



September 8, 1998

The Honourable David Collenette
 Minister of Transportation
 Minister's Office – House of Commons
 East Block – Room 104
 Ottawa, Ontario
 K1A 0A6

Dear Minister Collenette,

Re: NavCanada's Notice of New and Revised Service Charges

This letter is written to once again ask you to invoke Section 35 (2) of the Civil Air Navigation Services Commercialization Act which states that **the charging methodology may recognize that the value of the services differs among users.** This section can and should be invoked to reduce user fees in the north to be comparable to what northerners paid in charges before the system was operated by NavCanada. As I outlined in my letter to you on August 7, 1998, NavCanada's proposed fee structure does not take into account that the north receives a lower level of aviation services than the south.

In addition to the lower level of services provided in the north, NavCanada's Notice of New and Revised Service Charges fails to take into account that significant revenue is generated from overflights over the Northwest Territories. A large percentage of air traffic from Alaska to the central and eastern United States and from the western United States to Europe flies over the Northwest Territories. Given that NavCanada collects its enroute charges for overflights based on a formula which includes distances travelled in kilometres, recognition of the revenue generated through overflights in the Northwest Territories needs to be factored into NavCanada's calculations for fees.

Perhaps even more importantly, it has come to my attention that NavCanada is going to make windfall profits from the opening of four new polar routes. Based on conservative estimates, NavCanada will earn roughly an additional \$225 million in enroute charges. Approximately, \$140 million of this money will be accrued by flights over NWT airspace. The windfall that is going to be made from these polar routes deserves to be considered in NavCanada's, Notice of New and Revised Service Charges, with respect to northern fees.



Please consider the following information when calculating air service charges to the north.

Background

The August 5-11 issue of the reputed aviation magazine, Flight International, addresses the issue of new polar routes. Since 1994, the International Air Transport Association (IATA) has been working on getting the Russians to open up their restricted airspace so that polar routes will open up non-stop flights between Asia and North America. A dialogue was opened with Russia through a bilateral working-level forum, the Russia/America Co-ordinating Group for Air Traffic (RACGAT).

As a result of a series of 1997 Russia/America Co-ordinating Group for Air Traffic (RACGAT) meetings, four polar routes from North America were mapped out. These four routes will follow fixed tracks through Russian airspace to the longitude of 168.58 W boundary line with North America. After this, flexible tracking will be permitted. The Polar route destinations from North America are:

1. India, Pakistan, Sri Lanka and Bangladesh
2. South East Asia, Singapore, Malaysia, Thailand, Indonesia
- 3 and 4. China, Hong Kong, Japan, Taiwan, Korea

Three test flights have already been done. These flights were a practical demonstration that commercial passenger aircraft can pass safely over the North Pole without any adverse effect on navigation systems or flight management computers. User trials have been scheduled in late August or September. Northwest Airlines is planning to operate from Detroit to Beijing, Singapore International Airlines to New York via Beijing, and Cathay to Toronto and New York. Others expected to take part include Air Canada and Canadian Airlines, flying from Toronto to Beijing and Hong Kong, respectively, and United Airlines to India.

Implications of Polar Route Travel

North Pacific traffic has been expanding by an average of around 13% annually since 1995, topping over 60,000 flights in the last year. With the opening of the polar routes, many of the transPacific routes will be re-routed. Given that northern Canada is strategically located as the shortest route for one of the busiest routes of the world, and that Russian airspace is expected to continue to open up, the volume of traffic going over northern airspace is going to escalate.

How this relates to the North

An industry source calculates that approximately 62% of these new routes will cross the Northwest Territories. (See enclosed map.) As enroute charges are calculated using distance travelled in kilometres, it is fair to state that revenue generated from this geographic resource – northern airspace- should be reflected in NavCanada's fee structure. Currently, there is no recognition of where royalties raised through overflights come from. Thus, the revenue raised from an overflight over PEI – a province 1/5 the size of Great Slave Lake – is not distinguished from revenue raised from overflights of the Northwest Territories. Yet, it is obvious that the amount of money levied on an overflight of the Northwest Territories would be much greater than the money raised from flying over PEI.

NavCanada's Discussion Paper on Development of Phase II Service Charges states that:

Given the *ANS Act* recognizes the special circumstances of the North, users in the South would generally accept that some support for the North is part of the terms for commercializing the ANS. (page 18).

This statement overlooks the fact that because of the north's strategic location, we are generating much of the revenue which allows NavCanada to stay in business. Currently, a large percentage of the flights from Alaska to the central and eastern United States and from the western United States to Europe fly over the Northwest Territories. And with the opening of the Polar routes which are slated for next year, NavCanada can expect to receive a windfall in terms of overflight royalties. A large percentage of these polar routes cover NWT airspace.

As an example, Table 1 is an analysis of routes from New York to Asia. This table breaks down the total distance in Canadian airspace of each of the four polar routes. The table reflects the proportion of the flight that occurs within the NWT.

Table 1:

Traffic to and from New York via polar routes:			
Polar Route No.	Total Canadian Route Distance (km)	Total NWT Route Distance (km)	% NWT vs. Total Canadian distance
1	2,423	1,408	58%
2	5,114	3,145	61%
3	4,914	3,167	64%
4	4,702	2,900	62%
Totals	17,153	10,898	64%
Average	4,288	2,725	62%

NavCanada

Prior to the commercialization of the air navigation system, revenues from the Air Transportation Tax (ATT) were the primary source of funding for air navigation services. When NavCanada took over operating the system from the federal government, they developed a system to apply charges based on the following categories of air navigation services:

1. **Terminal** – terminal service charges are levied for air navigation services provided or made available to an aircraft at, or in the vicinity, of an aerodrome. Basically, it is a charge for landing and departing within Canadian airspace.
2. **Enroute** – this charge is applied to flights in Canadian-sovereign airspace or any other airspace where Canada has the responsibility to provide air navigation services. Enroute services are air navigation services other than terminal and oceanic services. Basically, it is a charge for flying through Canadian airspace. It is calculated by multiplying the unit Rate x Weight of the aircraft x Distance expressed in kilometres.
3. **Oceanic** - oceanic charges are based on a flat fee per flight. This fee is levied on North Atlantic Enroute Facilities and Service Charge (NAT). Therefore, any flight using NavCanada services during the course of a flight in the North Atlantic would be subject to an existing \$88.33 NAT charge per flight. A second oceanic charge is the International Communication Services Charge (Int'l Comm). The Int'l Comm Charge is for air-ground radio frequencies provided during the course of an international flight. The charge is currently \$58.49 per flight.

Because NavCanada is responsible for all aspects of airplane movement within sovereign Canadian airspace, a significant proportion of their revenue is generated through overflights. This revenue goes into the NavCanada "pot." With the opening of Russian airspace, for the first time non-stop routings will be possible from the eastern seaboard (New York) to Asian destinations. Air traffic from Asia will fly over NWT/Nunavut territory. IATA forecasts increases in world international scheduled passenger numbers will increase by 6.6% annually between 1997-2001, when they will reach 563 million. The most significant growth continues to be found in Northeast and Southeast Asia.

Table 2 analyzes enroute charges by aircraft type. The aircraft chosen are ones capable of flying non-stop between North America and Asia.

Table 2:

NavCanada Enroute charges by Aircraft type (RxWxD) per round trip flight (average route distance)			
Aircraft Type	Weight (W) Tonnes	Nav Can enroute charges per round trip flight	Portion accrued over NWT
Boeing 747	395	\$5,976	\$3,705
Airbus A-340	275	\$4,986	\$3,091
Boeing 777	298	\$5,190	\$3,281

Table 3 is a sensitivity analysis of the windfall profit that NavCanada would make based on 20-60,000 flights per year assuming a typical aircraft mix.

Table 3:

Projected NavCanada Additional Earnings Matrix					
Flights per Year	Estimated Fleet Mix			NavCanada Enroute Charges	NWT Portion
	B-747 (60%)	A-340 (30%)	B-777 (10%)		
60,000	\$215,136,000	\$89,748,000	\$31,140,000	\$336,024,000	\$208,334,880
40,000	\$143,424,000	\$59,832,000	\$20,760,000	\$224,016,000	\$138,889,960
20,000	\$71,712,000	\$29,916,000	\$10,380,000	\$112,008,000	\$69,444,960

What can be done?

As it stands, all money raised through overflights over Canadian airspace goes into NavCanada coffers. NavCanada has made the point that the vast size and remote location of the north make it expensive to provide services here. I believe that NavCanada must recognize that it is this very size and location that allows NavCanada to generate a large portion of their overflight revenue.

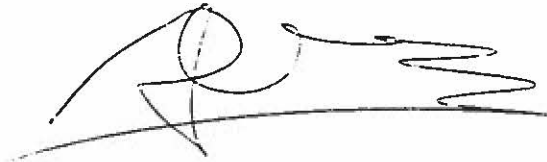
NavCanada's proposed fee structure will result in \$7.5 to \$10 million more in expenses to northerners while southerners will be saving \$100 million. The current fee structure needs to recognize that a significant portion of NavCanada's revenue is generated through overflights through northern airspace and split the revenue accordingly.

NavCanada is a not-for profit organization. In their Discussion Paper on Development of Phase II Service Charges, NavCanada states that illustrative charges have been developed based on an annual cost of \$900 million. The windfall that is coming from the opening of the Polar routes needs to be dispersed with recognition that a large proportion of this money is generated from overflights through northern airspace.

In closing, I am writing to ask you to reject the proposed fee structure. In my letter to you of August 7, 1998, it was established that the level of service provided by NavCanada in the north is of significantly lesser value than the same service provided to users in the south. I am asking you to invoke Section 35(2) of the Civil Air Navigation Services Commercialization Act which states that **the charging methodology may recognize that the value of the services differs among users.**

This section can and should be invoked to reduce fees in the North to be comparable to what the former ATT cost. Another option might be to calculate the royalties that are made on northern airspace, subtract the cost of services in northern Canada and disperse the profits to the north.

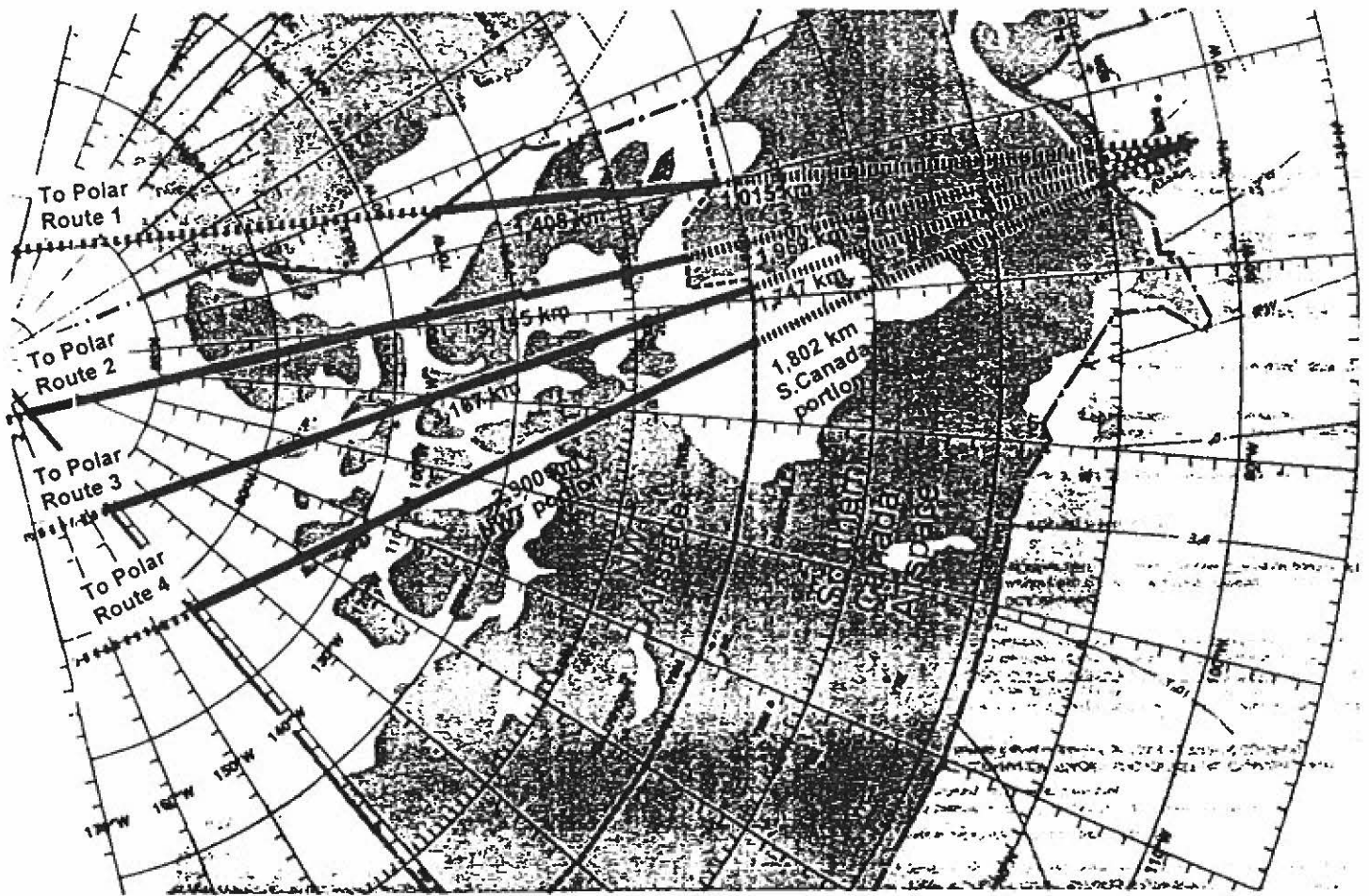
Sincerely,



Roy Erasmus
MLA, Yellowknife North

Enclosures – Map
Magazine article
Letter of August 7th

cc. Mr. Louis Comeau, Chairman, NavCanada
The Honourable Ethel Blondin-Andrews, P.C., M.P., Western Arctic
Ms. Nancy Karetak-Lindell, M.P., Nunavut
Members of the Legislative Assembly of the NWT
Mr. Bob Davies, President, NATA

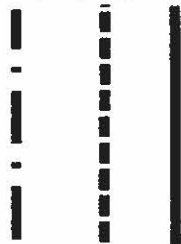


Legend:

Canadian Airspace Boundary

NWT Airspace Boundary

Portion of route in NWT airspace



The Honorable David Collenette
Minister of Transportation
Minister's Office – House of Commons
East Block – Room 104
Ottawa, On.
K1A 0A6

August 7, 1998

RE: NAV CANADA SERVICE CHARGES

Dear Minister Collenette,

I join my voice to the many northerners who have already stated that it is totally unacceptable that Nav Canada proposes to reduce southern costs by up to \$110 million a year while costs in the NWT will increase by \$10 million a year. I request that you invoke Section 35(2) of the *Civil Air Navigation Services Commercialization Act* which states that: *the charging methodology may recognize that the value of the services differs among users.*

Section 35 of the *Civil Air Navigation Services Commercialization Act* states that:

- (1) (c) charges for the same services must not differentiate between domestic and international flights of air carriers.
- (1) (d) charges for the same service must not differentiate among Canadian air carriers or foreign air carriers.
- (2) The charging methodology may recognize that the value of the services differs among users.

Nav Canada's proposed fee structure acts upon Section 35 1(c) and (d), but does not reflect Section 35 2. Northern users already pay higher costs than people in southern Canada, yet the value of services provided is significantly lower for users that operate from and/or to airports located in designated northern locations. This lower level of service is evident in terms of RADAR coverage, in terms of provisions made for radio navigation services for approach and landing and, finally, in the terms used as the basis for charges: maximum certified takeoff weight. By basing services charges on Section 35 1 (c) and (d), Nav Canada is overlooking the unique nature of northern airspace and unfairly penalizing northern operators and residents.



With respect to charging principles, I believe the following factors, which have been brought to my attention by a northern operator, have not been given adequate consideration. Keep in mind that the value of services provided is significantly lower for users that operate from and/or to airports located in designated northern locations.

Provision of RADAR coverage for departing aircraft:

Airports/operators in northern locations receive lower levels of RADAR coverage than southern users. Northern airports are beyond the area of RAMP radar coverage that is provided for virtually all airspace across southern Canada. This reduces the value of departure services in the following ways:

- 1) In order to provide the required separation Air Traffic Control will often impose one of the following restrictions on aircraft departing northern airports:
 - a. An altitude restriction that prevents the aircraft from operating at or close to the most fuel efficient altitude, or
 - b. A route modification that prevents the aircraft from following the shortest route of flight.
 - c. Delaying the departure of the aircraft until the conflicting traffic has landed.

Either option increases the cost of operation, thereby reducing the value of the air traffic control services provided.

The routing restrictions referred to above are provided to allow for separation between aircraft operating under "instrument flight rules". Aircraft departing southern airports may also receive air traffic control services that will alert the pilots to all possible conflicts with other aircraft, including those involving other aircraft not operating under instrument flight rules. This traffic alerting is not available at any northern airports, thereby reducing the value of the air traffic control services provided. I know of two near misses that occurred at the Yellowknife airport, there may have been more.

Provision of Radio Navigation Services for Approach and Landing:

A second area of concern with regard to northern service is the provision, or rather lack of provision, of radio navigation services for approach and landing. There are two basic types of navigation services that provide guidance for aircraft to land in "instrument" conditions:

"Non-Precision" approaches provide only lateral (left/right) guidance to enable the pilot to navigate the aircraft to the runway. No vertical (up/down) guidance is provided.

“Precision” approaches provide both lateral and vertical guidance to enable the pilot to navigate the aircraft to the runway. Since vertical guidance is available, the pilot can successfully land the aircraft in weather conditions that would preclude a landing without this vertical guidance.

In southern Canada, the number of precision approach facilities at airports used for jet transport operations is much, much higher than in the north. As a result, aircraft operated into northern airports are disadvantaged in the following ways:

1. There is an increased possibility of needing to divert to an alternate airport because of weather conditions that preclude a landing due to the lack of precision approach capabilities. The commercial impact of such a diversion is further exacerbated by the following factors:
 - a) There are fewer suitable airports available in the north, and diversions therefore require flight to more distant locations.
 - b) The cost of fuel in the north is much higher and this obviously increases the cost of a diversion.
 - c) The unavailability of updated weather information at northern airports may preclude diversion to a closer airport.
 - d) The availability of fuel at northern airports may preclude diversion to a closer airport.
2. There is a reduced margin of safety for approaches in cloud. The recent task force on preventing Controlled Flight into Terrain (CFIT) has reached the conclusion that non-precision approaches are statistically less safe than precision approaches, by a very significant margin. The relative scarcity of precision approach facilities in the north coupled with the frequently marginal weather conditions means that non-precision approaches are flown much more often than at airports in southern Canada.

Thus, it is clear that with respect to aeronautical navigation services for the approach phase of flight, a lower level of service is provided for northern operations.

Use of Maximum Certified takeoff weight as the basis for charges:

Another problem that exists with the proposed Nav Canada fees is with regard to the use of maximum certified takeoff weight as the basis for charges. The use of maximum certified takeoff weight as the basis for calculating charges implicitly implies that the aircraft being charged the fee should be able to depart, if required, at that weight.

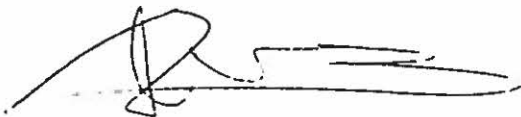
At all the designated northern airports that currently receive large jet aircraft, only one runway allows operation at weights approximating the maximum certified takeoff weight. At all other airports, the restrictions imposed by runway length may reduce the available payload by as much as 50%. This situation will become worse for northern airports as new regulations are phased in for operation on runways covered with snow. These regulations will reduce the maximum allowable weight at the shorter northern airports much more drastically than they would with the same amount of snow cover on a longer, southern runway.

This factor alone indicates that section 35 (2) needs to be invoked to adjust terminal charges for northern jet transport operations based on the fact that this operation can almost never be conducted at the maximum certified takeoff weight. Using the same aircraft type, a northern operator may need to make two trips and incur double the Nav Canada fees to carry the same payload as a southern operator.

Minister Collenette, I have serious concerns regarding the proposed Nav Canada fees: they do not recognize the unique nature of northern airspace. Moreover, I fear that if the proposed fees are implemented, the additional \$10 million charged to northern operators will be passed on to northerners in the form of higher food costs, additional health demands, higher airfares, reduced services, and less exploration work and other resource development.

Given the heavy reliance in the North on air travel and the distinctions that exist between northern and southern services, I urge you to reconsider the proposed Nav Canada Act in light of the above information and adjust the charging methodology to *recognize that the value of the services differs among users.* (35) (2). One way to do so is by freezing fees at the Phase 1 level. Another way might be to reinstate charging fees based on a head tax rather than on maximum certified takeoff weight.

Sincerely,



Roy Erasmus
MLA Yellowknife North

cc: All MLA's

The Honourable Ethel Blondin-Andrew, M.P. Western Arctic

Mr. Louis Comeau, Chairman, Nav Canada

Mr. Bob Davies, President NATA

Ms. Nancy Karetak-Lindell, P.C. M.P. Nunavut

