

Britain's Aerospace Gambit

Playing the U.S. off against Europe to control both

For the past year a front-page debate has animated the British press concerning that country's aerospace industry. At issue is which other nation's aircraft manufacturers would Britain ally with to develop and produce a new generation of commercial jet aircraft — will it be the U.S. or its European competitors?

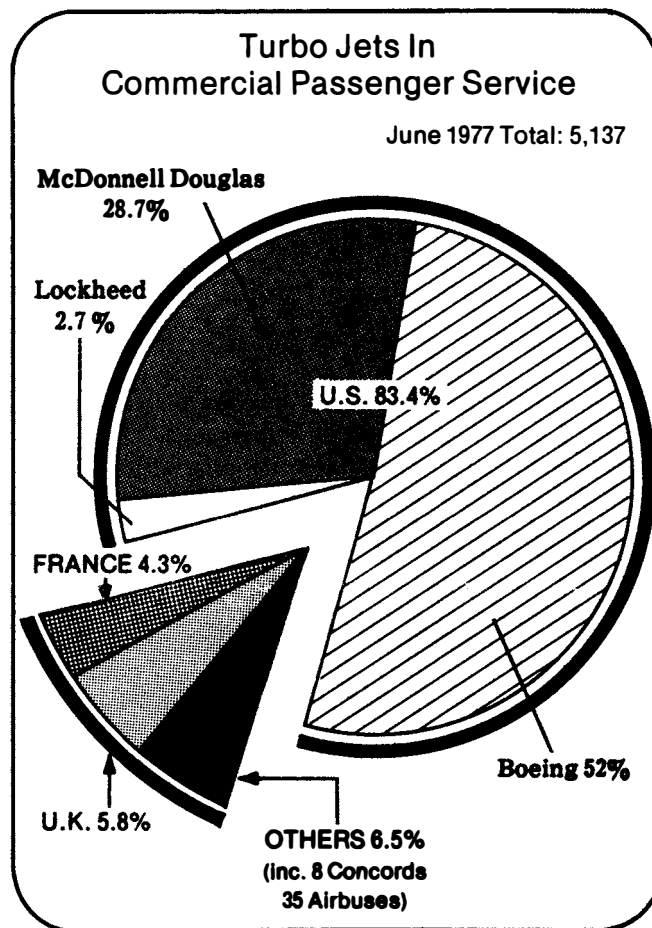
What might appear to be just another story for the financial pages and the industry journals is in fact much more: a case study of how leading British circles contrive to use economic deals and the press to win effective control over key aspects of U.S. economic and even strategic policy. One of the most fundamental questions in Britain's aerospace debate has been not how and with whom to develop aircraft for the sake of the aerospace industry itself, but how to use the industry toward the more fundamental goal of controlling both the U.S. and European economies. In particular, the aerospace tactic has been to play the U.S. and Europe off against each other in pursuit of British favors, as a means of extending British influence over both.

But just as significant about the aerospace case is the fact that Britain now confronts a development unforseen to the Royal Institute of International Affairs. The de facto alliance of particularly West Germany and France with Japan and sections of OPEC and the developing sector in the aftermath of the Bremen and Bonn summits, against the anti-growth politics represented most vocally by Britain itself, has had its effect on aerospace as in many other areas.

Two important indicators of trouble for the British strategy are United Airlines' recent \$1.2 billion order for Boeing's proposed new airliner, the 767, and the success of the French- and West German-dominated Airbus Industrie consortium in lining up an impressive number of customers for their version, the B10 airbus. In a nutshell, with development financing and future sales now guaranteed for both major competitors, Boeing and Airbus Industrie, the British government has lost its main bargaining chip, namely the promised generosity of its national exchequer in helping to finance whichever potential partner should offer the best long-term options. A ranking U.S.-based official of British Aerospace Corporation was referring to Rolls-Royce but could just as well have meant his own firm when he said recently, "Their situation is precarious. The Europeans don't need them any more, and the U.S. may not want them."

The Industrial Issues

In terms of manpower and revenues, the aerospace industry in the United States is comparable to or larger than the steel industry, and second only to auto in manufacturing. (For an economic survey of the industry, see *Executive Intelligence Review*, Vol. V, No. 2, Jan. 17, 1978.) The British industry is even larger relative to its national economy, and is backed by a decades-long government commitment to bolster certain strategic high-technology industries, particularly where its own military hardware is concerned. But here as elsewhere, Britain has chosen to develop an industry capable of impressive innovations but without the depth of production to realize them.



Roughly half of U.S. aerospace output is civil (primarily commercial jet aircraft), the remainder military and to a lesser extent, space. In Britain the proportion is roughly 70 percent military, much of this for export, as is a significant, though lesser, proportion of both civil and military production in the U.S. As of June 1977, U.S. manufacturers controlled over 83 percent of the entire non-socialist-sector commercial jet market, with two-thirds of this total represented by Boeing. The estimated market for new jet aircraft over the next decade is in the order of \$70 billion-plus.

Thus the impact of ongoing airline decisions on several national economies will be very great. This is true not only in terms of employment and overall production, but particularly in the area of trade imbalances. For both the U.S. and the United Kingdom — and increasingly for Europe as well — aerospace exports are a key surplus account.

At the same time, aerospace production is not something that can be readily turned on and off in keeping with short-term market demand or trade pushes. The massive capital requirements for research and development, combined with the limited number of (high-priced) products sold — in the order of a few hundred a year — means that the success or failure of any given plane or company over a 10-to-20-year period is largely determined long in advance, in airline purchase decisions and capital availability established over a short and intense period of negotiation and deliberation.

This is due not only to the relatively long life-span of the plane, but also to the preference of airlines for sticking with the models or manufacturers they already use, to minimize costs of training pilots and maintenance crews on new equipment. Therefore what is critical for the manufacturer in deciding to “launch” a new plane is yet only on the first drawing boards is the *number of airlines* placing orders or options, as much as the initial number of planes orders. Even small initial orders from a wide enough range of airlines guarantees, through parts, replacements, and expansion of fleets, a large enough run size over the life of the plane to meet the initial development costs of engineering, simulation testing, and setting up of tooling and assembly lines.

This vital negotiation and decision period is now drawing to a close, with some of the burning questions now clearly answered.

First, Boeing will be able to proceed with its projected 767 program, and presumably with the derivative 777 version and smaller 757 as well, based on United's July 14 order for 30 767s and a smaller number of 727s — at \$1.6 billion combined, the largest single commercial aircraft order ever in dollar terms. Second, Airbus Industrie can launch its A300 B-10 program, with orders and options in hand from three European air carriers and an option taken on 25 planes by Eastern Airlines, supplemented by Eastern's firm \$778 million order for 23 of the existing Airbus model, the B4.

The Strategic Issues

Yet the make-or-break decisions that affect 10-to-20 year product cycles do not fully explain the urgency of the aerospace debate. Not only does this industry represent a large segment of several national economies, but it is also the single most important source of innovations in new technologies for the entire economy, and the industrial base for all strategic weaponry. There exists a symbiotic relationship between the civil and military applications of the industry. At times military projects have provided the research and development platform for subsequent commercial ventures, lessening the risk posed by a possibly uncertain commercial future. This was part of the motivation behind the bidding by Lockheed, Boeing, and Douglas for the Air Force C5A contract in the mid-1960s, which was correctly seen as a valuable boost to the beginning wide-body (“jumbo”) jet commercial competition. Concomitantly, flourishing commercial sales can offset losses or shifts in valuable military contracts — sometimes. From a national military, rather than company, standpoint, the essential value of commercial aerospace sales is that the capital flow ensures the maintenance of the high-technology research and development capabilities of the domestic defense contractors.

This is one critical consideration for Britain. To the extent that Britain seeks to maintain a strategic military capability independent of the United States, it is essential to attach its aerospace industry to one with a guaranteed world market. The issue is only secondarily the cash-flow benefit of keeping the production lines running; this is easily accomplished by assuming a strictly subcontractor status with little or no overall design responsibilities. But what Britain seeks foremost is the resources to maintain intact its aerospace industry's integrated engineering and scientific research capacity, without too excessive a drain on tax revenues and without the need to constantly beat down thickheaded Tory opposition to any and all direct government subsidies.

From both the strategic and national-economic standpoints, the United Kingdom has arrived at a dangerous spot. When the decision was made in 1977 to nationalize the four British airframe manufacturers (Rolls-Royce, which produces engines, was nationalized in 1971), the industry appeared to be heading for collapse. The *Financial Times* (April 25) wrote:

The decline in exports of new aircraft by the UK . . . is the first significant manifestation of what is becoming one of the most serious problems confronting the UK industry — shortage of work on the civil side, with no immediate prospects of any improvement.

. . . (The) UK industry is feeling the pinch, with labour layoffs already announced at BAC and HSA (two of the companies merged into nationalized British Aerospace — ed.), and the likelihood of more to come unless some new work can be pumped in soon . . .

At the same time, the *Financial Times* pushed indirectly for a linkage with the U.S., by lying that:

So far, there is little political, and even less, manufacturing, cohesion in the European aerospace industry on the future of the civil side, contrasting sharply with the highly organised military collaborative programmes that do exist. The big exception is the Hawker Siddeley participation in the European Airbus, the one rock around which many in the UK feel a future new European civil partnership could and should be built.

In fact, as we will indicate below, it was only the British role in Airbus that was not cohesive.

From that point on, the British press waged a thorough campaign to convince the French and West Germans, the two largest partners in Airbus Industrie, that the U.K. was likely to "go Boeing" (or

otherwise U.S.) unless Airbus established a codominant role for Britain. At the same time the press tried to scare the U.S. — primarily Boeing — with the threat that Britain would join Airbus and gobble up chunks of the U.S.-dominated world commercial market.

How Britain Went After Boeing

A spokesman for British Aerospace suggested recently that Boeing's posture on the 757 program was essentially a *defensive* one. Of Boeing's three projected planes, he argues, this was the riskiest, since the jump in air traffic over the past year might now be putting a premium on larger planes (the 757 is the smallest of the 767-777-757 threesome) to handle the load. Moreover, he said, the manufacturer was

The New Generation of Jets

The first generation of commercial jets (starting with the Boeing 707 in 1958) were largely internally financed, although previous military experience was useful — contrary to Boeing's testy insistence that the two programs were totally unconnected. These jets, both Boeing's and Douglas's, emerged into a booming air travel market in the 1960s.

But the situation reversed with the emergence of the "jumbos." Here the manufacturers were forced to demand much larger and earlier down payments from the buyers, and even so took heavy initial losses with the recession of the early 1970s refracted through the impact of a combined falloff in air travel and in government-sponsored research and development programs.

The new generation of jets, while not embodying any

radically new technologies, are nonetheless an expensive proposition, and it has not been clear that airlines can carry much of the finance bill. The past year in air travel has been much better than originally expected, but continued adequate revenues are still not guaranteed. Hence all manufacturers have been jockeying with other manufacturers to form development-and-production consortia; even the U.S. giants cannot go it alone.

The latest generation of jets is made up of "mini-jumbos," falling between the present wide-body planes and narrow-body jets in passenger capacity and planned to operate with greater fuel efficiency and less engine noise.

Here, some members of the older generation and the new:

The Old Generation of Wide-Bodies

Boeing 747	A wide-body "jumbo jet" seating 370. For many routes this plane is simply too large. Present-day smaller jets hold no more than 130 or so. Also by virtue of its size, the 747 has little in common with smaller models either in parts or tools.
Lockheed L-1011	A smaller wide-body, with passenger capacity in the 250 range. This model could serve as the starting point for deriving new mid-range craft.
McDonnell Douglas DC10	Similar to the Lockheed L-1011.

The New "Mini-Jumbos"

Airbus A300 B4	Airbus's basic model. This plane has already won a \$778 million order from Eastern airlines. Its top selling points: low noise and high fuel efficiency.
Airbus B10	Airbus's new launch. A scaled-down version of the B4, the B10 is therefore in significant part already developed. This has been a selling point in competition with the "paper planes" (drawing-board models) of Boeing's 7x7 series, which will be available later than will the B10.
Boeing 757	A narrow-body craft seating 160. Cooperation with British Aerospace was projected on this model.
Boeing 767	A wider-body plane with 180- and 200-seat version. United Airlines has ordered \$1.2 billion of the 767, and the size of that order will no doubt facilitate the parallel development of both the 767 and the 777.
Boeing 777	A three-engine equivalent of the twin-engine 767. It is primarily aimed at over-water airlines that feel safer with an extra engine.

contemplating the development of three new models simultaneously, unlike all past development programs where comparable "families" of aircraft were developed successively, building on existing markets for the predecessors. By taking in the British, including both Rolls-Royce for engines and British Aerospace for airframe subcontracting, Boeing would avail itself of the tempting \$400 million of government issued and-or guaranteed credit (greatly reducing the financial risk). And it would deny British Aerospace's expertise and production facilities to competitor Airbus Industrie.

While such a tactic would be par for the political course in the aerospace business, the truth is more nearly the exact reverse. The British have been using Boeing, and would be far more the losers to Europe if the Boeing deal collapsed than would Boeing itself.

(It is true, though not of any great determining importance, that the interests of British Aerospace and Rolls-Royce do not necessarily coincide. Rolls has been playing the "U.S. card" for decades and continues to do so, often to the considerable annoyance of "Europeanist" Britons. British Aerospace, however, has seen its future in Airbus or similar ventures, since its own capabilities supplement those of Europe and more or less duplicate those of Boeing and other U.S. firms. In any case, both companies — and of course British Airways as well — are nationalized; "independent commercial" disclaimers notwithstanding must ultimately acquiesce to government dictate.)

Here's how the British tried to tighten their control over Boeing:

On April 4, 1978 Pan American World Airways ordered 12 Lockheed L-1011 Tristars (Lockheed's jumbo), with Rolls-Royce engines. The near-\$500 million order — with additional options taken that could increase the purchase to over \$1 billion — was underwritten by Britain's Export Credit Guarantee Department (similar to the U.S. Export-Import Bank) with a complete financing guarantee for the initial purchase. Such an arrangement, where the engines (Britain's direct interest) account for only 20 percent of the total airplane cost, is unprecedented in the industry. The following month, Eastern Airlines made its order for 23 Airbus B4s.

Boeing got the hint. On April 13, Treasurer J.B.L. Pierce took his case to Adlai Stevenson III's Subcommittee on International Finance of the Senate Banking Committee, urging passage of the then-pending bill to expand the lending authority of the U.S. Export-Import Bank (subsequently passed). Boeing's arguments at the time were not altogether in line with the effort to expand Exim from an overall positive national-interest standpoint; this argument appeared, but subordinated to an imputation that European export policy was somehow not proper — the argument often directed against the Japanese — and that so long as those guys were playing dirty, we ought to as well. "As a private company," he testified,

we cannot extend our limited resources beyond the prudent limits established by the capital market We can compete with Airbus and the other European aircraft manufacturers on cost and technical merits, but we cannot compete with the national treasuries of France and Germany and other European countries.

. . . . As for agreements between governments which would halt predatory export financing schemes, we would welcome a meaningful and enforceable structure. But if the spirit of such an agreement is more rhetoric than reality, we ask that Eximbank, when necessary, be permitted to match "head on" any governmental export financing activity devised (directly or indirectly) by other nations as a method of winning a sale in lieu of product superiority.

In late April Richard Ferris, President of United Airlines, announced that United's decision on the Airbus B10 versus the Boeing 767 might depend on pricing and financing, since the technical merits were so close. The London *Financial Times* followed up with an article May 10, reporting on British Industry Minister Varley's meetings with executives of Boeing, McDonnell-Douglas, and Lockheed. The *Financial Times* played up the tough new competition faced by the U.S. (that is, by Boeing), urging a U.S.-United Kingdom consortium . . . or else. On May 14, the *Sunday Times* of London reported that Britain now favored McDonnell-Douglas over Boeing, since Boeing might not, after all, sell the 1,000 757s it was anticipating. It remains unstated, that McDonnell could hardly hope to match even the lower projection.

By this time the negotiations were out of the hands of company representatives. British Prime Minister Callaghan took personal charge, with a visit to the U.S. June 25 for the express purpose of meeting not only with the manufacturing executives, but also with Frank Borman, president of Eastern Airlines. The visit was purportedly because Eastern had expressed interest in Boeing's 757, but in fact, equally if not more to profile Borman on the matter of Eastern's order of Airbus B4s.

The pressure was increased manyfold in June, with the press in the lead. Same-day articles in the *Financial Times* ("United Considers £1 bn. Order for European Airbus") and the *Wall Street Journal*, the latter authored by top scandal specialist Jerry Landauer ("Influential Allies: Boeing Co.'s Friends in Some Arab States Helped in Plane Sales"). The *Financial Times* noted prominently that the Eastern order had broken the American prejudice against foreign manufacturers; that the B10 had a most attractive financing package, and furthermore would limit the market for Boeing's 767; and that a delegation of airline executives had been quite impressed with the Airbus facilities at Toulouse, France.

Landauer's article was the first attempt to smear Boeing in a big way with the "overseas bribes" scandal. Unlike the unfortunate Lockheed, Boeing had remained Mr. Clean of American aerospace, despite a three-year Securities and Exchange Commission

investigation. (Boeing has had the advantage of State Department intervention. State has argued in federal court against an SEC demand that the company release the names of its foreign sales agents. At the time of Lockheed's "corporate Watergate" in 1976, its potential allies in the Administration had been paralyzed by Watergate and by the subsequent control over President Ford's policies by Secretary of State Kissinger. The SEC suit was finally settled in July, with Boeing promising never to do again what it had never done, and the SEC agreeing to let the names remain secret.)

Aerospace analysts in New York's brokerage firms dismissed the Landauer article, saying that such things no longer affected aerospace stocks, but that was not the article's intent in any case. The *Financial Times* followed up with a July 12 feature, "Europe's Airbus: Biting at Boeing's Heels," which retailed the "Boeing is on the defensive" line, reminded Boeing of its concern with foreign government financing inducements (such as the Pan Am Lockheed-Rolls Purchase), and noted that Boeing's "well-honed sales network" is "incidentally, under Securities and Exchange Commission investigation."

But two days later United announced its mammoth Boeing order, rather in advance of the end-August deadline the airline had set for its decision. It is possible that Boeing, under the previous months' barrage, had made a final offer to United that beat out Airbus, or that United, for its own reasons or under covert government and other pressure, made its move before the situation got further out of hand.

In any case, in the words of George Warde, President of Airbus's U.S. operation, "If Boeing had not won that, it would have been a disaster. For us, it isn't a disaster but a disappointment."

The British Lose Out

The United States made Boeing even more attractive to Britain, for now Boeing boasted a firm hold on the world's largest airline. But as events showed, the British strategy of playing the U.S. and Europe off against each other backfired. When both Boeing and Airbus found other sources for orders and financing, Britain was left with no reliable vehicle to support its own national research and development base in aerospace.

First, the British realized that McDonnell Douglas, Boeing's competitor, was now out of the picture. In all press accounts, McDonnell Douglas had figured as an alternative to Boeing on the basis of its offer of broader-range collaboration, extending to military projects (which are far larger in McDonnell Douglas than Boeing), and its willingness to include continental European collaborators along with the United Kingdom. Callaghan had personally favored this possibility. But the last week in July saw the final kibosh, when McDonnell Douglas refused to satisfy

British requirements for greater specificity about projected programs and about its intentions of launching its own commercial jet program (the ATMR).

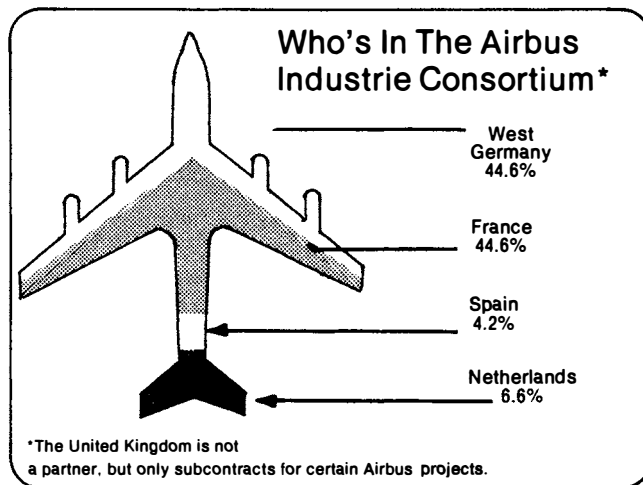
Meanwhile, Britain's Airbus alternative now appears almost equally distant. Although British Aerospace produced the wings for the Airbus B4, the development was largely financed by the French and West Germans, the full partners in the consortium. France is now demanding that Britain must pay its share of "back dues" if it expects to participate. This demand was known to the British at least as early as July 24, when a British Aerospace spokesman in the U.S. described the issue in a telephone interview. Yet the London *Sunday Times* claimed that

British Airways officials were shocked by last week's sudden and unexpected intransigence on the part of French negotiators (at the July 24 meeting between French, German, and British industries ministers — ed.).

... There is now a feeling that France does not want Britain in the European venture, and this is bound to affect the thinking of the British Cabinet.

Indeed!

Simultaneous with that shocked realization that the game was, if not over, at least being played by new and unpleasant rules, was the even more horrified British perception that the Franco-German "Grand Design" strategy rammed through at the July 8



Bremen and July 16 Bonn economic meetings was entirely for real. On July 26 the *Times* reported and editorialized on a just-released report from the Royal Institute of International Affairs, that Britain must indeed *not* subject itself to Boeing, at all, for otherwise she would lose all industrial leverage in attempting to mount a NATO arms buildup to counter the purported growing Soviet threat — on the correct though unstated assumption that the continental European countries, now in the tow of Schmidt's "Grand Design" and attendant potential for rapidly advancing MBFR talks, would otherwise not be susceptible to Britain's confrontationist strategy.

It is possible that Franz Josef Strauss of West Germany's opposition Christian Social Union, and allied Atlanticist circles in West Germany, may put up a howl for German accession to Anglo-European military cooperation, in the context of Britain's long-anticipated withdrawal of Bloodhound surface-to-air missiles back to the island from their previous station with RAF-Germany. However, the Grand Design is far further along now than when Strauss's first complaints were squashed in mid-July. Moreover, without the now-dead McDonnell Douglas option, Britain will have equally little aerospace project-leverage in shaping U.S. policy in this provocative area of short-to medium-range missile and aircraft strategy.

In any case, the entire issue may soon be moot. If industrial and political forces in the U.S. continue to move positively in the direction of the Grand Design, then the United Kingdom, unless it acquiesce to European, Arab, and U.S. terms, will shortly have no economy left at all.

As for the British-instigated friction between the U.S. and Europe, to which Boeing, among others, has been dangerously susceptible, the tremendous expansion of everyone's markets — in the developing sector and in the East bloc — is the obvious mutually advantageous resolution. Over a slightly longer term, the future of the aerospace industry would most naturally be based, as was its past, on superseding

presently defined markets by developing entirely new and vital technologies. Grumman, for example, has begun a major commitment to the development of commercial thermonuclear fusion power, not only through its contracted research and development work, but through an open propaganda campaign. Lockheed, along with Kennecott Copper, is investing heavily in developing the technologies for undersea mining. An expanded space program is an obvious immediate step. And the "aerospace" industry should be key in developing future surface mass transportation based on magnetic levitation.

At that point, far from competition, there will not be *enough* of the industry to meet all the project demands.

Recently, articles appearing in the *London Times* and *New York Times* have averred that British and continental manufacturers had agreed on terms for full British entry into Airbus Industrie. Neither, however, identified those terms. If the allegation (attributed to "industry sources") is true, then given the unprecedentedly low-key nature of the coverage, it may well represent a British move to quietly publicize a turn in the "European" direction — more to stall and turn back the Grand Design than to join it. Such a move would be coherent with the above-cited Royal Institute of International Affairs report advocating a European option for military reasons.

— *Richard Welsh*