

Bismarck

THE FIRST AND LAST VOYAGE OF THE BISMARCK

INTRODUCTION

This computer game allows the player to command either the British fleets or the Bismarck and Prinz Eugen in a real time simulation of the events during May 1941 that culminated in the destruction of the supposedly unsinkable Bismarck.

You position your units on a map screen and make attacks via real time arcade style sequences. Additionally you have weather reports, torpedo bombers and intelligence messages to contend with. You are also able to take part in "Set Battles" that allow you to explore the capabilities of different types of ship in pre-set combat situations.

AN HISTORICAL OVERVIEW

BISMARCK — THE PRIDE OF THE KRIEGSMARINE

Completed at Hamburg at the end of 1940 and displacing 41,700 tons, Bismarck was not fit for battle until May 1941 after undergoing extensive sea trials in the Baltic. Armed with eight 15 inch guns and massive armour plate, she was not intended to form part of any battle fleet, but to act in the role of lone ocean raider/commerce destroyer and to disrupt the Atlantic convoy-system upon which the European war effort so heavily depended.

Originally she was to operate with the battle cruisers SCHARNHORST and GNEISENAU out of Brest, but in May 1941 both of these ships were undergoing repair and effectively out of service. Bismarck's sister ship TIRPITZ was still undergoing sea trials and not considered ready for active service, so the decision was taken to send BISMARCK into the Atlantic with the cruiser PRINZ EUGEN which had completed her trials at the same time as Bismarck. It was hoped that on this first foray, Bismarck would attract the British Battleships away from the convoys and allow Prinz Eugen to attack the merchant shipping with minimal risk.

Finally on 18 May, the two ships under the command of Vice Admiral Günther Lütjens set sail from Gdynia harbour near Bergen and thence into the Atlantic. Despite tight security, the British had intercepted and decoded messages about the move and were beginning to put their plans into operation. Two days after leaving port the two ships were spotted by RAF reconnaissance planes. The hunt was beginning.

The German ships left Bergen on 21st May hiding under a cloak of fog and were lost from sight until finally being picked up on radar in the Denmark Strait between Iceland and Greenland by the two British cruisers Norfolk and Suffolk.

Shadowing the Bismarck, the two cruisers guided the battleships HMS Hood and Prince of Wales to an engagement with the German ships on the morning of 24th May. Under Vice Admiral Lancelot Holland, the Hood had been the world's largest pre-war ship. Her design however was rather dated, and although on paper Holland had superior firepower when taking both ships combined 18 guns into account against the Bismarck's 8, the new battleship Prince of Wales still had workmen aboard and he could not count on her armament remaining serviceable.

At 0552 the two British ships opened fire on the Bismarck but as the Hood was closing on the German ships an eight inch shell from the Prinz Eugen burst on her boat deck. Within a few minutes a huge fire was blazing as rocket ammunition began to explode. A fifth salvo from Bismarck struck the Hood from a range of 16,500 yards and a huge explosion broke her back. It is widely assumed that a shell had directly hit one of the Hoods aft magazines although there is strong evidence that this would have been unlikely. Whatever the true course of events, within 90 seconds the Hood had sunk leaving only a huge cloud of smoke and 3 survivors out of an original complement of 1415 officers and men.

The Bismarck and Prinz Eugens fire then switched to the Prince of Wales whose main gunnery radar was out of action. She was hit seven times but fortunately only 3 shells exploded. Despite her faulty equipment, the Prince of Wales 6th salvo scored two vital hits on the Bismarck — one shell penetrating a fuel bunker and the other putting one boiler out of action and causing flooding. Before being ordered to break off the engagement the Prince of Wales had succeeded in knocking two knots off the Bismarck's speed and causing her to leak fuel. It was the beginning of the end for the Bismarck and Admiral Lütjens made his most serious tactical error at this point in not running his damaged ship for Brest immediately.

During the night of the 24/25th May, torpedo bombers from HMS Victorious attacked the Bismarck, and although one hit was scored, the 18 inch warhead did not cause serious damage.

Leaking fuel, Lütjens belatedly decided to head for Brest, but first wanted to shake off the shadowing escort of British ships. As the Prinz Eugen was by now critically short of fuel Lütjens doubled back on his course to give the Prinz Eugen time to slip away, and head for Brest alone where she eventually tied up on 1st June. Lütjens' ploy worked and the resulting confusion caused the British ships to lose radar contact. The Bismarck's position was unknown from 0306 on the morning of 25th May until she gave it away again with a long radio broadcast at about 1000. For the next 24 hours the British fleet was unsure of her exact heading until an RAF Catalina spotted her again at 1030 on the morning of 26th May. By this time Admiral Tovey's Force H from Gibraltar, including the battleship Renown, the aircraft carrier Ark Royal and the cruiser HMS Sheffield were within striking distance and another airstrike was made on the Bismarck by Fairey Swordfish torpedo bombers from the Ark Royal at around 2100 on the evening of the 26th. A hit from one of the planes put the Bismarck's steering gear out of action and she was left a virtual sitting target. Destroyers launched another torpedo attack during the night and although another hit may have been scored, there was to be no escape from the circle of heavy ships waiting to engage her at daybreak.

At 0847 on the morning of 27th May, the flagship of the British Home Fleet — King George V — and the battleship HMS Rodney opened fire on the Bismarck at a range of 16,000 yards. Within half an hour the Bismarck was silenced and by 1015 she was a flaming shambles and so low in the water that the heavy shells were unable to cause any more substantial damage. A torpedo from the cruiser Dorsetshire finished the job and the Bismarck finally rolled over and sank at 1036 with her flag still flying. She took with her all but 110 men of her complement of some 2300. The hunt was over.

23 May (19.22) - Bismarck & Prinz Eugen sighted by Suffolk & Norfolk.

24 May (06.00) Hood sunk, Prince of Wales damaged. Bismarck losing fuel.

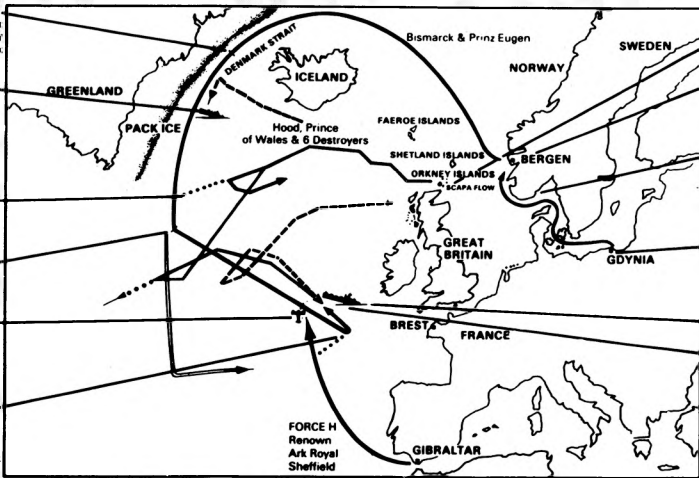
24/25 May (night) - Torpedo attack from Victorious.

25 May (03.06) - Contact lost - Prinz Eugen heads for Brest.

26 May (10.30) - RAF Catalina flying boat sights Bismarck.

26 May (21.00) - Torpedo strike from Ark Royal damages Bismarck's steering gear.

26/27 May (night) - Destroyers attack with torpedoes.



22 May (20.45) Home fleet sails.

21 May - Set sail from Bergen under cover of fog.

20 May - Spotted by RAF reconnaissance aircraft.

18 May - Bismarck & Prinz Eugen sail.

27 May (10.36) - Bismarck sunk.

27 May (08.47) - King George V & Rodney open fire on Bismarck.

THE OBJECTIVES

The British player must find and sink the Bismarck before it can reach the southern map edge. He must also ensure the safety of the Atlantic convoys. British aircraft carrier assets were severely limited at this stage of the war and the loss of either carrier involved would be a severe blow.

The German player must attempt to break out into the Atlantic by exiting the southern map edge. Bonus points are awarded for damage done to British naval units and convoys in particular. Points are deducted for damage suffered by the Bismarck or Prinz Eugen. As a last resort and to avoid sinking, the German player should head for Brest. If sufficient damage has been inflicted on the British this will still lead to a German victory.

The game is played from 0400 on May 22nd to 2400 on May 26th. If the Bismarck hasn't reached the southern map edge by the end of the game, the British win by default.

THE MAP SCREEN

This is the main playing screen and covers an area of the North Atlantic from Norway in the North East to Greenland in the North West and as far south as Brest in Northern France.

In the centre of the screen is the most important control of the game: the COMBOX. This white square is used to get information, move fleets or ship units and make attacks. By moving it around the screen using either the joystick or command keys, you will notice information appearing in various windows on the screen.

In the bottom right of the screen is the current date and time. This automatically updates as the game progresses.

MAP SYMBOLS

1. AIR SEARCH/LUFTAUFLÄRUNG



The windsock symbol on Iceland is the British players AIR SEARCH icon, the German players is in Norway.

Move the COMBOX over the relevant windsock and press fire. A shaded area will appear on the screen showing the areas of sea currently under observation by your air force. Any enemy units within these zones will be displayed. The zones will change according to weather conditions so keep checking.

To leave this screen press fire again.

AIRSEARCH ZONES AND BASE OF ORIGIN

BRITISH BASE LOCATION	AIRSEARCH ZONE
Newfoundland	South West corner of map
Iceland	North & South of base
Faeroe Islands	East & West of base
Shetland Islands	East & West of base
Scapa Flow	Northern U.K. area
Admiralty	Southern U.K. area
Aircraft Carrier	5x5 square centred on unit

GERMAN

Bergen	Norwegian sector
Admiralität	German sector
Brest	French sector

Remember if the weather is bad at the base it will not be operational.

THE MET. OFFICE/DAS WETTERAMT



Move the COMBOX over the cloud symbol (British player's is in Scotland, German's is in Holland) and press fire. The current weather situation will be displayed and show the areas of poor visibility. By pushing 'up' on the joystick or pressing the 'up' key you get a weather forecast at one hour intervals. You can get a forecast for the entire game period but you should note that as you predict further into the future the less accurate it will be.

To leave this screen press fire.

THE ADMIRALTY/ADMIRALITÄT



Whenever the flag symbol (British players is in London, German's is in Northern Germany) is flashing it means a report or message is waiting for you. To read it move the COMBOX over the flag and press fire.

NAVAL BASES



The anchor signs are the location of the two German naval bases: Bergen in Norway and Brest in France; and the four British bases: Shetland, the Faeroe islands, Scapa Flow and Hvalfjord in Iceland.

SHIP SYMBOLS



A Black Cross represents the Bismarck and Prinz Eugen. If you are playing the German side then this is the only other unit symbol on the map when you start the game.

If you opted to play the British there will be 12 units displayed. The black units on a blue background are under Admiralty control and can be moved at will.

If you move the COMBOX over any of the units on screen information about them will be displayed. The codes are as follows:

BB	No. of BATTLESHIPS in the fleet/unit.
CH	No. of HEAVY CRUISERS
DD	No. of DESTROYERS
CV	No. of AIRCRAFT CARRIERS
CL	No. of LIGHT CRUISERS
ME	No. of MERCHANTMEN
SPD	The units current SPEED. Either High, Medium or Slow.
FUE	The units FUEL level. This is shown in hours available. If a British unit runs out of fuel it will revert to Admiralty control and head home.

MOVING UNITS

Place the COMBOX over one of your units and press fire. The COMBOX will become a cross. Move the cross to where you want the unit to go and press fire again. The unit will now begin moving to that point on the map. To see where a unit is heading at any time, simply move the COMBOX over it. Its destination will be pinpointed by the movement cursor.

NOTE: Ships cannot sail over land — you must give directions around land masses.

If opposing units sight each other (come within 40,000 yards in good visibility), then both will be displayed on the map. They need not attack however.

NIGHT & DAY

You will note that at 2000 hours each day the map background colour changes from light to dark. This signifies the onset of night. During the night phase you have no AIR SEARCH, cannot make AIR ATTACKS and visibility is limited. Daylight returns at 0400.

SHIP ACTION SCREENS

Move the COMBOX over one of your ship units again and press fire THREE times. The unit will flash and the word BATTLE will appear on screen. The map will disappear and you will be presented with a SHIP SCREEN. If the enemy ship attacks one of your ships you will automatically be taken into this screen.

This is your viewpoint from the ship and is used to engage the enemy units. The screens vary according to the type of ship you are controlling.

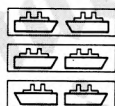
1. BATTLESHIPS

The screen is split into three.

The top third is the real world view and ships will be shown here along with your guns and any attacking aircraft.

The centre section is your ICON selection box:

The left hand column of icons control your MOVEMENT:

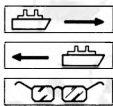


Close in on the ship on screen.

Maintain the same distance.

Retreat.

The next column of three control your VIEWPOINT:



Forward view.
Aft (rear) view.
Ship identification book.

Selection of this last icon will sequentially display a list of all the ships in the action and stop when it gets to the ship currently on screen. Press RIGHT to speed up the list. This feature is very useful for ensuring you don't attack your own ships until you are sufficiently experienced at the game to identify the ship silhouettes without referring to the book.

Moving further to the right, you are given information on your GUNS and DAMAGE.

The two boxes at the top of the section are highlighted in RED, FLASHING GREEN or GREEN.

Large naval guns must have their barrels in a horizontal position for the hydraulic hoist/rams to load the shell and charge. This means in practice that one barrel is up ready to fire while the other is down and reloading. To simulate this the GUN controls are as follows:

Both GUN LAMPS GREEN: Both guns ready to fire.

Either GUN LAMP RED: GUN reloading, neither will fire.

Either GUN LAMP flashing GREEN, the other GREEN: One gun has reloaded and is coming back up to elevation, the other can be fired.

NOTE: 4.7" guns on destroyers did not work in the way described above but for ease of game design we have assumed they did — apologies!

Just below the GUN LAMPS two sets of figures are shown. The top set shows the amount of damage the ship you are attacking has sustained, the bottom set is your level of damage. Any level over 99 means you or the enemy is sinking!

Moving to the right again, the next three icons are:

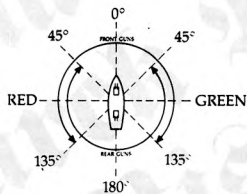


DAMAGE CONTROL. Selecting this puts a cursor on the ship plan at the bottom of the screen. Move the cursor to any section that is on fire and press fire. The white damage control party symbol will move to that point and put the fire out. Remember that fires spread. The various letters shown on the plan are as follows:

- M Magazine — any fire here could lead to an explosion.
- S Shell Room — as above.
- E Engine Room — damage here will slow you down.
- B Boiler Room — as above and/or lead to an explosion.

Also remember to put all fires out before returning to the MAP SCREEN as they will continue to burn and spread if undealt with and you may suddenly find the ship sinking.

The next icon down gives you GUN CONTROL. Once you select this option, you can sweep the guns left (port) and right (starboard) to give an all round view from the ship. The guns have the following sweep:



To fire the guns press 'fire' with this icon selected.



The last icon in this column exits to the main map screen. You cannot exit whilst an enemy ship is within 41,000 yards of your ship.

The final (far right) column of figures displays information about DISTANCE, RANGE and BEARINGS.

The top figure is the rangefinders estimate of the DISTANCE to the ship shown on screen.

The centre readout is the RANGE the guns are currently set at. With the GUN CONTROL icon selected, moving 'up' or 'down' will increase or decrease this range. When firing at ships you should aim to keep these top two sets of figures equal.

The bottom readout shows the turret BEARING. If this is highlighted RED, the gun turret is pointing to PORT, if GREEN then it is pointing to STARBOARD. See GUN CONTROL for more information.

MOVING AND SELECTING ICONS

When you first enter this screen, the EXIT, FORWARD VIEW and MAINTAIN DISTANCE icons will be selected. You can move the highlighted SELECT box around using the joystick or the command keys and pressing fire will SELECT an option. If you have selected either GUN CONTROL or DAMAGE CONTROL you must press 'X' on the keyboard to return to normal icon select mode.

The other types of screen available are as follows:

2. DESTROYERS/CRUISERS/CONVOYS (you control the Destroyer escorts)

The changes are:

a) In place of the plan view you have a radar display (remember all ships appear on the radar screen — not just enemy ships).

b) A TORPEDO icon replaces DAMAGE CONTROL. To fire a torpedo, highlight the icon and press fire. After a short wait a message will appear on screen indicating either a hit or a miss.

3. AIRCRAFT CARRIERS

The display is as for BATTLESHIPS but once again you have no DAMAGE CONTROL (it is assumed that if you are foolish enough to allow a relatively undefended Aircraft Carrier so close to the enemy that it can be attacked, then you deserve to 'lose it!'). Replacing the DAMAGE CONTROL icon is LAUNCH AIRCRAFT.

If an enemy ship is within an Aircraft Carriers air search zone (3 squares) and it is daylight and clear weather, then selecting LAUNCH AIRCRAFT will send a squadron of Fairey Swordfish torpedo bombers to attack the enemy ship. If it is dark when they reach the target, no attack will be made. If the weather deteriorates en route, losses will be taken.

When the aircraft reach the enemy you will go automatically into the AIR STRIKE ACTION SCREEN. After an attack the aircraft will return to the carrier.

A further Air Strike cannot be made from the same carrier within seven hours of the first launching. There is only one air strike unit per carrier, and if it is available it will be shown on deck on the plan view.

AIR STRIKE ACTION SCREEN

If you are commanding the British when an air strike is made, the screen will clear to the view from the cockpit of the leading Swordfish aircraft. On the horizon you will see the enemy ship. In the centre of the screen is your targeting cursor. The 2 dials are your altimeter (right hand) and ASI (air speed — left hand).

Moving down increases your speed and reduces your height, moving up decreases speed and increases height.

The Swordfish's maximum speed with a torpedo was approximately 100 knots. It would slow to around 60 knots to drop the torpedo and the optimum height was 80 to 100 feet.

The altimeter on your screen has a triangular sector marked on it. The top of that sector is 100 feet. The bottom is sea level. The ASI reads 60 knots at 10 o'clock.

An 18" (air dropped) torpedo will run for 1,200 yards before it is armed. It will run for a further 4,800 yards at a speed of 32 knots and then slow to 20 knots for its final 4,000 yards. It will 'die' at 10,000 yards.

To make a successful torpedo attack, you must therefore drop the torpedo (press fire) at 100 feet, 60 knots and between 1,200 yards and 10,000 yards. You will learn to gauge the distance to the enemy ship from its size on screen the more you play the game.

It should be noted that the closer you get to the enemy, the more chance you stand of being shot down. Equally if you simply fly in a straight line at the ship, you don't stand much chance of getting to drop the torpedo.

After dropping, your aircraft will veer away from the enemy ship, and you will be placed in control of the following aircraft. During this next run, a message will appear telling you if the last plane's torpedo scored a hit or not.

This sequence is repeated for all the aircraft in the unit.

If you are commanding the Bismarck and you come under air attack, your guns become Anti-Aircraft guns and can be moved in all directions. Firing is much more rapid than before. Damage is shown in the normal way.

PAUSE

You can PAUSE the game by moving the COMBOX over the CLOCK on the MAP SCREEN and pressing fire. Moving the COMBOX again turns PAUSE off.

SAVE/LOAD/QUIT

Whilst on the MAP SCREEN move the COMBOX over the compass (top right) and press fire. This will take you to the SAVE/LOAD menu.

The choices displayed are as follows:

- 1 SAVE GAME
- 2 LOAD GAME
- 3 QUIT GAME
- 4 CONTINUE GAME

Input 1,2,3 or 4 from the keyboard to select the required option. Please note that "saved" games don't use file names so either use a blank tape or disk for each game position or make a note of the tape counter reading for reference when reloading.

QUIT is useful if you make a mistake when selecting your game options. It takes you back to the first menu screen.

GUNNERY RANGES

SHIP TYPE		MAX. RANGE
Battleship	(BB)	38,000 yards
Heavy Cruiser	(CH)	32,000 yards
Light Cruiser	(CL)	26,000 yards
Aircraft Carrier	(CV)	26,000 yards
Destroyer	(DD)	22,000 yards
Convoy	(ME)	22,000 yards

TORPEDO RANGES

1,200 yards to 10,000 yards.

UNIT BOOK

BRITISH UNITS	TYPE	DEFENSIVE VALUE	GUN POWER
King George V*	BB	200	9
Prince of Wales*	BB	190	9
Hood*	BB	170	10
Rodney*	BB	180	13
Victorious*	CV	50	1
Norfolk*	CH	60	3
Suffolk*	CH	60	3
2nd Cruiser Sqn*	CL	30	2
Arethusa*	CL	30	2
Birmingham*	CL	30	1
Convoy* (1-4)	ME	90	1
4th Destroyer Flotilla**	DD	15	1
Ark Royal***	CV	60	2
Renown***	BB	150	10
Dorsetshire****	CH	60	3
GERMAN UNITS			
Bismarck*	BB	255	11
Prinz Eugen*	CH	75	3

AIR UNITS

Ark Royal Strike Group*** — 12 Swordfish
Victorious Strike Group* — 9 Swordfish

* These units are available from the start of the game.
** At about midday on the 25th, the 4th Destroyer Flotilla will become available.

*** Early in the morning of the 26th, Ark Royal & Renown will arrive.

**** At dusk on the 26th, the Dorsetshire comes onto the scene.

VICTORY CONDITIONS

It will be deemed a German victory if:

- a) The Bismarck reaches the Southern map edge without sustaining severe damage (50%+)
- b) The Bismarck reaches Brest after sinking at least one British Battleship, aircraft carrier or convoy.

It will be a British victory if:

- a) The Bismarck is sunk.
- b) The Bismarck reaches Brest without sinking any British units.
- c) The game ends without the Bismarck reaching the Southern map edge.

Any other result is deemed to be a draw.

Additionally you will be awarded a percentage from 0-100 which corresponds to your success or failures in the game. It is possible to have played superbly and get a high percentage score but still lose the game. For example, the player commanding the Bismarck sinks all the British units but explodes from fire damage before reaching the map edge. He will lose the game.

TACTICS

GERMAN PLAYER

1. Avoid engaging enemy battleships where possible, but try to sink anything else you come across.
2. Try to keep under bad weather. An ideal time to break through the British lines is under bad weather at night.
3. Keep in mind the victory conditions. Getting to Brest safely without damage and without sinking anything means you lose.
4. Keep an eye on the time and date. If you don't get to the Southern edge before the game finishes — you lose.
5. If you are near an aircraft carrier, either try and sink it or retreat — don't hang around.

BRITISH PLAYER

1. Don't commit yourself to either the North or South of Iceland until you spot the Bismarck or you'll get left behind.
2. Use the carrier's air search capability in your hunt. Try not to let zones overlap.
3. Don't let carriers get too close to the Bismarck.
4. In action, don't let your battleships get too close to the Bismarck. That way you can withdraw more easily if you take damage.
5. Use Cruisers and Destroyers to shadow the Bismarck. Don't waste them in futile attacks.

General tip:

During battles, rapid manoeuvres can confuse the enemy and allow you to close on a ship that would otherwise be moving away. Select "close in" followed by "move away" followed by "close in" in rapid succession.