

Rules Summary

The journal, *The Engineer*, Vol 86, 9 December 1898, p. 581., published a summary of the rules.

(Note by John Curry. I have taken the liberty of using modern standards for paragraphing to replace the 100+ sentence paragraphs of the original. The aim of this is to aid readability for the modern reader.)

The Jane Naval War Game

Mr Jane was not the first person to invent a naval Kriegspiel, and he will not be the last. But with him lies the honour of first achieving success. Our readers already know something about his game from the various accounts of certain battles that we have from time to time published, but as we have not been, up to the present, in a position to answer the many enquiries we have had as to the manner of playing the game, we shall make no apology for describing in some detail its various parts and the method of simulating naval warfare.

In the first place, however, we must remind our readers that the naval Kriegspiel is a game only in name. In reality it is a most instructive lesson in the capabilities of different types of ships to withstand or carry on attacks; in the practicability of evolution and of their usefulness; in the value of gun fire, and of the vulnerability of ships. In short, it puts very fairly before the players the actual problems which would face them were they commanding squadrons in times of war, and if played in seriousness cannot fail to instruct them.

The game has, we may, moreover, remind our readers, attracted the attention of many naval officers, and the rules, on which so much depends, have been, we are told, revised and approved by H.L.H. Grand Duke Alexander of the Russian Navy, by Prince Louis of Battenberg, and Captain May, of our own Navy, and by Lieutenant Kawashima, of the Navy of Japan. We call attention to these facts, because it is as well to make it clear in the first place that time will not be wasted by a consideration of its main points.

The game is played upon as large a table as possible, on which are laid a number of large squares of cardboard ruled into smaller squares of about 1 inch. size, the exact size does not greatly matter. The distance between the centres of any two adjacent squares represents 100 yd. On this board, which is the field of operation, scale models of the ships taking part in the action are moved.

A model of the *Trafalgar*, which is before us, is 15 in. long. It is made of cork, and is suitably coloured, the guns and masts being represented by wires. The effect is much better than might be anticipated, but the value of the model lies in the fact that the exact position of the guns is shown, so that in action it is at once evident which of them will bear and on what part of the vessel attacked.

As the sides of the squares represent 100 yds, moving a model from one square to the next would be equivalent to a speed of three knots, five squares would equal 15 knots, and so on. Each move is calculated on this one-minute basis, and is not supposed to occupy a longer time. In turning,

however, speed is lost. Most vessels are allowed to turn 45° on every second square, a few which do not answer well to the helm may only turn once in three, whilst others which are particularly handy may turn 45° in two adjacent squares. The turning of the model through the 45° is held equivalent to one move forward, so that if, for example, it was desired to turn a vessel of 18-knot speed, she would first move straight forward on to the third square from the one she left counting two, then would be rotated 45° counting three, then would make three moves forward to cover the distance equivalent to the manoeuvring is done in this way, which has proved sufficiently accurate and rapid for all purposes of the game.

With regard to firing and scoring, with every vessel there is supplied a large number of similar drawings of her on thin card. These drawings, elevation and plan, are divided into sections equivalent to 25 ft lengths by vertical lines $\frac{1}{4}$ in. apart, which are numbered consecutively from the bow. The armour is indicated on the a b c system, introduced, we believe by Mr Jane in his Fighting Ships. In this system the greatest protection is marked a a a, which is proof against everything except at very close range. Then follows a a a equivalent to 30 in. of iron,

a a = 24 in. of iron;

a = 18 in.;

b = 15 in.;

c = 12 in.;

d = 9 in.;

e = 6 in.;

f = thin armour.

Guns are indicated in a like manner by capital letters, but all guns over 12 in. are called A, and will, with armour-piercing shot, all penetrate a a armour at 1,000 yd, and the 110-ton gun penetrates a a a at the same distance. At 1,000 yd, the B guns, anything over 9.2 in and under 12 in. calibre, penetrate a, at 2,000 and 3,000 b, and at 4,000 and 5,000 c armour. The C D E and F guns penetrate respectively c d e and f armour at 1,000 yd. With armour-piercing shell the value of all guns is less than shot, and with common shell it is less still, but in each case the area of effect is more. Thus the 12 in. gun with armour piercing shell at 1,000 yd goes through a a armour, but its area of damage is equivalent to only 1, whilst the area of effect from a 12 in. common shell at the same range is 4, but it can only get through d armour. The amount of damage done by any shot is marked by pencil on the cards by scribbling over the number of sections destroyed. These sections are formed by the vertical 25 ft lines, and horizontal lines representing the various decks. It is presumed that the damage done is limited, upwards and downwards, by the decks.

A reduced card Sovereign after she has been in action will make the manner of scoring clearer. The soft bow end, it will be noticed, has been entirely blown away up to the a a bulkhead by

successive common shell; one of her masts has fallen, and one big gun aft, and two 6 in. guns on the port side have been silenced whilst one D gun in the starboard battery has been put out of action for five minutes by a shell which has passed through Section II on the port side in an oblique direction, and burst among the gun crew.

We give also a reduced target of the same ship. Many of these targets are printed on thin paper for each vessel; they are divided off, it will be observed, in a manner corresponding with the scoring card, and there are different scale drawings for 4,000, 3,000 and 2,000 yd. The firing is done with a striker, consisting of a strip of thin wood about 15 in. long, with an enlarged end, somewhere near the centre of which a short pin point projects. The target being laid flat upon the table, one of the views, according to the range and position of the enemy, is struck at; the hole made by the pin point indicates where the shot is supposed to have hit.

From a printed card it is then ascertained, knowing the calibre of the gun fired and the nature of the projectile, how many sections are to be marked off on the scoring card. If the projectile strikes armour which it is unable to penetrate, the effect is counted nil. On the same card the rate of fire of the different sorts of guns is also marked. Thus the 12 in. gun may fire once in every two complete moves, that is, once in two minutes, whilst all guns under 9-2 may fire once a minute.

We understand, however, from Mr. Jane, that this rate of fire can with advantage be reduced, as the accuracy of the strikers is too high, and thus actions are, as a rule, over too soon. This manner of firing seems at first sight crude, and it is only after having used it for some time that its suitability is appreciated. In no two strikers is the position of the pinpoint the same, and the expanded end of the striker is of such size that a large area of the target is covered, so that a sufficiently large margin of chance prevails. It has been found that all the attempts to secure accuracy which different players adopt end, as a rule, in failure, and no matter whether a short stroke or a long stroke is made, the effect is generally the same. As a rule, moreover, the accuracy of firing gets worse as the excitement increases. It will thus be understood that the strikers do very fairly imitate the conditions of actual shooting, particularly when the rate of firing is reduced according to Mr Jane's recent suggestion. We need not go further into the manner of playing the game, which will, we hope, be sufficiently well understood from what we have already said.

There are, of course, a number of rules on which we have not touched at all, which provide for various conditions, of which it might be advisable on certain occasions to take account; but it is found that for any one action only a few of them are generally required.

It is almost out of the question to review the game critically. At first there are several points which seem as if they would gain by revision; but on a closer acquaintance one begins to see that they have their advantages, and to understand that they have not been made without great consideration and after numerous experiments. For example, it appears as if the turning rule was defective; but in a actual practise it has proved itself suitable for all ordinary purposes and far simpler than various devises which suggest themselves as improvements.

We have already called attention to the strikers, and to the regulations for the number of shots per minute. By reducing the rate of fire for the big guns for all ranges, and by reducing the number of small guns fired as the range increases, the actual conditions of warfare are very well simulated, and actions take about as long as they would presumably in reality, if the crews of the various ships were equally cool and courageous. The estimates of the amount done have been worked out from official statistics, and as they have received the approval of very high authorities on the subject, we may safely conclude that they are not far from correct.

We have only touched upon the tactical game, but strategical problems can be worked out with even more value, although experts alone could hope to wrestle satisfactorily with the mass of rules and regulations which an imitation of a great strategical war must necessarily involve. There can, however, be little question that when played by persons well informed on the various points-as, for example, naval and military officers -and when well umpired, a great deal of useful information would be gained from it.

In conclusion, we must congratulate Mr Jane and those who have worked with him on what they have done, The rules alone, apart altogether from their bearing on the game, contain a mass of information upon ships of war, their armour and armament, their speeds and handiness, which cannot be found in so compact a form elsewhere, whilst a glance through those which apply particularly to the strategical game will show what a number of things have to be thought of by those who command fleets in time of war. The task Mr Jane set himself has been no light one, and great praise is due to him in that he has succeeded in grappling successfully with problems which it must have appeared at first could never be satisfactorily solved. We have little doubt the naval war game will ultimately be found at least as useful as-and it is certainly more realistic than-our military Kriegspiels.