# Chapter 8
# Department of Health and Community Services
# Air Ambulance

## Contents

# Department of Health and Community Services Air Ambulance

## Background

**8.1** There are two important reasons why we chose the New Brunswick air ambulance service for review as part of our work in the Ambulance Services Branch. The first is that this new service has increased costs to the public. Second, the mission of our Office involves promoting accountability by providing objective information to the people of New Brunswick through the Legislative Assembly. This project allowed us to address our mission by enabling us to report information on key aspects of the decision to set up a stand-alone air ambulance service for the residents of New Brunswick. It also allowed us to review and report upon the first year of operations of the new service.

**8.2** The following is a brief chronology of the events that lead up to the commencement of the stand-alone New Brunswick air ambulance service on 1 April 1996. Prior to that date, the Province was obtaining air ambulance services on an "as needed" basis from any one of a number of different service providers.

- In 1987, a consultant's report prepared for the Province recommended that the need for air ambulance services be made the subject of in-depth review by the Department of Health and Community Services. The report further recommended that funding not be provided to an air ambulance service without first ensuring there was adequate financial support for the road-based, pre-hospital Emergency Medical Service (EMS) system.

- In 1988, the provincially established Social Policy Committee presented a green paper on Ambulance Services. The green paper summarized comments made in public hearings held during that year. Among other things, it recommended that a helicopter-based air ambulance service be developed for New Brunswick.

- The green paper led to the preparation of the 1989 report, *"Ambulance Services in New Brunswick"*. It further recommended that the proposed air ambulance service be developed parallel to ground ambulance service, and that it be obtained in the most cost effective

manner possible. The government accepted the recommendation and announced its intention to implement a public air ambulance service for New Brunswickers.

- In 1991, the Department of Health and Community Services went to the Priority and Planning Committee of the Province with proposals for substantial changes in departmental operations. These included the regionalization of hospital services, and the creation of a public air ambulance service to be used in providing emergency transportation for New Brunswick residents. The Priority and Planning Committee approved most of the proposals, and changes commenced.

- At about the same time, departmental officials became aware of a similar air ambulance initiative then underway in Nova Scotia. New Brunswick representatives approached Nova Scotia about the possibility of developing a joint Maritime air ambulance service. In 1992, discussion began involving representatives from Nova Scotia, Prince Edward Island, and New Brunswick as to the form such a service might take.

- In August 1993 at the Council of Maritime Premiers conference, New Brunswick and Nova Scotia announced their intention to enter into a joint initiative to provide air ambulance service for residents of the two provinces. A committee was set up that included four representatives from each province. Prince Edward Island had opted out after initial discussions due to budget constraints. The proposed service was to have a dedicated aircraft and air medical crews based in Halifax, and a coordination centre to receive, screen and coordinate calls located in Moncton.

- The first request for proposals (RFP) from potential service providers was developed and issued in the fall of 1993. The initial target date for start-up of the program was December 1993. This date was subsequently extended several times. A second, revised RFP was issued in early 1994.

- In March 1994, upon consideration of submissions relating to the second RFP, a service provider was chosen and announced. However, in June 1994, that company sought bankruptcy protection.

- In July 1994, the Medical Transport Coordination Center (MTCC) became operational. The MTCC currently operates from the Moncton Hospital annex. Its function is to receive, screen, and coordinate calls for emergency air ambulance service. It is also intended to handle similar functions related to calls for air and ground ambulance patient repatriations. Repatriations are transfers of provincial residents back to New Brunswick from out-of-province facilities.

- In late 1994, a third RFP was issued. The second selection of an air service supplier was made by the committee in March 1995 and approved by the Ministers of Health in the two provinces. Unfortunately, due to disagreements between the two provinces, the decision was never ratified and the Maritime initiative was discontinued. The main areas of contention seemed to relate to the type of aircraft, the choice of an air service provider, and the appropriate means of governing the air ambulance service.

- In May 1995, the Department of Health and Community Services issued a press release indicating its intent to secure an air ambulance service for New Brunswick. In June 1995 a RFP was issued. A service provider was selected in December 1995.

- A stand-alone New Brunswick air ambulance service commenced operations on 1 April 1996.

**8.3** The Department of Health and Community Services, Ambulance Services Branch (ASB), has established a unit known as Air and Dispatch Operations to handle the operations of the air ambulance service and the MTCC. The unit is the responsibility of the Director of ASB. The air ambulance service is known as NB AirCare. The fixed-wing aircraft used to provide service is located at the Moncton airport. Air and Dispatch Operations unit employees are located in the Moncton Hospital annex.

**8.4** The Province of Nova Scotia has also set up a provincial air ambulance service, using a helicopter as its primary aircraft. The two provinces have agreed to provide back up to each other when the need arises.

## Scope

**8.5** Two objectives were stated for this project in our planning documents:

- to ensure that the existing New Brunswick Air Ambulance service is meeting its mandate with due regard for economy and efficiency while complying with established legislative and policy guidelines; and
- to ensure that the Department of Health and Community Services has established satisfactory procedures to measure and report on the effectiveness of the Air Ambulance program.

**8.6** Our examination procedures for this project included discussions with the Director of ASB, the Manager of the Air and Dispatch Operations unit, and various other individuals who were involved with the implementation of the New Brunswick service. We examined various documents and files relating to the decision to implement a stand-alone air ambulance service in New Brunswick. We also reviewed information and documents relating to operations of the service during the 1996-97 fiscal year.

## Results in brief

**8.7 The decision to create a stand-alone air ambulance service was based upon the need to improve the quality of service and to meet the demands of a regionalized hospital system.**

**8.8 The Department selected a fixed wing aircraft instead of a helicopter because the service was primarily intended to be a method of transporting stabilized patients from one medical facility to another.**

**8.9 A decision was made to lease the aircraft without the preparation or consideration of a financial comparison between the lease and buy options.**

**8.10 The lease agreement with the service provider was not signed until 1 October 1997, eighteen months after the commencement of the air ambulance service.**

**8.11 No measurable strategic goals have been established against which to assess the performance of NB AirCare.**

**8.12 There are no regular operating reports currently being prepared by NB AirCare and provided to the Ambulance Services Branch.**

**8.13 Out-of-province users do not appear to be paying all costs associated with their usage of the air ambulance service.**

**8.14 The facilities at the Coordination Center and hangar in Moncton need improvement.**

**8.15 One hundred and fifty-two services were provided during the 1996-97 fiscal year. One hundred and two of these services were provided to New Brunswick residents.**

**8.16 The net cost of air ambulance service to the Province for the 1996-97 fiscal year was $1.65 million.**

## New service decision

### *Rationale for stand-alone air ambulance service in New Brunswick*

**8.17** The decision to proceed with the establishment of a stand-alone air ambulance service for New Brunswick appears to have been based on two factors, quality of service and the regionalization of hospital services.

**Quality of service**

**8.18** During the late 1980s and early 1990s, the Province relied heavily upon the free service of the Maritime Command of Air Search and Rescue for emergency transfers within the Maritimes. The Quebec Aeromedicale service was used when transfers to Quebec hospitals were required. Other service providers were sometimes called upon as well. Costs of the service providers varied significantly. Also, using such a variety of service

providers meant that neither response times nor the quality of service provided were consistent. Additionally, we were informed that there were cases where acceptable service providers were simply not available, leading to significant delays in moving patients.

**8.19** The quality of service provided to northern New Brunswick was considered deficient by residents of that area. Air Search and Rescue did not provide service for non-emergency transfers. Therefore, because of the cost of hiring other service providers, ground ambulances were normally used for these non-emergency transfers. As a result, patients being transferred routinely faced road transfers of five hours or more to facilities in Saint John or elsewhere.

**8.20** Air Search and Rescue is still available as a service provider, but has recently added a requirement that users pay a fee for service. Additionally, they cannot guarantee that nurses or physicians will be assigned to flight crews.

**8.21** Implementation of a stand-alone New Brunswick air ambulance service was seen by decision-makers as a way of improving and standardizing the quality of air ambulance service in the Province.

**Regionalization of hospital services**

**8.22** In the early 1990s, the delivery of hospital services was regionalized. Regionalization meant that more specialized services would only be offered on a regional or provincial basis. Planning documents prepared by ASB in the late 1980s and early 1990s recognized that this initiative would increase pressure on ASB. The ability to transfer patients between facilities in an efficient and effective manner would become more important. The provision of adequate air ambulance services was seen as one facet of an effective transfer system in the new environment. The availability of such a service was seen as being particularly useful when the rapid transfer of patients was warranted or where long distances were involved.

### *Cost considerations*

**8.23** The decision to create a stand-alone New Brunswick air ambulance service appears to have been primarily taken in order to improve the quality of service, and to meet the demands of a regionalized hospital system. A departmental representative confirmed that, within limits, cost considerations were secondary. A departmental document dated May 1995 indicated that the decision to contract a single air service provider would cost the Province an additional $350,000 to $450,000 per annum. The proposed budget for the service as included in the document, *"Air Ambulance Service A Proposal"*, dated 14 June 1995, showed gross expenditures of $1.4 million and anticipated recoveries of approximately $0.4 million for a net cost per annum of $1.0 million. It was this proposal upon which the decision to proceed with a stand-alone air ambulance service for New Brunswick was based. Qualitative factors led the Department to make the decision to go ahead with a stand-alone service despite the expected increase in costs.

## Aircraft selection decision

### *Aircraft options available*

**8.24** There are two primary airmedical response options available. They include the "scene response" option and the "inter-facility transfer" option. "Scene response" involves a rotor-wing aircraft (helicopter) flying directly to major trauma or medical calls and transporting the patient directly to an appropriate facility. "Interfacility transfer" can be performed by rotor-wing or fixed-wing aircraft, and usually involves delivery of a higher level of care for a longer time period.

### *Factors in the decision taken*

**8.25** The Department's position is that the New Brunswick service was intended mainly for use in transporting stabilized patients from one medical facility to another (i.e. the inter-facility transfer option). Other considerations in choosing a fixed-wing aircraft over a helicopter included the ability of fixed-wing aircraft to operate in icing conditions, the relative cost of the two options, and the greater availability of runways in the Province in comparison with helipads.

## Selection of service provider

### *Lease versus buy decision*

**8.26** The Department decided to lease the aircraft, including pilot services, from a third party rather than to buy an aircraft and hire pilots. We were told that this decision was made in order to avoid the large capital investment involved in purchasing a plane. It was also indicated to us that the Province is not in the "air service business." However, to the best of our knowledge, a cost comparison of the lease option versus the purchase option of buying and maintaining an aircraft and hiring pilots was not done. Therefore, we were unable to determine if leasing was the most economical decision.

**Departmental comments**

**8.27** *On consultation with the industry and government transportation resources, the Department chose not to operate the aviation component of the air ambulance service directly. …. This decision was made because air ambulance aviation expertise is limited in the industry as a whole and did not exist in government. Thus, consideration of leasing versus purchase of the capital asset was a limited consideration.*

### *RFP process and approval*

**8.28** From our review, the Department appears to have complied with pertinent aspects of the Public Purchasing Act, and related clauses in the provincial Administration Manual, relating to the acquisition of services.

## Lease contract

**8.29** At the time of our audit, there was no signed lease agreement with the service provider. The service provider was operating under the terms of a signed memorandum of understanding between it and the Department of Health and Community Services. Because of delays in getting the lease signed, the period covered by the memorandum of understanding had to be extended. On 6 October 1997, the Department provided us with a lease contract. The lease contract had been signed on 1 October 1997, eighteen months after the commencement of the air ambulance service.

**Recommendation**

**8.30 We recommend that future lease agreements be signed in advance of the period covered by the agreement.**

**Departmental response**

**8.31** *[We] concur that it is optimal to completely conclude final contract negotiations prior to the initiation of any contract for service, but it was necessary to begin providing service prior to this occurring……the Department and the service providers did duly execute a memorandum of agreement prior to service initiation binding both parties to the provisions, conditions and limitations of the Request for Proposal and the service provider's response to it. The Department of Justice reviewed this document, and considers such documents to be legally binding on both parties.*

## Mandate and objectives

### *ASB strategic plan*

**8.32** The strategic plan for ASB does not specifically identify a mandate or mission for the air ambulance service. ASB's mission, as defined in the 1997 strategic plan for the branch, is

> *"to create and maintain an environment that enables efficient and effective use of resources in the provision of prehospital and inter facility patient care."*

**8.33** In reviewing the strategic plan for the ASB, it appears that both the mission and related strategic goals relate specifically to ASB's coordination role in the delivery of ambulance services. They only address air ambulance operations in a general way.

### *Air ambulance mandate*

**8.34** The Manager of Air and Dispatch Operations has drafted a distinct written mandate for the air ambulance service. The Director of ASB has approved this mandate, and it reads as follows.

> *"To provide a rapid response, critical care dedicated air ambulance for New Brunswick and Maritime patients."*

**8.35** However, there have been no measurable strategic goals established which are linked to this mandate. Therefore, there is no means of assessing the degree to which NB AirCare has met its agreed-upon mandate.

**Recommendation**

**8.36 We recommend that clear, measurable objectives be designed for the air ambulance service and linked to the existing air ambulance mandate.**

**Departmental response**

**8.37** *An application for accreditation of the service by the Commission for the Accreditation of Air-Medical Services will take place during the 1998-99 fiscal year. The application process requires that goals and objectives be set and measured. These will be linked to the mandate.*

## Information capture and reporting

### *Information captured*

**8.38** A great deal of information is captured for each transfer or requested transfer. Most of this data is readily accessible through a

database system. Computers are physically located at the MTCC. The database system used was designed in-house and seems to be very flexible in terms of reporting information that is available. Document packages are filed at the MTCC.

**8.39** From information captured on the database system, we were able to determine that NB AirCare provided a total of 152 services during the 1996-97 fiscal year. Of those, 102 were provided to New Brunswick residents, 20 to Nova Scotia residents, and 30 to Prince Edward Island residents. Of the services provided to New Brunswick residents, 36 were for transfers within New Brunswick; 49 were for transfers out of New Brunswick; 16 were flights back to New Brunswick from out-of-province facilities; and one related to a transfer between two out-of-province facilities.

### *Information reported*

**8.40** Currently, NB AirCare does not provide any formalized operating reports to ASB on a regular basis. Reports are requested on an ad-hoc basis by ASB, and these reports usually deal with specific issues. For example, recent information requests have related to the planned addition of a neo-natal team to air ambulance service in New Brunswick. Regular monitoring of operations is limited to frequent discussions between the Director of ASB and the Service Manager of NB AirCare. Management within ASB review financial reports relating to air ambulance as produced from the provincial financial information system on a regular basis.

**8.41** It is our understanding that work is underway on a standard reporting package relating to the operations of NB AirCare.

### *Additional desirable reporting*

**8.42** Incident reports are prepared each time a procedure has not been fully complied with in providing air ambulance services. Currently, these incident reports are not summarized anywhere by NB AirCare. They are verbally discussed with ASB management, but are not otherwise reported. While we did not note any significant problems in our review of incident reports, we do feel that it would be appropriate to summarize them and report them on a regular basis to head office.

**8.43** Additionally, airmedical staff of NB AirCare provides feedback questionnaires to receiving and sending facilities each time a service is provided. Again, as with the incident reports, questionnaires returned are not summarized anywhere nor incorporated into periodic reports for head office. We were told that the responses received to questionnaires have been nearly all positive during the first year of operation.

### Recommendations

**8.44 We recommend that an appropriate group of operating reports be developed by NB AirCare and provided to the Ambulance Services Branch on a regular basis. These reports should allow management to monitor operations at NB AirCare and to assess the degree to which strategic objectives are being met.**

**8.45 We further recommend that incident reports and responses to questionnaires be summarized and included in regular reporting to Ambulance Services Branch management.**

**Departmental response**

**8.46** *This……will be addressed in two ways: development of a strategic information plan for the Ambulance Services program to provide an integrated approach to contractual and finance, air and land operations, patient information, and inspection and enforcement needs; and development of the application for accreditation of the service, which will require comprehensive standardized reporting for the air ambulance service to be available.*

## Recoveries from users of the service

***New Brunswick residents***

**8.47** NB residents pay a co-pay fee of $50 for each inter-hospital transfer, regardless of whether the individual is transferred by land or air. No additional charges are levied.

***Non-residents of New Brunswick***

**8.48** The primary role of NB AirCare is to transport New Brunswick residents between hospitals in New Brunswick or to hospitals elsewhere in the Maritimes or central Canada as required. As a secondary role, NB AirCare provides service to residents of Nova Scotia and Prince Edward Island when called upon to do so.

**8.49** New Brunswick and Nova Scotia have agreed that each will bill an $8,500 reciprocal fee when the other province uses their service. The majority of the services provided to Nova Scotia occur during the winter months when Nova Scotia's helicopter-based service is often grounded due to icing conditions.

**8.50** The majority of services currently provided by Nova Scotia relate to neo-natal transfers. Neo-natal transfers by Nova Scotia account for most of the "Purchased services (excluding repatriations)" as shown in Exhibit 8.1. The requirement to buy service from Nova Scotia for neo-natal cases should be significantly reduced after 1 November 1997. Starting on that date, NB AirCare will begin handling most New Brunswick neo-natal transfers. Training of air medical staff and drafting of policy and procedures manuals relating to that specialty are currently underway.

**8.51** There is an understanding between the two provinces that they will not compete with each other for third party business.

**8.52** New Brunswick has also agreed with Prince Edward Island to bill that province $10,850 each time service is provided to a resident of Prince Edward Island.

**8.53** The gross cost of the air ambulance service for 1996-97 (excluding purchased services), as can be determined from information presented in Exhibit 8.1, was $1.9 million. The average cost of the 152 services provided during the year was therefore approximately $12,600. The average cost for the 102 services provided to New Brunswick residents during the year, net of recoveries, was $13,850. These average costs are higher than the amounts currently being billed to Prince Edward Island and Nova Scotia. Therefore, we must conclude that fees billed for non-resident use of the air ambulance service did not cover all costs associated with providing the service during the 1996-97 fiscal year.

**Recommendation**

**8.54 We recommend that the rates per service currently being charged to the other provinces be re-evaluated to ensure that they adequately cover all costs associated with the provision of air ambulance service.**

**Departmental response**

**8.55** *The current tri-partite agreement between Nova Scotia, PEI and New Brunswick expires March 31, 1998. These comments will be considered at that time..... During negotiation of any such agreements, care must be taken to not exceed the market value of such a service.*

## Facilities

**8.56** During the course of our review, we had the opportunity to tour the Air and Dispatch Operations facilities in Moncton. We noted that the office assigned to the MTCC in the Moncton Hospital annex did not, in our opinion, provide adequate space for the coordination function. We also noted that office and storage facilities at the hangar at the Moncton airport were in a state of disrepair. Additionally, our understanding is that facilities at the hangar are not heated during the winter months, meaning that out-of-town air medical staff has no base at which to wait between air medical flights. We have been told that administrative staff is making attempts to improve the quality of facilities in both locations.

**Recommendation**

**8.57 We recommend that the current facilities be reassessed and that improvements be made as necessary.**

**Departmental response**

**8.58** *We are working with the aviation service contractor to examine opportunities for improvement; however there is currently no additional hangarage at the Moncton Airport. In regard to the physical plant provided for the coordination function, a detailed examination will be undertaken as part of the evaluation of a pilot for land ambulance dispatch. Changes will be made as appropriate subsequent to this evaluation.*

## Conclusion

**8.59** Our conclusion is presented in response to our project objectives as identified in the “scope” section of this chapter.

**8.60** *To ensure that the existing New Brunswick Air Ambulance service is meeting its mandate with due regard for economy and efficiency while complying with established legislative and policy guidelines.*

**8.61** A mandate has been defined for the New Brunswick Air Ambulance service by the Manager of Air and Dispatch Operations and approved by the Director of Ambulance Services. However, since measurable strategic objectives have not been defined for the service, we were unable to assess the degree to which this mandate is being met. Strategic objectives should more specifically define what the service is intended to accomplish and give a focus to reporting provided to management.

**8.62** We did not note any cases where legislative or policy guidelines were not complied with. Additionally, we were pleased to note that the policies and procedures relating to the operations of the air ambulance service appear to be complete and well written.

**8.63** *To ensure that the Department of Health and Community Services has established satisfactory procedures to measure and report on the effectiveness of the Air Ambulance program.*

**8.64** Reporting relating to air ambulance operations is done on an ad-hoc basis. We feel there are improvements that should be made in this area. Appropriate reporting should be developed to allow management to assess the degree to which the air ambulance service has met its mandate. Such reporting should be tied to defined strategic objectives for the air ambulance service.

*Exhibit 8.1*
*Comparative cost of service*

| | 1996-97 Fiscal Year | | 1995-96 Fiscal Year |
|---|---|---|---|
| | **Budget** | **Actual** | **Actual** |
| Service provider | $ 927,721 | $ 915,579 | $ - |
| Purchased services (excluding repatriations) | 216,750 | 185,241 | 454,753 |
| Payroll, administrative, and other costs | 1,078,795 (1) | 1,000,990 | 591,456 (2) |
| Gross cost (excluding repatriations) | 2,223,266 | 2,101,810 | 1,046,209 |
| Less: Recoveries | ( 538,000) | ( 504,300) | - |
| Net cost (excluding repatriations) | $ 1,685,266 | 1,597,510 | 1,046,209 |
| Purchased services (repatriations) | | 54,859 | 213,788 |
| **Net cost of air ambulance service** | | **$ 1,652,369** | **$ 1,259,997** |

*(1) Includes one time start-up costs budgeted at $318,889 for the 1996-97 fiscal year.*

*(2) Some one time start-up costs were incurred during the 1995-96 fiscal year and are included in this figure. However, the actual amount could not be determined from available information.*