



World War II Magazine  
July 2005

## “Operation Catherine” and Churchill’s Phantom Fleet

By Jason Stevenson

It was a battle fleet like none other.

Leaving British ports in March of 1940 they steered into the rough chop of the North Sea. The three battleships steamed at a steady 12 knots, screened by two flotillas of destroyers battered by the swells. Several cruisers scouted ahead while a cluster of bulky tankers and supply ships followed. At twilight the fleet turned south, heading for the narrow channel to the Baltic Sea between Denmark and Sweden. They hoped to make this passage covered by darkness. When the sun rose the next morning the warships would be off the Baltic coast of northern Germany – inside Hitler’s backyard pond.

The fleet presented a stirring sight as it cleared the English coast. But to a practiced naval observer, however, the battleships looked a little odd. Their twin turrets and single funnels identified them as the R-class ships HMS *Royal Sovereign*, *Revenge*, and *Resolution*. But they appeared swollen beyond their normal dimensions as they rolled in the heavy seas. Dozens of new anti-aircraft guns prickled their decks and superstructures, a puzzling feature this early in the war. Beneath the water the battleships’ hulls curved outward with enormous double bulges, slowing them beyond their already obsolete speed. The buoyant bulges lifted the ships high in the water, partially exposing the dark band of their armor belts.

A closer examination would reveal the fore and aft turrets on each battleship were actually wooden mock-ups, painted gray, and with tree trunks masquerading as the massive 15-inch guns. The weight saved by removing the turrets and guns went into a tough outer shell of armor plates covering the warships’ decks and vital parts. After examining these radically encumbered and sluggish warships, a thoroughly confused naval observer might be inclined to call them “armored turtles” rather than battleships. And that was exactly the image their designer, Winston Churchill, had in mind.



The reconstructed battleships were the centerpieces of “Operation Catherine,” Churchill’s bold plan to attack and control the Baltic Sea. The fleet’s ambitious goals were many: To disrupt Germany’s critical

iron ore imports from Scandinavia; to tie down German warships; to sway Sweden and Norway to join the Allies; and to intimidate the Soviet Union from further belligerency. Once these objectives were accomplished, the warships were to establish a base at a friendly Scandinavian port and await overland re-supply from Britain. The title “Catherine” was inspired by Catherine the Great, because as Churchill cryptically offered, “Russia lay in the background of my thought.”

History tells us that the Royal Navy never raided the Baltic, and that the armored turtles of Operation Catherine only existed in Winston Churchill’s imagination and a few Admiralty plans. Although aspects of the operation seem unthinkable in hindsight, the Royal Navy seriously studied Churchill’s proposal in the winter of 1939-40, and several admirals actively favored it. In the end, many factors delayed the operation until Hitler’s spring offensives in 1940 made it obsolete. Beyond the conjecture of whether a battleship strike in the Baltic would have succeeded, the actual story of Operation Catherine presents a fascinating look at the workings of Winston Churchill’s Admiralty at the start of the Second World War.



### **Churchill’s Creative Side**

Winston Churchill’s inspiration for Operation Catherine flowed from his insatiable pursuit of the offensive. When he returned as First Lord of the Admiralty at the outbreak of war in 1939 he wasted no time in proposing action. “I sought earnestly for a way of attacking German by naval means. First and foremost gleaned the Baltic,” he wrote in the first volume of his history of the war, *The Gathering Storm*.

Striking Germany through the Baltic had long fascinated Churchill and the Royal Navy. In fact, Catherine was a revised version of a First World War plan to bypass the

slaughter in the trenches by landing a Russian army on Germany’s Pomeranian coast, just 90-miles from Berlin. In both world wars Churchill advocated attacking peripheral theaters where the sudden appearance of Allied warships and troops could transform the dimensions of the conflict to their advantage. This ambition spawned the aborted attempt to force the Dardanelles and the disastrous expedition to Gallipoli in 1915. However, that failure, which cost tens of thousands of Allied lives and a young Winston’s post as First Lord, did not temper his enthusiasm for Operation Catherine a quarter century later.

Just nine days after Churchill returned to the Admiralty in September 1939 he formalized his Baltic intentions by drafting a minute entitled “Plan Catherine.” The memo displayed Churchill’s flair for technical detail, and his restless focus on operational minutiae. These were two traits he kept throughout the war, and which occasionally created anxiety for the navy.

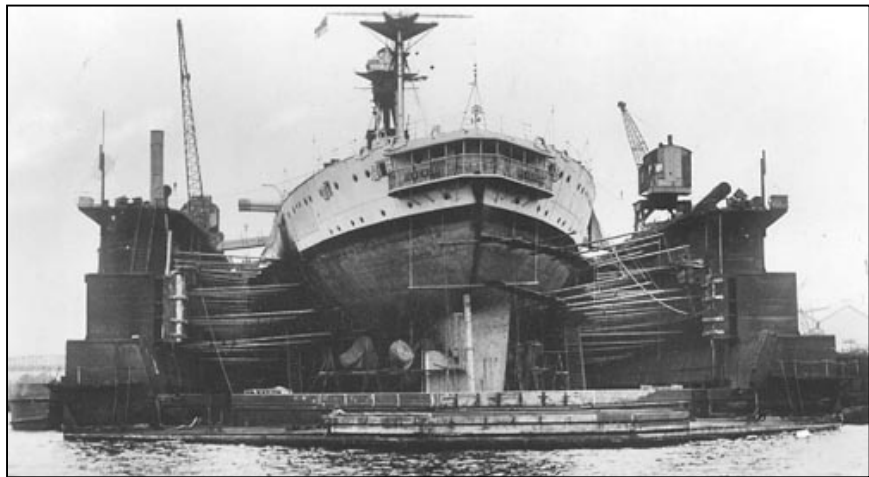
His design suggestions for Catherine, however, were typically creative. To overcome the Baltic’s shallow channels, Churchill proposed adding two layers of hollow bulges to the hulls of the R-class battleships to raise their draught by nine feet. By regulating the contents of the bulges, he explained, the battleships could alter their draught depending on the depth of the surrounding water. The bulges would have extended the battleship’s beam to a massive 140-feet, wider than any dry dock in Britain. The new ships would be so broad that workers could only attach the outer bulge while the warships anchored in a harbor. The memo contained several more of Churchill’s design impulses. To defend against mines he suggested the building of merchant ships as special “mine-bumpers” to precede the line of battleships into the Baltic channels. The mine bumpers, controlled by a crew situated in the stern, would mount heavily reinforced bows to “take the shock of any exploding mine.” Churchill reasoned that the explosions would likely knock out these ships, and requested the Admiralty determine the number needed for the successful completion of the operation. To supply the fleet during its foray into the Baltic Churchill requested the navy design and build several “turtle-back, blistered tankers” suitably hardened to resist bomb and

torpedo attack. These supply ships would follow behind the fleet and yet remain under the protective umbrella of the battleships' heavy guns. Churchill concluded the memo by ordering all work on the project to begin by October with the "highest priority." He wanted to launch Operation Catherine as soon as the Baltic channels cleared of ice in the early spring of 1940. Only nature, it seemed, could force Churchill to wait.

### The R-class

Although Churchill believed in the success of Operation Catherine, the R-class battleships were selected precisely because they were obsolete and potentially expendable. Laid down before the First World War, the five battleships' theoretical top speed of 18 knots made them the slowest capital ships in the Royal Navy. Two vessels, *Revenge* and *Royal Oak*, saw action at the Battle of Jutland in 1916, although neither was damaged. Only the *Royal Oak* received a major refit between the world wars, while the rest received limited upgrades in fire control, searchlights, and seaplane catapults in 1939. Meanwhile, the majority of other British battleships received more substantial refits and improvements during the inter-war years. By the outbreak of the Second World War, the R-class's slow speed and weak protection made them a liability rather than an asset in a fast-paced naval war. As a result, the old battleships loomed as the perfect candidates for Churchill's often-dangerous special projects.

But to Churchill, Operation Catherine was less about risk than it was about instilling the Royal Navy with his offensive instincts. The battleships' 15-inch guns still made them powerful weapons platforms, and he predicted the three ships detailed for Catherine would create battle squadron "the enemy heavy ships dare not engage." By transforming the R-class into armored turtles he could create new wartime roles for



*HMS Revenge* in a floating dock during the 1930s

these outmoded veterans – roles in which they could attack the enemy. As a keen student of Royal Navy history he looked to the past for his offensive inspiration. Writing to the Admiralty a month after he proposed Catherine, Churchill invoked the image of 18<sup>th</sup> century Nelsonian three-deckers to describe the function of the redesigned R-class: "We must work up to the old idea of a ship fit to lie in the line against whatever may be coming." These new battleships almost seemed to typify Churchill himself – slow but steady, unyielding, and capable of responding with a thunderous retort. But before these armored turtles could claim any of Churchill's mantle, they had to survive their first foray into the Baltic.

### Sailing into Danger

Churchill was aware of the many risks confronting Operation Catherine. He knew German warships, submarines, minefields, and bombers would threaten the fleet. He therefore devoted many of his points in the September 12 memo to improving the warships' survivability in the Baltic.

Surface attack worried him the least due to the superior firepower of the R-class battleships over the available German capital ships. He predicted that the 11-inch gun battlecruisers *Scharnorst* and *Gneisenau* would be "shatter[ed]" by the 15-inch batteries of the battleships if they dared to attack. Likewise, the battlecruiser's superior speed would not factor in the narrow channels of the Baltic. By

planning the operation for early 1940, Churchill also exploited the window of British capital ship superiority before the completion of Germany's new 15-inch gun battleships, the *Bismarck* and *Tirpitz*. Aerial attack, Churchill realized, was the most dangerous threat the fleet faced in coastal waters. He decided that increasing the R-class's protection against bombs and torpedoes would create, "a certain number of capital ships that are not afraid of a chance air bomb." Adding hundreds of tons of additional deck armor would blunt aerial bombs; while attaching bulbous double blisters to the hull would help absorb torpedo strikes.

Churchill also suggested augmenting each ship's anti-aircraft armament. He adhered to the conventional wisdom that "the combined batteries of the fleet" could defend against an aerial attack. Almost as an after-thought he proposed sending an aircraft carrier with the fleet, but it is unlikely that the Admiralty would agree to risk such an unprotected ship.

At this early point in the war the vulnerabilities of warships operating without air cover remained unknown. Likewise, the Luftwaffe's bombing skill had failed to impress the Admiralty. However, Churchill's air defense plan for Operation Catherine was likely inadequate given the confined waters in which the fleet would operate. Near constant dive-bombing, as occurred later off Norway and the Mediterranean, would have disabled or sunk most of the isolated fleet despite the additional armor that draped their decks.

Although Churchill recognized and attempted to reduce the threat from the air, he and the Admiralty remained ignorant of the fleet's vulnerability. If Operation Catherine had been carried out, it is conceivable that the Baltic Sea would have become the Royal Navy's fiery baptism by aerial bombing instead of Norway and Crete.

### **Support and Resistance**

The planning for Operation Catherine occurred at the start of the seven-month interlude between the collapse of Poland and the German invasion of Denmark and Norway on April 9, 1940. These months, known to historians as the Phoney War and described by Churchill as the Twilight War, saw the Allies busy with defensive preparation and speculation. While British bombers dropped propaganda leaflets on German cities, and territorial army soldiers waited for someone to attack, Churchill urged the navy "to rupture this defensive obsession" and take the fight to the enemy. However, the planning for his first strike, Operation Catherine, also became Churchill's re-introduction to the Admiralty's cautious approach to its valuable battleships.

He marshaled early support for Catherine among several high-ranking Admiralty officials, including Sir Stanley Goodall, the Director of Naval Construction and the designer of many of the Royal Navy's active battleships. Churchill also found an operational planner and potential fleet commander in Admiral of the Fleet the Earl of Cork and Orrery. To this spirited admiral, who would later command Royal Navy forces during the ill-fated Norwegian campaign, Churchill assigned the logistical planning for the operation. By late September Cork and Orrery reported back with a memo declaring Catherine to be "perfectly feasible but hazardous." To counter the losses expected in the dangerous passage, Cork and Orrery requested a force at least 30 percent larger than the German fleet in the Baltic.

Operation Catherine met more serious opposition from others in the Admiralty, and this resistance steadily increased the bureaucratic friction against it. The Admiralty's Plans Division insisted the operation could be attempted only if Japan remained neutral and defenses against air attack were expanded. The First Sea Lord, Admiral Dudley Pound, added conditions requiring that Russia stay out of the war and that the cooperation of Norway and Sweden be firmly established. Fearing the destruction of the raiding force, Admiral Pound also demanded the preservation of British naval superiority in the North

Sea without the vessels assigned to the raid. Still another condition required that the R-class battleships would be recalled for convoy escort if German surface raiders broke out into the Atlantic.

Churchill understood the Admiralty's sensitivity to risk capital ships, even its old ones. Each battleship represented over five years of construction, millions of pounds in capital resources, and the pride of the nation. Facing a long and potentially global war, the navy could not afford to lose battleships, however obsolete, in its first fight. To placate their concerns, Churchill wrote an October 1939 communiqué describing how the redesigned R-class would pursue the dangerous coastal missions threatened by mines and aerial attack, while "keep[ing] the high class stuff for outer oceans." Building armored turtles would therefore reduce the risk to the Royal Navy's newest and most valuable capital ships, he argued, rather than increase it.

Despite Churchill's arguments and agitations, the conditions raised by the Admiralty pushed the operation toward abandonment. Churchill's portrayal of this scene in *The Gathering Storm* glossed over this administrative resistance to his plan, but an influential quorum of top admirals considered Catherine too risky for their valuable battleships. Their subtle administrative resistance delayed the preparations for the operation and eventually forced its postponement when not enough time remained before the spring of 1940 to transform the R-class battleships into the armored turtles.

Writing in the *Gathering Storm* a decade later, Churchill chastised the Admiralty's refusal to build shallow draft and heavily armored battleships as lack of foresight. He wrote that situations later in the war at Malta and Tripoli dramatically illustrated the need for these ships. But history also shows that Churchill himself played a role keeping the armored turtles out of the water.

### **Why Catherine Failed**

From its inception, the Baltic mission faced competition from the many and sometimes conflicting priorities of the war's first months. Churchill's flurry of Admiralty orders contributed in the confusion. The day before he issued his memo on Plan Catherine, he wrote to Admiral Pound to suspend work on all battleships that could not be completed before the end of 1941. He urged the swiftest completion of the first "King George V" class battleships before the Germans could launch the *Bismarck*. At the time the Royal Navy had no capital ship that could both catch and fight the *Bismarck*. Since both the KGVs and the redesigned R-class required the same hardened steel plates for their armor, which were then in short supply, the First Lord's two orders created a logistical logjam. At the same time Churchill also demanded ambitious building programs for smaller warships to escort the convoys required to keep the British Empire functioning and fighting. This new construction crowded dockyards from Portsmouth to Belfast, and consumed massive amounts of the materials and manpower.

Completing all of these tasks proved an impossible feat for the British shipbuilders, and the reconstruction of the armored turtles, not supported by the full Admiralty, dropped down the priority list. Because the presence of heavy battleships was so crucial to Operation Catherine, the plan could not go forward without them. Noted British naval historian S.W. Roskill claimed that Churchill never fully comprehended the difficulty of the reconstruction process he planned for the R-class. Perhaps the tireless First Lord believed all things were possible if everyone worked as hard as he did.

### **The End of the R-Class**

Although they never achieved the glory tempted by Operation Catherine, the surviving four R-class battleships (*Royal Oak* was sunk by a German U-boat on October 14, 1939 at its Scapa Flow anchorage) served limited but useful roles in the war. Despite their handicaps and frequent promotion for suicidal missions, Roskill claimed the R-class "did valuable work escorting convoys and covering landing operations." *Resolution* took part in the bombardment of the French fleet at Mers-El-Kebir while *Ramillies* pounded German positions on D-Day and during the invasion of southern France. All four

made a brief foray into the Indian Ocean and escorted troop convoys in the Atlantic and Mediterranean. *Royal Sovereign* was loaned to the Soviet Union in 1944, re-christened the *Arkhangelsk*, and returned to the Royal Navy as a rusted hulk in 1949. She represented the last of the R-class when she went to the scrap-yard in September 1949.

Churchill never forgot his designs for Catherine. He deeply regretted the lost opportunity to transform the obsolete battleships into his dream of a “heavily-decked armored ship... ..bristl[ing] with anti-aircraft guns,” and with protection system “not enjoyed by any other vessel afloat.” Had they sailed, the armored turtles would have been the world’s ultimate defensive battleships designed for Churchill’s greatest, yet unrealized, offensive stroke.

## Bibliography

### Unpublished Sources

#### 1. Public Records Office:

##### a. *Admiralty (ADM series)*

ADM 1/13323 - Refit of "R" class battleships in the USA (1942-43)

ADM 167/114-115 - Naval Supply and Production – Graphical Summary

##### b. *War Cabinet Minutes (CAB series)*

CAB 65/1-3 - War Cabinet Minutes – October 1939

### Books

Churchill, Winston. The Second World War Volume I: The Gathering Storm. Casell & Co. Ltd.: London, 1948.

Gilbert, Martin. The Churchill War Papers – September 1939-April 1940 - Volume 1: At the Admiralty. Heineman: London, 1993.

---. The Churchill War Papers - May 1940-December 1940 - Volume 2: Never Surrender. Heineman: London, 1994.

---. The Churchill War Papers 1941 - Volume 3: The Ever-Widening War. Heineman: London, 2000.

Marder, Arthur J. From the Dardanelles to Oran: Studies of the Royal Navy in War and Peace 1915-1940. Oxford UP: London, 1974.

Padfield, Peter. The Battleship Era. Hart, Davis: London, 1972.

Raven, Alan and Roberts, John. British Battleships of World War II: The Development and Technical History of the Royal Navy's Battleships and Battlecruisers from 1911 to 1946. Naval Institute Press: London, 1976.

Roskill, S.W. Churchill and the Admirals. Collins: London, 1977.

---. Naval Strategy Between the Wars: 1930-1939 Volume II: The Period of Reluctant Rearmament. Collins: St. James Place, London, 1976.

---. War at Sea: The Official History of the Royal Navy Volume 1: The Defensive. Her Majesty's Stationary Office: London, 1954.