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PLAN

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Introduction

- In its 100 plus years of technical development, aviation has experienced several important periods of rapid change, often stimulated by war, whether “hot” or “cold”. Between 1903 and 1918, the basic Wright aeroplane was transformed from an experimental craft to a military platform capable of delivering a reasonable bomb load between Britain and Germany. The 1920s saw the development of regular commercial services, and by the late 1930s the all-metal, stressed monoplane was the standard platform for military and civil aircraft. At the same time, reciprocating engines improved both in power and reliability. Innovation was encouraged by events such as the Schneider Cup, which extended the state-of-the-art for fast seaplanes and which in turn would form the basis for at least two significant World War Two land-based fighter aircraft, the Italian Macchi C.202 and C.205 fighters, and the Spitfire and the Merlin engine.¹ Aircraft such as the Douglas DC-3, the Ford Trimotor and the Junkers 52 were the mainstays of airlines in the USA and Europe. However, in the absence of a well-developed global network of landing places, the flying

boat, operating out of established ports and harbours, remained the primary vehicle for long haul routes.

- 2 The Second World War accelerated the pace of technical development in structures, load bearing and propulsion, as well as introducing on-board electronics such as radar for attack and navigation. More important for the long-term development of aviation, German and British work on jet engines provided the basis for a post-war step change in the power, range, and durability of civil and military aircraft. Wartime needs also stimulated innovation in the power and range of transport aircraft, almost all manufactured in the US. Regular long-distance operations such as the “Hump” from India to China, flying over the Himalayas increased confidence in land-based transportation. Investment in landing fields throughout much of the world followed military needs. By 1946, the US was able to launch regular trans-Atlantic commercial operations using compound, four-engined airliners; the flying boat rapidly became a casualty of a major technological and infrastructural discontinuity, which radically shortened its general viability for commercial and military aviation use.
- 3 This paper considers the effects of this technological and infrastructural discontinuity on post-war planning in the UK. The UK was a major manufacturer and innovator in wartime military aviation; with a production base that at its peak employed over two million people. However, on the outbreak of war in September 1939, UK domestic production of transport aircraft ceased in order to focus on combat types: “the work of aircraft designers must, at the present stage of the war, be devoted wholly to war requirements”.² Admittedly this was perhaps not much of a sacrifice given the low relative technical standing of pre-war British land-based airliners, but it would imply an even steeper hill to climb technically at war’s end if the UK was to compete in world markets. For the length of the war, the UK would rely largely on US transports and some bomber conversions, such as the Avro York and its fleet of flying boats that had been operated by Imperial Airways. Research and development was also focused on these short-term needs – the jet engine was a key exception.
- 4 However, anticipating the end of war and military demobilization, in 1943 the government began planning for the post-war revival of a domestic civil aircraft industry to equip its national airlines and to en-

sure that its “Imperial” or “Commonwealth” connections would not come under American economic influence. The War Cabinet noted that if the UK was to maintain a substantial aircraft industry after the war and to compete with the US, the country would have to plan to build in much larger numbers than the minimum required to satisfy routes within the Empire. Making this clear to the Americans would also strengthen the government’s hand in forthcoming air traffic negotiations.³ Lord Beaverbrook, the first Minister for Aircraft production was even more trenchant, painting a picture of a post-war world where the Americans would use their technological superiority to dominate the market for air travel. He concluded:

We cannot give a lead to the Dominions unless we are in a position to supply British airplanes with British engines. If we fail to provide British airplanes and British engines for the Dominions at the end of the War, then the leadership of air routes in the Empire will pass to the US.⁴

- 5 Guarantees of prototype funding would also be desirable if the government was to encourage firms to combine in order to “see that our civil aviation was effectively organised on the basis of the types now proposed”.⁵ Flying boats would be included in this exercise in this programme of technological and industrial recovery; in the absence of convincing proof that land-based airliners would be able to serve the “Empire” routes, it seemed clear that the pre-war trajectory of long-haul air transport would remain valid, even if only in the medium term. As a result, one its major projects would combine the sea-plane form with jet propulsion. In the event this proved to be a totally nugatory and expensive choice, exemplifying the weakness of state planning for a complex and rapidly changing technological and commercial environment.

The Interwar era – when flying boats dominated long-haul transport

- 6 In the afterglow of history, it seemed such a gracious way to travel: silver service at your seat, overnighting at well-appointed forts and

onward to the Orient or Australia. In reality, travelling long haul by flying boat was not quite so luxurious:

So, what of the much-vaunted “Golden Age” of luxury? Lengthy journeys by air were not, as indeed they are not now, luxurious. Being confined in a noisy metal box flying through the turbulent lower atmosphere for many hours was, if you were lucky, comfortable at best. In a European winter, playing second fiddle to sacks full of Christmas mail, served lukewarm food in a chilly cabin and roused in the wee small hours of the morning for the next leg of the journey would test anyone’s patience.⁶

- 7 Nevertheless, the Imperial Airways flying boat services were the sinews of Empire connectivity in the interwar period; and the Pan Am Boeing Clipper routes across the Atlantic and the Pacific pioneered long haul intercontinental airline operations. Air France also operated mail services to South America using the Latécoère 300 series. The German Dornier X was the largest flying boat of the 1930s and carried over 150 passengers across the North Atlantic, but never entered series production. But how quickly the age of the passenger flying boat passed; the Second World War accelerated developments in land-based airliners to such an extent that by the early 1950s the glorious Solents and Sandringhams of Imperial’s fleet had all but disappeared from the world’s airways.

British wartime flying boat operations

- 8 In 1938, round 90 per cent of Imperial’s route mileage was devoted to the “Empire” services to South Africa, India and the Far East, many of which were flying boat operations.⁷ The government, as part of a deliberate policy of focusing air route development on the Empire, heavily subsidized these services. The Air Ministry also financially supported the development of aircraft to be used on these routes, including the new Empire class of flying boats built by Short Brothers, which were destined for North Atlantic services to Canada. With increased engine power providing increased range and payload, the “Empire” aircraft were regarded as “in the van of flying boat con-

struction". The government also paid for construction of a "suitable base for the Empire flying boat service" on the Solent.⁸

- 9 The outbreak of the war meant that the Imperial Airways flying boat passenger services to the Far East were abandoned and in 1940 the airline was absorbed into the new British Overseas Airways Corporation (BOAC), taking over the Empire flying boat fleet. There were hopes that air services for mail and possibly for passengers might operate across the South Atlantic, and specially converted flying boats, the Short S.30 *Cabot* and *Caribou*, to be followed by the improved S.30s – the *Golden Fleece*, the *Golden Hind*, and the *Golden Horn* (the "G" boats) were planned for North Atlantic operations. At about 15 per cent larger than the Empire boats, these were effectively new designs. However, in November 1939, the *Cabot* and *Caribou* were diverted temporarily to long-range maritime reconnaissance duties to locate German commerce raiders. By early 1940, the RAF had lost 14 Sunderland patrol flying boats as a result of the Norwegian campaign and other operations, leaving only 34 available for duty. In March 1940, the Air Ministry concluded that "owing to the heavy calls on our military flying boats and to the importance of our sea-borne trade of the work they are doing", the diversion of Imperial's flying boat fleet would be permanent, and the "G" boats under construction were to be converted immediately for RAF use.⁹
- 10 The loss of these five aircraft would "be most disappointing to commercial interests, who have been pressing for an extension of our air communications". This would also "reduce still further the very slender reserve of boats behind the Empire services". The suspension of all civil aircraft construction, especially "large and expensive" flying boats, meant physical losses could not be replaced and "a reduction in the frequency of the already curtailed Empire services will be inevitable". In April 1940, the War Cabinet was forced to accept the "disagreeable necessity" of abandoning an air link to Canada, which was to have been operated by BOAC flying boats.¹⁰ For the rest of the war, BOAC's flying boat operations were directed at serving routes to Portugal. The last North Atlantic flight was in 1940. Four aircraft were lost due to enemy action, including two shot down by Japanese aircraft in February 1942. The last BOAC service to Durban was in November 1946.¹¹

Planning the post-War era

- 11 In 1943, flying boat operations were very much part of the future envisaged for post war air transport. Frederick Miles of Miles Aircraft, in his concept of a massive airport sited on the Thames Estuary outlined rail links to Central London, runways for European traffic and a flying boat lagoon for long haul services. Flying boats were also included in the post war planning to recreate a British civil aircraft industry. The giant Princess would be another example of jet-powered British aerial innovation, contributing to the nation's challenge on North Atlantic air routes. Sadly, for the flying boat, the war spawned a string of long concrete landing surfaces ideal for a new generation of long-range airliners. Plans for the new London airport at Heathrow saw no need of a flying boat lagoon. However, there was still just enough uncertainty about the future technical evolution of air transport to encourage a last hurrah for the flying boat, and both the War Cabinet and the post-war Labour Government supported a final flurry of British flying boat development.

Planning for the peace

- 12 In late 1942, the War Cabinet began to consider a post war future for the vastly expanded British aircraft industry. Lord Brabazon of Tara, an ex-minister and aviation pioneer was asked to chair a committee to guide the revival of British airliner manufacturing, which had been deliberately suspended on the outbreak of war. In a series of reports between 1943 and 1945, Brabazon outlined a number of specifications for future development, which would provide the basis for a government-funded programme of prototypes. Initially, these comprised five broad specifications, which were later expanded to include a number of variations:
- Type I: a very large, long-range landplane for the North Atlantic route;
 - Type II: an economical replacement for the Douglas DC3 for European services;
 - Type III: a four-engined, medium-range landplane for the Empire routes;

- Type IV: the most advanced of them all, a jet mail plane for the North Atlantic;
 - Type V: a twin-engined, fourteen-passenger feederliner.
- 13 The Brabazon Committee worked under conditions of considerable uncertainty, technological and commercial. Although the Government had commissioned a fact-finding mission led by Sir Roy Fedden, late of Bristol Engines, in 1942, this had focused on military equipment and the Brabazon Committee was unsure how post war civil aviation might be affected either by technical, political and economic developments¹². It did make two good bets on the revolutionary jet engine; other projects, including the eponymous long-range Brabazon and the Avro Tudor sponsored from 1944 proved to be less successful technically or commercially.¹³
- 14 Initially, neither the Brabazon scheme, nor the “interim Type” programme (bomber design derivatives built to provide gap-filling equipment for British airlines at the end of the war) included any flying boats. The Brabazon team and its airline advisors were influenced by what was known about the latest American transport designs, which would emerge post war at the Lockheed Constellation and Boeing Stratocruiser. Nevertheless, with a more conventional frame of mind, the Air Ministry remained keen on the concept as an option for long-range maritime patrol and as a means of maintaining Imperial connectivity after the war. During the war, BOAC used the Short Hythe, a civil conversion of the Short Sunderland, for some services to Portugal and occasionally as a VIP transport. However, these were not able to fly the Atlantic and BOAC’s *ad hoc* use of the Boeing 314A “Clipper” ended in the face of threats from long-range German aircraft.¹⁴ Nevertheless, BOAC also believed that there would be a role for long-range flying boats in its post war operations.
- 15 As a result of Air Ministry pressure and BOAC’s apparent requirement for a new class of larger flying boats, the Ministry of Aircraft Production (MAP) added a number of flying boat designs to its post war programme. One was a conventional “interim” design – the Shorts Sandringham, based on the Sunderland patrol aircraft, but Shorts was also awarded a contract to develop new medium and large piston engined aircraft, the Shetland and Solent.

- 16 The MAP (absorbed into the Ministry of Supply [MoS] in July 1945) was also interested in exploiting Britain's revolutionary jet-engine technology and added a large jet-powered flying boat concept to the post war civil programme. Saunders Roe had been working on a design for a large all-metal flying boat capable of carrying over 100 passengers at 340 mph and at 37,000 feet since 1943; this became the basis for the SR.45 (Princess) submission to the MAP/MoS 1945 requirement. The Princess would use the Bristol Proteus turboprop engine, under development since 1944. Saunders Roe was awarded an order from the MAP/MoS for three prototypes in 1945. The Government believed that the SR.45, amongst others, showed "high promise of enabling us to exploit the lead which we already have in the development of gas turbines", and which would sustain British operated services to North America and the Empire by 1950.¹⁵

A military interlude

- 17 During the war Saunders Roe also conceived the SR. A/1 (originally SR.44) jet powered flying boat fighter. The British had considered converting Hurricanes and Spitfires into floatplanes, but had discarded the idea earlier in the war as offering only a limited additional element of maritime airpower; it was also likely to prove a fatal option for its pilots. The Government had prohibited research on new aircraft, to focus only on developments that would be used for wartime service. As the war neared its end, Churchill himself made it clear that commitments generally to military R&D would be limited to "projects likely to be effectively used in operations before the end of 1946". Key scarce personnel were also needed "by industry in preparation for the changeover to peacetime production and for the development of civil air transport".¹⁶ This bald statement of policy was amended after representations MAP, seeking assurances that this did not

[...] cover the normal R&D essential to keep us ahead in types of aircraft and engines. If we were to slow down or abandon it we would gravely jeopardise our whole position in the air for many years to come, since once we lost our position we could never – in peacetime – catch up again on other nations.¹⁷

- 18 Jet-engined fighters, however, were seen as a priority, the more so as intelligence reports of German jet and rocket aircraft began to circulate. The Gloster Meteor would see service as a V-1 cruise missile interceptor. The SR. A/1 came into this category, especially as it was potentially an ideal aircraft for the Pacific campaign, obviating the need for forward bases, but with its integral floatation design and jet propulsion, performance that matched conventional naval fighters. However, as Japanese suicide “Kamikaze” attacks began to focus on aircraft carriers, a seaplane was also viewed as a useful alternative.¹⁸ As the war in Europe neared its end, the UK intended to devote more resources to the Far East – a British naval carrier task force took part in the Okinawa campaign in April 1945 – and the defeat of Japan was then expected to be no earlier than late 1946. The SR. A/1 performance was projected to be 520 mph at 40,000 ft. The US F-4 Corsair – the fastest naval fighter of the war – had a top speed of 375 mph at 21,000 ft.
- 19 The Air Ministry issued a specification in April 1944, which indicates that from the outset the aircraft would be operated by the RAF and not by the Fleet Air Arm. The MAP/MoS duly authorised the development and construction of three prototypes. The aircraft was powered by the De Havilland Goblin engine, which had been under development since 1941. The SR. A/1 was also equipped with one of the first Martin Baker ejector seats. Development was delayed by the concurrent effort to deliver the Princess; as one of the smaller members of a fragmented British aircraft industry, Saunders Roe struggled to maintain two design teams and sufficient factory capacity. The SR. A/1 flew for the first time in July 1947, but an evaluation by the RAF concluded that it was unable to match the performance of land-based jets. The Royal Navy was also commissioning a new generation of carrier-based jet aircraft, and had no requirement for the SR. A/1. Although the US and other foreign government showed some interest in the aircraft, no other orders were forthcoming. Testing continued until 1950, when the outbreak of the Korean War briefly revived interest, by then it was already obsolete.¹⁹

Interest in commercial flying boat wanes

- 20 The increased wartime performance of piston-engined land-based transports and the promise of even more powerful, long-range aircraft such as the Lockheed Constellation and the Boeing Strato-cruiser had already signaled a major threat to the flying boat. The construction of long, concreted runways for both long-range bomber and transport operations also provided the basis for an international infrastructure for future airliner operations. The jet engine would add another dimension to commercial flight, promising even better performance for conventional airliners.
- 21 The diminishing interest in flying boats as a commercial workhorse was soon reflected in government policy. This was made clear in 1948 in an official review of the post war civil aircraft programme conducted by Sir John Hanbury-Williams, the Chairman of Courtaulds.²⁰ The Hanbury-Williams report effectively ended the policy of state-financed civil prototype development and gave the nationalized airlines greater freedom to choose their own equipment on commercial grounds, although in practice this did not end the presumption of “buying British”. BOAC had made it clear that the flying boat was no longer an element in its forward planning. Hanbury-Williams provided the leverage to end any interest in the Princess or any other sea-based airliner.
- 22 In general, passengers still liked the comfort afforded by the flying boats operating on the Empire routes. But ominously, the cost of maintaining marine airports was rising. The effects of the 1944 Chicago Convention setting out the rules for post war civil aviation, obliged countries to provide airports for commercial aircraft; but landing charges did not cover the full costs of airport operations and national governments had to cover the gap; as only a few states were still using flying boats, the additional cost of marine airports was passed directly on to the operators. BOAC estimated that this would cost them annually £2 million (£78 million in 2020 values) for overnight accommodation.²¹ As the airline was already carrying a considerable extra overhead as a result of operating inadequate British types, the government accepted that “medium-sized” flying boats

“should not continue to be included in the operational plans of the Corporation after the withdrawal from service in the natural course of the existing types”.²² BOAC continued to operate the Solent until November 1950, with its last flying boat service to Durban. A few Solents were acquired by European and Australian airlines, and the aircraft remained in service until the early 1960s. Further work on Shorts flying boats was stopped in 1951, and several prototypes were abandoned.²³

Cancellation of the Princess

- 23 The Princess, however, presented “a problem of its own”.²⁴ BOAC doubted that it would be economic to operate either across the Atlantic or on the Empire routes. The cost of maintaining marine airports for the Empire services would also be prohibitive. There was still some scope for operations to South America and the Caribbean, where marine airports were relatively cheap to maintain and geography favoured flying boat operations. Seven aircraft based at Calshot on Southampton Water would be sufficient. This would cost £7 million, but BOAC believed that under these conditions, the Princess had a “a reasonable chance of breaking even by 1956-8”.²⁵ The Cabinet accepted that this was a “doubtful” forecast,

But the only alternative is to abandon altogether this ambitious project, on which much research and money has already been spent. From the wider national point of view, there is everything to be said for maintaining this country's interest in the flying-boat.

- 24 The Cabinet agreed that work on the Princess should continue, at least for the time being.²⁶ This proved to be only a short reprieve.
- 25 The Princess was not the only project sponsored directly or indirectly as part of the Brabazon programme to be in trouble. Indeed, only the Vickers Viscount, the De Havilland Dove and above all the commercial domination promised by the Comet could be described as successes. In 1948, an official report into the Avro Tudor fatal crashes recommended that the government end the policy of anticipating airline needs through financing prototype development.²⁷ The Churchill government elected in 1951 was even less inclined to sponsor civil aircraft programmes and the aircraft industry would be expected to

fund its own airliner programmes, ideally backed by one of the Air Corporations, or a clear military requirement for a transport aircraft such as the Vickers V.1000 launched in 1951.²⁸

26 Duncan Sandys, the Minister of Supply, told the Cabinet in March 1952 that the primary objective of the post war civil aircraft programme was “to establish a lead in civil aviation”, that while the UK was “on the threshold of success with the smaller types (notably the Comet), the development of the giant types is taking much longer and costing much more than was expected”.²⁹ It was evident that along with the piston-engined land-based airliner Brabazon, the Princess had been overtaken by the rapid evolution of post war airliner development, including the Comet. The Brabazon was duly cancelled in 1953 and BOAC officially concluded in 1951 that it had “no interesting the Princess or any other flying boat”.³⁰

27 However, Sandys argued that the Princess still had some potential as troop transport, “because of (its) speed and because (it was) not vulnerable to submarine attack, (it) represent a wider investment for troop-carrying purposes than sea transports”.³¹ Sandys confirmed the construction of the three aircraft on order. But with development further delayed by problems with the more powerful Proteus III engine the prototype had to make do with the underpowered Proteus II. Nevertheless, Sandys recommended finishing construction of the Princess prototype for “experimental flying”.³² Work on the two airframes under construction was paused pending the arrival of the more powerful engine.

28 The Princess flew for the first time in April 1952 and the prototype appeared at the Farnborough Airshow the following year. But even the limited interest displayed by Sandys soon disappeared; the RAF quickly found that it no longer had any requirement for the aircraft, which would now be covered by the V.1000. There was no further official support for the flying boat. Although test flights continued until 1954 and there was talk of a nuclear-powered experimental vehicle, this was the end of the Princess. There were various other proposals for using the airframes, including one from Saunders Roe to convert them into land-based aircraft. None came to be realized. The three aircraft remained in storage until 1964 when they were bought as possible Saturn V rocket transport, but the airframes were too cor-

roded to fly again. They were left as rusting hulks on the Isle of Wight and eventually broken up in 1967, and an era of British aviation finally passed.³³

- 29 Flying boats have continued to play a minor role in civil aviation, confined largely to connecting communities in areas such as Northern Canada and the Pacific Islands. The German company Dornier developed a flying boat as its first post-war design. But as a major force in the airline industry the flying boat was a casualty of the technological discontinuity ushered in by the Second World War. The Princess was perhaps a case of hedging bets in the face of technical and commercial uncertainty. The UK ended the war with little understanding of modern airline operations, which had continued unabated in the US. Pre-war conceptions of flying boat services still had some resonance in official circles. Similarly, jet propulsion was the one real advantage the UK had in terms of future developments, but exactly how this would affect the airline business was not clear. A combination of this revolutionary technology with an established *modus operandi* had its attractions. This may also have been affected by a more conservative outlook in the Air Ministry, which had even less awareness of commercial airline operations.
- 30 So, even if conventional flying boats were rendered obsolete by better and cheaper land-based options, the Princess was something of a hybrid: state-of-the-art jet propulsion combined with Imperial connectivity to meet an emerging requirement for trans-Atlantic travel. But even with turbine engines the Princess would never match the economic advantages of land-based aircraft, offering direct intercontinental services to major population centres. The main lesson of the Princess episode is perhaps to underline the dubious nature of state planning in the commercial aviation sector in the face of rapid technological and commercial change.

NOTES

- 1 The Supermarine and Macchi seaplanes were “state-of-the-art” monoplanes, setting air speed records in the early 1930s. J. Glancey, *Wings over Water. The Story of the World’s Greatest Air Race and the Birth of the Spitfire* (London: Atlantic Books, 2020).

- 2 House of Commons, December 1942, www.flightglobal.com/pdfarchive/view/1942/1942_per cent20-per cent202664.html.
- 3 These would culminate in the Chicago Agreement of 1944.
- 4 Memorandum by the Lord Privy Seal, 3rd December 1943, CAB 66/43/37.
- 5 Meeting of the War Cabinet, 25th February 1943, CAB65/33/35.
- 6 R. Pegram, "The Golden Age", *Aviation Historian*, 26, 2021.
- 7 *Ibid.*
- 8 *Report of the Committee of Inquiry into Civil Aviation (the Cadman Report) and Government Observations*, Cmnd 5685, March 1938, CAB/24/275/23, para 39, 51 and para 9 of Government response; but for the war, this may have become the blue print for government supported civil aircraft development.
- 9 *Diversion of Civil Flying Boats for Military Duties*, Memorandum by the Secretary of State for Air, 11th March 1940, CAB/67/5/26; Cabinet Minutes, April 16th 1940, CAB/65/6/39.
- 10 *Ibid.*
- 11 32 Empire boats (all classes) were built between 1935 and 1942; see B. Cassidy, *Flying Empires: Short "C" Class Empire Flying Boats* (Queens Parade Press, 1996, 2011) 216.
- 12 The Chicago Conference on post war civil aviation, which set out the terms for commercial operation, did not meet until 1944.
- 13 For details of the Brabazon Committee, see K. Hayward, "The Brabazon Committee: a Political History", *The Aviation Historian*, 33 (October 2020), 10-18.
- 14 *Long-range Transport for VIPs*, Memorandum by Minister of Civil Aviation, 10th May 1946, CAB/129/9/45.
- 15 *Civil Aircraft Requirements*, Joint Memorandum by the Minister of Supply and the Minister of Civil Aviation, 2nd August 1946, CAC/129/12/17.
- 16 A note by the Prime Minister, *Priorities for Research and Development*, 15th January 1945, CAB/66/60/46. The continuation of hostilities against Japan were then expected.
- 17 A note from the Minister of Aircraft Production, *Priorities for Research and Development*, 24th February 1945, CAB/66/62/19.
- 18 Glancey, *op. cit.*, 285-256.

19 *Ibid.*

20 Cited in *Ordering of Aircraft for the Air Corporations*, Memorandum by the Lord President of the Council, 16th January 1948, CAB/129/23/21.

21 *The Civil Aircraft Programme*, A memorandum by the Lord Privy Seal, 9th July 1948, CAB/129/28/29.

22 *Ibid.*

23 *Ibid.*

24 *Ibid.*

25 *Ibid.*

26 *Ibid.*

27 *Ibid.*; *Future of the Tudor Aircraft and of the "Fly British" Policy*, Memorandum by the Minister of Supply, 10th July 1948, CAB/129/28/32; Cabinet Minutes, 7th August 1948, CAB/128/6/15.

28 But subsequently cancelled in 1954, see K. Hayward, "The Blame Game – Vickers V.1000: the ultimate political football?", *The Aviation Historian*, 14 (January 2016).

29 Cabinet Minutes, 13th March 1952, CAB/128/24/30.

30 Cabinet Minutes, 13th March 1952, CAB/128/24/30.

31 Cabinet Minutes, 13th March 1952, CAB/128/24/30.

32 Memorandum to the Cabinet by the Minister of Supply, 3rd March 1952, CAB/129/50/8; the Bristol Brabazon was cancelled at the same time.

33 Sadly, this was my own personal memory of the Princess. At the same time the Martin Seamaster, a jet-powered flying boat was being developed for the US Navy. The \$400 million programme was cancelled in 1958.

RÉSUMÉS

English

In the 1930s, the flying boat was the major vehicle for long haul airline services. Flying boats were particularly vital in British aviation policies. However, the flying boat was rendered obsolete by technological and operational changes brought by the Second World War. Nevertheless, the British government included an advanced, jet-powered flying boat in its post-1945 planning exercise. This proved to be a major error in policy.

Français

Dans les années 1930, l'hydravion était le principal véhicule des services aériens long-courriers. Les hydravions étaient particulièrement essentiels dans les politiques de l'aviation britannique. Cependant, l'hydravion a été rendu obsolète par les changements technologiques et opérationnels apportés par la Seconde Guerre mondiale. Pour autant, le gouvernement britannique a inclus un hydravion perfectionné, propulsé par un moteur à réaction, dans son exercice de planification post-1945. Cela s'est avéré être une erreur politique majeure.

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Mots-clés

Aviation commerciale, hydravions, planification gouvernementale/étatique, innovation en temps de guerre, discontinuité technologique

Keywords

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