



## NOTICE OF NEW AND REVISED SERVICE CHARGES

### **General**

Pursuant to Section 36 of the *Civil Air Navigation Services Commercialization Act*, S.C. 1996, c. 20 (“the ANS Act”), the following document provides notice of NAV CANADA’s proposed new and revised charges for air navigation services (“the Proposal”). This Notice sets out the particulars of the Proposal with regard to these charges. A more detailed document setting out additional details in relation to the Proposal, including a justification of the fee proposal in relation to the charging principles established under Section 35 of the *ANS Act*, is available from NAV CANADA upon request from the address set out in Section 6 of this Notice. Persons interested in making representations to NAV CANADA with regard to the Proposal may do so by writing to the address set out in Section 6 of this Notice.

***NAV CANADA will be applying charges to the following categories of air navigation services: (i) oceanic; (ii) terminal, and (iii) en-route, to overflights and flights departing from and/or landing at Canadian airports.***

This Notice consists of six sections:

- (1) Proposed ***Oceanic*** charge
- (2) Proposed ***En-route*** charges
- (3) Proposed ***Terminal Services*** charge
- (4) ***Exemptions from Charges***
- (5) Proposed ***Terms and Conditions of Payment*** regarding charges
- (6) ***Additional Information*** regarding the Proposal and on ***Making Representations*** to NAV CANADA

Note: All references to dollars refer to Canadian dollars.

## 1. Oceanic Charge

- NAV CANADA currently levies two Oceanic charges – the North Atlantic Enroute Facilities and Services Charge (NAT) and the International Communication Services Charge (Int'l Comm).
- The NAT Charge is for air navigation services provided or made available by NAV CANADA or a person acting under the authority of the Minister of National Defence to an aircraft during the course of a flight in the Gander Oceanic Flight Information Region/Control Area (FIR/CTA). The existing charge is \$71.60 per flight.
- The Int'l Comm Charge is for air-ground radio frequencies, provided or made available by NAV CANADA or by a person acting under the authority of the Minister of National Defence at one or more aeronautical stations to an aircraft during the course of an international flight, other than a flight between Canada and the continental United States, to obtain communication services. The existing charge is \$53.68 per flight.
- ***The NAT and Int'l Comm Charges will be merged into a single Oceanic Charge, effective November 1, 1997.***
- The Oceanic Charge will be for air navigation services, including air-ground radio frequencies to obtain communication services, provided or made available by NAV CANADA or a person acting under the authority of the Minister of National Defence to an aircraft during the course of a flight in the Gander Oceanic FIR/CTA.
- ***The proposed Oceanic Charge will be \$140.51 per flight.***
- Where in the course of a flight an aircraft lands or takes off from an airport in Canada located north of the sixtieth parallel of north latitude and lands or takes off from an airport in Greenland, the charge per flight will be 40% of the proposed Oceanic Charge otherwise payable.
- An illustration of the application of the Oceanic Charge is provided in Attachment II.

## 2. Enroute Charges

- Enroute services are air navigation services other than terminal and oceanic services.
- Enroute charges are applied to flights in Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA), and cover enroute services provided or made available by NAV CANADA or by a person acting under the authority of the Minister of National Defence.

- Flights subject to the enroute charges include:
  - overflights -- flights that pass through Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA) which do not land or take off in Canada, and
  - flights landing and/or taking off in Canada -- any flight between two Canadian airports or between a Canadian airport and a foreign airport.
- Currently, only an overflight charge is levied.
- With respect to U.S. domestic overflights (e.g., Boston - Chicago, Anchorage - Seattle), the Proposal assumes that such flights would be charged the Overflight Charge for the distance flown through airspace where NAV CANADA provides air navigation services. This approach mirrors the application of the proposed U.S. overflight fee to Canadian domestic overflights (e.g. Montreal - Halifax, Toronto - Vancouver), as set out in the Interim Final Rule (IFR) published in the U.S. Federal Register on March 20, 1997, by the U.S. Department of Transportation. However, the IFR provides for time to consult on operational and other issues inherent in the U.S. proposal. Any changes in the NAV CANADA proposal that could result from the finalization of the IFR will be reflected in the final NAV CANADA Enroute Charges.

### *Charge Calculation*

- The proposed enroute charge for a flight will be the unit rate multiplied by the number of charging units for that flight.
- The number of charging units for each flight will be the square root of the aircraft weight expressed in tonnes multiplied by the distance in kilometres.
- For flights which remain entirely within Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA), distance is calculated as the great circle distance between the departure and arrival airports.
- For flights which enter or exit Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA), distance is calculated as the sum of the great circle distances of each leg of the flight in that airspace, based on the flight plan or position reports.
- Enroute distances will be reduced to take into account areas around both the arrival and departure airports in Canada in accordance with the paragraph below.
  - At airports where the Terminal Services Charge applies (refer to Section 3):
    - If dedicated arrival/departure control services are provided, as indicated in Attachment I, the reduction is 65 km (approximately 35 nautical miles);
    - If dedicated arrival/departure control services are not provided, the reduction for the airport is 35 km (approximately 20 nautical miles).

- At airports where the Terminal Services Charge does not apply, the reduction is nil.
- For the purpose of calculating the charges, the following three methodologies may be used for determining the weight of an aircraft. The aircraft operator has a choice between the first two options; whereas the third option exists as a default method should the operator fail to provide the required information.

#### Provision of Information

At least one month prior to the start of each six-month period, with the first period commencing on November 1, 1997, the aircraft operator must provide a fleet submission to NAV CANADA listing each aircraft expected to transit Canadian-controlled airspace (excluding aircraft that transit only the Gander Oceanic FIR/CTA). The fleet submission must indicate the registration number and the maximum permissible take-off weight of each aircraft, as specified in the aircraft's certificate of airworthiness or in a document referred to in that certificate. In the fleet submission, the operator will be required to select either Option (1) or Option (2) below.

#### Options

- (1) The weight of an aircraft would be defined as the maximum permissible take-off weight of that aircraft, in tonnes expressed to the first decimal place, as stated in the fleet submission noted above; under this option, the operator must also include aircraft registration number in every flight plan.
  - (2) The weight of an aircraft would be calculated as the average maximum permissible take-off weight of the aircraft of the same type utilized by the operator, in tonnes expressed to the first decimal place, as stated in the fleet submission noted above.
  - (3) Where the fleet submission is not provided to NAV CANADA within the specified timeframe, or where under option (1) the aircraft registration number is not recorded on the flight plan, the weight of any aircraft utilized by the operator for a flight in Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA) will be the highest maximum permissible take-off weight for an aircraft of the same type.
- ***The proposed Overflight Charge will be based on a unit rate of \$0.03263 per charging unit, effective November 1, 1997, increased from the existing unit rate of \$0.026142.***
  - ***The proposed Enroute Charge for flights either departing from or landing at a Canadian airport will be \$0.02174 per charging unit, effective November 1, 1997.***
  - The Overflight Charge has a higher unit rate than the Enroute Charge applicable to flights landing or taking off in Canada because the latter category of flights will still be subject to the Air Transportation Tax ("ATT") while it is being phased out during the transition period (to November 1, 1998).
  - Illustrations of the application of the Enroute Charges are provided in Attachment II.

### 3. Terminal Services Charge

- Terminal services are air navigation services provided or made available to an aircraft at or in the vicinity of an airport, excluding aircraft overflying the airport, such as i) dedicated arrival/departure control services provided by Area Control Centres and Terminal Control Units or ii) aerodrome services including, for example, airport advisories and air traffic control from a tower.
- The Terminal Services Charge will be levied for flights departing from airports with staffed air navigation facilities, i.e., airports with air traffic control towers, flight service stations (FSSs) or community aerodrome radio stations (CARS), whether the air navigation services are provided by NAV CANADA or by a person acting under the authority of the Minister of National Defence, except the airport located at Portage-La Prairie, Manitoba (hereinafter referred to as “Airports with Staffed Air Navigation Facilities”). Airports which currently meet this criterion are listed in Attachment I.

#### *Charge Calculation*

- The proposed Terminal Services Charge for a departure will be the unit rate multiplied by the number of charging units for that departure.
- The number of charging units for each departure will be the aircraft’s weight expressed in tonnes raised to the 0.9 power (i.e., weight<sup>0.9</sup>).
- For the purpose of calculating the charge, the following three methodologies may be used for determining the weight of an aircraft. The aircraft operator has a choice between the first two options; whereas the third option exists as a default method should the operator fail to provide the required information.

#### Provision of Information

At least one month prior to the start of each six-month period, with the first period commencing on November 1, 1997, the aircraft operator must provide a fleet submission to NAV CANADA listing each aircraft expected to transit Canadian-controlled airspace (excluding aircraft that transit only the Gander Oceanic FIR/CTA). The fleet submission must indicate the registration number and the maximum permissible take-off weight of each aircraft, as specified in the aircraft’s certificate of airworthiness or in a document referred to in that certificate. In the fleet submission, the operator will be required to select either Option (1) or Option (2) below.

#### Options

- (1) The weight of an aircraft would be defined as the maximum permissible take-off weight of that aircraft, in tonnes expressed to the first decimal place, as stated in the fleet submission noted above; under this option, the operator must also include the aircraft registration number in every flight plan.

- (2) The weight of an aircraft would be calculated as the average maximum permissible take-off weight of the aircraft of the same type utilized by the operator, in tonnes expressed to the first decimal place, as stated in the fleet submission noted above.
  - (3) Where the fleet submission is not provided to NAV CANADA within the specified timeframe, or where under option (1) the aircraft registration number is not recorded on the flight plan, the weight of any aircraft utilized by the operator for a flight in Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA) will be the highest maximum permissible take-off weight for an aircraft of the same type.
- ***The proposed Terminal Services Charge, effective November 1, 1997, will be \$7.74 per charging unit.***
  - Illustrations of the application of the Terminal Services Charge are provided in Attachment II.

#### **4. Exemptions from Charges**

- Certain categories of flights shall be exempt from air navigation services charges.
- Under Subsection 32(2) of the *ANS Act*, air navigation services charges will not be imposed on:
  - a) A user who is a person acting under the authority of the Minister of National Defence;  
or
  - b) A user in respect of a state aircraft of a foreign country, unless the foreign country has been designated otherwise by a Canadian federal Order in Council under Subsection 32(3) of the *ANS Act*.
- In addition, air navigation services charges will not apply in respect of the following flights:
  - i) Search and rescue flights operated under the direction of the Canadian Forces Search and Rescue Service;
  - ii) Flights operated for a registered charity within the meaning of the Income Tax Act (Canada) or equivalent foreign statute, proof of such status to be provided to NAV CANADA;
  - iii) Flights of aircraft the maximum take-off weight of which, as shown in their certificate of airworthiness or a document referred to in that certificate, is 5.7 tonnes or less.

It should be noted that the proposed exemption for aircraft weighing 5.7 tonnes or less is provided as part of NAV CANADA's plan for developing charges for large aircraft in the first year of the transition period and for small aircraft in the second year.

## **5. Terms and Conditions for Payment**

The following terms and conditions will be applicable regarding payment of charges imposed by NAV CANADA with regard to services:

- Remittances may be made in either Canadian dollars or U.S. dollars. U.S. dollars will be converted at the exchange rate for buying Canadian dollars on the day the remittance is deposited into a NAV CANADA bank account. Any material gains/losses will be credited/debited to the customer's account.
- All charges become due and payable on the thirtieth (30<sup>th</sup>) day after the date on which the invoice is issued in respect of the charges (the "due date").
- Invoices will be issued every month for flights occurring in the preceding month.
- When payment in full has not been received by the due date, interest shall commence being charged on the first day after the due date.
- Interest shall be calculated monthly on the outstanding amount, including principal plus any accrued interest.
- When a payment is made on an overdue account, the period for which interest is charged shall end on the day the payment is received.
- The interest rate shall be calculated on the basis of an annual rate of 18 per cent.
- Pursuant to Section 55 of the Act, the owner and operator of an aircraft are jointly and severally liable for the payment of any charge for air navigation services imposed by NAV CANADA.
- NAV CANADA may apply to the courts for an order authorizing the corporation to seize and detain aircraft in respect of unpaid and overdue charges. For Oceanic and Overflight Charges which are collected by the UK Civil Aviation Authority (the "CAA"), the CAA may seize and detain aircraft in respect of unpaid and overdue bills.

**6. Additional Information Regarding the Proposal and on Making Representations to NAV CANADA.**

A more detailed document entitled *Details and Principles Regarding Proposed NAV CANADA Charges for Air Navigation Services* ("Details and Principles Document") is available in hard copy. An electronic copy will be available on NAV CANADA's Internet site (<http://www.navcanada.ca>) by Monday, June 2, 1997.

Hard copies of the Details and Principles Document may be obtained by contacting NAV CANADA:

in writing:      NAV CANADA                      by fax: (613) 563 - 3426  
                    77 Metcalfe Street                      by telephone: 1-888-762-8226  
                    Ottawa, Ontario  
                    Canada  
                    K1P 5L6  
                    Attention: Commercial Relations

Pursuant to Section 36 of the ANS Act, persons interested in making representations to NAV CANADA with regard to the Proposal may do so in writing to the following address:

NAV CANADA  
77 Metcalfe Street  
Ottawa, Ontario  
Canada  
K1P 5L6  
Attention: Director, Rates and Revenues

The facsimile number for written representations is (613) 563 - 7994 .

**Note: Representations must be received by NAV CANADA by not later than the close of business (eastern standard time) on July 30, 1997.**



**AIRPORTS WITH STAFFED AIR NAVIGATION FACILITIES**<sup>1</sup>

**TOWERS**

**FSSs**

**CARS**<sup>2</sup>

**Atlantic**

Gander  
St. John's  
Halifax \*  
Moncton

Charlo  
Charlottetown  
Deer Lake  
Gander  
Fredericton  
Halifax  
Saint John  
St. John's  
St. Anthony  
Sydney  
Wabush  
Yarmouth

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**Québec**

Dorval \*  
Mirabel \*  
Québec \*  
Sept-Iles  
St-Honoré \*  
St-Hubert \*  
St-Jean \*

Gatineau \*  
Gaspé  
Iles-de-la-Mdeine  
Iqaluit  
Kuujuuaq  
Kuujuuarapik  
La Grande Rivière  
Mont Joli  
Montréal (Dorval)  
Québec  
Roberval  
Rouyn  
Sept-Iles  
Val D'Or

Broughton Is  
Cape Dorset  
Clyde River  
Kimmirut (Lake Harbour)  
Pangnirtung  
Pond Inlet  
Sanikiluaq  
Eastmain  
Waskaganish  
Wemindji

**TOWERS**

**FSSs**

**CARS** <sup>2</sup>

**Ontario**

Buttonville \*  
Hamilton  
London  
North Bay  
Oshawa \*  
Ottawa \*  
Sault Ste. Marie  
Sudbury  
Toronto LBPIA \*  
Toronto Island \*  
Waterloo  
Windsor \*

Kingston  
London  
North Bay  
Sault Ste. Marie  
St. Catharines  
Timmins  
Tor/Buttonville

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**Central**

Regina \*  
Saskatoon \*  
St. Andrews \*  
Thunder Bay \*  
Winnipeg \*

Baker Lake  
Brandon  
Churchill  
Kenora  
La Ronge  
Prince Albert  
Rankin Inlet  
Regina  
Resolute Bay  
Saskatoon  
Sioux Lookout  
Thompson  
Thunder Bay  
Winnipeg Int'l

Coral Harbour  
Gjoa Haven  
Igloolik  
Pelly Bay (Town Site)  
Pepulse Bay  
Taloyoak (Spence Bay)  
Arviat (Eskimo Point)  
Chesterfield Inlet  
Whale Cove  
Grise Fiord  
Nanisivik

**TOWERS**

**FSSs**

**CARS** <sup>2</sup>

**Western**

Calgary \*  
Edmonton Int'l \*  
Edmonton Mun. \*  
Springbank \*  
Villeneuve  
Whitehorse  
Yellowknife

Dawson Creek  
Edmonton Intl  
Ft. McMurray  
Fort Nelson  
Fort Simpson  
Fort Smith  
Fort St. John  
Grande Prairie  
Hay River  
High Level  
Inuvik  
Lethbridge  
Lloydminster  
Medecine Hat  
Norman Wells  
Peace River  
Red Deer  
Springbank/Calgary  
Whitecourt  
Whitehorse  
Yellowknife

Fort Liard  
Wrigley  
Fort Resolution  
Aklavik  
Fort McPherson  
Paulatuk  
Sachs Harbour  
Tuktoyaktuk  
Delene (Fort Franklin)  
Fort Good Hope  
Tulita (Fort Norman)  
Cambridge Bay  
Kugluktuk (Coppermine)  
Holman  
Beaver Creek  
Burwash  
Dawson  
Faro  
Mayo  
Old Crow  
Teslin  
Watson Lake

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**Pacific**

Abbotsford \*  
Boundary Bay \*  
Kelowna  
Langley \*  
Pitt Meadows \*  
Prince George  
Vancouver \*  
Vancouver Hr. \*  
Victoria \*

Abbotsford  
Campbell River \*  
Castlegar  
Cranbrook  
Kamloops  
Nanaimo \*  
Penticton  
Port Hardy  
Prince George  
Prince Rupert  
Smithers  
Terrace  
Vict. Harbor \*  
Williams Lake  
Vancouver

In addition to the airports listed above, Nav Canada will be extending a charge to civilian aircraft movements at certain aerodromes receiving ANS services from DND, including, but not limited to, the following:

Bagotville  
Cold Lake  
Comox  
Goose Bay  
Trenton

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**Notes:**

1. The list was prepared in February, 1997 and may change before Terminal Services Charges are implemented on November 1, 1997.
2. Nav Canada funds ANS operations at the CARS airports (community aerodrome radio stations) under contract with the governments of Quebec, Northwest Territories and Yukon Territories.

**At the airports marked with an asterisk (\*), flights receive dedicated arrival/ departure control services.**

**ATTACHMENT II**

**ILLUSTRATIVE NAV CANADA CHARGES**

*(The following information is to assist the reader in understanding the application of the proposed charges, as set out in this Notice.)*

Oceanic Charge (section 1 of the Notice):

Effective November 1, 1997, the charge per flight will be \$140.51.

Enroute Charges (section 2 of the Notice):

The charge is calculated as follows:

$$R \times W \times D$$

R = unit rate

W =  $MTOW^{0.5}$

D = distance expressed in km

The weight factor (W) is calculated by taking the square root of the aircraft weight; for a more detailed discussion of the calculation of aircraft weight, please refer to section 2.

The distance factor (D) is the great circle distance flown in Canadian-controlled airspace (excluding the Gander Oceanic FIR/CTA) in kilometres, net of reductions pertaining to terminal services, as set out in section 2.

Effective November 1, 1997 the unit rate (R) will be \$0.02174 for flights either departing from or landing at Canadian airports and \$0.03263 for overflights.

Terminal Charges (section 3 of the Notice):

The charge is calculated as follows:

$$R \times W$$

R = unit rate

W = weight factor =  $MTOW^{0.9}$

The weight factor (W) is calculated by raising the aircraft weight to the power 0.9; for a more detailed discussion of the weight calculation please refer to section 3.

Effective November 1, 1997, the unit rate (R) will be \$7.74.

**ILLUSTRATIVE NAV CANADA CHARGES**

**TORONTO (YYZ) -LONDON, ENGL. (LHR) RETURN**

**B747**

*WEIGHT (MTOW) = 395.0 TONNES*

*DISTANCE = 2129 KM*

(IN CDN CONTROLLED AIRSPACE EXCL. GANDER OCEANIC)

**OCEANIC CHARGE:**

CHARGE PER FLIGHT

= \$140.51

**return (x 2)**

= **\$281.02**

**TERMINAL SERVICES CHARGE (Toronto):**

*UNIT RATE (R) : \$7.74*

FORMULA

R x W =  
7.74 x 395.0<sup>0.9</sup>

= 7.74 x 217.2388

= **\$1,681.43**

**ENROUTE CHARGE:**

*UNIT RATE (R) : \$ 0.02174*

FORMULA

R x W x D  
0.02174 x 395.0<sup>0.5</sup> x (2129-65)

= \$891.80

**return (x 2)**

= **\$1,783.60**

**TOTAL CHARGES (YYZ-LHR-YYZ)**

= **\$3,746.05**

**ILLUSTRATIVE NAV CANADA CHARGES**

**VANCOUVER (YVR) - MONTREAL (YUL) RETURN**

**B767**

*WEIGHT (MTOW) = 141.0 TONNES*

*DISTANCE = 3679 KM*

**TERMINAL SERVICES CHARGE** (Vancouver and Montreal):

*UNIT RATE (R) : \$7.74*

FORMULA	R	x	W	=	
	7.74	x	141.0 <sup>0.9</sup>	=	7.74 x 85.9601 = \$665.33
			<b>return (x 2)</b>	=	<b>\$1,330.66</b>

**ENROUTE CHARGE:**

*UNIT RATE (R) : \$ 0.02174*

FORMULA	R	x	W	x	D	=	
	.02174	x	141.0 <sup>0.5</sup>	x	(3679-130)	=	\$ 916.17
					<b>return (x 2)</b>	=	<b><u>\$ 1,832.34</u></b>

<b>TOTAL CHARGES (YVR-YUL-YVR)</b>	=	<b>\$ 3,163.00</b>
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**ILLUSTRATIVE NAV CANADA CHARGES**

**OTTAWA (YOW) -WASHINGTON (IAD) RETURN**

**CL65**

*WEIGHT (MTOW) = 23.0 TONNES*

*DISTANCE = 80 KM*

**TERMINAL SERVICES CHARGE (Ottawa):**

*UNIT RATE (R) : \$7.74*

FORMULA	R	x	W	=		
	7.74	x	23.0 <sup>0.9</sup>	=	7.74 x 16.8095	= \$130.11

**ENROUTE CHARGE:**

*UNIT RATE (R) : \$ 0.02174*

FORMULA	R	x	W	x	D	=	
	.02174	x	3.0 <sup>0.5</sup>	x	(80-65)	=	\$1.56

<b>return (x 2)</b>	=	<b><u>\$3.12</u></b>
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<b>TOTAL CHARGES (YOW-IAD-YOW)</b>	=	<b>\$133.23</b>
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**GOOSE BAY-WABUSH(RETURN)**

**DASH8**

*WEIGHT (MTOW) = 15.6 TONNES*

*DISTANCE = 432 KM*

**TERMINAL SERVICES CHARGE (Goose Bay and Wabush):**

*UNIT RATE (R) : \$7.74*

FORMULA	R	x	W	=		
	7.74	x	15.6 <sup>0.9</sup>	=	7.74 x 11.8526	= \$91.74

<b>return (x 2) =</b>		<b>\$183.48</b>
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**ENROUTE CHARGE**

*UNIT RATE (R) : \$ 0.02174*

FORMULA	R	x	W	x	D	=	
	.02174	x	15.6 <sup>0.5</sup>	x	(432-70)	=	\$31.08

<b>return (x 2)</b>	=	<b><u>\$62.16</u></b>
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<b>TOTAL CHARGES (YYR-YWK-YYR)</b>	=	<b>\$245.64</b>
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**ILLUSTRATIVE NAV CANADA CHARGES**

**WINNIPEG (YWG) - HAMILTON (YHM) RETURN**

**B727**

*WEIGHT (MTOW) = 76.9 TONNES*

*DISTANCE = 1520KM*

**TERMINAL CONTROL CHARGE (Winnipeg & Hamilton):**

*UNIT RATE (R) : \$7.74*

$$\begin{array}{rclclcl} \text{FORMULA} & = & R & \times & W & = & \\ & = & 7.74 & \times & 76.9^9 & = & 7.74 \times 49.812 & = & \$385.54 \\ & & & & & & \text{return (x 2)} & = & \mathbf{\$771.08} \end{array}$$

**ENROUTE CHARGE:**

*UNIT RATE (R) : \$ 0.02174*

$$\begin{array}{rclclcl} \text{FORMULA} & = & R & \times & W & \times & D & = & \\ \text{(one way)} & = & .02174 & \times & 76.9^{0.5} & \times & (1520-130) & = & \$264.99 \\ & & & & & & \text{return (x 2)} & = & \mathbf{\$529.98} \end{array}$$

$$\text{TOTAL CHARGES (YWG-YHM-YWG)} \quad = \quad \mathbf{\$1,301.06}$$

**ILLUSTRATIVE NAV CANADA USER CHARGES**

**CHICAGO-PARIS (RETURN)**

**B747**

*WEIGHT (MTOW) = 395 TONNES*

*DISTANCE = 2247 KMS*

**OCEANIC CHARGE :**

NAT/Intel Comm. charge (flat fee)

= \$140.51

**return (x2) = \$281.02**

**OVERFLIGHT ENROUTE CHARGE :**

*UNIT RATE (R) : \$ 0.03263*

FORMULA = R x W x D  
= 0.03263 x (395)<sup>0.5</sup> x 2247 = \$1457.20

**return (x2) = \$2914.40**

**TOTAL ANS COSTS (ORD-CDG)**

**= \$3195.42**