

Strategic Thinking and Threat Intelligence – Lessons from WW2

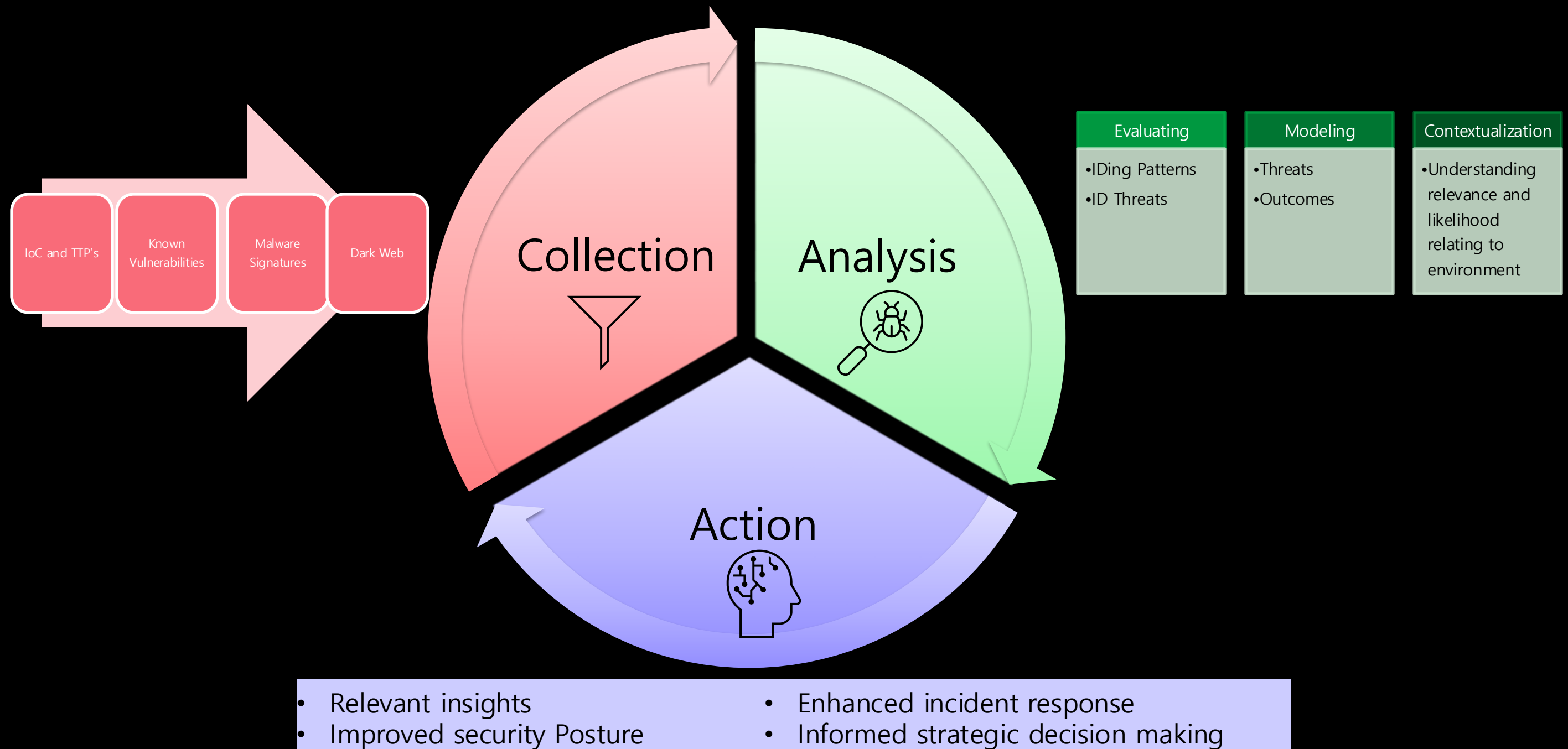
John Karabin

Chief Cyber Security Strategist McGrathNicol



McGrathNicol

What is Cyber Threat Intelligence and why does it often fail?



September 3rd , 1939: War is Declared

BRITAIN DECLARES WAR

GERMANY FAILS TO REPLY TO OUR ULTIMATUM



THE PREMIER'S DISCLOSURE

Delayed German Reply Due to Peace Plan?

PREMIER TELLS THE NATION

"I Am Certain That The Right Will Prevail"

HITLER'S MIND MADE UP

BRITAIN IS AT WAR WITH GERMANY, NO REPLY TO OUR ULTIMATUM HAVING BEEN RECEIVED BY 11 A.M.

Premier in a broadcast to the nation at 11.15 said: "We are at war with Germany. No undertaking has been received from Germany."

Prime Minister said: "Now may God bless you all. May we defend the right. It is evil things that we shall be fighting against: brute force, bad faith, injustice, oppression, and persecution, and against them I am certain that the right will prevail."

"You can imagine what a bitter blow it is to me that all my long struggle to win peace has failed."

"Yet I cannot believe that there is anything more or anything different that I could have done and that would have been more successful."

"Up to the very last it would have been quite possible to have arranged a peaceful settlement."



The lights have gone out in Europe once again and Britain is at war with the Navy on perpetual guard.

Battle Continues Along The Frontier

Sunderland Daily Echo and Shipping Gazette | 3 September 1939

Reference Wikipedia

Risks around supply chain

Britain an island nation relied heavily on imports

- Over 68 million tons a year were shipped to Britain using the merchant navy
 - 95% of fuel was imported
 - 70% of food was imported
- If that drops below 27 million tons, called the "Red Line" the country grounds to a halt - capitulation and defeat were inevitable.
- The Battle of the Atlantic ran from September 1939 to May 1945 (war ended 2nd Sept 1945)
 - Churchill was convinced the outcome of war rested on winning the Atlantic



Reference Wikipedia

The rise of the 2nd generation submarine – The German U-Boat



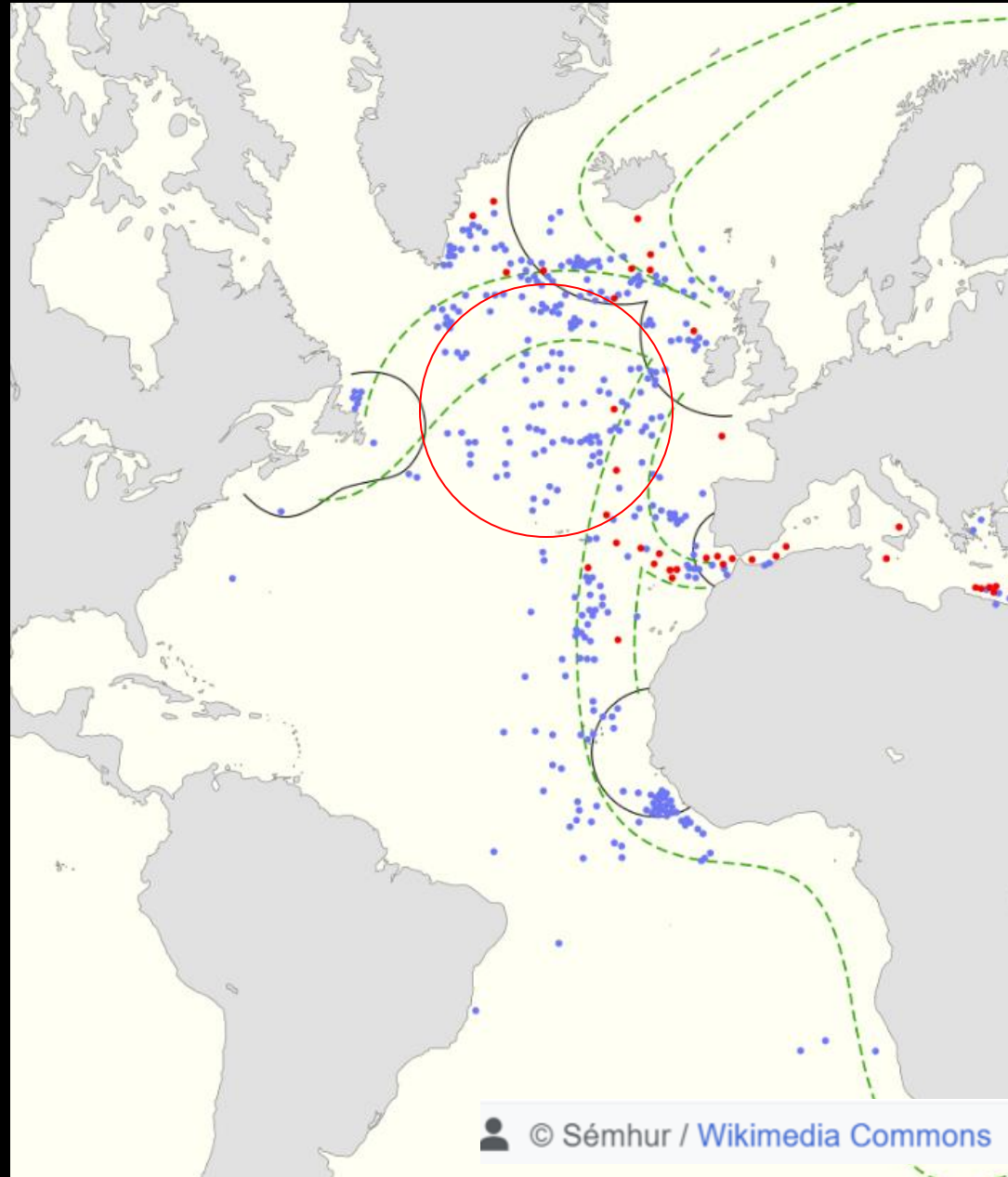
Karl Dönitz as Grand Admiral "Befehlshaber der Unterseeboote"

- A commander of the submarine fleet in WW1
- Supreme commander of the U-Boat fleet in WW2
- Responsible for the Wolfpack tactic



Reference Wikipedia

The Battle of the Atlantic – a war of attrition



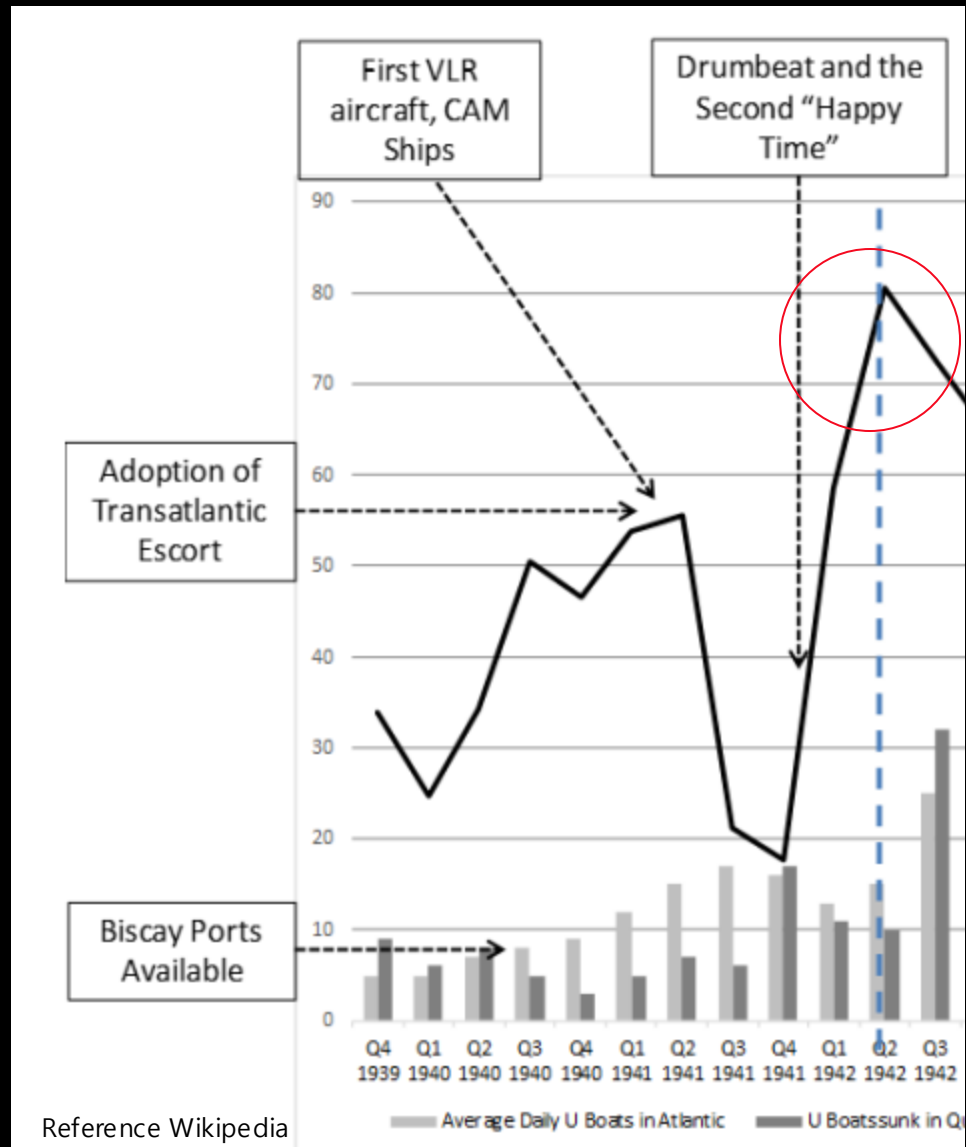
- Mid-March to December 1941
- Black arcs show aircraft coverage
- Red Dots U-Boats sunk by the Allies
- Blue dots are merchant ships sunk by U-boats
- Red Circle – The "Black Pit"

- 2,603 merchant ships lost
- 175 naval ships

- "... the only thing that ever really frightened me during the war was the U-boat peril"

– Winston Churchill

Losses towards the redline



- Technology and experience were not enough to outmaneuver the threat
- The supply to Britain was reduced to 27m tons
- Churchill faced with imminent defeat demanded more and instigated a strategic "wargaming" division run by retired Captain Gilbert Roberts



"Find out what is happening and sink the U-boats."
– Churchill

Western Alliance Tactical Unit – W.A.T.U.

In Feb 1941 a special division of the Western Approaches Tactical Unit (WATU) was formed in Liverpool which was supported largely by the Woman's Royal Naval Service WRNS or the "Wrens"



Reference Wikipedia

Reference Wikipedia

Captain Gilbert Roberts, Jean Laidlaw and team at the WATU A Strategy division

A lesson from history in contextual strategy

Simulation and Wargaming:

- Providing a platform to understand the entire threat landscape
- To better understand the motivation of the enemy
- To think differently, work out counter measures and test them
- To Train your people in a safe environment all be it under pressure **"make your mistake here on the oil-cloth and you won't make them at sea"** - Roberts



(Credit: Imperial War Museum)

Operation Raspberry - May 1942

- By summer 1942 in one month 4 times the number of U-Boats were being sunk. The odds suddenly changed!

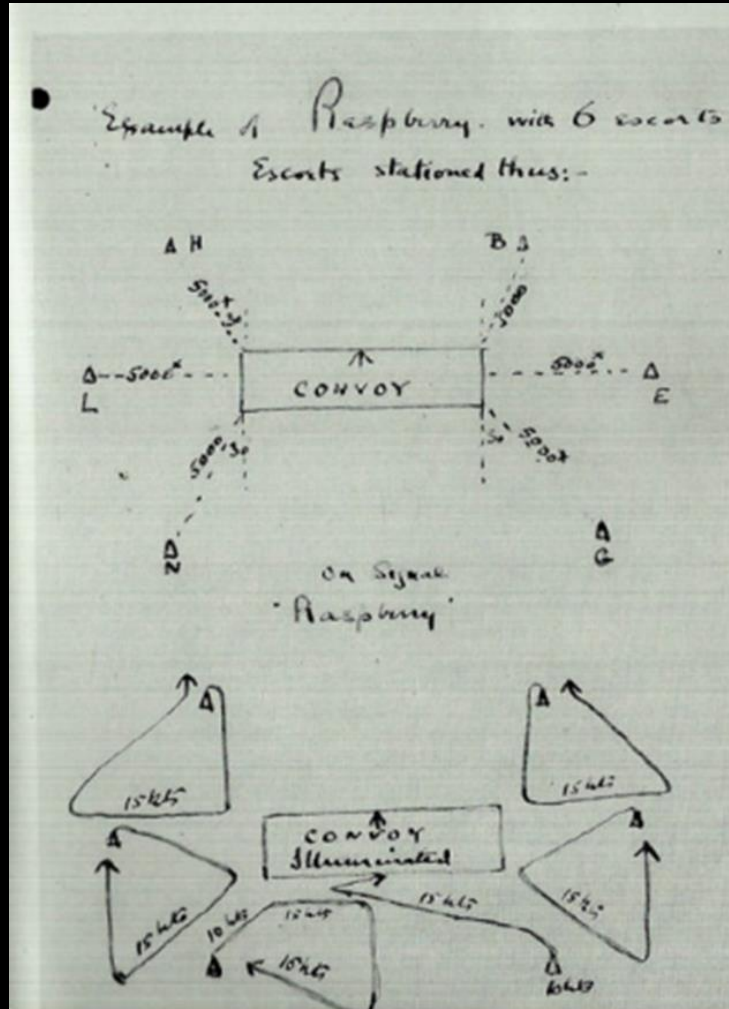


Diagram of the Raspberry tactic. Photo by anonymous (date unknown).

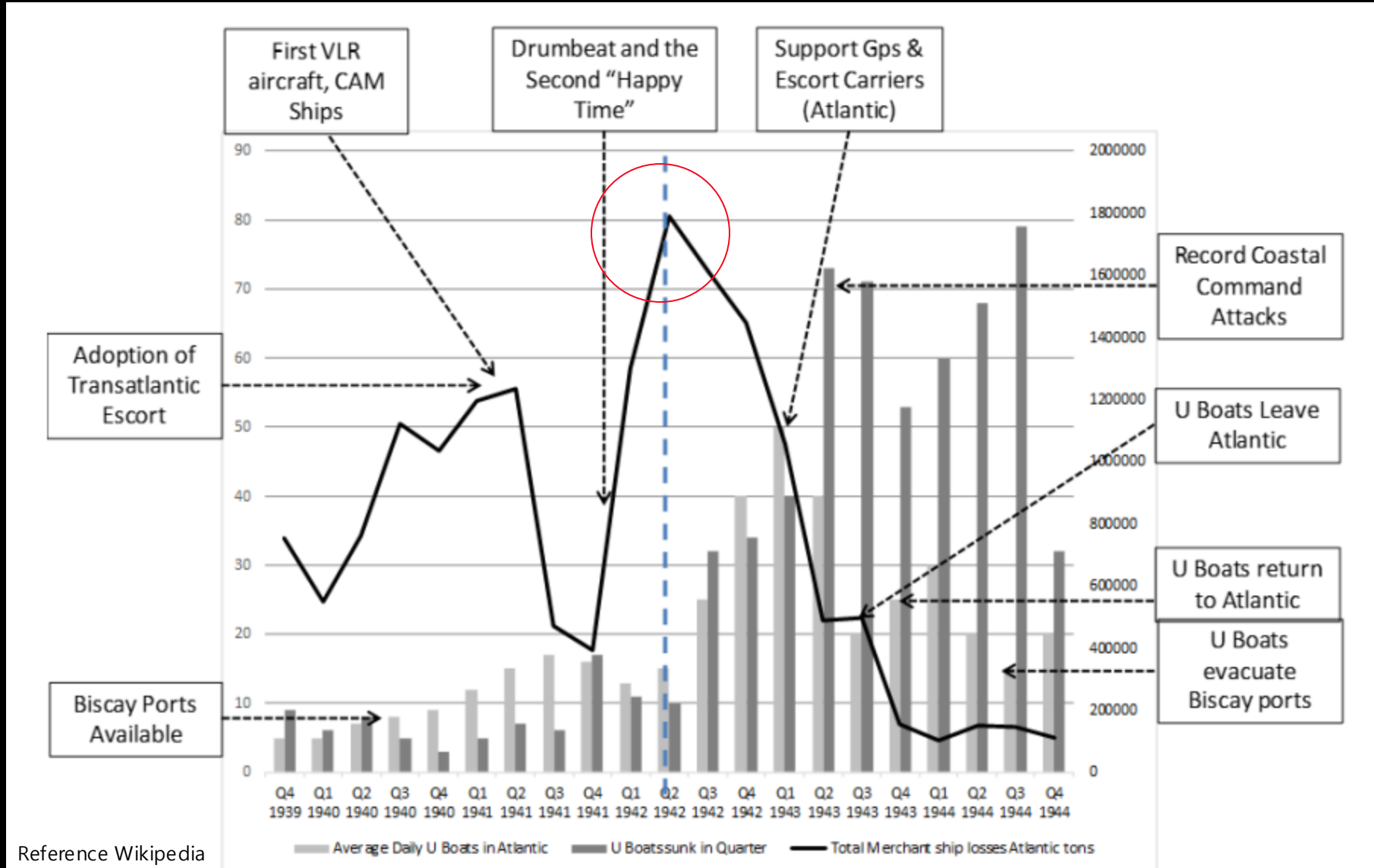
Reference IWM



Reference Wikipedia

Admiral Horton, beaten on the board by Janet Okell and Jean Laidlaw

Losses towards the redline



The summer of 1942 saw a dramatic change to the Battle of the Atlantic.

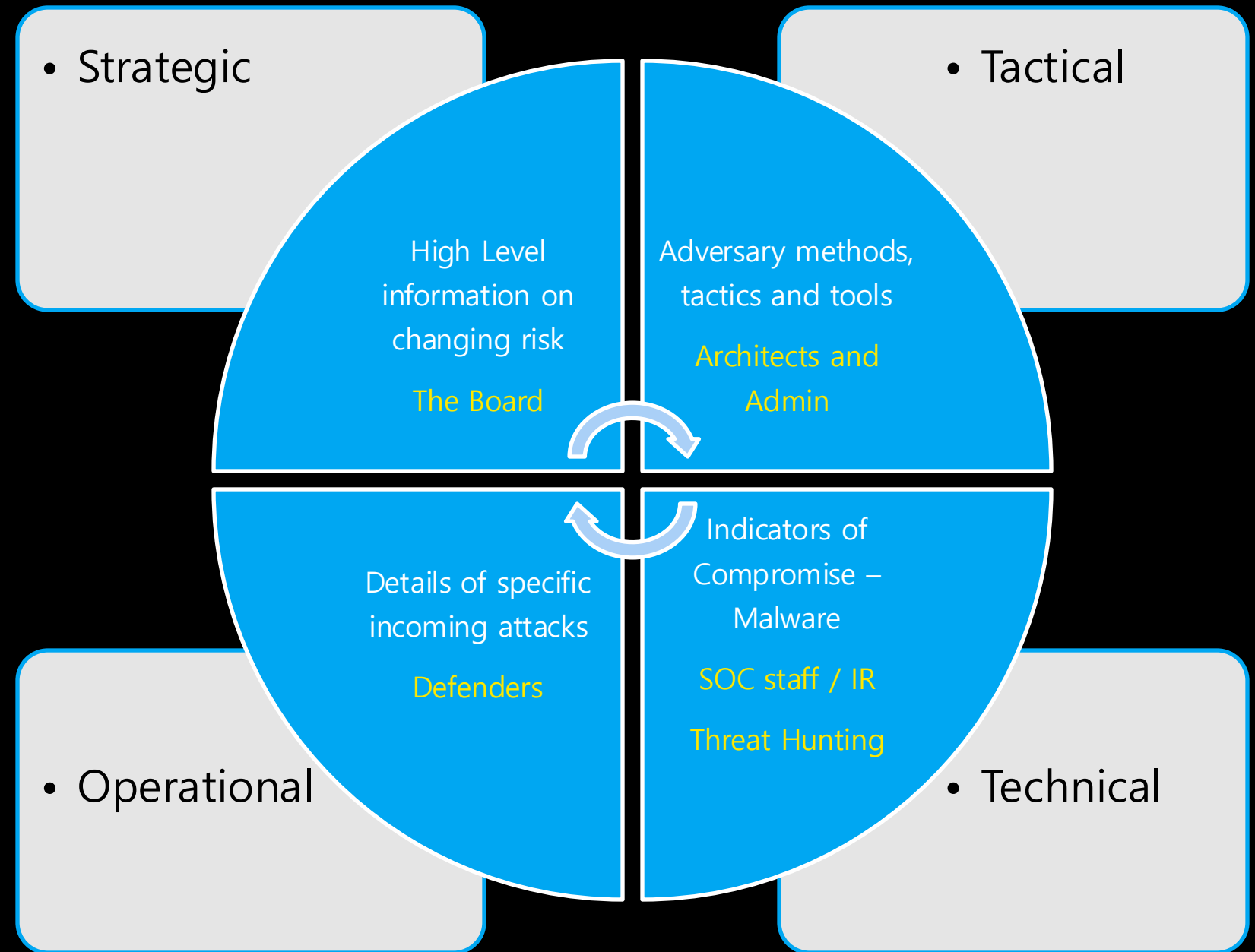
By combining:

- Technology
- Intelligence
- Tactics
- Training

Modern Cyber Threat Intelligence considerations

Considerations:

- Over reliance on technology and single pane-of-glass approach
- Bias and Hubris causing "threat blindness"
- Lack of skills and capability to deal with issues
- Data overload – Filtering and smart automation needed
- Timeliness – categorizing and risk weighting of threat intelligence
- Financial and resource constraints – how much is enough?
- Over reliance on external sources missing contextualization
- Not utilizing table-tops and wargaming to learn the lessons and sharpen the responses



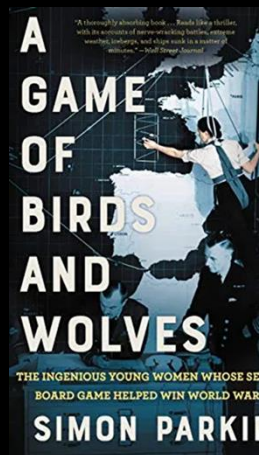
Dynamic Threat Landscape

Postscript

At war's end, Admiral Sir Max Horton, who had been defeated on that memorable day in 1942 by two young Wrens, sent a personal signal to all who had served in the unit – a powerful tribute to their quiet but momentous achievement:

"On the closing down of WATU I wish to express my gratitude and high appreciation of the magnificent work of Captain Roberts and his staff, which contributed in no small measure to the final defeat of Germany."

In 1975 the British government issued a decree stating that the stories from the battle for the Atlantic could be told



Jean Laidlaw became one of Britain's first Chartered Accountants retiring as chief accountant for Baker & Mackenzie. She stayed in touch and was part of the Wrens until she died peacefully in 2007.