



Buttercup vs. Raspberry

WATU Revisited

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Admiralty Trilogy Group

Connections Online 2022

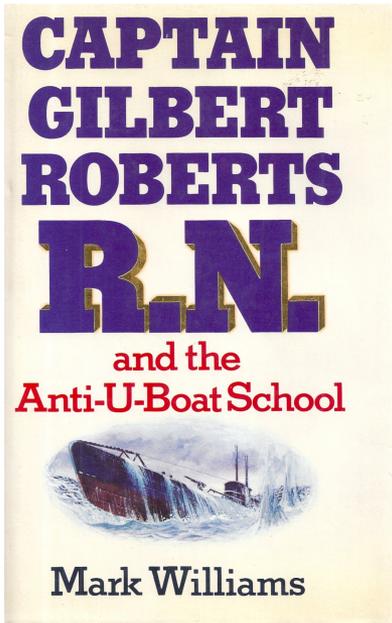


Preamble

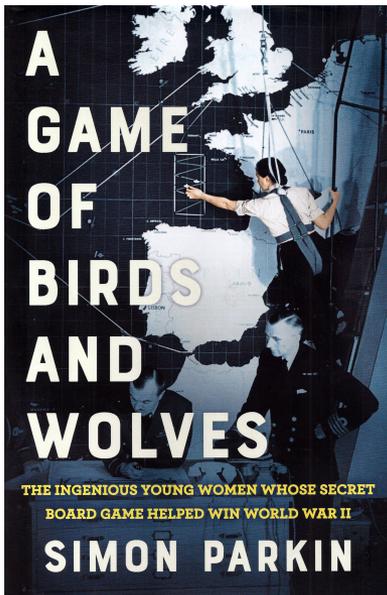


- ◆ **The Western Approaches Tactical Unit (WATU) is one of the best examples of an organization using wargames to solve military problems.**
- ◆ **Its role as an educational institution was, arguably, its greatest contribution to winning the Battle of the Atlantic.**
- ◆ **Became the central “hub” for a dynamic feedback loop.**
- ◆ **The story of WATU is largely a single person narrative.**

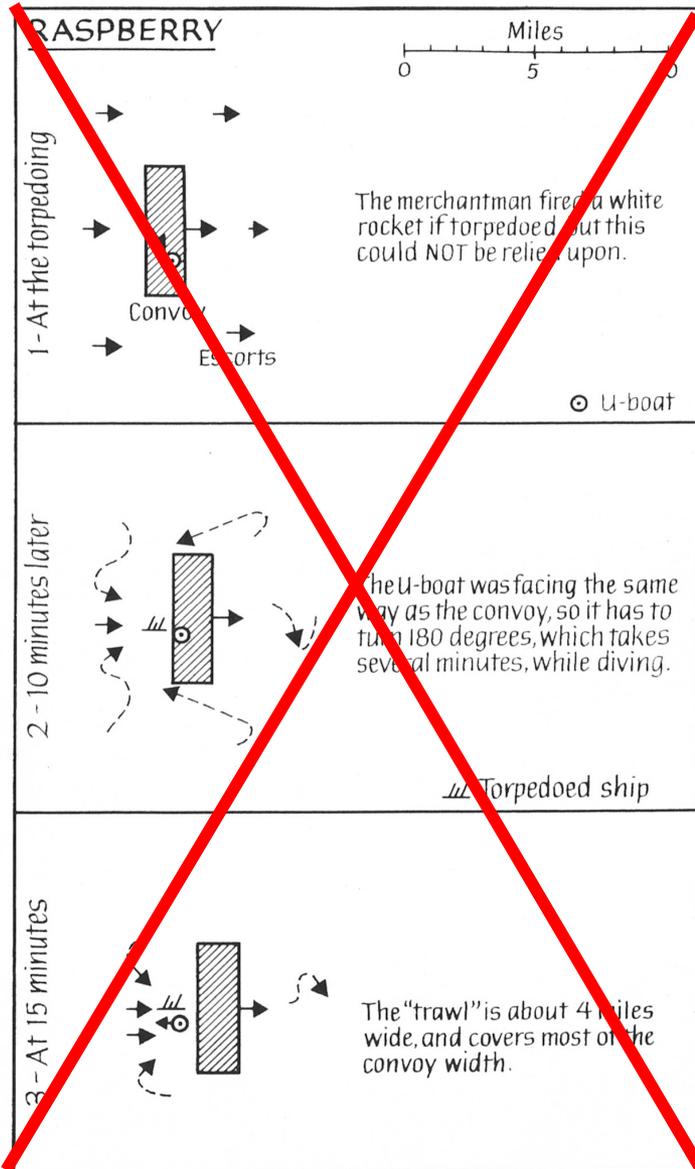
Limited Perspective



- ◆ The two published accounts draw from the same main source: CAPT Gilbert Roberts unpublished memoirs.
- ◆ There are some notable discrepancies between these two books, especially in regard to Operation Raspberry.
- ◆ Unsettling discovery that both books have numerous conflicts with the historical record.
- ◆ Perhaps the most interesting revelation is the popular notion of Operation Raspberry as portrayed by Williams...

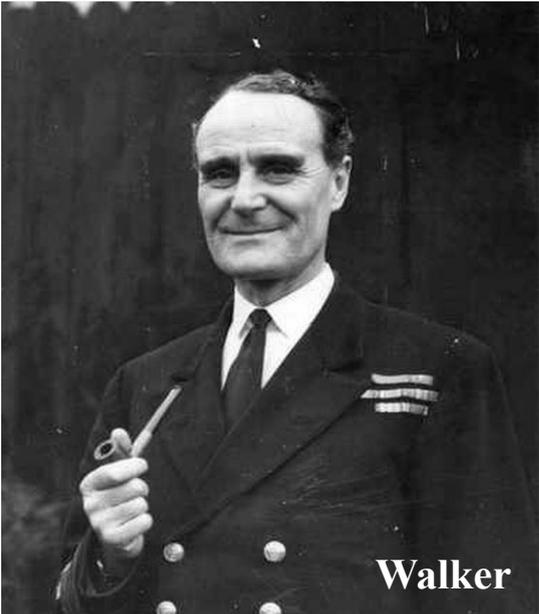
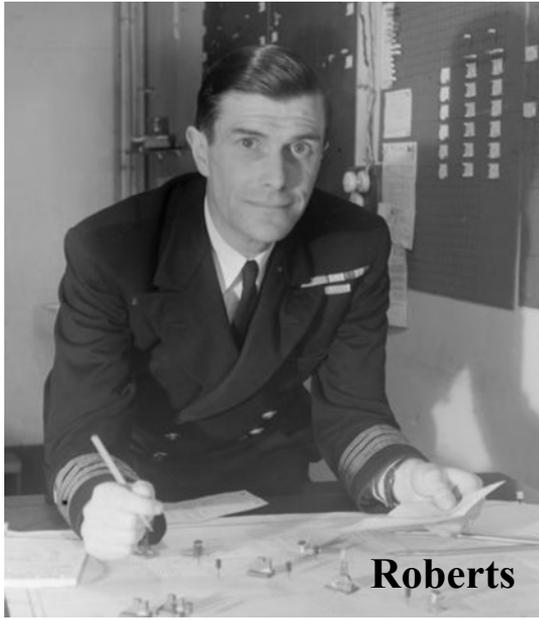


Limited Perspective



IS NOT RASPBERRY!

Outline



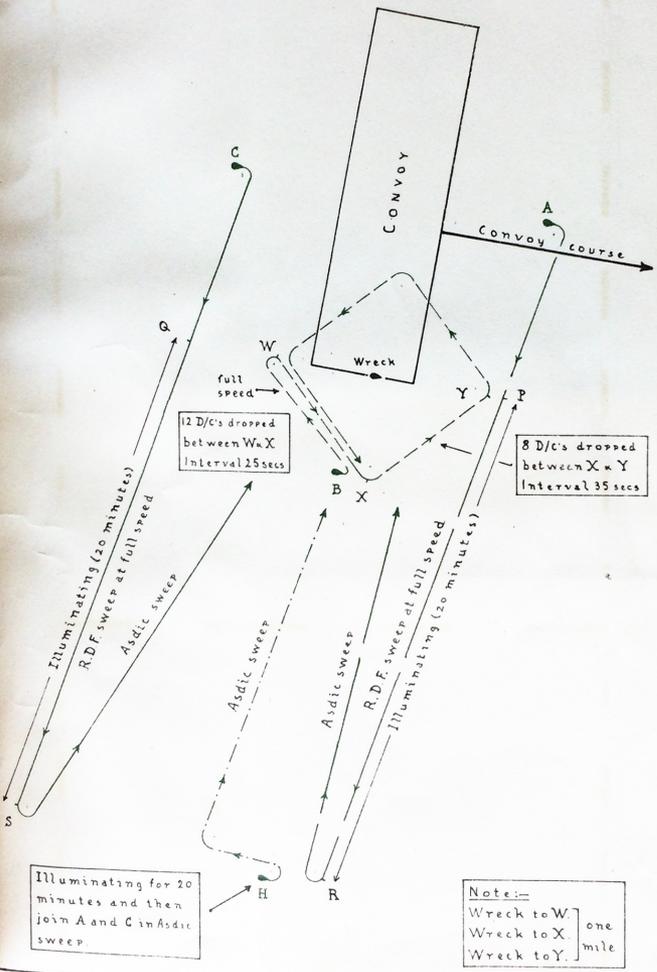
- ◆ **Operation Buttercup as devised by CDR Frederic J. Walker.**
- ◆ **CDR Gilbert Roberts' analysis of Convoy H.G. 76.**
 - **Directly impacted his view of U-boat tactics.**
- ◆ **Roberts' assumptions and tactical basis for Operation Raspberry.**
- ◆ **Operation Raspberry as published in the Atlantic Convoy Instructions.**
- ◆ **Plausible timeline for how Operation Raspberry was developed.**
- ◆ **Wargaming lessons that are worth repeating.**

Operation Buttercup

OPERATION "BUTTERCUP" STARBOARD

(See Appendix "B.")

D



- ◆ Operation Buttercup was a coordinated, multi-ship, nighttime, tactical maneuver to counter a U-boat attack.
- ◆ Buttercup's goal – to force a U-boat to submerge.
 - U-boat loses its mobility advantage.
 - Improve the chances of ASDIC (sonar) detection.
- ◆ Both Williams and Parkin, and by extension Roberts, have a very simplistic and incomplete view of the maneuver.

Operation Buttercup

- ◆ **Buttercup did have a serious potential failure mode.**
 - **The side to execute the operation had to be called out accurately.**
 - **Walker reserved the authority to call the operation to himself.**
- ◆ **ADM Sir Percy Noble, Commander-in-Chief, Western Approaches, expressed strong criticism of Buttercup in his remarks the Admiralty Convoy H.G. 76 report extracted from Walker's after-action report.**

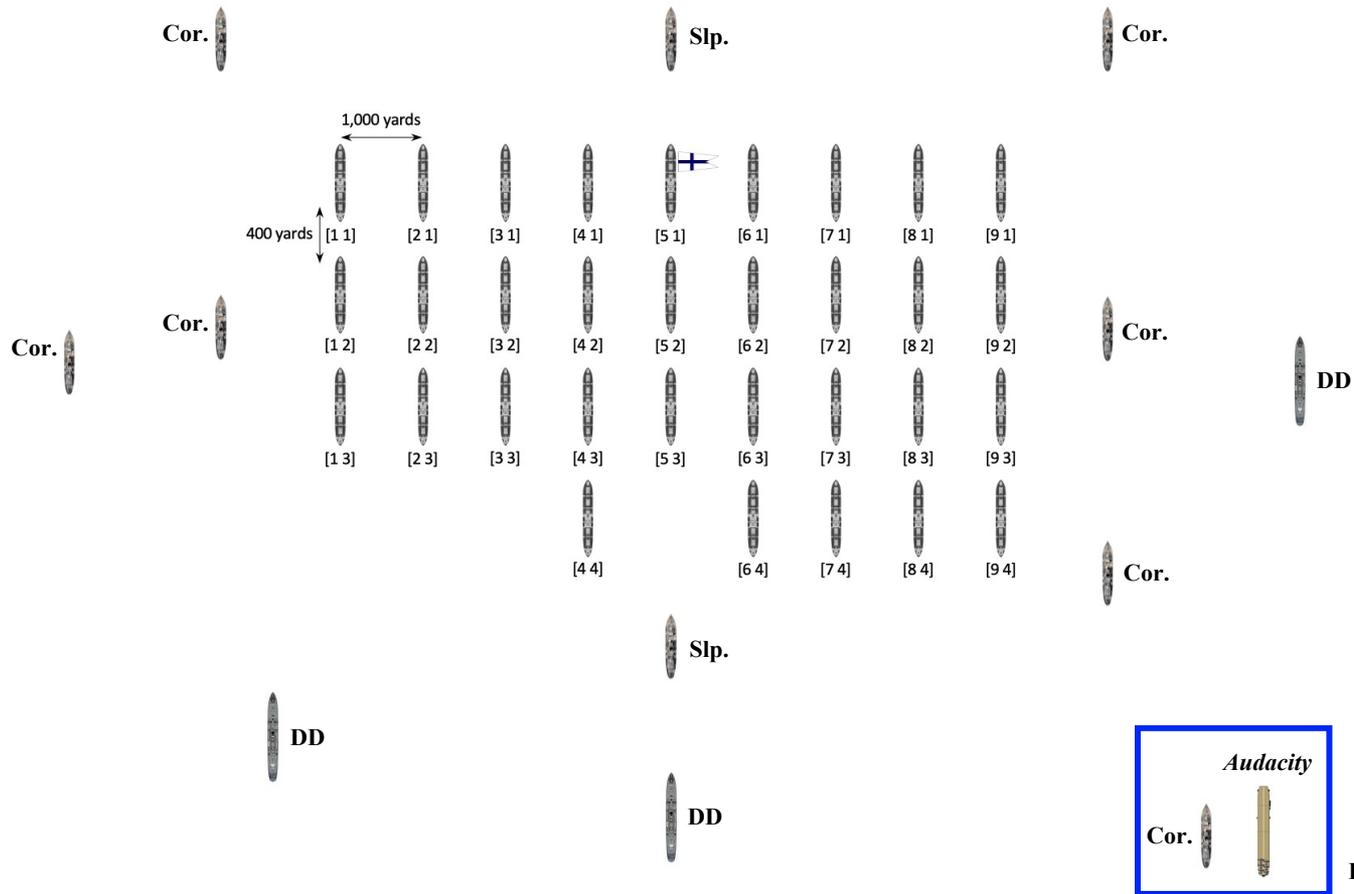
97. Extracts from Remarks by Commander-in-Chief,
Western Approaches.

(i) My remarks on operation "BUTTERCUP" are, briefly, that reliance should not be placed on estimates of the side of attack, offensive action being taken on both sides; more escorts should take part in the search; and delay in the commencement of operation "BUTTERCUP" is not acceptable - on a torpedoing, any escort should order it by R/T at once.

Convoy HG 76 Summary

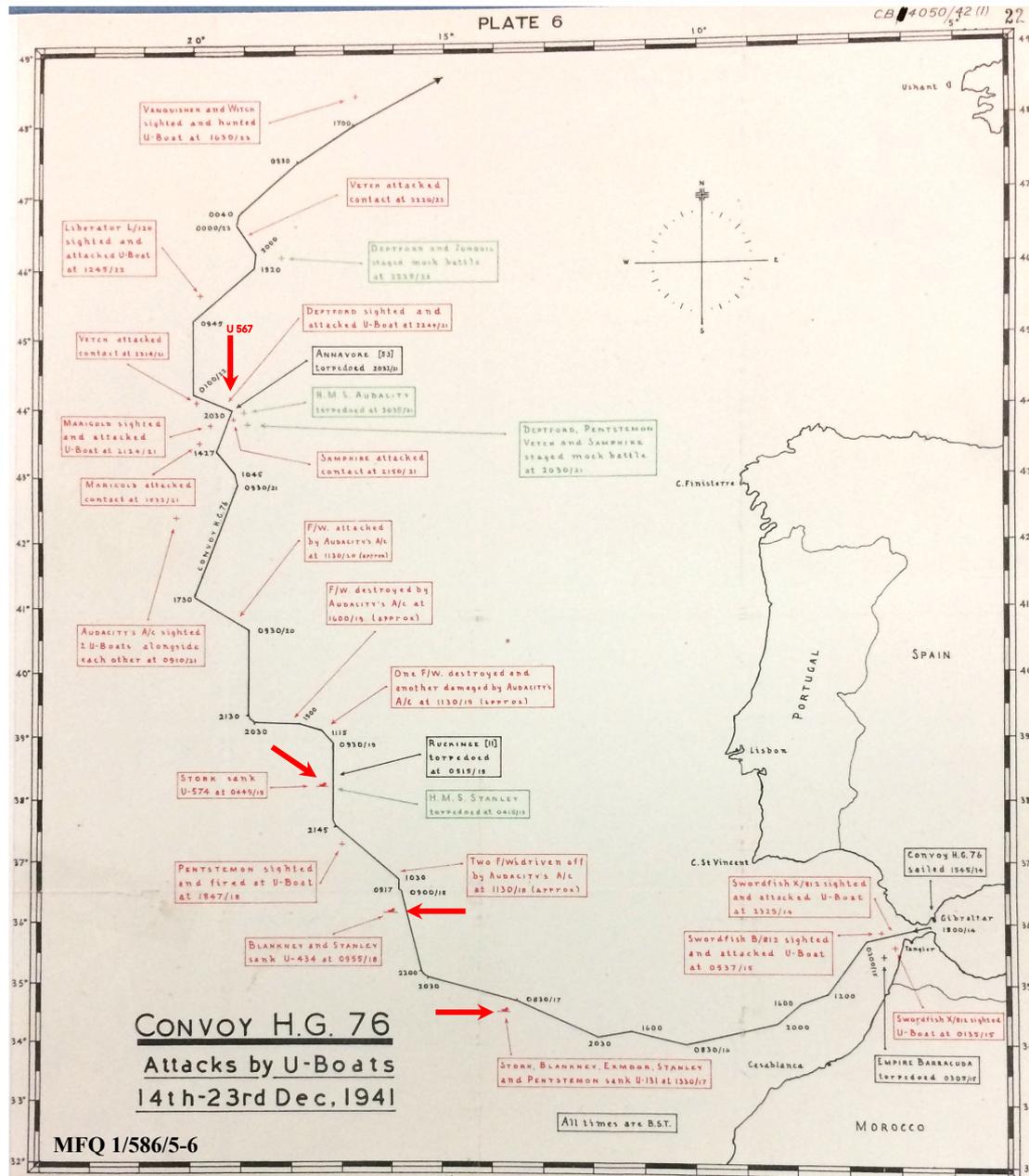
- ◆ **The battle for Convoy H.G. 76 was the first clear cut Royal Navy victory over a German wolfpack.**
 - **The British lost the escort carrier *Audacity*, the destroyer *Stanley* and two merchant ships (*Ruckinge*, *Annavore*).**
 - **Germans lost a total of five U-boats (U 127, U 131, U 434, U 574, and U 567).**
- ◆ **Operation Buttercup was employed twice during this convoy battle.**
 - **The first time after the sinking of *Stanley* – successful.**
 - **The second time after the sinking of *Annavore* – unsuccessful.**
- ◆ **The convoy battle account as presented by Williams and Parkin contains numerous factual errors.**
 - **Inconsistent with the official Admiralty report on Convoy H.G. 76.**

Convoy H.G. 76

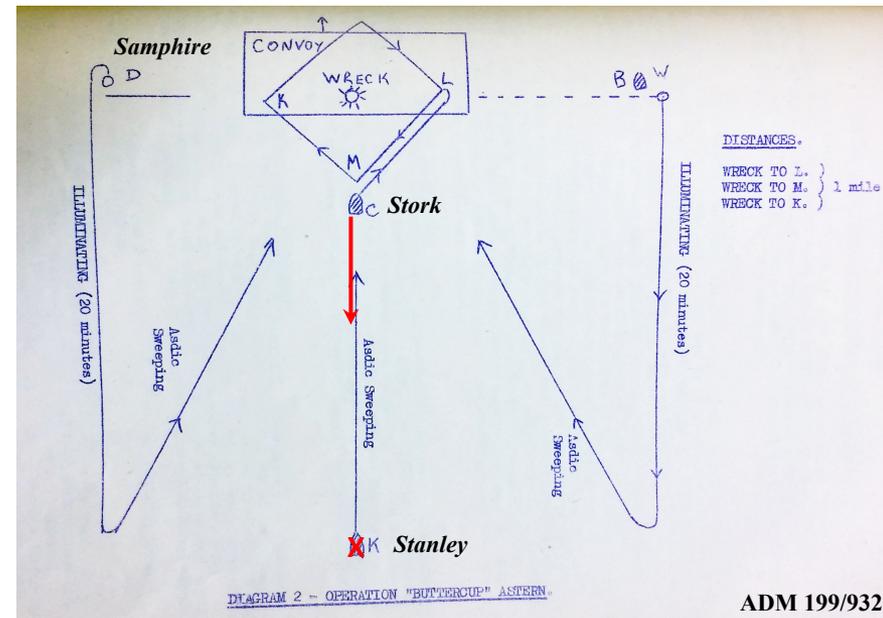
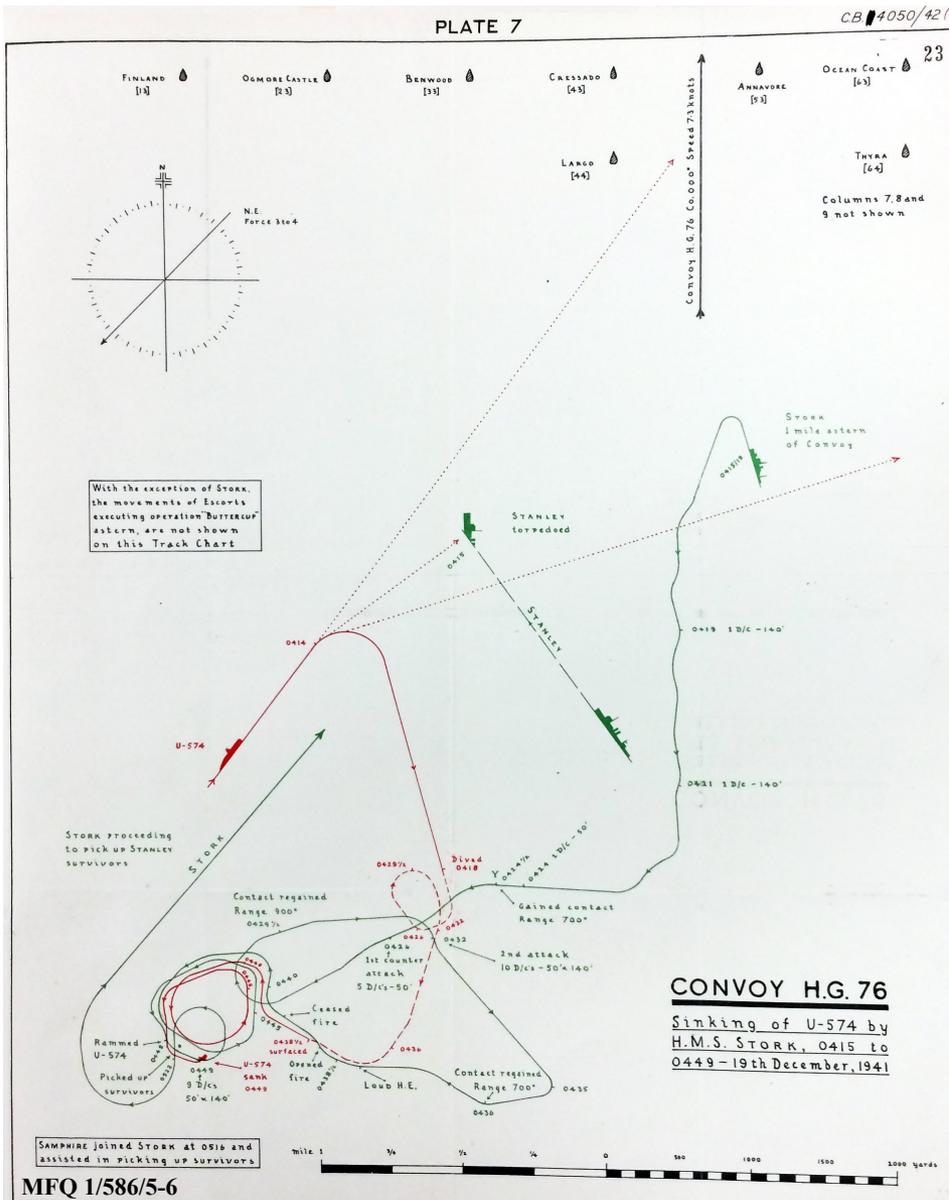


- ◆ Consisted of 32 merchant ships, nine escorts of the 36th Escort Group, three supporting Gibraltar-based destroyers and the escort carrier *Audacity*.
- ◆ Attacked by six U-boats of Group *Seeräuber* and three reinforcing U-boats.

Convoy HG 76

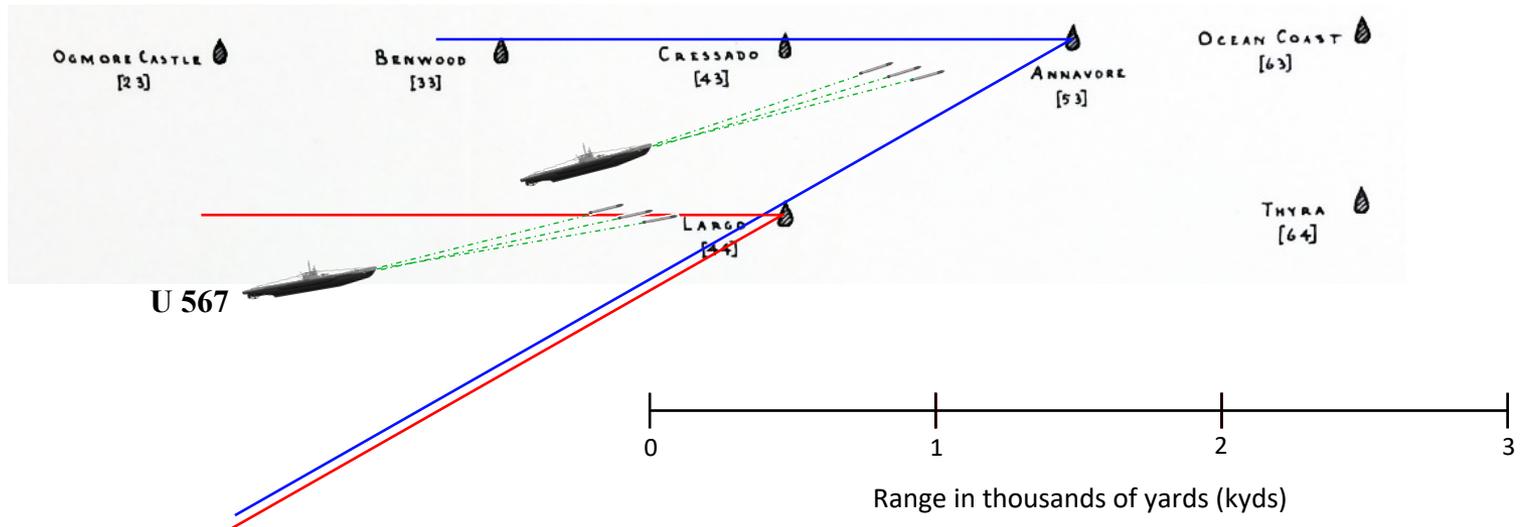


Convoy H.G. 76 Events – 19 December



- ◆ U 574 torpedoes and sinks *Stanley*.
- ◆ *Stork* rams and sinks U 574 after Walker initiated Buttercup Astern.
- ◆ U 108 torpedoes and sinks *Ruckinge*.
- ◆ Neither book mentions the sinking of *Stanley* or *Ruckinge*.

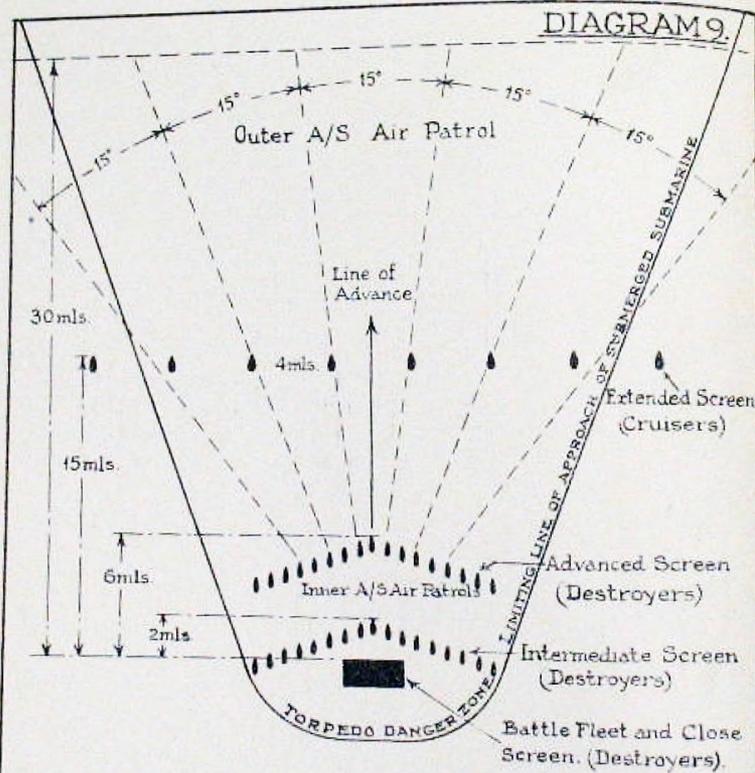
Convoy H.G. 76 Events – 21 December



- ◆ **Main focus of Roberts' analysis as portrayed in the biographies.**
 - *Annavore* [5 3] is torpedoed most likely on her port side and sinks.
- ◆ **Williams and Parkin explicitly state the attack on *Annavore* had to have been from a U-boat inside the convoy – at best a forced argument.**
 - Unspoken assumption: *Annavore* was the intended target.
- ◆ **Williams and Parkin explicitly state Buttercup's success was a fluke.**
 - Walker called Buttercup Starboard, this was a mistake.
 - No U-boat was detected, let alone attacked following the torpedoing of *Annavore*.

Basis for Operation Raspberry

A TYPICAL CRUISING DISPOSITION
OF A FLEET.



The torpedo danger zone and the limiting lines of approach are worked out on the following assumptions:- Speed of Fleet - 14 Knots, Speed of Submarine - 5 Knots, Speed of Torpedo - 40 Knots for 8000 yards.

The effect of variation in the fleet's speed between 12 and 18 Knots is not very great and can be neglected.

NOTE:-

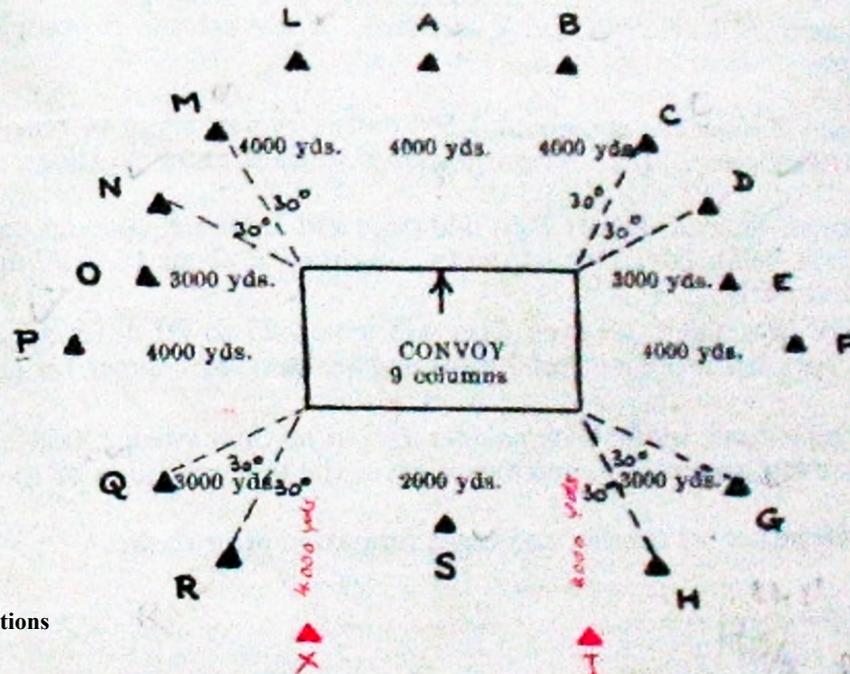
In the diagram there is an insufficient number of destroyers to form a complete advanced screen between the limiting lines of approach.

C.B. 3044.

- ◆ Williams and Parkin state the normal distance of the escort screen from the convoy “would be some 5,000 yards.”
 - Suggests Roberts fell back on his training as a Battle Fleet destroyer captain.
- ◆ Roberts also assumes a U-boat could not attack a convoy from outside the ring of convoy escorts.

Convoy HG 76 Escort Positions

COMPOSITE CONVOY DIAGRAM showing all lettered positions and spare lettered positions.
(Short Title C.C.1)



ADM 239/344
Atlantic Convoy Instructions
Article 130

- ◆ Escort positions and distance from a convoy.
 - Atlantic Convoy Instructions of 1942 has escorts 2,000 – 4,000 yards away.
 - Other secondary references have similar distances 2,000 – 3,000 yards away.
 - These are base ranges, zig-zag pattern adjusts by ± 500 yards.

Basis for Operation Raspberry

- ◆ **Roberts' assumption of escort distance doesn't match Walker's escort positions in Convoy H.G. 76.**
- ◆ **U-boat tactical guidance: torpedo attacks from 1,500 – 3,000 meters.**
 - Typical range closer to 3,000 meters.
- ◆ **Attacking from outside the escort screen is entirely possible.**
 - Kretschmer and Hesseler are clear that attacking from outside the escort screen was not unusual – “orthodox tactics”.
- ◆ **In short, Roberts constructed a Strawman's argument in his memoirs to justify his belief that convoys were, as a rule, being penetrated.**

Basis for Operation Raspberry

- ◆ **Three critical assumptions of German U-boat tactics.**
 - 1) A U-boat would slip into the convoy on the surface to attack from within.
 - 2) A U-boat would infiltrate from astern.
 - 3) After an attack a U-boat would immediately submerge and allow the convoy to pass overhead.

- ◆ **While penetrating the convoy was possible, it wasn't a likely option.**
 - German Navy View: Rohwer: “seldom occurred”, Kretschmer: “at times”.
 - Royal Navy View: “Few U-boats were prepared to penetrate...a convoy.”

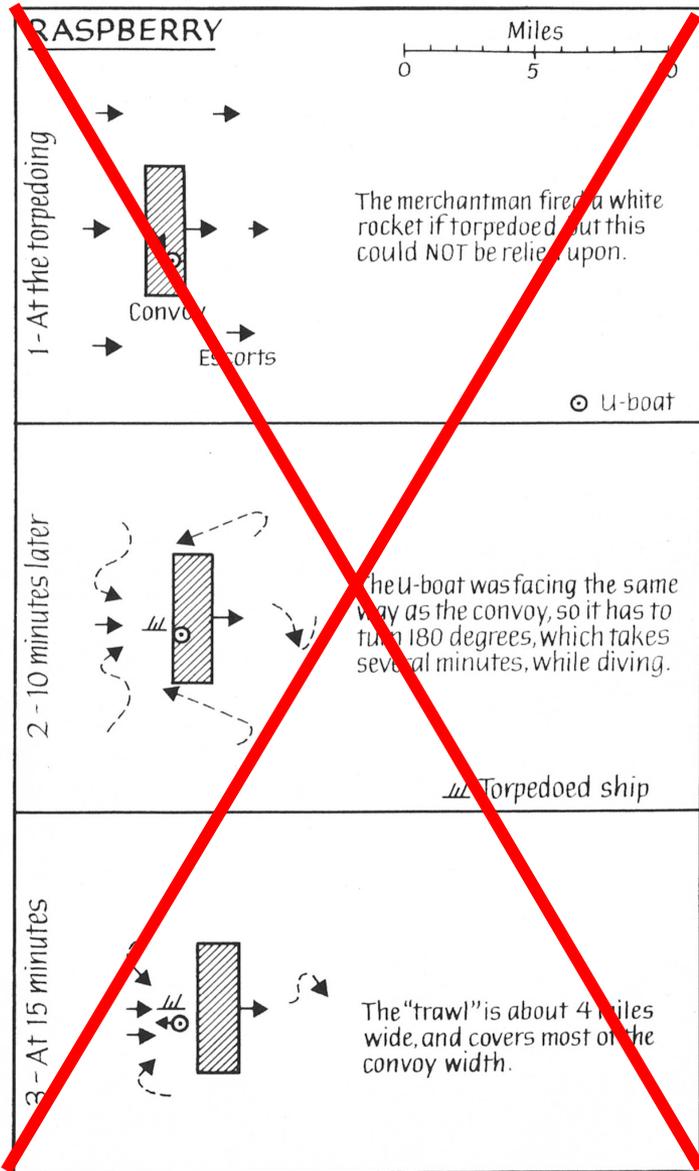
- ◆ **Infiltrating the convoy from astern.**
 - Assumption not included in Parkin's book.
 - German tactics favored the convoy's flanks – influenced by wind, moon.

- ◆ **Submerging after attacking.**
 - U-boat aces knew that submerging negated a U-boat's advantages.
 - Kretschmer: U-boat wasn't to submerge “...under any but the most desperate of circumstances...”

WATU's First Briefing

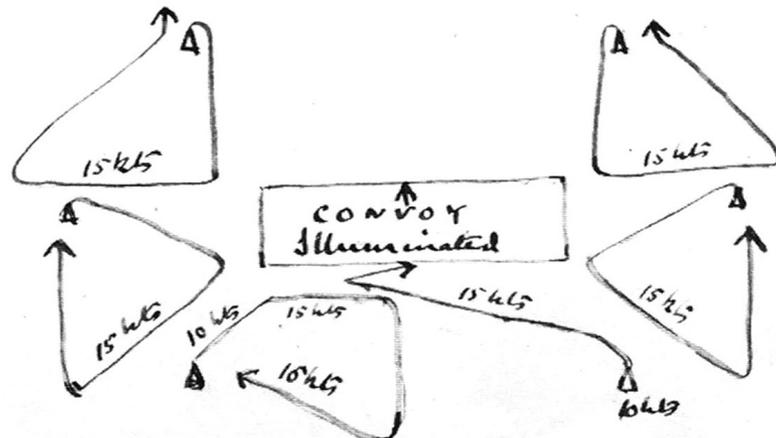
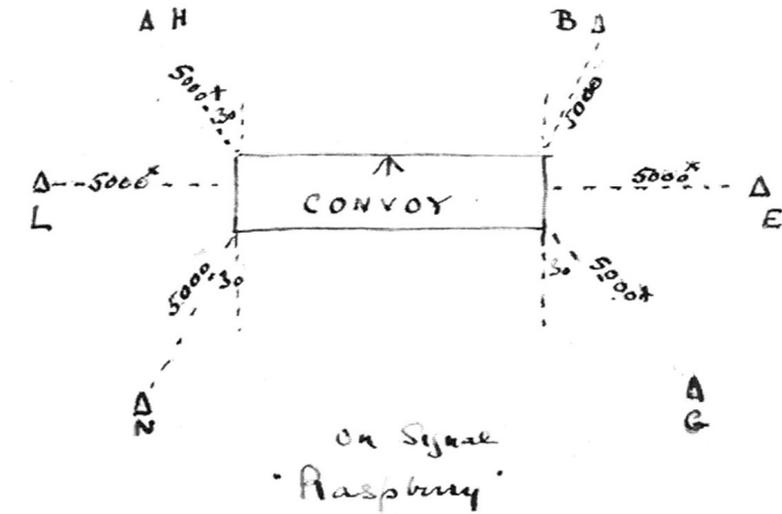
- ◆ ***If* the presentation to ADM Sir Percy Noble was based on the analysis in Williams' and Parkin's books, it would have been professional suicide.**
 - Roberts would have been shown the door, and WATU may not have existed.
- ◆ **By all accounts Gilbert Roberts was an intelligent, motivated, if touchy, individual.**
 - He could not have made such egregious mistakes.
 - Suggests the events described in the biographies is not what took place.
- ◆ **There two firm pieces of evidence to support this hypothesis.**
 - WATU not only survived, it thrived.
 - Operation Raspberry published in the Atlantic Convoy Instructions of 1942.

Operation Raspberry

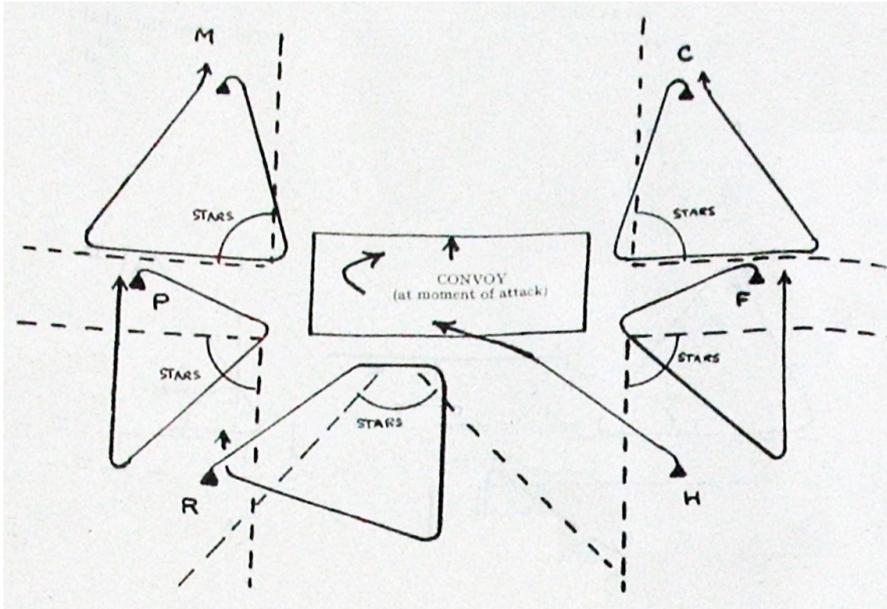


Example of Raspberry - with 6 escorts.

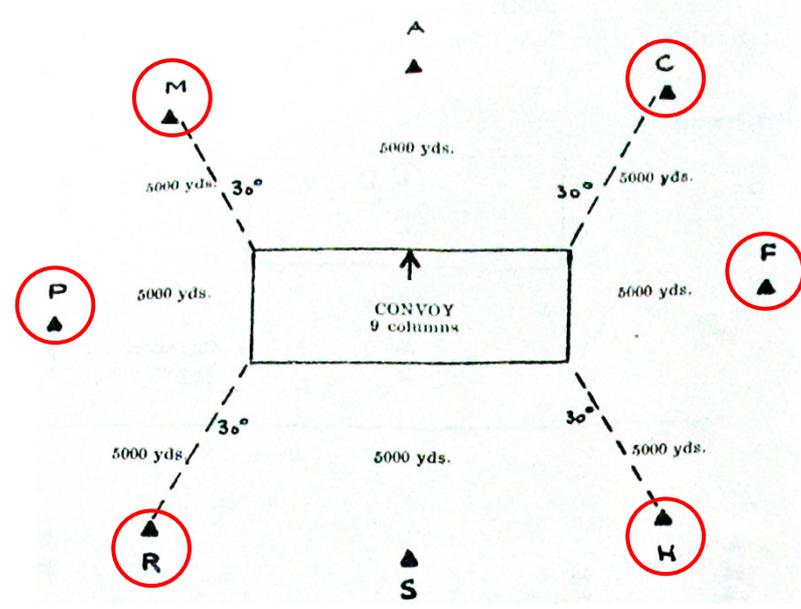
Escorts stationed thus:-



Night Escort 6 Operation Raspberry



ADM 239/344
Atlantic Convoy Instructions
Article 120



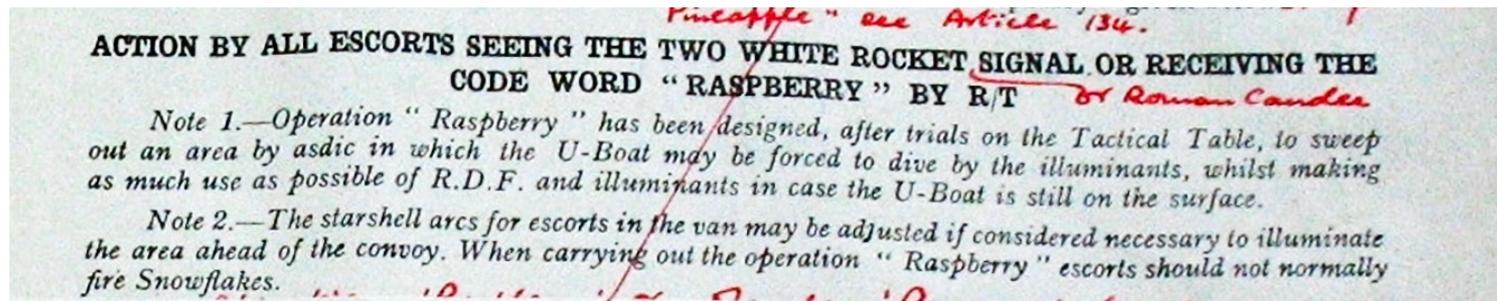
ADM 239/344
Atlantic Convoy Instructions
Article 131

- ◆ Escorts are positioned at a distance of 5,000 yards away from the convoy.
- ◆ Operation Raspberry bits:
 - Inward search is a dedicated ASDIC sweep – within 1,500 yards of the convoy.
 - Outward search focuses on a visual search with starshells, and radar.
 - Only one escort goes into the convoy proper.
- ◆ The operation focuses on a U-boat threat external to the convoy.

Raspberry is Buttercup v2.0

Raspberry is essentially a modification of Buttercup

- ◆ The only differences between these two operations are:
 - The escorts further away, turn inward from their initial positions.
 - A full convoy perimeter response – not just to one side.
- ◆ Official function of Raspberry is identical to that of Buttercup.
- ◆ Walker biographers Terrence Robertson and CDR D.E.G. Weymss claim the two operations are linked.
 - “It had some defects, but it proved the fore-runner of a series of operations ...worked out in the tactical school...and passed on as drills to us at sea, the ‘Fruit’ operations.” (Weymss, 1948)



A Plausible Timeline

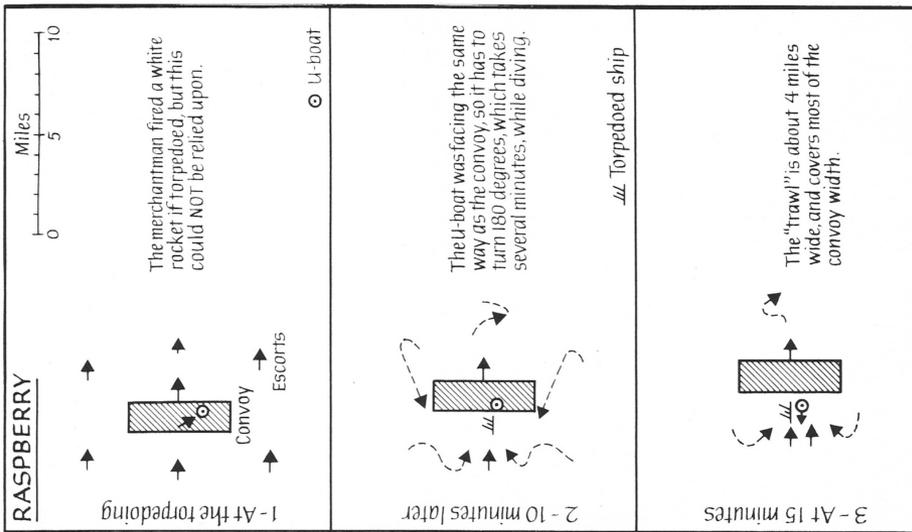


- 29-30 Dec 1941: HMS *Stork* arrives in Plymouth for repairs.
- 6 Jan 1942: Noble/Walker attend a meeting in London.
 - VADM Usborne was almost certainly an attendee.
- 6-7 Jan 1942: Roberts to meet Second Sea Lord and Usborne.
 - Form a tactical analysis unit at Derby House.
 - Usborne wanted Roberts to prove Buttercup was utterly ineffective.
- 7-8 Jan 1942: Roberts reports to ADM Sir Percy Noble.



- Early Jan 1942: Roberts begins researching convoy actions and assembling the WATU team.
- Early Jan 1942: Roberts interviews Walker, gets an appreciation for Buttercup.
- After analyzing Buttercup, Roberts realizes he is in a minefield.
- Roberts changes Buttercup enough to please Usborne, but also addresses Noble's earlier criticisms.

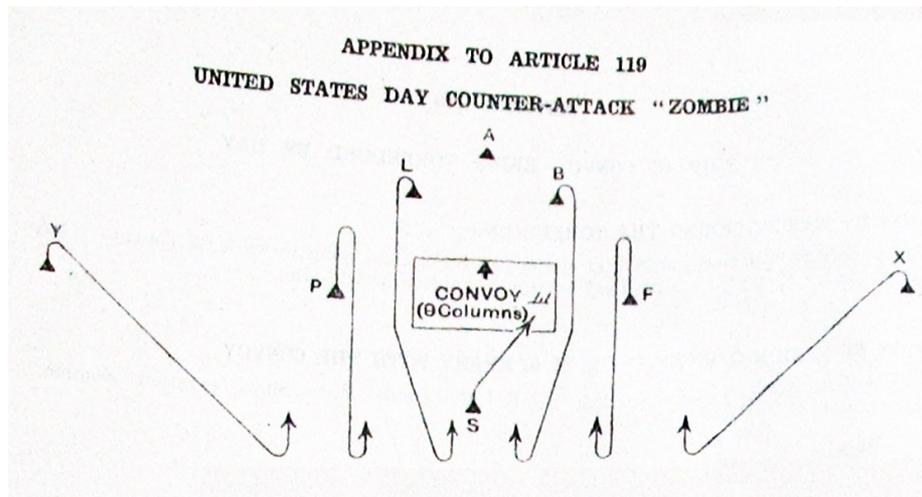
What the Devil is this?



Williams, 96

◆ Royal Navy Operation Artichoke/
American Zombie.

◆ To counter an attack by a submerged
U-boat on a convoy during daylight.



Atlantic Convoy Instructions
Article 119

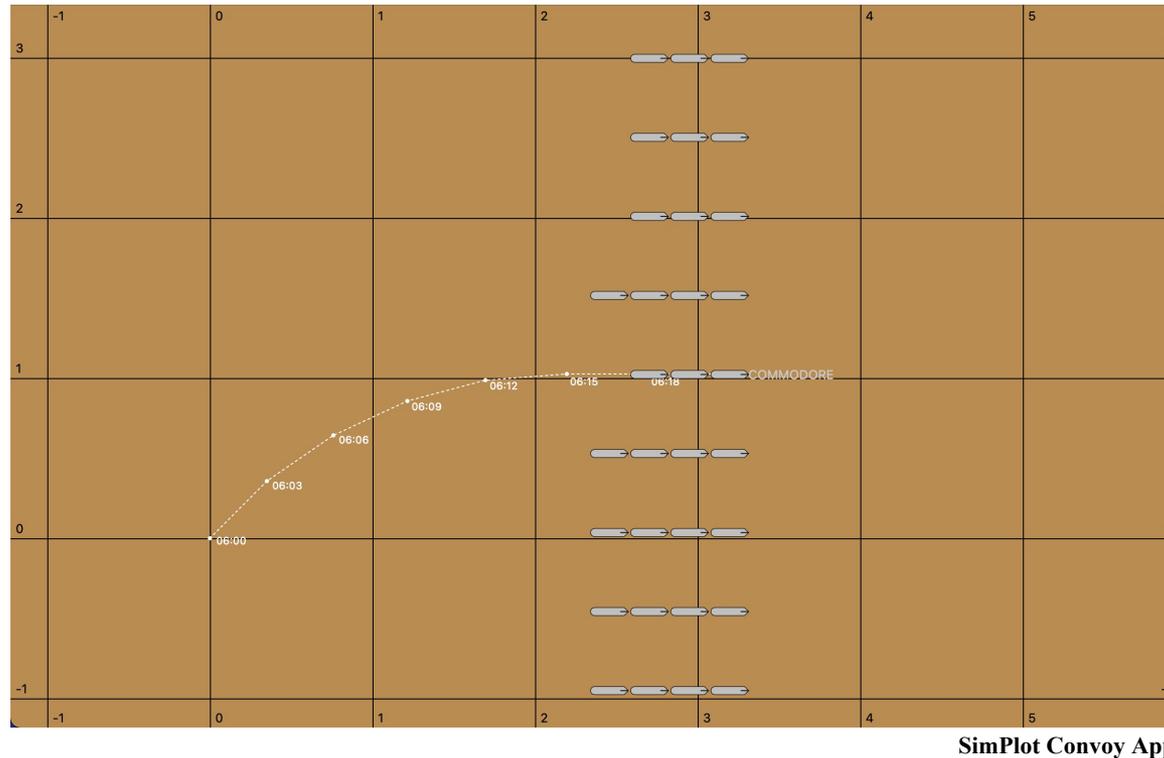
Conclusions

- ◆ **Roberts' contributions to the Battle of the Atlantic have been embellished – largely by Roberts himself.**
- ◆ **WATU was an extremely effective trainer of escort commanders.**
- ◆ **WATU's initial tactical developments were not particularly innovative.**
 - **As the cadre of graduates increased and reported their experiences back to the staff, WATU became a the “hub” of a well tuned operational feedback cycle.**
 - **Roberts and the WRENs were experts at the ASW game, not ASW experts.**
- ◆ **The Roberts biographies written by Williams and Parkin have a large number of historical errors that distort the origins of Operation Raspberry.**
- ◆ **Operation Buttercup was an effective anti-submarine maneuver.**
 - **It wasn't perfect, but it represented a solid foundation for refinement.**
- ◆ **Operation Raspberry is a modification of Buttercup.**
 - **Designed to appease both VADM Cecil Usborne and ADM Sir Percy Noble.**
 - **Raspberry variants had a relatively short life - canceled May 1943.**

Wargaming Lessons Worth Repeating

- ◆ **Beware the notion that wargames can “prove” anything.**
- ◆ **Beware the use of malign wargaming.**
- ◆ **Basing historical analysis on a single source is not particularly wise.**
 - **WATU’s story needs more points of view.**
- ◆ **Both sides of a conflict must be studied – the enemy has a vote.**
- ◆ **Wargaming works best with an integrated analysis – gaming**
 - **operations cycle.**
 - **By itself the tactical table is insufficient...benign environment.**

WATU Game



- ◆ A copy of the WATU tactical ASW game rules has been quite elusive.
- ◆ The Admiralty Trilogy Group believes this game can be reconstructed.
 - Royal Navy's War Game Rules 1929 (C.B.3011)
 - Capabilities of Own and Enemy Forces for use in A/S Tactical Games 1948
- ◆ We hope to be able to present this game at next year's Connections Online.

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