COMMISSION OF INQUIRY INTO THE AIR ONTARIO CRASH AT DRYDEN, ONTARIO

Final Report

Volume II

The Honourable Virgil P. Moshansky
Commissioner

COMMISSION OF INQUIRY INTO THE AIR ONTARIO CRASH AT DRYDEN, ONTARIO

This Final Report consists of three volumes: I (Parts One–Four), II (Part Five), and III (Parts Six–Nine and the General Appendices). The table of contents in each volume is complete for that volume and abbreviated for the other two volumes. Seven specialist studies prepared for this Commission have been published separately in a volume entitled Technical Appendices; the contents of the Technical Appendices are given at the end of this volume.

COMMISSION OF INQUIRY INTO THE AIR ONTARIO CRASH AT DRYDEN, ONTARIO

Final Report

Volume II

Part Five

The Honourable Virgil P. Moshansky
Commissioner

Printed in Canada
Cat. No. CP 32-55/2-1992E

This volume has been translated by the translation services of the Secretary of State, Canada, and is available in French.

The aerial photograph reproduced in the endpapers was taken by CASB investigators on March 11, 1989, the day following the crash of Air Ontario flight 1363. It depicts the area of the Dryden Municipal Airport (upper right), surrounding road system, and crash site. McArthur Road runs vertically up the middle of the photograph, curving to the right at about the centre of the book on the right-hand page. (The cleared straight line is a hydro right of way.) Middle Marker Road angles to the left off McArthur in the lower left-hand section. The path of Air Ontario flight 1363 through the trees begins not far from the end of runway 29, and the crash site can be seen just above Middle Marker Road. Many survivors walked out to Middle Marker Road immediately after the crash.

CANADIAN CATALOGUING IN PUBLICATION DATA

Commission of Inquiry into the Air Ontario Crash at Dryden, Ontario (Canada)

Final report
Issued also in French under title: Rapport final.
Includes bibliographical references.
ISBN 0-660-14382-8 (Vol. 1–3)
DSS cat. no. CP32-55/1992E (Vol. 1–3)

1. Aeronautics — Ontario — Accidents — 1989.
I. Moshansky, Virgil P. II. Title.

TL553.5.C65 1992 363.12'492 C92-099547-0

CONTENTS

VOLUME I

VOLUME III

PART FIVE

THE AIR CARRIER – AIR ONTARIO INC.

13 CORPORATE HISTORY

Air Ontario Inc. is Canada's third largest regional air carrier in terms of revenue. With a fleet of fifteen Dash-8 series 100 and four Dash-8 series 300 turboprop aircraft, and approximately 670 employees, Air Ontario provides scheduled and charter service to 15 destinations throughout central Canada and the northern United States. Its most travelled scheduled routes were, as of May 1991, Toronto (Pearson) to Sudbury, Toronto (Pearson) to Windsor, and Toronto (Island) to Ottawa.

Air Ontario Inc. is the product of a functional merger between Austin Airways Limited and Air Ontario Limited. The origins of Air Ontario Inc. are described in the following section and in figure 13-1.

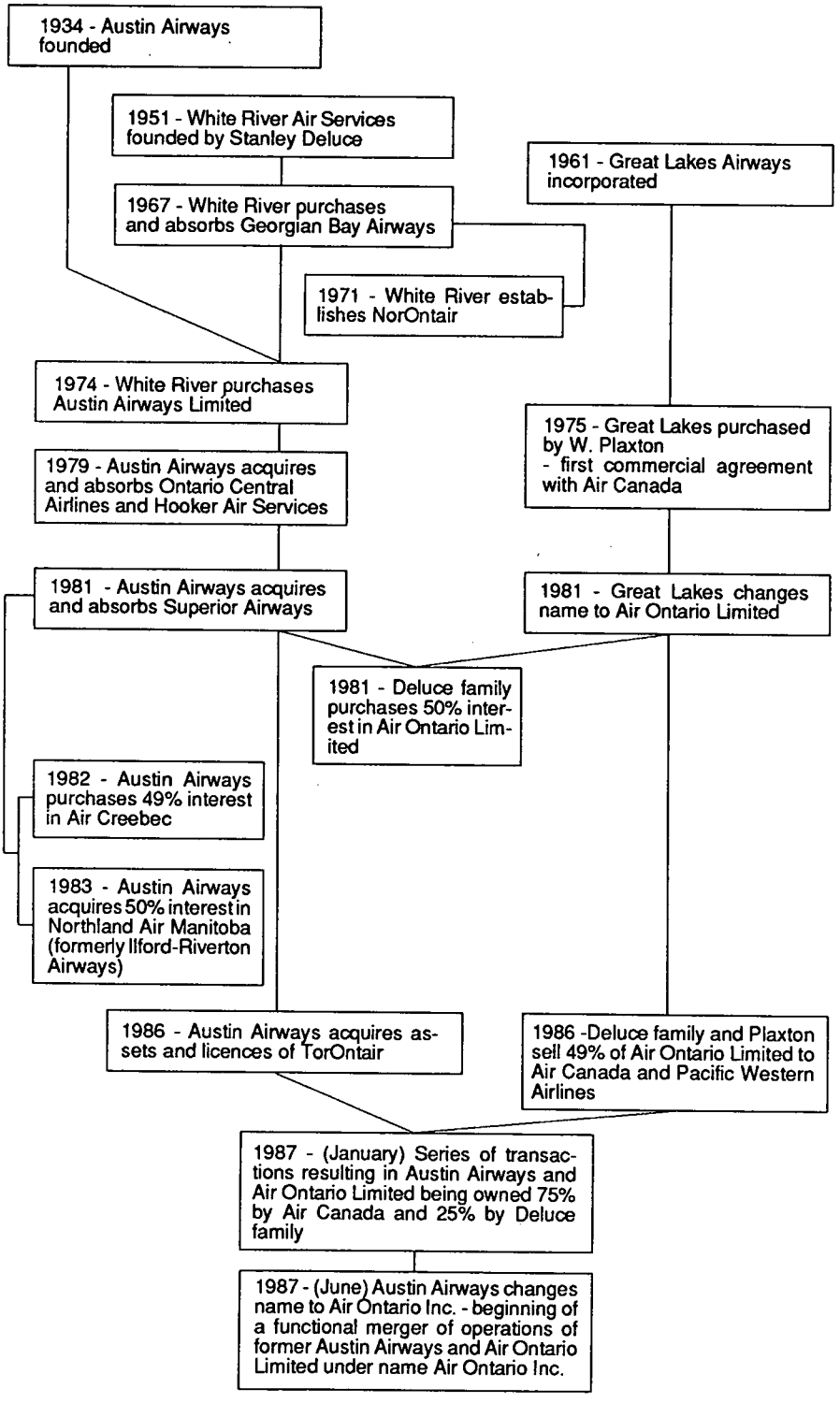
Austin Airways Limited

Austin Airways Limited, a largely northern operation, was founded in 1934 by Jack and Charles Austin. In 1974, all of the shares of Austin Airways were purchased by White River Air Services, which had been founded by Stanley M. Deluce in 1951. From its earliest days of operation, White River was run as a family business, with Stanley Deluce employing his seven sons in various capacities.[1] In the early days, White River was an exclusively visual flight rules (VFR) charter operation flying single-engine Cessna, Beaver, and Otter float-equipped aircraft in the summer months in Northern Ontario.

In 1967 White River purchased Georgian Bay Airways, then operating a scheduled service between Timmins and Kapuskasing, using twin-engine aircraft and with the capability of conducting flights in accordance with instrument flight rules (IFR). Thus White River acquired its first licence to operate a scheduled service. Approximately 95 per cent of the White River traffic between Timmins and Kapuskasing connected with Air Canada flights at Timmins. Although on a small and informal scale, this was the first feed service that White River provided to Air Canada routes.

[1] Stanley and Angela Deluce have seven sons, William, Robert, Joseph, James, Bruce, Gerald, and Terrance, each of whom has been employed at various times in various capacities in the aviation business.

Figure 13-1 Air Ontario Inc. Corporate History



In 1971, White River won a competition for a Government of Ontario contract to establish and operate NorOntair airlines. NorOntair, under the direction of Mr William Deluce, provided scheduled service in Northern Ontario using Twin Otter aircraft. Eventually, NorOntair would operate four to five Twin Otters employing between 20 and 25 pilots and 10 aircraft maintenance engineers (AMEs). It provided scheduled service to northern communities including Chapleau, North Bay, Sudbury, and Sault Ste Marie, with its main base of operation being Sudbury and later Timmins.

Mr William Deluce described how, as the vice-president and general manager of NorOntair, he oversaw the development of this new airline:

> A. ... NorOntair was a new ... service. It was the provision of scheduled service ... utilizing Twin Otter, new Twin Otter, aircraft that had been ordered and purchased from de Havilland by the Ontario government and leased to us for a dollar.
>
> It was our obligation and responsibility to hire people, to set up the systems and to manage the operation and in so doing, provide a highly reliable service to the people of northern Ontario. And at that time as well, we integrated the scheduled service very closely with that of Air Canada. We tied in with Air Canada. They were basically our handling agent at any point that we had dual operations.
>
> (Transcript, vol. 151, pp. 23–24)

Mr Deluce described his reporting relationship:

> A. I had two reporting streams at that point. I reported again back to Stan Deluce and aside from that, I also reported to the Ontario government from a fiscal point of view. It was a subsidized operation in the early days and the fiscal responsibility basically was one that the Ontario government was very much interested in and involved in.
>
> (Transcript, vol. 151, p. 26)

In all, Mr William Deluce and White River operated NorOntair for approximately three-and-one-half years.

In October 1974, after approximately one-and-one-half years of negotiations, White River acquired all the shares of Austin Airways. Mr William Deluce described how his family acquired existing airlines and their licences as a method of expanding its operation in a tightly regulated airline industry:

> A. It was the fact that in order to expand back in those days in a highly regulated environment which the transportation – air transportation business was, you had to either expand through

> the licensed application route which was a very time consuming, tedious and usually not very successful route.
>
> The easier way or the way that we certainly had expanded in the '70s was to acquire other companies that already had licences and all of this came together ... after working quite vigorously with Mr Austin in about a year and a half – in about a year and a half's time of negotiation with Mr Austin for the purchase of Austin Airways in October of 1974.
>
> (Transcript, vol. 151, p. 35)

In Austin Airways, the Deluce family acquired an airline operation that was four to six times larger than White River. Austin Airways flew DC-3 and Canso aircraft on predominately IFR, scheduled service. These aircraft were larger than anything flown by White River at that time and brought the Deluce family within the regulatory regime of Air Navigation Order (ANO) Series VII, No. 2, which governed air carriers operating aircraft heavier than 12,500 pounds.

Approximately 80 per cent of Austin Airways' business was scheduled service while 20 per cent was charter work. Austin serviced communities on both sides of Hudson Bay as far north as Cape Dorset and Baffin Island. Austin had no significant presence in southern Ontario at that time.

One of the first priorities for the new ownership of Austin Airways was to modernize its equipment. Mr William Deluce testified that they sought to replace the Austin DC-3 and Canso aircraft with turbine aircraft, which were able to operate more effectively in the harsh northern environment. Hawker Siddeley HS-748 aircraft were eventually acquired to fulfil this role.

Austin Airways and White River were initially operated as separate entities; eventually, however, the two operations were integrated under the name of Austin Airways. It was the objective of Austin management to phase out the single-engine VFR operation and move exclusively to a multi-engine IFR operation.

In 1979, Austin Airways, under the ownership and management of the Deluce family, continued its expansion of operations by acquiring the assets and licences of Ontario Central Airlines and Hooker Air Services Limited. These airlines' extensive scheduled licences for northwestern Ontario and Manitoba complemented the existing Austin service in northeastern Ontario and Quebec. With these acquisitions, Austin Airways added some 25 additional scheduled points, 75 to 80 employees, and 20 to 30 single-engine, light twin-engine, and DC-3 aircraft. The Ontario Central and Hooker Air operations were immediately integrated into the operations of Austin Airways.

In 1981 Austin Airways acquired Superior Airways Limited, which was based in Thunder Bay, Ontario. In so doing, Austin Airways

acquired an established operation in Thunder Bay (the largest city in northwestern Ontario), six or seven aircraft of varying types, and a number of licences including one linking Thunder Bay and Minneapolis, Minnesota. For Austin Airways, the Minneapolis licence represented its first scheduled service to the United States.

In 1981 the Deluce family made an additional acquisition of significance – namely a 50 per cent ownership interest in Air Ontario Limited, the dominant regional carrier in southern Ontario. Mr William Deluce testified that it had been his family's intention to purchase 100 per cent of Air Ontario Limited, but its owner, Mr James Plaxton, would surrender only one-half of his company. In Air Ontario Limited, the Deluces saw an opportunity to expand their operation further into southern Ontario. At this stage, there was no attempt to integrate the operations of the two companies since the Deluces were not involved in the day-to-day management of Air Ontario Limited.[2]

In 1982 the Deluce family became involved in establishing and managing Air Creebec, a scheduled service to settlements on the lower eastern shore of James Bay. The Deluce family maintained a 49 per cent equity interest in the airline with the Cree community owning a 51 per cent interest. While Air Creebec was an independent entity, Austin Airways did provide some management and maintenance services to it on a contract basis.[3]

In 1983 Austin Airways acquired a 50 per cent interest in Ilford-Riverton Airways Limited, which later became Northland Air Manitoba. This acquisition coincided with an Austin Airways sale of some of its northern Quebec assets to Air Inuit. Because of the sale to Air Inuit, Austin Airways had surplus personnel and equipment which were deployed in Northland Air Manitoba. Although it was an independent airline, Northland Air Manitoba, like Air Creebec, was operated by imported Austin management.[4]

In 1986 Austin Airways acquired the assets and licences of TorOntair, which enabled it to provide service out of Toronto to Trenton, Kingston, and Elliot Lake. These routes were served by Hawker Siddeley HS-748 and Beech 99 aircraft. With this additional service, Austin Airways'

---

[2] Though Mr William Deluce was the vice-president of Air Ontario Limited and a member of its board of directors, he and his family were not involved in the day-to-day management of the company. Mr James Plaxton, as president and CEO of Air Ontario Limited, maintained managerial control over his company until he sold off all of his interest in 1987.

[3] The Deluce family divested itself of its interests in Air Creebec in 1988.

[4] Mr James Morrison was brought into Air Creebec as the general manager. Mr Morrison would later become the vice-president of flight operations of Air Ontario Inc. Captain Robert Nyman was brought into Northland Air Manitoba as the director of flight operations, a position he would later assume at Air Ontario Inc.

already comprehensive northern operation was linked to Canada's busiest airport, Pearson International.

Air Ontario Limited

Air Ontario Limited was originally incorporated in 1961 as Great Lakes Airlines. Based in Sarnia, Ontario, Great Lakes operated Convair 440 aircraft in southern Ontario. A partnership, including Mr James Plaxton, purchased the company out of receivership in 1975, and shortly thereafter Mr Plaxton became the 100 per cent owner of Great Lakes. At approximately the same time, Great Lakes entered a commercial agreement with Air Canada whereby Great Lakes took over Air Canada's money-losing Toronto-to-London, Ontario, route, servicing it with four newly acquired 55-passenger Convair 580 turboprop aircraft.

Mr Thomas Syme, formerly the Air Ontario group vice-president of operations and marketing, described this early commercial arrangement that existed between Great Lakes and Air Canada as the first "feeder-trunk" relationship involving Air Ontario and Air Canada.[5] In addition to Great Lakes taking over Air Canada service between London and Toronto, the two carriers' schedules were arranged so that passengers flying from London to destinations beyond Toronto could make a coordinated connection onto Air Canada at the international airport in Toronto.

During the late 1970s, Great Lakes provided scheduled service between Sarnia, London, Toronto, Peterborough, and Ottawa, Ontario. Mr Syme explained that the regulatory environment in Canada inhibited the expansion of Great Lakes during these years:

> A. At that time, any new routes had to be approved in terms of the licensing to operate into those routes, and licensing was – was often very difficult to get, and on a number of occasions, Air Ontario had applied for ... various licences, which would have allowed them to operate into new areas and had been declined.
>
> (Transcript, vol. 97, pp. 14–15)

[5] "Feeder-trunk" or "trunk-feed" refers to the relationship between a national/international carrier and its regional affiliate. In a deregulated environment, where an air carrier has greater flexibility in adding and abandoning routes, a trend developed in the United States in the 1970s whereby large national and international carriers would purchase equity interests in established regional carriers. The parent, or "trunk" carrier, would typically abandon its short-haul regional routes, which were picked up by the established regional affiliate, operating on a more cost-effective basis. It would "feed" the national carrier at significant "hub" airports. Following the deregulation of the Canadian airline industry in the mid 1980s, similar trunk-feed arrangements were developed.

In the spring of 1981, Great Lakes changed its name to Air Ontario Limited. At this time Mr Plaxton sold a 50 per cent interest in the company to the Deluce family of Timmins, Ontario, the owners of Austin Airways Limited, then the largest airline serving Northern Ontario.

From 1982 to 1986, in spite of the difficulties with regulation described by Mr Syme, Air Ontario Limited expanded its routes to include service to Winnipeg, Thunder Bay, Sault Ste Marie, Windsor, North Bay, Montreal, Cleveland, Ohio, and Hartford, Connecticut. To service these expanded routes, Air Ontario added more Convair 580 aircraft to its fleet.

In 1986 Air Canada and Pacific Western Airlines Corporation each acquired 24.5 per cent of the shares of Air Ontario Limited. The Deluce family and Mr Plaxton held the outstanding 51 per cent through a holding company called Delplax Holdings Limited. This was the first time that Air Canada held an equity position in Air Ontario Limited.

The commercial arrangement with Great Lakes and later Air Ontario Limited was regarded by Air Canada as successful, and an ownership interest in the feeder airline was one way to ensure that the relationship remained intact. Mr William Rowe, formerly the Air Canada senior vice-president of associated airlines and Air Canada shareholders' representative on the board of directors of Air Ontario Inc., explained in testimony that, in the United States, some feed carriers had changed allegiances, causing disruption for the "trunk" carrier. By purchasing an equity interest, rather than simply relying on a contractual arrangement, Air Canada was able to exert some control over the feeder.

Austin Airways and Air Ontario Limited: Pre-Merger

At the time of their merger, Air Ontario Limited and Austin Airways had annual sales of approximately $35 million each. The two companies were, however, different in almost every other respect. Their fleets, operating environments, employee groups, and management styles are contrasted in the following section.

Austin Airways had approximately 30 aircraft of seven different types. Many of these aircraft were acquired through the different airline acquisitions previously described. Its fleet included the Cessna 402, a light twin-engine aircraft seating seven passengers; the Beech King Air 200, a light twin-engine aircraft seating approximately nine passengers; the Beech 99, a light twin-engine aircraft seating 14 passengers; the de Havilland Twin Otter, a twin-engine aircraft seating 19 passengers; the Douglas DC-3, a larger twin-engine piston aircraft used primarily for

flying cargo in the north; the Cessna Citation, a small straight-wing jet aircraft used for air ambulance services; and the Hawker Siddeley HS-748, a turboprop aircraft seating from 40 to 43 passengers.

Air Ontario Limited operated a fleet of 11 Convair 580 aircraft, a turboprop aircraft with a passenger capacity of 55. It had operated Convair 580 aircraft exclusively since the upgrade of its fleet from Convair 440 aircraft following its first commercial agreement with Air Canada in 1975.

Austin Airways provided a diverse range of commercial airline activities. It had a scheduled passenger service, complemented by a charter passenger and cargo service. In addition, it operated an air ambulance service with the Cessna Citation jet aircraft. Although Austin did operate some scheduled service out of Toronto, it primarily served northeastern and northwestern Ontario.

Air Ontario Limited provided, almost exclusively, scheduled passenger service in southern Ontario. With its Convair 580 aircraft, it serviced communities like Sarnia, Windsor, London, Ottawa, Montreal, and Cleveland.

The demands placed on pilots and crews flying in the Canadian North were and are qualitatively different from those encountered by pilots flying in the southern, and for the most part controlled, airspace. These differences were reflected in the experiences of pilots flying for Austin Airways and Air Ontario Limited.

The Austin Airways operating environment was generally harsher than that of Air Ontario Limited. Many of the communities served by Austin had airport facilities that would be described as marginal by southern standards. Gravel airstrips in the summer and fall could be covered with mud in the spring and snow in the winter. Navigation aids and weather reporting are, by and large, less reliable in the north than they are in the south. Austin Airways, in many respects, was still a "bush"-type operation as it entered its merger with Air Ontario Limited. Air Ontario Limited, conversely, served the busier southern centres and had the benefit of long, paved runways, controlled airspace, and superior navigation aids.

Mr Martin Brayman, a retired Transport Canada regional superintendent of large air carrier inspectors for Ontario Region, was shown the accident statistics for a number of carriers, including Austin Airways, operating in northern and remote regions. In discussing the accident rates of these carriers, he stated that there is "a direct relationship between the number of accidents or incidents that a carrier has and the condition under which the carrier operates" (Transcript, vol. 131, p. 63). He pointed out that in northern Canada, in mountainous areas like British Columbia, in northern Quebec, and in the Arctic, there are a

number of factors that have to be taken into account with respect to operations.

Mr Brayman expressed his opinion with respect to the element of risk involved in the hostile environment of northern operations:

> A. ... there is no question that in remote areas where the population demands a reasonably high level of air service, and in Canada, our native peoples surely do that, the carriers are hard-pressed often to meet those demands.
>
> You are working in areas of bad weather, poor runways, little in the way of runway markings or approach aids, weak beacons often covered with ice. So it's a – it is a hostile environment.
>
> And if you take it even further to operations that extend out onto the sea ice, for instance, a lot of the northern operators land and take off from frozen lakes, from frozen sea ice, they touch down on frozen cracks in the sea ice. There is no question there's an element of risk.
>
> (Transcript, vol. 131, pp. 63–64)

He elaborated upon the difficult conditions habitually faced by pilots in northern operations:

> A. You are getting in an area that has a paucity of aids to the pilot. You are dealing with basic single runway strips. You are dealing with heavy snowfalls, high snowbanks, drifting snow, white-outs.
>
> It's a very difficult area to fly in successfully. Extremely cold temperatures, heavy icing during transitional periods, spring and fall. Yes, it's a very, very difficult area to fly in.
>
> (Transcript, vol. 131, p. 65)

Aside from this difficult flying environment, northern operators are also typically faced with personnel problems that Mr Brayman, a person from that environment, outlined succinctly:

> A. The basic structure of Austin's, Bradley's, any company in the north, is fairly constant. They have a hard-core group of people who stay with the company for a long period, and these people are very well qualified, especially in the management ranks.
>
> There is always a high turnover of junior people in companies. In the pilot world, the normal progression is upward. And we don't have a system similar to the National Hockey League where they remunerate minor leagues when they take players.
>
> In the aviation world, it's very common to see a complete migration from the very bottom up to the very top carriers in a

> very short period. Pilots are jumping ship and going to bigger and better equipment.
>
> So carriers in the north do have trouble holding onto their flight crews.
>
> (Transcript, vol. 131, p. 66)

Austin Airways had approximately 600 employees and, at the time of the merger, no active unions. In the Austin Airways non-unionized, northern environment, employee responsibilities were relatively unstructured. If support facilities were not available at a station stop, flight crews would do whatever was required to complete the mission at hand. For example, it was not unusual for pilots at northern outlying bases to assist in loading or fuelling aircraft. This was the nature of bush flying, and it is not uncommon in the Canadian North today.

Air Ontario Limited, in contrast, had approximately 250 employees who were largely unionized. The pilots of Air Ontario Limited were represented by the Canadian Air Line Pilots Association (CALPA); the flight attendants were represented by the Canadian Air Line Flight Attendants Association (CALFAA) and later the Canadian Union of Public Employees (CUPE); and the station agents, ground handlers, and mechanics were represented by the Canadian Auto Workers (CAW). In this unionized environment, employee tasks were clearly delineated. Pilots flew the aircraft, ground handlers loaded and serviced the aircraft, and AMEs were responsible for the repair and maintenance of the aircraft.

Mr Syme described the management of the two companies as reflecting their different operating environments. He described the non-unionized Austin Airways environment as less structured than that of Air Ontario Limited. He noted that the Austin management was more interactive with its employee group than was the Air Ontario Limited management. In the unionized Air Ontario Limited, collective agreements with the employee groups defined the structure of labour-management relations.

The Merger into Air Ontario Inc.

Change in Ownership: January 1987

As at January 1987, prior to the increased ownership by Air Canada, Austin Airways was wholly owned by the Deluce family while Air Ontario Limited was 51 per cent owned by the Deluce-Plaxton holding company (Delplax Holdings), 24.5 per cent owned by Air Canada, and 24.5 per cent owned by Pacific Western Airlines. Through a series of transactions in late 1986 and early 1987, the shares of Austin Airways

and Air Ontario Limited were purchased by numbered company 152160 Canada Inc., which was owned by Air Canada (75 per cent) and the Deluce family (25 per cent). With these transactions Mr James Plaxton and Pacific Western Airlines divested themselves of all interest in Air Ontario Limited. After the transactions, via the numbered company 152160 Canada Inc., the Deluce family owned 25 per cent of each of Austin and Air Ontario Limited.

Mr William Deluce, in explaining the rationale for the sale of part of the family's holdings to Air Canada, pointed to trends in the United States regarding the so-called "trunk-feed" relationship. Mr Deluce noted that the American experience indicated that the trunk-feed phenomenon would become increasingly important in Canada as deregulation took hold. He recognized that his family was the dominant force in Ontario regional air carriage. However, to take full advantage of their positions, Austin and Air Ontario Limited needed a significant amount of capital investment to expand and upgrade their operations. For these reasons, Mr Deluce explained, his family was willing to relinquish a degree of ownership in its businesses in exchange for the needed investment.

From the perspective of Canada's two national airlines the Deluce assets were extremely attractive. The Deluce dominance of Ontario regional air carriage would necessarily feed either of the two major airlines. An added attraction was the Deluce purchase of 50 de Havilland Dash-8 aircraft and spare parts on very favourable terms.

In late 1986, the Deluce family entertained offers from both Air Canada and Canadian Pacific Airlines, ultimately entering into an agreement with Air Canada. Following the change in ownership of Austin and Air Ontario Limited, Mr William Deluce was retained by Air Canada to act as the president and chief executive officer (CEO) of its newly acquired regional carrier. The boards of directors of each company consisted of nominees of the two owners, Air Canada and the Deluce family, reflecting their proportionate ownership interests. Apart from a common board of directors and CEO, Austin and Air Ontario Limited continued to operate as separate entities in the early months of 1987. Austin Airways provided passenger feed to Air Canada pursuant to the terms of a commercial agreement dated January 7, 1987. Air Ontario Limited continued to feed Air Canada, as it had since the 1977 Great Lakes agreement.

Merging Austin Airways and Air Ontario Limited

Although it was initially the intention of the Austin/Air Ontario Limited ownership to maintain the two companies as distinct entities, discussions were held regarding the future of both throughout early 1987. Economic

and labour concerns were identified as the principal factors that motivated their merger. On the economic side, Mr Syme described the "synergies" that could be taken advantage of by joining the two companies and rationalizing less productive departments (Transcript, vol. 97, pp. 47–48).

Addressing labour concerns, Austin/Air Ontario Limited senior management believed that the separate operation of the two companies under common ownership might not be economically or operationally viable. Following the change of ownership, CALPA filed an application for certification before the Canada Labour Relations Board to become the bargaining agent for the Austin Airways pilot group. Mr Syme testified that there was a possibility of the Canada Labour Relations Board imposing Air Ontario Limited working conditions on the less structured and non-unionized Austin Airways employee group. This lack of structure was viewed as necessary for Austin's northern bush flying. The imposition of Air Ontario Limited collective agreements on the Austin group – which was a real possibility according to Mr Syme – would threaten the economic viability of the outlying Austin routes. Rather than wait for the imposition of such conditions upon Austin, it was the decision of the combined Austin/Air Ontario Limited board of directors to join the two companies with one integrated employee group, and proceed with their business planning accordingly.

At the meeting of the joint Austin/Air Ontario Limited board of directors held on April 29, 1987, the merger of the two companies was addressed. The following minutes of that meeting provide an insight into the discussions at this level:

> Mr. Deluce pointed out that while initially it had been the intention to maintain the separate operations of the companies until all labour relations issues had been resolved, it had now become apparent that there were in fact certain advantages to merging the two companies from a labour relations point of view. In addition thereto, there were numerous employee relations, operational and financial advantages in merging the two companies immediately.
>
> ...
>
> William S. Deluce elaborated upon the current status of labour relations matters at both companies. In particular, Mr Deluce advised the meeting that as of March 11, 1987 CALPA had the right to strike Air Ontario Limited however there were no indications at the present time that a strike would, in fact, take place. The Air Ontario CUPE Agreement expires in September of 1987 and the Air Ontario CAW Agreement expires in September of 1988. Mr Deluce also advised the meeting that certification proceedings were continuing before the Canada Labour Relations Board with respect to the Austin Airways Limited pilots.
>
> (Exhibit 934, tab 1, pp. 2–3)

The merger of the two companies was approved in principle at this meeting of the combined board. The merger was effected as of June 19, 1987, and Air Ontario Inc. commenced business as of that date.

Mr Brayman, who occupied the position of regional superintendent, large air carriers, at Transport Canada during the period of the merger between Austin Airways and Air Ontario Limited, commented upon the reaction of the regulator to the merger and the steps taken to ensure that the new operation met with the regulator's approval. He indicated that the areas of concern included "the smooth transition brought about by hostilities associated with seniority lists, displacement of personnel" and "the integration of the training programs, to make sure that where cross-training is required, it follows a legitimate normal process, and that the files are kept up to date" (Transcript, vol. 131, p. 67).

Mr Brayman testified that "there was no doubt that the Austin group of supervisors displaced the Air Ontario [Limited] group of supervisors" (p. 68). He stated that Air Ontario Limited was basically a commuter operation which for a number of years operated at major airports on hard-surface runways with one type of airplane, the Convair 580. He described Air Ontario Limited as "a nice, neat, tidy operation" while describing Austin Airways as "a sprawling organization which flew in quite a few spectrums," including charter type, non-scheduled operations (p. 68).

Mr Brayman stated that there was concern at Transport Canada about how the two management groups would meld, and that "it was an awkward period" with the old staff from Air Ontario Limited being displaced and new people from Austin Airways taking over. Although he described the merger outcome as being "not as drastic as we thought it might be," he stated that Transport Canada had concerns regarding a smooth transition of operational control from one group to another:

> A. In fact, from management down, the Austin's group, the principals of the White River group, which were the Deluces, they came in in senior management positions and they brought with them the operational people and the airworthiness people from the Austin group to take over.
>
> (Transcript, vol. 131, p. 69)

Mr Brayman expressed the concerns of Transport Canada about a carrier that operated in a very broad area of Northern Ontario, spread out over large distances with a large number of aircraft, coming down to southern Ontario and "operating in a nice, tight little commuter environment":

A. Yes, we had some concern. Austin's had been operating 748s on scheduled routes, so we knew they had the infrastructure to take over. But there was other factors.

For instance, at the same time the Dash 8 was being introduced into service, the Convair 580 was – which had been the backbone of the Air Ontario fleet was going out.

Yes, we would have to say that there were some concerns.

Q. And what were those concerns?

A. We were concerned about the smooth transition of operational control from one group to the other.

(Transcript, vol. 131, p. 70)

Mr Brayman spoke of flight following as being one of the focal points of Transport Canada's concern about the operational control within the newly merged company. As the events have borne out, the Air Ontario flight dispatch and flight-following system proved to be a valid concern indeed. This subject is discussed further in chapter 23 of this Report, Operational Control.

Air Ontario Inc.

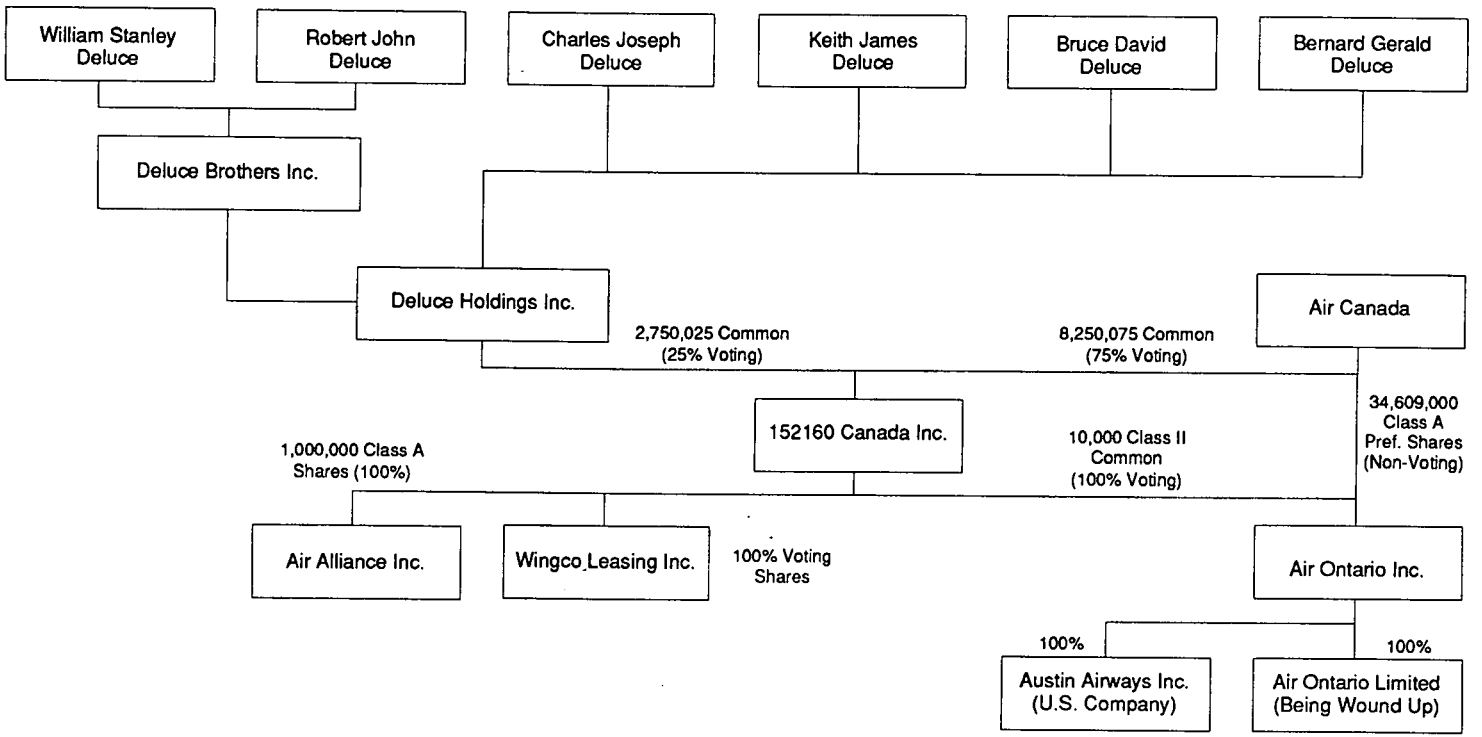
Air Ontario Inc. (Air Ontario) was wholly owned by a numbered company 152160 Canada Inc. which, in turn, was owned by the Deluce family and Air Canada (see figure 13-2).[6]

Immediately following the merger, Air Ontario Inc. operated the combined Austin/Air Ontario Limited routes, which went north to Fort Severn and Great Whale on Hudson Bay, west to Winnipeg, east to Montreal, into large southern Ontario cities like London and Toronto, and into three American centres, Minneapolis, Cleveland, and Hartford (see figure 13-3). In the period after the merger, Air Ontario Inc. had approximately 800 employees – the former Austin employees who were not yet unionized and the former Air Ontario Limited employees who were largely unionized. The new company operated a combined fleet of approximately 40 aircraft of eight different aircraft types.

Following the merger the entire combined operation of the two companies continued for some months. Air Ontario's head office and main base of southern operations was in London. The northern

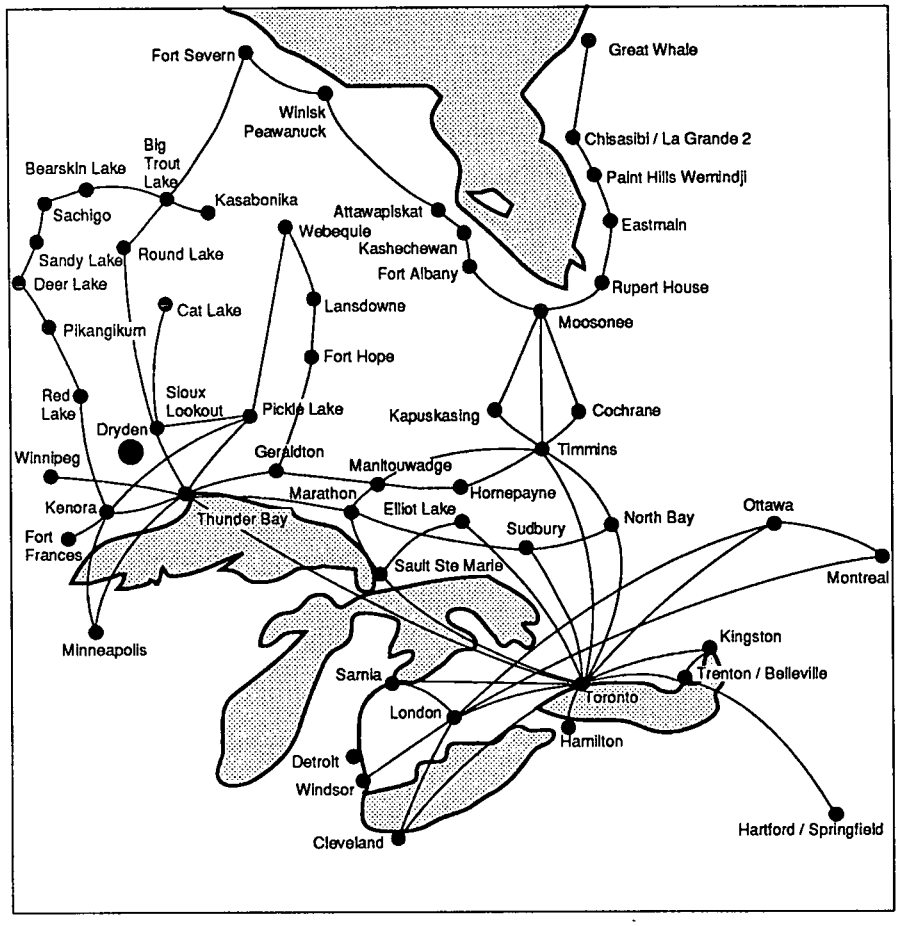
[6] In addition to its 75 per cent interest in the voting common shares, Air Canada purchased a substantial number of non-voting preference shares. Though they represented a substantial equity interest, the preference shares were "debt-like" in that they were to be redeemed by Air Ontario according to a set schedule. Therefore Air Canada, with its combined common and preference shares, had at any given time following the merger an equity position in Air Ontario of more than 90 per cent.

Figure 13-2 Air Ontario Inc., Ownership Structure, March 10, 1989



Source: Based on Exhibit 782

Figure 13-3 Air Ontario Inc., Route Map, June 1987



Source: From Exhibit 778

operation was managed in Timmins by Mr Bruce Deluce, the company's vice-president of charter sales and northern operations. As the administrative departments of the new company were consolidated in London, there was a contemplated immediate loss of 25 to 30 jobs from the Austin employee group.

With the functional merger of the two companies, the combined Air Ontario Limited/Austin employee groups took various steps to establish common collective representation by the various unions. The two pilot groups were merged under the representation of CALPA with a common seniority list. Upon completion of the merger of the pilot lists, CALPA began negotiating the first collective labour agreement for the combined pilot group. The negotiations, which commenced in the fall of 1987, broke down in the spring of 1988, resulting in a pilot strike from March until May 1988. The ultimate settlement of the labour-management dispute was a collective labour agreement which applied common work rules to all Air Ontario pilots.

As a consequence of the changes in working conditions, the continued viability of northern routes became questionable. Mr William Rowe, Air Canada representative on the Air Ontario board, explained the effects of the unionization of the northern pilots and the application of southern working conditions on the entire operation:

> A. The two entities were not compatible ... as separate entities under one management structure. It was obvious they had to be merged. They were.
>
> At the time of the merging, the unions of Air Ontario petitioned, and in particular, CALPA, the pilots' association, was successful in receiving authority to organize the Austin pilots.
>
> The work rules for Austin at the time of the merger were that essentially of a charter and bush operator, where there were – a multiplicity of duties were performed by various individuals, including the flight crew, who would frequently and as part of their normal duties be called upon to load the aircraft, et cetera, perform multiple duties other than just flying.
>
> At the time of the organizing, a delineation of duties took place, and the multiple duties that the pilots once had were not carried forward any further. They had refused to continue in that line.
>
> Also at the time, there was an increase in competitive flying by other non-union operators, and very much smaller operators than Austin, on several of their routes, and it became apparent that the smaller operators were going to erode the economic position that Austin once enjoyed in the area where indeed, in many cases, they had a monopoly service and were able to provide this service at very good rates, but still at reasonable cost, but that whole cost structure was now going to be eroded

> by virtue of the union contract and the merger contract – or merging, results of the merger, and be attacked from a competitive position of much less expensive operators and smaller entities.
>
> We then decided that it would be best to divest ourselves of the routes of Austin as much as possible, while they ... still had value, and while there was a buyer available for them.
>
> There was a buyer available, and negotiations took place, and subsequently, we agreed to transfer those operations to the new owner, new owners.
>
> (Transcript, vol. 121, pp. 148–49)

The decision to divest Air Ontario of its northern assets was first conceived in June 1988 with a divestment plan being formulated in July and August. The sales of the northern assets were completed in the last quarter of 1988 and the beginning of 1989.

Air Ontario Inc. maintained scheduled service to Winnipeg, Dryden, Kenora, Fort Frances, Thunder Bay, Sault Ste Marie, Elliot Lake, Sudbury, Kapuskasing, Timmins, North Bay, Ottawa, Montreal, and points south. All Air Ontario routes north of the named locations were discontinued.

The principal purchasers of the northern hard assets and routes of the former Austin Airways were Air Creebec and Bearskin Airlines. Although the Deluce family and Air Ontario did not maintain an equity interest in these airlines, they maintained commercial relationships with them. The northern service remained integrated in the Air Ontario system via commercial agreements with these carriers. Northern passengers were fed into the Air Ontario system by Bearskin and Air Creebec. Air Ontario then fed these passengers into Air Canada's national and international transportation network.

By late 1988, Air Ontario had approximately 550 to 600 employees, a decrease of approximately 200 to 250 employees (or 25 to 30 per cent) from the period immediately following the merger. Some of the displaced Austin personnel were able to find employment with the newly expanded Air Creebec and Bearskin Airlines.

As would be the case with any major corporate rationalization, there were anxieties among the employee group regarding their future with Air Ontario. At least one manager associated low employee morale with poor job performance, which potentially compromised flight safety. Certainly, in any time of great change and dislocation within a company, it is the task of management to remain focused on operational imperatives; in the case of an airline, the operational imperative is flight safety.

Without a doubt, Air Ontario's managerial resources were greatly taxed during the functional merger of the two regional carriers. The divestment of northern operations, the reduction of employees by almost

one-third, the consolidation of its operation in London, Ontario, the merger of two disparate pilot and flight attendant groups, a lengthy pilot strike, the cultivation of a relationship with the new controlling shareholder, Air Canada, the rationalization of its aircraft fleet, and the introduction of a new aircraft type all represented significant challenges to Air Ontario management in the 18 months following the merger. The issue to be examined is whether Air Ontario management was able to support the flight safety imperative during this period of distraction.

14 MANAGEMENT ORGANIZATION

Following the merger of Air Ontario Limited and Austin Airways, the management of Air Ontario Inc. was faced with the challenge of integrating the two somewhat disparate companies. Quite understandably, there were many management changes at Air Ontario as this integration proceeded. Adding to the demands on management was a pilot strike from March 11 until May 1, 1988. It was within this environment of significant management change, company integration and rationalization, and management preoccupation with labour relations that Air Ontario undertook its first jet transport operation.

In the review of the F-28 program that follows it is apparent that operational deficiencies which were linked to the crash of flight 1363 were attributable, at least in part, to inattentive management. To understand fully the circumstances that led to this accident, it is necessary to consider the operational deficiencies of the air carrier management component of the air transportation system.

This section describes the operational management of Air Ontario during the material period from June 1987 until January 1990.[1] There is a discussion of significant changes in operational management and the events that were occupying the attention of management during this period (see figure 14-1).

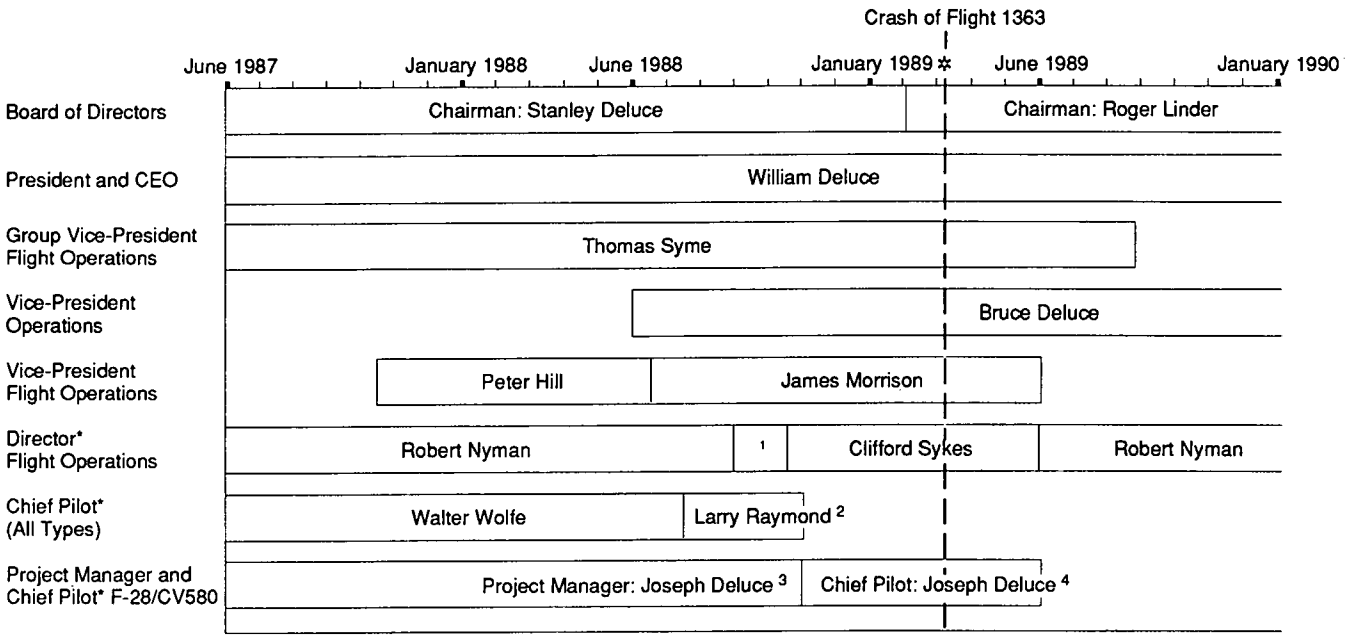
Management Structure

The management structure of Air Ontario is not unusual. Its corporate hierarchy consisted of lower level supervisors and managers reporting to middle management directors, who in turn reported through one or two levels of vice-presidents to the president and chief executive officer (CEO). The president and CEO reported to the board of directors.

The board of directors met at least four times per year and was ultimately responsible for the overall direction and management of the company. Decisions affecting the company fundamentally, such as the selection of Air Ontario officers at the vice-president or president level or the acquisition of new aircraft, required approval of the board of

[1] Operational management includes flight operations and maintenance management.

Figure 14-1 Air Ontario Inc., Senior Operational Management, June 1987–January 1990



* Appointments of director of flight operations and chief pilot require the approval of Transport Canada.

1 James Morrison, acting director of flight operations.
2 Acting chief pilot.
3 The duties and responsibilities of the project manager were not formally defined. Because there were items that were not complete from the F-28 Project Plan when Captain Deluce was formally appointed F-28/CV580 chief pilot, the duties of the project manager are said to overlap with those of the F-28 chief pilot.
4 Although the evidence suggests that Captain Deluce was fulfilling the role of F-28 chief pilot as early as June 1988, he was not formally appointed to the position until November 1988.

directors. Air Ontario's 12 board members were nominated by the company's two shareholders, 9 by Air Canada and 3 by the Deluce family, reflecting their respective ownership interests. Mr Stanley Deluce was chairman of the board from June 1987 until February 1989, when he was succeeded by an Air Canada nominee, Mr Roger Linder.

There were several committees of the board of directors; of particular significance was the executive committee, which met on a monthly basis and included as members Mr Stanley Deluce, Mr William Deluce, and Air Canada nominees William Rowe, John McMurtry, and later Roger Linder. Because it met frequently, the executive committee was able to review proposals and decisions of more immediate significance to the day-to-day management of the company. The Air Ontario F-28 project was one proposal that was discussed at length at the executive committee and at the board of directors.

Mr William Rowe served as Air Canada's "shareholder's representative" on the Air Ontario board and executive committee. Mr Rowe, who was also Air Canada senior vice-president, associated airlines, reported directly to Air Canada's president and chief executive officer regarding Air Ontario. Although in testimony Mr Rowe described his role as primarily one of protecting Air Canada's financial interest in Air Ontario, he stated that he also served as a liaison between Air Canada and Air Ontario management and, to the extent that Air Canada wanted to influence Air Ontario, he would introduce matters of interest to Air Canada at the Air Ontario board meetings.

Air Canada, as the majority shareholder of Air Ontario, had effective control of the board. Thus, Air Canada's interests were, or ought to have been, reflected in every decision of the board of directors of Air Ontario.

Reporting to the board of directors, and directly responsible for the day-to-day management of the company, was the president and CEO, Mr William Deluce. Mr Deluce was 38 years of age when he became president of Air Ontario Inc. in June 1987. He has a degree in chemical engineering from the University of Toronto and is a licensed pilot. As is evident from the description of the history of the company, Mr William Deluce has performed many roles in his family's businesses. He handled baggage and fuelled aircraft as a boy, at the age of 19 he managed a northern base, as a young man he built NorOntair "from scratch," and finally, at a still relatively young age, he became the chief executive officer of Canada's third largest regional airline. In addition to being a member of the Air Ontario board and executive committee, Mr William Deluce has been a member of the boards of directors of a number of other companies including Canada 3000 Airlines and the Canadian Tire Corporation. He was also a director of the Air Transport Association of Canada (ATAC) from 1985 to 1988 and its chairman for 1987–88.

Mr William Deluce, as CEO, was directly involved in the selection and approval of managers at the level of vice-president and director. In some instances he would make management choices himself; on other occasions management changes would be presented to him for consideration by his group vice-president, Mr Thomas Syme.

Throughout the material period, Mr William Deluce only attended at Air Ontario's head office at London, Ontario, approximately two to three days per week; however, he was in daily telephone contact with Mr Syme there. When he was not directly involved in the management of Air Ontario, Mr Deluce attended to his other business interests. He relied upon Mr Syme as the senior officer responsible for the day-to-day management of Air Ontario Inc. Both Mr Syme and Mr Deluce equated the role of Mr Syme to that of a "chief operating officer," although he was not formally given that title until a recent reorganization in 1991. Mr Deluce elaborated on his working relationship with his group vice-president:

> Q. Were you relying very heavily on him in day-to-day matters of running the corporation, sir?
> A. I was relying upon Tom [Syme] and Tom had assembled under his wing other suitable support staff.
> Q. To what extent, would you say, had you delegated your duties and responsibilities to Tom Syme?
> A. Well, when it came to day-to-day operational types of things, Tom was responsible for it. If it was a strategic matter, those would be areas that I would be involved, very much involved in. If it was a policy matter, Tom would ... normally bring it to me and we would sort it out either between Tom and I or with our senior vice-president group.
>
> (Transcript, vol. 151, p. 128)

Mr Syme's experience was primarily in the fields of finance and accounting. He graduated from the University of Western Ontario Business School with an honours business administration degree in 1976 and he is a certified general accountant (CGA). Following graduation, he worked in the insurance and accounting business until 1981, when he joined Great Lakes Airlines as its chief accountant. In 1983 he was appointed corporate comptroller of the company (by then Air Ontario Limited) and was responsible for finance and accounting functions, information systems, personnel, and payroll. In late 1985 Mr Syme was appointed assistant to the president, Mr James Plaxton, taking on the additional responsibility of strategic planning. This involved operational, commercial, and fleet planning, including the acquisition and disposition of aircraft.

After less than one year Mr Syme was appointed director of operations for Air Ontario Limited. With this new position – his first in airline operations – Mr Syme was directly responsible for the flight operations and maintenance functions of Air Ontario Limited; in addition, he carried on as director of strategic planning and coordinator of the corporate business plan. In early 1987 Mr Syme became the vice-president of operations for Air Ontario Limited and, in June 1987, he was appointed the group vice-president operations of the newly merged company, Air Ontario Inc.

For the material period, from June 1987 until March 10, 1989, Mr Syme had reporting to him the vice-president of operations, the vice-president of maintenance and engineering, the vice-president of flight operations, and the vice-president of marketing. Mr Syme was involved in all managerial appointments within the flight operations and maintenance departments.

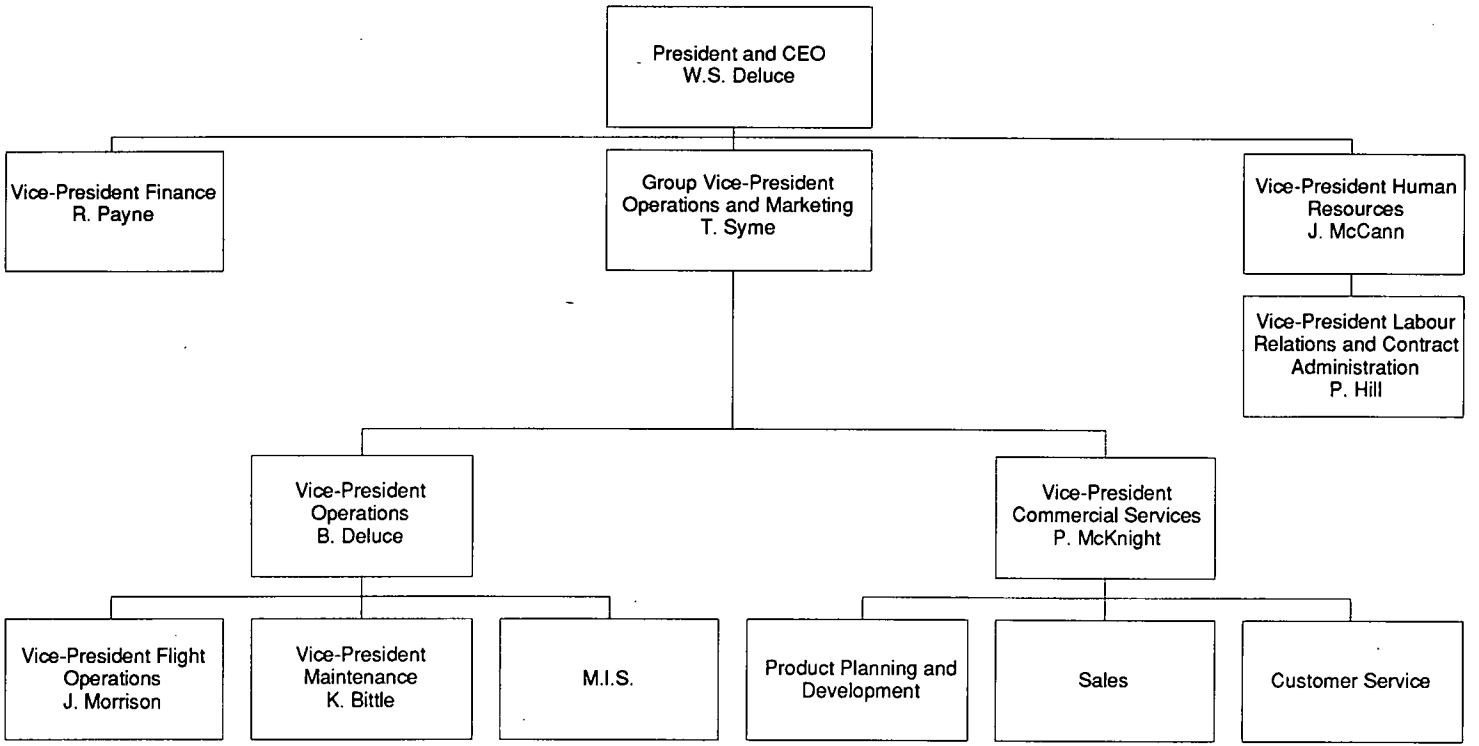
Mr Syme is neither a licensed pilot nor a licensed aircraft maintenance engineer. He testified that, because he had no technical background, he relied upon the advice of his senior technical people on operational matters.[2]

In June 1988 Mr Bruce Deluce was appointed vice-president of operations reporting to Mr Syme. With this organizational change, Mr Syme was, for the first time, one step removed from direct line authority over the flight operations department. Six months later, in December 1988, Mr Syme's line authority over the maintenance department was interrupted by an expansion of Bruce Deluce's role. The senior management organization at Air Ontario on March 10, 1989, is portrayed in figure 14-2.

Mr Syme continued as chief operating officer until mid-1989, when Mr Bruce Deluce as vice-president of operations was given a direct reporting relationship to his brother, William Deluce. Mr Syme's responsibilities were then limited to commercial services. With this change, Mr Bruce Deluce became responsible for the entire operational side of Air Ontario and Mr Syme concentrated strictly on commercial matters.

[2] The issue of technical and operational proficiency of senior airline managers is discussed in chapter 25, Management Performance.

Figure 14-2 Air Ontario Inc., Senior Management Organization, March 10, 1989



Source: From Exhibit 793

Operational Management: Flight Operations and Maintenance

Regulatory Requirements

To obtain an operating certificate, an air carrier operating large aircraft must have a flight operations and maintenance organization that meets the requirements of Air Navigation Order (ANO) Series VII, No. 2, which states:

5.(1) An applicant for an operating certificate shall show that he has the qualified managerial personnel necessary to operate the proposed commercial air service and that such personnel are employed on a full time basis in the following or equivalent positions:
(a) Managing Director;
(b) Director of Flight Operations (or Operations Manager);
(c) Director of Maintenance and Engineering (or Maintenance Manager);
(d) Chief Pilot; and
(e) Chief Inspector.

(2) Where because of the nature of a commercial air service, positions other than those specified in subsection (1) would, in the opinion of the Director, be more appropriate, the Director may

(a) approve different positions or a different number of positions; and
(b) authorize the allocation of more than one position to one person.

6.(1) No person shall serve as a Director of Flight Operations (or Operations Manager) or as a Director of Maintenance and Engineering (or Maintenance Manager), unless his qualifications, background and experience are satisfactory to the Director.

(2) No person shall serve as a Chief Pilot or Chief Inspector unless he meets the requirements set forth in Schedule A.

Candidates for the chief pilot and chief inspector positions must fulfil the following qualifying criteria in Schedule A to ANO Series VII, No. 2:

1. Every Chief Pilot shall
   (a) hold a valid airline transport pilot licence or a senior commercial pilot licence with a Class I instrument rating with full privileges;
   (b) have at least three years experience as a pilot-in-command of a large aeroplane with an air carrier;
   (c) know the contents of the air carrier's Operating Certificate, Operations Specifications and Operations Manual; and
   (d) know the provisions of the *Air Regulations* necessary for the proper performance of his duties.

2. Every Chief Inspector shall
   (a) hold a valid aircraft maintenance engineer licence Category "A" and shall have held such licence for at least three years;
   (b) have at least three years experience on large aeroplanes with an air carrier or an approved maintenance organization, one year of which was as a maintenance inspector;
   (c) know the appropriate parts of the air carrier's Operating Certificate, Operations Specifications, and Maintenance Manual necessary for the proper performance of his duties; and
   (d) know the provisions of the *Air Regulations* necessary for the proper performance of his duties.

The ANO contemplates separate maintenance and flight operations organizations. The director of flight operations and the chief pilot are the two flight operations management positions required by the ANO, and the director of maintenance and the chief inspector are the two required maintenance management positions.

The air carrier's flight operations organization and practices are described in its operations manual while its maintenance organization and practices are described in its maintenance manual. An air carrier is required to produce both manuals for Transport Canada's approval as a condition of operation. Both manuals must describe the duties, responsibilities, and reporting relationships within the flight operations and maintenance organizations. (The approval of manuals is discussed in chapter 19, F-28 Program: Flight Operations Manuals.)

Although Transport Canada is to review and approve the contents of the carrier's operations manual and maintenance manual, there are no clear regulatory descriptions of the duties, responsibilities, or qualifications of the required management personnel.

Air Ontario Flight Operations Management

A flight operations organization, in the simplest terms, is responsible for the planning and execution of aircraft movements. This responsibility encompasses operational control and flight following; operational standards and practices; initial and recurrent training of pilots; and, in the case of Air Ontario, the initial and recurrent training of flight attendants. The Air Ontario flight operations organization and practices were described in the Air Ontario Flight Operations Manual (issue date September 15, 1987). As at March 10, 1989, three amendments to the manual, dated December 23, 1987, April 13, 1988, and May 1, 1988, had been approved and incorporated. This manual was submitted to Transport Canada in fulfilment of the requirements of ANO Series VII, No. 2.

The Air Ontario flight operations management experienced considerable change in organization and personnel during the period June 1987 to September 1989. For the most part, this organizational change was not reflected in any amendments to the Flight Operations Manual.

Flight Operations: Summary of Structural Changes[3]

In June 1987 the director of flight operations, Captain Robert Nyman, was reporting directly to the group vice-president of operations, Mr Thomas Syme, who reported to the president. In late 1987 the position of vice-president of flight operations was created, a position initially occupied by Mr Peter Hill.[4] The director of flight operations reported to the vice-president of flight operations, who reported to the group vice-president.

In June 1988 the position of vice-president of operations was created. This position was occupied by Mr Bruce Deluce. The vice-president of flight operations reported to the vice-president of operations, who reported to the group vice-president. This is the organizational structure that was in place on March 10, 1989, and is reflected in figure 14-3.

Eventually, in September 1989, the positions of vice-president of flight operations and group vice-president would be eliminated so that the director of flight operations reported directly to the vice-president of

---

[3] Please refer to figure 14-1.

[4] Amendment #1 to the Air Ontario Flight Operations Manual, dated December 23, 1987, describes Mr Hill as the vice-president of operations. This seems to be the only reference to Mr Hill having had that title. The position filled by Mr Hill at that time (and later by Mr James Morrison) was known internally at Air Ontario as the vice-president of flight operations. The position of vice-president operations, later occupied by Mr Bruce Deluce, was considerably different from Mr Hill's position as referenced in the Flight Operations Manual (Exhibit 146).

operations, who reported directly to the president. Thus, in the 27 months from June 1987 until September 1989 Air Ontario either added or subtracted layers of operational management on three occasions. In addition to these structural changes, there were changes in the senior management personnel of the Air Ontario flight operations department.

Personnel Changes

Director of Flight Operations Captain Robert Nyman In June 1987, following the merger of Austin and Air Ontario Limited, Captain Robert Nyman became the director of flight operations for Air Ontario Inc. He had held this position at Air Ontario Limited for two months prior to the merger.

Since obtaining his commercial licence in 1958, Captain Nyman has accumulated in excess of 20,000 hours of flying and has been employed for most of his career by companies owned in whole or in part by the Deluce family. Captain Nyman worked in various capacities for Austin Airways including pilot, check pilot, chief pilot, and director of flight operations. From 1984 until April 1987 he was employed by Northland Air Manitoba as director of flight operations.

In early 1987 Captain Nyman indicated to Mr William Deluce that he would like to move back to Ontario. Mr Deluce advised him of the possibility of replacing Captain Robert Murray, who was the head of the flight operations department at Air Ontario Limited. On Mr Deluce's suggestion, Captain Nyman met with Captain Murray to discuss the position that Captain Murray was voluntarily leaving. Shortly thereafter, on April 1, 1987, Captain Nyman began in his position as the director of flight operations.

Captain Nyman acknowledged that his duties and responsibilities were those set out in section 3.2 of the Air Ontario Flight Operations Manual. These are as follows:

> 3.2 DIRECTOR OF FLIGHT OPERATIONS – DUTIES, RESPONSIBILITIES AND AUTHORITY
>
> 1. The Director of Flight Operations is responsible to management for overall direction and supervision of Company Flight Operations and the development of policy governing these functions, and shall ensure that all such operations, under all Licenses and Certificates held by the Company will be conducted in accordance with the general and specific policies and instructions contained in this Manual, as approved by the Department of Transport.
> 2. He will develop and apply new flight operations policy and procedures in keeping with changing conditions, equipment, experience and competency of personnel.

3. He will have available for immediate communication to rescue co-ordination centres, lists containing information on the emergency and survival equipment carried on board any Company aircraft.
4. He will ensure that all flight crew are familiar with the regulations and procedures pertinent to the performance of their duties prescribed for the areas to be traversed, the airports to be used and the air navigation facilities relating thereto. He shall ensure that other members of the flight crew are familiar with each of these regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aircraft.
5. He will also be responsible for the preparation of amendments to this Manual and for the briefing of all Operational Personnel regarding the reasons for, and effects of all amendments and shall keep a permanent register of acknowledgements by Operational Personnel ensuring they are fully and currently informed.
6. Although some of the above duties may be delegated to other supervisory personnel, i.e., Assistant Director of Flight Operations, Chief Pilot the responsibility for the safe and efficient operation of all Company flight operations remain with the Director of Flight Operations.
7. He will report directly to the Vice-President of Operations.

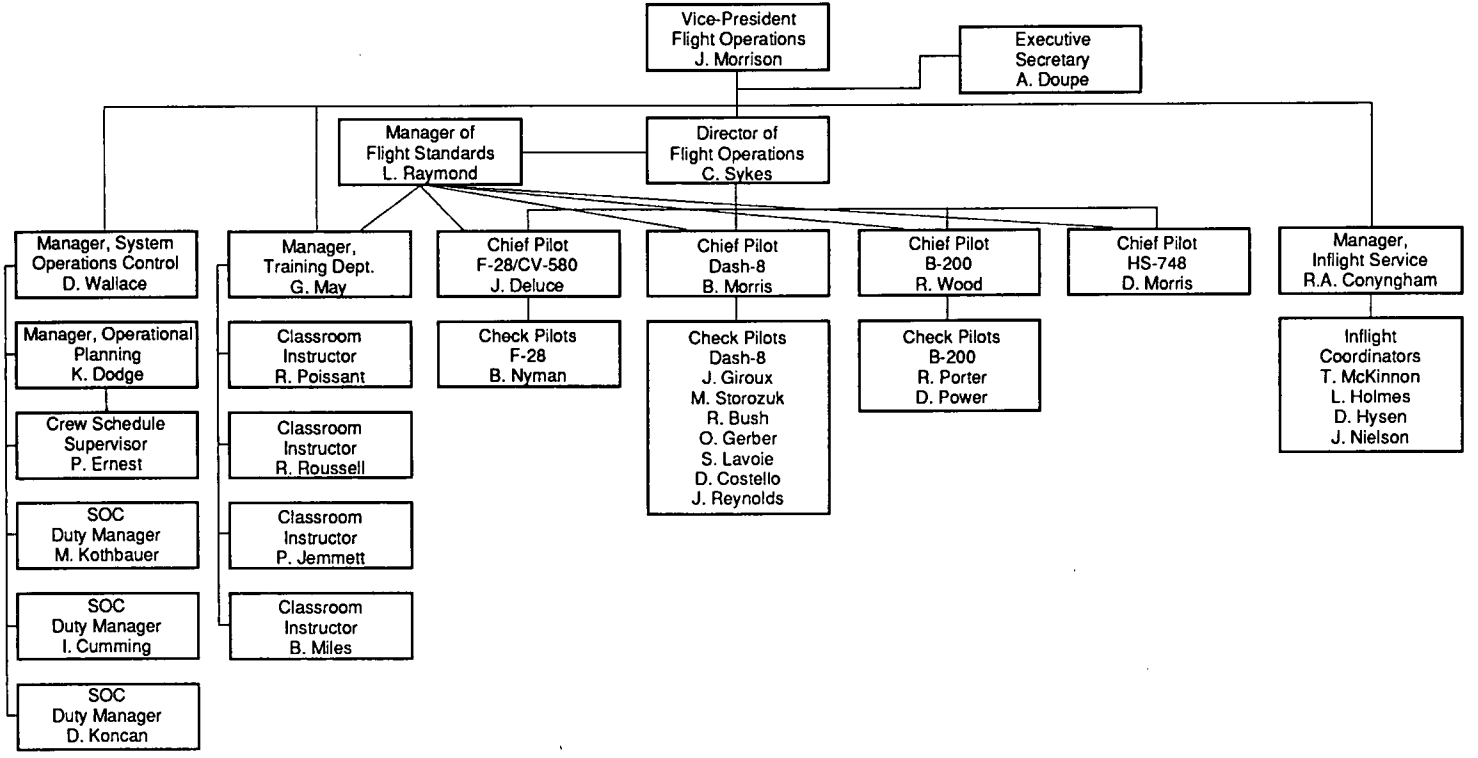
(Exhibit 146, p. 3-6)

Initially, Captain Nyman reported to the group vice-president of operations, Mr Thomas Syme. From November 1987 until June 1988, Captain Nyman reported to the vice-president of flight operations, Mr Peter Hill. Contrary to the description in the Air Ontario manual, there was no individual with the title of vice-president of operations until Bruce Deluce took on the position in June 1988.

Air Ontario's pilots went on strike in March 1988. Captain Nyman testified that from the fall of 1987 until the strike began, he assisted Mr Hill in negotiations with the pilot group. Captain Nyman described the labour negotiations and background research as occupying approximately 50 per cent of his time during this period. His involvement with negotiations ceased at the commencement of the strike, as he and other management pilots were then engaged in line flying responsibilities.

After the strike Captain Nyman carried on as the director of flight operations for several months. He testified that he preferred to return to line flying, and on August 24, 1988, Air Ontario announced that Captain Nyman would be stepping down and Mr James Morrison would become, after a transitional period, acting director of flight operations. By the end of September 1988 Captain Nyman was out of the director of flight operations position completely, and flying as a line pilot.

Figure 14-3 Air Ontario Inc., Flight Operations Organization, March 10, 1989



Source: From Exhibit 793

In July 1989 Mr Bruce Deluce informed Captain Nyman that Mr Morrison had accepted a position with Air Creebec and asked that Captain Nyman take over from Mr Morrison, vice-president of flight operations, as an interim director of flight operations. Captain Nyman agreed on condition that the appointment would be for no longer than six months to one year, at which time he would return to line flying. Captain Nyman continued in the position of director of flight operations, reporting to Mr Bruce Deluce, vice-president of operations, until July 1990.

Vice-President of Flight Operations Peter Hill The creation of the position of vice-president of flight operations and the appointment of Mr Peter Hill to it was initiated in late 1987 by the group vice-president, Mr Syme. Mr Syme explained that he wanted to consolidate some of the operations functions which were previously reporting directly to him. Mr Hill was selected for the position because of his previous experience with system operations control (SOC) and airport services. As the vice-president of flight operations, Mr Hill oversaw both the flight operations department and SOC.

Mr Hill's qualifications were described in the "Air Ontario Inc. Corporate Overview and Historical Financial Statements Fleet Plan":

> Following the Aviation and Flight Technology course at Seneca College, where he obtained a commercial pilots licence, Mr Hill spent three years with Toronto Airways and Air Canada before joining Air Ontario in 1974 as a dispatcher.
>
> Mr Hill has been involved in all labour negotiations and developed the present dispatch system, as he worked up through Chief Dispatcher and Assistant Director of Operations. When Mr Hill was appointed Director of Stations and Contracts in 1984, he took responsibility for all airports, handling agreements, facilities and petroleum purchasing.
>
> (Exhibit 778, p. 12)

It should be noted that Mr Hill's role as the vice-president of operations is referred to on at least three occasions in the Transport Canada–approved Flight Operations Manual. There are no defined duties and responsibilities for the vice-president of operations position, although it appears at the top of the approved flight operations organization chart at page 3-3 of the manual. At page 3-4 Mr Hill is listed as the vice-president of operations, and, at page 3-6, the director of flight operations is said to report directly to the vice-president of operations. On each of these pages was the Transport Canada seal of approval.

Although Mr Syme testified that "Mr Hill was not holding an approved flight operations position from the perspective of Transport," it appears to me from the evidence that Mr Hill in fact had a very definite senior supervisory role in Air Ontario's flight operations department (Transcript, vol. 97, p. 159). From October 1987 until the commencement of commercial service of the F-28 in June 1988, the jet program fell within Mr Hill's realm of responsibility. In June 1988 Mr Hill was named the vice-president of employee relations and contract administration. At that time Mr James Morrison was appointed vice-president of flight operations and Mr Bruce Deluce was appointed to the newly created position of vice-president of operations.

Vice-President of Flight Operations James Morrison In early June 1988 Mr William Deluce announced the replacement of Mr Hill by Mr James Morrison as the vice-president of flight operations. In a memorandum to Air Ontario employees, Mr William Deluce described Mr Morrison's new role with the company:

> Jim's responsibilities will encompass all flight operations activities including administration of SOC, Technical Training and the pilot group. Jim brings a wealth of previous aviation experience to Air Ontario and most recently was employed as General Manager of a Quebec based regional carrier. Jim will report to the Vice President, Operations, Bruce Deluce.
>
> (Exhibit 791)

The Quebec-based regional carrier referred to was Air Creebec, a company 49 per cent owned by the Deluce family.[5] Mr Morrison had had an involvement with the Deluce family since 1981. After flying light aircraft for several years throughout northern Canada, Mr Morrison began flying with Austin, first as a contract Twin Otter captain, then as an HS-748 first officer. In 1982 he was appointed general manager and operations manager of Air Creebec. As such he was responsible for establishing a management structure for the new airline. In 1987 he was appointed vice-president and general manager of Air Creebec. During the startup phase at Air Creebec, Mr Morrison reported to Mr William Deluce; later, he reported to Mr Billy Diamond, president and CEO of Air Creebec.

Later in 1987 Mr Morrison advised Mr William Deluce and Mr Diamond of his intention to leave Air Creebec and his interest in joining Air Ontario. Towards the end of the Air Ontario pilot strike (March–May 1988) Mr Morrison flew as a management pilot for Air Ontario. At the

[5] The Deluce family divested itself of its interest in Air Creebec in 1988.

same time, with the approval of Mr William Deluce and Mr Diamond, he wound up his responsibilities with Air Creebec.

During this period Mr Bruce Deluce advised Mr Morrison of the possibility of his becoming the Air Ontario vice-president of charter sales and airport services.[6] Later, Mr Bruce Deluce advised him that, owing to a restructuring at Air Ontario, this position was no longer available but the position of vice-president of flight operations was. Mr Morrison took the position and formally left Air Creebec to join Air Ontario on July 1, 1988.

Reporting to Mr Morrison in his new position was Captain Nyman as director of flight operations. Mr Morrison in turn reported to Mr Bruce Deluce, who was appointed vice-president of operations in June 1988. On August 24, 1988, Air Ontario announced that Mr Morrison would assume the additional responsibilities of "acting director of flight operations." Mr Morrison was vice-president of flight operations at Air Ontario for approximately one year, during which time he effected a complete reorganization of the flight operations department. In July 1989 he left Air Ontario and returned to Air Creebec as executive vice-president and chief operating officer.

Director of Flight Operations Clifford Sykes After interviewing a number of in-house candidates, Mr Morrison appointed Captain Clifford Sykes to succeed Captain Nyman as director of flight operations in mid-October 1988. Captain Sykes had worked for Air Ontario Limited and Great Lakes Airlines since 1973. He flew the Convair 440 and later the Convair 580 aircraft. At various times, he had been the chairman of the master executive committee for CALPA and the chief pilot for Air Ontario Limited. Prior to being appointed director of flight operations, Captain Sykes was a line captain on the F-28 aircraft.

As director of flight operations, Captain Sykes was responsible only for the pilot group. The manager of system operations control, the manager of training, and the manager of in-flight service all reported directly to the vice-president of flight operations, Mr Morrison.

A large part of Captain Sykes's tenure as director of flight operations was devoted to administering the new CALPA contract and assisting in the integration of the two pilot groups – those formerly employed by Austin Airways and by Air Ontario Limited. In addition, Air Ontario was divesting itself of many of its northern assets during this period and

[6] The proposed organization of Air Ontario that included Mr Morrison as the vice-president of airport services and charter sales was presented to the Air Ontario executive committee on May 6, 1988, and was rejected by the Air Canada representative, Mr Rowe.

Captain Sykes helped to facilitate the transition of many of the pilots who were displaced from the north.

Captain Sykes left his position as director of flight operations in May 1989, when he joined another airline.

Vice-President of Operations Bruce Deluce In June 1988 the position of vice-president of operations was created and Mr Bruce Deluce was appointed to it. Like his brother William Deluce, Mr Bruce Deluce had been involved with his family business since he was a boy. Starting as a high school student in 1975, he worked for White River Air Services performing various tasks including those of a station agent, refueller, radio operator, and flight attendant. He worked as a load master in cargo operations and as an apprentice maintenance engineer in the maintenance department.

In the fall of 1979 Mr Bruce Deluce began to fly commercially with Austin Airways. During this period he was endorsed to fly the Twin Otter, the Cessna 402, the HS-748, and the Cessna Citation. Much of his early flying was as a first officer, but he did fly the Cessna 402 as a captain. Throughout this period he also worked on special business projects for his brothers William and Robert Deluce.

From 1981 to 1983 Mr Bruce Deluce studied electrical engineering at Lakehead University in Thunder Bay, Ontario. While attending university, he continued to fly the HS-748 out of the company's Thunder Bay base. In the summer of 1982 he was temporarily assigned to be the Thunder Bay base manager. He was also endorsed as a captain of Twin Otter aircraft.

In the spring of 1983 Mr Bruce Deluce continued to work in various capacities for the family business. From August until December 1983, he worked in Thompson, Manitoba, where he acted as Austin's regional manager for northern Manitoba. From December 1983 until August 1985, he worked as the computer services manager for Austin at Timmins, Ontario. From the autumn of 1985 until February 1987 he worked as the director of finance and administration for Austin, reporting to his brother Robert who was vice-president and general manager. From February until June 1987, Mr Bruce Deluce was the vice-president of operations for Austin.

Following the merger in June 1987, when he was 28 years old, Mr Bruce Deluce was the vice-president of charter sales and northern operations for Air Ontario Inc. In June 1988 he was appointed vice-president of operations reporting to the group vice-president, Mr Thomas Syme. This reporting relationship continued until September 1989, when Mr Bruce Deluce began reporting directly to the president, Mr William Deluce.

Changes in the Flight Operations Department

In the two years from June 1987 until July 1989, there were significant changes in the management of the Air Ontario flight operations department. These changes coincided with Air Ontario's divestment of northern assets and the resultant dislocation of northern personnel. Air Ontario's employee group, based on the testimony of Mr Thomas Syme, decreased by "almost one-third" during this period (Transcript, vol. 97, p. 195). Also, at this time, labour relations in the company strained to the point that an eight-week pilot strike occurred from March 11 until May 1, 1988.

Of the senior flight operations managers, Captain Nyman held his position for the longest period of time. He was initially the director of flight operations from June 1987 until September 1988 and then on an interim basis from August 1989 until July 1990. During his initial appointment as director of flight operations, Captain Nyman was ultimately responsible for all flight operations aspects of the F-28 implementation plan, indeed all aspects of flight operations at Air Ontario.

In a 1988 year-end memorandum to his employees, Mr William Deluce addressed the changes that his company was experiencing:

> As we approach the end of 1988, I think that all employees will look back at the past year as having been a time of continued change within Air Ontario Inc.
>
> The implementation of change is a difficult undertaking for any company. It creates instability for the corporation, and in particular, for the employee group. The management of change is a complex process which requires a well coordinated effort by all departments within the corporation. The necessity for fairness and equitability in the administration of the employee group is matched by commercial realities and economic efficiencies which must be addressed to preserve the viability of the company as a whole.
>
> Air Ontario Inc. is a company which, although rich in the traditions of its predecessor companies, is itself less than two years old. The approximate eighteen months since the formation of Air Ontario Inc. has seen a level of evolution within the industry as a whole, from a commercial, regulatory and technological perspective that is unparalleled in the history of Canadian aviation. Against this background the primary focus of Air Ontario has remained unchanged, that being the providing of high quality scheduled passenger services on a regional basis in central Canada and the northeast U.S.
>
> Since the formation of Air Ontario Inc., management has been committed to a resource rationalization programme which culminated in the recent sale to Air Creebec of most of the company's non-scheduled service assets. Air Ontario Inc. is now much less

> complicated and better focused company than it was eighteen months ago. It is management's strong belief that this positions the company very favourably going into 1989 from a commercial, operational and competitive perspective.
>
> ...
>
> We can look back to 1988 as a year of necessary change, however, management is committed to realizing 1989 as a year of stabilization.
>
> (Exhibit 793)

Reading this document and hearing the evidence of its authors, Mr William Deluce and Mr Thomas Syme, I was struck by the clarity with which the difficulties encountered by the company were articulated. Four points from this memorandum are worth emphasizing for the purposes of my study of the F-28 program:

- The implementation of change ... creates instability for the corporation.

There was great instability within the flight operations department at Air Ontario. I have already described the ongoing internal changes at Air Ontario, particularly at the level of vice-president of flight operations and director of flight operations. Also significant were the number of key operational individuals who left Air Ontario to pursue opportunities elsewhere. Captain Robert Murray was supposed to play a major role in the F-28 program; yet, within weeks of the commencement of F-28 service, he left the company. At approximately the same time, the company's chief pilot, Mr Walter Wolfe, also left to go to another airline. Captain Larry Raymond replaced Captain Wolfe as acting chief pilot until the flight operations restructuring was completed and new chief pilots were appointed some five months later.

- The management of change is a complex process which requires a well coordinated effort by all departments within the corporation.

A well-coordinated effort was indeed required by all departments. It is revealed, however, that the implementation of the F-28 program was characterized by a troubling lack of coordination and effective management. Deficiencies in project coordination were significant to the crash of flight 1363.

- The approximate eighteen months since the formation of Air Ontario Inc. has seen a level of evolution within the industry as a whole, from a commercial, regulatory and technological perspective that is unparalleled in the history of Canadian aviation.

Mr Deluce's allusion to deregulation and the commercial imperatives it brought about is significant to the company's drive to provide its first transport jet service.

- [M]anagement is committed to realizing 1989 as a year of stabilization.

At approximately the same time as this memorandum was written, Air Ontario lost access to the F-28 simulators it was using at Piedmont Airlines. In chapter 20, F-28 Program: Flight Operations Training, I explain how this event was destabilizing and how it contributed to a further unravelling of the F-28 program.

Within one year of joining Air Ontario, and following the CEO's commitment to "1989 as a year of stabilization," Mr Morrison – the architect of a complete restructuring of the flight operations department – left Air Ontario to pursue an opportunity at another airline.

In my view, it is significant that the senior managers at Air Ontario understood that the forces of change were creating dislocation within their company and that they would have to redouble their management efforts for the company to operate effectively. In later sections, I examine how the F-28 program was allowed to deteriorate seriously in the absence of meaningful operational management.

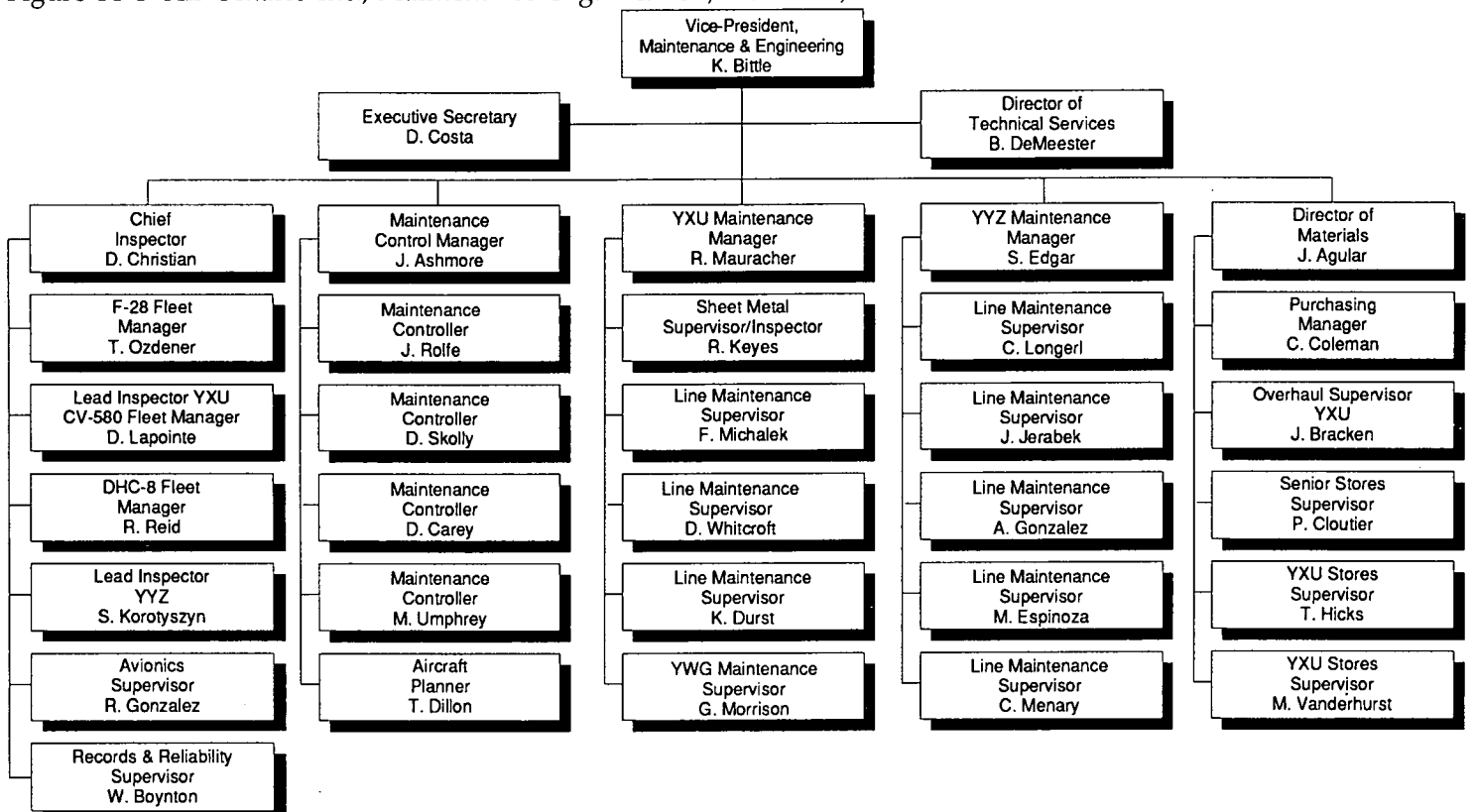
Maintenance and Engineering Management

The Air Ontario maintenance organization and practices were described in its Maintenance Control Manual (Exhibit 319). Unlike the flight operations management, the senior management of maintenance was relatively stable during the period June 1987 to July 1989. Mr Kenneth Bittle was vice-president of maintenance and engineering at Air Ontario during that material time.

Mr Bittle began his aviation career in 1975 as an apprentice mechanic with Patricia Air Transport (Pat Air) of Sioux Lookout, Ontario, a small northern airline flying primarily float aircraft. In 1978 Pat Air went into bankruptcy and Mr Bittle moved to Hooker Air Services as an AME. When the Deluce family acquired the assets and licences of Hooker Air Services in 1979, Mr Bittle joined Austin Airways as a base engineer in Sioux Lookout.

Mr Bittle worked in many operational capacities at Austin Airways. At various times he held the positions of base manager, chief parts storeman, materials manager, director of support services, operations manager for northeastern Ontario, and, finally, director of maintenance and engineering. In the last position he reported to Mr Robert Deluce, who was then vice-president and general manager. Mr Bittle had held

Figure 14-4 Air Ontario Inc., Maintenance Organization, March 10, 1989



Source: From Exhibit 793

this position for two years when Austin and Air Ontario Limited merged.

Mr Bittle then was selected to be vice-president of maintenance and engineering of Air Ontario Inc. in preference to Mr Peter DaCosta, former head of maintenance at Air Ontario Limited. Mr Bittle held this position until August 1990, when he became president and chief executive officer of Northland Air Manitoba.[7]

The Air Ontario maintenance organization in place on March 10, 1989, is depicted in figure 14-4.

The two principal operational departments at Air Ontario Inc. – flight operations and maintenance – were dominated by former Austin Airways management personnel during the material period: Captain Robert Nyman, the director of flight operations, Mr James Morrison, the vice-president of flight operations, and Mr Kenneth Bittle, the vice-president of maintenance and engineering. That former Austin Airways personnel came to dominate the operations of Air Ontario Inc. is, in my view, significant and is discussed later in the Report.

Management Selection

The Selection Process

The appointment of any officer of the company, including the CEO, required approval by the board of directors of Air Ontario.

Mr William Deluce was president and CEO of Air Ontario Inc. pursuant to his earlier employment agreement with Austin Airways Limited and Air Ontario Limited. He discussed his role as CEO with Mr Leo Desrochers and Mr Ray Lindsay of Air Canada during the negotiations for Air Canada's purchase of 75 per cent of Air Ontario Limited and Austin Airways. Mr William Deluce testified that, although his being the president of Air Ontario was not a condition of the sale to Air Canada of a majority interest in his company, his acceptance of the position of CEO was predicated upon very definite conditions:

> A. ... part of the prerequisite on ... my part that I set out with Air Canada was that I was prepared to take on the job on the basis that I had a normal board reporting responsibility. I was not interested in running a division of Air Canada. I was interested

[7] Northland Air Manitoba is a regional airline that is owned 50 per cent by the Deluce family and 50 per cent by Ilford-Riverton Holdings Incorporated.

> in running a company or a couple of companies but on a very independent basis. Independent to the ... extent that I would have ... to report as a normal C.E.O. would do to a board.
>
> (Transcript, vol. 151, pp. 111–12)

Mr William Deluce testified that he would normally select all senior management personnel and he was occasionally involved in the placement of managers at a lower level. The selection of managers at Air Ontario typically involved his consulting with Mr Syme and the human resources department. All changes in management structure discussed above would have required at least the approval of Mr William Deluce and, in some cases, would have been an initiative of Mr Deluce.

Mr William Deluce brought with him the entrepreneurial management style of a man who had built his company up from a small family business. While his style of management changed somewhat as his company grew, differences in his corporate culture and that of the majority shareholder resulted in some disagreement at the board level. Mr Rowe, an Air Canada representative on the Air Ontario board, provided insightful evidence on the clashing of Air Canada and Air Ontario corporate cultures:

> A. ... This was my first encounter with a small entrepreneurial style of operation, and, as a consequence, I had some personal adjustments and difficulties in that adjustment in ... getting used to the style of a smaller management group and, in particular, the entrepreneurial style of a chief executive officer.
>
> Q. Now, an entrepreneurial style, could you just either explain that term generally or explain how that differs from the management that you were used to.
>
> A. Well, I think, in that context, Counsel, I would define it basically as being able to make a lot of decisions often by one's self very quickly as opposed to, in our corporation, where most decisions were run through various committees with a lot of studies to back them up and that type of thing, often a gut-feel-type decision-making as opposed to one backed up by extensive study and – and vetting of – at various levels by various experts, because there simply weren't the experts around and the experts weren't needed in that environment. It was a much smaller, closer-in environment where the experience of the individuals could be brought to bear and the right decisions generally made very quickly.
>
> I, on the other hand, came from an organization where consensus, extensive study, various levels of approval, checks and balances existed, and that was simply not ... necessarily the style in an entrepreneurial environment, which, incidentally, we

felt, Your Honour, we wished to foster because it was one of the things we had purchased that we couldn't supply ourselves in relation, Counsel, to a previous question of yours, is why didn't we build our own house ... that we felt that we could purchase this particular style of operation, which would be germane to the size of community and the routes being served and would allow a much better style of operation than we ourselves could provide.

So I went through a lot of personal adjustment in that regard, and that's no secret, that, as a board member and executive committee member, I frequently had disputes with management on how they arrived at decisions and how they sometimes carried them out, and I was generally somewhat a thorn in management's side as I grappled with understanding how they operated and how that translated into my environment, and also the expectation of my superiors in the role I played on behalf of our corporation and how they would interpret the actions.

So, Counsel, I spent some considerable time within our corporation counselling our senior management members on why decisions were taken and what was behind them. Similarly, I would spend some considerable time with Bill Deluce, in particular, but other members as well on their style and testing as to why things were done.

So I was generally in the position more frequently of ... probing – not being antagonistic, I hope, but I suppose so on several occasions, because we had some fairly hot sessions, of really probing the thing, because it was a different environment to me ... things were done very much faster, usually – often without consultation that I thought might have taken place or should have – in my world, would have taken place.

Q. Consultation with whom, sir? ...

A. Oh, with the board, with other members. I had to understand how a board operated at that particular level.

Our own board of directors had a particular consultative style and management, their executive management relationships, and I was – initially, at any rate, I was very concerned that the boards of these smaller companies behave in a similar fashion, and that the chief executive officer behave as ... responsibly as our chief executive officer behaved to his board.

I guess the difficulty arose in the style. Chief executive, Bill Deluce, was an entrepreneur, family-style operation which I knew nothing about, never encountered before. And he ... had been projected into an environment that he wasn't used to either, and from an entirely different background, what we had expected of him, and I had come from a background that was different than what he was experiencing as well, so the two of us had to dance around and get used firstly to each other, our expectations, and the environment that was growing up at the

> time. And incidentally, these ... companies were generally our first real encounter with small companies that we had not created in our own image and managed with our own personnel.
>
> Heretofore, many of the companies that we had created ... had Air Canada management seconded to them. So the corporate culture was quite complete all the way through, whereas in the case of these smaller companies, it was anything but the same.
>
> And so we both had to get used to each other's demands, and that was part of my role, to bring the smaller company up to some of the standards of reporting and expectations and behaviour from an executive point of view that we expected.
>
> I had to translate back to our corporation the need for the freedom to act and the entrepreneurial flair that was required to keep the companies viable in the atmosphere in which they existed.
>
> So there was a dichotomy back and forth, and that took place over a period of several years.
>
> (Transcript, vol. 121, pp. 81–85)

An example of disagreement between Mr William Deluce and Mr Rowe is seen in discussions surrounding Mr Deluce's selection of his brother Bruce Deluce as vice-president of operations for Air Ontario.

The Appointment of Bruce Deluce as Vice-President of Operations

The proposed appointment by Mr William Deluce of his brother Mr Bruce Deluce as the vice-president of operations was the subject of considerable discussion at the Air Ontario executive committee meeting of May 6, 1988. This is reflected in the following minute from that meeting:

> Material was distributed to the members of the Executive Committee at the meeting with respect to the proposed change in the management structure of the Company.
>
> William Deluce spoke to this issue. Considerable discussion took place with respect to the appointment of Bruce Deluce as Vice President, Operations.
>
> It was agreed that the appointment of Bruce Deluce as Vice President, Operations would be deferred until the next meeting of the Executive Committee.
>
> (Exhibit 934)

The new position of vice-president of operations had authority over the vice-president of airport services and charter sales, the vice-president

of flight operations, and the vice-president of maintenance. Under this proposal, Mr Bruce Deluce, who was 29 years old at the time, would have had direct responsibility for three of the largest departments in the company.

Mr Rowe explained his concern with the possibility of nepotism and his objection to the proposed management change:

> A. Well, Your Honour, I was concerned about the degree of experience that the individual had, and I ... wished to be satisfied – because I did not know too much about ... the individual at the time, I wanted a further explanation as to his capabilities.
>
> I also was somewhat perturbed that the appointment had been put forward without consultation with the executive committee prior to it appearing almost a fait accompli, and I was trying to make the point that that sort of procedure was not acceptable and it was not compatible with the way we did things in Air Canada, somewhat tying in, Counsel, to my remarks earlier about the differences in the two organizations.
>
> Secondly ... I was concerned about the possibility of nepotism within the organization, not that it was bad or wrong necessarily but that I did not want it to appear that Air Canada would condone any structure of that nature in ... this company.
>
> I was quite sensitive to the fact that the family had owned and operated Austin Airways in their own manner and as a family, and I was particularly concerned, as were several others in our company, that it not appear as if, quotes, "the family," end of quotes, were running Air Ontario, that promotions should be on merit.
>
> And, again, because of my background and experience in management, I was concerned about the development of a successor to the president, not that he was leaving or anything like that, but that ... there be a clear – fairly clear line of development for all people within Air Ontario and that career possibilities be protected and excellence of management be encouraged and rewarded on its own merit.
>
> (Transcript, vol. 121, pp. 135–36)

After some discussion over a number of weeks, a less ambitious appointment for Mr Bruce Deluce was implemented. The initial proposal of May 1988 would have made Mr Bruce Deluce responsible for flight operations, maintenance, charter sales, and airport services. The organization implemented in June 1988 made Mr Bruce Deluce responsible for flight operations, airport services, and charter sales. The vice-president of maintenance remained in a direct reporting relationship with the group vice-president, Mr Syme. Further, Mr Morrison was named vice-president of flight operations instead of Mr Hill. Mr Morrison had more experience in flight operations than Mr Hill, and this

change was seen as assisting Mr Bruce Deluce in his transition to the new position. In addition, Mr Bruce Deluce maintained a reporting relationship with Mr Syme.

During the weeks between the initial proposal and the ultimate appointment of Mr Bruce Deluce, Mr Rowe made several inquiries about his experience and competence. In particular, Mr Rowe spoke with Mr John McMurtry, another Air Canada nominee on the Air Ontario board, who was apparently more familiar with the Deluce family than was Mr Rowe. Mr Syme testified that Mr McMurtry had expressed his opinion that the appointment of Mr Bruce Deluce, as originally contemplated, represented too much of a change at that time. Further, Mr Syme testified that the executive committee thought a staged transitioning of Mr Bruce Deluce into the senior operating position within the company would be desirable.

Mr Rowe testified further that, on the advice of the Air Canada personnel department, he considered requiring Mr Bruce Deluce to undergo independent "executive testing" prior to approving his appointment as vice-president of operations. However, after at least two discussions with Mr William Deluce, Mr Rowe "came to believe that the candidate was satisfactory ... [and that] there were enough safeguards given to proceed" (Transcript, vol. 121, p. 141). Mr Rowe testified that he expressed concern at the board level that executive talent was scarce within Air Ontario, with the exception of the Deluce family, and, in the future, they should look outside the company for appointments at a senior executive level. His inquiries, combined with the proposal to bring Mr Bruce Deluce into the senior operational position in the company by stages, satisfied Mr Rowe that the appointment of Mr Bruce Deluce was acceptable.

Following his June 1988 appointment, Mr Bruce Deluce was given increasing responsibility. In December 1988 the maintenance department was brought within his area of responsibility, as was management information systems. In July 1989 system operations control and in-flight service began reporting directly to Mr Bruce Deluce.[8] Finally, in September 1989, Mr Thomas Syme was appointed executive vice-president commercial services and Mr Bruce Deluce, as vice-president operations, reported directly to Mr William Deluce, the president and CEO. With this final change, Mr Bruce Deluce became the senior executive manager responsible for the entire operational side of Air

[8] Previously, system operations control and in-flight service reported to the vice-president of flight operations. In July 1988, with the departure of Mr James Morrison, Mr Bruce Deluce took on direct responsibility for the flight operations department, in addition to his responsibility over maintenance.

Ontario. Mr Syme's area of responsibility was restricted to commercial matters.

In summarizing this description of the air carrier, the following points should be emphasized:

- The operational management of Air Ontario Inc. was dominated by individuals who received their aviation experience in the northern environment of Austin Airways.

- Air Ontario Inc., as a scheduled passenger carrier providing a regional feed to Air Canada in a deregulated environment, was a very different operation from that of Austin Airways. Air Ontario management was confronted by demands that were materially different from anything they had previously encountered.

- Significant demands were placed on Air Ontario management by:

  - the merger of the two employee groups – the non-unionized Austin Airways with the unionized Air Ontario Limited – including the merger of the pilot seniority lists;
  - the negotiation of the first collective agreement of the newly merged pilot group;
  - the continuation of commercial service on a limited basis, by management pilots, during an eight-week pilot strike;
  - the management of the orderly commencement of services after the strike;
  - the administration of collective labour agreements that delineated employee working conditions and the relationship between management and labour;
  - the rationalization of operations which involved an abandonment of northern routes, a sale of northern assets, and a reduction in size of the company's workforce by one third; and
  - the cultivation of a new trunk-feed relationship with the parent company, Air Canada, which involved among other things the operational demands of providing a reliable coordinated connecting service with the national carrier at its Toronto and Winnipeg hubs.

- Frequent changes to the operational management at Air Ontario, in addition to a high turnover of key management personnel, characterized the company during the period from June 1987 until March 10, 1989.

It was in this environment of high stress on a frequently changing operational management group that Air Ontario commenced its first transport jet operations.

Chapters 15–22 of this Report provide a detailed analysis of the F-28 program. It will be shown that operational deficiencies which were significant to the crash of flight 1363 were attributable, at least in part, to deficient and inattentive management.

15 THE F-28 PROGRAM: PLANNING

Introduction

As stated in the opening pages of the Report, the ultimate goal of this Inquiry is the prevention of future aviation accidents. From the outset I have accepted the premise that accident prevention is best served through a properly functioning commercial aviation system. Generally, when accidents do occur, it is because the aviation system has broken down; accordingly it is the purpose of accident investigation to identify the causes of the system malfunction so that appropriate corrective action can be taken.

In this system analysis I must describe the immediate operational environment in which the crew of flight 1363 operated. That operational environment included the following factors:

- the improper deferral of the maintenance of the aircraft auxiliary power unit;
- the dispatch of the aircraft with an unserviceable APU out of a maintenance base;
- the dispatch of the same aircraft into Dryden, where there were no ground-start facilities for the F-28;
- general serviceability problems with the aircraft;
- the limited F-28 training of ground-handling staff at Dryden; and
- the erroneous flight release for flight 1363.

These and other factors are indicative of systemic problems with the Air Ontario F-28 program. In this section there is an examination of that program.

In October and November 1987, after a period of assessment and planning commencing in approximately June 1987, Air Ontario entered negotiations to lease two F-28 aircraft from the French air carrier, Transport Aérien Transrégional (TAT). Air Ontario was to receive these two aircraft in the spring of 1988, but a number of events intervened to result in its taking delivery of the first F-28 aircraft, C-FONF, in late May 1988 and the second, C-FONG, in November 1988. It was the intention of Air Ontario management to build its F-28 fleet eventually to as many as eight aircraft.

When Air Ontario embarked on its F-28 program, it was the first time that its management had operated a transport category jet aircraft in commercial scheduled service. As the F-28 aircraft was new to its personnel, Air Ontario management, with the express approval of parent company Air Canada, sought to access the expertise of individuals and organizations having experience with the aircraft. In this regard it contracted for ground school and flight simulator training for its pilots with Piedmont Airlines of Winston-Salem, North Carolina, which had one of the world's largest fleets of F-28 aircraft in commercial service. Air Ontario pilots were given their ground school training by Piedmont in Winston-Salem, and their simulator training in Tampa, Florida. In December 1988, because of the Piedmont takeover by USAir of Arlington, Virginia, and the increased training demands experienced within those two merging airline operations, Air Ontario lost access to the F-28 simulator in Tampa. Accordingly, Air Ontario flight operations management implemented alternative arrangements for training its F-28 pilots. Apart from its involvement with Piedmont/USAir, Air Ontario did little to employ any individuals with either F-28 experience or transport category jet experience in its new F-28 operation.

Air Ontario introduced its commercial F-28 aircraft service in June 1988.

The analysis that follows begins with a description of the business rationale behind Air Ontario's first foray into scheduled jet transport operations. I describe the marketing imperatives that apparently motivated the acquisition of the F-28s, the early operational planning, and, ultimately, the implementation of the program. The information contained in this initial description is gleaned largely from the testimony of Air Ontario and Air Canada executives who were involved in the decision making, as well as relevant Air Ontario corporate minutes and planning documents that were tendered into evidence.

I then contrast Air Ontario's plan to introduce the F-28 aircraft with what actually occurred during the implementation of F-28 service. What emerged from the evidence was that a reasonably sound plan went awry in its implementation. The derailing of the plan occurred under the management of an overburdened individual who had no experience in the certification and introduction of a scheduled jet transport operation. The difficulties encountered by the F-28 project manager were exacerbated by the fact that his immediate operational supervisors were occupied by labour relations matters and other concerns related to the integration and rationalization of a newly merged company. These management problems manifested themselves in undesirable operational practices within the F-28 operation and in specific flight safety shortcomings, each of which is considered below.

Air Ontario, as a commercial air carrier, was not operating in a vacuum. Transport Canada, as the regulator, had a duty to prevent the serious operational deficiencies in the F-28 program. Before commencing its jet service, Air Ontario had to obtain the approval of Transport Canada in the form of an amendment to Air Ontario's operating certificate to include the F-28. The evidence convinced me that the granting of the amendment to the operating certificate in June 1988 was the pivotal point in the commercial air transportation system relative to this accident. This regulatory requirement represented the best opportunity, in my view, for Transport Canada to impose its regulatory will upon Air Ontario's proposed introduction of the new aircraft type. It was at this point that Transport Canada should have satisfied itself that Air Ontario was fit to offer jet service, with the requisite degree of safety, to the travelling public. Had the regulator been more diligent in scrutinizing the proposed F-28 implementation at Air Ontario, many of the operational deficiencies that had a bearing on the crash of flight 1363 could have been avoided. The Air Ontario operating certificate amendment to include the F-28 is, accordingly, a focal point for much of the analysis of the F-28 program.

Apart from the scrutiny that should precede an amendment of an operating certificate, the ongoing monitoring role of Transport Canada should also be emphasized. After a proposed operation has been approved, Transport Canada is responsible for ensuring that what was represented in the air carrier application for amendment is in fact implemented and that any startup problems are dealt with promptly and professionally.

As Air Ontario endeavoured to make the F-28 program operational, Air Canada (Air Ontario's majority owner) remained largely uninvolved. Air Canada's role was kept to a minimum for reasons discussed in chapter 26, Role of Air Canada. What little operational consultation there was amounted to a cursory look at the F-28 Project Plan by Air Canada's senior technical personnel. There was neither a monitoring of the progress of the Air Ontario F-28 program nor a review of the support structure for that operation by Air Canada.

It is in the context of this air carrier and regulatory activity that the operational deficiencies are analysed. Although for the purposes of analysis I have structured the story of the F-28 program in light of the defined roles within the operational and regulatory environments, I must stress that safety awareness should not be so limited. The evidence convinced me that concern about safety must transcend that which is defined as a minimum "legal requirement."

Planning the F-28 Program

Fleet Rationalization

In the period following the merger, Air Ontario management undertook an immediate assessment of its fleet composition. At the time of the merger, Air Ontario had 51 aircraft of nine different types, representing the combined Austin–Air Ontario Limited fleet. Air Ontario Limited had flown one type, the Convair 580. Austin Airways operated a fleet of different aircraft types.[1]

It was acknowledged by Air Ontario and Air Canada witnesses that Air Ontario had to reduce the number of aircraft types in its fleet. Mr Syme described how a multi-type fleet is operationally more expensive and complicated for an air carrier because each type requires specific training for pilots and maintenance personnel. Each type also requires its own equipment and spares inventory and, although some common equipment might be used, differentiated equipment is also necessary. He explained that "a larger management and administrative support base" is required. He went on to elaborate:

> A. ... in general, in a multi-type fleet environment ... the tendency would be for the company to be less flexible. Change is more difficult to implement because of the training requirements, and in a unionized environment, when there's a structured process of flowing pilots, for instance, from aircraft type to aircraft type. If you upgrade one captain on the senior piece of equipment, there's a waterfall effect, that you are upgrading all – in order of seniority, you are upgrading – you could be upgrading eight captains through eight different types. And enhanced product quality, again, is focusing on the increased flexibility that we contemplated achieving through the rationalization of the fleet.
> Q. So from an operational point of view, then, is it fair to say that the more types you have, the more burdensome it is for the flight operations organization?
> A. I think that's a fair statement.
>
> (Transcript, vol. 98, pp. 22–23)

[1] The nine aircraft types in the Air Ontario fleet were: Dash-8 series 100, Convair 580, HS-748, DC-3, DHC-6 (Twin Otter), Beech 200, Beech 99, Cessna Citation, and Cessna 402. It should be noted that the Dash-8 series 100 was introduced to the combined Austin-Air Ontario Limited fleet following the change in ownership of the two companies in January 1987.

Selecting the F-28

The first documentary reference to the F-28 aircraft at Air Ontario is found in the June 1987 Air Ontario Inc. business plan, where it was stated:

> Air Ontario faces no less competition in the charter sector of its operations, both from aggressive, low-cost carriers in Northern Ontario, and from other regional airlines who traditionally operated with turboprop equipment but are now introducing jet aircraft. Air Ontario will not only need to introduce a cost-efficient small aircraft but will also need to consider larger aircraft in order to be competitive. The answer in the latter case may be the 56-seat Dash 8 series 300, or it may lie in acquiring a small (60–70 seats) jet aircraft of the F-28 variety.
>
> (Exhibit 938, p. 2)

The rationalization of the Air Ontario fleet and the possible acquisition of the F-28 were again discussed in the context of the Air Ontario five-year business plan at the board of directors' meeting of August 12, 1987.

In a document entitled "Fleet Rationalization Discussion Paper," written in July–August 1987, the importance of reducing the number of aircraft types was discussed:

> The existing aircraft fleet at Air Ontario comprises eight[2] different aircraft types. A recent survey of the top fifty regional carriers in the United States indicates no carriers with more than 5 aircraft types and the vast majority with less. The diversity of revenue services which Air Ontario enjoys is a factor in the fleet mix; however, the optimization of the service/resource mix is undoubtedly the most significant opportunity for enhancement of Air Ontario's long term profitability.
>
> (Exhibit 796, p. 1)

In this fleet rationalization discussion paper, there was a preference expressed to reduce the fleet to four aircraft types: a 7- to 19-passenger aircraft, a 27- to 44-passenger aircraft, a 55+ seat aircraft, and a cargo aircraft capable of carrying 6000 to 12,000 pounds.

In the 55+ seat category, management's intention was to replace the ageing Convair 580 aircraft, whose residual resale values were deteriorating. Included among aircraft types considered in the replacement program were the de Havilland Dash-8 series 300, the Aerospatiale

---

[2] There is a discrepancy between the number of aircraft types cited in Exhibit 938 and Exhibit 796: the former listing nine and the latter eight.

ATR72, the British Aerospace ATP and BAe 146, and the Fokker F-28 Mk1000. Of these aircraft the Dash-8 series 300, the ATR72, and the ATP were turboprop aircraft; the BAe 146 and the F-28 were jet aircraft.

Air Ontario was already committed to the delivery of new Dash-8 series 300 aircraft; however, because of delivery delays and a reassessment of manufacturer promises with regard to aircraft capacity, Air Ontario was looking for faster and larger aircraft.

Partially because the ATR72 and the British Aerospace ATP were not readily available, either of the two jet aircraft – the BAe 146 or the F-28 – was favoured. In reviewing the document entitled "F-28 Acquisition Proposal," which was presented to the Air Ontario board of directors for consideration, I note that particular emphasis was directed to the competitive attractiveness of a jet aircraft:

> Air Ontario has begun operation on a number of routes (namely Toronto–Sault Ste Marie, Thunder Bay–Winnipeg, Toronto–Cleveland, London–Ottawa) where competitors are offering larger, faster jet equipment in the 100–200 seat range. Thus far, Air Ontario has managed to capture a modest share of the market through scheduling and using the "AC" flight designator to its best advantage. The time has arrived for introduction of a larger, faster aircraft into the fleet.
>
> (Exhibit 800, p. 4)

It is interesting that these Air Ontario internal documents, intended for the board of directors, underlined the words "*larger*" and "*faster*" for emphasis. Without a doubt there was a great deal of enthusiasm as Air Ontario embarked upon its first transport category scheduled jet airline service.

Along with the practical size and speed advantages of jet aircraft was a certain prestige. Mr Rowe, the Air Canada representative on the Air Ontario board of directors, testified that many communities exerted political pressure on the airlines to provide jet service. On the subject of "jetitis," as it was sometimes described, Mr Rowe gave the following evidence:

> A. [C]ommunities were vying for economic development, and airline service was deemed to be a prime ingredient for economic development. Furthermore, with the advent of the ... jet aircraft, that was deemed to be ... one of the prime elements of economic development for any city. So various cities and towns would exert considerable pressure to find carriers available for providing jet service for economic development, and, hence, there was quite an intensive interplay between a city, the province, and the federal government on a member-of-parliament level and the regulatory body on the federal side itself.

> There was considerable influence as to finding carriers and getting them to serve the area itself.[3]
>
> (Transcript, vol. 121, p. 16)

The prestige of jet service described by Mr Rowe was borne out by comments of the chief administrative officer of the Town of Dryden, Mr John Callan:

> A. When Air Ontario announced that they were looking at reinstating jet service to the Dryden Airport, that really thrilled us to no end, because it was seen as a feather in our hat to have jet service ...
>
> (Transcript, vol. 4, p. 69)

Given delivery problems with the Dash-8 series 300 and the desire to sell off their ageing Convair 580 aircraft, there appears to have been a sense of urgency in getting the jet acquisition program under way.

With regard to the delay in Dash-8 300 delivery and a concern regarding Dash-8 300 passenger capacity, the following comments in the F-28 Fleet Acquisition Proposal (November 1987) are significant:

> A response from Air Ontario in light of the above two events has yet to be formulated. But what has emerged is *a pressing need* for a faster, larger-capacity aircraft in the Air Ontario system in advance of the spring of 1989.
>
> (Exhibit 800, p. 9, emphasis added)

Further evidence of Air Ontario's pressing need to commence the jet acquisition is seen in the following passage from the F-28 acquisition proposal:

> Air Ontario must examine larger aircraft in the 50+ seat range and select one for use in its system in the *earliest possible timeframe.* Unfortunately, other than the ATR-72 and the British Aerospace ATP, there are no larger turboprop aircraft which will meet the mission requirement. Both of these aircraft are rejected at this point, largely on the basis of acquisition time. The only other practical alternative lies with smaller, used jet aircraft in the 65–90 seat range, namely the F-28 and the BAe 146.
>
> (Exhibit 800, p. 10, emphasis added)

---

[3] Mr Rowe went on to explain that in recent years the preoccupation with jet service has waned. This has resulted from the advent of a reasonable alternative in modern, large, pressurized turboprop aircraft.

Having narrowed the list of possible replacements for the Convair 580 to two aircraft types, a comprehensive comparative aircraft evaluation was performed. On an economic basis, the F-28 was judged to be a more viable aircraft for Air Ontario than the BAe 146.[4]

Marketing Considerations

After the economic rationale for choosing the F-28 was established, a marketing study was performed to determine how best to utilize the F-28 within the Air Ontario route structure. Again the competitive attractiveness of a jet aircraft was emphasized from the marketing perspective. Noted among the advantages to deploying the F-28 on the Winnipeg–Thunder Bay–Sault Ste Marie–Toronto route was the following:

> Maximum competitive impact vs. Canadian Airlines, with respect to CP overlap with Air Ontario routes, and through direct jet-to-jet competition.
>
> (Exhibit 800, p. 40)

Mr Syme testified regarding the meaning of this particular passage:

> A. In the markets that were mentioned, we were competing, in the Canadian market-place, with Canadian, who were operating 737s on those markets, and with USAir who was operating – the Cleveland route that he referred to, USAir operates DC-9s on the market. And as we expanded into these types of markets, it was the first time that we had really competed head to head with jet operators, and ... this section was put together by our vice-president of marketing and ... that was a major concern, from a competitive factor, to him.
>
> (Transcript, vol. 98, p. 135)

The marketing implications of having Air Ontario take over some routes previously serviced by Air Canada DC-9 aircraft were also considered:

> In addition, acquisition of F-28 aircraft by Air Ontario presents certain longer-term benefits to Air Canada in its route rationalization efforts. Air Canada's reduction in frequency or even eventual withdrawal from certain markets in Ontario would be far more

[4] Exhibit 800, Air Ontario Inc. Acquisition Proposal (November 1987), states: "The comparative aircraft evaluation clearly indicates a substantial profit/cash flow benefit for the F28-1000 alternative, relative to the BAe 146 and the Dash 8-300."

> palatable in both a commercial and political sense if Air Ontario could offer a mixed jet/turboprop replacement service.
>
> (Exhibit 800)

Again, Mr Syme elaborated upon the effect of local politics on the proposal:

> A. I guess the underlying issue there is that at that time, there existed a very – a fairly strong bias in the market-place for jet equipment over turbo prop equipment. And ... the statement just reflects that.
> Q. In particular, what is meant by "political sense"? What are the political considerations?
> A. The airline industry seems to be one that attracts a lot of political attention. And as Air Canada pulled out of markets in northern Ontario, that was of great interest to the local politicians. And one of the issues that they raised was the loss of jet service, and what is being suggested here, that if we are able to offer alternate jet service, that that will thereby reduce the political sensitivity.
>
> (Transcript, vol. 98, p. 136)

Air Ontario's attention to the marketability of a jet service to replace the former Air Canada DC-9 service is consistent with the marketing emphasis in the Air Ontario–Air Canada commercial agreement.[5] While the agreement is discussed in chapter 26, Role of Air Canada, for present purposes I note that one of the stated objectives of the agreement is to deliver a "homogeneous product" to Air Ontario and Air Canada passengers (Exhibit 783). The agreement establishes Air Canada–Air Ontario commonality in many of the marketing aspects of air carriage. This indicates to me that both companies understood a consumer preference for an "Air Canada-like" service. The cited evidence of Mr Syme regarding the marketability of jet service can be viewed as another example of delivering a product that looked like an Air Canada product. Notwithstanding, it was the evidence of Mr William Deluce that the F-28 program was "entirely an Air Ontario initiative ... conceived and orchestrated by Air Ontario" that he took to the Air Ontario Board for approval (Transcript, vol. 152, p. 129).

---

[5] Mr Syme testified that this commercial agreement survived the merger of Austin Airways and Air Ontario Limited and defined the relationship that existed between Air Canada and Air Ontario Inc.

Approval of the Plan

It would appear that the board of directors' acceptance of the F-28 program came in its review of the Air Ontario five-year business plan, which contemplated the F-28's introduction. Although this plan and the Fleet Rationalization Discussion Paper were discussed at the August 12, 1987, Air Ontario board meeting, there was no documentary evidence indicating formal board approval of the program at that date.

Mr William Deluce testified that, in August 1987, he attended an auction at the Turkish national airline Turk Hava Yollari (THY) with the intention of purchasing two F-28 aircraft. He stated that it was fortuitous that he lost in his bidding on the aircraft to the French airline Transport Aérien Transrégional (TAT), because the final sale price was too high to make the aircraft economically attractive for Air Ontario. Having been unsuccessful in purchasing the aircraft, Mr Deluce, while he was at the auction in Turkey, made initial contact with TAT regarding the possibility of Air Ontario leasing the two F-28 aircraft. Further discussions with TAT took place in September 1987 and formal lease negotiations occurred in October–November 1987.

Mr Deluce testified on his involvement with the aircraft identification and acquisition:

> Q. And I believe that you then took steps to contact TAT in order to lease these two same aircraft, is that right?
> A. Yes.
> Q. And when did you do that, sir?
> A. That would have been done in September of '87 ... I actually made the initial contact while I was at Turkey at the auction. Followed it up in September and October and then actually went over ... for some formal meetings with the TAT representatives. I think it was October–November of '87.
>
> (Transcript, vol. 152, p. 141)

Mr Deluce also testified about the involvement of the executive committee and the board:

> A. Well, they were not involved in the detail. They were very much aware that we had a detailed implementation plan, but ... they were not in a position and they were not following the detailed orchestration of the plan.
>
> As significant events took place, i.e., the securing of aircraft either through lease or acquisition, they would be informed of those types of events. But we had a plan along which we were proceeding, along which management was proceeding, and if there was any significant change to that plan, we would highlight it for them and their main interest was that, you know,

> where was the plan that we had set out, did it still ... basically represent the line along which we were tracking.
>
> So, they weren't into the detail but they were following it on an overall basis.
>
> (Transcript, vol. 152, pp. 141–42)

At the October 8, 1987, meeting of the Air Ontario executive committee, a proposal to lease two F-28 aircraft from Transport Aérien Transrégional was reviewed. In the minutes to that meeting it was noted:

> After much discussion, upon motion duly made seconded and unanimously carried, The Executive Committee approved the leasing of two F-28 aircraft from TAT subject to obtaining approval from the Board.
>
> (Exhibit 935, p. 2)

The members of the executive committee who unanimously approved the F-28 lease were John McMurtry and William Rowe on behalf of Air Canada and Stanley Deluce and William Deluce on behalf of the Deluce family.

It appears that Mr William Deluce was very active in an attempted purchase and then lease of the aircraft in August 1987, prior to any board of directors or executive committee approval of an aircraft acquisition. Mr Deluce testified regarding board approval for the aircraft acquisition which was referred to in the October 8, 1987, minute of the executive committee:

> Q. And lastly, sir, it does say that,
>
> "... the leasing arrangement is subject to obtaining approval of the Board."
>
> So the board approval seemed to be a condition precedent to arriving at a final decision, is that right?
>
> A. That's correct.
>
> Q. So this was not something which you, Bill Deluce, would do on your own and then have rubber stamped, is that right?
>
> A. No, it required board ratification.
>
> Q. Now when we say "board ratification," would you view that ratification as a rubber stamp or something which you still had to leap through?
>
> A. It was ... something that I still had to go through, however, I guess historically, I can say ... that the executive committee was very thorough in ... the programs that we brought forward and there was no precedent for the executive committee recommending or approving something and the board not approving it.
>
> Q. So de facto it would have been a fait accompli upon a recommendation emanating from the executive committee?

> A. I could never count 100 percent on that, but historically that was the way it was.
>
> (Transcript, vol. 152, pp. 144–45)

A minute of the January 18, 1988, meeting of the Air Ontario executive committee noted that:

> Material was also distributed with respect to the proposed acquisition of F-28 aircraft by the Company and a discussion took place with respect to this issue.
>
> (Exhibit 939, p. 3)

The material referred to was the Air Ontario F-28 acquisition proposal (Exhibit 800). Although it was termed a "proposal" it would appear from the evidence of all witnesses involved that the project was well under way prior to the discussions of January 1988.

At the meeting of the Air Ontario board on March 29, 1988, the Air Ontario 1988 business plan[6] was tabled, discussed, and approved, subject to some amendment. In that business plan, the F-28 is one of the aircraft types referred to as part of the Air Ontario fleet. Although there was no documentary evidence clearly specifying the approval by the Air Ontario board of the F-28 program, at least by March 1988 there is clear acceptance by the board of the program.

The F-28 Project Plan

Once the acquisition of the F-28 aircraft was approved, steps were taken to develop a detailed implementation plan. The development of this plan was coordinated by Mr Thomas Syme, the group vice-president of operations and marketing.

The first implementation plan, The Air Ontario Inc. F-28 Project Plan (Exhibit 799), was finalized some time in September or October 1987 and was included in the F-28 acquisition proposal (Exhibit 800). The Project Plan consisted of identification of four broad categories of tasks that would have to be completed prior to the commencement of commercial service of the aircraft. These categories were:

- *administration*, which included tasks such as the preliminary inspection of the aircraft, the acceptance of the aircraft, and the negotiation of the aircraft lease with TAT;
- *maintenance*, which included all aspects of maintenance planning, such as the recruitment of F-28 maintenance specialists, the development of

[6] Exhibit 936, Air Ontario Inc. 1988 Business Plan (Revised), March 1988

a workable minimum equipment list, and the provisioning of spare parts for the aircraft;

- *flight operations*, which included all aspects of flight operations planning, such as the recruitment of experienced F-28 specialists and pilots, the preparation of an F-28 pilot training program, and the preparation and amendment of operating manuals; and
- *marketing*, which included tasks such as the preparation of schedules for the F-28, and the planning of the F-28 promotional launch.

Included with the description of the tasks was a schedule of completion dates. Mr Syme characterized the date of Transport Canada's approval of the inclusion of the F-28 on Air Ontario's operating certificate as the target date against which they scheduled the timing of all aspects of the plan.

A comprehensive revision to the Project Plan, dated December 28, 1987, was prepared by Captain Joseph Deluce (Exhibit 802). Although Captain Deluce had been working on various aspects of the F-28 plan since October 1987, he was formally appointed the F-28 project manager in January 1988. The Revised Project Plan reflected slippage in some of the previously projected dates for completion of the various implementation tasks. However, the projected commencement date of commercial service for the F-28 remained the same. Both the F-28 Project Plan and the Revised Project Plan anticipated a startup of late April to early May 1988.

The Air Ontario pilot strike from March until the beginning of May 1988 ultimately delayed the introduction of the F-28 into commercial service. While the original implementation date was to be May 1, 1988, commercial service for the F-28 actually began on June 1, 1988. Mr Syme commented on the delay in the introduction of the jet program:

> A. ... the ultimate test of the program being on track is the successful certification of the aircraft. The target date for implementation of the aircraft with the initial October plan was May 1. In the ... late December revised plan, the target date was May 1. After taking an almost three-month strike [sic], we put the aircraft into service early in June. From my perspective, that's a reasonable indication that the program, prior to the strike, was on track. We implemented the aircraft almost 30 days from the original target date, experiencing a three-month strike [sic] in between, which impacted on ... obviously, many areas of the operation.
>
> (Transcript, vol. 98, pp. 161–62)

Mr Syme was specifically asked to comment on the suggestion that the F-28 was introduced into commercial service at Air Ontario with several operational deficiencies in the F-28 program. He replied:

> A. Well, from my perspective, the aircraft was implemented under the approval of the appropriate regulatory agencies, which is an external test ...
>
> (Transcript, vol. 98, p. 162)

Having reviewed the Project Plan and the Revised Project Plan, I am of the view that Air Ontario had properly identified the significant tasks that had to be performed prior to commercial operation of the F-28. Further, Mr Syme's evidence suggests that Air Ontario intended these tasks to be performed before the F-28 was added to the Air Ontario operating certificate. The Commission investigation revealed, however, several material tasks identified in the Project Plans that either were not completed at all or were completed much later than scheduled and following the introduction of the F-28 into commercial service.

In the discussion of the implementation of the F-28 program, there is an analysis of various deficiencies in the program. Such deficiencies could have been prevented if the F-28 implementation had proceeded according to the Project Plan.

F-28 Project Team

An operational "F-28 Project Team" was assembled to acquire the aircraft and bring it into service. The members of the project team were Air Ontario director of flight operations Robert Nyman, Air Ontario vice-president of maintenance and engineering Kenneth Bittle, and pilots Joseph Deluce and Robert Murray. Each member of the project team was given responsibility for different aspects of the implementation plan.

On the recommendation of Mr William Deluce, Captain Joseph Deluce was appointed the project manager. As the project manager, Captain Joseph Deluce was the "prime coordinator of the plan,"[7] and it was his role to monitor the progress of the plan and ensure that its various elements were completed according to a timetable.

Mr Bittle was primarily responsible for the maintenance aspects of the Project Plan, which included, among other things, F-28 training of maintenance personnel, provisioning of spare parts and support equipment for the F-28, and developing a maintenance program for the F-28, including the development of a minimum equipment list for the aircraft.

---

[7] Thomas Syme, Transcript, vol. 98, p. 53

Captain Murray worked with Captain Joseph Deluce and Mr Bittle in formulating the various elements of the revised Project Plan. Captain Murray was also responsible for ensuring that some aspects of the plan were completed. Captain Joseph Deluce and Captain Murray were the first Air Ontario pilots trained on the F-28 and, at the commencement of commercial service in June 1988, Captain Murray was the only Air Ontario F-28 pilot with company check pilot (CCP) authority. It should be noted that Captain Murray left Air Ontario in July 1988, approximately one month after commercial F-28 service commenced, to pursue an opportunity at another airline.

Although Captain Joseph Deluce was the F-28 project manager, it was the view of Mr Syme, confirmed by Captain Nyman, that the responsibility for all flight operations aspects of the Project Plan rested with Captain Nyman as director of flight operations. Given Captain Nyman's other activities during the implementation period, as shown below, it seems unlikely that he could have been supervising the project manager in any meaningful way.

It was the evidence of Captain Nyman that, in the months of October 1987 to March 1988, he and the vice-president of flight operations, Mr Peter Hill, devoted up to 50 per cent of their time to labour relations in an attempt to avert a pilot strike. When the strike commenced, it was the evidence of Captain Nyman that he returned as a management pilot to "essential flying" out of Pickle Lake in the North. The strike lasted from March 11, 1988, until May 1, 1988. The airline recommenced its normal scheduled operations on May 7, 1988. Throughout the month of June 1988 Captain Nyman was at the Piedmont F-28 course in Tampa, Florida. At the same time, as he would in the normal course, Captain Nyman was responsible for overseeing the entire flight operations of the airline, which included, as described earlier, the operation of many different aircraft, from small twin-engine aircraft to the HS-748 and the Convair 580, over a mix of scheduled and charter service spanning a very substantial route network.

Therefore, from October 1987 until July 1988, Captain Nyman was devoting the majority of his time to labour relations, essential flying, and F-28 training, in addition to his very substantial duties as the director of flight operations. It was precisely during this period when Captain Nyman was to have supervised all flight operations aspects of the F-28 plan. It is apparent from this evidence that the senior managers at Air Ontario retrospectively ascribed to Captain Nyman a supervisory function over Captain Joseph Deluce and the F-28 implementation which, owing to competing demands for his time, he did not effectively fulfil. I am of the view that the director of flight operations should have been overseeing closely the progress of the F-28 Project Plan.

The Role of Transport Canada: Amending Air Ontario's Operating Certificate

Section 700 of the Air Regulations states that:

> No person shall operate a commercial air service in Canada unless he holds a valid and subsisting certificate issued by the Minister certifying that the holder thereof is adequately equipped and able to conduct a safe operation as an air carrier.

The operating certificate is the document that certifies that an air carrier has been permitted to operate in Canada. Included in the operating certificate are a description of the air carrier's operation and a listing of the types of aircraft operated.

It is the responsibility of Transport Canada to scrutinize applications for operating certificates and to ensure that air carriers comply with their operating certificate and operations specifications. The Transport Canada Air Carrier Certification Manual describes the importance of the operating certificate:

> The public's protection ... is safeguarded by the *Aeronautics Act*, the *Air Regulations*, the *Air Navigation Orders*, operating certificates and Operations Specifications forming part thereof. These statutory requirements are the main instruments for ensuring that aircraft operations are conducted safely.
>
> (Exhibit 1026, p. 3)

To amend the operating certificate, the air carrier must obtain authorization from the minister. When Air Ontario sought to introduce the leased F-28 aircraft to its operation, it was required to apply to Transport Canada for an amendment to its operating certificate. In this regard, Air Ontario forwarded to Transport Canada a package of documents dated January 24, 1988. They included a number of required Transport Canada standard forms that detailed the specifications of the aircraft, the airports into which Air Ontario planned to operate the aircraft, the operations personnel involved with the program, and the maintenance facilities at Air Ontario.

In addition to its filing of these required standard forms, Air Ontario included a package of documents nominating Captain Claude Castonguay as a "B Authority" company check pilot. (See the discussion regarding the role of Captain Castonguay in chapter 20, F-28 Program: Flight Operations Training). Finally, in appendices A and B to the application, Air Ontario described the proposed F-28 deployment at Air Ontario.

This application was reviewed by Transport Canada, Ontario Region. Mr Martin Brayman, regional superintendent of large air carrier inspection, testified that it was his group at Ontario Region which initially reviewed the Air Ontario application. An approval checklist was tendered into evidence indicating that, between February 2, 1988, and May 30, 1988, Mr Brayman and others in Transport Canada were reviewing various aspects of the Air Ontario application (Exhibit 1024). Mr Brayman testified that the Certification Branch within Ontario Region identified on the checklist the tasks that must be completed by Air Carrier Branch in its review of Air Ontario's application. It was Mr Brayman's responsibility to ensure that the tasks were completed. The checklist was signed as completed on May 30, 1988, by Mr Wilf Bradbury of Ontario Region.

The various components of the Air Ontario application were signed and recommended for approval by Mr A. Bryson of Ontario Region Airworthiness Branch and Mr R.J. McKnight of the Certification Branch. On June 2, 1988, Mr McKnight and Mr Donald Sinclair, Ontario Region manager of the air carrier operations branch, recommended to Transport Canada headquarters that the requested amendment to the Air Ontario operating certificate be granted.[8] It was noted by Mr McKnight and Mr Sinclair that Air Ontario was given a temporary operating certificate valid from May 31, 1988, to July 31, 1988, pending the formal approval of the amendment by Transport Canada headquarters (Exhibit 968).

On June 10, 1988, the Air Ontario operating certificate was amended to include F-28 operations.

Amending the Operating Certificate: Related Issues

The application submitted by Air Ontario and approved by Transport Canada promised that certain steps would be taken by the company in support of the F-28 operation. These statements of intention may well have reflected Air Ontario planning as of January 28, 1988, the date of application. However, as of June 2, 1988, the date of approval, certain of the promises had not been fulfilled and, with respect to at least one undertaking, I am of the view that the omission was material to the crash of flight 1363.

The application states that:

> Operations Officers will receive training by Air Ontario supervisory pilots who are qualified on the F-28 to familiarize them with the

[8] The recommendation was made by Ontario Region to the Office of the Superintendent Air Carrier Certification, Standards and Legislation, at Transport Canada headquarters.

> aircraft and its systems with a special emphasis on flight planning, performance and MEL procedures.
>
> (Exhibit 855, p. 32)

It must be noted that, although it may have been their intention to train the operations officers fully as per the information contained in this application, in fact only duty operations managers (i.e., dispatch supervisors) received any F-28 training. The dispatchers, including the dispatcher responsible for flight 1363, received no F-28 training and acknowledged a lack of familiarity with F-28 systems.

The issue of dispatch and flight following is examined in detail in chapter 23, Operational Control, but for present purposes I note that in the three areas emphasized in the application to Transport Canada – flight planning, performance, and MEL procedures – there were serious deficiencies. Had these deficiencies been prevented it is unlikely the aircraft C-FONF would have been dispatched to Dryden on March 10, 1989. It appears from the application that Air Ontario properly identified the dispatch and operational control issues that required attention. The error was in failing to implement training in the manner promised.

Air Ontario's failure to fulfil an undertaking material to the application for an operating certificate amendment raises a number of issues:

- Was it the responsibility of the air carrier to advise Transport Canada of any change, or was it the regulator's responsibility to ensure the validity of the information contained in the application?

In my view, the regulator clearly should have scrutinized all aspects of the application to ensure that material changes would be detected prior to the approval of the application. Having stated this, I would also note that common sense would dictate that the air carrier should have informed the regulator of any such changes.

- Given that the regulator did have a group assigned to review the application, why did the group not identify a material deficiency regarding dispatch training?

It is observed by me in a subsequent chapter of this Report that operational control and dispatch are areas that were generally neglected by the regulator. The failure by the regulator to confirm that these undertakings had been discharged prior to the issuance of the amended operating certificate is simply another example of such neglect. If the regulator had regarded operational control and dispatch as important, then, at this early stage, many serious problems could have been avoided.

- Was the validity of the approved operating certificate amendment compromised by the incorrect information in the application?

In my view, even though the representations made by Captain Nyman were correct at the date of application, it must have been apparent to Air Ontario management prior to their receipt of the amended operating certificate that the information submitted in support of the requested amendment was erroneous. Further, there was nothing in the application that stated, though it may be implied, that the promised action would occur prior to the commencement of commercial services. Having stated this, I am of the view that the regulator should not have granted the requested amendment unless it assured itself that all aspects of the application were in place.

Throughout my assessment of Air Ontario's F-28 program, the role of Transport Canada and the certification process is examined. It becomes apparent that there is considerable room for improvement in Transport Canada's scrutiny and licensing of prospective air carrier operations.

Air Canada and the F-28 Program Planning

By correspondence dated November 19, 1987, Mr Thomas Syme forwarded to Mr Bruce Aubin, Air Canada vice-president of facilities and supply and chief technical adviser, a copy of the F-28 Project Plan for his review and comment. Mr Syme did this at the suggestion of Mr William Rowe, an Air Canada representative on the Air Ontario board.

Mr Syme testified as to his sending the F-28 Project Plan to the chief technical adviser at Air Canada:

> Q. Was the Project Plan itself reviewed at all by anyone at Air Canada, currently in situ at Air Canada?
> A. Yeah ... it was either raised at the executive committee or at the board. The shareholder rep of Air Canada suggested it might be helpful to forward a copy of the implementation plan or invited me to forward a copy of the implementation plan to one of their senior technical vice-presidents for review and comment.
> Q. And first of all, who was the shareholders' rep who made that recommendation?
> A. Bill Rowe.
> Q. And the senior technical vice-president to whom you sent the plan, who was that?
> A. Bruce Aubin.
>
> (Transcript, vol. 98, pp. 141–42)

Mr Rowe confirmed that it was he who suggested that the F-28 Project Plan be forwarded to Mr Aubin:

Q. And it seems we have a mention of the board on the 12th of August. Let's start there, and I will ask you who was doing the discussing at the board level and what was discussed with regard to the – and what literature, if any, was shown, or information given to the board at that time?
A. The subject would have been introduced by the chief executive officer, and supported by his staff. The discussion would have centred around the use of the aircraft, the economics and the expected return to the company.
Q. All right. And I take it it's – in the context of a five-year plan, it was considered a viable operation, from your point of view?
A. Yes.
Q. As a board member?
A. Yes, it was.
Q. The fact that it was a jet being introduced into a turbo prop and piston fleet, was that ever the ... the subject of any discussion?
A. Yes, it was. We were concerned that it be done in the proper manner and that the necessary adjustments to the operation of Air Ontario take place to allow the introduction of the aircraft itself.
Q. Was any thought given to the lack of jet expertise within the Air Ontario executive or operations group?
A. It would have formed part of a discussion, general discussion, on the introduction of jets in total.
Q. Do you remember anything specific about that discussion?
A. No specific concern, no.
Q. Was it a subject that was raised and dispelled or was it a subject that was considered worthy of further pursuit?
A. No, it was part of general discussion on the whole subject of introduction of the jet itself, because it was a major move on the part of the company.
Q. Was any thought given at the board level of going to Air Canada for any expertise?
A. I believe I referred Bill [Deluce] to Bruce Aubin of our company, that he would be available to Bill [Deluce] ... to consult with him if required.
Q. And indeed, we have Mr Aubin's correspondence before the Commission, and to summarize it, Mr Syme wrote to Mr Aubin, Mr Aubin wrote back to Mr Syme and Mr Aubin was provided with the F-28 Project Plan for his comment.
A. Right.

(Transcript, vol. 121, pp. 229–31)

By draft correspondence dated January 14, 1988, Mr Aubin provided his comments on the Air Ontario Project Plan. Mr Aubin provided constructive comment on various specific aspects of the plan, and in general his assessment of the plan was positive. Mr Aubin wrote:

> The overall scheduling of the program looks good, however, do you have anyone following-up progress which each division apart from yourself and does each division have its own set of jobs identified. Some of the above are specific activities. Very often a close follow-up can help a division solve some problems early and prevent delays.
>
> (Exhibit 804, p. 3)

It should also be noted that there was no flight operations input solicited from Air Canada, the area within which most of the operational deficiencies occurred.

By correspondence dated February 16, 1988, Mr Syme thanked Mr Aubin for his comments on the plan and provided further details on the F-28 implementation.[9] Mr Syme reported that:

> A project manager is in place to follow up and coordinate all the activities of the various divisions and has indicated that the program is well on track, including the following:
>
> a) Personnel Selection
> b) Pilot Training
> c) Spares Provisioning
> d) Test Ground Equipment and Maintenance Equipment Provisioning
> e) Transport Canada Paperwork Processing
> f) Aircraft Preparation
> g) Aircraft Ferry Flight Preparation
> h) Scheduling of Aircraft
> i) Program Training for Ramp, Counters and Dispatch
>
> (Exhibit 803, p. 2)

Evidently, between the correspondence of February 16, 1988, and the commencement of commercial service on June 1, 1988, events intervened to cause the Project Plan to go off track. The F-28 was added to the Air Ontario operating certificate and commercial service did begin June 1, 1988, yet several material components of the Project Plan were incomplete. Chapters 16–22 of this Report examine deficiencies in the F-28 program that were revealed by the accident investigation.

---

[9] This was the last correspondence exchanged between Air Ontario and Air Canada on the subject of the F-28 Project Plan. In addition to Mr Aubin's review of the plan, it was the evidence of Mr Syme that a Mr Clayton Glen of Air Canada reviewed the Air Ontario commercial and financial analysis of the alternative aircraft candidates.

The Post-Accident F-28 Pilot Survey

In the period immediately following the crash of flight 1363, Air Ontario's flight safety officer, Ronald Stewart, decided to conduct a survey of the Air Ontario F-28 pilots to assess the F-28 program. Captain Stewart testified that, because he was not an F-28 pilot, he wanted to get some background information on the F-28 operation and, in particular, he wanted specific information on de-icing and hot refuelling procedures. Captain Stewart had attended at Dryden as an observer on the CASB investigation team, and de-icing and hot refuelling had emerged as two areas of immediate safety concern. Of further interest to him were rumours persisting at Air Ontario regarding various operational practices in the F-28 program. Captain Stewart testified that he "wanted to get to the bottom" of "fairly strong rumours that indicated a ... fairly poor operation" (Transcript, vol. 74, p. 98; vol. 95, pp. 153–54).

It had been Captain Stewart's intention to contact a large number of Air Ontario F-28 pilots for his survey. Over a period of approximately two weeks, Captain Stewart was able to interview five pilots.[10] These were Captain William Wilcox, Captain Erik Hansen, First Officer Christian Maybury, First Officer Monty Allan, and First Officer Deborah Stoger. Captain Stewart described this group of pilots as a random sampling of the F-28 pilot group.[11]

Captain Stewart canvassed the pilots' views on a variety of areas, including:

- the quality of the F-28 training program
- F-28 de-icing procedures
- fuelling practices
- F-28 standard operating procedures
- F-28 safety, and
- possible differences in operating practices of former Air Ontario Limited pilots and former Austin Airways pilots.

In addition to these fairly specific areas of inquiry, Captain Stewart asked the pilots if they had any additional concerns or comments about the F-28 program.

---

[10] There were 25 Air Ontario pilots who received ground school and flight training on the F-28 aircraft. When Captain Stewart was conducting his survey in April 1989, he attempted to contact 18 active Air Ontario F-28 pilots. He was able to contact five pilots – two captains and three first officers – before the survey was terminated following Captain Stewart's discussions with the vice-president of flight operations.

[11] The F-28 pilot survey–related issues are discussed at length in chapter 42, Incident and Accident Reporting and Pilot Confidentiality.

It was in respect of these additional comments and concerns that I heard telling evidence regarding deficiencies in the F-28 program. Each of the five pilots was called as a witness before me to explain his or her answers to Captain Stewart's questionnaire. I found all the pilots to be forthright in their evidence and I commend them for their honesty in testifying under somewhat trying circumstances.

Certainly care must be taken in considering any post-accident assessments of the F-28 program. In this case, however, there was ample independent evidence to corroborate the assessments made by the pilots. After having considered the circumstances surrounding their testimony and the substance of the testimony itself, I place great weight on the observations of the five pilots regarding the F-28 program.

It is not my intention to review the details of the pilots' testimony at this point. Instead, such evidence is referred to throughout the analyses of the various operational deficiencies that follow.