

Simulations  
Canada

# GRAND FLEET

Tactical Naval Combat  
in the North Sea, 1914 - 1918



# GRAND FLEET, Tactical Naval Combat In The North Sea, 1906-1920.

## Index:

- 1.0 Introduction
- 2.0 General Course of Play
- 3.0 Game Equipment
- 4.0 Getting Started
- 5.0 Planning A Mission
- 6.0 The Battle Phase
- 7.0 The After Action Report
- 8.0 Scenarios
- 9.0 Notes On Play
- 10.0 Designer's Notes
- 11.0 Bibliography

## Credits:

Design: J. Baker.  
Development: S.M. Newberg.  
Playtesting: W.J. Nichols & W.I.T Group.  
Cover Art: J. Kula, (c) 1989.  
Printing: Halcraft Print.

*The enclosed software program on diskette, rules booklet, and map sheets are copyrighted. These items may not be copied, photocopied, reproduced, translated or reduced to any electronic or machine readable form, in whole or in part, without prior written consent from Simulations Canada. The software program may be copied, by the original purchaser only, to provide a secure backup copy of the provided program diskette. However, such a copy may not be given away or sold to other individuals or firms of any form. We do not protect our software so that purchasers will have no difficulty making a backup copy. Please do not abuse this policy.*

Copyright (c), 1989 by Simulations Canada, P.O. Box 452, Bridgewater, Nova Scotia, Canada, B4V 2X6. MADE IN CANADA.

**1.0 INTRODUCTION:** The first decade of the twentieth century saw a revolution in naval armourments that led to one of the first technological arms races. The advent Lord Fisher's "Dreadnought" type battleship revolutionized naval design and made a good portion of the current naval forces of the world obsolete, thus creating a new, and level, starting point. The major naval powers were forced to engage in a race to see who could produce the most of this new form of seapower. When World War I broke out in 1914, the two largest fleets of these types of ships were possessed by England and Germany. England decided to use her fleet to attempt strangle Germany with an economic blockade. However if Germany could defeat the British Grand Fleet in battle, it could break such a blockade and possibly cause the defeat of the Allied powers. With these objectives, the two nations engaged in a series of skirmishes and battles over the next four years, of which the largest was the tactically indecisive battle of Jutland. The British were never able to destroy the German fleet and hence eliminate

its threat, but they did maintain their blockade. Germany, unable to complete her transformation into a "sea animal" like her opponent, was left fighting another English dominated Grand Coalition on land.

**GRAND FLEET** is a detailed game type simulation of the naval battles in the North Sea from the beginning of the dreadnought era in 1906 to the end of World War One and extending through 1920. This coverage period allows for all of the ship designs that were to participate in The Great War as well as those underway but not yet completed by the end of the war. It covers the major clashes between the Germans and British and also includes a scenario generator capable of creating hypothetical naval actions during the entire period. The players have the viewpoint of the senior naval commander present for each side. As such, they are responsible for giving maneuver orders for the fleet they control and giving general orders to other fleets and light forces which will execute those orders under the control of their commanders, as represented by the computer. During the setup phase, the player will be able to establish fleets and squadrons from available ships. During battle, the player will command his forces from his position on his flagship. He will have first hand knowledge and direct control only of his own fleet and the forces assigned to it. At all times only the information relevant to the player's viewpoint will be presented and only the decisions which the player's viewpoint could actually make will be available. Information and activities that would not be seen from this viewpoint will be handled by the computer.

**2.0 GENERAL COURSE OF PLAY:** The game is composed of two major sections, the setup phase and the battle itself. The setup phase allows the players to play a new or saved game, to select a scenario to play, or to create their own scenario. Once setup is complete, the battle begins. Each sides' ships will move as ordered. Contact reports will come in both from your Flag Captain (on the ship which you command) and from other ships and squadrons on your side. The player is considered to be "on" his flagship. Thus, his options are centered around this ship and the reports it would receive. The player may give orders directly to his the fleet to which his flagship belongs. He may also give orders to other fleets, squadrons and light forces that are in communications with him. Once the player has finished giving orders and sending messages, the battle resumes. Every two minutes of game time the player will be able to issue up to two new orders to his subordinates. When the game ends, the players will be given an "After Action Report" composed of the final victory point total and a ship status report that will display the closing situation for each vessel involved in play.

**3.0 GAME EQUIPMENT:** Two identical, laminated maps representing a featureless area of the North Sea were fought are included in the

game. Positions in the game are reported based on a Cartesian X,Y system marked off in 3000 yard intervals (squares) that is not confined by the printed area of the map. X positions run from left to right, but we have reversed the Y axis to keep the map grid uniform to that of our previous tactical naval games. Thus Y positions run from top to bottom. The printed map therefore represents only one quadrant of the normal 4 quadrant Cartesian system. Should your actions take formations off the map to the north (top), the coordinates of the formations would remain positive in the X coordinate, but become negative in the Y coordinate. Similarly moving off the printed grid to the west (left) would make the X coordinate negative while Y would stay positive. Moving off the northwest corner would produce negative X and Y coordinates. Any time play moves off the supplied printed surface, the you should replot all locations and draw onto the map the new axis X,Y range to represent your shift. Headings are based on a 16 point compass. Heading 0 is directly north, heading 4 is East, 8 is South, etc. The two differently colored markers provided with the game can be used to keep track of ship locations, contact reports, and axis shifts. To erase marker notations from the laminated surfaces, simply rub them off with *damp* a cloth.

#### 4.0 GETTING STARTED:

**4.1 BOOTING:** Before first booting the game you should format a blank disk for saving games. Consult your disk drive manual for how to format a blank disk. Apple users must format under DOS 3.3. To boot the game, place the game disk in the primary drive and turn on the computer. Commodore users must type 'LOAD "GDF",8' followed by 'RUN'. IBMPC users should use DOS 2.0 or later and boot the game by inserting the disk in the default drive of an already running system and typing 'GDF'. Note that you can copy the files to a hard disk and the game then started from that directory. Amiga, Atari ST, & MacIntosh users should start the file GDF.PRG. After starting the game, keep the game disk in the disk drive unless told to do otherwise by the program.

**4.2 ENTERING INFORMATION:** The computer detects the completion of each information entry by the player typing in their entry or by pressing the <RETURN> or <ENTER> key. The computer will list the available options. If a default option is available, it will be highlighted and pressing the <RETURN> key will automatically select this option. No distinction is made between upper and lower case letters.

**4.3 PAUSE TIME:** After booting, the computer will ask what length of time you wish for each message to pause before it scrolls up the screen. We recommend a pause time of 1-2 seconds. If the time you set is not what you want, save the game and restart.

**4.4 ONE OR TWO PLAYERS:** After booting, the computer will ask if you will be playing with one or two players. If you choose one player, the computer will ask you which side you wish to control. Simply enter

the letter 'G' or 'B' indicating your choice. If two players are chosen, each player will be asked to enter a password that the computer will request before displaying messages that should be seen only by that player. A password of spaces is allowed.

**4.5 NEW OR SAVED GAME:** The program will ask if you wish to restart a saved game or start a new one. Entering an 'S' will take you to the routine that restarts a saved game and will prompt you through the procedure. Entering a 'N' will allow you to select from the available scenarios or build your own scenario.

**4.6 SELECT SCENARIO:** There are seven historical scenarios in **GRAND FLEET**, or the player can choose to build his own. If you are starting a new game you must enter a number (1-8) indicating your choice. In either case, you will have the option of editing your own forces using the force setup routines.

**4.7 CHANGE GAME PARAMETERS:** After the scenario has been chosen, certain parameters can be changed from their historical values for purposes of play balance or experimentation. The susceptibility of the British ship designs to magazine explosions may be decreased by choosing post Jutland flash protection. Similarly, the effectiveness of British gunfire may be increased by choosing post Jutland shell design. If you are building your own scenario, the experience level for either side may be enhanced (this represents a heightened state of training and will result in more accurate gunnery and quicker repair of damage).

**5.0 GAME SETUP OPTIONS:** If you choose to build your own scenario, you will first have to choose the environmental conditions, and then edit, that is, alter the component units of, the forces available. Similarly, the force editing procedures may be used to modify the forces assigned to a human player (not the computer) in any of the historical scenarios.

**5.1 GAME LIMITS:** If you choose to build your own scenarios, the computer will ask you to select the game length (in 2 minute turns). At least 1 hour (30 turns) of game time must be chosen. Then the computer will ask you for the year in which the scenario is set. This year determines the ships available for your fleet, based on historical availability.

**5.2 GAME ENVIRONMENT:** If you are constructing your own scenario, the computer will ask you if you wish it to select the environment. If you do not, you will then have to enter the game start time, the times of dawn and dusk, the wind direction, the prevailing weather conditions, and whether the moon is up during darkness. Whether you select these values or allow the computer to do so, you may reselect them before continuing on to force selection.

**5.3 COMPUTER FORCE SELECTION:** In a 'Build Your Own Scenario', you will be given the option of having the computer select the sides. If you select this option, the computer will then select forces for both the British and German player. You will then have the option of modifying the forces assigned to you. If you do not choose this option, you must then

enter the forces available to both sides. This option is recommended as it will save considerable time and also will add to the suspense of the initial contact. If you choose this option, all of the procedures described in 5.4 are optional, if you do not, you must perform them for both sides.

**5.4 FORCE SETUP PROCEDURES:** You will always have the option of editing forces which are not controlled by the computer. In addition, if you choose to build your own forces without using option 5.3, you will have to enter the forces available to the computer player as well. To understand the force editing routines, you must first understand how the forces are organized.

**5.41 CAPITAL SQUADRONS:** The basic maneuver unit is not the single ship, it is a squadron of several ships that maneuver and fight as a unit. Each capital ship squadron may contain up to 8 separate ships. Although these ships start as a unit, as damage occurs some of them may be forced to drop out of formation. The squadron is limited to the top speed of its slowest ship, so it is wise to assign ships of similar top speeds to the same squadron. Selecting option (C) from the FORCE SETUP menu allows you to create and edit the squadrons in your fleet. If you select this option, you will be allowed to either (C)reate or (M)odify squadrons. If you select (C)reate, you can then either choose to select a preselected squadron (based loosely on the organization in force at the time of JUTLAND), or build your own squadron from the available ship list. For a preselected squadron to be chosen, all of its ships must be available during the time period of the game. Also, none of them may have been previously assigned to other squadrons. In 1906, the Germans have no preselected squadrons completed, and you must choose to construct the squadrons from the available list. Using preselected squadrons will considerably speed force selection. After selecting the preselected squadron, the squadron edit procedures are entered.

If you choose to build your own squadron, you will first be asked to enter the squadron name. Then the squadron edit procedure is invoked. The squadron edit routines are also invoked if you choose to modify an existing squadron.

When editing a squadron, you may choose to (A)dd a ship from the available ship list, (R)emove a ship from the squadron, change the squadron (N)ame, choose a (F)lagship for the squadron, change the (O)rder of ships in the squadron (that is, their physical sequence in a line of battle), or e(X)it. For a squadron to be saved, it must contain at least one ship. If you do not choose a squadron flag, the first ship in the squadron will be assigned this duty.

**5.42 LIGHT SHIP SQUADRONS:** Light ship squadrons are not treated as individual ships, but are treated as a single unit. When you choose to build a light ship squadron, you must first choose the squadron name. You will then be asked to choose the type of ship from among five generic light ship types:

1) New Light Cruisers (CL) armed with 6 inch guns.

2) Old Light Cruisers (CL) armed with 6 inch guns.

3) Light Cruisers (CL) armed with 4 inch guns.

4) Destroyers (DD)

5) Torpedo boats (TBD).

After choosing the light ship type, you may then assign the squadron to a fleet. This need not be done at this point, because on exit from setup, the computer will ask you to assign any unassigned squadrons.

After choosing the light ship type, editing will be invoked to allow modification of the light ship. You may change any of the above values, or modify the strength of the squadron. A default strength of 8 DD/TBDs or 4 CLs is assumed, but may be changed. Note that to delete a light squadron, you should specify a strength of 0.

**5.43 FLEETS:** A fleet is a grouping of capital squadrons. It is possible to maneuver all the squadrons of a fleet together using a single order, which considerably eases the difficulty of issuing orders. When building your own scenarios you must create at least one fleet as your commander is assumed to be located on the flagship of the "Main" fleet (see rule 5.46 below). Before you can create any fleets, you must first build at least one capital squadron. When assigning a new fleet, you must enter the name of the fleet. You then will be allowed to (A)dd capital squadrons, (R)emove squadrons, assign a fleet (F)lagship, re(N)ame the fleet, change the physical (O)rder of the squadrons of the fleet in their position in the line of battle, or e(X)it. You must assign the flagship from among the ships in the fleet before you exit this routine. A fleet with no capital squadrons will be removed. Note that light ship squadrons are not actually part of the fleet formation, but are assigned to a fleet for command purposes.

**5.44 POSITION UNITS:** It is necessary to assign an initial position to every unit on your side when building your own scenarios. A position consists of an X,Y position specified in kyd (1000 yd) intervals relative to the origin (X=0,Y=0), a course heading and a speed. If you position a fleet, the position you specify will apply to the first capital squadron in the fleet. You must then specify the formation of the fleet and all other squadrons will be placed for you. There are two formations available for fleets:

**COLUMN** formation position the fleet in a "follow the leader" attitude. Columns are easier to maneuver. If you have specified only one squadron in a fleet, you should use column formation.

**LINE OF BEARING** formation requires you to specify a line of bearing (heading) from the lead squadron along which all of the other squadrons are positioned. All squadrons retain the fleet heading. Line of bearing formations can be used to construct line abreast or echelon formations. Line of Bearing formations are harder to maneuver, but can be used to bring a large fleet into action quickly.

**5.45 DISPLAY SQUADRONS:** You may choose to display the squadrons you have created and their positions. If a squadron is listed as "not positioned" instead of an X,Y

coordinate, you must use the routines in 5.44 to assign it a position.

**5.46 CHOOSE MAIN COMMAND:** It is necessary to choose the fleet which you personally command. To use this option, a fleet must be created first. If only one fleet exists, it will automatically be chosen.

**5.47 FINISHING THE SETUP:** To exit from the game setup routines, you must have created and positioned at least one fleet, positioned all independent and light squadrons, and chosen your main command. If the computer discovers any light or independent capital squadrons which have not yet been assigned to a fleet for command purposes, it will ask you to assign them now. If only one fleet exists, all independent squadrons will be assigned to it. Note that all of the procedures in 5.4 are optional for historical and computer selected scenarios. That is, though all this will be selected for you in such scenarios, you can always modify this preselection via the edit routines should you so desire.

## 6.0 THE BATTLE PHASE:

**6.1 GENERAL:** During the Battle Phase, the forces of each side will attempt to carry out their orders as planned by the players. The Battle Phase consists of a series of turns each of which consists of sighting, orders, combat, and movement. Activity during the Battle Phase is resolved for two minute segments of game time. During each two minute turn, the player will be able to issue two maneuver orders.

**6.2 THE SIGHTING PHASE:** In the sighting phase, you will receive reports from your flag captain about enemy and unknown forces that can be observed by your fleet. Also, you will receive reports from friendly ships about enemy forces that you cannot directly observe. During the reports, you may pause the scrolling display temporarily by pressing any key.

**6.3 THE ORDERS MENU:** You may only issue two orders to your fleet each gameturn. You have several choices for orders, depending on whether you issue them to your own fleet, a subordinate fleet, or light forces. You also have a limited ability to change the force organization that was established during the setup phase.

**6.31 DISPLAY CONTACTS:** This selection will display information on visual sightings from the player's Flagship. It does not expend an order. The display will show squadrons and detached ships that are visually detected. By selecting the (C) Further Contact Information option you can display individual ship status, and occasionally receive more information on a contact that was reported by friendly forces. For all identified enemy ships and squadrons, you will see a recommended engagement range. This is the range your flag captain has determined gives you the best chance of inflicting more damage on the enemy than is inflicted on your forces. This range is calculated based on the immune zone characteristics of your flagship.

**6.32 ISSUE FLEET ORDERS:** This selection allows you to give maneuver and fire orders to the fleet that is directly under your

command. You have much greater control over this fleet than over your other forces, and will be able to issue orders that control its battle formation and movement. Depending on your formation and previous orders, only certain maneuvers will be available. In order to use the full range of orders, you should let any of your previously ordered maneuvers be completed before you initiate a new one. The menu for this order will show you which maneuver your fleet is currently executing. If only a formation is listed, your fleet has completed its last order. With all orders, you will be asked to confirm that the order is to be issued. You may issue the following orders to your fleet:

**(B) Battle Turn Away:** This maneuver is available only to the Germans. It causes all the squadrons to make an immediate 180 degree turn, followed by a form up order. This maneuver allowed the German fleets to escape from an unfavorable position at Jutland.

**(E) Evade Torpedoes:** If you initiate this maneuver, your fleet will become unformed, but you may avoid torpedo damage. You will have to enter a new course to which all your squadrons will turn.

**(F) Form Up:** This order is always available. It allows you to form either a Line or Column formation. Until the new formation is complete, however, the squadrons in your fleet will move much more slowly. If you choose to form a column formation, you will have to enter the new speed and course on which the column will form. If you order a line formation, you will have to enter the speed, course and line of bearing.

**(I) Increase/Decrease Speed:** Enter the new fleet speed. Note that the fleet is limited to the speed of the slowest ship in the formation

**(L) Front to Flank Turn:** This maneuver is available only to a line formation which is not maneuvering and which is formed so that the line of bearing is at right angles to the fleet heading (for example, the line of bearing is north while the fleet heading is east). It causes all the squadrons of your fleet to make an immediate 90 degree turn to port or starboard and form a column. This is the fastest method of forming a column and its flexibility is the reason for using a line formation while approaching an enemy.

**(N) No new order:** Exit to the main orders menu.

**(O) Open Fire:** Until you issue this order, ships in your fleet will not fire on the enemy. During the combat phase, you may receive requests to open fire from ships in your command, at which time this order may be actuated for that vessel.

**(S) Shift:** A shift order allows you to conduct an S-Turn to move your formation to port or starboard without changing formation. It is available only to fleets which are not conducting any other maneuver. You will be asked the direction you wish to shift (port or starboard), how far you wish to go, and at what speed the maneuver is to be conducted.

**(T) Turn in Succession:** Turn in succession is available only to fleets in column formation. It causes the squadrons to follow the leader. You enter the new direction

and speed of the lead squadron, and all following squadrons will follow it. This order is why the column formation is used to maneuver a long line of ships. In order to ease the completion of the maneuver, you occasionally will want to choose a speed slightly less than the fleet maximum, to allow squadrons to catch up.

**(W) Wheel:** This order is available only to a not maneuvering line formation. It causes the line to wheel up to 45 degrees while maintaining formation. Ships on the inside of the wheel will slow down to allow the completion of the maneuver.

**(X) Cease Fire:** This order causes ships in your fleet to cease firing at enemy targets.

**6.33 ISSUE ORDERS TO INDEPENDENT AND LIGHT FORCES:** Unlike with your fleet, you may not issue actual maneuver orders to independent and light squadrons. Instead, you tell them what you want them to do and the computer, representing the commander of such forces, will execute these orders. Certain of these orders are available only for light **(L)** squadrons, some for independent capital **(C)** squadrons, and others are available for both **(B)** types. You will be asked to select the squadron to which you issue the orders. You may issue orders to individual capital or light squadrons, or all light forces. If you choose to issue orders to all light forces, you are limited to orders which do not require the entering of specific positions. The following orders are available:

**(A)-Attack (B):** This order tells your forces to attempt to attack the nearest enemy. They will immediately move toward the nearest spotted enemy and engage them. If no enemy is in sight, they will continue on course.

**(C)-Cover (B):** The forces selected will attempt to interpose themselves between the nearest enemy and your fleet. German light forces will lay smoke screens.

**(G)-Go to Station (B):** The squadron selected will attempt to maintain a position relative to your fleet. You specify the position in terms of a bearing relative to the fleet heading and a range in kyd. As you maneuver your fleet, the squadrons assigned to station orders will move to maintain this relative position.

**(J)-Join the Fleet (C):** The squadron will incorporate itself into the fleet and then be subject to the fleet maneuver orders.

**(R)-Relay (L):** Squadrons with relay orders will move to a position midway between your fleet and a second fleet on your side. If they establish communications with both fleets, you will then be able to issue orders to the subordinate fleet even if you cannot see it directly.

**(S)-Scout (B):** This is similar to station orders except that the direction is specified in terms of actual map direction instead the heading of the fleet. The squadron will move in the specified direction and attempt to maintain that position. Note that you may lose contact with squadrons with this order if you send them too far away.

**(T)-Torpedo Attack (L):** The squadron(s) specified will move toward the nearest enemy capital squadron and launch torpedoes.

**(W)-Withdraw (B):** Head home at top

speed. For all withdrawal orders, the units will move in the NW (British) or ESE (Germans) direction in an attempt to clear out of the battle area, provided that these orders do not bring them closer to the enemy.

**(X)-No order (B):** this selection exits without giving orders to the selected formations.

**6.34 CHANGE ORGANIZATION:** You may make minor changes to your side's organization by choosing this menu. You may:

**(D) Detach A Squadron.** One of the squadrons in formation with your main fleet may be detached. Choosing this will cause the squadron to receive orders as an independent squadron.

**(S) Change Independent Squadron Subordination.** You may choose to command a squadron that is currently controlled by a subordinate fleet or release one of your squadrons to the control of another fleet.

**(R) Release Slower Ships.** Formations are restricted to the speed of the slowest ship in the squadron. If a ship is more than 1 KT slower than the rest of a squadron, you can release it to act independently. It may either be ordered to follow at its best speed or go home. A ship which is ordered to follow, but which loses track of its parent squadron, will revert to a withdrawal order. If the parent formation slows down enough so that a released ship can catch up, the ship will rejoin its squadron. During combat, you may receive a communication from a ship which has been damaged to the point where it cannot keep up with the formation. Releasing a ship at that time (immediately) does not cost an order. Releasing a ship from this menu does cost an order and undamaged ships may also be released.

**6.35 ISSUE ORDERS TO SUBORDINATE FLEETS:** The player may issue maneuver commands only to the main command of his side. Other fleets may receive orders through this menu, but only if you are in communications with them. You may tell a subordinate fleet to:

**(C) Continue On Current Course And Speed.**

**(E) Engage A Spotted Enemy.**

**(P) Pursue A Spotted Enemy.**

Both engage and pursue have similar effects. However, ordering pursuit will cause the fleet to be more aggressive in closing the range. If the fleet does not detect any enemy ships, it will revert to continue orders.

**(J) Join Main Body.** This order will cause the fleet to take station either ahead or behind your fleet (depending on whether its speed is greater or slower than your fleet). It will not actually join your fleet formation.

**(I) Act Independently.** This causes the fleet to choose its own movement strategy. Fleets which are out of communications will use this order automatically.

**(H) Change Course.** The fleet will move on the new course which you will indicate.

**(W) Withdraw.** The fleet will head for home, NW for England or ESE for Germany.

**6.36 EXIT:** Entering the letter 'X' signifies that you have finished issuing orders. The game then will resolve combat and

movement for the turn.

**6.4 COMBAT:** Results of combat which are observed by the players' Flagships will be displayed on the screen. Reports of gunnery hits will include near misses and hits that fail to penetrate the target's armor. It is possible for combat to occur between ships, yet not be reported. This is especially the case when the engaged ships are out of sight of the player's Flagship. If the player's Flagship is crippled during combat, an attempt will be made to shift the player's Flag to another vessel. This represents the transfer of authority to the next senior commander; it does not imply the physical relocation of the force commander. Damage does not take effect until the end of each combat resolution increment, so even ships which are sunk will be able to resolve their return fire for that turn.

**6.5 MOVEMENT:** Ships will move according to their orders after combat is complete. Ships given withdrawal orders will attempt to avoid contact with enemy forces. Ships will never allow themselves to run aground and collisions, intentional or otherwise, will not occur (historically ship COs were alert to navigation risks and actual instances of collisions were very rare).

**6.6 CONCLUDING THE GAME:** The game will end automatically if any of the following occur: 1) One side's capital ships are completely destroyed or, 2) The number of turns specified in the setup phase has elapsed. You may also choose to end the game voluntarily at the end of any turn.

**6.7 SAVE OR END GAME:** This selection allows the player to either save the game or end it. To save the game, you must use a preformatted save game disk (see Section 4.3). Use only file names legal under your computer's disk operating system to name the saved game.

**7.0 THE AFTER ACTION REPORT:** At the end of the game, you may see the computed victory points and display the status of all ships and light squadrons. Victory points are calculated both by damage inflicted and by the size of the opposing force (thus a large British Fleet will result in a large number of German victory points). Ships that have been sunk will have the conditions of their loss given. The computer will then calculate the victory points for each side.

**8.0 SCENARIOS:** Beginning players are advised to first play DOGGER BANK (British side) or Scarborough II (British side) before attempting any of the more complex scenarios.

**8.1 SCARBOROUGH RAID I: 16 DEC 1914** was a day of missed opportunities that could have changed the course of history. The Germans had been conducting bombardment raids with their fast battle cruiser force against English coastal towns. The Grand Fleet, based far to the North, seemed to be powerless to stop these raids and the Admiralty came under considerable criticism. They decided to trap the German battle cruisers the next time they tried a raid. To this end, the British attached two powerful squadrons of

their latest dreadnoughts to their own battle cruiser force. Their radio intercepts indicated that the Germans were going to bombard Scarborough and the British planned to trap them on their way home. What the intercepts did not reveal was that the entire German High Seas Fleet was deployed to support the battle cruisers for their return. The light forces of the German main body and the British clashed just before dawn, and then the German admiral (Ingenohl) made a fateful decision that robbed him of the chance to significantly alter the balance of naval forces and possibly change the course of the war. Instead of investigating the contacts to the southwest and offering battle, he convinced himself that he was facing the entire Grand Fleet and turned back to port, leaving his battle cruiser forces unsupported. Scenario 1 investigates the hypothetical situation in which the German and British forces turn toward each other instead of away. The British must attempt to use their range advantage to engage the Germans while avoiding destruction by the larger German forces.

**8.2 SCARBOROUGH RAID II:** After Ingenohl turned back to port (Scarborough I), the German battle cruisers completed their bombardment and headed home. The British forces which had been detailed to trap them made brief contact with the German screen, but, due to a mixup in signals, lost track of the Germans and allowed them to escape in the mist. The British lost their chance to destroy the German raiding force, and only later learned how close to destruction they had come themselves. This scenario recreates this situation from the point of the German bombardment group heading home.

**8.3 DOGGER BANK, 24 JAN 1915:** The Germans continued their raids against the British coastal towns, and the Battle of Dogger Bank was the result. The Germans allocated 3 of their battle cruisers and the armored cruiser Blucher to the raid, but were intercepted by a force of 5 British battle cruisers. The German admiral decided to withdraw in the face of his numerically superior enemy, but was forced to abandon the slower Blucher to escape. Once again, a signal mixup on the part of the British allowed the German battle cruisers to escape, as the British concentrated on the ill-fated Blucher and sank her.

**8.4 JUTLAND, THE SCOUTING ACTION, 31 MAY 1916:** The great collision of the Grand Fleet and High Seas fleet began when the German and British battle cruiser forces met in a running fight. The British BCs were supported by powerful 5th battle squadron and the German admiral (Hipper) decided to the attempt to draw this force to the main body of the German fleet. In the fight that followed, two British battle cruisers were destroyed by magazine explosions. Beatty (commander of the British battle cruisers) was heard to utter the famous line "There seems to be something ~~must~~ be wrong with our bloody ships today".

**8.5 JUTLAND: THE MAIN ACTION, 31 MAY 1916:** The British battle cruisers and 5th battle squadron retreated from the High Seas Fleet and attempted to draw it to the Grand Fleet. The German admiral (Scheer) pursued. This scenario begins just before the British

Grand Fleet deploys for action. Historically, the British admiral (Jellicoe) managed to "cross the T" of the German fleet and the High Seas fleet faced destruction. Admiral Scheer ordered a "Gefechtskehrwendung" (Battle Turn away) maneuver and escaped. There followed a running battle to the south that ended with the German Fleet escaping during the night. Both sides claimed victory, and from a tactical standpoint the Germans had actually won the engagements in terms of units engaged and losses, but the Grand Fleet had not been broken and the German High Seas Fleet had therefore suffered a strategic defeat with the Allied blockade remaining intact.

**8.6 JUTLAND, 31 MAY 1916:** This scenario starts at the beginning of the Scouting action and continues for the entire battle of Jutland with all forces available.

**8.7 1918 - THE LAST CHANCE:** In 1918, the Germans sortied again in an attempt to engage British convoys from Scandinavia, leaving their predreadnoughts in port. Although no battle actually occurred, this scenario supposes that they encountered the Grand Fleet, supported by an American squadron, on 18 April of the last year of the Great War.

**8.8 SCENARIO NOTES:**

**8.81 LIGHT FORCES:** All of the scenarios have been set up so that the light forces of the opposing fleets will make contact during the first few game turns.

**8.82 COMPUTER SELECTED FORCES:** The computer will select randomly one of four force levels for the British as follows: 1) Battle Cruisers, 2) Battle Cruisers and Supporting Battle squadron, 3) Main Body, or 4) Main Body and Battle Cruisers. The computer will select randomly one of two force levels for the Germans: 1) Battle Cruisers, or 2) Battle Cruisers and Main Body. Until you scout out the enemy, you will not know what forces he has available.

**8.83 FOR THE PURISTS:** For the sake of game mechanics and to simplify play, some of the smaller groups of light forces, especially on the German side, have been consolidated into larger units.

**9.0 NOTES ON PLAY:**

**9.4 COMBAT: GRAND FLEET'S** combat resolution procedure considers the specific interactions between the gun characteristics of each firing weapon, the firing range to the target to determine impact angles, and the armour of each particular target. As was historically the case, immune zones can exist at certain distances. To use your vessels to best effect, try to position your ships so that you are in the immune zones of as much of your forces as possible, while as many of your guns as possible are firing at your opponent's forces at ranges that are not in his immune zones. This puts a premium on maneuver as the decisive element of concentrating effective firepower. Damage from combat can occur to a ship's propulsion, weapons, fire control equipment, etc. Flooding and fires may occur. Good damage control can halt flooding, put out fires, and regain propulsion. Damage to weapons and fire control systems will be permanent (during the timeframe of the game).

But keep in mind that capital ships were designed to take hits. Slugging it out within each other's immune zones can produce very long battles to little effect.

**10.0 DESIGNER'S NOTES:** The history of naval warfare during this period is fascinating. Over the course of 10 years gunnery ranges changed from about 5000 yards to the horizon, ships almost doubled in size, speeds increased dramatically, and basic ship design for the next half-century was defined (today, the IOWA class battleships in service with the U.S. Navy are direct descendants of the Dreadnoughts). There were essentially 6 classes of ships in use during this period:

1. Predreadnought Battleships (PD) were the capital ship design in use at the turn of the century. They were significantly slower than the later designs, but were reasonably well protected and often used the same type of gun as the first dreadnoughts. Usually they had mixed calibers of guns, with only two turrets (of 2 guns each for a total of 4 guns) of the larger size. Predreadnoughts were considered obsolete at the time of the war, but were used extensively for shore bombardment and other tasks requiring medium amounts of firepower, but without a need for high speed. This gave them a job and saved risking their less expendable successors in the battle line.

2. Dreadnought Battleships (BB) were the capital ship class named from the Dreadnought, Lord Fisher's revolutionary design which was launched by the British in 1906 and incorporated the lessons learned during the Russo-Japanese war of 1905. The Dreadnought had only a single caliber of main guns, normally mounted around the centerline of the vessel to take maximum advantage of the resulting firing arc, and stressed speed and protection. Even at the time, the Dreadnought was considered to render all its predecessors obsolete. Naval strength from this time until the beginning of the Second World War was measured in the number of "dreadnought" battleships that were in service. Immediately after the Dreadnought was launched, the major nations of the world jumped on the bandwagon rather than be left with potentially uncompetitive fleets, thus starting one of the first technological arms races and leading directly to the first major Western Arms Control attempt with the Washington Naval Conferences of the 1920s. Germany and England were especially caught up in the competition and turned out dreadnought designs as rapidly as their shipyards could work on them. Increasing firepower, speed, and armour soon rendered the original Dreadnought itself obsolete. The German and British capital ship designs were somewhat different. British ships were designed to project naval power around the world, while the German ships were more optimized to fight in the North Sea. Thus British ships tended to be somewhat more seaworthy and slightly faster, while their German counterparts were better armoured and had superior internal compartmentation at the expense of crew comfort and endurance. British guns also tended to be larger and have a slightly longer range, though in penetration



and reliability the German shells often had a slight edge.

3. Battle Cruisers (BC) were faster than the battleships, although their main armament tended to be of the same caliber. British and German battle cruiser designs differed radically. German battle cruisers were superbly armoured and were essentially fast dreadnought battleships. British battle cruisers tended to be lightly armored, under the concept that "speed is armor", and were originally designed to chase down commerce raiders (as they did very well in the battle of the Falkland islands). The epitome of this design was found in the late war Courageous / Glorious class which was essentially a light cruiser armed with 15 inch guns. In the war (that is, in actual combat), the German designs proved superior. At Jutland, the British lost 3 battle cruisers to magazine explosions, while the Germans lost only one such vessel that had been subjected to the concentrated fire of a significant part of the British battleline for a considerable length of time.

4. Armoured Cruisers (CA) of the First World War were generally designs intended to serve as scouts for the predreadnought fleets of the end of the 19th century. Unlike their Second World War counterparts, they were not significantly faster than battleships and were in fact often slower than a majority of the battle cruisers. Whenever they became engaged with other capital ships (at Jutland and Dogger Bank), they usually came out second best. They were, however, to find their place after the number and weight restrictions of the Washington Naval Conferences, and became the workhorse large ship of the Second World War.

5. Light Cruisers (CL) were the eyes of the fleet. They did not have the firepower to engage the heavier ships, but served in the essential roles of scouting, relaying messages, and defending the battleline against enemy light forces. British light cruisers tended to be more modern, faster, and more heavily gunned than those of Germany.

6. Destroyers (DD) & Torpedo Boats (TBD) were the lightest of the warships and were designed to launch torpedoes at the enemy battle line, screen their own battle line from enemy torpedo attack, and guard against submarines. British designs tended to be larger and more heavily armed, but until late in the war only the Germans included smoke generators on their ships. Although an inaccurate weapon at the time, torpedoes were devastating when they hit. As a result the most vital light forces mission was to engage the enemy's light forces before they could close to torpedo launching ranges.

General notes: Though British ships tended to be faster and have slightly larger guns with longer range, until late in the war they suffered from two major drawbacks. First, they tended to explode when they suffered turret hits. Magazine flash fires were a hazard for by both sides, but the British gun propellant mixture was more volatile than the German and inadequate flash protection was common. Together these resulted in several ships being lost to magazine explosions prior to the

installation of remedial measures. Secondly, early British gun projectiles were faulty and tended to shatter instead of penetrating target armour. It is interesting to note that the British ordnance department evidently was aware of this problem even before Jutland, but did little to correct it.

These British disadvantages were somewhat offset by greater numbers of ships, the experience of extensive sea time, and longer ranged guns. The Germans, while not having any glaring problems in hardware to overcome, were hampered by their smaller number of units available, limited open ocean background, and the occasional morale problem due to the previous difficulties. The result, though strategically uneven due to geography, geopolitics, and other considerations, was surprisingly even tactically on the limited front of the North Sea, leading to a balanced and fascinating struggle.

James S. Baker & Stephen M. Newberg

#### 11.0 BIBLIOGRAPHY:

- Costello and Hughes, Jutland 1916  
Campell, Jutland, An Analysis of the Fighting  
Breyer, Battleships and Battle Cruisers 1905-1970  
Burt, British Battleships of World War One  
Tarrant, Battle Cruiser Invincible  
Hough, The Great War at Sea 1914 - 1918  
Goldrick, The King's Ships Were at Sea  
Beesly, Room 40-British Naval Intelligence 1914 - 1918  
Conway's All the World's Fighting Ships 1860 - 1905  
Newberg, Line Of Battle, Simulations Canada (manual simulation)  
Newberg, Battleship, Simulations Canada (manual simulation)  
Dunnigan, Jutland, The Avalon Hill Game Co. (manual simulation)  
War Machine (periodical)  
Conway's Warship (periodical)  
Warships in Profile (periodical)  
The General (periodical)  
Strategy & Tactics (periodical)

## SIMULATIONS CANADA SOFTWARE LIMITED WARRANTY

The software, instructional, and display materials provided with this product are sold "as is", with no warranty as to performance or fitness. The entire risk as to the quality or performance of the software is assumed by the buyer.

To the original purchaser only, Simulations Canada warrants the media to be free from defects for 30 days. If during that period a defect should occur, the software media (the disk) may be returned to Simulations Canada for replacement at no cost to the buyer. Enclose only the original disk and dated proof of purchase with such returns. Simulations Canada may, at our option, also provide no cost updates of software to the current production version for buyers that have obtained from us a Return For Update notice. Under all other conditions Simulations Canada will replace returned software media only if the original media and a payment of \$15.00 (U.S. funds) service charge are provided.

### ABOUT DEFECTIVE DISKS:

Our games are extensively tested before release in a process by which we hope to discover and correct any programming errors. However, due to the complex nature of simulation programming, some errors may not be detected until after publication. Should you discover such an error, please return the original game disk (only) and any saved games you may have to us, along with as detailed a description as possible of what was happening and what actions you had taken in the game just prior to when the error occurred. We will use your information to try to find the problem and, upon correction of the error, we will return an updated disk to you. Please note that this may take some time, so be sure to keep a backup of the program disk for play use during such an interval.

In addition to occasional program errors, the disk itself may be bad. We experience the industry standard 5% failure rate in disk duplication. Before assuming your disk is defective, please check your disk drive. Over 90% of the disks returned to us as defective run on our equipment without problems, but our drives are regularly cleaned and serviced for speed & alignment. If yours has not been so serviced, that could very well be the problem. When we do receive a defective disk within the 30 day warranty period noted above, a free replacement disk will be sent out immediately. If you are out of warranty on a defective disk, you must send the service charge along with the original disk to receive a replacement.

Please note that we cannot maintain any warranty on our game disks if they have been altered in any way. So please do not save games to the game disk, cut extra write notches, etc. Any such alterations void your warranty. In addition, our disks are not copy protected. Make a backup immediately and use it to play the game. Store your original in a safe place in case your backup disk ever becomes defective. Our programs are, however, copyrighted. Please do not abuse our "no copy protection" policy by giving away copies of the game disk. Doing so only hurts us all in the long run.

And finally, please remember to give us your name and address (legibly!) in all communications. We will do our best to correct any problems and get back to you as quickly as possible.

## GRAND FLEET

## Tactical Naval Combat In The North Sea, 1906-1920.

It all started with Lord Fisher's new warship, the Dreadnought, a wonder of swift and hard striking naval power that swept away decades of naval design and ushered in a new era of might at sea... An era in which Germany suddenly had a chance to build its way to maritime equality with its arch rival, England. And their theatre of conflict, for eventual confrontation was inevitable, was the choppy, fog ridden confines of the North Sea.

For **GRAND FLEET** we have created a new game system from the roots of our highly realistic and viewpoint oriented simulations of WWII tactical naval combat in the Pacific (**LONG LANCE & IN HARM'S WAY**). The result is a large and detailed simulation of capital ship combat viewed from the squadron or fleet level, but resolved by individual ships. Every vital factor of grand tactical combat of the time is reproduced, all the way down to wind direction for smoke effects. As the commander of a major part of the German or English Navies, it will be your decisions that can win or lose the war in a single day. 7 scenarios give you actions from raids to all of Jutland, and a "build your own" system provides for as many new scenarios as you can imagine. How will you do, when you command the **GRAND FLEET**? Design by J. Baker, development by S. Newberg, & art by J. Kula.

## SIMULATIONS CANADA COMPUTER GAMES:

**NORTHERN FLEET**, Modern Naval Operations In The North Atlantic.  
**GRAND FLEET**, Tactical Naval Combat In The North Sea, 1906-1920.  
**ROMMEL AT EL ALAMEIN**, The Battles For Egypt, 1 July - 6 Nov, 1942.  
**IN HARM'S WAY**, Tactical Naval Combat In The Pacific, 1943-1944.  
**MOSCOW CAMPAIGN**, Typhoon & White Storm, 30 Sept 1941 - 13 Feb 1942.  
**LONG LANCE**, Tactical Naval Combat In The Pacific, 1942.  
**TO THE RHINE**, The Allied Advance In The West, 29 Aug - 14 Dec, 1944.  
**ROMMEL AT GAZALA**, The Battles For Tobruk, 26 May - 27 June, 1942.  
**STALINGRAD CAMPAIGN**, The Turning Point In Russia, Jun 1942 - Feb 1943.  
**KURSK CAMPAIGN**, Operation Zitadelle, Summer, 1943.  
**OPERATION OVERLORD**, The Invasion Of Europe, 6 June - 28 August 1944.  
**SEVENTH FLEET**, Modern Naval Combat In The Pacific Ocean.  
**GOLAN FRONT**, The 1973 Arab/Israeli War In The North.  
**BATTLE OF THE ATLANTIC**, The Ocean Lifeline, 1940-1944.  
**SIEG IN AFRIKA**, The War In North Africa, 1940-1943.  
**FIFTH ESKADRA**, Modern Naval Combat In The Mediterranean Sea.  
**FALL GELB**, The Fall Of France, Spring 1940.  
**GREY SEAS, GREY SKIES**, Tactical Modern Naval Combat.

*NOTE PLEASE: Although most of our games are available for all major personal computer systems, in a number of the above titles the versions for the 16 bit computers (Amiga, Atari ST, IBMPC, & MacIntosh) are considerably more sophisticated and realistic simulations than the versions for the 8 bit computers (Apple II and C64/128), due to the greatly expanded capabilities of the larger systems.*

To retain the box spine label but detach the warranty & game description, cut along the dotted line.  
 When closing the box, place the spine label between the box sidewall and the lid.