

Briefing Memo

Air Superiority in the Falklands (Malvinas) War

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Introduction

The Falklands War was a war between the United Kingdom and Argentina both in the West in 1982. The two sides had disputed territorial rights over the Falkland (known in Argentina as “Malvinas”) Islands and other islands in the South Atlantic Ocean. This was the first war since World War II, and the first war in the jet aircraft era, in which the Western fleet sustained continuous air attacks. It was a war that involved the use of many new weapons, including the Exocet air-to-ship missile and the AIM-9L air-to-air missile.

As expected, the United Kingdom envisioned conducting an amphibious operation and subsequent combat to re-recapture the Falklands under her air superiority. Argentina succeeded in sparing its military assets and concentrating them against the United Kingdom’s amphibious operations, as well as in preventing the United Kingdom from achieving air superiority to a great extent by attacking with Exocet missiles. Although this war is well known for the overwhelming victories of the Sea Harriers in the air-to-air combat, the United Kingdom in reality had inadequate air superiority and there were instances that could have jeopardized its victory. This article takes a look back at the combat and air superiority transition during the Falklands War and examines its implications.

1. Geographical Features of the Falkland Islands

The Falkland Islands, located virtually east of Tierra del Fuego at the southern tip of the South American continent, consist of two large islands, East Falkland and West Falkland, as well as over 300 small islets. It has a total area of approximately 12,000 km², just about two-thirds of the size of Japan’s Shikoku island. The distance between the Falkland Islands and the U.K. mainland is approximately 13,000 km. Ascension Island, a U.K. territory that served as a staging post on the way to the Falklands during the war, is located near the equator in the Atlantic Ocean, also separated by a long distance of 6,300 km more or less from the Falklands. The Falklands were relatively distant islands for Argentina as well, located approximately 700 km from the closest South American mainland airfield.

2. Overview of the War

In January 1982, the Argentine military junta decided to recapture the “Malvinas” by the end of the year, ahead of the 150th anniversary of the U.K. control of the Falklands in 1983, even resorting to force, and began planning for the operation. Coincidentally, a group of Argentinians landed on the island of South Georgia (U.K. territory located approximately 1,400 km east-southeast of the Falklands) by neglecting immigration procedures in March 1982. In response to the United Kingdom’s attempt to force the group out of the island, Argentina hardened its posture and decided to immediately launch a military operation for recapturing the Malvinas. On April 2, approximately 900 marines from the Argentine forces conducted a landing operation in Stanley, the capital of the Falklands that was practically defenseless, and succeeded in occupying the Falklands in one day. The United Kingdom then sent in a task force to the Falklands that was defended by Argentine forces comprised of approximately 12,000 personnel. Sea and air

combat began on May 1, and the U.K. forces landed on the Falklands on May 21. Following the subsequent land-sea-air combat, the Argentine stationed forces surrendered on June 14, and the Falklands became U.K. territory again.

3. Overview of the Air War

(1) Air strengths of the United Kingdom and Argentina

Both the United Kingdom and Argentina mobilized multiple types of aircraft. This article describes the main models that are related to air superiority. U.K. fighters used in this war were 28 Sea Harrier FRS.1s of the Fleet Air Arm. Attack aircraft were 10 Harrier GR.3s of the Royal Air Force, which were operated from aircraft carriers from the middle of the war to carry out ground attacks. The Sea Harriers were dedicated to air-to-air combat missions after the arrival of the Harrier GR.3s. For bombers, the United Kingdom utilized 3 Vulcans based in Ascension.

Argentina's fighters included 15 Mirage IIIs of the Air Force, which were used to escort attackers and as decoys. As for attack aircraft, the Air Force had approximately 30 Daggers and approximately 40 A-4B/Cs, while the Navy had 10 A-4Qs and 5 Super Étendards. The Air Force had 2 KC-130H tankers that supported the attack missions of the Super Étendards and A-4s.

(2) First air-to-air combat

Full-scale combat between the U.K. and Argentinian forces began on May 1. A U.K. carrier battle group led by two aircraft carriers approached the Falklands. The United Kingdom's aim was to crush Argentine naval and air capabilities so that she could establish sea and air superiority in preparation for a landing operation. Meanwhile, Argentina misunderstood that the carrier battle group included landing units and aimed to defeat the U.K. landing units offshore.

In the first attack, a Vulcan bomber took off from Ascension, bombed Stanley airport and opened a hole in the runway. From 8 a.m. (local time), the Sea Harriers were launched for ground attacks on the Falklands and conducted combat air patrol (CAP) over the islands. The Argentine Air Force sent a lot of fighters and attackers from the mainland, leading to an air war with U.K. forces. The outcome of the combat was a one-sided victory by the Sea Harriers, bringing down four aircraft without sustaining any damages. Thereafter, Argentine air units sought to avoid a direct engagement with the Sea Harriers.

(3) Anti-ship attack by the Exocet missile

On May 4, the U.K. carrier battle group, in an attempt to further deplete Argentine sea and air capabilities, advanced to the waters south of the Falklands. Detecting this, Argentina's Super Étendard approached the group and launched Exocet missiles. The carrier battle group was caught completely off guard; the Exocet hit the destroyer HMS *Sheffield*, causing a major fire, and sunk her. The loss of a warship to the Exocet missile had significant impacts on the United Kingdom's operations of aircraft carriers. Since the aircraft carriers had to be protected, the carrier battle group was positioned at a distance that the Super Étendard could not reach, even if it received aerial refueling from air bases on the continental mainland. In turn, the Sea Harriers had less time for CAPs over the Falklands. Argentina, on the other hand, confirmed that the United Kingdom did not have amphibious landing units and sought to spare its assets by restraining air attacks.

(4) Air war related to the landing operation

At 3:30 a.m. on May 21, the United Kingdom began landing in San Carlos in East Falkland. The Argentine Air Force and Naval Air Corps conducted low-altitude incursion to avoid detection by radars onboard U.K. ships. Intense air war continued from May 21 to 25. Nineteen high quality aircraft of the Argentine forces were shot down, equivalent to as much as 13% of the 151 aircraft that were deployed in total over the five days. Meanwhile, the five-day combat resulted

in major and fatal damages to four U.K. vessels and inflicting moderate to minor damages to eight U.K. vessels. Nevertheless, the United Kingdom succeeded in landing ground units equipped with the necessary capabilities. The Argentine air units, on the other hand, lost momentum after May 26 and hopes dissipated for expelling the U.K. forces from the Falklands.

4. Relationship between the Falklands War and Air Superiority

(1) Goal of combat and air superiority

“Air superiority” does not refer to the degree of superiority in air battle (in a narrow sense, air-to-air combat by fighters), as the term suggests. The U.S. forces and NATO define air superiority as “degree of dominance in the air battle of one force over another that permits the conduct of operations by the former and its related land, sea, and air forces at a given time and place without prohibitive interference by the opposing force.” In this war, the United Kingdom sought to re-recapture islands by a landing operation, while Argentina sought to stop this. In this context, what was the ideal air superiority for both countries to achieve their respective goals?

For the United Kingdom, the ideal air superiority was to achieve dominance in the air battle in order to carry out a landing operation and the subsequent ground operation (capturing Stanley where adversary troops were concentrated) without interference by Argentina. For Argentina, the ideal air superiority was to achieve dominance in the air battle to prevent U.K. air operations from interfering with Argentine operations for defeating the re-recapture units.

What measures and means could the two countries have taken to achieve such air superiority? The U.K. Government’s rules of engagement prohibited attacking units assigned to the South American mainland, the main air force of Argentina. The available option for U.K. air units was to take advantage of its superiority in the quality of aircraft, carrying weapons, and pilots to engage in a war of attrition against the attacking opposing air force prior to the landing operation and deplete Argentina’s air capabilities. Following the landing, it was also necessary to defend what had to be protected from the opposing air force. Both constitute defensive counter-air operations.

For Argentina, it was ideal to incapacitate all two aircraft carriers (if possible, also counter-air weapons onboard vessels), which were a source of the United Kingdom’s air capabilities, in order to defeat the re-recapture units offshore. If this was not possible, it was necessary for Argentina to at least achieve dominance in the air battle (or not be dominated by the United Kingdom) to the extent that mainly operations using air capabilities could be conducted against the landing units at the time of the landing operation. These are offensive counter-air operations and air interdiction operations.

(2) Analysis: To what extent did the United Kingdom and Argentina achieve air superiority? Why did they fail to achieve adequate air superiority?

Argentina detected that a landing operation of the United Kingdom would not be imminent, and thus, the United Kingdom could not engage in the war of attrition that it had intended. Furthermore, Argentina’s offensive counter-air operations (the attacks by Exocet missiles) imposed a threat on U.K. aircraft carriers that were a source of her air capabilities. Accordingly, the United Kingdom’s basis for air power had to be positioned far away from the combat area, and the United Kingdom could not appropriate adequate CAPs over the Falklands. In addition, there was a lack of early warning aircraft, preventing the implementation of effective and efficient defensive counter-air operations against the many incoming low-altitude aircraft. Therefore, at the time of the landing operation, U.K. air superiority was incomplete in airspace over the landing area. This resulted in losses in personnel and supplies, delaying the landing operations and the subsequent ground operations. However, the extent of U.K. air superiority turned out to be in the permissible range, allowing the United Kingdom to secure victory.

Argentina could have but failed to achieve its ultimate air superiority by sinking two U.K. aircraft carriers through offensive counter-air operations (attacks by Exocet missiles). It is believed that Argentina was affected by the restriction

on the deployment of up to five Super Étendard and five Exocet missiles, the crewmembers' inexperience with weapons, and U.K. jamming. While Argentina could not defeat U.K. aircraft themselves, it was still able to considerably decrease the substantive air capabilities (CAP time) of the United Kingdom in key battle areas.

With the United Kingdom's CAPs being inadequate, Argentina concentrated the assets it had spared for air interdiction in the landing areas where the opponent would be vulnerable, and succeeded in conducting fierce attacks known as "Bomb Alley." Although considerable losses were inflicted on the United Kingdom, Argentina failed to interdict the United Kingdom's landing operations and subsequent ground operations. One of the reasons for this failure was the fact that (while it did not have much leeway due to attacks being conducted at full flying radius) Argentina targeted its attacks against combat vessels rather than transport vessels. In addition, Argentina was ignorant about bomb fuse settings for anti-ship attacks (a significant number of bombs did not explode) and could not make the most of this major chance to secure victory. Secondly, Argentina lacked the ability and will to counter the Sea Harriers; nor did it have a weapon system that can overwhelm ship-to-air missiles, resulting in a considerable depletion of its capabilities during the air interdiction against landing units.

5. Implications from Air Superiority in this War

The United Kingdom sought to defeat Argentine air capabilities by defensive counter-air operations. However, the decision to attack or not rests on the will of the attacking side. Unless the opponent attacks, there can be no war of attrition. It is already difficult to win an air war with air defense as the attacker has superiority. Moreover, the difficulty was compounded by the nature of island operations, in which the subject of defense/recapture is at the front (in the middle between the main forces of one force and the opponent's force) and both have to come to the front, and the interceptions of low-altitude intruding aircraft could not be carried out effectively and efficiently in the absence of early warning aircraft.

Due to Argentina's threat of offensive counter-air operations (attacks by Exocet missiles), the United Kingdom had to keep her aircraft carriers apart from the battle area and faced the dilemma of reduced air superiority in the battle area. Should the United Kingdom keep her aircraft carriers apart from the battle area to protect them and put the ground-sea-air operations at risk? Or should the United Kingdom forward deploy its aircraft carriers to gain air superiority in the most vital areas while putting its two air assets in danger? The choice was difficult.

The bombing of the Stanley airport by the Vulcan bomber did not yield substantial military achievements. However, it led Argentina to disperse its fighters to the mainland out of fear that its capital may be at risk of air raids. Such assets could have become critical escort capabilities in an attack against landing units. It is noteworthy that the United Kingdom showcased its capabilities and thereby shaped the opponent's perception, which had significant collateral effects beyond the direct effects.

Although attention tends to be directed at the Exocet, it must not be forgotten that the B model, the oldest of the A-4 aircraft, produced the greatest military achievements for Argentina. The aircraft inflicted fatal or major damages to four vessels and moderate to minor damages to three vessels in exchange for losses of ten aircraft (if there had been no unexploded bombs due to the defective fuse settings, the damages would have been far larger and the United Kingdom may not have secured victory). It demonstrates that even old style weapons should not be taken lightly.

Conclusion

In this war, the United Kingdom had not anticipated that Argentina would recapture the Falklands, whereas Argentina had not anticipated that the United Kingdom would seek to re-recapture the islands. It was a war fought with weapons which were at the countries' disposal and had not been contemplated for use in the South Atlantic. For example, Argentina struggled with her Mirage IIIs and Daggers which did not have aerial refueling fittings and thus had short flying radiuses. Meanwhile, the United Kingdom added aerial refueling fittings to its C-130s and Nimrods during the

war, and they were deployed for missions in the vast South Atlantic Ocean. In addition, although it was not completed during the war, after the sinking of the HMS *Sheffield*, the United Kingdom mounted searchwater radars on Sea King helicopters, and the first flight was conducted on July 23. The Sea King helicopters were carried on the aircraft carrier HMS *Illustrious*, which was commissioned in 1982 ahead of the scheduled 1983 commission, and engaged in an early warning mission in the South Atlantic Ocean where tensions remained high.

While it is important to correctly predict the future, we are humans and there are limits. The United Kingdom's ability to think and respond as needed to unforeseen circumstances, coupled with its technical capabilities that made this possible, enabled the country to win over Argentina. This furthermore contributed to the United Kingdom's dominance in the war, even with inadequate air superiority.

Main Referenced Sources

- Alfred Price, Jeffrey Ethell, *Air War South Atlantic*, Kensuke Ebata, trans. (Tokyo; Harashobo, 1984).
- Rodney A. Burden, Michel I. Draper, Douglas A. Rough, Colin R. Smith, David L. Wilton, *Falklands the Air War* (Dorset; Arms and Armour Press, 1986).
- Lawrence Freedman, *The Official History of the Falklands Campaign*, Volume I, II (London; Routledge, revised and updated edition, 2007).
- Chris Hobson with Andrew Noble, *Falklands Air War* (Hinckley; Midland, 2002).
- Lené De La Pedlaja, "The Argentine Air Force versus Britain in the Falkland Islands, 1982," Robin Highman and Stephen J. Harris ed., *Why Air Forces Fail: The Anatomy of Defeat* (Lexington, Kentucky; The University Press of Kentucky, 2006) pp. 227-259.
- Santiago Rivas, *Wings of the Malvinas: The Argentine Air War over the Falklands* (Manchester; Hikoki Publications, 2013, first published 2010).
- Robert L. Scheina, *Latin America: A Naval History 1810-1987* (Annapolis; Naval Institute Press, 1987).

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