

self) and construct frigates, though not at a price which would bring them export markets. Uncompetitive costs would still be the norm with production concentrated in a single shipyard; the regional dispersal merely adds to these costs and sacrifices the opportunity for quality improvement through series production.

Industrial benefits

Paul Hellyer, Defence Minister during the mid-1960s, introduced a heavy emphasis on industrial benefits in defence procurement. He attributes the present prosperity of Canadair Ltd. of Montreal largely to government direction in connection with the 1964 CF-5 procurement. The cost of assembling the CF-5 at Canadair was 30 percent higher than direct purchase; even so, it was the cheapest aircraft available. Unfortunately, few in National Defence below the Minister shared his views as to its adequacy. It is a light attack, ground support aircraft, an activity in which Canada has not been much involved. It could be, and was, partially adapted to other purposes, but it remains the classic Canadian case of the arbitrary precedence of industrial benefits over defence priorities.

The long-range patrol aircraft (LRPA) contract of 1976 reflected the first formal assessment of the linkage between defence procurement and industrial benefits. It did not include a contractual obligation to small sub-contractors. The airframe and engines of Lockheed's *Orion* were combined with the listening system, radar and computer of Lockheed's *Viking* to produce an updated anti-submarine warfare (ASW) aircraft christened the *Aurora*. Part of the offset package was firm, part depended on wing construction for future *Orions* only half of which were then on order, and a great deal depended on Lockheed's uncertain business prospects in the 1980s and early 1990s and on the competitiveness of Canadian suppliers. Despite its unpredictability, this was a more continuous production and employment benefit than then Supply and Services Minister Jean-Pierre Goyer's notion of stripping and refitting the aged *Argus* aircraft at Canadair in Montreal.

The serious industrial benefits alternative to Lockheed was Boeing, more commercially than defence-oriented, but a far healthier and more prosperous company. The project evaluation team scored its 707 higher on all counts except cost. The Department of Industry, Trade and Commerce (IT&C) was doubtful that superior industrial benefits warranted a \$370 million additional capital expenditure, however, and Maritime Command of the Canadian Armed Forces disliked the tripled fuel costs. Thus, the offset factor played a considered rather than a determining role in the LRPA award.

Sometimes, a procurement offset relates more to trade and investment than to production and employment. Such is the case with so-called Third Option deals, negotiations undertaken with major industrial powers other than the United States in the hope of de-

veloping a more equal external trade and investment relationship. The purchase of the *Leopard* tanks from West Germany was undertaken in 1976 as a means of building onto an existing NATO military connection broader political and economic linkages with the European Community. Thereafter, the British, German and Italian heads of government suggested to Prime Minister Trudeau that he give preferred consideration to a European Community plane in the NFA competition. The *Tornado* consortium was accordingly invited to bid. Much to the annoyance of the British High Commissioner to Canada, however, it was not amongst the two finalists announced in November 1978.

The *Tornado* industrial benefits package was satisfactory, except that it was not assessed as fully realizable by the government project team assembled to analyze the NFA program. General Dynamics with its F-16 was rated lower, yet short-listed, and the F-14 placed bottom on industrial benefits and eliminated. The first two of the three front runners on industrial benefits, the prototype F-18L and the F-15, were also dropped, leaving the McDonnell Douglas F-18A as the other finalist. Only the two cheapest aircraft already receiving U.S. government commitments and support survived the elimination round, indicating that cost was more critical than industrial benefits or performance in assessing eligibility for the final stage.

Offset packages

Both firms encountered problems in calculating offsets. McDonnell Douglas advertised that every wing for more than 1,100 DC-10s and DC-9s flown by 65 airlines was built in its Malton, Ontario plant. When it claimed over a half billion dollar offset credit for continuation of existing production, the project team disallowed most of the claim, but allowed offset credits of \$645 million on the newer DC-9 Super 80, stretch DC-10 and military KC-10. McDonnell Douglas also sought premature offset credit for sub-contracting the inertial guidance system of the new American cruise missile with Litton Systems of Toronto. The cruise missile is also contracted to General Dynamics, and it was earlier agreed that whichever company won the NFA competition could use the credit to cover any offset shortfall. Westinghouse, which manufactures the F-16's radar, advertised the Canadian job creation that would flow from production of key components. Yet its bold Churchillian headline, "Never has so much been put in so small a space for so little money", rhetorically highlighted the restricted space that precluded possible later substitution of the requisite all-weather radar.

Northrop, principal sub-contractor of the F-18A, sought a preliminary injunction against McDonnell Douglas when it discovered that the latter was offering Canadian offset production parts for F-18As that would be sold to other customers, a breach of its contract with Northrop. This dispute was later settled. On