 min. 20 sec.; B Battery, 9 min.; D Battery, 8 min. 50 sec.; E Battery, 9 min. 30 sec.; H Battery, 16 min. 20 sec. (no wagons); I Battery, 7 min. 15 sec. (no wagons).

The route march could not be carried out properly in accordance with conditions, excepting in D and E Batteries, owing to the men being unable to get leave from their employers. Short route marches were, however, held in all the batteries.

Battery Drill.

The battery drill in most cases was good until the officers were casualtied, when it was found that the senior non-commissioned officers had not been sufficiently well trained to take the place of officers.

More time should be devoted to training in fire discipline and application of fire under the varying conditions likely to arise on service; drills, like foot parades and ceremonial, should be limited to what is absolutely necessary.

Fire Discipline.

Very good throughout. Penalties have been made in several instances for slack camp routine, lack of smartness, &c., but the errors were chiefly due to want of training.

Shooting.

The practice this year was better than the previous year, two batteries qualifying for first class, two for second class, and one third, while one battery did not classify.

A Battery.

The attendance of this corps was not very good, and a great many of the non-commissioned officers and men absented themselves from the gunnery examination, consequently the marks for gunnery are very low; in addition, the standard of general knowledge in gunnery is only fair.

The signallers are particularly good, but have not been trained in field-sketching, &c.

The range-takers and layers are good and well trained, but the drivers are not as efficient as in other batteries.

There were two new officers in the battery, and the corps was not efficient before the camp commenced, but improved very much as a result of its annual training, and obtained a second-class figure of merit for practice, and qualified for B grade.

B Battery.

This battery has greatly improved since last year. It has the full complement of officers, and fifty-eight all ranks attended the camp.

Discipline during camp, excellent.

The gunners are smart, and drill well.

The battery is below the strength in drivers, and consequently the marks awarded for driving are not high.

Gun-layers are good.

Range-takers are very good. A telemeter is on issue to this battery.

The signallers in this battery are the most efficient of any Field Artillery signallers in the colony.

One trumpeter was not trained in semaphore signalling.

The shooting of this battery was first class, and the general efficiency of the corps is of a comparatively high standard.

D Battery.

This battery has been awarded the Challenge Shield for 1905–6. It has the full complement of officers, and sixty-six all ranks attended the camp.

The discipline of the corps was very good.

The gunnery was not of such a high standard as in B Battery, the junior non-commissioned officers being weak in imparting drill.

The drivers are good.

The signallers are efficient, but instruction in field-sketching has been neglected.

The gun-laying was particularly good, both at the examination and at the service practice.

The battery qualified for first class.

E Battery.

This battery is efficient, but owing to its practice being so bad it only qualified for B grade efficiency.

The attendance was good.

Owing to this corps having no drill-shed during the past year its training was necessarily carried out under difficulties, and its efficiency suffered. In all subjects the battery was below its usual standard of efficiency.

Signalling instruction had not been systematically carried out.

Range-takers failed badly at service practice, although they did fairly well at the examination.

The gun-laying was not good.

This battery has usually very efficient drivers, but this year they were not up to the standard of former years.

The discipline of this corps is excellent. The battery was very smart in turning out, and its battery drill was good.

It is hoped that now the drill-shed is available for instruction for this corps it will receive more training than hitherto.

H Battery.

An efficient corps.

Discipline good, but battery was penalised for stable routine not being properly carried out, late falling-in on parade, &c.

The attendance at camp was very good.

The men drill well, but, as in nearly all the batteries, the non-commissioned officers require more training in imparting instruction. If officers were to instruct their own sections more in regard to gunnery, &c., the percentage in this subject would be higher.

This battery had neglectled signalling previous to the camp, consequently the marks are very low in this subject, otherwise the battery would have qualified for A grade.

The range-takers passed a good examination, and were most reliable at service practice (mekometer).

The gun-layers of the corps are very good, although, as the guns are not fitted with telescopic sights, gun arcs, &c., their examination is very much easier than in 15-pounder B.L. batteries.

The trumpeters are very good, the best of all the battery trumpeters in the colony.

The drivers were not as good as they were the year preivous.

The battery drill was fairly good until the officers were made casualties, when it was found that the non-commissioned officers were not sufficiently well trained to take the officers' places.

This battery obtained a second-class figure of merit, and qualified for B grade.

I Battery.

This corps requires a lot of training, being weak in nearly all subjects except driving, which is good.

The marks for attendance are the lowest of all the batteries.

The marks for gunnery are low on account of non-commissioned officers and men being absent from the examination, as well as the general knowledge of the non-commissioned officers and men being weak.

The signallers are fairly good with both semaphore and Morse Code, but have not been trained in reconnaissance.

The range-finders are fairly good, but did not do good work at the service practice.

Gun-layers are fairly good.

Trumpeters are not efficient.

This corps was penalised for various omissions during the camp, but the discipline was good.

Non-commissioned officers mostly inexperienced, and require a lot of training. There are no facilities at Westport for training in field-work, and consequently this battery suffers in lack of training in taking up positions and battery manœuvre.

RETURN showing the RESULTS of the EXAMINATION of the NEW ZEALAND FIELD ARTILLERY VOLUNTEERS for the New Zealand Field Artillery Challenge Shield, 1906.

Battery.	Attendance. (100.)	Gunnery. (100.)	Signalling. (50.)	Range-finding. (50.)	Gun-laying. (72.)	Trumpeters. (20.)	Driving. (50.)	Battery Turn-out and Route March. (100.)	Battery Drill. (100.)	Total Marks. (642.)	Percentage.	Deductions for Discipline.	Total Marks to count for Shield.	Classification for Service Practice.	Grade awarded for 1905-6.	Order of Merit.
												Per Cent.				
A ..	82·9	47·4	35	40	65·6	14	28	70	75	457·9	71·32	2	69·32	2nd	B	5th
B ..	92	82·5	43·37	45	61	15·5	30·4	87	90	546·77	85·166	0·014	85·152	1st	A	2nd
D ..	93·39	80·8	36·6	40	67·25	17	41·45	90	90	556·49	86·68	0·5	86·18	1st	A	1st
E ..	88	78	30·25	37	59·7	16·5	35·1	88	90	522·5	81·4	Nil	81·4	3rd	B	3rd
H ..	85·6	71	14	40·7	67·5	19	29·97	60	75	462·77	72·08	2·25	69·83	2nd	B	4th
I ..	80	53	25·6	40	61·25	7	33	68	60	427·85	66·6	2·75	63·89	N.C.	C	6th

APPENDIX II.

CONDITIONS FOR THE COMPETITION FOR THE NEW ZEALAND ENGINEER VOLUNTEERS' CHALLENGE SHIELD.

The shield will be awarded to the company that obtains the highest number of marks for efficiency as laid down in these conditions, and is therefore by examination found to be the most efficient company of engineers in New Zealand.

Any infringement of these instructions will disquality a company.

The Engineer staff officer will carry out, or depute officers to carry out, the examinations at the various stations, and he will decide the results and make his award, which will be final.

The award will be published in "General Orders," and the shield will be held by the winning company until the publication of the next year's award.

Discipline.

A corps is to be under examination from the commencement to the termination of its annual training-camp.

Special attention is to be paid to the discipline of the corps, and marks will be deducted by the Engineer staff officer, or the officer deputed by him, for any slovenly work throughout the camp, such as—

(*a.*) Late falling-in on parade.

(*b.*) Bad discipline on parade, or lack of smartness.

(*c.*) Bad discipline in camp, such as disturbance after "Lights out"; camp routine not properly carried out; tents and lines not clean, &c.

Penalties for bad discipline in accordance with above will be made by the deductions from the total number of marks awarded for efficiency and attendance, which deductions must not exceed 5 per cent.—*i.e.*, a maximum of 1 per cent. under each of the above headings.

Attendance.

One hundred marks will be allotted for attendance.

For every parade held during the annual training-camp, excluding Sundays, 1 point will be awarded for each attendance. The number of points gained multiplied by 100 and divided by the maximum number will be the marks allotted to the company.

Example.—If the strength of the corps is 100 all ranks, and twenty-eight parades were held during the camp, the maximum would be 2,800; but if there were only 2,600 attendances, the marks allotted would be $\frac{2,600 \times 100}{2,800} = 92{\cdot}8$.

The attendance of all parades will be checked by an officer of the Permanent Forces, or the senior Permanent Force instructor present.

Half a mark may be deducted from the attendance marks of any man who is late for parade.

Marks will not be lost by the absence of men through sickness as a result of injury incurred on duty.

Officers, non-commissioned officers, and men absent from the district will not count as on the strength of the corps for this calculation.

Field Engineers.

Field Engineering.

Every non-commissioned officer and man in the field engineering section will be examined.

The maximum number of marks an individual may obtain will be 200. The total number of marks obtained by those examined will be divided by the number of men in the section.

Example.—Of a field engineering section of forty, thirty are examined. The number of marks the thirty obtain is 4,824. The marks placed to the credit of the company will be $\frac{4,824}{40} = 120{\cdot}6$.

Signalling and Field Telegraphy.

A similar system will be pursued in these sections, save that the maximum marks for an individual will be 100.

Subjects of Examination.

The particulars of the subjects of examination are shown in paragraph 416, General Regulations of the Defence Forces of New Zealand.

Submarine Mining Engineers.

Submarine Mining.

Every non-commissioned officer and man in the submarine-mining section will be examined.

The maximum number of marks an individual may obtain will be 200. The total number of marks obtained by those examined will be divided by the number of men in the section.

Example.—Of a submarine-mining section of forty, thirty are examined. The number of marks the thirty obtain is 4,824. The marks placed to the credit of the company will be $\frac{4,824}{40} = 120{\cdot}6$.

Testing, and Electric Lighting.

A similar system will be pursued in these sections, save that the maximum marks for an individual will be 100.

Subjects of Examination.

The particulars of the subjects of examination are shown in paragraph 45, General Regulations of the Defence Forces of New Zealand.

CONDITIONS FOR THE COMPETITION FOR THE NEW ZEALAND MOUNTED RIFLES AND INFANTRY CHALLENGE SHIELDS. (Competitive Tests, Volunteers, New Zealand, between Squadrons and Companies of Regiments and Battalions.)

Infantry.

1. Marching.

Company to march nine miles in marching order—viz., New Zealand service uniform, leggings or gaiters, overcoat, haversack (containing 4 lb., representing day's rations), water-bottle (filled), thirty rounds ball ammunition, and 5 lb. weight, representing other eighty rounds. Route to be arranged so that march terminates at a rifle range or suitable place for ball-firing. Officers to carry field-glasses, weight of rations, field note-book, and revolver. Section commanders not to carry ball ammunition, but an equivalent in weight.

	Marks.
Time	30
Discipline on march	30
Condition of men on completion of march	40
Total	100

Deductions during march: 10 marks will be deducted for each man falling out and not rejoining; 5 marks deducted for each fall-out temporarily, unless leave granted; incomplete marching order.

Mounted staff officer to ride with corps to award marks.

2. Shooting.

At end of march the thirty rounds ball carried during march to be expended as follows:—

(*a.*) Five volleys at 900, 800, or 700 yards (three volleys by half-companies changed to two volleys by sections) at target representing gun and team or formed Infantry.

(*b.*) Ten rounds while advancing by half-companies extended 2 paces (five rounds at 600 yards, five rounds at 500 yards), at targets representing heads and shoulders.

(*c.*) Fifteen rounds advance as skirmishers snap-shooting (four rounds, about 400 yards; four rounds, about 300 yards; seven rounds, about 200 yards) at disappearing and running targets. Targets to be lowered at end of each stage to prevent being hit in a later stage.

Marks, 31⅓ points for each hit; total, 10.

Under present conditions it would be impossible to exercise companies on ground where unknown distances could be given, hence corps will probably require to use their rifle range for this.

3. Judging Distance.

It being practically impossible to get companies together on ground suitable to combine the sections 2 and 3, judging distance to be taken separately on unknown ground as follows: Judging at long distance, 800 yards, two distances; judging at short distance, 400 to 100 yards, two distances.

	Marks.	
(*a.*) Half-company commanders, two tries each	10	Long distance.
(*b.*) Section commanders, two tries each	10	
(*c.*) Four leaders, one try each; six, four leaders ...	30	
	50	
Repeat for short range	50	
Total	100	

Objects to be set up by staff, but distance not to be measured or calculated until competition over. Five marks for each long distance judged within 20 yards over or under; 5 marks for each short distance judged within 10 yards over or under.

4. Entrenchments.

Mobilisation store-tools to be used. Tools in two heaps, one for each half-company under half-company commander, file past, pick up tools, form on selected points, spitlock out the task, and make a shelter-trench 3 ft. deep, 2 ft. wide, 5 ft. front for each man, to hold the half-company; small elbow-rest between trench and parapet.

	Marks.
Correctness, time, and laying out trench	40
Digging the trench after being spitlocked, if made in one hour and a quarter	60
Total	100

Average texture of ground to be selected: 1 point to be deducted for every minute over the hour and quarter; 1 point to be added for every minute under hour and quarter.

5. Drill and Training.

Close-order company drill:—	Marks.
(*a.*) Rifle and bayonet exercises	15
(*b.*) Firing exercises, fire discipline	25
(*c.*) Company in direct attack at least 1,000 yards, issue of orders, use of cover, formation suitable to ground and fire	35
(*d.*) Control of skirmishers, signalling (both lateral and perpendicular), communication during attack	25
Total	100

6. Duties in Camp and Bivouac.

	Marks.
(*a.*) Company arriving at a selected point, officer commanding issues orders for camp and bivouac, embracing paragraphs (*b*), (*c*), and (*d*) ...	20
(*b.*) Pitching certain number tents and constructing certain number bivouac shelters	20
(*c.*) Sanitary and water-supply	20
(*d.*) Construction of field-kitchen or cooking-place, issue of half-rations (per mobilisation scale), cook same, and provide meal for company ...	40
Total	100

Mounted Rifles.

Competitions similar to those for the Infantry, with the following alterations:—

1. Marching.

Route to be eighteen or twenty-one miles.

2. Shooting.

Add care of led horses while dismounted men carry out the shooting.

3. Judging Distance.

Same.

4. Entrenchments.

	Marks.
Substitute a reconnaissance on a broad front, orders for same, maintenance communications—lateral and perpendicular—and reporting on the same	50
Taking up an outpost line after reconnaissance, orders for same, and general knowledge of duties	50
Total	100

5. Drill and Training.

	Marks.
Care of horses, and stable management	25
Firing exercise and fire discipline	25
Squadron in attack, issue of orders, use of cover for men and horses, method of skirmishing, and adoption of formation suitable to ground and fire	25
Scouting and patrolling	25
Total	100

6. Camps and Bivouac.

Same as for Infantry, adding horses.

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