J 103 PI 1964 W5 A12

REPORT OF

COMMISSION OF INQUIRY

AS TO THE FUTURE OF THE AIR CANADA OVERHAUL BASE AT WINNIPEG INTERNATIONAL AIRPORT, AND RELATED MATTERS,

ESTABLISHED UNDER

ORDER IN COUNCIL P.C. 1964-857 OF JUNE 11, 1964

LIBRARY OF PARLIAMENT

MAY 24 1556

BIBLIOTHÈQUE DU PARLEMENT

MARCH 3, 1966

TO HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL:
MAY IT PLEASE YOUR EXCELLENCY,

As the Commissioner appointed by Order in Council dated June 11, 1964, P.C. 1964-857, to inquire into and report upon the future of the Air Canada Overhaul Base at Winnipeg International Airport, and related matters,

I BEG TO SUBMIT FOR YOUR EXCELLENCY'S CONSIDERATION THIS REPORT.

MARCH 3, 1966

COMMISSIONER

TABLE OF CONTENTS

REPORT

- Part 1. Introduction
- Part 2. Historical and Descriptive Matters:
 - Sections A History and Description of Air Canada
 - B History and Description of Maintenance and Overhaul bases of Air Canada
 - C History of Problems of Winnipeg Overhaul Base of Air Canada
 - D Description of procedures leading to granting of international landing rights.
- Part 3. Reports on Referred Matters:
 - Sections A Wallace Clark Report.
 - B Dixon Speas Report.
 - C Plans of Air Canada for the future of its overhaul bases at Winnipeg and Dorval.
 - D Use of Air Canada overhaul base at Winnipeg for DC-9 or other aircraft of Air Canada.
 - E Future of Air Canada and other aircraft overhaul facilities at Winnipeg in relation to announced government policy.
 - ' Future of Winnipeg as an aviation centre and other relevant matters.

<u>APPE1</u>	First page reference		
A	Copy of Order in Council P.C. 1964-857 establishing the Commission of Inquiry and appointing the Commissioner.	1	
В	Copy of transmittal letter to the Commissioner from the Honourable J.W. Pickersgill, Minister of Transport, dated June 15, 1964.	1	
С	Memorandum of appointments.	1	
D	Memorandum of the procedures and public hearings of the Commission.	1	
E	List of submissions to the Commission.	1	
F	Statement of the Honourable J.W. Pickersgill of April 24, 1964.	9 and	136
G	Statement of the Honourable J.W. Pickersgill of June 1, 1965.	9 and	130
Н	Schedule of characteristics of Air Canada's past and present fleets.	11	
I	Plan showing routes served by Air Canada.	11	
J	Schedule of daily Transborder flights between Canada and U.S.A.	11	
K	Schedule of negotiated Canadian-United States air routes announced December 31, 1965.	33	
L	Instructions to Dixon Speas.	<u> </u>	
М	Special comment relative to abridged Dixon Speas Report.	45	
N.	Schedule of aircraft departures and layovers.	104	
0	Distribution of overhaul employees by skill	106	
P	Typical maintenance check schedule for large jet aircraft.	106	
Q	Plan of Dorval building area.	106	
R	Announcement re closing of United Air Lines Washington base.	118	
S	Submissions, related to Canadian air transport policy, filed with Department of Transport.	139	
T	Memorandum - air cargo facilities, Department of Transport.	162	

REPORT OF COMMISSION OF INQUIRY AS TO THE FUTURE OF THE AIR CANADA OVERHAUL BASE AT WINNIPEG INTERNATIONAL AIRPORT, AND RELATED MATTERS, ESTABLISHED UNDER ORDER IN COUNCIL P.C. 1964-857 OF JUNE 11. 1964.

PART I

INTRODUCTION

The following material is attached to this report as preliminary information:

- Appendix A Copy of Order in Council P.C. 1964-857 establishing the Commission of Inquiry and appointing the Commissioner.
- Appendix B Copy of transmittal letter to the Commissioner from the Honourable J.W. Pickersgill, Minister of Transport, dated June 15, 1964.
- Appendix C Memorandum of appointments.
- Appendix D Memorandum of the procedures and public hearings of the Commission.
- Appendix E List of persons making submissions to the Commission.

In Part 2 there is a short description and history of Air Canada (in this report for brevity referred to as "AC") and its several maintenance and overhaul bases, and a short historical review of the problem relative to AC's maintenance and overhaul (in this report designated "o/h") base at Winnipeg and its future, leading to the appointment of the Commission by Order in Council P.C. 1964-857 of June 11, 1964 (in this report referred to as the "order"). There is also a short description of the procedures leading to the granting of international landing rights.

Part 3 contains the report of the Commissioner of his inquiry into the several matters referred to the Commission by lettered paragraphs (a) to (f) inclusive of the order.

Both AC and the Province of Manitoba made extremely detailed and competent presentations of their respective views and their consultants were extremely well informed and prepared. A great deal of the material presented will be of significant use generally as well as to the Commission.

AC supplied the Commission with all information required by it regardless of time and effort involved. The Commission was particularly impressed with the high calibre and knowledge of the technical witnesses who appeared on behalf of AC.

Most of the submissions made and briefs filed were of a high order.

The Commission expresses its grateful thanks to all those who participated in the proceedings, including Commission Counsel, Mr. Sweatman, Commission Economic Consultant and Secretary, Mr. Moffat, Counsel for AC, Mr. Monk, and for the Province of Manitoba, Mr. Mauro, who through their skill and co-operation made the task of the Commission much less onerous.

PART 2

HISTORICAL AND DESCRIPTIVE MATTERS

A. History and Description of Air Canada.

Trans-Canada Air Lines was incorporated by Chapter 43, Statutes of Canada 1937. This act was amended in 1938, 1940, 1941 and 1945 and as amended was consolidated as Chapter 268 of the Revised Statutes of Canada 1952. The consolidated act was further amended by Chapter 50, 1953.

By Chapter 2, Statutes of Canada 1964, the name of Trans-Canada Air Lines was altered to "Air Canada". In this report the corporation is referred to by the use of the letters "AC", and the act of incorporation as amended is referred to as the "act".

Section 14 of the act provides, inter alia,

"14. (1) The Corporation is authorized

- (a) to establish, operate and maintain air lines or regular services of aircraft of all kinds, to carry on the business of transporting mails, passengers and goods by air, and to enter into contracts for the transport of mails, passengers and goods by any means, and either by the Corporation's own aircraft and conveyances or by means of the aircraft and conveyances of others, and to enter into contracts with any person or company for the interchange of traffic and, in connection with any of the objects aforesaid, to carry on the business of warehousing goods, wares and merchandise of every kind and description whatsoever;
- (b) to buy, sell, lease, erect, construct and acquire hangars, aerodromes, seaplane bases, landing fields and beacons and to maintain and operate the same;
- (d) to carry on its business throughout Canada and outside of Canada:

The Minister of Transport is designated by the act in its present form as the Minister for the purposes of the act.

The authorized share capital of AC is \$25,000,000 divided into shares of \$100.00 each, of which \$5,000,000 has been issued and is held by Canadian National Railway Company, a Crown Corporation.

AC is managed by a board of nine directors, of

whom five are elected by its shareholders (C.N.R.) and four are appointed by the Governor in Council.

Mr. Gordon R. McGregor is a director and the President of AC and has been such since 1947.

Under the act the head office of AC was designated to be at the City of Ottawa, or such other city as the directors might select. In June, 1947, the directors selected Montreal as its head office and it so remains.

The act provides that while the C.N.R. may subscribe for shares of AC it may only dispose of them with the approval of Parliament. The Minister is entitled at any time to acquire the shares on payment of the book value.

The C.N.R. is authorized to issue securities to acquire shares of AC and to lend money to AC for its purposes. Throughout the years the C.N.R. has provided AC with its basic capital requirements.

Under Section 15 the Minister may enter into a contract with AC, known as the Trans-Canada (now Air Canada) contract, for the organization, operation and maintenance by the Corporation of lines of aircraft for the "speedy and efficient transport of passengers, and goods across Canada and between and within the several provinces thereof, and between points in Canada and points outside of Canada..."

This contract is to contain such terms as the Governor in Council might order, and in the absence of such order is to provide, inter alia,

- "(a) for the operation of the aforesaid lines of aircraft between points and over routes to be designated from time to time... by the Governor in Council;
 - (b) for the transport of passengers and goods by the Corporation at tariff charges on a competitive basis with other similar transportation services in North America:
 - (e) for the furnishing by the Corporation of all adequate, modern aviation equipment... hangars and other buildings and, except as hereinafter otherwise provided, all other equipment, services and materials necessary for the operation of an efficient service by means of the aforesaid Trans-Canada Lines sufficient to take care of all mail, passengers, express and other traffic offered to the Corporation for transport."

Such a contract, dated June 1, 1937, was entered into. It was renegotiated May 4, 1946, has been amended from time to time, and as presently in force requires, inter alia. AC to

- (a) organize, maintain and operate certain air services, subject to variation of such services by the Air Transport Board with the approval of the Minister, and to the abandonment of any such service with the approval of the Governor in Council, and to
- (b) furnish and maintain, at its own cost and expense, all adequate modern aviation equipment, hangars, buildings, equipment, services and materials necessary for "the operation of an efficient service" by means of each of the air services, sufficient to take care of all mails, passengers, goods and other traffic offered to AC for transport.

Section 16 of the act authorizes the Postmaster General to enter into a contract with AC for the transport of mails and for the amendment of such a contract from time to time.

A mail contract was entered into, and has been amended from time to time.

The board of directors of AC is required to report annually to Parliament. Such reports are submitted to Parliament through the Minister.

It is clear that under the act AC is a proprietary corporation for the conduct on behalf of the Crown of an air transport business. By the act, the AC contract and the mail contract, AC is a major "chosen instrument" for the implementation of Canadian policy with respect to air transport, and by these means control is exercisable over AC not only by Parliament but also in a substantial measure by the government of Canada

Control is also exercisable over AC by the government of Canada indirectly through the election by C.N.R. of a majority of its directors and the appointment by the Governor in Council of the remainder.

AC has expressed its basic policy to be

"...To provide the safest and best possible service for the transportation of passengers, mail and goods by air, within Canada and between Canada and other countries, at the lowest fares and rates consistent with the maintenance of a sound financial position."

Some history of the origin, growth and changes in the air services provided by AC is necessary to enable a proper understanding of the present operating position of AC.

AC commenced operations by acquiring from Canadian Airways in September, 1937, and operating, a route between Vancouver and Seattle. Later training flights between Winnipeg and Vancouver were commenced. Operating headquarters were at Winnipeg. Until August, 1938 flying was confined to Western Canada through training and mail carriage services but later, following experimental flights east from Winnipeg, regular training, express, and mail services were instituted between Winnipeg and Montreal.

The national service then comprised flights (but not for passenger service) from Montreal to Vancouver with stops at Ottawa, Toronto, North Bay, Kapuskasing, Wagaming, Winnipeg, Regina and Lethbridge. At most of these points hangars and storage facilities were constructed. These were necessary because of the short range and operational requirements of the small aircraft in use.

Passenger service had been limited to the Vancouver-Seattle route but in 1939 passenger service on the other routes commenced and was extended to other points, including Calgary and Edmonton. Due to the urgencies of the war, AC's shops and facilities came to be used for military aircraft as well as its own.

In 1940 services to Moncton, London, Ontario, Cleveland and Boston were commenced. In 1941 services were extended to Halifax and commenced between Toronto and New York and the Vancouver-Seattle service was abandoned.

By this time AC had eighteen small aircraft, a

passenger revenue of \$2,300,000 contrasted with a mail revenue of \$3,000,000, and was in a profit position. The losses of \$1,300,000 incurred during the first three years of operation had been met by the government.

In 1942 service was extended to Victoria and commenced between Moncton and St. John's, Newfoundland, via Sydney. At this time the overseas operations of AC were limited to co-operation with British Overseas Airways Corporation in its trans-Atlantic service by providing maintenance and repair in Canada and supplying flight crews and supervision.

In 1943 AC operated on behalf of the Canadian government a trans-Atlantic service basically related to the war effort. This service continued until the conclusion of the war and thereafter ordinary passengers and express were carried, using six Lancaster airplanes.

Additional services were commenced, in 1946, Toronto-Chicago, Toronto-Cleveland, Victoria-Seattle, Lakehead-Duluth, and in 1947, Halifax-Boston. The Toronto-Winnipeg service began using the Sault Ste. Marie route and bypassed North Bay and Kapuskasing.

Also in 1947 a wholly-owned subsidiary of AC took over the service previously conducted by it for the government between Canada and Britain and substituted North Star aircraft for the Lancasters.

The introduction of North Star aircraft made longer flights possible and in 1948 Toronto, Winnipeg and Calgary became the regular stops between Montreal and Vancouver. Additional local flights were commenced to serve those places left out of the trans-continental flights and the use of DC-3s began.

Also in 1948 Bermuda and Caribbean services from Montreal and Toronto were started.

By this time the axis of AC's operations had shifted from Winnipeg to Eastern Canada and in 1949 AC commenced the moving of its operating headquarters from Winnipeg to Montreal.

In 1951 service to Paris was inaugurated via London and to Dusseldorf in 1952 with service to Montego Bay in 1953.

In 1955 various route service changes were made as a result of the ability of AC to fly between Montreal and Vancouver with stops only at Toronto and Winnipeg, using Super Constellations. Viscounts were placed in service in 1955.

In 1956, DC-8s, and in 1957, Vanguards, were ordered, and in 1957 AC approved construction of a consolidated o/h and maintenance base at Dorval for its new fleet.

1957 saw inauguration of non-stop flights between Toronto and Vancouver and between Toronto and Britain. Direct flights between Montreal and Paris and between Vancouver-Winnipeg-London commenced in 1958 and various services were extended. Service between Halifax and London commenced in 1960 and between Halifax-Boston-New Yörk in 1961.

In 1955 Canadian Pacific Airlines had obtained permission to establish a route from Vancouver and Edmonton to Amsterdam and in 1957 to inaugurate a route to Lisbon and Madrid and later to Rome. In 1958, following a report and recommendations made to the Government of Canada by Stephen F. Wheatcroft, C.P.A. was given permission to start limited competition with AC on the trans-continental route between Vancouver-Toronto-Montreal. This was commenced in 1962.

The Wheatcroft report of 1958 states in part as follows:

#6. Social Obligations and Subsidy Policy

Government policy has required TCA, and expects new carriers, to accept certain obligations to support unremunerative socially desirable services. It is recommended that this policy should be reconsidered because there is a strong case for believing that direct subsidy is preferable to internal cross-subsidization.

It is not suggested that it is wrong to subsidize the low traffic routes. On the contrary, there appears to be the strongest possible case for Government aid to local and regional air services in Canada.

A policy of direct subsidy would make possible a new approach to local and regional operations. Small carriers can almost certainly perform these at a lower cost than a major trunkroute airline. Hence TCA might be relieved of some of its unprofitable social services if the Government agreed to subsidize local carriers on these routes. An additional consideration is that the present financial difficulties of most of the small airlines appear to make some assistance essential for their survival. A review of the overall policy towards local and regional air services is required urgently."

The statements of government policy, (Apps. F and G) would indicate that Mr. Wheatcroft's recommendations with respect to direct subsidies to local and regional carriers have not been followed.

The present situation in the Canadian air transportation field is that there are significant domestic operations carried on by AC and C.P.A., and by the major regional air carriers Eastern Provincial Airways (1963) Limited, TransAir Limited, Pacific Western Airlines, Nordair Limited and Quebecair Inc. There are also many other Canadian companies engaged in civil aviation but for the most part of a non-scheduled type.

C.P.A., in addition to one daily flight each way across Canada, now operates flights to Mexico, South America, New Zealand, Australia, the Orient, the Netherlands, Portugal, Spain and Italy.

AC, in addition to its domestic flights, operates flights to Great Britain, Eire, France, Germany, Switzerland and Austria in Europe, in the United States of America to Chicago, Detroit, Cleveland, Boston, New York and Tampa, and to Jamaica, Bermuda, the Bahamas and the West Indies.

The present Minister of Transport, the Honourable J.W. Pickersgill, stated in the House of Commons on June 1, 1965, (App.G) that the government has undertaken to regard AC and C.P.A. as its chosen instruments in the areas of the International operations allocated to each.

In the same statement and in relation to domestic mainline services he stated that the government has decided to employ a special aviation consultant to advise whether the growth of domestic mainline services would now permit some further degree of competition.

In the field of regional air carriers the Honourable Mr. Pickersgill made it clear that the government expects the two major airlines - AC and C.P.A. - to take some responsibility to assist in working out a policy that in cases where scheduled service was necessary regional air carriers should have a relationship with the mainline carriers that would give the regional carriers a reasonable chance to operate without government subsidies.

In a press release made on July 27, 1965 the Honourable Mr. Pickersgill announced the appointment of Mr. Stephen F. Wheatcroft, whose 1958 report has been referred to, to prepare a special report as to whether further development of competition in the domestic mainline field at the present time would be harmful to AC in that field.

It is assumed that the competition referred to might be that by C.P.A. or by any regional air carrier and that the position of regional air carriers is therefore under study.

To cope with increasing traffic the full jet fleet of AC is being substantially increased. AC in a news item released November 4, 1965 indicated that it had ordered an additional ten jet aircraft for delivery in 1966 and 1967 and that contract negotiations were under way for fourteen further jet aircraft to be delivered early in 1967. Some of the new DC-8s and DC-9S ordered are of a "lengthened" version, each being larger and carrying more passengers and cargo than those now in service or previously on order.

AC pointed out that these new jets would increase its jet capacity by almost one-third in 1966 when it takes delivery of six DC-9 and two DC-8 jets ordered in 1963 and 1964. The first of the latter DC-9 aircraft was delivered in January, 1966.

The Commission has received on a confidential basis a forecast through to 1973 of AC's fleet size and composition. (See App. D).

Under the amended bilateral agreement between Canada and the United States announced December 31, 1965 (see Section D of Part 3 and App.K) Canada received from the United States and gave to the United States various routes additional to those under the previous agreement. The Commission anticipates that the new routes acquired by Canada will be allocated between AC and C.P.A. in accordance with the government's declaration of policy in this regard and that as a result AC will extend its operations by direct routes from Montreal and Toronto to Tampa and Miami, from Montreal to Chicago and from Toronto to Los Angeles, and that C.P.A. will extend its operations by a direct route from Vancouver to San Francisco. These additional routes will substantially increase the services of AC and, to a lesser degree, those of C.P.A.

App. H indicates the characteristics of AC's past and present fleets.

App. I indicates the various routes served by AC at the present time, not including the routes between Canada and the United States added by the new bilateral agreement.

App. J is a schedule of daily Transborder flights between Canada and U.S.A. In this schedule the lines between points indicate the number of daily flights on each service.

The growth of AC over the ten year period 1954 to 1964 is demonstrated by the fact that passenger revenue increased by more than \$110,000,000, an increase of about

180%. All other system revenues (mail, freight, baggage and incidental services) in the same period increased by \$22,000,000 or about 135%.

While in the main the operations of AC have been financially successful (profits were made in twelve of the last fifteen years), deficits were incurred in ten or so of the twenty-eight years of operation. To the extent that surplus earnings were insufficient, these deficits (aggregating some \$10,000,000) were met by the government of Canada. Profits of \$1,504,575 were recorded in 1964 and a dividend of \$1,255,575 was paid in that year to C.N.R.

A press release issued by AC at the conclusion of its 1965 operations indicated a record profit for 1965, with passenger traffic up 14%, air freight traffic up 37%, and revenue up 17%.

B. History and Description of Maintenance and Overhaul Bases of Air Canada.

The maintenance and o/h bases of AC were established and developed as the operations of the airline expanded and evolved.

The separate functions of line maintenance and o/h should be understood. AC has described line maintenance as the execution of through flight maintenance tasks at operating stations and the carrying out of minor routine aircraft checks. In rough and not precise terms line maintenance might be compared with the function and capacity of a service station providing gas and oil and minor checks and repairs to motor cars.

0/h has been described as the reconditioning of aircraft, engines and components following their removal from service.

AC describes an o/h base as one carrying out the above function of o/h. The o/h base also supplies the technical support services required by line maintenance.

Following incorporation of AC in 1937, its head office was established in Montreal and its operational headquarters in Winnipeg. Flight crews were trained on Lockheed aircraft on the route west of Winnipeg. There was only partial routing east of Winnipeg. What is now Hangar No. 1 at the Winnipeg base was under construction in 1937. It was completed in 1938 as AC's first major maintenance and o/h facility.

By mid 1939 AC's operations were extended to Toronto, Ottawa, Montreal, and in 1940 to Moncton. Maintenance facilities were available at Vancouver, Lethbridge, Winnipeg, Toronto, Montreal and Moncton. The Winnipeg base functioned as the major o/h centre, although some major check work was carried out at Vancouver, Toronto and Moncton.

The British Commonwealth Air Training Plan during World War 2 led to AC taking on additional maintenance and o/h work for the Royal Canadian Air Force at Winnipeg. Additional facilities were required and Hangar No. 2 and the present engine o/h shop and service building were constructed.

The Montreal maintenance facility was expanded so as to maintain aircraft engaged in returning to Montreal crews who delivered military aircraft to Britain.

At the end of the war in 1945 AC introduced its DC-3 fleet, which it built up to a peak number of 30. North Star aircraft were introduced in 1946 and built up to a peak fleet of 26.

The DC-3 required less maintenance than the predecessor Lockheed fleet. This permitted AC to phase out Moncton as a major maintenance base in 1947. Winnipeg was the major o/h base for DC-3 aircraft.

Routing requirements in the high density areas of Montreal and Toronto, as well as the inauguration of AC's North Star trans-Atlantic service in 1947, led to the development of Montreal as the main base for North Star aircraft. However, o/h work on the Merlin engine (used in North Star aircraft) was carried out at Winnipeg, with engines and related components being supplied by Winnipeg to Dorval.

The heavy routing which continued to develop in eastern Canada led to the construction in 1954 of additional and improved o/h facilities at Toronto. By this date, Toronto was the main centre of AC's domestic operations.

In 1954 the Super Constellation was brought into service to gradually replace North Star aircraft on main routes and in international service. The Super Constellation fleet reached a peak number of 13. The maintenance and o/h of this aircraft were assigned to Dorval.

In 1955 the Viscount was introduced into the AC fleet, with major o/h being performed at the Winnipeg base. The peak number of Viscounts in service was 50. The current number in service is 39.

1956 saw AC placing its orders for the DC-8 jet aircraft, and commissioning Wallace Clark & Company Limited to make recommendations as to maintenance and o/h facilities requirements of AC for its existing and future fleet.

On receipt of the Wallace Clark report in 1957 the board of directors of AC determined to build a new main maintenance and o/h base at Dorval. Construction was commenced in 1958 and completed in 1959.

During the period 1961 to 1963 AC also constructed new maintenance bases or modernized its maintenance facilities at Vancouver (1961), Halifax (1962) and Toronto (1963).

While AC has its own maintenance facilities in Canada, at London, England the air line has entered into a pooling agreement with other international operators whereby equipment facilities and major aircraft parts are shared. The parties to this agreement are classified as "servicing" companies or "user" companies. AC is a "user" under this agreement.

The size of each of the present maintenance and 0/h facilities of AC and the gross investment made by it in each of them is as follows:

Vancouver	 building area plot plan gross investment 	104,125 sq. ft. 25 acres \$3,872,000.
Winnipeg	 building area plot plan gross investment 	258,037 sq. ft. 23 acres \$4,117,000.
Toronto	- building area plot plan gross investment	202,254 sq. ft. 23 acres \$5,463,000.
Dorval	- building area plot plan gross investment	791,395 sq. ft. 23 acres \$31,573,000.
Halifax	- building area plot plan gross investment	42,545 sq. ft. 5 acres \$1,907,000.

The Vancouver facility consists of two DC-8 sized hangar bays, at one end of which there is a ramp containing ground support equipment, such as a sheet metal and plumbing shop, a machine and welding shop, a propeller assembly area, a service checking area and other related facilities. There is also a stores building joined to the hangar by a link hallway. Boiler and power generation services are in another building. The outside wall of one of the hangar bays is removable so that a third bay can be added in the future. There are DC-8 sized parking and run-up areas adjoining the facility.

The Winnipeg maintenance and o/h base is situated in seven separate buildings. The two hangars previously mentioned account for 59,171 sq. ft., the balance of the building area comprising the stores building, engine shop and other facilities.

The two hangars at Winnipeg do not adjoin one another as is the case at Dorval. Winnipeg hangars No. 1 and 2 have door spans of 190 ft. and 193 ft. respectively, and ceiling heights of 26 ft. and 29 ft. respectively. (The height of the tail fin of the DC-9 aircraft is understood to be 27 ft. 5 inches. That aircraft could enter Winnipeg hangar No. 2 without difficulty but could only enter hangar No. 1 by raising the nose wheel and thereby lowering the tail. This is inconvenient and would result in risk of damage to the aircraft). The hangars cannot accommodate DC-8 aircraft and maintenance at Winnipeg of these aircraft requiring enclosed conditions is accomplished within a portable canvas coverall frame, referred to by employees as a "Rainbow Stage".

Situated between the two hangars at Winnipeg is the engine and propeller overhaul shop and a service building in which there is located a cafeteria, kitchen, welding and sheet metal shop and other separate facilities. The stores building, constructed in 1955, is remote from the other

facilities. The operations building is located in a wartime hangar and is used primarily to support the ramp operations at the air terminal.

The engine test house, also constructed in 1955, is located outside of the plot plan area on Sargent Avenue. A trucking service is maintained between the engine shop and the test house.

Of the seven separate buildings comprising the Winnipeg o/h facility, only the stores and test house buildings are of fairly recent construction (10 years). The remainder and the equipment have been well maintained and the evidence is that, while not modern by current standards, the Winnipeg facility is not inadequate for its present use.

The Toronto facility contains five hangar bays. Three bays will accommodate aircraft of the Vanguard size and the other two will accommodate DC-8 aircraft. AC has stated that it will extend the three Vanguard sized bays as maintenance requirements at Toronto demand. There are shops and stores areas provided on the annexes immediately behind the hangar. In addition, a millwright shop has been constructed directly behind one hangar bay. In the area of the new Toronto terminal AC has recently constructed a ramp service garage.

The Dorval maintenance and o/h base has two hangars, both of DC-8 size, one for line maintenance and the other for overhaul. The maintenance hangar is 484 ft. long and is equipped with double cantilever doors, one on each side running the entire length of the building. This enables aircraft to be brought in to the hangar from either side for servicing without moving other hangared aircraft.

The adjoining o/h hangar is 833 ft. long and is of the single cantilever type. As part of the total facility, both line maintenance and other related facilities being integrated, there are main stores centrally located as well as unit o/h shops covering instruments, radios and accessories.

The engine shop is situated at the rear of the o/h hangar and the test house adjoins the engine shop. There are two office buildings adjacent to the maintenance and o/h facilities and a boiler house is located a short distance from the engine shop and test house.

The Dorval engine shop and related support functions were designed to overhaul, repair and test turbo jet, turbo fan and turbo prop engines and propellers. The test facility will accommodate engines of 30,000 lb. thrust (engines for the DC-8s being in the order of 18,000 lbs. and those for the DC-9 being rated at 10,000 lbs.).

The Dorval base represents a fully modern, well integrated maintenance and o/h facility in which AC has not spared expense in order to achieve maximum convenience and efficiency.

At Halifax there is a single hangar bay facility of DC-8 size constructed along the lines of the Vancouver facility and with a similar removable wall to permit future expansion. In wings attached to the hangar AC has constructed a ground maintenance unit, a stores area and other areas for related maintenance functions.

The aircraft employed in earlier years required much more extensive enroute or line maintenance than is required by the aircraft in service today. Aircraft may now operate for much longer hours between overhauls than was the case some years ago. The aircraft are larger and fly faster. The Commission was informed one DC-8 has the transportation capacity (a function of size and speed) of more than five North Star aircraft, and that one DC-9 is expected to have a greater transportation capacity than three Viscounts.

The foregoing factors tend to reduce the need for many "enroute" maintenance bases, except for line maintenance purposes, and lend support to AC's concept of a single well-equipped main base.

C. History of Problems of Winnipeg Overhaul Base of Air Canada.

An intangible factor of some importance in the history of the Winnipeg o/h base and in the events leading up to the appointment of this Commission has been the uncertainty as to the future of the base and the suspicion and distrust with which Winnipeg community leaders and newspapers, as well as employees at the base, have viewed AC's various pronouncements and statements of intention made from time to time.

Following the first "move" of personnel in the traffic department from Winning to Montreal in 1948 and after further moves were announced as being imminent, a delegation from Winnipeg appeared in April, 1949, before a Parliamentary Committee, as did President G.R. McGregor.

Mr. McGregor was questioned at length by Winnipeg Members of Parliament, the record of the Parliamentary Committee reading in part as follows: (T 1197-1199 V 10)

(Note: the underlining in the various quotations that follow is that of the Commission)

"I would like to touch on the question of the move as it was planned and described in my brief, and the possibility of what may happen. As I understand it, the great fear is that this is simply the withdrawal of a bung from a barrel and the whole contents is going to flow out as a result. I would like to reiterate my previous statement and that of the Directors of TCA as such (I am referring to the Board of Directors) that none of us can see any possibility of such an action proving to be economical. I feel quite sure, although I have not discussed the point with him, that the Minister is of exactly the same opinion. I wish to express gratitude to His Worship, Mayor Coulter, for accepting that statement. I would like to dwell for a moment on the reason why that statement is made, with a great degree of confidence. Probably few of you have seen the Air Lines' establishment in Winnipeg. We have there permanent buildings which have been equipped with heavy machinery, a great deal of which is built into the structure of the buildings. That machinery is associated with the overhaul of engines, both the radial DC-3 engines and the Rolls-Royce engines. the company's engine overhaul work is done there. Thus, to disrupt that situation, would be unthinkable. That the machinery could not be transplanted: The cost of moving it would be tremendous, and TCA would be moving from an area in which it can hire good mechanical help, in an apparently abundant supply, into an area where that supply, both as to quality and quantity, is not comparable. I fully agree with all the arguments advanced by the Manitoba brief in that regard.

MR. MUTCH: If it is permitted to interrupt briefly, might I ask, in the event of TCA developing jets, to what extent would that argument apply?

MR. McGREGOR: I would think the argument would apply fully as well, Mr. Mutch. The Air Lines took on Rolls-Royce fluid-cooled engines, after having operated with radial air-cooled engines entirely, and it followed exactly that program. So I see no reason why the introduction of jet or prop-jet engines would not fit in satisfactorily with conversion of that overhaul base to exactly the same type of work.

MR. MUTCH: The argument then was that you would prefer to be near Pratt and Whitney in Montreal. Would that argument not apply to the fact that jet would probably be developed in the east?

MR. McGREGOR: No. Our desire to be near to these organizations with whom we are doing business, is founded purely on an administrative basis. It is somewhat akin to the situation of the head office of a power company being located in a business centre, where its transactions are carried out, rather than at a powerhouse at some falls on a river."

During the course of cross-examination of Mr. McGregor by counsel for Manitoba at the hearings of the Commission, the foregoing and other questions and answers before the Parliamentary Committee, as well as statements made in the House of Commons as reported in Hansard and in newspaper clippings from Winnipeg papers reporting on these and other statements of AC officials were put to Mr. McGregor: (T 1206 - 1209 V 10).

MR. MAURO: "... what I am attempting to do is in line with what I think Mr. McGregor yesterday properly inferred that it is necessary to put this in context to go back to at least 1949. Knowing how often Mr. McGregor has been subject to examination I know I am trying now to get the record complete. If at any point, Mr. McGregor, when my reading is not correct you will interrupt me. The question that I am in effect asking as I complete each statement will be - Is that an accurate statement?

111

MR. McGREGOR: Mr. Commissioner, I certainly have followed the reading that Mr. Mauro has done in Hansard and I find his repetition absolutely correct. I can't say the same thing, naturally, about newspaper comments. I have not had a chance to check it and I don't know whether it is correct or not.

MR. MAURO: I will only refer to newspaper comments that refer to a TCA announcement, Mr. McGregor, with the view that if you in your records do not find that there was such a TCA announcement on the date that I mention that you will so advise the Commission, because these are the best records we have.

MR. McGREGOR: Thank you.

MR. Mauro: Thank you, Mr. McGregor. So that we have the assurances in 1949 before the Parliamentary Committee and as I stated the next step in this progression that we could locate was on May the 4th, 1950 -- an announcement of TCA which was repeated by the Honourable C.D. Howe in the House to the effect that:

"TCA has consistently stated that other than the headquarters move in October of 1949 it did not contemplate any transfer of operating functions away from Winnipeg."

Does that sound like an accurate statement in 1950?

MR. McGREGOR: Yes, I would think it would.

MR. MAURO: Then, again, a newspaper article from a Winnipeg paper dated October the 29th, 1951, approximately a year later, under the heading "New Plant Planned for TCA":

"Tentative plans have been made by Trans-Canada Air Lines for the construction of a motor testing plant at Stevenson Field in 1952, TCA officials told the Tribune today.

"This action, they said, is in line with the normal growth of TCA operations, and the fact that Winnipeg is regarded as the centre for its overhaul base. It has, however, no immediate connection with plans for jet engines.

"The overhaul base it's indicated, will be expanded to meet present and future requirements, but this is in the 'tentative' stage, as also is the number of extra employees that may be needed.

"Addition of five Super-Constellations is planned by TCA. These will be for the Atlantic flights, and for that reason, servicing will be done at Montreal. But addition of these planes, it is pointed out will automatically mean more work for the overhaul base here, in taking care of extra planes made available for flights in Canada. "TCA officials agree that while purchase of jettype planes is not under consideration at the present time, they have to keep in mind future possibilities. For that reason, any expansion of facilities at Stevenson Field will be designed to provide for a quick change-over and extension as and when that becomes necessary."

You will check that, Mr. McGregor, to see if it is just newspaper imagination. That was on October 29th, 1951.

If there were any errors in the substance of the information contained in the newspaper clippings, AC did not bring them to the attention of the Commission.

As dealt with in Part 3, in August, 1956 AC engaged Wallace Clark & Company (Canada) Ltd. to study its o/h requirements. The main Wallace Clark report was submitted to AC on May 31, 1957. On September 10, 1957 a Winnipeg newspaper carried the report that: (T 1212 V 10)

"T.C.A. officials today emphatically denied rumours that the overhaul and maintenance base at Stevenson Field was to be moved from Winnipeg.

According to these stories a U.S. firm of consulting engineers have made an efficiency survey for T.C.A. similar to surveys conducted for a number of U.S. airlines.

The experts are supposed to have recommended that overhaul and maintenance facilities be transferred from Winnipeg to Windsor or some other centre in Eastern Canada.

T.C.A. officials told the Tribune on Tuesday that Winnipeggers need lose no sleep over the rumours. There is no intention of moving the maintenance base from Stevenson Field.

111

A spokesman for the airlines said that the rumours may have arisen from a continuing survey T.C.A. makes of its operations. He denied that any special study was being made with the view to transferring T.C.A. facilities from Winnipeg."

On October 28, 1957, Mr. McGregor addressed a meeting of AC employees in one of the Winnipeg hangars. Asked about what the employees were told, Mr. McGregor stated before this Commission: (T 1229 - 1230 V 10)

MR. McGREGOR: "... I came to Winning in the autumn of 1957 specifically for the purpose of telling the base personnel, who were understandably restive, what our view was of the effect of the Dorval Base on the Winnipeg situation. I was reported in the press at that time and I think it is very clear by implication because I simply said to the Winnipeg Base personnel that their employment here would continue as long as the job of overhauling Viscount aircraft and Dart engines continued.

MR. MAURO: Is this what you said to the employees?

MR. McGREGOR: Yes

MR. MAURO: You will agree that that is not what is said in the newspaper reports that I read?

MR. McGREGOR: No, it does not seem to be, I will admit. But, I am talking about an address given to the base personnel from an inspection stand in a hangar. You may be quite right in saying that the November letter (Note - letter of November 14, 1962) was the first document, but it was not the first declaration of policy.

MR. MAURO: So, what you are telling the Commission is that in 1957 you told the workers in Winnipeg that when the Viscount goes, Winnipeg goes?

MR. McGREGOR: No, I did not say that, and I did not say it at the time. I said they would be all right in their present employment as long as the function of the Viscount and Dart engine overhaul remained in Winnipeg or, remained in the company. I should say.

Earlier in his testimony (T 1176 - 1177 V 9)
Mr. McGregor had explained AC's position as regards the
Wallace Clark report and the manner in which AC's decision
was made public in these words: (T 1176 - 1177 V 9)

MR. McGREGOR: "On October 29, 1957, I announced in Winnipeg the Company's intention to build an overhaul base at Montreal. At the same time a commitment was made to continue the overhaul of Viscount aircraft and their engines at Winnipeg. Let me make it perfectly clear that the Wallace Clark Report left no doubt that there would be substantial economies to be gained if all turbine powered aircraft overhaul was consolidated at Montreal immediately upon construction of the new facilities. The Company's decision to continue Viscount overhaul at Winnipeg was based upon a wish to lighten, as far as possible, a blow to the Winnipeg economy and to its own staff at that point. Obviously, a sudden transfer of the Viscount maintenance and overhaul function to Dorval would have been unduly disruptive.

I also stated in 1957 that when the Montreal facility was built, approximately 100 employees would be transferred east. These would be technical specialists required to service DC-8's and Vanguards. Planned purchases of additional Viscounts and their associated overhaul requirements would offset this small group movement. Subsequent employee transfers from Winnipeg were of a nature and scale almost exactly as forecast and publicly announced.

It was, of course, obvious that over a longer period of years the number of Viscounts in service would diminish gradually. This has proved to be the case as there are now 39 Viscounts in service as compared with a peak purchase of 51. Also, the number of hours of overhaul work per Viscount hour flown has declined substantially so that the volume of overhaul required at the Winnipeg base has decreased more rapidly than has the size of the Viscount fleet."

While it may have been "obvious" in 1957 that the number of Viscounts in service would diminish over the years, it was not so obvious then that this would mean the end of the Winnipeg Base, although this might have been implied by Mr. McGregor's commitment that the employment of Winnipeg base personnel would continue so long as AC continued to overhaul Viscounts.

It is important to recognize that the Wallace Clark report was, and remained until the hearings of the Commission, a confidential document, and the only knowledge of its contents was that gained from AC's statements.

Nothing was said in 1957 by AC of the recommendation of Wallace Clark that a single consolidated base be constructed

at Montreal or that "upon eventual retirement of the Viscount, if not before, all maintenance and overhaul should be consolidated."

Obviously Mr. McGregor's 1957 statement to employees was not considered by them to be sufficiently reassuring since on November 14, 1957, Mr. N.A. Radford then General Chairman of Airline Lodge 714, submitted a letter to AC containing a list of specific questions as to AC's plans for the Montreal and Winnipeg bases. The letter was answered by Mr. J.T. Bain, then Director of Engineering and Maintenance, on March 11, 1958. The reply read in part as follows: (T 869 V 7)

- "Q.3. When new facilities are built in Montreal, will they be capable of handling DC-8 and Vanguard aircraft only, or will the initial buildings be sufficient to include the Viscount operation also?
- A. The new facilities will be designed and built to meet only the space requirements of the DC-8 and Vanguard. There is no overhaul space planned for Viscounts.
- Q.4. What are T.C.A. plans for Winnipeg after 1961?
- A. In making the announcement of the Board of Directors decision, the President's statement covered the time interval for which positive Company plans have been made. This was based on present knowledge of aircraft purchases, route patterns, and the expansion needed to meet the estimated air travel requirements. Beyond 1961, there is every confidence that the airline will continue to expand. However, the exact shape of that expansion depends on many factors outside of T.C.A.'s control. We can be pretty certain up to 1961. Beyond that point it would be incorrect to make positive statements.

Venturing a personal opinion, I regard the Board of Directors' decision as tantamount to saying that Viscount and Dart overhaul will remain permanently in Winnipeg.

- Q.5 What happens to Winnipeg after Viscount aircraft are retired from service -- Will replacement aircraft be overhauled at Winnipeg or Montreal?
- A. We do not yet know when the Viscounts will be retired, what will replace them, or the location of the overhaul in the latter event.

- Q.6 Will Viscount operation as it exists in Winnipeg today remain after 1961, when the Montreal Base begins the Vanguard and DC-8 operations?
- A. I believe this question is answered under Nos. 4 25."

The above answers were not wholly responsive to the questions asked and appeared more intended to allay fears as to the future of the winnipeg base than to provide frank information concerning the plans of AC limiting that future.

If AC made any other public statements relative to the Wallace Clark recommendations and AC's decision to close ultimately the Winnipeg base, AC did not bring them to the attention of the Commission, although full opportunity was available and the Province of Manitoba spent a good deal of time at the hearings stressing the lack of full disclosure.

It was not until November 14, 1962 that winnipeg employees were actually informed in unequivocal terms that AC intended to close the Winnipeg Base when the Viscounts were phased out of service and a likely time for such phasing out was given. On that day, Mr. McGregor wrote the following letter addressed to the Winnipeg Overhaul Base Personnel: (T 1179 V 9)

"The many Winnipeg based personnel who were at the 25th Birthday Party at Winnipeg on Friday, November 2, will remember that I refrained at that time from making any comments on Company planning, saying that I felt that a party was not the proper place to "talk shop". I also promised that the Company would soon make such statements as lay within its power, in order to facilitate as far as possible the personal planning of the base personnel.

This letter is written in fulfilment of that undertaking. The Dorval Base, as was stated at the time, was designed for the specific functions of the major maintenance and overhaul of the airframes and engines and other components of what was conceived to be the ultimate TCA fleet of turbo-jet aircraft. The recommendation that there should be only one such base, and that it should be located at Dorval, was made by a very competent firm of aviation consultants, and was accepted by the Board of Directors at that time. That decision, obviously meant that as TCA moved toward an all-jet fleet, the winning Base as an overhaul centre would cease to exist.

At the time, I said that in order to cause as little personal inconvenience as possible to its Winnipeg personnel, TCA would continue to carry out Viscount airframe and Dart engine overhaul at Winnipeg as long as the Company operated a substantial number of Viscount aircraft. That commitment has been fulfilled, and will continue to be honoured.

The question which must be uppermost in the minds of many of you is: "Yes, but for how much longer?"

The answer to that question, as I see it at this time, is as follows:

TCA's need for Viscount aircraft is related to:

- (a) any basic change in the routes which it is licensed to operate; and
- (b) the acquisition of new (jet) aircraft which would do some or all of the work now being performed by Viscounts and Vanguards.

I cannot accurately forecast changes in TCA's route pattern, but with the possible exception of the Prairie milk run, I personally think it unlikely that there will be any great changes in TCA's short route operations.

With respect to (b) above, it can now be said that TCA does not plan to seek authority to acquire any short-medium range jet aircraft for operation prior to the winter of 1965-66.

Therefore I feel reasonably certain in forecasting that apart from conditions over which TCA has no control.
TCA will be operating a Viscount fleet of not less than 40 aircraft through 1965. Naturally, I can be much less definite as to what may occur thereafter, but it is quite possible that the Viscount fleet will start to dwindle in numbers, perhaps quite rapidly, early in 1966.

From the foregoing you will realize that TCA's most probable next purchase of a new aircraft type will be a short-medium range jet, and that the major maintenance and overhaul of such aircraft, its power plants and components, will be engineered into Dorval, not Winnipeg, in conformity with the original planning, and the dictates of economic common sense.

There is a human tendency to regard "1966" as a long way away; but in fact, it is not four years, and that time will pass quickly. In making plans for personnel, the specific circumstances applying in every individual case will obviously vary widely, and it would be foolish of me to try in this letter to give any rules of thumb, but I think you can trust the Company to deal with its people fairly and intelligently; certainly that will be the Company's objective.

I feel that the foregoing statement puts you in possession of all the information which at this time exists in this headquarters on this subject. I hope it will remove much of the doubt as to the future, and the difficulty which has surrounded your personal decisions in recent years. I hope, too, for such of you to whom this may apply, that you will not regard the prospect of changing your scene of activity to Montreal with reluctance. I think that those many who have already made the move are actually enjoying living in the Montreal area.

"G.R. McGregor"
President. "

This 1962 letter could have been welcomed by employees at the Winnipeg o/h base, and in Manitoba generally, if only for the reason that for the first time there was a precise and complete statement of AC's intentions relative to the future of the base. This clear statement is in contrast to the general, rather guarded and less-than-complete statements made in 1957 on behalf of AC and referred to previously in response to an understandable request of members of Airline Lodge 714 to obtain information as to their future.

In retrospect it would appear that disclosure in 1957 of the Wallace Clark report contents in so far as they related to the future of the Winnipeg o/h base, coupled with a frank indication of the long range intentions of AC in that regard, while it might have caused an immediate storm, might also have brought about a much earlier solution of the base problem than will now be the case.

The 1962 letter refers to statements said to have been made in 1957 on behalf of AC concerning the recommendations of AC's consultants for a single base at Dorval in which all

o/h operations would be consolidated. The 1957 commitment of Mr. McGregor was to operate the Winnipeg base "so long as the <u>function</u> of the Viscount and Dart engine overhaul <u>remained in...</u> the Company". The 1962 letter sought to introduce a qualification that the Winnipeg base would be operated so long as AC "operated a substantial <u>number</u> of Viscount aircraft".

The statements actually made in 1957 were much less informative than the references to them in the 1962 letter would indicate.

The Commission was told by Mr. McGregor that AC's management decisions with respect to the Winnipeg o/h base had as one of its basic objectives informing base personnel of Company plans: (T 1191 V 9)

"... as far in advance as possible with a view to minimizing disruption of the individuals' personal and domestic planning."

If, as was stated in Mr. McGregor's letter of 1962, the acceptance by AC's directors of the Wallace Clark recommendation of one o/h base meant that the Winnipeg base would "cease to exist" as AC moved toward an all jet fleet, the Commission can only observe that disclosure of that conclusion when it was made in 1957 would have been more in keeping with AC's expressed objective as quoted above; and might have avoided much of the suspicion with which AC's announcements became to be viewed.

The failure to give in 1957 precise information regarding the proposed base closure may have been intended to be in the interests of AC's o/h base employees. As it turned out the delay in disclosure may have had an effect on employees and the public concerned reverse to that. This is indicated in the evidence of Mr. Don Mills (T 101 V1) appearing on behalf of Airline Lodge 714 Winnipeg International Association of Machinists, which represents many of the Winnipeg o/h base employees, and of Mrs. Grace H. Allen, a wife of an AC Winnipeg o/h base employee who relates (T 1967 - 1968 V 14) the unhappy effects of the uncertainties on employees and their wives and families.

D. Description of procedures leading to granting of international landing rights.

As a preliminary to consideration (in part 3) of the future of Winnipeg as an international air centre a short general outline follows of the procedures under which foreign air carriers are given landing and other rights in Canada, and Canadian air carriers given landing and other rights in other countries.

The Convention on International Civil Aviation (the Convention) was formulated at the International Civil Aviation Conference at Chicago December 7, 1944. It supersedes previous conventions signed in 1919 and 1928, has been ratified by the majority of countries interested in civil international air transport, and has been amended from time to time.

The Convention creates the International Civil Aviation Organization (ICAO) (with headquarters in Montreal) and establishes principles and arrangements stated in the Convention to ensure that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically.

The Convention recognizes the sovereignty of every state over its own air space and establishes general rules for the flying of aircraft of one state over the territory of another.

While the Convention in general applies only to civil aircraft, it provides, in relation to state aircraft of a country, i.e., military, customs and police, that such aircraft shall fly over or land on the territory of another only in accordance with special agreement or authorization.

The Convention permits civil sircraft of a contracting state not engaged in scheduled international air services, to make, without prior permission, flights into, or in transit non-stop across, the territory of another contracting state, and to make stops for non-traffic purposes, and to take on and discharge passengers, cargo or mail, subject to such regulations, conditions or limitations as the state involved may consider desirable.

However, the Convention specifies that no scheduled international air service may be operated over or into the territory of a contracting state, except and in accordance with special permission or other authorization of that state.

During the Conference at Chicago, the International Air Services Transit Agreement (a multilateral agreement) was also formulated. It has since been accepted by many countries, including Canada. States which have ratified that agreement grant to each other (under certain conditions), with respect to scheduled international air services, what are known as the First and Second Freedoms of the air, namely, the privilege to fly across its territory without landing, and the privilege to land for non-traffic purposes.

As a result of multilateral agreements the airlines of most foreign countries may exercise in Canada the two Freedoms referred to above, and Canada enjoys similar rights in relation to those countries.

As contemplated by the Convention negotiations between any two of the signatories to the Convention take place from time to time with respect to particular scheduled international air services. The resulting agreements are termed bilateral air agreements.

Under a bilateral agreement the contracting foreign country may be granted, in respect of Canada, not only First and Second Freedoms, but also a Third Freedom, namely, the right to put down traffic in Canada from that country, a Fourth Freedom, namely, the right to take on in Canada traffic to that country, and a Fifth Freedom, namely, the right to put down and take on in Canada traffic originating in or destined for a third country. Canada could in return be granted similar rights.

The rights exchanged are contained in the relative bilateral agreement and the agreed services are listed in an Annex or Route Schedule which forms part of the agreement.

Bilateral agreements may be revised from time to time by negotiation between the contracting states. In such negotiations each country determines its own position in relation to its own circumstances, Obviously, when negotiating, a state would take into consideration its national interest, which includes the interest of its travelling public, and also the interest of such of its national air carriers as would be affected by the granting of rights, either through gaining a new market or losing all or part of an existing market, and, in most cases, in both ways.

A process of "quid pro quo" bargaining goes on with the expectation that for each right granted by one state to another state a corresponding benefit to the granting state will be obtained.

Having arrived at an agreement the contracting states designate which of the airlines of their nationality shall be entitled to operate the agreed services on the routes specified in the agreement.

As a result of various negotiations bilateral air agreements have been entered into between Canada and eighteen or so other countries.

The bilateral agreement with the most extensive route schedule is, naturally enough, that between Canada and the United States, entered into June 4, 1949 and amended December 20, 1955 and April 9, 1959. Under this agreement Canada has sixteen routes to points in the United States, of which seven are not in operation, and the United States has twenty-two routes to points in Canada, of which six are not in operation.

Amendment of the Canada-U.S. bilateral has been under negotiation for some time and on December 31, 1965, just prior to completion of this report, a press release was issued from the office of the Prime Minister indicating that agreement had been reached in principle between the governments of the United States and Canada on a new air transport agreement to replace the existing agreement as amended.

The release indicates that all routes operated under the existing agreement will be retained and other routes will be available to both countries.

A press announcement made January 17, 1966 indicates that the agreement has been signed.

A copy of the amended route schedule referred to in the release is attached as $\mbox{\sc App.}\, K_\bullet$

The United States is the only foreign country which has been granted air traffic rights at Winnipeg as distinct from several foreign countries, including the United States, which have received First and Second Freedoms at Winnipeg, not involving the right to discharge or take on passengers or cargo.

Part 3 of this report refers in some detail to the effect of these various agreements in relation to Winnipeg as an aviation centre.

PART 3

A. Wallace Clark Report

In 1956 the AC fleet consisted of Douglas DC-3, North Star, Lockheed Constellation and Vickers Viscount aircraft. Except for the Viscount, which has a turbo-prop engine, all of these aircraft were powered by piston engines. The peak number in service of each of these aircraft in the AC fleet at that time was as follows:

DC-3	30
North Star	26
Constellation	13
Viscount	50

The DC-3 fleet was being phased out in favour of the Viscount, the first of which had gone into service in 1955.

Dorval was the main base for the o/h of the North Star and Constellation fleet. Winnipeg was the major o/h facility for the DC-3 and the Viscount and also for the Merlin engine powering the North Star aircraft, and its associated components.

Consistent with the worldwide trend to jet aircraft AC placed its initial orders for full jet aircraft in 1956, the jet selected being the Douglas DC-8. AC also selected Vanguard turbo-prop aircraft for use as a medium-range aircraft for domestic routes; supplementing the shorter range and smaller Viscount.

A projection was made in 1956 of the AC fleet for the years 1958-1965. The then projected 1965 fleet and the actual fleet in that year was:

	1956 projection for 1965 fleet	Actual 1965 fleet	
Viscount	46	39	
Vanguard	24	23	
DC-8	17	16	

In the light of the requirements of this projected fleet AC engaged Wallace Clark & Company (Canada) Ltd. (Wallace Clark) in August 1956 to make an engineering study to

determine AC's needs for future maintenance and o/h facilities. Wallace Clark was the Canadian subsidiary of Wallace Clark & Company Incorporated of New York, a firm of management consultants with considerable experience in aircraft industrial planning, including maintenance and o/h base layouts at various centres.

Under their terms of reference, Wallace Clark were to survey AC's existing facilities, study the maintenance and o/h requirements for the future fleet, evaluate the factors to be considered in the choice of base locations and, finally, to propose a plan for establishing adequate facilities, including recommendations with respect to geographic locations. After agreement by AC upon the location of major facilities, Wallace Clark was to develop the layout plans for maintenance and overhaul shops in detail.

The study began in September, 1956, and the first progress report was made to AC on November 2, 1956, with subsequent progress reports being rendered during the winter of 1956-1957. The third progress report dated April 5, 1957, made to the AC Vice-President for Operations, began with the words -

"All basic data for determining future maintenance and overhaul facilities requirements are now complete. The visit of the Aircraft Team to Vickers has provided background information on the Vanguard similar to that previously reported on the Viscount and DC-8. All engine overhaul processes are complete, and shop flow studies have been made to determine minimum shop area requirements and maximum manpower utilization. All supporting shopwork loads, involving both aircraft and engine units, have been calculated. A summary of area requirements is presented later in this report. The data prepared as part of this study constitute a first draft of maintenance and overhaul practices for the new equipment and thus provide a body of information of considerable value apart from the present exercise.

l

The main report was made May 31, 1957, followed by supplements during that summer. In essence, Wallace Clark examined 13 "propositions" or possible solutions. of these propositions involved combinations of maintenance and o/h facilities located at one or more of four stations -Vancouver, Winnipeg, Toronto and Montreal, at all of which points AC operated maintenance and/or o/h bases. combinations ranged from the o/h of all aircraft and engines at one of these four cities to the o/h of airframes at Montreal or Toronto and engines at Winnipeg; from the o/h of DC-8s at Montreal or Toronto and Viscounts and Vanguards and all engines at Winnipeg; to the o/h of DC-8s and Vanguards at Montreal or Toronto, and the o/h of Viscounts and engines for Viscounts at Winnipeg. All of these propositions assumed the continued use of existing buildings wherever possible. A thirteenth proposition was an alternate to all of the others and involved the construction of a single new o/h facility at Montreal.

The conclusion and principal recommendation of Wallace Clark in its report of May 31, 1957 was stated as follows:

"The facts point conclusively in one direction only. A consolidated base for maintenance and overhaul located at one of the two centers of population and traffic in the East will be best for Trans-Canada Air Lines. However, the existing facilities and operation at Winnipeg cannot be closed, practically nor economically, earlier than mid 1961 (the end of North Star operation).

The recommended course of action is for Trans-Canada Air Lines to consider developing a base in the East capable of accommodating the entire 1965 workload, including all aircraft and engine overhaul and line maintenance operation checks.

Decision as to relocation of Viscount and Dart engine overhaul should be reserved until late in the year 1959. The decision whether or not to relocate the Viscount from Winnipeg to the East will rest in part upon the then expected retirement date for the Viscounts. If they will continue in service for more than two years after 1961, the base should be consolidated; if less, not. In

any case, we can find no real requirement nor incentive to make a decision this year on the Viscount. Upon eventual retirement of the Viscount, if not before, all maintenance and overhaul should be consolidated."

Wallace Clark went on to say -

"The transition from Constellations and North Stars to DC-8s and Vanguards will require capacity in buildings and labour force above the 1965 levels. Construction of a complete facility will provide this capacity, which later will be reduced through evacuation of existing buildings. The transition may extend over several years, depending upon traffic demands and the performance of new equipment. The problems of supervising the shifting workloads can be met far more easily and at less cost at one base than at two.

Upon due consideration of all factors Montreal is the best choice for location of the base."

In arriving at their conclusions and recommendations, Wallace Clark considered and rejected nine of the thirteen propositions as having considerable economic handicaps. The four remaining for consideration as "leading candidate propositions" were -

- Proposition 3 o/h all aircraft and all engines at Toronto
- Proposition 4 o/h all aircraft and all engines at Montreal (using then existing but reconstructed facilities)
- Proposition 4A- o/h all aircraft and engines at Montreal in a single new consolidated base (to be constructed)
- Proposition 11- o/h DC-8 and Vanguard aircraft and engines at Montreal and o/h Viscount aircraft and engines at Winnipeg.

Making use of existing buildings at Montreal with some reconstruction (proposition 4) was considered by Wallace Clark

to be the least costly, and the two base concept at Montreal and Winnipeg (proposition 11) the most costly of the leading candidate propositions. It was estimated that the initial cash outlay for proposition 11 would exceed that for proposition 4 by \$896,000 and that the operating expenses for proposition 11 would be \$909,000 per year higher than those for proposition 4.

In addition to cost comparisons, there were some intangible factors affecting Wallace Clark's recommendations -

"The importance of having the maintenance base at a center of aircraft movement, and having the overhaul and maintenance activities together has been shown. There is no doubt that flexibility in use of the work force is increased through having one base rather than two, and consequently costs will be lower. In the long view, therefore, the solution will preferably be a single base at a point of high aircraft activity."

Notwithstanding the reference in the Wallace Clark report to "due consideration of all factors" having been given, the evidence is that no consideration was given by Wallace Clark to the impact that base location might have on Canadian regional or provincial economics, this being considered outside the scope of the Wallace Clark study. Mr. Wilson summarized the Wallace Clark approach as follows:

"We dealt with information affecting the company management and company expenses and investment. We did not examine, for example, trend of industrial employment in various areas of the country or the provinces. We realized that the objectives of national development exist and of provincial development and that, taken in some context other than management of the industrial enterprise, there might have been factors to influence a choice of location. We did not go into them. Our objective was to provide the most economical facilities for the airline."

Wallace Clark submitted a supplement to their May 31, 1957 report under date of July 25, 1957. In this supplement, Wallace Clark dealt more specifically with cost estimates of a new facility at Dorval and also modified the conclusion reached in the May report that expanding the existing facility at Montreal, but making use of present buildings so as to overhaul all aircraft and engines there (proposition 4), was less costly than constructing a totally new Dorval facility (proposition 4A). Wallace Clark found that the attempted use of existing buildings at Dorval became "progressively less feasible as plans are developed in more detail. " The factors involved in this finding included making cost allowances for disruption and inefficiencies due to working in old buildings while modifications were being carried out, continuing operations for an additional two years at both Winnipeg and Montreal, if the existing buildings at Montreal were retained, and additional construction costs which could not be foreseen in the initial study.

Weighing the foregoing factors, Wallace Clark estimated that the cost of proposition 4 would exceed proposition 4A in total cash outlay and would cost \$409,000 more per year to operate. Hence, proposition 4A, the new facility at Dorval, became in Wallace Clark's opinion, the least costly of the propositions formulated and studied by them..

On August 15, 1957, Wallace Clark presented to AC their fourth progress report containing departmental layouts and tentative physical dimensions for the proposed new consolidated base at Dorval.

Under date of September 20, 1957, Wallace Clark delivered a comprehensive layout report with a programme for carrying the construction forward and a forecast of cash requirements. In presenting this report, Wallace Clark said -

"The time span from now until arrival of the DC-8 will just cover design and construction, if action is taken without delay to begin design work. To avoid risk of disruptions of the operations and unnecessary expense, virtually the entire facility must be ready when the DC-8 begins operation."

On November 27, 1957, Wallace Clark presented a further facilities layout report (described as "Facilities Layout Report II") addressed to Mr. G.R. McGregor, President, Trans-Canada Air Lines, and reading in part as follows -

"This report supplements the Layout Report of September 20th, 1957 and recognizes the Board's decision to retain Viscount overhaul at Winnipeg and build a new facility at Montreal for the Vanguard and DC-8".

Mr. R.B. Wilson, who was a Vice-President of Wallace Clark and in charge of the Wallace Clark team, gave the following evidence: (T 652-653 V6)

- "Q. ...your recommendation in your report was for a consolidated base, a new one, to be constructed at Montreal?
 - A. That is correct.
 - Q. Now, what was done in relation to that decision?
 - A. The solution recommended in our evaluation report wherein we suggested that a consolidated base in Montreal was acceptable to the TCA management. We were asked to continue with a refinement of the layout plans for a consolidated base.
- Q. When you say you were planning for a consolidated base, what overhaul functions were ultimately at that time considered as going to be included in that base?
- A. All aircraft and all engines and all accessory overhauls including the DC-8, the Vanguard and the Viscount.
- Q. And initially did you proceed to plan such a base?
- A. We did make the preliminary sketches and very preliminary cost estimates for such a base.
- Q. And are those preliminary estimates included in your report?
- A. They are included in the report known as Layout Report I, dated September 20th, 1957.
- Q. Then there were some changes in plan, were there not?
- A. There were. We were advised by Air Canada management that the decision had been made not to plan

at that time to relocate the Viscount overhaul and we were advised to re-structure the base to provide for the DC-8s and Vanguards and to make provision in that new design for expansion to accommodate 51 Viscounts in the event a decision were later made to move the Viscounts.

- Q. Was there any indication to you at that time of the length of time which would elapse before the Viscount fleet was consolidated into Dorval?
- A. There was not. Our instructions were merely to re-structure the base, as I have indicated. Our report had suggested the timing which we covered yesterday, but we were not advised as to when action would be taken."

Under examination by Commission Counsel Mr. Wilson stated that his instructions not to plan the Dorval base for immediate Viscount o/h came from Mr. McGregor in late September, 1957, and as a result the planned facilities at Dorval were reduced in size, with provision for expansion in the event of ultimate use of the base for the o/h of a fleet of 51 Viscounts.

And further: (T 654 V 6)

- "Q. Did you have any recommendation as to timing assuming that the Viscount fleet was going to be operated past 1959?
 - A. Yes. We suggested that upon reconsidering the decision in 1959 whether to relocate the Viscounts that the management look forward to see how long the Viscounts would be operated. We suggested that if they would be operated for a period of two years beyond 1961 the Viscounts should immediately be consolidated into Montreal. If it appears that the Viscounts would retire within two years we suggested that they not be moved, but be phased-out at Winnipeg. This was based on the practical problems of moving a base for a period of operation with the same equipment for a year or less.
 - Q. But whichever way it happened, if your recommendation had been followed the Viscount fleet would not have been in Winnipeg at 1961?
 - A. I would say that is correct, yes, sir."

Mr. McGregor stated (T 1177 V 9) that the decision of AC not to follow the initial recommendation of Wallace Clark that the o/h of Viscounts be transferred to Dorval at the latest by 1961 was based on a wish to lighten the blow to the Winnipeg economy and the o/h staff at Winnipeg.

Following presentation of the Facilities Layout Report II by Wallace Clark in November 1957, a further direction of the design and development of the new Dorval base was taken over by AC personnel. Wallace Clark rendered assistance to AC in planning techniques and other control procedures until April of 1958 when their services were no longer required.

The Wallace Clark projected cost differences were based on initial and general estimates intended to be used for comparison of the propositions and not as estimated budgets of the absolute dollar amounts. Given this qualification, the estimate by Wallace Clark of capital expenditures for the engineering and maintenance facilities required under proposition 4A was approximately \$23,400,000. In addition to providing the new facility at Dorval, this amount was to include a new DC-8 size hangar at Vancouver and modifications to other hangars there and at Toronto.

The actual investment by AC in buildings and equipment at the new Dorval base is in the order of \$31,500,000. This does not include any of the costs for facilities at Toronto and Vancouver.

As proposition 11 would have called for some new facilities at both Dorval and Winnipeg (at a total estimated capital cost for engineering and maintenance of approximately \$20,850,000), it may be presumed that the actual capital cost of proposition 11, if carried forward, would also have been considerably higher than was forecast by Wallace Clark. However, as the new Dorval base was in fact built and the two base development involved in proposition 11 did not come into being, one can only speculate as to whether the real additional costs of proposition 11 over proposition 4A would have been in the order of \$1,037,000 per year (as finally forecast by Wallace Clark in Facilities Layout Report II) or a greater or lesser amount.

When comparing this sum with those produced by other studies made in 1963 and later it should be remembered that it is expressed in terms of 1957 dollars.

Mr. Wilson stated in evidence that further and recent consideration of the Wallace Clark report had not altered the conclusion of the report concerning the building of a single consolidated base at Montreal. He summarized his views as to a single base as follows: (T 648 V 5)

"The major influences are that some duplication of staff is inevitable when two bases are operated instead of one, that some duplication of equipment and spare parts inventory will occur, that special facilities will be less well utilized, and that control of workload at two bases is so much more difficult that inefficiencies will inevitably occur simply because two bases exist rather than one."

The objectivity of the Wallace Clark report or the Wallace Clark recommendations was not questioned during the hearings. The Commissioner is satisfied that the study was competently and objectively done and that the recommendations made by Wallace Clark were proper in the light of the o/h requirements of AC and of its instructions to Wallace Clark to evolve a plan that would provide the most economical facilities for the airline.

Because of the proprietary information contained in the Wallace Clark report it was not considered a public document and the details of its conclusions were not publicized at the time of receipt. Reference is made in Part 2 to this aspect. The confidential character of the report was lifted, due to the time factor, for the purposes of the Commission and it is now a public document.

B. DIXON SPEAS REPORT

By 1959 the new o/h base at Dorval recommended by the Wallace Clark report in 1957 had been completed and was in operation. A guarded explanation concerning the future of the Winnipeg o/h base had been given in 1957 by AC to its Winnipeg employees (See C of Part 2). In November, 1962 Mr. McGregor had made a clear announcement of AC's intention to close its Winnipeg o/h base when AC ceased to operate a "substantial number of Viscount aircraft", and had coupled with this an intimation that this closure might be early in 1966. This announcement had brought about strenuous protests from the Winnipeg area. Following representations made to the Government of Canada, R. Dixon Speas Associates (Speas) of New York City, consultants with considerable experience in "civil aviation planning in projects involving technical, operational, and economic considerations" was engaged in March, 1963 by AC to "examine the economic merits of the Company's planning with respect to the Dorval and Winnipeg bases" (T 418 V 4). A copy of the instructions given to Speas appears as Appendix L.

In essence Speas were to examine the o/h planning and facilities of AC and to recommend to AC a course of action to provide AC, in the most efficient and economical manner through 1973, with o/h capacity adequate to its needs throughout that period.

Speas reported to AC in August, 1963. Their report consists of a Summary Report and four supporting volumes comprising in all some 388 pages of material, which includes a large number of supporting statistical and accounting tabulations.

This report had been prepared using all available information, including many figures which were the property of AC and which would have been of great use to its suppliers and competitors. Consequently, while the complete report

was delivered to AC, only the Summary Report was released to the public. Because of the considerable and expressed public interest in the material upon which the Summary Report was based, the then Minister of Transport, the Honourable George J. McIlraith, in November, 1963 instructed Speas to prepare an abridged version of the report and this was prepared and delivered to the Minister of Transport in February 1964 and was made public. The special comment to this second document appears as Appendix M.

Both the initial report and the abridged version were filed with the Commission. Notwithstanding the proprietary or confidential nature of much of the material in the basic report, copies were made available by AC through the Commission to the Province of Manitoba, its counsel and consultants, for study on the basis that the confidential character of all proprietary information in the report was to be respected. All concerned scrupulously observed this condition.

Mr. R.D. Speas, called as a witness by AC, described the composition and qualifications of his firm and the extensive consultant management engineering work performed by his firm for many major airlines of this continent and elsewhere throughout the world.

Mr. Speas described the circumstances under which his firm was engaged by AC to conduct the study under review and emphasized not only that the review was to be made strictly on the basis of economics but also that it was to be "completely independent" with the procedures to be followed, avenues to be explored and data to be used to be at the sole discretion of his firm. (See Appendix L.)

Mr. Speas described the procedures and data used in the Speas study and also the report resulting from it, including its conclusions and recommendations. He submitted to extensive cross-examination by counsel for the Province of Manitoba and the Commission and during his evidence in chief

he stated that he was still of the opinion that the Winnipeg base should be closed at the earliest possible date in the interest of the most efficient and economical operation of Air Canada.

The Speas study was based upon extensive statistical and accounting data provided by AC, comprising historical and current data as at 1963 plus projections and estimates of aircraft fleets, flying hours and schedule frequency patterns for the ten years ending in 1973.

In designing its study Speas selected what they considered to be the four most logical alternative plans of operation of AC's o/h facilities and prepared detailed estimates of the cost of each of the four plans for each of the ten years. The starting point of these calculations was the manhour records of the time employed in the maintenance and o/h of each type of aircraft operated by AC. These were estimated for each future year by adjusting current data to reflect changes in the number and nature of the various types of aircraft to be in use and the frequency of o/h related to estimated mileages to be flown. These manhour estimates were then converted to dollar costs by applying average wage rates per hour with adjustments year by year to cover estimated wage increases and the effects of accumulating seniority by existing staffs.

An important factor required to be taken into account was the prospect that a new short range jet aircraft would be acquired by AC and put in service during the period under study. While AC later selected the DC-9 as its new short range jet aircraft, at the time of the Speas studies the make and model had not been determined. The proposed new plane is referred to throughout the Speas report as the "New Jet". The date of introducing the New Jet, the frequency of maintenance and o/h it would require, the labour it would require for the o/h of its airframe and engine, and the amount of capital equipment and hangar space required for it, were all major variables in the estimates prepared by the Speas staff.

At the time of the Speas study the division of work among the various AC o/h bases was as follows:

- (a) line maintenance on all types of aircraft was done at various bases as the need arose and as facilities were available.
- (b) o/h of Viscount aircraft was done at Winnipeg.
- (c) o/h of DC-8 and Vanguard aircraft was done at Dorval.

(The DC-8 aircraft operated by AC use a full jet engine while the Viscount and Vanguard are operated by a turbo-propeller type engine. At the time of the study Winnipeg was overhauling Viscount "turbo-prop" aircraft and engines only, while Dorval was overhauling both "turbo-prop" yanguards and full jet DC-8s.)

The New Jet to be introduced into the system would, of course, have a jet engine and was anticipated to have a smaller frame and fewer engines than the DC-8. The study assumed that the New Jet would be introduced gradually beginning in 1966 and that it would be of the same general type as the BAC-111 or DC-9, having two engines. No. o/h cost allowances for the New Jets were provided in the study for 1964 but for 1965 the cost of preliminary organization was included and thereafter the o/h cost allowances for the New Jets increased gradually year by year as more New Jets were added to the fleet. Thus the study included the estimated costs of o/h and maintenance for the Viscount, vanguard and DC-8 for the entire ten year period of the Plans and the New Jet for only part of that period.

The Four Plans and Estimated Costs

Early in their work the Speas staff concluded that four specific plans of operation were "the four most logical alternative plans conceived to be available to T.C.A." These plans were as follows:

- Plan 1 Winnipeg remains open for Viscount o/h functions; New Jets and all other fleets are based at Dorval.
- Plan 2 Winnipeg remains open for Viscount and New Jet o/h functions.
- Plan 3 Winnipeg closes in 1963 and all o/h functions are consolidated at Dorval.
- Plan 4 Winnipeg closes in 1966 and all o/h functions are consolidated at Dorval.

Plan 4 is identical with Plan 3 for the last seven years and both assume the New Jet being overhauled at Dorval. The only difference in cost between Plans 3 and 4 arises from the three years that the Viscount was assumed to be overhauled in Winnipeg rather than Dorval.

Elaborate calculations were prepared showing the amounts of labour required for each of the four plans. These labour requirements were then converted to dollar costs by applying estimated wage rates. The capital cost of additional facilities for the New Jet required at Dorval or at Winnipeg was estimated and included on an amortized basis in the relative plans.

The cost elements entering into the estimated costs of the different plans were broken down by Speas into 19 different categories, some of which will be referred to in this report in detail.

The aggregate estimated dollar costs over the tenyear period of each of the flour plans were compared with each other and Speas reached these conclusions:

- (a) Plan 3 (under which the Winnipeg base would be closed immediately) was the least costly of all four plans, being estimated to cost over tenyears \$248,506,600, and was, as Speas described it, the "best".
- (b) Plan 4 (under which the Winnipeg base would be closed in 1966) was the next least costly of all four plans but over the ten-year period would be more costly than Plan 3 by \$10,135,200 (this excess cost being incurred in the years 1963-1966).

- (c) Plan 1 (under which the Winnipeg base would remain open for Viscounts only) was more costly than Plan 4 and over the ten year period would be more costly than Plan 3 by \$29,943,200.
- (d) Plan 2 (under which the Winnipeg base would remain open for Viscounts and would also o/h the New Jets) was the most costly of the four plans and over the ten year period would be more costly than Plan 3 by \$40,149,400.

The abridged Speas Report says at page 36:

"The Winnipeg base should be closed down at the earliest possible date in the interests of most efficiently and economically operating Trans-Canada Air Lines."

In making his calculations of the costs of each of the three more costly plans Speas included as a cost of carrying each of them a sum of money to cover interest. Mr. Speas explains his views as follows: (T 1012-1013 V 8).

"We approached this on the basis that use of money is worth something. We also accept the fact that Air Canada's average interest rate is about 5 per cent, and if there are any Air Canada surplus funds, we would expect that they would be used for better than 5 per cent as far as the base for figuring is concerned is reasonable.

Now, there are two main methods of showing the cost of money: these are known as 1: the present value method; and 2, the terminal value method. We chose the terminal value method because it shows the full eventual effect of the difference in the cost of the plans studied...

Any increased cost of operation which results in decreased ability to save leads, in fact, to borrowing and the payment of interest. We therefore believe that the method chosen, in short, rests not on theory but on observable fact."

This interest effect is an important element in all three "less best" plans. For example, in the case of Plan 1 the excess cost over Plan 3 was estimated at \$23,807,900 and the interest added to that cost to the end of the period was \$6,135,296.

Also in making their cost estimates Speas assumed that if the New Jets were to be overhauled in Winnipeg a minimum capital expenditure of \$3,000,000 would be necessary to equip Winnipeg for that purpose on a "patchwork" basis and stated that in actual fact modern facilities adequate to AC's requirements would cost at least \$16,000,000 although they did not provide for this in the estimates.

The Speas Summary Report states (page 7)

"The foregoing conclusions are based upon the fleet sizes which TCA plans to operate during the 1964-1973 period. As a result of our calculations we are convinced that the basic conclusions and recommendations of the study would not change with variance in fleet sizes."

The Banks' Analysis and Criticisms

The Province of Manitoba engaged Mr. Robert L. Banks, of Washington, D.C., a professional transportation analyst and economist, having extensive experience in that field, to analyze the Speas Report. Both versions of the Speas Report were made available to him, as well as a considerable volume of additional data supplied to the Commission by AC at his request.

Mr. Banks was called by the Province of Manitoba as a witness, and in the course of lengthy and detailed examination and cross examination by counsel for the Province of Manitoba, AC and the Commission, Mr. Banks criticized many assumptions made by Speas and the use by them of specific data entering into their estimates of costs by categories and

upon which were based the difference in cost between the four plans.

The Banks approach was summarized by him as follows: (T 1828-1829 V 13)

"...Manitoba's analysis of the report entailed its review in entirety. All five volumes of the report were analyzed and other data were requested of Air Canada, some of which were supplied. Certain other information was also obtained elsewhere. It was then possible, within the scope of costs used by R. Dixon Speas Associates, to re-analyze the alternatives, using in general the method developed by and data available to Speas, but utilizing variations in method or substitute data where those used by Speas were not properly applicable. substitution was, however, made as to such basic parameters originating with Air Canada as forecast fleet composition or flight hours by type.

From this procedure, which involved 14 separate adjustments, a quite different picture emerged than that shown by Speas."

Mr. Banks submitted alternative estimates of costs of the various plans, showing in each case substantial variation from Speas' estimates.

Mr. Banks approved the Speas Report on one major issue when he stated that he agreed with the Speas findings that Plan 3 was the "best" plan in the sense (T 2247 V 15) "that it would yield the lowest corporate cost to Air Canada". However, Mr. Banks pointed out that his instructions did not include an assessment of the social costs to the Province of Manitoba or Canada from the dissolution of a highly skilled group of workers. Also he did not agree that the "savings" of Plan 3 over Plan 1 or of Plan 3 over Plan 2 were as estimated by Speas.

Banks accepted the basic approach and overall pattern of the Speas Report and adopted its conclusions except in the fourteen separate cases where he criticized assumptions and use of data and where he proposed adjustments.

Some of the criticisms of and adjustments made by Banks to the Speas report had relatively little dollar effect on the Speas' conclusions but a number had very substantial implications and effect and the cumulative effect of all, if accepted, would be substantial in amount.

The Commission proposes to discuss the more significant adjustments first followed later by those of less significance.

Major Adjustments Suggested by Banks:

1. Labour Burden

Labour burden ("burden" in this report) is the term used by both Speas and Banks to designate expenses incurred for hours paid but not worked. This includes vacation time, holidays, sick time, time on union work, short shift lost time, job direction, training time for new employees, or employees moving to new work, and time used by mechanics in supervisory or clerical work.

The Speas study used a certain percentage of direct labour as the measure of the burden at Dorval and a different percentage as the measure at Winnipeg. Banks accepted Speas' percentage for Winnipeg but recalculated the figures for direct labour at Dorval at a higher percentage than used by Speas. The precise percentages used by Speas are in the confidential category.

The percentage accepted by both Speas and Banks as the starting point for Winnipeg was adjusted from year to year to reflect the result of adding new staff which required unproductive training time. The base percentage for Dorval used by Speas was the AC 1963 budget percentage, which was adjusted by Speas from year to year for new employee training schedules. In his study Banks used the 1963 realized result as his base percentage for Dorval, and he made the same annual adjustments to it as had been made by Speas.

Banks submitted data supplied by AC showing actual productive manhours and burden manhours for 1961, 1962 and 1963.

There were variations from year to year and between bases. AC's actual experience at Dorval in 1964 produced a percentage at almost the exact centre of the range between the basic percentage used by Speas and that used by Banks.

The effect of the recalculation made by Banks was to increase substantially the costs estimated by Speas of work to be done at Dorval with no change in the estimated costs of work done at Winnipeg under Plans 1 and 2. Since there is substantially more work at Dorval under Plan 3 than under Plans 1 and 2 the effect of this recalculation was to increase the cost of Plan 3 relative to the other plans.

The importance of the burden factor can be put into perspective when it is realized that there are about one million manhours of burden labour in each year in the various plans and that over the ten year period the average labour cost will exceed \$2.00 per hour.

The burden ratio is obviously affected by the number of new employees who must receive training, by the number of existing employees who are being trained for new jobs, by the seniority of the staff with respect to vacation time, and by the attitudes of staff and supervisors to sick time, short shift time, etc. and it may be affected by changes in attitudes which may arise if the bases are combined or if they are both left open. Neither Speas nor Banks discussed these factors with any degree of completeness.

On logical and deductive analysis there is not likely to be any permanent difference between the burden ratio in Winnipeg and Dorval resulting from location factors alone. It appears likely that over a period the dominant elements will be the numbers employed at and the type of base, and the number of new employees and of employees being trained for new work. Vacation time is controlled by the union agreements which are fundamentally the same at both locations. Neither the Province of Manitoba nor AC presented any evidence that the ratio would be higher for a combined base than for two bases or that combining the bases would reduce the ratio.

The Commission's approach to calculations for the burden element of cost is that the basic burden ratio on long term would be approximately the same for all three possibilities, namely, a Winnipeg base and a Dorval base, or a consolidated base, and that variations from that basic ratio would result primarily from training time for new or transferred employees or the introduction of a new type of aircraft. These variations have been taken into account by both Speas and Banks in their annual adjustments for all plans.

The adoption of a common basic ratio for burden at both Dorval and Winnipeg midway in the range for those bases over the period for which actual figures are available, would seem reasonable. This would significantly raise the cost of Plan 3 as calculated by Speas and significantly reduce the cost of that plan as calculated by Banks. While making these comments, the Commission does not intend to make any precise dollar recalculation of this burden cost factor.

2. Inspector Labour

A significant cost element is that of inspector labour. In their studies Speas calculated the number of inspectors and the cost of their salaries by use of a chart relating the number of trades personnel at each base to the number of inspectors per hundred trades personnel. In other words their basis was the number of inspectors as a percentage of trades personnel staff. Speas used the figures for 1963, namely:

	Winnipeg	Dorval
Actual number aircraft tradesmen Actual number of inspectors	537 40	1,426 96
Ratio of inspectors to trades person	onnel 7.45%	6.73%

These figures were plotted on a chart showing that as the base increased in size from 537 to 1,426 the ratio of inspectors went down from 7.45% to 6.73%. The straight line relationship between these points was used to estimate the percentages for bases of other sizes.

In commenting on this method Banks stated: (T 1884 V 13)

"The relationship demonstrated in the chart ... indicates that the ratio of inspectors to productive personnel varies inversely with the number of productive personnel. This concept seems valid."

However, Banks took the position that the use of 1963 data alone was not satisfactory and made further recalculations using data for 1961, 1962 and 1963. In addition Banks used a different charting method which showed the

relationship between the number of trades personnel and the number of inspectors. He calculated a mathematical straight line formula by which he estimated that the number of inspectors in any base contemplated by the Plans would be 8.448, plus 4.76 inspectors for each 100 of productive personnel. Under this formula the number of inspectors at Dorval or Winnipeg would increase by 1 for each 21 productive employees added to the staff.

The use of Banks' formula would reduce the number of inspectors estimated by Speas in every category of base in the range from 500 employees to 2,400 employees, and would reduce the number of inspectors estimated by Speas most noticeably in the medium sized plants.

As applied to the Plans under consideration these two differing approaches to inspector labour result in the following:

- (a) If the Winnipeg base were closed and about 500 employees were transferred to Dorval to o/h all aircraft (Plan 3) the number of extra inspectors needed at Dorval would be about 24 or 25 according to either formula. In this respect Banks confirms Speas' estimates.
- (b) Assuming about 300 men are needed to o/h the DC-9s, that number of men, according to Speas' formula, would require about 20 inspectors if the DC-9 were added to the Winnipeg base (Plan 2) and only 16 inspectors if they were added to Dorval (Plan 3). Under the Banks' formula this work could be handled by about 14 inspectors at either base.

In applying the different formulae the main difference is that Speas estimates annual inspection costs for the DC-9s at \$100,000 if they are brought into Dorval and \$130,000 if brought into Winnipeg, while Banks estimates that these would be \$90,000 at either base. Thus Speas is in effect saying there is an annual cost saving of \$30,000 on this item if the DC-9 goes to Dorval while Banks is saying there is no such saving.

Rebuttal evidence on behalf of AC was to the effect that the number of inspectors does not bear a fixed ratio to the production force but varies as to size of work force, type of work and size of shop. AC did not state whether the Commission should deduce from this that the Speas' ratio was correct or incorrect.

In any event the Commission is of the view that there would be an annual saving in inspection costs under Plan 3 as compared to Plan 2, but that the saving is somewhat less than estimated by Speas. The Commission notes that Speas and Banks do not differ significantly on the inspection costs related to the transfer of the Viscounts to Dorval.

3. Management Salary Costs

"Management Salary Costs" is a very large cost category entering into the cost of all Plans, including, as it does, executive salaries, but, more significantly, the salaries of foremen, assistant foremen, supervisors and chiefs of inspection, and quality control technicians and the salaries of office staffs employed on planning and production analysis, publication, personnel and secretarial, stenographic and clerical duties.

The abridged Speas report began the description of the treatment of this cost category by stating that: (P.122)

"For a small base operation the 'fixed' charges of management type overhead is always a considerably higher percentage of the total labour forces than is the case for a large base."

The Speas report then details management data for 1963 as follows: (corrected for typographical errors)

	Winnipeg		Dorval	
No. of employees in aircraft	trades	537	1,426	
No. of management personnel		181	321	
Management ratio		33.71%	22.51%	

Speas constructed a chart in the same manner as for inspector labour and plotted the relationship between number of employees in aircraft trades at each base and the number

of management personnel per one hundred trades personnel. The chart uses the above 1963 data alone and shows the ratio decreasing rather rapidly as the size of the base increases. Under this formula the addition of 300 or 400 new employees to the Winnipeg base would result in an estimated management staff increase much larger than would result from the addition of the same number of new employees to the Dorval base. However, Mr. Speas in evidence stated that his estimate in the higher base sizes tends to "flatten out" i.e., that the ratio should decline more slowly.

Banks criticized the Speas' formula and again took the position that data for 1963 alone was not sufficient. He used data for 1958-1963 procured from AC and covering the situation at two selected days in each year. He plotted this on a chart showing twelve sets of figures for the Winnipeg base, four sets of figures for the previous Montreal base, and eight sets of figures for the new Dorval base. These twenty-four sets of figures relate number of management personnel to number of production personnel, and a straight line relationship was calculated by mathematical correlation. The formula for the line so calculated is one which estimates the number of management personnel in a base as 106, plus 13.66 for every 100 production employees.

The four observations for the old Montreal base comprise a group that are separated from both the Winnipeg and the Dorval experience. The Commission doubts that the experience of the final two years at the old Montreal base is relevant to the present question. If those four observations are eliminated the chart can be examined using only the data Such a chart does not for Winnipeg and the data for Dorval. appear to yield a straight line relationship. Rather it suggests that in either base an increase of 200 or 300 employees can be made with a relatively small increase in management staff but that a relatively larger increase is needed to jump from a base with 600 to 900 employees to a base that is double that size. In other words a chart relating to Winnipeg alone shows a relatively small increase in management employees as new productive employees are added and a chart relating to Dorval alone shows the same situation.

The charts used by both Speas and Banks reflect mainly the large difference between the management staff for a base in the 600 to 900 employee category and one in the 1,400 to 1,700 employee category. In mathematical terms the Banks' chart indicates a relatively small change in the number of management staff for a small increment to production staff at either base.

Banks compares his formula with a tabulation of the complement of management staff actually employed at Winnipeg in 1963 and concludes: (T 1896 V 13)

"... that management personnel requirements under the alternative plans are probably considerably less than those derived by not only Speas but also by the statistical method employed by Manitoba in its tenth adjustment."

while Banks! conclusion apparently is that his formula produces too high a figure, his estimates are nevertheless based upon it. The result is to raise materially from those estimated by Speas the cost of management salaries in a larger base and to reduce that cost somewhat in a small and medium sized base.

In this context the Superintendent of Management Systems for AC stated (T 2693 V 1d) that mathematical tests established that sound statistical procedure would require two separate formulas, one for Minnipeg and one for Dorval and that they could be considered parallel.

It is concluded from this evidence that the number of extra management personnel for each 100 additional production personnel would be about the same whether the new staff was added to Winnipeg or to Dorval.

The witness filed a chart (Exhibit 93) showing the results of his calculations as well as of the Speas' and the Banks' formulas. The significance of this chart can only be realized if attention is directed to bases of different sizes. For a base with from 750 to 1,000 aircraft trades personnel the witness' formula shows management personnel lower than Speas and higher than Banks. This is the range at which Winnipeg would operate if it overhauled both Viscounts and DC-9s under Plan 2.

For a base with from 1,500 to 1,750 employees there are no major differences between the three formulas. This is the range at which Dorval would operate if it overhauled the DC-9s under Plan 1. For bases above 1,900 employees the witness' formula shows management personnel well above the Speas figure but falling below the Banks figure as the size of the base is further expanded. This is the range in which Dorval would operate if it overhauled all four aircraft types under Plan 3.

AC also presented in rebuttal a detailed estimate of management personnel needed for Winnipeg if it overhauled Viscounts and DC-9s under Plan 2. This showed that Viscounts alone required 176 management personnel but if DC-9s were added new management staff should be employed immediately to begin preparation and by 1968 management staff would be up to 260, or an increase of 84 to handle DC-9s.

A similar analysis was presented covering Dorval if it were to handle both the Viscounts and the DC-9s, indicating that both could be handled at Dorval by an increase of management staff from 331 to 376 or a net increase of only 45.

In summarizing his adjustments related to management salaries Banks stated that his estimates for Plan 1 were not significantly different from those presented by Speas. For small additions to the large base both Banks and Speas have used approximately the same figures. The rebuttal evidence also seemed to confirm this.

It appears that Speas were too high in their estimates of management staff required for a moderate extension of the Winnipeg base but it must not be overlooked that more management personnel are needed to introduce a new type of jet aircraft into a base which has been overhauling only turbine engines. The AC rebuttal evidence is that management staff requirement for the early years of the DC-9 at Winnipeg would be higher than the Speas estimates but in the later years would fall below the Speas estimates.

Banks confirms in the main Speas' estimate for management salaries at Dorval under Plan 1 whereby the Viscounts continue to be overhauled at Winnipeg. Speas estimated that if the Viscounts were transferred to Dorval and the DC-9 were to be overhauled there as well (Plan 3) there would be an increase in this category at Dorval of only \$40,000 annually. Banks, however, estimates this increased cost at Dorval to be of the order of \$500,000 per year.

The rebuttal evidence of AC seems to support the Commission's conclusion that the real added cost would be in the neighbourhood of \$300,000 annually. While there would be this increase for management salaries at Dorval it must be remembered that the effect of transfer of the Viscounts from Winnipeg would be to eliminate an expenditure of several times this amount for management services at Winnipeg, the precise amount of that expenditure being in the confidential area.

In relation to Plan 2 (under which the DC-9s and Viscounts would be overhauled at Winnipeg) Banks estimated that management services for the DC-9 at Winnipeg would be less than at Dorval. The Commission cannot agree with Banks in this respect.

While the Commission feels that Speas' estimate of the cost of management services for the DC-9 at Dorval is somewhat low, the Commission considers that the Speas figure for this cost at Winnipeg is not unreasonable.

4. Purchasing and Stores Costs

This cost category includes the cost of labour, facilities, equipment and miscellaneous items for the purchasing and stores function related to maintenance and o/h.

Speas estimated that concentrating this function at Dorval under Plan 3 would result in an annual saving of \$120,000 as compared to Plan 1 (Viscount at Winnipeg and all others at Dorval) and a saving of \$200,000 annually as compared to Plan 2 (Viscount and New Jet at Winnipeg and DC-8 and Vanguards at Dorval).

The procedures used by Speas to estimate the number of manhours on this function under each of the plans are quite complicated but Banks accepts them without revision. However, Speas used pay rates of \$2.55 per hour for Winnipeg plus a fixed percentage increase per year to cover expected increases in the pay scales. For Dorval Speas used \$2.21 per hour plus the same percentage per year.

Banks submitted information provided by the members of the International Association of Machinists at Winnipeg to the effect that the rate of \$2.55 used by Speas is the rate for Lead Storeman 2, the highest of the seven categories of stores employees, and that the weighted average of hourly rated I.A.M. stores personnel at Winnipeg was only \$2.32. That figure plus the percentage adjustment was used by Banks in his calculations.

In rejecting the \$2.21 rate used by Speas for Dorval. Banks stated that this was subject to a labour contract calling for an increase of 12 or 13 cents per hour with the accumulation of one more year of seniority and that while in Winnipeg most of the employees have relatively long service, and are therefore at the maximum rate, in Dorval the same level would be reached after one year. this basis Banks calculated the Dorval rate as \$2.21 for the first year of the Plans, rising to \$2.37 in the second year as a result of the added seniority plus the percentage assumed increase in the pay scale. the second year of the Plans Banks recalculated warehouse and stores costs on the basis of Winnipeg and Dorval having the same average rate for stores employees, and for the balance of the period the percentage annual increases are equalled by losses of seniority as new employees replace persons retired or transferred.

AC did not adduce evidence challenging Banks' recalculations.

The effect of Banks' recalculations is to raise the cost of the Dorval operations estimated by Speas and to lower slightly the costs estimated by them for the Winnipeg operations. While the overall effect is to increase the estimated costs of all the plans, the largest increase appears in Plan 3, which assumes all fleets at Dorval. Banks' approach is that the cost of this function would be about the same under any of the three plans and that the savings in this regard estimated by Speas of \$120,000 per year between Plans 1 and 3 and of \$200,000 annually between Plans 2 and 3 are unrealistic.

The Commission is of the view that the labour rates are likely to be substantially the same at Winnipeg and Dorval and that the annual saving from integrating this function at Dorval would be substantially less than estimated by Speas.

5. Integration Factor

The abridged Speas Report refers to the "integration factor" and defines its scope in the following terms: (P.83)

"The preceding compilation of manhours by Plans does not recognize the fact that certain efficiencies are inherently possible whenever two smaller maintenance operations are combined under a single base. The savings effected arise from commonality of procedures, functions, equipment, facility items, flexibility of operations, and the more efficient meshing of shift scheduling in MOC, overhaul and shop areas.

Highly precise attempts to calculate the interaction of all these factors which vary continuously with time are impractical. Intangible and indirect effects also influence the overall efficiency values. It is necessary to make an allowance for the efficiency achieved, however, and a uniform application of the percentage value against the Plans is fair and proper. A reasonable estimate of the effect is 6% - achieved in full several years after the fleet integration date to enable absorption of initial problems and capitalization of the improvements inherently possible."

Speas made their calculations by applying the integration factor in three stages beginning in the year when the bases are combined. Speas added the manhours of labour calculated for the New Jets to the Dorval total in Plan 1 and to the Winnipeg total in Plan 2. On the basis of this new fleet being added in 1966 the integration element was reflected by applying a factor of .98 in 1967, .96 in 1968 and .94 in later years, to the total manhours calculated for the base to which the New Jet was added. In the case of Plan 3 (Winnipeg closed immediately and all work transferred to Dorval) total manhours were calculated and multiplied by a factor of .98 for 1965, .96 for 1966 and .94 thereafter. The integration factor having been applied under Plan 3 commencing in 1965 by reason of the consolidation of Viscount work at Dorval, and in the result the full 6% was applied to all labour for the New Jet from time of introduction.

Speas applied the formula as a direct mathematical calculation whether the New Jet was added to Winnipeg, having staff and equipment now overhauling Viscounts, or whether the New Jet was added to Dorval, having staff and equipment already overhauling the DC-8 "sister" fleet.

Banks criticized the size of the integration factor and applied 1% instead of 6%. He also criticized the application of this integration factor to the total manhours of the base after the new fleet was added on the basis that it assumed a very substantial saving if a small fleet were added to a large base. He pointed out that a blind application of the mathematics to a large base when a small fleet was added could produce a result that total labour needed for the combined base would be less than the amount formerly needed for the original large base. However, Banks applied his 1% factor also as a rigid mathematical formula without relation to the nature or size of the existing base or the nature or size of the fleet to be added.

The evidence before the Commission indicates that, despite wide differences, there are many similarities and many common elements between the DC-9 and the DC-8. Consequently, it seems reasonable that a more favourable integration factor would exist for the addition of the DC-9

to a base already overhauling DC-8s than for the addition of the DC-9 to the base overhauling the Viscount. There is, however, no quantitative data as to the dollar amounts involved.

Banks expresses his assessment of the savings from combining fleets into one base in the following terms: (T 1868-1869 V 13)

"To accomplish such an assessment it is necessary to review the sources of manhour savings which are claimed to accrue from fleet integration. These can be classified for convenience as two in number, first, direct labour by other than management personnel to maintain and overhaul aircraft and to maintain and operate the facilities which support the overhaul function, and secondly, the burden attaching to such labour, which is, of course, time paid for but not worked...

"As to direct labour as a source of the savings from fleet integration, it is inconceivable to Manitoba that the addition of another fleet to a base would facilitate a six per cent cut in the manhours required to perform a given job assignment. A mechanic will require, on the average, a certain time span to perform a certain task. This time span has long since been well defined by industrial engineering studies related to every major type of commercial airplane. Mr. Speas' report says at page 93 that some of the fleet integration savings result from what he terms 'Commonality of procedures, functions, equipment, facility items, flexibility of operations. ' All of these things, in my opinion, will alter this time span, the time span required by a mechanic to perform a certain task, not one iota. Thus, if savings are to be made, they must accrue from the remaining attribute of fleet integration cited by the report, namely, 'more efficient meshing of shift scheduling in MOC, overhaul and shop areas.! This presumptively means a reduction in idle time, one of the components of 'other burden' as defined at page 87 of the Report."

The 'other burden' referred to includes idle time, clerical work by mechanics, and time spent on union duties, and Banks points out that the 'other burden' constitutes a relatively small percentage of work hours and he estimates idle time as being 1%.

During cross-examination of Banks it was suggested that certain amounts of idle time not reported as such for statistical purposes occur when mechanics and other overhaul staff are on duty but are not completely occupied. There are, of course, no accurate records of the amount of such time, if it exists, or of the extent to which it would be reduced if the base had a larger work load and a larger variety of units to work on.

Banks held to his view that the integration factor should be 1% and used the correction factor .997 for the first year after integration, .992 for the second year and .99 for subsequent years. In the case of Plan 3 (Winnipeg closed in 1963) he deferred applying the integration factor to Dorval until 1967.

The difference between a 6% and a 1% integration factor in the costing of Plan 3 is brought into focus when it is realized that each 1% represents about \$86,000 per year applied to the complete o/h operation, that the annual difference between the Speas factor of 6% and Banks factor of 1% is approximately \$430,000 and that deferment of application of Banks' 1% accounts for a further \$86,000 for each of two years.

In rebuttal evidence AC directed considerable attention to this subject. Exhibits were presented which purported to show the savings made by British European Airways when two bases operated by them were combined into one but it was not demonstrated that these figures had any relevance to the situation in Canada.

AC also submitted studies made by it of estimated savings which would accrue from integration as related to lead and certificated mechanics in the actual work force in AC's bases and also as related to its power plant shops at Dorval. Exhibits showing the results of these studies indicated substantial savings in these areas alone could be achieved from integration. Cross examination of AC's witness, J.W. Norberg, left the Commission with the impression that if the same yardsticks as were used in the studies relative to mechanics were applied to the separate Winnipeg and Dorval bases some of the claimed savings could be achieved even if the bases were kept separate.

The final position taken by AC is set out at page 53 of its argument as follows:

"There may be a dispute about the amount of the savings resulting from integration whether it is six per cent more or less but this is a matter of judgment. There may also be disputes as to when the saving commences to be realized but it is Air Canada's submission that there is such a saving and it is at least six per cent. It is also Air Canada's submission that the potential saving is in many areas of the productive staff and goes far beyond the recorded idle time."

The Commission is of the view that there is an integration factor to be taken into account but the Commission does not intend to offer any definite finding as to what is the appropriate factor. The Commission believes that the 6% applied by Speas to the complete labour supply of the entire consolidated base is too large a factor. On the other hand the Commission believes the 1% factor applied by Banks to be too low, especially in the case of the introduction of the DC-9 into a base which is already overhauling DC-8s.

However, as stated by AC, the factor to be applied is a matter of judgment. There are no means of measuring it in precise terms and obviously concepts vary widely as between consultant and consultant. Possibly an approach to the effects of integration more realistic than those used by Speas and Banks would be, on integration, to apply first a factor to total o/h manhours on the combined fleets and then to add another factor on the manhours related to the new fleet brought into the base, and to add an additional factor on DC-9 labour only if the DC-9 is being added to a base already overhauling the DC-8 "sister" fleet.

6. Interest

Earlier in this part there were tabulated the amounts by which Speas' cost estimates for Plans 1, 2 and 4 exceeded those for Plan 3.

Speas arrived at these cost figures by estimating actual expenditures in the case of each Plan. Speas then added to the cost of each Plan found to be more costly than the cheapest of the Plans, the interest which would be payable to finance the extra cost involved. Their argument was that if the work could be done in any given year for a specific

amount but public policy required the spending of an additional amount for an uneconomic plan, then the real added cost is not just the additional amount, but that amount plus interest thereon to the end of the Plan period. On this basis their estimate of the additional cost for the Plan period of Plan 1 over Plan 3 of \$29,943,200 was made up of \$23,807,900 actual cost and \$6,135,296 interest.

Banks challenged the validity of this approach and suggested instead that the proper calculation would be the sum which, together with earned interest, would be sufficient to meet each year the estimated additional costs as they arose.

Speas chose the terminal value method, which emphasized cost differences between the less costly Plan and the others and Banks the present value method, which minimized those cost differences.

It appears that the Province of Manitoba suggests that the Commission should not follow either the Banks' approach or the Speas' approach since the final argument of the Province at page 46 states: (the underlining is that of the Commission)

"If management required that a cost expert advise them on the cost of the various plans so that a decision of management could be made, the cost that would be most meaningful would be present value and not terminal cost at some future year. It is our submission that the cost with which this Commission should be concerned are the actual dollar costs prior to calculating either present value or terminal cost."

Thus there are in effect three different approaches to the interest element. More significant than the selection of any particular approach is to ensure, when comparisons of plans are made, that the interest factor is treated similarly in each compared plan, or, if not, that appropriate adjustments be made to make the comparisons valid.

It is obvious, however, that if a particular plan is adopted which in a particular year is more costly than another, money for the additional cost would have to be found

and interest on that money is a factor in determining the total cost difference. Either the Speas' or the Banks' approach could be used and either would have some basis of reasoning, but without adjustment Banks' figures cannot be compared with Speas' figures, and vice versa.

So as to simplify comparison of plans the Commission will refer in this report to cost differences between plans on an annual basis, ignoring interest. However, it should be kept in mind that whenever one plan is more costly than another in any year, an interest element is properly applicable to the difference, and also that costs continue year by year indefinitely, and in this respect there is no real meaning to an artificial cut off at the end of a seven or ten year period, or at any given date.

Other Adjustments Suggested by Banks:

No one of the adjustments proposed by Banks which follow, would, even if accepted in entirety, by itself make any really significant change in the Speas' estimates of the cost differentials between the Plans, although, of course, there could be some cumulative effect.

7. Viscount Labour:

Banks estimated a considerably lower outlay for Viscount labour than that estimated by Speas and a great deal of time was expended at the hearings on this subject. The rebuttal evidence of AC supported in the main the Speas' position. The effect of any reduction in the Speas' estimates for this cost element would reduce the amount of labour required for Viscount o/h whether at Winnipeg or Dorval but by itself would make no significant alteration in the relative position of the four Plans.

8. New Jet (DC-9) Labour:

Speas had estimated that o/h labour per flight hour for the New Jets would be 70% of the amount needed for the

DC-8. Banks was of the opinion that the DC-9 could be maintained and o/hauled with considerably less labour than estimated by Speas and gave his estimate at 55% of the amount needed for the DC-8. Banks' estimate, if accepted, would result in a very substantial reduction of the estimated cost of overhauling DC-9s either at Dorval or at Winnipeg. However, any adjustment would be applied to all four Plans and would not by itself significantly alter the relative cost position of the Plans.

9. Common Labour:

This has to do with labour in paint shops, welding shops, etc., which is common to all types of aircraft serviced in the base. Banks' view was that if, as he contended, the DC-9s and Viscounts require less direct labour than estimated by Speas, they will also make less use of the common services and hence there should be a reduction in the estimated requirements for labour in the common shops attributable to DC-9s and Viscounts. If some adjustment should be made in this respect it would reduce the estimated costs of all four Plans but should not significantly alter their relative positions.

10. Aggregate Manhour Requirements:

The procedure followed by both Speas and Banks was to gather together the various labour estimates and produce an estimate of total manhours of labour needed for the o/h function. This total was then converted to dollar cost by applying an appropriate rate per hour. Banks, in making an adjustment under this heading, reflected the changes proposed by him in the various labour items. He also included in the estimated costs of Plan 3 the cost of DC-8 labour performed or to be performed by way of maintenance at Winnipeg. This item had been overlooked in the Speas study. This suggested change (which was not objected to by AC at the hearings) raised the Plan 3 manhours figure relating to DC-8s by just over 2% but it did not affect the costs of Plan 1 and Plan 2.

11. Social Benefits:

Speas had estimated this cost element at 6.99% of salary payments based on actual results in 1962. Banks suggested 6.88% of salary payments as a more appropriate percentage, based on the five year average of 1958-1962. Over the ten year period the cost effect of this apparently small change would be a range of from \$18,000 to \$19,000 per year between the different Plans.

Speas asserted with some conviction that costs for social benefits would undoubtedly increase over the years and that his selection of the actual for 1963 was more logical than a five year average. If, however, an adjustment were accepted it must be accepted for all four Plans and again any reduction would apply to all Plans and would result in no significant change in their relative cost positions.

12. Crew Chief Labour:

While both Speas and Banks used a ratio of 1.05 crew chiefs per 100 productive men, in evidence Banks stated that in fact adoption of the Speas ratio of 1.05 crew chiefs overstated, to Winnipeg's disadvantage, the cost of crew chief personnel. The amount involved is not material.

Because Banks adjusted downward Speas' estimates of the number of men required for certain jobs, e.g. Viscount and DC-9 labour, he made corresponding changes in the estimated number of crew chiefs. This suggested adjustment would not, of itself, make any significant change in the comparisons between the Plans.

13. Hourly Wage Rates:

The essential point of Banks' criticism under this heading was that it was unrealistic to apply rigidly the formula proposed by Speas to combine an estimated annual increase in wage scales with the accumulation of seniority by new employees. Banks' view was that seniority increases should be limited to the first four years on the assumption that after that date retirements and deaths by older employees would offset seniority raises for new employees. Banks also differed with Speas by introducing a slightly higher estimate of the number of experienced Winnipeg employees who would

accept a transfer to Montreal if the Viscount work were transferred there. In the result Banks accepted the Speas' figures for Plans 1 and 2, which did not involve transfer of employees to Dorval, but in the case of Plan 3, where transfers were involved, Banks estimated slightly higher wage rates in the early years, and slightly lower wage rates in the final years, with the ten year total being down by a small amount.

Banks stated that this adjustment would result in a slightly more favourable picture for Plan 3 than under the Speas formula.

14. Facilities:

Banks: criticisms and suggested adjustments in this regard were directed to the cost estimated by Speas of construction and ownership of necessary facilities to o/h the DC-9s at either base.

Speas estimated that the capital cost of adding additional facilities at Winnipeg to enable the o/h there of DC-9s (Plan 2) would be \$2,021,000 but that because Dorval was designed and constructed for the new fleet, as well as for the DC-8s and Vanguards, the capital cost for changes there to o/h Viscounts and the DC-9 fleet under Plan 3 would be only \$459,000. Plan 2 would require no change in the Dorval facilities since under that plan both Viscounts and DC-9s would be overhauled at Winnipeg.

Banks objected to these estimates on the basis that while the comparison was unfavourable to Winnipeg it was less unfavourable than Speas' figures indicate. Specifically he asserted that a hangar for DC-9s and the necessary outdoor tarmac expansion could be completed for \$478,500 less than the Speas estimate, which included a hangar and tarmac to o/h DC-8s as well as DC-9s. In addition Banks estimated that the test cell could be modified to test the DC-9 engine at a cost of \$335,000 whereas Speas had estimated \$625,000 for a completely new unit. (As indicated in Part 2B questions at the hearings

of the Commission elicited the fact that AC has disposed of its Winnipeg test house under a lease option agreement which allows Standard Aero Engine Limited to use one of the test cells on a rental basis with an option to buy the entire test house in 1971.)

Hangar and test facilities at Winnipeg for DC-9s are not contemplated under either Plans 1 or 3 and Banks' criticism does not apply to the estimates for those plans.

Apart from the capital costs of any new facilities at either location it would appear reasonable that operating costs for cleaning, maintenance, etc. in one combined plant would be less costly than in two separate facilities, and Banks confirmed this view.

Speas estimated that the annual cost of plant ownership at Dorval would only increase by \$50,000 per year if the Viscounts and DC-9s were introduced into Dorval under Plan 3 but by contrast Speas estimated that the closing of the Winnipeg base would eliminate all costs there in this category and would save many times the amount of the annual increase at Dorval.

Banks says: (T 1902 V 14)

"The Speas Report logically found that the cost of owning and operating maintenance and overhaul buildings with all activity consolidated at Dorval ... is less than with two bases ..."

However, Banks points out: (T 1904 V 14)

"... that cost comparisons which now favour

Dorval by contrast with Winnipeg were to a

large degree predetermined by investment

decisions of the past, when the Dorval base

was established. These decisions mandated
a capital cost comparison on a sunk cost
basis for Dorval, and an added cost basis for
Winnipeg. Such a dual cost standard, however
appropriate in the circumstances, advantages
Dorval."

Banks is pointing out that decisions taken several years ago, and investments already made as a result of those decisions, have had a significant effect in determining that it will be less costly from a capital cost point of view to add new fleets to Dorval than to Winnipeg.

The Commission agrees with Banks' view that the hangar and tarmac expenses for Winnipeg under Plan 2 as estimated by Speas were designed to accommodate the DC-8 as well as the DC-9 and consequently should not be charged entirely to the DC-9. As an offset, by reason of AC having given Standard Aero an option to purchase its Winnipeg test house, additional capital expense would be incurred under either Plans 1 or 2 unless AC is able to re-negotiate the lease option with Standard Aero to enable it to retain the right to use the test house and this is not certain of accomplishment. The decision to grant that option has also obviously weakened the position of the Winnipeg base relative to Dorval.

Under all these circumstances it is difficult to see how any of the Plans could be implemented with costs for construction and ownership of facilities at less than those estimated by Speas. Banks and Speas agree in substance with respect to costs in this category under Plans 1 and 3 and they both agree that the facilities! costs under Plan 2 would be substantially over that of either of the other Plans but Banks disagrees as to the amount of the excess.

The evidence of AC officials, which the Commission accepts, is that it would not be practical to bring the DC-9 into the present Winnipeg base with only a "patchwork" extension rather than a complete rebuilding of the base. The latter would cost substantially more than the \$2,021,900 used by Speas in their costing of Plan 2. The estimate of Speas of complete rebuilding (not used in their costing) was \$16,734,000, including equipment.

Conclusions

It is one of the duties of the Commission to consider and report upon the Speas Report.

It must be emphasized that all results of the Speas' studies and of the Banks' recalculations are estimates

based upon complicated assumptions as to labour requirements, wage levels and other costs under different plans. It is certain that the actual results realized by AC from whatever plan is followed will not correspond to the estimated figures. In fact recent changes made by AC in its forecasts of fleet size and composition will alone alter tremendously the volume of work to be done from that estimated by Speas and considered by Banks. It is, however, of no real importance for the purpose of comparison between the Plans that the actual cost figures will be different from the estimates. The real point of the complicated accounting calculations is to attempt to evaluate the difference between the costs of one plan and another.

Referring generally to the Speas Report and Banks' criticisms and recalculations of it, it is noteworthy, and perhaps to be expected, that, in the main, the particular assumptions and procedures upon which the Speas Report was based, and which were criticized by Banks, were those which had the effect of favouring Plan 3 (the consolidation of all o/h functions at Dorval) and were detrimental to the continuation of the o/h function at Winnipeg (Plans 1 and 2); and also that, in the main, the different assumptions and alternative procedures in those same respects made or suggested by Banks were those which had the effect of favouring the cost position of Plans 1 and 2. These plans would have continued and, in the case of Plan 2, increased, the o/h function at Winnipeg.

Speas' recommendation was that as quickly as possible the Winnipeg base should be closed and that the Viscount and the New Jets should be overhauled at Dorval, with the result that all four aircraft types would be overhauled in the consolidated base there (Plan 3).

As previously indicated, Banks agreed with Speas that there would be a saving by consolidating all o/h functions at Dorval but disagreed as to the amount of that saving.

The Commission's findings in this Part are expressed in differences on an annual basis between the cost estimates for the various plans, without direct reference to the cost estimates in total for the ten year period of the Plans, and without taking account of interest related to cost differences.

Ignoring interest adjustments and placing Plan savings on an annual basis, the cost differences estimated by Speas and Banks respectively between Plans (in each the difference being measured against Plan 3) are set out as follows:

(a) The annual additional cost of keeping the Winnipeg base open for Viscounts under Plan 1 would be:

<u>Speas</u> <u>Banks</u> \$2,380,790 \$1,070,000

(b) The annual additional cost of keeping the Winnipeg base open for Viscounts and for DC-9s under Plan 2 would be:

<u>Speas</u> <u>Banks</u> \$3;192,290 \$ 970,000

In effect Banks is saying that the additional cost estimated by him of overhauling Viscounts at Winnipeg is reduced by \$100,000 annually if the DC-9 is brought into the Winnipeg base and overhauled together with the Viscount.

In general the Commission's view is that Banks' analysis and evidence establish some valid, meaningful and significant criticisms of the Speas Report but that even after making appropriate adjustments Plan 3 is still significantly less costly in a direct economic sense than any of the other plans.

The Commission does not intend to attempt to make any calculation of the precise dollar adjustments which in

its view should be made to the Speas' calculations by reason of the Banks' criticism and other evidence.

The estimated annual o/h costs of AC are in the order of \$25,000,000.

The costs associated with the different plans have been reviewed by three different groups of qualified technical consultants, Wallace Clark in part, and Speas and Benks in entirety, and each has come up with precise but differing estimates. It would not serve any useful purpose for the Commission (a layman in the field) to add a fourth precise estimate.

The Commission feels that its function is to evaluate Speas' conclusions in the light of Banks' criticisms, the Wallace Clark report and other evidence given to it and to express its conclusions in general terms.

The Commission is of the view that the additional annual costs of Plan 1 (Viscounts at Winnipeg) over Plan 3 (all fleets at Dorval) are in the general order of \$1,600,000 rather than \$2,380,790 as estimated by Speas or \$1,070,000 as estimated by Banks.

The corresponding annual figure estimated in 1957 by Wallace Clark, but under somewhat different conditions, was \$1.037.000.

The Province of Manitoba has argued that any calculation of this type is academic because AC management has announced that the Winnipeg base will continue to operate for Viscounts so long as a substantial number of Viscounts remains in service. However, regardless of any commitment or as to why or for how long the Winnipeg base is maintained in operation, in the opinion of the Commission, to keep the Winnipeg operation for Viscounts alone rather than to consolidate in Dorval costs AC about \$1,600,000 per year.

Also the fact that Plan 3 was not, nor could have been, implemented in 1963, as recommended by Speas, does not mean that savings in the indicated order would not have

been achieved if it had been. Annual savings in that order are an indication of the approximate cost that has already been absorbed and will continue to be absorbed so long as the Winnipeg base overhauls the Viscounts as at present.

The Commission is also of the view that the additional annual costs of Plan 2 (Viscounts and DC-9 at Winnipeg) over Plan 3 (all fleets at Dorval) are in the general order of \$2,300,000 annually rather than \$3,192,290 annually as estimated by Speas or \$970,000 annually as estimated by Banks.

It must be understood and emphasized that the estimated cost differences between the different Plans, whether those differences are as estimated by Speas, or by Banks, or by the Commission, are based on estimates of the cost of the o/h of the fleet of AC under the different plans over a ten year period. These estimates were made on the basis of data supplied by AC to Speas, or collected by them at the time they undertook their study, and, in the case of Banks, on the basis of data supplied to him through the Commission, or collected by him independently.

The first purpose of these elaborate accounting exercises was to try to determine which plan would be the least costly over the planning period. On this there is unanimous agreement that Plan 3 would be the least costly. The second purpose was to try to estimate the amount of the saving if one plan were adopted in preference to another. On this the differing conclusions are stated above.

The actual dollar cost of carrying out whichever Plan is finally determined upon may be quite different from any of the estimates, and in fact, by reason alone of the changed and increased fleets forecasted, that inevitably must be.

Furthermore the estimates of cost differences between Plans only take account of dollars. They take no account of the desires of AC in relation to the conduct of its operations or of its views as to the convenience, efficiency and safety, or lack of them, of conducting its o/h operations in any particular way. For that matter they take no account of the desires and aspirations of any particular community, or segment of a community, in relation to the location of the o/h facility or of any policies there may be for regional or national development.

Some of these aspects will be dealt with in the concluding Sections of this Part.

C. Plans of AC for the future of its o/h bases at Winnipeg and Dorval.

These plans have been expressed by Mr. McGregor clearly and (except as to timing) unequivocally as follows: (T 1187-8-9 V 9)

"The Company's policy regarding the maintenance and overhaul of its flight equipment is
clear and consistent with repeated declarations
made in the past. Very simply, the airline
regards it as fundamental that it should be free
to care for its aircraft in accordance with the
highest technical standards and in the most
efficient and economical way possible. To this
end, two technical studies of the most thorough
nature have been conducted by outstanding aviation
consultants and the Company has acted in accordance
with those recommendations supported, of course,
by the experience and knowledge of its own staff
of highly competent technical people.

At Dorval a \$31,000,000 overhaul facility of the most advanced type has been built to accommodate the Company's DC-8 and Vanguard aircraft and the new jets to be delivered in the future. It was designed and constructed specifically to meet these highly complex technical requirements. It incorporates provision for ready and inexpensive expansion as required. Winnipeg the Company's Viscounts will continue to be overhauled as long as a substantial number of them remain in service. By a substantial number, the Company considers a fleet of 30 or more aircraft. This commitment was made in 1957 to the City of Winnipeg and to the Company's Winnipeg-based staff. It has been honoured and will continue to be honoured.

When, however, the Company ceases to operate a substantial number of Viscounts, the commitment will have been met and the Winnipeg base must, of necessity, close."

The decision to consolidate all o/h activities in a single base at Dorval was made by the board of directors of AC on the advice of its consultants Wallace Clark, which advice was later confirmed by consultants Speas. However, the directors decided not to follow for the time being the advice of their consultants that the o/h of the Viscount should be removed to Dorval and in this connection Mr. McGregor stated: (T 1177 V 9)

"The Company's decision to continue Viscount overhaul at Winnipeg was based upon a wish to lighten, as far as possible, a blow to the Winnipeg economy and to its own staff at that point. Obviously, a sudden transfer of the Viscount maintenance and overhaul function to Dorval would have been unduly disruptive."

The reference by Mr. McGregor in the first quoted statement to a 1957 commitment to AC employees relative to continuing o/h in Winnipeg so long as a "substantial number" of Viscounts remained in service, was in fact a reference to his 1962 commitment to AC employees. The 1957 commitment was for "so long as the function of the Viscount and Dart engine overhaul remained in ... the Company". (See Part 2 C).

In February, 1965 when Mr. McGregor gave his evidence it was contemplated that AC would be operating in 1973 between 33 or 34 Viscounts. At that time Mr. McGregor stated: (T 1245 V 10)

"The best information I have is the forecast of my competent people which says that if the status quo remains with respect to the physical health of the aircraft and the route pattern that we will need more than 30 Viscounts through 1973."

In relation to the timing of the proposed closure of the Winnipeg base the following extracts from Mr. McGregor's evidence are pertinent: (T 1189 V 9)

"I wish to make it perfectly clear that it is virtually impossible to fix firm dates for the Viscount phase-out. The duration of the Winnipeg base overhaul function beyond 1966 is dependent upon a number of factors influencing the company's future requirement for Viscount equipment. Among these is the degree of achievement of the forecast rate of traffic Also, it is assumed that there will be growth. no appreciable change in Air Canada's short-haul route pattern. If, for any reason, the company were to lose these routes, its Viscount requirement and the need for Viscount overhaul facilities would be substantially reduced. Certainly Air Canada will be operating at least 30 Viscounts beyond 1965 and estimates have suggested that this condition could continue possibly for some years. But the possibility of major changes in the requirement for Viscount operation must be recognized."

On cross-examination by Mr. Mauro the following took place: (T 1239-41 V 10)

"Q. Now, Mr. McGregor, you have indicated that your continual commitment was that the base would remain open so long as there would be a substantial number of Viscounts?

A. Yes.

Q. And you indicate in one report 20, but I think in fact your position has been between 20 and 30?

A. Yes.

Q. And your estimate in December of 1963 to the Parliamentary Committee, at that date, was that there would be 34 in 1973?

A. Yes.

Q. So, that is a substantial number?

A. Yes.

- Q. And there is no reason to change your mind since December of 1963?
- A. There is no reason to change my mind since 1963, but there is every reason why I think in fairness to the Commission I should point out that we are talking about an inexact science?
- Q. Yes.
- A. And we are talking about an estimate of a requirement for a specifically short-range aircraft. If anything was done to TCA's short-range route pattern that eliminated our requirement for Viscount entirely or reduced it very substantially, those estimates would be worthless.

There is another factor I think I should point out: there has crept into the industry in recent years something usually referred to as "metal fatigue". The Viscount by 1973 will be approximately 20 years old. This is a unique situation for modern aircraft, although not unknown in such old and slow ones as the DC-3. And I would be the last man in the world to swear here that the Viscount would be legally operated in 1970. for all I know..

- Q. Your plans today, we realize, as in all these forecasts, even cost analysts' forecasts that one has to use the best information on the date the decision has to be made?
- A. Exactly.
- Q. And your best information today is that Air Canada will be operating between 33 or 34 Viscount aircraft in 1973?
- A. That is our technical forecast.
- Q. And therefore the Winnipeg base will be open at least until 1973, based on that assumption?
- A. That assumption will remain there, yes."

The Honourable G.J. McIlraith, while Minister of Transport (T 1321 V 10) is stated to have said on December 4, 1963 in the House of Commons that it was correct that 34 Viscounts would be operated by AC during the next ten years and serviced at the Winnipeg o/h base.

The foregoing estimate of Viscount usage was confirmed during the May, 1965 hearings. However, a revised forecast, filed with the Commission in October, 1965, (the details of which are confidential) indicates that AC expects to have a significantly lesser number of Viscounts operating in 1973 than were previously estimated. Accordingly, if AC's present plans are carried out the proposed closing of the Winnipeg base could be considerably earlier than was contemplated by AC in May, 1965. (See Part 2 C and App. D).

Mr. McGregor saw no possibility whatever of maintaining and increasing employment at the Winnipeg base as a Viscount o/h base and in fact foresaw a dwindling of o/h work and of employment there, as the workload presented by the diminishing fleet of Viscounts went down.

Mr. McGregor stated: (T 1190-1 V 9)

"The Company will continue to relate the size of the Winnipeg work force directly to the volume of Viscount overhaul work that requires to be done. It is not Air Canada's intention to employ at any time any more employees than are needed to meet the current workload at Winnipeg or at any other point in the airline's network.

The Company has throughout its corporate history endeavoured to plan intelligently, to operate efficiently and to deal fairly with the communities it serves and the staff it employs. It fully realizes that in this case it has been forced into a course of action which is resented by some elements of this community. However, it regards its primary responsibility as the service of the interests of Canada as a whole through the provision of good air transportation with maximum efficiency at the lowest possible

price to the travelling and shipping public. The Company regrets that the closing of the Winnipeg overhaul base is an economic necessity. It has searched diligently for an alternative course of action that would preserve the base, but without success. It has done what it can to cushion the impact by providing time for adjustment by continuing Viscount overhaul at this point even after it would have been economically advantageous to do otherwise. It is also prepared to work closely with Municipal and Provincial Authorities in an endeavour to find other productive uses for the Winnipeg facilities after the Viscount work terminates."

One alternative course of action mentioned by Mr. McGregor as not seriously considered by AC was a proposal by a "reputable" organization that it would take over the AC base personnel and base and continue the o/h of Viscount on a contract basis. He stated that this was not pursued on account of a likely negative personnel attitude and because AC was not happy over the idea of having its o/h work done other than by its own staff under its own supervision and inspection.

Mr. McGregor could see the possibility of using the structural facilities at the Winnipeg base for another industry (T 1282 V 10) or "even by the independent operation of an overhaul and maintenance facility". However, he stated that it was hard to conceive of the engine room and facilities directly related to the machinery being used for other than their present use. He suggested that either the Province or the municipality might appoint a small committee to meet with a corresponding small committee appointed by AC to see what might be done towards putting an alternative activity in the base in the hope that through this and possible tax concessions and other inducements a new or expanded industry might be created. He pointed out, however, that his commitment to employees made it impossible for AC to say when the premises would be vacant and open and this in turn made it difficult to look for prospects.

He also stated that if the personnel at the Winnipeg base by vote or otherwise eliminated his commitment regarding continuation of o/h of Viscount at Winnipeg, it would be possible to talk "better sense" with respect to the alternative use of the premises.

Mr. McGregor gave his commitment: (T 1289 V 10)

"...we will do any mortal thing within reason to try and arrive at an alternative use of those facilities".

The Vice President Administrative Services of AC (Mr. S.W. Sadler) intimated that AC was prepared to co-operate fully on any realistic plan for the purchase or lease of the o/h buildings and facilities at Winnipeg even though it might result in some curtailment of the space presently occupied for maintenance and o/h activities. He pointed out, however, that for the next few years, with the exception of the operations building, the bulk of the base properties and equipment was fully committed to the Viscount aircraft maintenance and o/h program. He suggested that AC would be prepared to dispose of these facilities at a selling price of "present book value", which he defined as being the "gross book value", namely, the original cost of approximately \$2.5 million. He stated that these assets were depreciated on AC's books by approximately 70% but that the present cost of construction would be at least \$6 million. (The engine test house, as noted in Part 2 B, has been optioned to Standard Aero and the site of all the buildings is under lease from the Department of Transport).

In April, 1965 AC prepared and forwarded to the Honourable Mr. Pickersgill (with a copy to the Commission) a brochure of some thirty pages describing in detail the Winnipeg o/h facilities. This would be useful to any person interested in a purchase of the facilities.

In summary, AC plans to close the Winnipeg o/h base as soon as it ceases to be required by it for Viscount o/h, but will co-operate in a sale or lease of the buildings and facilities to be effective following such cessation, or as buildings or facilities become redundant to its requirements.

AC plans to perform all o/h work on its fleet (other than Viscounts) at Dorval and on closure of the Winnipeg base to perform at Dorval all o/h work on its remaining Viscounts.

In response to a request from the Commission AC stated on December 20, 1965 that: (the underlining is that of the Commission)

"(a) The overhauling of the entire fleet of Air Canada at the Dorval Base will not require for some years additions and alterations in excess of those provided for in the material already submitted to the Commission."

The nature and estimated cost of these additions and alterations, as gleaned from a re-examination of the AC submissions, are referred to in Section E of this Part 3.

AC has advised the Commission that while the Dorval o/h hangar is inadequate in size for the "stretched" DC-8s now on order they will not be delivered for some time and after then further time would elapse before they would require o/h. In the meantime they could be accommodated in the Dorval maintenance hangar. Ultimately, however, alterations and additions, the nature of which has not been settled, would be required to the Dorval facilities to meet the needs of the larger number of, and longer, aircraft now on order, or which may be ordered in the future.

The Speas report had included in its cost of additional facilities required in Winnipeg in case the o/h of the DC-9s were undertaken there, a hangar of sufficient size to accommodate a DC-8.

In response to a question by the Commission, AC has stated that it does not propose "in the foreseeable future" to make additions and alterations to the Winnipeg base for line maintenance of aircraft, including DC-8s and DC-9s.

Presumably if Viscounts only are overhauled at Winnipeg AC does not propose to provide the hangar for line maintenance of DC-8s proposed by Speas to be constructed

if the DC-9s were to be overhauled at Winnipeg. Commission can only assume that if this function is performed AC intends to use the canvas covered portable "Rainbow Stage" now used for Vanguards and referred to in Part 2 B. this is so the Commission wonders whether such facilities are in keeping with the facilities used by AC elsewhere (Vancouver, Toronto and Halifax) for similar purposes, notwithstanding the much more rigorous weather conditions in Winnipeg. The AC policy of sparse minimum expenditures applicable to the dwindling Viscount o/h base would not seem applicable to facilities reasonably required for the line maintenance at Winnipeg of AC's full jet fleet which will continue in service long after the Vanguards and Viscounts are phased out. The inclusion by Speas in their estimate of such hangar facilities for DC-8s would imply that they were in fact considered necessary.

The Commission is of the opinion that, except for the stores building and engine test house constructed in 1955, the buildings and facilities of the Winnipeg o/h base, while useful for their present and like purposes, are definitely of outmoded design and of single purpose nature and would require considerable alterations and additions before they could be economically used by any other industry.

Bearing this in mind and the dislocation that AC would cause in the Winnipeg community by reason of its ultimate base closure, the Commission is of the view that, notwithstanding that the stores building may have a ready market value as a building used for purposes isolated from the o/h base, the entire complex of buildings, if and when sold, should be offered for sale as a unit and also that AC should not seek to make a profit from the sale of these facilities, whether sold for continuing o/h purposes or to an industry which might replace the o/h facility. Sale for o/h purposes or to a replacing industry would only be feasible if the price were attractive. If this view is accepted the price of the facilities would not exceed AC's net book value, being approximately \$700,000 as of 1965.

Mr. Sadler described in detail the administrative planning of AC pertinent to the transfer of the Winnipeg o/h base to Dorval. This included the understandings and arrangements between AC and the International Association

of Machinists through its two separate Lodges, Airline Lodge 714 applying to its union employees west of Montreal, and Trans-Oceanic Lodge 1751 applying to union employees at Montreal and to the east of that city. These relate to job security and seniority in the phasing out in one division of one type of aircraft, and the phasing in in the other division of another aircraft. In particular Mr. Sadler explained the "minutes of negotiation" confirming arrangements between the company and the Union in 1964 relating to the transfer to Dorval and the seniority of Winnipeg base union personnel affected by the phasing out at Winnipeg of the Viscount and the phasing in at Dorval of the DC-9.

AC's arrangements and policies involve, for union and other personnel, free air transportation, or actual cost of other transportation, movement of personal belongings, payment of temporary living expenses, assistance in relation to cases where an employee's home cannot readily be disposed of, and limited financial assistance for the purchase of a new home and provision of services, utilities and furnishings.

Mr. Sadler outlined arrangements for Winnipeg based employees not desiring to transfer to Dorval. These include provision for retirement or early retirement under AC's pension plan, termination of service and election of a deferred pension or refund of pension contributions, and early termination pay for certain employees between 60 and 65 who do not wish to transfer.

Tables were filed indicating employee transfer plans of other Canadian corporations.

While consistent objection has been taken in the Winnipeg area to the transfer of Winnipeg employees under the foregoing arrangements pending final decision as to the future of the Winnipeg base, no objection was raised during the hearings to the particular terms of the arrangements.

While recognizing the objections of some employees that they should be required to make a decision to transfer

or not, the Commission has no hesitation in describing the arrangements for transfer negotiated by AC with the Union, and also as applied to non-union personnel, as being eminently fair and in keeping with good up-to-date employer-employee practices.

Reference has been made previously to Mr. McGregor's statement to the effect that a dwindling of employment at the Winnipeg base must be expected, and this will inevitably take place on the basis of AC's present plans. However, it is interesting to note that at the present time employment at the base in terms of numbers of employees is not significantly less than at a year ago, the stablizing influence being ascribed to a program of changes and renovations to the interiors of Viscount cabins.

The comparative employment situation is as follows:

Employees	January 1, 1966	January 1, 1965
O/h base: Management	166	176
Contract employees: Permanent Long term temporary Short term temporary	508 144 38	610 49 44
O/h stores: Management Contract employees: Permanent Long term temporary	41	100 100 100 100 100 100 100 100 100 100
	49 	56 <u>9</u>
	960	985

AC advises that it anticipates that the number of its Winnipeg base employees will increase during the current year to a peak of about a further 90 men who will be engaged on a short term temporary basis.

The replacement of approximately 100 permanent employees (a significant number of whom were transferred to Dorval pursuant to phasing out arrangements with the employee's union) by a corresponding number of long term temporary employees will be noted.

The Commission will report in Section E of this Part 3 its views with respect to AC's plans concerning the future use or disposition of the Winnipeg base facilities.

D. Use of Air Canada Overhaul base at Winnipeg for DC-9 or other aircraft of Air Canada.

The Commission has come to the conclusion that there should be no interference with AC's plan for a consolidated o/h base at Dorval and for the o/h there of the DC-9. The Commission's conclusion has only in part to do with the direct financial cost to AC of maintaining two separate o/h bases for jet aircraft, although that cannot be ignored.

The practicality of overhauling the DC-9s at Winnipeg separately from the DC-8s at Dorval has been explored diligently as required by the order, both at the hearings and by subsequent enquiries, but that solution, while desired in Winnipeg, does not seem to be a sensible one in the circumstances. It would have long term adverse effects on AC (and consequently on Canada at large).

The direct financial cost would be significant. AC is now absorbing, and since 1961 (when the Vanguards were introduced into Dorval, following introduction of the DC-8) or shortly thereafter, has absorbed, additional annual costs resulting from its 1957 decision to continue to o/h the Viscounts at Winnipeg after the new Dorval base was in operation. These additional costs are estimated, in respect of the period from 1961 by Wallace Clark at \$1,037,000 and, in respect of the period from 1963 on, by Speas at \$2,380,790, by Banks at \$1,070,000, and by the Commission at \$1,600,000, in all cases annually. These are the estimated additional costs per year which would not be incurred if the Viscount were maintained and overhauled at Dorval as recommended by Wallace Clark, and later by Speas.

If the DC-9s were overhauled at Winnipeg together with the Viscounts, then (disregarding capital costs of construction of a new facility there of \$16 million or more, and disregarding the cost arising from under-utilization of the Dorval base) the estimated additional costs would be in the order of \$3,200,000, \$970,000 or \$2,300,000 per year, depending on which of the estimates of Speas, Banks or the Commission are accepted as being valid.

These additional costs for the Winnipeg o/h of the Viscount and DC-9s as variously estimated are significant but they only relate to the estimated costs that have been measured in dollars. They do not include some additional intangible but real costs to AC that would enter into a two-base operation.

AC stated to the Commission, through its President, Mr. McGregor, in clear and precise terms its understanding of its basic purpose and obligations in the provision of air transport, its duty to be efficient, its obligation to provide for the efficient and safe o/h of its aircraft, and described what had been done by AC in that connection, and its present intentions in that regard.

This statement is of considerable importance and interest and it is the intention of the Commission to quote it almost in full, omitting for brevity's sake only those portions which do not have significant interest and which, in the opinion of the Commission, do not prevent that which is quoted from being a fair summary.

Mr. McGregor said: (T 1170 - 1191 V 9)

"...It has been and continues to be the corporation's basic purpose to provide the safest and best possible service for the transportation of passengers, mail and goods by air within Canada and between Canada and other countries at the lowest fares and rates consistent with the maintenance of a sound financial position...

It cannot be stated too emphatically that in the highly competitive air transportation industry of today, inefficiencies cannot be tolerated.

...It (AC) should conduct its affairs as would any private corporation relying upon itself to provide and extend the air services which will help people satisfy their transportation needs and attract them as customers.

... The proper maintenance and overhaul of the corporation's fleet of aircraft is its most important single operational responsibility. Safety considerations are paramount. All else is secondary. Air Canada has, throughout the years, maintained the highest technical standards and this fact is recognized throughout the air transportation industry. Such an achievement is not won without careful planning and the intelligent application of the very large sums of money required to maintain modern aircraft. The proper care of the Air Canada fleet during the past quarter century has been a story of constant adjustment to a rapidly changing technology and the exercise of foresight during a period of revolutionary changes in the structure of commercial aircraft and their means of propulsion.

In Air Canada as in most airlines more money is spent in aircraft maintenance and overhaul than in any other single function. Planning errors in this area would have serious financial results. Every action that Air Canada has taken in the provision of new maintenance and overhaul facilities has followed the most pains-taking study by its own technicians and by established technical consultants of wide industry experience.

To understand the progression of relevant events in Air Canada, it is necessary to go back to at least 1949. The president's office was in Montreal where it had been established in 1937. Winnipeg was, as it had been since the corporation's inception, operational headquarters. This was logically the case as the airline initially was a domestic carrier only and Winnipeg in the centre of the then route structure, was the appropriate location for the care of aircraft of the day. The

short range of aircraft then in use necessitated Winnipeg stops and this was highly convenient for maintenance and overhaul purposes. The much longer range of modern aircraft, together with the growth of the company's Eastern Canadian, United States and Overseas operations has completely altered that situation. The centre of gravity of the airline's operations has moved steadily east.

In 1948 the General Traffic Department of 30 persons was moved from Winnipeg to Montreal.

In 1949 the airline, for reasons of managerial efficiency, consolidated, as planned, its senior administrative offices at Montreal ... 150 Winnipeg staff were involved, with the overhaul base remaining untouched. Management stated at that time (1949), in response to questions, that there was no reason to believe that the executive offices move was the forerunner of a mass transfer of the Airline's activities from Winnipeg to Montreal. That statement was correct in the context of the times and represented managerial opinion. It must be remembered that at that date the fleet consisted of North Stars and DC-3's, the former type having newly entered service. The purchase of Super Constellations was not yet contemplated. Commercial turbine-propeller aircraft had not yet been designed and the introduction of commercial jet aircraft into service was still some years away. The Corporation had no new aircraft types under consideration and the Winnipeg Overhaul Base was adequate for the foreseeable future. Nevertheless, in testimony before the Sessional Committee on Railways, Airlines and Shipping in April, 1949, I pointed out that it was naturally impossible to make accurate forecasts for many years on such a highly technical subject as facilities for the maintenance and overhaul of commercial aircraft.

The next few years did not conflict with the Company's 1949 outlook. The staff employed by the airline at the Winnipeg Overhaul Base grew from 1039 in 1949 to 1170 in 1956. Transfers were few in number and insignificant in size.

The beginning of the fleet conversion to turbine power began with the ordering of Vickers Viscounts in 1952.

By 1956 rapid advances in aviation technology resulted in major equipment decisions by the Airline. In that year

orders were placed for the newly designed Douglas DC-8 jetliners and the large propeller-turbine Vickers Vanguard aircraft. This confronted management with the necessity of providing itself with modern overhaul facilities for aircraft of a type and of a size unprecedented in the Company's experience and for whose care there were no existing facilities. To obtain the best possible guidance as to what should be done in this new situation the airline hired the services of Wallace Clark and Company (Canada) Ltd., the Canadian branch of a leading firm of aviation consulting engineers. They were asked to examine existing overhaul facilities, to study the Company's plans for fleet ownership over a 15-20 year period and to produce fully supported recommendations as to what steps should be taken.

These consultants for nine months examined a variety of plans. The Wallace Clark Report, submitted to the Company on May 31, 1957, recommended that a completely new maintenance and overhaul facility should be built at Montreal, specifically designed to deal with turbine powered aircraft; that the initial construction should be large enough to meet the Company's requirements for several years to come and be capable of expansion at a minimum of cost and disruption of function. This recommendation was submitted to a meeting of the Airline's Board of Directors and approved in September, 1957. The related expenditures are included in the company's capital budgets for the years 1958, 1959 and 1960, which in due course were approved by the government by Orders in Council.

... On October 29, 1957, I announced in Winnipeg the Company's intention to build an overhaul base at Montreal. At the same time a commitment was made to continue the overhaul of Viscount aircraft and their engines at Winnipeg. Let me make it perfectly clear that the Wallace Clark Report left no doubt that there would be substantial economies to be gained if all turbine powered aircraft overhaul was consolidated at Montreal immediately upon construction of the new facilities. The Company's decision to continue Viscount overhaul at Winnipeg was based upon a wish to lighten, as far as possible, a blow to the Winnipeg economy and to its own staff at that point. Obviously, a sudden transfer of the Viscount maintenance and overhaul function to Dorval would have been unduly disruptive.

... The Montreal Base was constructed and in partial operation in December, 1959. This is one of the most advanced and flexible facilities for the overhaul of modern aircraft in the air transportation industry. It has done with efficiency the job for which it was designed. It possesses the built in capability of relatively inexpensive expansion to cope with future overhaul requirements.

By the early 1960's, plans for additional aircraft acquisition and for the gradual phasing-out of Viscount operations had reached a point where forecasts could be made of the life expectancy of the Viscount overhaul activity at the Winnipeg base. It was then obviously the responsibility of management to make to its Winnipeg employees a clear statement of the Company's position so that they would have the necessary information to make their own personal plans. Accordingly, I wrote a letter on November 14, 1962 ... to the employees at the Winnipeg Base forecasting that, while the Company would probably be operating a Viscount fleet of not less than 40 aircraft through 1965, it was quite possible that it would start to dwindle in numbers, perhaps quite rapidly, early in 1966.

- ... In February, 1963, following representations by the Province of Manitoba and the City of Winnipeg, the Federal Government requested that a second analysis of the airline's maintenance and overhaul requirements be undertaken by an independent engineering consultant. The following month the firm of R. Dixon Speas Associates was commissioned by Air Canada to provide a recommended course of action relative to its overhaul and stores capacity from 1963 to 1974...they were asked to recommend to Air Canada a course of action that would provide the company in the most efficient and economical manner through 1973 with overhaul capacity adequate to its needs.
- ... The Dixon Speas Report was delivered to the company on August 13, 1963 and recommended that the Winnipeg base should be closed down at the earliest possible date in the interests of most efficiently and economically operating Air Canada. The continued use of that facility would involve

the airline in an extremely heavy penalty in unnecessary operating expenses and if Winnipeg were to be equipped to overhaul any new turbine powered aircraft type, an additional heavy burden of capital expenses would be incurred.

The Company's policy regarding the maintenance and overhaul of its flight equipment is clear and consistent with repeated declarations made in the past. Very simply, the airline regards it as fundamental that it should be free to care for its aircraft in accordance with the highest technical standards and in the most efficient and economical way possible. To this end, two technical studies of the most thorough nature have been conducted by outstanding aviation consultants and the company has acted in accordance with those recommendations supported, of course, by the experience and knowledge of its own staff of highly competent technical people.

At Dorval a \$31,000,000 overhaul facility of the most advanced type has been built to accommodate the company's DC-8 and Vanguard aircraft and the new jets to be delivered in the future. It was designed and constructed specifically to meet these highly complex technical requirements. It incorporates provision for ready and inexpensive expansion as required. At Winnipeg the company's Viscounts will continue to be overhauled as long as a substantial number of them remain in service.

On no possible grounds could the company contemplate the overhaul of the new DC-9 medium-range jet aircraft at Winnipeg. Such a step would be preposterous and a betrayal of management's responsibility to operate the airline with efficiency. The existing Winnipeg facilities are quite unsuitable for the care of the new jets and it would be necessary to construct a completely new base that would largely duplicate Dorval facilities and leave the latter with a high proportion of unused and wasted capacity...This airline could not contemplate such a completely unjustifiable policy...it regards its primary responsibility as the service of the interests of Canada as a whole through the provision of good air transportation with maximum efficiency at the lowest possible price to the travelling and shipping public. The company regrets that the closing of the Winnipeg overhaul base is an economic necessity.

...It has done what it can to cushion the impact by providing time for adjustment by continuing Viscount overhaul at this point even after it would have been economically advantageous to do otherwise. It is also prepared to work closely with Municipal and Provincial Authorities in an endeavour to find other productive uses for the Winnipeg facilities after the Viscount work terminates.

Air Canada will, of course, continue to provide on its routes to and from Winnipeg aircraft capacity and flight frequencies properly related to the traffic requirements."

The Commission intends to comment in some detail on this statement and to refer to other evidence related to it.

There may be some disagreement with Mr. McGregor's statement of the basic purpose of AC. AC is not a private corporation. It is a Crown Corporation, performing a national transportation function on behalf of the Government of Canada. It is subject to that government and to the Parliament of Canada. It has an obligation to be efficient, but its first obligation is to provide adequate air transport. This may not be quite so closely related to cost factors or financial results as Mr. McGregor thinks (see Part 2 A).

There can, however, be little quarrel with his statement that safe and proper maintenance of its aircraft is a most important responsibility of AC. Canadians generally would be quick to criticize the board of directors and Mr. McGregor's management if this responsibility were not fulfilled. However, no question of the safety or efficiency in the o/h function was raised at the hearings, apart from the matter of cost. The present separate bases at Winnipeg and Dorval are operated by AC at its own volition and witnesses did not question the efficiency of either base. In fact they stressed the efficiency of the Winnipeg personnel.

The Commission has already commented on the Wallace Clark report (Part 3 A), and has expressed the view that the study was competently and objectively done and that its recommendations were proper in the light of the o/h requirements of AC and of its instructions to Wallace Clark to evolve a plan that would provide the most economical facilities for the airline.

Mr. McGregor says that the Wallace Clark report left no doubt that there would be substantial economies to be gained if the o/h of all turbine-powered aircraft (and that term includes Viscounts) were consolidated at Montreal immediately upon construction of the new facilities.

That the report left no such doubt was known in 1957 to AC and its directors (who decided not to implement the recommendation for the time being with respect to Viscounts) but it was not known to the general public. The report was not then a public document. All that was known of it then by the general public was from the public statements made by responsible AC officials at the time. These are fully set forth in Part 2 C. They were guarded in their reference to AC's ultimate goal of consolidation and its decision for the eventual closing of the Winnipeg base, although careful examination of what was said, or, more accurately, of what was not said, might have put Winnipeg and the Winnipeg base staff on the alert.

The report may have left no doubt but AC left the public in doubt.

It seems likely that if in 1957 AC had frankly disclosed the full recommendations of the report and AC's intention to lighten the blow on Winnipeg by deferring the closing of the Winnipeg base until retirement of the Viscounts, there would have been no need for the appointment of this Commission in 1964.

It is possible, however, that as a result of such a disclosure protests would have been raised, and these protests might have resulted in a public enquiry, similar to that of this Commission, being appointed in 1957 or 1958 but that enquiry would not have been confronted, as was this Commission, with a "fait accompli".

The Wallace Clark recommendations would not then have been acted upon, and the Dorval base would not then have been built and in operation, several years before the enquiry began.

This comment should not be taken to imply that in the result the Dorval base would not in any event have been proceeded with as recommended by Wallace Clark. The Commission has expressed the view that the recommendations were proper in the light of Wallace Clark's instructions to provide the most economical facilities for AC. However, while the comparative costs of various plans were of significance, there were other matters and considerations also of significance.

Wallace Clark estimated that to operate a consolidated base to o/h DC-8s, Vanguards and Viscounts would be approximately one million dollars per year less costly than a two base operation with the o/h of the Viscount at Winnipeg. Wallace Clark rejected the idea of a consolidated base at Winnipeg as having considerable economic handicaps. Various other alternatives were rejected, as was the alternative of a consolidated base at Toronto.

However, even on the cost factor the decision of Wallace Clark was not one of a completely overriding order. Mr. Wilson, one of the authors of the report, described the decision as "close" and then elaborated: (T 637 V 5)

"Considering the magnitude of the operations involved, one would have to say it was rather close, if this is a meaningful term."

There were other considerations involved in a decision for or against a particular base location, described by Mr. Wilson: (T 638 V 5)

"When the work had proceeded to a point where choices needed to be made among the various possible solutions, a certain approach was taken which had its roots in the seemingly overriding logic of airline operations. approach was that if it was elected to locate maintenance and overhaul facilities in some place other than what the logic of airline operations dictated, then a definite incentive should be indicated for so doing. As an example, if one were considering to locate a base for DC-8 aircraft at Winnipeg -- and let me say, we are speaking here as looking forward from 1957 -- where it was expected the DC-8 would not normally be

available for maintenance, then some overwhelming incentive would be needed to offset the inconvenience of routing a DC-8 into Winnipeg, with the economic penalties, passenger inconvenience and delays which would result. In another example, if it were considered to maintain two bases rather than one, very obvious and substantial economic incentives — meaning economic incentives for the company — should be evident to offset the economic penalties and the difficulties in communications, management, personnel and inflexibility attributable to the two-base operation."

Mr. Wilson made it clear that in the Wallace Clark study no effect was given to

- 1. The possible influence of a base location on schedules and airline revenues, pointing out that every airline does route its aircraft to its base and away and that it is not possible to identify what penalties it suffers.
- 2. The relative efficiency of an organization in one city versus another.
- 3. Workload scheduling difficulties which, as he put it, "tend to become larger in smaller organizations".

However, Mr. Wilson stated: (T 632 V 5)

fond of stating or citing the obvious benefits of operating in heavy-traffic locations, the obvious problems of bad weather, the obvious problems of having to trade airplanes and discomfort passengers, etc. Of course, philosophically one has to agree that these things all seem logical. However, in this

study, we simply did not include these, because it is not possible to appraise them in a defensible manner. One can make assumptions which seem logical, and from those infer some economic comparison. But, we did not include in this analysis anything which we could not found upon a demonstrable base. In this way I think it could be said, probably, that the comparative results (of the different plans) were conservative."

In the result neither the Wallace Clark report (nor later the Speas report) took into consideration the dollar effect of scheduling or routing situations.

Also the Wallace Clark study did not take into consideration such matters as objectives of national or regional development. In reply to a question by Commission Counsel Mr. Wilson said: (T 692 V 6)

"We dealt with information affecting the company management and company expenses and investment. We did not examine, for example, trend of industrial employment in various areas of the country or the provinces. We realized that the objectives of national development exist and of provincial development and that, taken in some context other than management of the industrial enterprise, there might have been factors to influence a choice of location. We did not go into them. Our objective was to provide the most economical facilities for the airline."

The board of directors of AC was entitled and obliged to take all these factors (cost and other) into consideration in their recommendations to government, and perhaps did. However, AC is a public body, a Crown Corporation, an instrument of government, and its decisions of this nature

require governmental approval, involving as they did capital expenditures on the public credit of very substantial amount. This decision was not a routine management one, but one of public policy. Several communities in Canada could have had an interest in it. Dorval and Winnipeg would be interested but Toronto, for example, could have had an equal interest with both those cities, as could Vancouver.

The ultimate decision would have to be that of the government (as, in fact, it was, orders-in-council approving the capital expenditures for the Dorval base having issued) but before that decision was made the public should have been apprised of the recommendations so as to enable to be made whatever representations were deemed desirable.

The less-than-frank information given by AC to the public of the Wallace Clark recommendations, and of its decision with reference to the Winnipeg base had the effect of allaying suspicion in Winnipeg and of enabling AC to embark on a consolidated base concept for all its aircraft, with the location of that base being Montreal and with the closure of the base at Winnipeg being only a matter of time, all without full public appreciation of the significances involved.

The Commission stresses, however, that the decision to construct a consolidated base at Dorval might have been the proper decision in all the circumstances.

As stated by Mr. McGregor, the Dorval base was constructed for the expected DC-8 and Vanguard fleets, with provision for expansion.

The first clear public announcement of AC's intention to close the Winnipeg base was that made by Mr. McGregor on November 14, 1962 related to an announcement of AC's intention to acquire new jet aircraft to do some or all of the work being done by Viscounts and Vanguards.

Knowledge in Winnipeg that the Winnipeg base was to be by-passed in the jet age resulted in a storm that brought about the appointment of Speas as consultants to examine the o/h planning facilities of AC and make their recommendations. Their report and recommendations are fully dealt with in Part 3 B.

The Commission has expressed the view that Speas overestimates the additional cost to AC of overhauling its Viscounts and DC-9s at Winnipeg, but even the lesser cost believed by the Commission to be involved is an extremely significant amount, \$2,300,000 per year. This estimated cost does not take into consideration a number of intangible cost factors also not considered by Speas but raised by AC as being significant.

That there is such a difference results from a modern large base having been constructed at Dorval. That under different circumstances the new base might have been constructed at Winnipeg is now irrelevant. The Dorval base in fact exists.

Mr. James McLean, Director of Maintenance and Overhaul of AC said: (T 414 V 4)

"The decision in 1957 to build a modern, integrated main base facility at Dorval to cater for the maintenance and overhaul need of the DC-8 and Vanguard aircraft (with the added requirement that this base be designed such that with minimum rework, it would be capable of accepting the Viscount work load at a future date), was the cornerstone in Air Canada's planning to update its maintenance facilities to meet present day requirements."

And at: (T 449 V 4)

"The need for maintenance at "enroute" points which existed with yesterday's aircraft on yesterday's route structure, has been replaced by the need for a single well-equipped Main Base (located at a point of high airline activity where adequate aircraft down time occurs), supported by

Line Maintenance Units located at points where a combination of the number of departures and natural aircraft layovers provides the opportunity for maintenance."

Attached as Appendix N is a schedule of aircraft departures and layovers showing relative activity at different points.

Mr. McLean stated: (T 444 V 4)

"...we see the system as it exists today with the route mileage of 39,612 miles, with the buildup that has occurred in terms of Atlantic operations, with the introduction of the polar flights, with the buildup of the Caribbean services and the tremendous shift in buildup in the area of operations surrounding Toronto and Montreal. This shift of emphasis, the change of character of the airline from the early 1940 period through the 1950's into the 1964 situation has been reflected in the maintenance The maintenance facilities required in the 1940 era are not the maintenance facilities required to cope with an operation on a complex system of this kind involving modern jets moving at very high speeds. This kind of an airline as seen throughout the world requires integrated facilities at a point within the airline that gives the maintenance division easy access to the operating fleet and sees this integrated facility complemented by the development of route-end facilities to perform the maintenance functions when natural down time is provided at the end of the line as the aircraft lay over."

Mr. McLean completed his remarks in this connection: (T 486-487 V 4)

"...on the basis of the Wallace Clark recommendations, Air Canada planned for and constructed a network of maintenance facilities based on a "one main base" concept. This network consists of the Line Maintenance facilities at Toronto, Vancouver and Halifax and the Main Base at Dorval.

The fact that the network, (Dorval, Toronto, Vancouver and Halifax) constructed and equipped at a cost of \$42,815,000, exists cannot be ignored and in the interests of economy Air Canada must continue with its program to utilize to the fullest the capabilities of this network.

The one major step remaining in Air Canada's overall plan to achieve the ultimate goal is the amalgamation of the Dorval and Winnipeg bases."

The evidence of Mr. Speas and of officials of AC confirms and enlarges upon Mr McGregor's statement that the Dorval facility is of a most advanced type, designed and constructed to meet the highly complex technical requirements of AC's DC-8 and Vanguard fleets.

The evidence further indicates that the Dorval base is capable with relatively little capital expense of expansion in the areas required to enable it to adequately o/h the DC-9s now in service or on order, and, for that matter, the Viscounts as well.

A two-base concept, with one base at Winnipeg for the o/h of the DC-9s (and of the Viscounts until they are phased out) and another base at Dorval for the o/h of the DC-8s (and of the Vanguards until they are phased out) would not, in the opinion of the Commission be justifiable in the light of evidence as to the complexity of the o/h of advanced type jet aircraft, related to physical plant and equipment and and the highly trained technical personnel with differing skills required for that function.

Appendix O gives an indication of the various and detailed skills involved in the o/h process and Appendix P details a typical maintenance and o/h schedule for a large jet aircraft. Evidence is that approximately 50% of maintenance and o/h work is of the scheduled variety and the balance is non-scheduled.

That the Winnipeg base as it is today (see description in Part 2 B) or after the expenditure of \$3,000,000 or so estimated by Speas for minimum alterations and additions of equipment, is or would be inadequate for the o/h of DC-9s, is clear from the evidence of the AC officials who would be responsible for the o/h function, and of their consultants. A completely new and modern base, almost duplicating in plant, equipment, and personnel the Dorval base (except possibly as to size) would be required. The capital cost of such a plant has been estimated by Speas at \$16,000,000 and by Banks at a lesser amount, but experience of AC and others related to estimated capital expenditures would lead one to believe the higher cost is a minimum.

That the Dorval base as it is today, (see description in Part 2 B) with relatively minor alterations and additions to machine shop capacity and engine testing cell, estimated by AC officials to cost about \$240,000, could perform the o/h function for AC's entire present fleet, including the initially forecasted DC-9s, is likewise clear from the evidence of those same AC officials and their consultants.

Appendix Q is a plan of the Dorval building area. To assist realization of actual size a witness described the overhaul hangar alone as being two and one-half times the length of a football field.

While the DC-8 and the DC-9 are different aircraft they are produced by the same manufacturer and have a high degree of commonality. While having relatively few directly interchangeable parts or components the aircraft are of the same "state of the art", being constructed of similar materials, and by application of the same methods, procedures and philosophy. Their units, systems and controls apply similar principles. In a way they are big brother and little sister. The equipment and skills used in the o/h of one are in general the same as for the other.

To duplicate at Winnipeg the physical facilities and personnel of Dorval (as would largely be necessary to o/h the DC-9s at Winnipeg) would, in Mr. McGregor's words, and agreed to by the Commission, be completely unjustifiable.

Apart from the matter of straight duplication Mr. Wilson pointed out that on the redesign of the Dorval base necessary to omit immediate provision for Viscounts, the square feet area was decreased, and the capital costs were also decreased by some \$2,600,000. While the Dorval base as constructed was sized only for the estimated requirements for DC-8s and Vanguards with no spare capacity, plant utilization has decreased over the years by reason of product improvements and increases in initial o/h and maintenance check times (time extensions) to the point where the Dorval base is now under-utilized. On the phase out of the Vanguards, these facilities will be under-utilized by at least 50% unless the DC-9s are substituted for the Vanguards. This situation, of course, would result in reductions of staff there, just as in Winnipeg the phasing out of the Viscount and the closing of that base will result in staff reductions there.

Mr. A. D. Bone, General Superintendent of the Dorval base in response to questioning by Commission Counsel stated in this connection: (T 760 V 6)

"...we did not design excess capacity into the base. The base was sized against the best known requirements of the airline up to 1965. All this work was done against no background knowledge of the performance of the aircraft and its products.

Q. Stopping there a moment, Mr. Bone, if I may interrupt you, I am not clear on how this can be so. Air Canada presumably evaluated the DC-8 and the Vanguard and knew the characteristics of each of those aircraft; is that not so?

A. Well, these airplaines were still on the drawing board; they had not flown. We had no actual in-operation experience to draw on. It is quite easy to do this work or a lot easier to do this work, for example, if you are buying an aircraft of an already existing in-service type, but at the point in time when these base facilities were being developed and planned the DC-8 had not flown and the Vanguard had not flown and there was no experience other than military on another type jet aircraft and turbo-prop jet aircraft that we could take and use in the sizing exercise, but no real, fast, nailed-down, in-service material that we could hang our hat on."

Also: (T 758 V 6)

"...At this point in our history yes we have excess capacity which in retrospect maybe could have been taken out, but there have been periods in our time where we have needed that capacity. I would like to say that when I use the word 'capacity' it has the following definition. It is not just bricks and mortar; it means a shop can be on a single—shift operation or it can be on a double—shift operation. This increases the capacity of the work that goes on in any one area. It also is related to test equipment capacity and not just related solely to physical size."

In reply to questioning by counsel for the Province of Manitoba Mr. Bone said: (T 788 V 7)

"...When we talk about capacity, we are not only talking about the square-foot area in a shop; we are also talking about the type of shift structure and equipment utilization and a number of factors that can produce a percentage factor of facility utilization."

and: (T 790 V 7)

"Q..So what in effect has taken place is that you needed in 1959 approximately twice the capacity that you need in 1965 at Dorval? You have 50 per cent excess capacity so, in 1959 when you were planning this base, you planned a base that resulted in twice the capacity that you now see that you need in 1965?

A. This is not correct. If you build a shop of a certain square foot area you need that size shop to cope with a workload and that shop could be staffed on an eight hour per day basis but you still need that amount of square foot area. Now, if you go to a two-shift operation or a three-shift operation, you increase the utilization of those facilities but this cannot be termed 'designing in 45 per cent excess capacity'.

Q. What has the number of shifts got to do with capacity?

A. It means that if you have a shop of a certain size with so many production stations in it, that if you man it with three shifts you can increase the capacity for work output in that shop."

and in response to questioning by Commission Counsel: (T 801 V 7)

"Q. My learned friend Mr. Mauro was talking to you about an airplane dock, and you said that you had the one dock and that you had to have a dock of this size to do any airplane overhauls. Now, what about the engine overhaul facility: Would you have a smaller engine overhaul facility if you reduced the number of engine overhauls by, say, 50 per cent?

A. If you disregard any planned reserve capacity, you would need essentially the same square foot area for the equipment that is used in the process of overhaul, whether you overhauled ten engines in the facility or whether you overhauled fifty engines in the facility. The equipment required in the overhaul process has to be there, and it occupies that much floor area. It becomes a case of utilization of it."

Mr. Bone further said: (T 710 V 6)

"The Dorval facility, as conceived and developed from 1957 through 1959 was aimed at providing sufficient capacity for maintenance and overhaul requirements for DC-8 and Vanguard aircraft to at least 1965. In actual fact today's base capacity is in excess of this requirement and capacity exists to accommodate the Viscount and DC-9 fleets."

and at: (T 717 V 6)

"It is planned to use some of this capacity to accommodate the DC-9 fleet being introduced in 1966. This aircraft in many respects is a scaled down version of the DC-8 in that many of the installed units in the various aircraft systems are identical or similar to those on the DC-8 aircraft. This means that many can be tested with existing facilities, overhauled or repaired with existing tooling and in some instances parts needed in these processes can be supplied from existing inventory holdings.

Additionally, the personnel skills and knowledge required to accommodate these complex functions are available at Dorval, thus minimizing effects of the 'learning curve', and reducing training expenses."

Provision for the o/h of the DC-9 aircraft at Winnipeg would constitute a reversal of AC's decision to move toward a one base concept. This concept was dealt with by witnesses in considerable detail.

Mr. Wilson, speaking of the Wallace Clark report said: (T 648 V 5)

"A. Upon consideration of the Wallace Clark Report, I would not change the conclusion, namely, that a single consolidated base be built at Montreal.

The Major influences are that some duplication of staff is inevitable when two bases are operated instead of one, that some duplication of equipment and spare parts inventory will occur, that special facilities will be less well utilized, and that control of workload at two bases is so much more difficult that inefficiencies will inevitably occur simply because two bases exist rather than one."

Mr. Speas was questioned as to his firm's recommendation in August, 1963 for the early closing of the Winnipeg base and consolidation at Dorval: (T 1009 V 8)

"Q. Is this still your opinion?

A. Yes sir, it is. I would only say that we have a passage now of about a year and one-half since we arrived at this recommendation, and I feel very strongly and very sincerely that the reasons are stronger now than they were then. We have talked only of the economic aspects of the picture. There is something that comes before the economic aspects: that is, the way to run a good airline.

In the modern airline technology, with the high performance, extremely expensive, highly sophisticated aircraft, it is of the utmost importance that you centralize and consolidate your abilities to get the maximum out of the personnel and facilities that you have, because the facilities are to support the aircraft. The aircraft are not to support the facilities. If you plan to do the best jab, operating the aircraft, in doing that you build a solid base for an expanded operation.

The reason for feeling more strongly now than a year and one-half ago is this accelerated transition to the jets. They are more highly productive, they are more sophisticated, they are a lot more expensive, and an airline needs every dollar it can save to buy them."

The Commission has had to give consideration to the effect of the increased numbers of DC-8 and DC-9 aircraft forecast by AC in October, 1965 over those forecasted in May, 1965 (App. D) and considered in the Speas report.

In this connection the remarks of their 1963 consultant Mr. Speas are of interest: (T 935 V 8)

"A. When the forecasts were laid down, the forecasts had what we considered to be a very heavy content of propellerdriven aircraft (Vanguards and Viscounts) in the future inventory. We questioned this, frankly. We felt that in actual fact competitive circumstances on the North American Continent would, as it long since had done over the North Atlantic and most heavily in Europe, press all of the vast majority of operations into the jet category. We recognized that Air Canada had been a pioneer in the introduction of turbine transports to this continent. As a matter of fact, as you undoubtedly know, they were the first airline in North

America to introduce turbine-powered aircraft. Their position of leadership in that respect had been outstanding, and it achieved a very spectacular traffic penetration in their competitive That is, Air Canada with their routes. turbine aircraft had been right. We felt in looking at the plans that there might be more jet aircraft than was planned and expected, and we spoke of this with Air Canada. We decided to leave it exactly as it was because it is very, very clear that any acceleration of the transition to jets will most certainly require a prudent airline management to consolidate and centralize at the earliest possible date if it is to be operated competitively in this competitive world."

It appears from AC's revised forecasts of October, 1965 that Mr. Speas was correct in his views as to acceleration of the transition to full jets.

The Commission has come to the conclusion that these additional aircraft do not alter the previously expressed conclusion of the Commission.

Mr. Speas indicated the reasons why in the current transition to jet travel the economies of a single base o/h operation were necessary for an airline to survive against its competitors. Questioned concerning the effect of a suggested annual difference of a million dollars between a single and multi-base operation Mr. Speas stated: (T 1016 V 8)

"...the subject there, rather, spoke of \$1 million on an item of about \$25 million, and then endeavoured to relate it to the total, (of all AC operating expenses) but, in fact, if you approach all items of airline operating costs with that same philosophy, you can find elements in

every single aspect of Air Canada's costs. If you say 'It is only a million a year with respect to the overhaul. Then, you must say the same with respect to passenger service because I am confident you can find areas where you can spend more money in passenger service and bring money into one area instead of another, or you can in your sales and promotion, for which Air Canada has spent \$29 million. Let us say that the allocation of contracts or sales and promotion for Air Canada is not to be made up on value but some other measure is to be brought in and so you say 'What is a million dollars?!, with respect to flying operations and fuel costs.

... When Air Canada started back in the 30's and then on into the 40's, it was a domestic airline and they did a fine Job as a domestic airline. The nation of Canada has now sent Air Canada out to fight the world, so to speak, and it is doing a good job fighting the world. But, as far as the North Atlantic is concerned ... those fares are determined by a group of airlines, and it is a hungry bunch of wolves that are fighting for the lowest possible costs, and it is an efficiency operation. So, Air Canada itself cannot Just automatically increase fares to get money there; nor can they increase fares trans-border-wise. They cannot increase the fares where they are competitive. Their competitors are operating efficiently and will continue to operate efficiently. Therefore, there is no place.

Then, when you look domestically in Canada, you have competitive circumstances here too. So, you end up with very few elements actually of the Air Canada route segments that are not competitive..."

In summary, all AC officials who testified on the subject, and both of its consultants, were of the opinion that in the current state of air transportation a single consolidated base for AC was necessary and desirable in the interests of AC and to enable it to retain its competitive position. The Commission agrees with them, but not necessarily that it should have been established at Dorval.

It is interesting to note that the transportation consultant for the Province of Manitoba, Mr. Banks, had this to say when questioned concerning the Speas plan for consolidation at Dorval: (T 2247 V 15)

"A. In 1963, yes, best, Mr. Monk, in the sense that it would yield the lowest corporate cost to Air Canada. Our instructions, of course, did not include an assessment of the social costs to the Province or to Canada from the dissolution of the highly skilled group of workers which Manitoba believes ought to be maintained as a working force in this city."

and at: (T 2252 V 15)

"A. Well, to the extent that, from the point of view of Air Canada the most economic plan would be the closure of the Winnipeg Base at a given point in time, I would agree with Ir. Speas, but, I would not ever agree with the word, best, because it is used here solely in terms of what is best for Air Canada, not necessarily in terms of what is best for the Canadian nation.

- Q. Well, I meant best for Air Canada.
- A. Yes, sir.
- Q. Economically best.
- A. Dollar-wise, yes, sir."

The Commission shares Mr. Banks: concern relative to the social costs to the Province resulting from the consolidation at Dorval. This and other factors should have been a major subject for consideration in 1957 prior to construction of the consolidated base at Dorval. It is also a major consideration when discussing in Section E of this part the future of the Winnipeg o/h facilities.

The transition from multi o/h base operations to single base operations has been going on in world airlines for some years. Speas presented elaborate and extensive studies of all the 24 world airlines in North America and Europe carrying a billion passenger kilometres or more during the 1963, (in which category AC appeared as ninth in size) and of the histories of their o/h bases (not to be confused with maintenance bases). The Commission queries the relevancy of some aspects of these studies, but the central theme of a trend to consolidation of bases since 1947 is of interest and has pertinency.

These 24 airlines have in the period 1946-1963 closed 25 major bases. Only 6 airlines now have more than one base each.

We are familiar with AC now having two. Air France, which had four, has two, one for piston aircraft and one for engines only. Pan American had four and now does engine work in one base and aircraft o/h in another (Speas in his calculations considers them to be one base but the Commission considers them as two). SAS is a consortium of the airlines of the three Scandinavian countries, each of which had, and still has, an o/h base. Continental has a new jet o/h base ans has not yet announced its plans regarding its old base for non-jet equipment.

The position of United Airlines is of particular interest. It had two bases and closed one, retaining its San Francisco base. Then, by merging with Capitol Airlines, United acquired another at Washington which was engaged in the o/h of Viscounts.

Mr. Speas stated in evidence that public announcement had been made of United's intention to close the Washington base. Mr. Banks on behalf of the Province of Manitoba filed a telegram from United to Mr. Banks to the effect that no such public announcement had been made.

AC then filed as an exhibit for identification a portion of a transcript of proceedings before the Civil Aeronautics Board. The following extract from those proceedings has a familiar ring:

- "A. I would think that when the base (speaking of Washington base) ... if Viscounts were completely phased out, we have a \$30 million investment in San Francisco, with all the equipment and machinery, and I would think it would be very foolish to duplicate back here for equipment that is already provided for in its overhaul in San Francisco.
 - Q. So it would be your thought to leave the base here?
 - A. No. As the Viscounts faded out, if there were no Viscounts, I would think that the base would fade with it."

Whether or not this was a public announcement of closure, as asserted by Mr. Speas and denied by Mr. Banks and by United Airlines in its carefully worded telegram, will be left undetermined by the Commission.

What is of interest, however, is a copy of a subsequent press announcement dated August 18, 1965 made by United Airlines and obtained by the Commission, reading in part as follows:

"United Air Lines has announced that beginning in 1967 it will start gradually reducing aircraft overhaul work done at its Washington maintenance base as the company begins phasing out Viscount and piston aircraft from its fleet. The company said by 1969 the base here will no longer be used for overhaul work.

P. A. Fruehauf, assistant vice president for engineering and maintenance in Washington, said the long-range program for closing the overhaul base, which may affect about 840 people at National Airport, was drawn up in line with United's plans to have an all jet fleet by 1970. Fruehauf said all overhaul work on jet aircraft is performed at United's overhaul base at San Francisco. The Washington base is used only for overhaul service on Viscount and certain piston planes.

'In April of this year United announced plans for the lease, purchase or option of 144 new jet aircraft valued at more than \$750,000,000! Fruehauf said.
'These aircraft, to be delivered over the next five years, will provide us with an all jet fleet by 1970. As we begin receiving these new jets into our fleet we will phase out piston and Viscount aircraft, and the workload at the base here will be reduced.'"

The whole announcement is so closely akin to the corresponding AC announcement of November 14, 1962 that a copy is attached as Appendix R.

What is happening elsewhere is no necessary criterion for what should happen at Dorval and Winnipeg but it surely must be of some interest.

In several submissions it was suggested that AC should have not less than two o/h bases in the event that by reason of war, insurrection, act of God, explosion or other disaster, one was disabled. Any of these contingencies could occur at Winnipeg or at Dorval, but, of course, the result would be more serious if it occurred at one base and there were no others available.

The cost of duplicate facilities would be a significant annual insurance premium, which other airlines do not seem to assume.

AC stated that in the event of a contingency at Dorval recourse could be had, so far as airframes and components were concerned, to the C.P.A. base at Vancouver (AC now overhauls the C.P.A. DC-8 jet engine). AC also filed correspondence and memoranda indicating that there was in existence a North American Pool of Technical Facilities and Services for standby services should an airline's o/h facilities become crippled. There are at least seven facilities in the U.S. where DC-8s, and presumably in due course DC-9s, can be overhauled.

AC is an informal or associate member of this Pool. It does seem to the Commission that AC could profit by close liaison with and development of, the Pool. Beyond that comments the Commission has no recommendation to make.

Observations concerning possible o/h at Winnipeg of Vanguards will be found in Section D of this Part.

E. The future of Air Canada and other aircraft overhaul facilities at Winnipeg in relation to announced government policy.

The o/h facilities of AC at Winnipeg have been described in detail in Part 2 B. The Commission has stated he is unable to recommend that AC should now abandon its single o/h base concept and that because a consolidated base has in fact been constructed at Dorval, AC should not be interfered with in its decision to o/h DC-9s there (Part 3 D).

The facilities at Winnipeg for the o/h of aircraft and engines are not confined to those of AC. Several privately owned companies perform those functions at, or in the vicinity of, Winnipeg International Airport.

Bristol Aero Industries Limited (Bristol) (successors in 1954 to the business of MacDonald Brothers Aircraft Limited founded 30 years or so ago) has extensive facilities to manufacture, jet engine components for Canadian and export markets, (principally in the U.S.), components of aircraft, including float and ski installations, and also rockets, and electronic instrumentation and telemetry packages carried in rockets.

Bristol also has extensive facilities for the repair and o/h of aircraft, but not aircraft engines. The latter facilities account for the employment of approximately one-half of its 900 employees and occupy 85,000 sq. ft. of space. Bristol repairs and overhauls for the government of Canada the CF 101 (Voodoo supersonic jet interceptor). Bristol also overhauls helicopters and components, and twin and four engine aircraft (excluding engines) for many customers, including airlines, government, commercial and industrial companies and private operators. In addition Bristol handles the servicing, refuelling and ramp handling operations of aircraft, and the handling of air cargo, for several airlines operating through the Winnipeg International Airport, such as C.P.A. and Northwest Airlines, and also for SAS, Pan American and Trans World Airlines which at times use the airport as a refuelling stop.

In support of all these services Bristol has engineering and laboratory facilities and a pool of labour skilled in the aero space industry. Bristol is one of the many Winnipeg business concerns desiring improved Canada-U.S. air service on account of its significant business in the U.S.

Standard Aero Engine Limited (Standard Aero) was established in 1937 and has extensive aircraft engine o/h facilities occupying two former R.C.A.F. hangars and two engine test cells (capable of testing up to 5,000 h.p.) its facilities having a total floor area of 86,000 sq. ft. It employs in the aggregate 450 persons. Standard Aero overhauls both piston and turbine types of aircraft engines, and a variety of associated accessories, aircraft wheels and brakes, and also helicopter engines. Its customers include airlines, the government, and many commercial and private aircraft operators. Standard Aero states it has an investment in its facilities in excess of one million dollars.

aircraft products and has branch offices at Vancouver, Edmonton, Calgary, Toronto and Montreal.

Western Aero Engines Ltd. conducts a somewhat smaller aircraft engine repair and o/h operation than Standard Aero but it has a significant place in the o/h industry. There are other companies engaged in various aspects of o/h industry.

The combined payroll of the private industries engaged in the maintenance and o/h of aircraft and engines would appear to equal or almost equal that of the AC Winnipeg o/h base.

Many considerations influence the future use of AC's Winnipeg o/h base, of which the most significant are:

1. The decision made in 1957 by AC to consolidate at Dorval all its o/h functions with respect to DC-8s and Vanguards, its construction at Dorval of a large, modern o/h base costing some \$31,000,000, and its decision made in 1962 to o/h its incoming DC-9s there.

- 2. The decision made in 1957 by AC to continue to o/h at its Winnipeg base its Viscount airframe and Dart engine either for "as long as the function of the Viscount and Dart engine overhaul remained in the Company" or for "as long as the Company operated a substantial number of Viscount aircraft" and its commitments to its employees to those effects (See Part 2 C).
- J. The leasing in 1961 by AC to Standard Aero for a term expiring December 31, 1970, of one of the two test cells in AC's Winnipeg engine test house (leaving the other test cell available pro tem for AC's Dart engine tests), and the granting by AC to Standard Aero of an option to purchase the entire test house at the termination of the lease at a purchase price of \$80,000. (Note If the option is exercised the AC Winnipeg o/h base would be without Dart engine testing facilities unless these are negotiated for with Standard Aero. New facilities for that purpose are estimated to cost approximately \$600,000, or possibly less).
- 4. The continuing annual cost of Viscount o/h in the Winnipeg base in excess of the cost of performing the same function at Dorval in consolidated facilities, estimated at \$1,070,000 by consultants for the Province of Manitoba, \$1,600,000 by the Commission and \$2,380,790 by consultants for AC.
- 5. The likelihood that on the basis of AC's most recent estimates the size of its Viscount fleet will diminish perhaps sharply after 1967 and that before 1973 there may be less than "a substantial number" (30) of Viscounts in operation, this to be accompanied by a corresponding yearly diminution in use of the Winnipeg base and in the number of AC's employees there, and, that unless there is some change of plans, there will be complete closing and abandonment, likely by or before 1973.

- 6. At the present time and in their present conditions the buildings, equipment and facilities of the Winnipeg base are only suitable for the o/h of Viscount airframes and Dart engines, or similar size and type of aircraft and engines; since receipt of the Wallace Clark report in 1957 only minor capital expenditures have been made by AC in respect of these buildings, equipment and facilities; and just prior to then the only significant expenditures were for the construction of a stores building and an engine test house in 1955.
- 7. The buildings related to the base are not situated on land owned by AC but on land leased from the government of Canada under leases with terms variously expiring in 1966, 1972 and 1978.
- 8. The current collective bargaining agreement between AC and the International Association of Machinists provides for wage rates and conditions of employment applicable to the AC o/h base employees that are in the main higher and more favourable to AC's employees than the wage rates and conditions of employment that generally apply to employees of other aircraft and engine o/h facilities in Manitoba.
- 9. Agreements exist between AC and the International Association of Machinists relative to the phasing out of Viscounts and the phasing in at Dorval of DC-9s and to the transfer of employees to Dorval, and these agreements require to be honoured.
- 10. Standard Aero, Bristol, Western Aero and other companies have extensive facilities in Winnipeg for the o/h of aircraft engines and frames respectively, and the withdrawal of o/h work from such facilities for the benefit of the AC base would simply amount to a transfer of work from one facility to another with no overall benefit to the community at large.
 - 11. The conclusion of the Commission that AC's plans for a single base should not be interfered with.

The Honourable Mr. Pickersgill expressed to the Commission (Transmittal letter - App. B) the desire of the government that everything should be done that can reasonably be done by the government to ensure that the eventual withdrawal of the Viscounts is balanced by new activities, and has requested the Commission to inquire into the possibility of maintaining and increasing employment of the Winnipeg base.

The Prime Minister has stated in the House of Commons (November 22, 1963):

"For at least as far ahead as planning now extends, that is at least ten years, the Winnipeg facilities will continue to be used.

This decision has considerable importance to the economy of greater Winnipeg. In the view of the government it is very much in the national interest that opportunities for skilled employment of the kind which the T.C.A. base provides should be diversified in different centres to as great an extent as is compatible with industrial efficiency. For this reason the continued operation of these maintenance and overhaul facilities in Winnipeg is to be warmly welcomed."

In a telegram to the Honourable Duff Roblin (March 19, 1964) filed with the Commission, the Prime Minister stated:

"It is the policy of the government to do everything possible to maintain employment at the T.C.A. base in Winnipeg and, if possible, to increase it.

So far as T.C.A. is concerned, this means that the base will continue to be used for the overhaul of Viscount aircraft as long as these aircraft are in service. As far as the government is concerned, it means further that we will do everything we can to ensure that other aircraft work is available in Winnipeg so that the eventual withdrawal of the Viscounts is at least balanced by new activities.

This policy should not be interpreted as a guaranty that each particular job now filled in Winnipeg will continue indefinitely. Normal changes in technology and work methods, and the provisions of seniority rules between employer and employee, may lead to the disappearance or transfer of particular jobs. A dynamic industry cannot be frozen into a particular employment pattern.

My undertakings mean that there will be no transfer of work from Winnipeg by deliberate policy. On the contrary, the policy is to do our utmost to secure enough aircraft work to maintain or improve the present employment level...

The part of that policy which concerns T.C.A. relates to the continued overhaul of Viscounts in Winnipeg. T.C.A. has confirmed that, as far as its planning now extends, most of its Viscount fleet will remain in service for at least ten years, and the commitment to keep this overhaul work at Winnipeg has been clearly re-stated."

The statement of governmental policy relating to regional carriers made by the Honourable Mr. Pickersgill June 1, 1965 (App.G) has been referred to. It will be recalled that the government expects AC and C.P.A. to assist it in working out a policy of assistance to regional carriers in various forms, including contractual relations and technical support.

The TransAir brief to the Commission, and its brief to the Minister of Transport of December, 1965, indicated its need of modern aircraft suited to its activities, and also its ability in certain circumstances to use a number of Viscount in its operations.

Other regional air carriers are understood by the Commission to have similar needs and abilities to use this type of aircraft. In the aggregate a significant number of these aircraft could be utilized in improving and extending regional air services throughout Canada.

At the same time the financial positions of the regional carriers are understood to be such that they could not finance the acquisition of this type of aircraft in the open market.

Since AC is committed by its own act to the continued operation of the Winnipeg base (it would appear until 1973 in any event) for the o/h of what will be for it a diminishing

Viscount fleet, it would seem appropriate that a plan should be devised that will retain for the benefit of Canada generally, and of its regional carriers, the use of the Viscounts as they are phased out by AC, and which will at the same time preserve for the Winnipeg base all o/h work related to the Viscount, thus maintaining to the utmost extent the level of employment there during the life of the Viscounts.

Such a plan would seem to be consistent with governmental statements of policy, the requirements of Canada for improved regional air transport, the needs of AC and of the regional carriers of Canada. At the same time it would assure to the continued operation of the Winnipeg base a maximum volume of Viscount work.

In very general terms the recommended plan would involve the following:

- 1. In fulfilment of its commitment to its employees and the public AC would continue to operate the Winnipeg base for the o/h of its Viscount aircraft and their Dart engines as at present until 1973 or until such earlier time as AC and its employees might agree upon.
- 2. The o/h activities referred to in paragraph 1 would be conducted through a subsidiary company to be incorporated now by AC for such purpose. The existing o/h buildings, equipment, facilities and leases of the Winnipeg base would be transferred to such company at a price not in excess of their present depreciated book values. A low property book value is necessary to assist the o/h company in keeping its overhead costs to a minimum. The government would grant adequate renewals of existing land leases.
- 3. During the period referred to in paragraph 1 AC would control the o/h company through stock ownership and its board of directors and would o/h at said base, through such company, not only its own Viscount fleet but also, on a contract basis, such other Viscounts and their Dart engines as may be made available for such purpose, this to include Viscount aircraft and engines owned by the Department of Transport, TransAir, and any other available Viscount aircraft and engines, such as those offered for o/h in 1964 by Air France and Icelandair and refused by AC.

- 4. Any Viscounts now or hereafter becoming surplus to the requirements of AC would be offered for sale or lease to Canadian regional air carriers at purchase prices or on lease terms not involving a profit to AC; this in recognition of the financial inability of regional carriers to incur large capital or operating expenditures and in part implementation of the responsibility of AC to regional carriers as outlined in the June 1, 1965 governmental policy statement (App. G).
- 5. Surplus Viscounts would not be sold or leased by AC outside of Canada unless first offered to Canadian regional air carriers or other potential Canadian users on appropriate terms, nor unless and until it became clear that no Canadian buyers or lessees were forthcoming or likely. C.P.A. should be considered a potential purchaser or lessee because of its significant regional operations.
- 6. The terms of any sale or leasing of Viscounts would require the purchaser or lessee to have all o/h and maintenance work (other than normal line maintenance) on such Viscounts performed on a contract and cost basis by the o/h company at the Winnipeg base and to acquire a share interest in the o/h company on a basis related to its participation in o/h work. It might be feasible and desirable to provide for pooling and interchangeability of aircraft and engines to eliminate the need for unnecessary investment in spares.
- 7. In view of the lease and option to sell granted by AC to Standard Aero of the engine test house, appropriate arrangements for use of the test cells would have to be made with Standard Aero or a new test house would require to be constructed by the o/h company.
- 8. The present agreement between AC and the International Association of Machinists for transfer to Dorval of AC Winnipeg base employees would continue to apply to all permanent contract employees of AC desiring to fill vacancies as they occur at Dorval. Also present arrangements for non-contract employees desiring transfer would be continued. Staffs at the Winnipeg o/h base would be augmented to the extent necessary but without transfer privileges.
- 9. As soon as AC has fulfilled its commitment to its employees relative to the continued operation of the Winnipeg base, and sooner if the employees deem it in their interest and that of the base to relieve AC of that commitment prior to 1973, AC would sell its shares in the o/h company at a price not in excess of their then net book value and on appropriate terms of payment.

- 10. It would be hoped that the purchasers of shares of the o/h company would comprise C.P.A., if it acquired Viscount aircraft, and such of the regional air carriers as were using or likely to use Viscount aircraft.
- ll. Upon the sale by AC of its shares the o/h company would continue the servicing on a contract basis of all Viscount aircraft and Dart engines and other aircraft theretofor serviced at the base, including any Viscounts of AC still in service, until their ultimate phasing out.
- 12. A significant requirement of the success of the o/h company would be that the capital value of the acquired buildings, equipment and facilities and also the wages and working conditions of its employees would be such as to enable its o/h base to be competitive with like bases capable of doing Viscount and other o/h work.
- 13. If tax concessions are needed to make the project economically viable the City of St. James and the Metropolitan Corporation of Greater Winnipeg (both of which submitted briefs in favour of the retention of the base) could be invited to assist in this regard.

The foregoing general plan would doubtless require modification and change in many respects to accommodate all the various situations and requirements. It also would require for its success the goodwill of all concerned and more especially that of AC and its employees. In this connection, if found desirable, the employees of AC who chose to remain with the base at Winnipeg could accelerate the commencement of the co-operative management of the base by relieving AC prior to 1973 of its continuation commitment.

The alternative to some such plan would seem to be continued operation by AC of the Winnipeg base for the o/h of its dwindling fleet of Viscounts until its commitment runs out (1973 or so), with annual shrinkage in the work and in number of employees (a withering on the vine) followed by inevitable closing with consequent demoralizing effects on staff. Only at that time could alternative uses for the base be sought.

The desirability of providing work at the Winnipeg base additional to that on Viscounts has been given a great deal of consideration by the Commission.

The Vanguard immediately comes to mind. specifications see App.H). The size, complexity and power of the Vanguard compared to the Viscount, and its height (36' 1.41"), would require a new large hangar and much expensive fixed equipment, test capacity and instrumentation, most of which would involve duplication of similar facilities at Dorval now used in common with the DC-8. The expectation that the Vanguards will remain in the AC fleet only a relatively short time after the enlarged fleet of DC-8s and DC-9s is in operation, would make its transfer to Winnipeg short lived, and in any event such transfer would be most uneconomical because of the additional capital costs involved and requirements for specialized staff. The concensus is that regional carriers would have a very limited requirement for aircraft of the type and size of a Vanguard.

One also thinks of military aircraft and engine o/h as a means of supplementing work on the Viscount. This avenue has been carefully explored.

Most military aircraft o/h work is performed on contract by private concerns throughout Canada, that rely in great measure on such work for their continued existence. At Winnipeg, for example, work on military aircraft accounts for a great proportion of the work of Standard Aero and Bristol. The same situation exists in other private o/h bases in Canada.

The total volume of all military aircraft work (including helicopter work) available in Canada was estimated by Mr. Elbert Cheyno of Los Angeles, appearing on behalf of the Province of Manitoba, as involving some four million hours of work per year. Enquiries made by the Commission indicate that there is likely a somewhat lesser number of work hours than estimated by Mr. Cheyno.

Also the Commission is informed that the volume of military o/h work is likely to decrease sharply by a third to a half, by reason not only that the more expensive aircraft now in use are more reliable and call for less servicing, but also due to the inauguration by the armed services of what are known as "Depot Level Inspection and Repair" procedures (D.L.I.R.) whereby o/h is performed, not as was formerly done in conformity with prescribed time limits but following actual inspection of the aircraft at the related depot, and then only to the extent found necessary by such inspection.

An annual workload of some 800,000 hours would be required to maintain a staff of approximately one thousand men at the AC Winnipeg o/h base. To match diminishing Viscount workloads would require annual increments of military work, reaching to a peak of 800,000 hours on full retirement of the Viscounts. Much of the military work is highly specialized, involving equipment, tools and skills already available in existing o/h facilities and not available at the AC Winnipeg base. Some military aircraft could not be accommodated at Winnipeg because of their size. The existing work is now done at facilities already under-utilized and crying for more work. Transfer of existing work to Winnipeg would be unfair to the companies and regions where the work is now being done. Transfer of work from Standard Aero and Bristol would not improve the overall position of the Winnipeg community and would likewise be unfair to those firms. To maintain existing workloads at Standard Aero and Bristol and the AC base would mean that approximately one-third of all military aircraft work available in Canada would be done in Winnipeg. Such a transfer of work would require disregard for the operating areas of the aircraft, and their cruising ranges, the proximity of established bases in such areas, and the cost of duplication of specialized skills and equipment.

The fact that generally wage rates at the AC base are in excess of those in at least many privately operated o/h facilities in itself would make competitive tendering by the Winnipeg base difficult if not impossible.

Helicopter work is a possibility but the limited volume available and the existence of established o/h facilities at Winnipeg and elsewhere do not make this avenue very promising.

Mr. Cheyno came to the conclusion that "This (military maintenance work) could be effective but the inherent problems are manifold."

The Commission has come to the same conclusion, applied however only to the present time. The aircraft industry with its related activities is dynamic and rapidly changing. Openings not yet seen could appear and assist in filling the void which the ultimate retirement of Viscounts will create.

The possibility of military maintenance work, particularly of new work which may emerge, should be carefully reviewed from time to time.

The Commission does not regard the recommended plan with respect to Viscounts as a complete and satisfactory solution of the AC Winnipeg base problem but it would be an improvement over the situation created by a combination of shrinking use by AC of Viscounts and AC's commitment to keep the base open pro tem. That commitment makes it impossible for the base in the meantime to be turned over for other uses. Implementation of the plan would be of assistance to regional carriers, extend the life of the base, retard the decrease of employment and secure the interest of regional carriers in what might ultimately become a co-operative base for them.

Because modern jet aircraft require a consolidated base, and because that base has been placed at Dorval, Winnipeg and Manitoba have become casualties of technology and events. The fact is that the Winnipeg area will be losing an industry established in 1937 at the commencement of AC's operations which by reason of the accelerated growth of the aviation industry in the jet age would have played an increasingly larger part in the development of Winnipeg. This comes at a time when there is great concern that Winnipeg's rate of growth may be much less than that of other cities. Recent Dominion Bureau of Statistics figures show growth rates for the three years ending June 1, 1964 as 2.3% for Winnipeg as compared to 9% for Toronto and 7.1% for Montreal. Whether these statistics are really indicative of Winnipeg's actual growth, or lack of it, may be questioned by some.

That the loss of the Winnipeg base will not be immediate does not alter the fact that the potentials of a large modern jet base at Winnipeg will not now be realized.

It will be recognized that an industry of the size and with the ramifications of the existing Winnipeg base, with its direct payroll of 1,000 or so people, and with its various indirect effects, plays a more important part in the economy of Winnipeg than such an industry would play in one of the larger communities in Canada.

AC has maintained in Winnipeg since its inception, and has stated (regardless of whether the Winnipeg base closes or not) its intention to continue to maintain in Winnipeg, its central accounting office in addition, of course, to its administrative and other offices and facilities related to operations in the Winnipeg area. This provides a substantial payroll and AC has indicated that it is a practical and economical course for it to follow, notwithstanding that its operational headquarters are in Montreal.

There have been several governmental pronouncements on the subject of regional development. The most recent that has come to the attention of the Commission is that of the Prime Minister of Canada speaking at the Dominion Provincial Conference held in 1965, who is quoted as saying:

"I would like first to refer to the economic items on the agenda. The first of these is concerned with regional problems. The federal government is well aware that the course of economic development in the various regions of Canada has been uneven. This has resulted in unequal opportunities for people in different parts of the country ... Regional inequalities clearly mean that it is not enough to have policies designed to maintain a high rate of growth for Canada taken as a whole. We must also have policies to develop the full potential of all parts of Canada. Historically, regional inequalities have been the main divisive forces in our country and many national policies have therefore been directed towards overcoming such inequality.

Changing circumstances require adaptations in the form of such policies but in no way lessen the importance of the objective ... They must take into account the special needs of the individual regions. If all Canadians are to benefit as they should from economic growth we cannot rely entirely upon such general instruments as fiscal policy, monetary policy, and commercial policy. They have to be supplemented by more selective measures to achieve particular goals."

It would seem to the Commission that the loss to Manitoba of a present opportunity to share in the jet aspects of AC's o/h activities merits special attention of the government of Canada.

A policy of decentralization of some Canadian government administrative or operational activities might enable the transfer to Winnipeg of a number of operations and activities which would have a significant beneficial effect on the Winnipeg economy and help fill the void without at the same time placing any economic burden on Canada at large. Some such action would seem desirable and consistent with the quoted statement of the Prime Minister.

F. Future of Winnipeg as an aviation centre and other relevant matters.

1. Preface

The order (App.A) requires the Commission to inquire into and report upon, inter alia,

- "(e) The future of aircraft overhaul and maintenance facilities at Winnipeg and, in particular, of the facilities of Trans-Canada Air Lines at Winnipeg, in the light of the announced intention of the Government of Canada to encourage the development of regional air carriers and to seek increased Canadian participation in international air traffic.
 - (f) Relevant matters which may in the course of the inquiry arise or develop and which, in the opinion of the Commissioner, should be included within the scope of the inquiry and report."

The Honourable Mr. Pickersgill in his transmittal letter (App. B) adds to this by saying (the underlining is that of the Commission)

"It is the desire of the government of Canada that your review should seek to point to a constructive place for the existing facilities of the aviation industry in Winnipeg and, in particular, the overhaul and maintenance base of T.C.A. in Winnipeg in the framework of the regional, national and international future of Winnipeg as an air centre. We would welcome any other constructive comments or proposals relating to the government's role in the development of aviation in Winnipeg and Manitoba."

Counsel for AC stated its view (P.5 of AC's argument) that the Commission was established under Part 1 of the Inquiries Act, that under that part the only documents issuable having any legal effect are orders in council,

that the terms of the order as issued set out the complete terms of reference of the Commission, and that those terms cannot be changed or extended or curtailed by any letter or similar document.

If the Commission were to accept this view then logically the Commission should ignore not only the above quoted portions of the Honourable Mr. Pickersgill's letter but also the remaining portions of the letter, including those requesting the Commission in the interests of AC to maintain the confidential character of the proprietary material in the complete Dixon Speas report. This latter requirement was properly insisted upon by AC during the course of the inquiry and both Manitoba and the Commission concurred with AC's position in this regard.

The Commission is of the opinion that the terms of the transmittal letter should not be ignored, and that even if the letter has no legal effect as a legal requirement to the Commission it is certainly an expression of the Government's receptiveness to constructive recommendations along the lines of the letter.

In any event the Commission deems the subject matter of the letter to be relevant matters which under paragraph (f) of the order the Commission in its discretion may include within the scope of the inquiry.

Counsel for AC also submitted (T 1521 V 11 and P.5 of AC's argument) that a consideration of Canadian air policy (except as related to matters specifically referred to the Commission in the order) is beyond the scope of the inquiry. The Commission concurs that it is not the function of the Commission under the order, nor does the Commission deem itself qualified, to advise the Government of Canada as to what Canadian air policy should be. The Commission, however, is of the opinion that the Commission should attempt to ascertain what Canadian air policy in fact is, and then attempt to relate to that policy the future use of the AC o/h base at Winnipeg and also all other aviation facilities at Winnipeg.

In this connection the Commission considers "aviation facilities" to include not only the o/h facilities of Air Canada, and of the Bristol, Standard Aero and Midwest companies, but also the Winnipeg International Airport and its passenger, air cargo, and aircraft servicing facilities.

2. Canadian Air Policy

The most recent formal expressions of current Canadian air policy are to be found in two statements by the Honourable J.W. Pickersgill, Minister of Transport, made respectively April 24, 1964 and June 1, 1965 (Apps. F and G).

It is to be noted from these declarations of policy that

- (a) in the international field the government regards AC and Canadian Pacific Airlines as its chosen instruments in international operations; was hoping for early completion of negotiations with the U.S. for a new bilateral agreement; and expected the advice of AC and C.P.A. in its bilateral air negotiations; and
- (b) in domestic mainline services the field is not necessarily limited to AC and C.P.A. but competition by C.P.A. and others should not be such as to injure the essential framework of AC's network of domestic services; and
- the government deems it necessary that there be a relationship between regional carriers and the mainline carriers that would give the regional carriers a reasonable chance to operate without governmental subsidies; considers it necessary that the economic position of the principal regional air carriers be improved (with consequent improvement, presumably, in the services of such regional air carriers to the Canadian public); and expects AC and C.P.A. to take some responsibility to assist it in working out such a policy.

The report of Stephen F. Wheatcroft referred to in Part 2 A was made in 1958. The statement of policy made April 24, 1964 (App.F) generally followed the Wheatcroft recommendations, except with respect to Mr. Wheatcroft's recommendations for direct subsidies to regional air carriers.

The further statement of policy of June 1, 1965 (App. G) presumably followed discussions between Government, C.P.A. and AC, and the instructions to Mr. Wheatcroft for a further study on the matter of competition between mainline carriers suggest that following his report there will be a statement of government policy in this regard.

Perhaps Mr. Wheatcroft's report or some subsequent report will deal with the role of regional air carriers in the total field of air transport in Canada and the support to be afforded to such carriers in carrying out the role specifically assigned to them.

As of the moment the Commission finds no governmental definition or statement of the purpose and function of regional air carriers beyond those in the Honourable Mr. Pickersgill's statements which imply the necessity for financial assistance to regional carriers and that this is to be given in some fashion (other than by direct subsidy).

The governmental statement in this regard (App.G) is of such significance to the recommendations of the Commission that it is quoted in full.

"The third principle announced on April 24, 1964 stated that a definition of the role for regional air carriers providing scheduled service was necessary, including a relationship with the mainline carriers that would give the regional carriers a reasonable chance to operate without governmental subsidies.

In the discussions with the Presidents of the two major airlines, it has been made clear that the Government expects them to take some responsibility to assist in working out that policy. There are many forms which such assistance might take, ranging through route transfers and route operations, contractual relations and various forms of technical and administrative support. Implementation of this co-operation is not something that will produce major results overnight, but it should have important results over a longer period.

The Presidents of the two major airlines as well as each of the major regional carriers are being requested to prepare special recommendations on measures by which they consider this third principle could be implemented, and on what specific steps could be taken by the major carriers, or by the Government, to improve the position of the principal regional air carriers. It is planned, in this connection, to arrange for continuing machinery of consultation and liaison between Air Canada, Canadian Pacific Airlines, the major regional carriers and the Government to ensure the development of adequate regional air carriers.

The development of Canadian civil aviation in accordance with these policies will provide for improved and more stable service for the Canadian public as well as a better economic framework for the carriers themselves. In the domestic field a degree of competition will remain to provide the public with the advantages that can result from a competitive atmosphere; while at the same time this policy will avoid the excesses of competition which were ruinous to all but one of the main railways of Canada in the past and which can result only in major added burdens for the taxpayer and, because of the inability of carriers to maintain heavy deficit positions, less satisfactory service to the public."

Apart from formal governmental statements of policy, it should be recognized that the Air Canada Act, the Aeronautics Act and The Carriage by Air Act in themselves reflect basic air policies.

However, at the moment it seems that the announced air transport policies of the government are more related to the relative positions of air carriers amongst themselves than to the definition of the broad goals of air transportation in relation to the growth, economy, unity and well-being of the nation. In these matters it appears that governmental policy is still in the process of evolution.

Several carefully prepared submissions were made to the Commission stressing the desirability of and need for a comprehensive declaration by the government of its air transportation policy to supplement the statements of policy previously referred to: It was claimed that these statements were of limited scope and really went little beyond establishing the relationship between the government on the one hand and AC and C.P.A. on the other, and, to a limited extent, of those carriers with each other, and with the regional carriers, without defining the objectives of the government in the broad field of air transport. Some submissions went further and indicated what, in the witnesses' views, the policy of the government should be in relation to the international, national and regional aspects of air transportation.

While, as indicated, some of the material in these submissions was beyond the terms of reference of the Commission and the Commission could not give full consideration to them, they were of such an order and nature as to be of interest and assistance to policy advisors and makers. The Commission accordingly has submitted them to the Department of Transport for this purpose.

The titles, authors and general nature of these submissions are set out in App.S.

To the extent that the content of these submissions is deemed within the general scope of the Commission's terms of reference, the Commission has taken them into consideration and used them in the preparation of this report.

3. Winnipeg as an Aviation Centre

A number of submissions were made, and a great deal of interest was shown, in respect of the future of Winnipeg and Manitoba as an international, national and regional air centre.

Obviously Winnipeg's growth as an aviation centre, apart from aircraft and aircraft component and accessory manufacturing and from aircraft repair o/h and servicing, depends on increases in air traffic, both passenger and freight. These matters are now commented upon.

(a) Winnipeg as an international air centre

While the content of some of these submissions was in the outer periphery of the terms of reference of the Commission, they were heard, and are commented on, in light of the indication in the Honourable Mr. Pickersgill's transmittal letter (App.B) that constructive comments or proposals relating to the government's role in these areas would be welcomed.

The geographical position of Winnipeg in relation to the airways of the northern world was stressed by many witnesses, who noted that the distance between Winnipeg and London via the Polar Route is approximately 580 miles shorter than the traditional route via Toronto and/or that other points in Europe are correspondingly closer via the Polar Route; that this geographical advantage was of assistance to Winnipeg only in that in the summer a thrice weekly direct service by AC between Winnipeg/Prestwick/ London was available, with one weekly flight only during the winter months; that this service, when available, resulted in Winnipeg traffic saving from two to two and onehalf hours compared to travelling eastwards across Canada and stopping at either Toronto or Montreal, but that the saving of 580 miles in flying distance was not compensated for by any reduction in rates, the rate via the Polar Route being arrived at basically by application of the normal fare from Winnipeg to Montreal plus the normal fare, Montreal to London.

It was also pointed out that SAS overflies Winnipeg en route from the Scandinavian countries to the U.S. Pacific Northwest; that Pan American Airways uses Winnipeg as a fuel stop in its Los Angeles-Europe route; that Northwest Orient Airlines on its Chicago-Anchorage-Tokyo route overflies Winnipeg, and that other foreign airlines have the right to fly over or make technical stops at Winnipeg but none of them have the right to put down and take on passengers there.

Winnipeg's designation as an international airport appears to be based on the availability of immigration and customs officials (U.S. and Canadian) there, and on Winnipeg's access to countries in the Pacific via C.P.A.'s single daily flight westward across Canada; to Europe via C.P.A.'s single daily flight eastward, AC's Polar Route service and AC's several flights to Eastern Canada; to the U.S.A. and the Caribbean by connections in Eastern Canada from these latter flights; and to Minneapolis by a thrice daily but "milk run" type of service by Northwest Airlines from Winnipeg, stopping en route in two flights at Grand Forks and Fargo and in one flight at Fargo only.

Strong submissions were made concerning the necessity for better and more frequent service from Winnipeg to Europe (with lower fares to be related to the shorter travel distance) and for direct flights from Winnipeg to Minneapolis, and to Chicago and Los Angeles, and for changes in the various bilateral air transit agreements to enable airlines now overflying Winnipeg to put down and take on passengers, thus facilitating the travelling public in Winnipeg and the prairie provinces and drawing from mid-continental North America a great deal of traffic destined to Europe, with corresponding reverse traffic, all to the benefit of Winnipeg and to the improvement of its position as an aviation centre.

It would appear from submissions that many people living in Winnipeg have the vague impression (ill-defined but strongly held) that their Winnipeg heritage includes, as well as sub-zero weather, some natural advantages in air travel. Winnipeg is in the centre of the continent, and no matter in what direction aircraft may travel, surely in this air age a city so placed in the hub of North America Will be served better than any other. Such is the impression!

The future of Winnipeg as an aviation centre is, of course, related to its unique geographical position, referred to by so many during the hearings of the Commission, and because of that geographical position Winnipeg has been for long important to domestic and foreign air carriers for

operational landing purposes, regardless of extent of traffic. However, that importance largely disappeared with the DC-3s, the North Stars and Super Constellations. The almost universal use of large jet aircraft makes non-traffic stops en route almost unnecessary. Even worse for Winnipeg, the supersonic planes of the future will fly higher overhead than the jets of today and, like the jets, will only come down to discharge and pick up passengers in quantity. People in numbers, and only people in numbers, will make them want to come down.

The position of Winnipeg in relation to air services seems to be somewhat similar to that of the hometown of John Kenneth Galbraith, the author of the report to the President of the United States on Canadian-American Civil Air Relations referred to in Section A of Part 2. Mr. Galbraith in his book "The Scotch" referred to his birthplace in Ontario, Iona Station, in these terms:

"...potentially at least, the railroads provided as fine a system of communications as that of any community in the world. Were one to step on a train, one could proceed westward without changing cars to Windsor, Detroit and Chicago. A single change would bring him to San Francisco, and the gateway to the Orient. To the east, he could go with equal convenience to Niagara Falls, Buffalo, Syracuse, Albany and New York City. With a single change from train to ship, he could be on to Liverpool, Southampton or Glasgow.

Unfortunately, the trains did not stop."

Winnipeg has the same potential with respect to air communications as Iona Station, but, like the railroad at Iona Station, it is (in part) only a potential. The trains did not stop at Iona and the planes (many of them) do not stop at Winnipeg!

The main reason for planes to stop at Winnipeg, or at any city, will be people, and not merely geographical position.

People provide air traffic. If people in sufficient numbers lived in Manitoba, Saskatchewan and Alberta, air traffic at Winnipeg, and Winnipeg's future as an air centre,

would be assured with but little necessity for special planning and persuasion. Winnipeg would be a plum much sought after by air carriers, Canadian and foreign, just as Montreal and Toronto are understood to be considered plums by carriers fortunate enough to have secured traffic rights there.

Also Canadian air carriers would be competing with each other (to the limited extent competition is permitted) to provide at Winnipeg more and better services for both passengers and cargo. No longer would the airlines of the world fly over Winnipeg. Foreign countries on behalf of their national carriers would be vieing with each other at the bargaining tables for traffic rights at Winnipeg and be more than willing to pay the price of such rights by significant concessions to Canadian carriers in their own countries. Winnipeg International Airport would be an international airport in fact as well as in name.

These situations, pleasant for Winnipeggers to contemplate, do not exist at the present time. The cold fact, unpalatable to those who call Winnipeg their home, and hard for many (including the Commission) to accept, is that there are not, as yet, sufficient people in the Winnipeg area, or served by that area, either to warrant substantially increased air service by Canadian carriers or even to induce foreign carriers overflying Winnipeg to seek traffic rights here if the price required to be paid for such rights is significant in bilateral "quid pro quo"; in loss of attractiveness to passengers desiring a non-stop flight; in loss of seat sale revenues in cases where the passengers picked up do not equal those let off; and in lost operational time.

The Commission feels that basic to proper planning for the future of Winnipeg as an aviation centre is acceptance of the concept that flight services into and out of Winnipeg must necessarily be related to available traffic and that traffic is related to population.

The provision of an air service, whether by a regional carrier, a national carrier or a foreign carrier, is basically a matter to be determined by economics, except in those cases where the public interest is such as to override mere economics. Winnipeg cannot expect international or national air services not justified by available or potential

traffic, nor can it reasonably expect additional service from foreign carriers which, as a result of the "quid pro quo" bargaining principle currently practiced, would result in duplication of adequate services or the significant impairment of the revenue of Canada's national carriers. Winnipeg can, however, reasonably expect that bilateral agreements and scheduled services should be so negotiated and arranged that the convenience of the travelling public is factored as well as economics.

Apart from regional service, air traffic from Winnipeg and Western Canada is captive to AC, C.P.A. and Northwest Orient Airlines. The limited competition afforded by C.P.A.'s daily flight each way probably provides some stimulus to AC but the effect of this should not be overestimated. Mr. Stephen Wheatcroft's report on his current studies in this connection (Part 2 A) may or may not result in increased mainline competition with corresponding betterment in air service at Winnipeg.

(b) Winnipeg-U.S. air service

The Canada-U.S. bilateral agreement as it existed prior to the recently signed agreement was negotiated in the days of short flight aircraft and was designed merely to provide regional border crossing between Winnipeg and Fargo and not a direct service to and from Minneapolis. This agreement gave a monopoly to Northwest Airlines in transborder flights south from Winnipeg which provides the current thrice daily but "milk run" service from Winnipeg to Minneapolis less-than-enjoyed by Winnipeggers.

Fairness to Northwest Airlines requires it to be said that at least one stop between Winnipeg and Minneapolis was necessary by reason of the bilateral agreement and the other stop on two of the daily flights was necessary to provide sufficient traffic to warrant the flights. Whether or not Northwest Airlines in the past activated itself to have the bilateral agreement amended to enable a direct flight Winnipeg to Minneapolis will be a matter of record with the appropriate U.S. authorities, but the service provided has in fact exceeded the requirements of available traffic. The significant promotional program of Northwest Airlines advertising its service has been only partially successful in increasing the traffic.

The most recent records available indicate that in the year ended September 30, 1965 the traffic on the Winnipeg-Minneapolis run averaged approximately 81 passengers per day in each direction. The seating capacity of the three airplanes used (a full jet and two propellor aircraft) was 252, the load factor being approximately 31% - a very low usage.

The service was patronized where necessary as the only available air service south from Winnipeg, but, because of the stops and of the wait-overs at Minneapolis for connections, it was avoided by many destined for Chicago and Eastern U.S.A. who preferred the AC service to Toronto, even to the point of backhauling to Chicago.

These non-competitive situations could only benefit AC, and to a much lesser degree Northwest Airlines, but were most exasperating to the people of Winnipeg who for years have been clamouring for better service to Minneapolis and Chicago and who at the hearings of the Commission expressed their views in most emphatic terms.

The storm of angry comment in Winnipeg following the recent signing of the new Canada-U.S.A. bilateral reflected the disappointment of the people of Winnipeg and of the prairie provinces that the long-awaited direct air service to Chicago would not be available for some time to come. The responsibility for this result was variously attributed to the government, AC and Northwest Airlines; AC being suspected of having a natural desire to prevent traffic being diverted from its Toronto-Chicago line by means of Northwest Airlines Winnipeg-Minneapolis-Chicago run; and Northwest Airlines being suspected of efforts to prevent AC from achieving a direct Winnipeg-Chicago flight and thus to avoid interference with the already light traffic in its Winnipeg-Minneapolis line destined ultimately for Chicago.

Mr. McGregor stated at the hearings of the Commission that AC was interested in acquiring the right for a direct flight from Winnipeg to Chicago. Such a route combined with AC's existing Toronto-Chicago flight would appear to provide a very satisfactory triangular flight enabling effective use of equipment and a most satisfactory service from the point of view of the people of Western Canada.

It is not for this Commission to conjecture why the application of the Canadian Government for this route was rejected by the U.S. Government.

Studies presented to the Commission indicated that in 1962 about 94,000 Winnipeg and Prairie region passengers (including both ways) might reasonably have been expected to move over the Winnipeg-Minneapolis route had there been a non-stop flight between those points. Of these it is obvious that a significant number would have used a non-stop flight to Chicago if such had been available. In the year ended September 30, 1965, the actual transborder traffic between Winnipeg and Minneapolis was 60,000 passengers (both ways). Statistics will be available to determine which of these passengers were destined for Chicago. these statistics may not indicate sufficient traffic to Chicago for an economical operation, AC obviously has felt that traffic would build up. It will be realized that an AC route Winnipeg to Chicago would result in a diversion of considerable traffic from Northwest Airlines' route Winnipeg to Minneapolis.

By 1969 when re-negotiation of the new bilateral agreement comes up, there should be a much clearer picture of available traffic and the long-desired wish of Winnipeg and Western Canada for direct flights from Winnipeg both to Minneapolis and Chicago, one by a U.S. carrier and the other by a Canadian carrier, may then be economically and politically possible.

The fact that the new bilateral agreement now permits a direct flight between Winnipeg and Minneapolis (one of the services sought by Winnipeg) appears to have been almost unnoticed. Adequate service on this new route by Northwest Airlines, coupled with good connections at Minneapolis for Chicago and to the West, should provide a much better service then heretofore and, besides being a convenience to the travelling public, should demonstrate the traffic potential much better than the "milk run" service now offered. The economic viability of a direct Winnipeg-Chicago flight should be known prior to the bilateral agreement revision scheduled for 1969 and Winnipeg's voice will no doubt be heard before that time.

(c) Winnipeg-Europe air service

This service is provided by AC and C.P.A. via
Toronto or Montreal and, in a limited way, by AC's limited
Polar flights established in 1958. The Polar flight is a
convenience to the people of Western Canada from a traveltime standpoint and has an economic value to Winnipeg. The
route is well justified from an economic standpoint.
Statistics presented to the Commission indicate that in 1962
the load factors on the Polar flights from and to Winnipeg
compared favourably with the flights to London out of Toronto
and Montreal. The limited flights available, however, require
many people to use the longer but traditional route via
Toronto or Montreal.

It would appear that if the Toronto or Montreal flights to Europe are underloaded there is little or no incentive for AC to improve its Polar service from Winnipeg beyond the present weekly service in winter each way and the thrice weekly service in summer. If the Polar route had not been established most traffic originating at Winnipeg and points west would necessarily travel to Europe via the latter flights and the Polar service is in a sense a duplication, justified, however, by traffic and convenience.

Whether the Polar flight was initiated by AC of its own volition or as a result of continuous agitation from Winnipeg and Western Canada is a matter of conjecture but the fact is that it was commenced and that it is a convenience to the people of Western Canada and its use should be encouraged and extended by adequate flight schedules and appropriate passenger and air cargo rates.

There appears to be no real incentive for AC to concern itself unduly in negotiating with the appropriate body for a reduced rate Winnipeg to, say, London, which takes into consideration the fact that Winnipeg to London via the Polar route is 580 miles shorter than via Toronto or Montreal. At the present time the economies resulting from the shorter haul at the longer haul rates go to AC alone.

Existing traffic necessarily pays the regular domestic fare plus the fare set by international agreement whether travelling the Polar route or otherwise. Most of

this would go to AC as a major transcontinental carrier. While a fare reduction would be dollars out of AC's pocket, it is difficult to explain to people in Western Canada why the advantage of shorter mileage should not result in an advantage to those entitled by their geographical position.

From AC's point of view traffic to and from Winnipeg would undoubtedly be increased as a result of fare reductions and this, of course, applies to freight as well as passenger traffic.

It seems to be taken for granted in Winnipeg that the airlines overflying Winnipeg, and particularly Pan American, which makes technical stops at Winnipeg, would be eager to acquire traffic rights at Winnipeg. This may not be so, particularly having in mind the current use of longer range aircraft and that the foreign airline making landings here (which in most cases would be non-essential for operational purposes) would be required to grant to Canada equally remunerative privileges elsewhere. granting of privileges to foreign carriers which would injure the revenue of Canada's national airlines without extraction of benefits to those airlines elsewhere would perhaps be a convenience to the travelling public but must be considered in the light of the fact that at least in the case of AC the government would foot any resulting deficits. At the same time if AC and C.P.A. are not prepared or able to provide adequate services, Western Canada to Europe and to the Pacific, the interest of other foreign carriers in serving Winnipeg should be ascertained.

The interest of such foreign airlines largely remains to be seen. The Province of Manitoba in its submission to the Commission stated that B.O.A.C. had indicated such an interest and furnished to the Commission a copy of a letter to that effect written in 1963 by the then Agent General of the Province in London, England, to the Department of Industry and Commerce of Manitoba. However, the situation has now apparently changed since the Deputy Chairman of B.O.A.C. has informed the Commission by recent letter (February 10, 1966) that there has been no planning by B.O.A.C. for the introduction of its services to or through Winnipeg, nor is it contemplating any routes for Winnipeg in the forseeable future.

The Commission has caused further enquiries to be made.

The records of the Air Transport Board indicate that in 1954 SAS was interested in acquiring the right to make technical stops at Winnipeg but did not ask for traffic rights.

These records also indicate that in 1958 Germany on behalf of Lufthansa was interested in traffic rights at Winnipeg en route to the U.S. Pacific North-West but eventually received traffic rights Montreal en route to San Francisco.

Similarly Swissair indicated in 1958 a desire to inaugurate an air service to Canada en route to points in the U.S., but Winnipeg was not specified as a traffic point.

It is a matter of conjecture as to whether the technical stops made at Winnipeg by SAS sparked the flurry that brought about the inauguration of AC's Polar flight and as to whether the Lufthansa application was another spur-

AC has been suspected of endeavouring to protect its Polar route traffic to and from Western Canada and Europe against the foreign airlines overflying Winnipeg. However, it seems to the Commission that this would be a proper attitude for AC to take provided the services furnished by AC and C.P.A. to Europe by Polar flights and by the traditional routes are adequate for the needs of Western Canada and provided the combination of AC, C.P.A. and U.S. carriers give to Western Canadians appropriate access to the Pacific and to the U.S. Pacific North-West.

Evidence given at the hearings of the Commission indicates that the direct dollar result to Winnipeg from a carrier stopping at Winnipeg en route and being fuelled there would not be significant and apart from some ramp service would not add to the maintenance or o/h activity there.

The convenience of the travelling public is the major consideration, but at the same time the adverse impact of foreign carrier traffic on Canadian airlines should not be disregarded. The "quid pro quo" principle of route allocations which is in vogue cannot be ignored if our Canadian airlines are to remain solvent.

(d) Domestic air services at Winnipeg

Domestic air services at Winnipeg are furnished by Canada's "chosen instruments", AC and C.P.A., and by TransAir Limited, a large regional carrier based at Winnipeg. There are a number of smaller aviation companies providing nonscheduled air services for profit and a significant number of privately-owned aircraft used for business or pleasure, or both.

For TransAir Limited, and the smaller aviation companies and the privately owned aircraft based at Winnipeg, that city is a terminal centre. The terminals of AC and C.P.A., however, are now Vancouver, Toronto and Montreal. Winnipeg has become a line station on their main lines, which are also gathering services for overseas flights. While this is a "come-down" from Winnipeg's initial position as the centre of AC's air activity, it is a logical result of the geographical position of Winnipeg (in this respect a detriment) and of the use of modern long range aircraft and their scheduling related to traffic.

Complaints relating to available domestic services seem largely related to plane schedules (a complaint of travellers the world over) arising out of Winnipeg's line station position where flights in the main originate elsewhere, and to lack of availability of seats at busy periods.

It would appear that in its forecasts AC (probably in common with other world airlines) has underestimated the upsurge of air traffic that has taken place recently and that its present fleet is inadequate to the demands made upon it. The changes in AC fleet forecast made between May, 1965 and October, 1965, referred to in Appendix D, involving very substantial increases in numbers of the previously forecasted DC-8s and DC-9s are a reflection of the increased traffic. So also is the very substantial increase referred to in Part 2 A in 1965 over 1964 of net revenue (17%) and of passenger traffic (14%) and air freight traffic (37%), indicating significantly increased usage of existing equipment. The load factor achieved by AC in 1965 must have risen to a new high, (passenger load factor up 2% to 65%).

In the light of this Mr. McGregor's statement in the annual report of AC for 1964 is of interest.

"North American passenger traffic rose 6% as compared to 2% in 1963. This healthy growth compares favourably with the estimated rise in gross national product and substantiates the airline's previously expressed conviction that the days of dramatic annual passenger growth are history and that future increases in domestic air travel will be closely linked to the general state of the nation's economy."

The successful operation of a large airline in this rapidly changing world and expanding economy is a very difficult matter and AC has a record that is the envy of many other airlines. However, it is of utmost importance that in the operation of AC the interests of the travelling public be placed ahead of the making of significant airline profits. While deficits should not be a rule, one wonders whether AC is inclined to place too much emphasis on the making of a profit. The airline is a Crown Corporation providing a public transportation service and the making of profits should not be its primary motive any more than should perennial deficits be tolerated.

Provision of more adequate seats and scheduling would cut AC's profits but would be consistent with AC's purpose.

In the matter of scheduling, the Commission counsel, Mr. Sweatman, (who, like the Commission, in the practice of his profession has the necessity of travelling on many occasions to Eastern Canada and the U.S.A.) expressed his point of view, and that of many others, on the matter of flight schedules, as follows:

"Aircraft, understandably, do not all stop at Winnipeg, but with those that do, how conveniently are Winnipeggers served?

A Winnipeg business man wants to see a government official in Ottawa. The official is accommodating and will see the Winnipegger almost any time during business hours on any weekday. How is the Air Canada timetable?

There is a direct non-stop connection from Winnipeg to Ottawa (Flight 508), but although this flight originates in Winnipeg, it leaves

at 11:30 a.m. and gets to Ottawa at 3:35 in the afternoon. An awkward time to leave and an awkward time to arrive, as the Winnipeg businessman can get very little done at his office before departure and cannot reach downtown Ottawa before 4:30 in the afternoon. Not the sort of hour one suggests to begin a business discussion.

The direct flight is clearly unattractive and almost useless.

What flights are available through Toronto? If he is willing to get up at 3:30 in the morning, there is a jet at 4:35 (Flight 804) which connects with a Vanguard (Flight 652) that will put the Winnipegger in Ottawa at 10:20 a.m. This is five hours travelling and a very early start, but with sufficient stamina, the Winnipeg businessman could ask the government official for lunch in Ottawa.

A night flight the evening before?

Flight 812 leaves Winnipeg at 6 in the evening, reaches Toronto at 9 (Toronto time) and an hour and fifty-five minutes later, Flight 606 leaves for Ottawa arriving fifteen minutes before midnight. About 1 a.m. will see the businessman in his room at an hotel, having left Winnipeg six hours earlier.

Returning to Winnipeg doesn't take as long, and the schedules are not as inconvenient, although one wonders why the direct flight (Flight 509) leaves Ottawa at 3:20 in the afternoon (making after-lunch appointments impossible), to be followed less than two hours later (Flight 505 at 5:10 p.m.) by another flight which goes through Toronto and terminates in Winnipeg at 8:35 (the earlier Flight 509 goes on to Vancouver via Regina, arriving at the west coast at 9:30 p.m.).

Supposing our Winnipeg businessman wants to get to Chicago? (One hesitates to even explore this delicate subject following the Winnipeg reaction to the new arrangements between Canada and the United States which were recently announced).

On the present schedule of Northwest Orient Airlines, a Winnipegger can fly to Minneapolis at 6:45 in the morning (although it takes but five minutes to clear U.S. customs and immigration, he is asked to be at the Winnipeg Airport one hour earlier than flight time). This flight reaches Minneapolis at 9:45, after stopping at Grand Forks and Fargo en route, and there is a connecting flight to Chicago which arrives there at noon. Five hours, plus, from Winnipeg.

If getting up at 4:30 in the morning is too Spartan, another Northwest flight leaves Winnipeg at 12:40 p.m. and reaches Chicago at four o'clock in the afternoon. This is more convenient from the points of physical comfort and travelling time (four hours, plus), but is open to the same objections as the Winnipeg-Ottawa direct flight in that virtually a whole business day is lost in travelling.

The new bilateral agreement between Canada and the United States will give Winnipeg a direct non-stop flight to Minneapolis. Perhaps Northwest will schedule this flight to provide more humane connections to Chicago and other U.S. points.

It is probably only a plain, if painful truth (which Winnipeggers have not been told or have not wanted to admit) that it is the number of people who wish to go to or from Winnipeg (or any other city) which determines the frequency of flights to and fro, and not the geographic location. 'Not enough traffic' was the reason the trains did not stop for Galbraith at Iona Station, and 'not enough traffic' is the reason many planes do not stop at Winnipeg.

But, oh 'Air Canada' in the matter of schedules, can you not make it a little easier for us to stand on guard for thee?"

This plaintive cry will be shared by many Western Canadians and applied not only to the two routes mentioned by Mr. Sweatman but also to several other current AC schedules, including its Winnipeg-Montreal flights.

It can reasonably be expected that the use, starting in April, 1966, of the DC-9s and the delivery of DC-8s on order should bring about an improvement, both in seat availability and scheduling.

Not only is scheduling by AC and C.P.A. important in domestic travel but also to ensure that to the extent possible suitable connections of Canadian flights are made with U.S. carriers serving Winnipeg and Vancouver so that the necessary change of planes is not accompanied by undue delays. AC's domestic scheduling at Winnipeg from and to Western Canada should bear reasonable relation to the Northwest flights to Minneapolis and its connections to Chicago thus giving some of the advantages to the traveller that might have been achieved had the bilateral negotiations brought about a Canadian Winnipeg-Chicago route. Similarly schedules at Vancouver should be arranged so as to provide adequate connections between flights of C.P.A., AC and U.S. carriers, thus giving Western Canada reasonably convenient access to San Francisco and Los Angeles until such time as the economics of direct flights from Winnipeg to, say, Los Angeles, are established. This type of co-operation may overtax the competitive instincts of the airlines involved but the travelling public has a right to expect such consideration.

(e) Regional air services at Winnipeg

As they have grown into continental and intercontinental air carriers, both C.P.A. and AC have largely abdicated their earlier functions as regional carriers in Western Canada. TransAir became the successor to C.P.A.'s regional operations in the Northern portions of Manitoba, Saskatchewan and Ontario and in 1963 took over AC's Western Prairie Service providing local type services between Winnipeg and Calgary via the intermediate cities of Brandon, Dauphin, Yorkton, Regina, Saskatoon, Prince Albert, Swift Current and Medicine Hat. At the same time Pacific Western Airlines Limited took over from AC the balance of its unwanted foothills' regional routes.

C.P.A. has retained regional carrier functions in British Columbia and AC remains a significant regional airline operator, particularly in Eastern Canada. It is assumed that AC would have been extremely happy to shed its not-too-attractive (both operationally and economically) Western Prairie Service. By 1962 the Viscount had become the smallest

aircraft in the AC fleet and AC was moving to larger aircraft which could not economically serve these points, nor for that matter would the landing fields be adequate at all these points for Viscount operation.

AC had become a large continental and intercontinental carrier with aircraft suited to those operations and to its domestic mainline operations. Its corganization and size had become too great for the minor regional operations it had commenced and it wanted to give them up. Evidence before the Commission indicated that a carrier such as TransAir is better suited to such an operation and could perform the functions more efficiently and economically than could the large and highly organized AC.

Without questioning the logic, from AC's point of view, of the shedding of these services, it can be argued that AC's function to provide national air transport still remains and that, directly or indirectly, the services which it inaugurated should be continued to the extent that they are justified either by economics, social obligations, or the necessity or desirability of regional or resources development.

TransAir discontinued the route serving Regina, Swift Current, Medicine Hat and Calgary in 1964 after a claimed operational loss of \$114,000. Mr. R.D. Turner, now deceased, President of TransAir, stated at the hearings of the Commission, that failing assistance TransAir would likely be forced to discontinue the balance of the Western Prairie Service (Winnipeg, Brandon, Yorkton, Regina, Saskatoon and Prince Albert) in April, 1966.

Several submissions made to the Commission, including a strong submission from the City of Brandon, stressed the necessity, not for discontinuance, but for improvement of these services, originated by AC in the earlier days of its development.

TransAir is a significant factor in the economy of Winnipeg and of Manitoba. In addition to the Western Prairie Service it provides extensive scheduled and non-scheduled service between Churchill on Hudson's Bay and

Montreal via Ottawa, and the only scheduled air services to such significant points in Northern Manitoba as Dauphin, Thompson, The Pas, Flin Flon, Lynn Lake, Churchill. In addition TransAir serves many other isolated points. Discontinuance of the Western Prairie Service would substantially affect the cities served and, of course, would affect the extent of the operations of TransAir.

The Commission notes from the Honourable Mr. Pickersgill's policy statement of June 1, 1965 (App.G) that the government has employed a special aviation consultant (Mr. Stephen Wheatcroft) to advise whether there should be further competition on domestic mainline services. His report could conceivably find some areas where TransAir might find sufficient traffic or assistance to enable it to maintain the Western Prairie Service.

In any event the policy statement indicates the awareness of the government of the financial plight of regional air carriers such as TransAir and the need of a relationship between them and the mainline carriers that would give the regional carriers a reasonable chance to operate without governmental subsidies. The Commission notes that the Presidents of the mainline and regional carriers of Canada have been requested to provide the government with recommendations as to how this result can be achieved and understands this is being done.

In view of this statement of government policy and of the action being taken thereunder it would be a duplication of function for the Commission to comment in great detail on the various submissions made on behalf of TransAir and the points served by it. The Commission stresses the importance to Winnipeg and to those points that the Western Prairie Services should be continued and that TransAir should be able to continue and expand the valuable services now provided by it.

Since making its formal submissions to the Commission TransAir has made available to the Commission a copy of its recent brief to the Honourable Mr. Pickersgill made pursuant to his request. In this brief TransAir describes its present operations and the financial results thereof, outlines

its aspirations for its future role as a regional carrier, and indicates the assistance it might require to enable it to continue and expand its operations. No mention is made in this brief of the intimation made by the late Mr. R.D. Turner, in his submission to the Commission on behalf of TransAir, that the remaining portion of the Western Prairie Service might have to be abandoned. Instead the brief is a forward looking document whereby TransAir seeks the means of extending rather than discontinuing services.

This fifty-five page fully documented brief looks to the extension of TransAir's prairie services from Regina to Calgary via Swift Current and Medicine Hat; from Regina direct to Edmonton; from Saskatoon direct to Calgary; from Saskatoon to Edmonton via North Battleford and Lloydminster; from Winnipeg direct to Regina to supplement its present Winnipeg-Brandon-Regina service. It also envisages the development of new routes eastward; from Winnipeg to Toronto via the Lakehead and Sault Ste. Marie, Sudbury and North Bay connecting with its present Churchill-Montreal flight at Ottawa. It also seeks transborder services from Regina to Minot, North Dakota, and from Winnipeg to Chicago via Minneapolis.

In the TransAir brief the Western Prairie and foothills services abdicated by AC would be resumed and extended and the operations of TransAir would be extended eastward and southward. TransAir would require not only permission to fly the new routes but would also require assistance, at least in the initial stages of the redevelopment of the Western Prairie Service, and TransAir suggests direct subsidy by the government (as is afforded to regional carriers in the U.S.A.); assistance to enable it to acquire by lease or purchase necessary additional air equipment; and the rental or acquisition on favourable terms of hangar and base facilities; or combinations of these.

A most significant prerequisite would be the sharing with AC of its mainline routes Winnipeg-Regina; Regina-Calgary; Regina-Edmonton; and Winnipeg-Lakehead-Toronto and Ottawa. While opposition from AC could be expected to this sharing it seems that the Western services at least would be in the public interest (bearing in mind discontinuance by Canadian Pacific Railways of certain rail services) and that

if AC will not provide the service it would be reasonable that a regional carrier such as TransAir be given the opportunity of doing so. It would also seem clear that some financially self-supporting direct services on mainline centres are needed to assist the regional carriers in providing the presently loss-generating feeder routes. In this connection, and as indicated by Professor Harris (T 1555 V 11), a governmental position would appear to be necessary if AC, the principal carrier to bear the burden of the loss of any profitable routes allocated to the regional carriers can be expected to give full support to such a policy.

The Commission has no information as to the need for, or feasibility of, the proposed Eastern services, but understands that this is under study.

The suggested Winnipeg-Minneapolis-Chicago route would in effect be a double-tracking of that route in conjunction with the services to be provided by Northwest Airlines under the new bilateral. It would require the sanction of bilateral agreement, amendments to which are scheduled for consideration in 1969. It would not provide the direct Winnipeg-Chicago route desired both by AC and many people from Winnipeg and other parts of Western Canada. What opposition Northwest Airlines and AC would provide to the bilateral amendment necessary for TransAir to acquire its desired transborder rights remains to be seen.

TransAir has indicated that to service the routes suggested by it would require the addition of at least three Viscounts, as well as six Electras and two DC-6s, and additional hangar and base facilities. In the light of AC's anticipated diminishing need for Viscounts, TransAir's need of them is of significance to the Winnipeg area from the standpoint of their maintenance and o/h there. This has been discussed in Section E of this part.

The Commission deems it most desirable that the position of TransAir as a regional carrier be clarified and enhanced and that it be given an opportunity to expand its operations at least by providing needed continuations and extensions of the prairie routes abandoned by AC. Careful and sympathetic study should be given to the eastward and southward services proposed by TransAir.

Needless to say, any improvement and extension in TransAir's services would in itself be some improvement in Winnipeg's position as an aviation centre.

On March 2, 1966, as this report was being finalized, a Winnipeg newspaper reported that the Department of Transport had announced that TransAir proposed to discontinue on April 16, 1966 all its prairie flights but that public hearings would take place prior to any discontinuance.

The discontinuance of these services would, of course, result in a loss to the communities served, to TransAir in its effectiveness as a regional carrier, and to Winnipeg as an aviation centre.

It is assumed that some means will be found to ensure that regional air services will be provided, adequate to the needs of the prairie regions.

Airline Lodge 714 International Association of Machinists, representing AC's Winnipeg base contract employees, cautioned against granting to regional carriers too readily rights which might adversely affect mainline carriers and suggested that for the meantime east-west major runs should be limited to one major carrier, presumably AC.

(f) Air cargo services and facilities at Winnipeg

The rapidly increasing importance of air freight traffic, the particular geographical position of Winnipeg as a "hub" in this respect, and the inadequacy of present air cargo facilities at Winnipeg, were discussed by a number of witnesses.

The Premier of Manitoba, the Honourable Duff Roblin, presented statistics which showed a dramatic growth of air freight carriage in Canada from 64 million pounds in 1958 to 99 million pounds in 1964.

Mr. Richard B. Blackwell, a transportation economist and analyst associated with R.L. Banks & Associates, estimated an increase in air freight volume in North America of 240% between 1965 and 1970, and a further 135% between 1970 and 1975. He also foresaw an increase from an estimate of just

under 5 million pounds of freight originating in Winnipeg in 1965 to 17 million pounds in 1970, with significant increases beyond that year.

He estimated that in 1963 TransAir carried approximately 225 tons of express and freight on its scheduled services north and west of Winnipeg (exclusive of its extensive charter freight carriage). At the time of his report he estimated TransAir's weekly freight carrying capacity departing Winnipeg at 27 tons; Northwest Airlines at 55.6 tons; and AC and C.P.A. at 647 tons between them. Of course not all this capacity would be available for traffic originating in Winnipeg since traffic originating elsewhere was being carried, but it appears from his evidence that the freight carrying capacity available at Winnipeg was ample for requirements for some time to come and, it seems obvious, it would be increased as required.

The hub character of Winnipeg was illustrated by chart relating Winnipeg to markets in Europe; in Eastern Canada; in the U.S.A. transborder; in Western Canada; in the far East via Western Canada; and in Northern Canada.

It is clear that AC has adopted an agressive role in the development of air freight carriage. In 1964 AC increased in air freight handling over 1963 by 26%.

It has removed one of its DC-8Fs from combined passenger and air cargo service to an "all cargo" configuration, giving it a cargo capacity of 41.5 tons.

Mr. R.D. Speas, consultant for AC stated: (T 1020 V 8)

"Whereas the passenger traffic of airline operations has been the dominant factor in traffic growth, air cargo is now emerging as the area of growth potential which will probably become of great importance, both to airlines as well as the nations and communities served by the airlines. In this respect Air Canada is going forward with advanced equipment to serve the market. For example, three days a week the most advanced combination air freight/passenger plane in the world leaves Winnipeg at 4:40 p.m. and arrives in European capitals the following morning. Only through an operation which achieves maximum economy can this category of service be expanded to maximum benefit of the communities thereby served."

A press release by AC at the conclusion of 1965 operations confirms these various views by indicating an increase of passenger carriage by AC over 1964 of 14%, but an increase of freight carriage of 37%.

While witnesses did not forecast similar rates of growth for increases in air express and air mail carriage, it is interesting to note that AC reported increases in 1965 over 1964 of air express 22% and air mail 8%.

AC appointed at Winnipeg a Cargo Sales Manager, a Cargo Sales Representative and a Cargo Service Manager and AC announced in January, 1966 that in November, 1965, 5,800 shipments were handled by it at Winnipeg, an increase of 43% over November, 1964 and accounting for a total of 1.1 million pounds.

The Minister of Industry and Commerce of Manitoba, the Honourable Gurney Evans, emphasized the large number of individual shipments making up the freight tonnage to be handled at Winnipeg, estimated to rise from almost 100,000 separate shipments in 1965 to 200,000 in 1970 and 385,000 in 1975, and pointed to the necessity for modern specialized facilities and equipment to handle this large and increasing volume on an economic basis.

Witnesses expressed their view that a great deal of planning and sales effort would be required to enable Winnipeg to reach its potential for air freight carriage and referred to the present limited air cargo facilities as being inadequate.

Professor Ralph F. Harris, Director of the School of Commerce, University of Manitoba, called by the Province of Manitoba, stated: (T 1555 V 11)

"In terms of fixed facilities, the new air terminal buildings and air field of Winnipeg are of modern calibre. Air freight and cargo have had a prominent place in Canadian aviation history for a long time and, with new equipment developments and business demands for the servicing of markets, are acquiring increased status in world mainline aviation. Winnipeg's present limited cargo facilities do not fully reflect these realities and possibilities."

The policy of the government of Canada related to air cargo terminal facilities is outlined in a memorandum dated May 4, 1965, a copy of which is attached as Appendix T.

Briefly the government leaves to the airlines the provision of air cargo facilities but is prepared to co-operate with any airline or combination of airlines in the provision by lease of suitably located land as a site.

At the hearings of the Commission Mr. S.W. Sadler, Vice President Administrative Services of AC announced (T 863 V 7) that AC was planning to construct at Winnipeg at a cost of some \$600,000 and to have in operation in 1966 a services complex to house a cargo terminal of approximately 20,000 square feet, a commissary and commissary stores, ramp equipment and its maintenance, and a millwright shop. Presumably the several buildings required for this purpose are still in the planning stage.

The Honourable Mr. Roblin stated (T 1455 V 11) that it was not reasonable to expect AC or any other carrier to provide the facilities at Winnipeg International Airport required to permit and encourage the growth of air traffic. He suggested that local, community, municipal and provincial agencies be given some direct responsibility for development and management of the facilities.

The Speech from the Throne read at the opening of the Manitoba Legislature on February 3, 1966 states in part:

"My Ministers are also prepared to take the initiative in the construction of an air cargo facility at the Winnipeg International Airport in co-operation with the industry and federal authorities."

The Commission is of the opinion that the air carriers are alive to the air freight potential both at Winnipeg and elsewhere and will do everything possible to develop it. They will need assistance in the provision of adequate air cargo facilities at Winnipeg.

It would seem preferable that rather than have each carrier develop its own facility a co-operative facility serving all carriers (charter and schedule) be constructed and equipped. Consideration should also be given to the

provision of rail connections with the facility in view of the interrelation of air and rail freight. AC should be induced to defer construction of its proposed cargo facility pending the outcome of negotiations for development of a co-operative facility.

The proferred assistance of the governments of Canada and Manitoba should be taken advantage of and the carriers (A.C., C.P.A., TransAir and all others) should be invited to participate. The government of Manitoba has offered to take the initiative. Negotiations should be commenced at the earliest, possible moment so that full advantage of this significant potential may be had.

(g) General flying in Manitoba

It was a matter of surprise to the Commission to hear Mr. C.A. Antenbring, a charter member of the Winnipeg Flying Club, say: (T362 V 3)

"There is more to flying than the T.C.A. and C.P.A. and TransAir ... More people in North America move more miles in small aircraft of the type mentioned in this brief (privately owned aircraft) than all of the airlines in North America put together, in any one year."

The surprise resulted from the Commission's lack of knowledge of the extent of private flying operations related to flying generally.

Statistical data on the extent and importance of general aviation in Canada and in Manitoba was provided by Mr. J.S. Merrett on behalf of the Province of Manitoba. While, of course, his statistics were not directed towards establishing Mr. Antenbring's statement, they did confirm the general intent. of it by establishing that general aviation (of which private flying is a component) is a very large and growing activity of significant economic value and one which, if encouraged, can play a significant part in the development of Winnipeg as an aviation centre.

The four components of general aviation are government owned (non-military) aircraft, non-route services of schedule air carriers, other commercial (non-scheduled) air operators, and private aviation, the latter comprising a rapidly extending group of owners of aircraft operated for business or pleasure, or both.

Private aviation accounted in 1963 for 65% of the total Canadian registry of 6,500 aircraft. The annual registration increase of 300 was accounted for almost entirely by private aircraft registrations.

Speaking of aircraft generally, the distribution of aircraft among the Prairie Provinces (29% of the total) is above the average for Canada, whether related to area or population. Manitoba registration (8%) also exceeds the average for Canada, equals that of Saskatchewan, but (perhaps accountably) is less than that of Alberta.

In both Manitoba and Saskatchewan registered aircraft related to population exceeds that of the U.S.

Manitoba is a long way behind Saskatchewan in numbers of airports and aerodromes, having only 111 to Saskatchewan's 213, and has less navigation facilities. Saskatchewan's betterment relates in part to its government sponsored flying ambulance service.

In 1961 general aviation in Canada accounted for one million flying hours, half of those being flown by private aircraft. In November of 1962 the Department of Transport projected that by 1973 general aviation would account for 2,200,000 flying hours, with approximately one-half being flown by private aircraft.

Canadian private aircraft operators in 1961 flew 140,000 hours on non-business activities and 325,000 hours on business in a large variety of occupations.

In 1964 general aviation generated expenditures for fuel, oil and o/h of 12½ million dollars, of which one-half million was spent in Manitoba. These figures are for maintenance and operation only and do not include the capital cost of aircraft, which is significant.

Of the 20,000 or so Canadian Pilots Licenses in force in 1964, 15,000 plus were held by private aircraft operators, 3,000 by commercial operators and only 1,400 by airline transport pilots.

However, only 16 private pilots had instrument rating, as against 243 commercial pilots and, naturally enough, almost all airline pilots.

These statistics have been taken at random from Mr. Merrett's submission and have been quoted perhaps somewhat inexactly with the intention merely of putting general aviation and its components in perspective related to airline transport, and of indicating in general the extent and likely growth of general aviation.

There was a great deal of commonality in the submissions made by the Winnipeg Flying Club (a pioneer of private flying in Manitoba, which supplies fully equipped flying training and has 800 members of which 500 hold flying licences), the Manitoba Flying Farmers Association (having 230 members, half of whom own aircraft) and the Manitoba Aviation Council (recently organized but intended to comprehend all those in Manitoba interested in the promotion of private flying) and all three organizations had suggestions as to how private flying could be promoted in Manitoba, with consequent benefit to the economy. Most of these suggestions, however, were directed to the government of Manitoba and not related to the government of Canada which instituted this inquiry.

The government of Manitoba has taken a significant interest in this inquiry, not only by the part it played in bringing about its institution but also through its major and helpful participation in the proceedings. In view of this and of the expressed interest of the Province of Manitoba in the subject of general aviation in Manitoba the Commission is recording the main and common suggestions made by the three organizations, notwithstanding that if they are to be implemented they will require to be implemented in the main by the government of Manitoba. They are either out of, or "fringe" to the terms of reference of the Commission.

The recommendations of these organizations are:

- 1. That an official of the Department of Industry and Commerce of Manitoba should be designated to deal with (in addition to his other duties) matters of concern to private aviation in Manitoba and with whom private aircraft operators and their organizations could confer on matters affecting them, not requiring attention at ministerial level.
- 2. That the government of Manitoba give serious consideration to the formation of a Provincial Aviation Council or Commission to promote private flying.

- 3. That additional landing strips be constructed in Manitoba in the following manner:
 - (a) In new construction of provincial highways provision be made for concurrent construction of a parallel landing strip in proximity to selected towns.
 - (b) Some assistance be provided to local flying groups and municipalities in establishing landing strips on a "do-it-yourself" basis adjoining highways in various areas, such as were constructed by flying enthusiasts and municipalities at Morden, Wawanesa and Haskett.
 - (c) To encourage tourism by private aircraft from within and without Manitoba landing strips be constructed at several Manitoba-U.S. border points, like that at Haskett, close to customs clearing points, and also in significant resort and park areas, such as Falcon and Clear Lakes, Grand Beach, and International Peace Gardens.
 - (d) Additional safety landing strips be constructed at Thompson, The Pas and Flin Flon.
 - (e) Disused airfields constructed for the British Commonwealth Air Training Plan now reverting to nature be restored for use.
- 4. That the Province should prepare and make available (at a charge if desired) an adequate map and manual providing information as to all landing strips and aids to navigation in Manitoba, and as to obstructions in the vicinity of landing strips.
- 5. That at least some portion of the gasoline tax paid to the Province by private aircraft operators be devoted to the provision of landing strips and other aids to those operators.

It was made clear that the proposed landing strips were not costly or elaborate and in many cases local enthusiasts and municipalities could and would contribute money, labour and equipment.

Generally the strip should be 2,500 feet long by at least 100 ft. wide, either grassed or gravelled after levelling, preferably with a black topped landing ribbon, with a parking area and wind sock. Hangar and gassing facilities could be provided as required. Apparently both the provinces of British Columbia and Alberta provide for such landing strips, as did Saskatchewan in its flying ambulance plan.

If the appropriate landing strips and aids to light aircraft operators were available, local flying enthusiasts predict considerable tourist activity. Manitoba would be, as one witness remarked, a province "with its hangar doors open".

Reverting to the subject of general flying in Manitoba and of matters of interest to the government of Canada, witnesses acknowledged the many services made available to all private and business aircraft through the Department of Transport, Civil Aviation Branch in its operation and maintenance of large airports, weather services and navigational facilities.

Lack of facilities at Winnipeg International Airport for light visiting aircraft was mentioned as well as some disappointment at the intended diversion of small aircraft to a satellite airport under construction by the Department of Transport at St. Andrews, twelve miles N.N.E. of downtown Winnipeg.

Enquiries indicate that the St. Andrews Airport (under construction since 1961 and not ready for completely satisfactory aircraft operation) has two grass runways, 2,500 ft. by 500 ft., aircraft and car parking areas, a temporary gas pump, a two bay garage, and a waiting room and washroom facilities. It is under control of a resident Airport Manager. The Commission is advised that a new entrance road and connecting service roads have been constructed, lots are available for companies wishing to build aircraft servicing facilities and that the present inadequate runways are to be replaced in 1966 by construction of paved and lighted runways 2,500 ft. by 100 ft., with apron, and that Air Traffic Control service will be provided as soon as the paved runways are in service.

The Department of Transport has furnished to the Commission information as to aircraft activity at Winnipeg International Airport during May, 1965. Of 17,567 aircraft

movements in that month 10,955 were of local traffic remaining under tower control (basically of private flying). The remaining 6,612 movements were of itinerant traffic, involving 1,571 scheduled and non-scheduled airline movements, 1,467 were movements of other commercial traffic, 2,161 were military movements, 46 were of civil government aircraft movements and 1,367 were movements of private aircraft.

It will be seen that the bulk of the aircraft movements related to general flying, both local and itinerant, and most of this was accounted for by private aircraft.

The Commission is advised that the construction of St. Andrews Airport is in line with Department of Transport policy elsewhere to separate, in the general interest of safety and efficiency, larger aircraft from the smaller trainer and private aircraft. Presumably this policy would not preclude privately owned aircraft of the "executive" type, fully equipped with navigational landing aids, from using the major airport, but it would affect smaller privately owned aircraft.

The removal of smaller aircraft from the Winnipeg International Airport will no doubt cause some dislocation and nostalgia, particularly with the members of the Winnipeg Flying Club, who have been associated with that airport since it was developed as Stevenson's Field not long after the First World War. However, subject to the provision of adequate facilities at St. Andrews, this may be a logical and necessary sequence of events, particularly bearing in mind the projected great increase in private flying and the increasing use of the major airport by airlines in addition to use by military aircraft.

St. Andrews Airport must, however, have not only the basic facilities required for light aircraft but also those described as lacking at the Winnipeg International Airport, such as hangars, gas, oil and repair services, if it is to be accepted by private aircraft operators as a substitute for the more conveniently located major airport with its associated ancillary maintenance and o/h facilities close at hand.

It should not be presumed that the projected or even accelerated increase in general flying in Manitoba, whether

commercial or private, important as it now is and in the future will be to the general economy of Manitoba, can generate additional work for the o/h industry in Manitoba significant when related to the volume of work now being done at the AC o/h base.

Mr. Elbert Cheyno, of Los Angeles, California, having an extensive association with aircraft maintenance, and called by the Province of Manitoba, stated: (T 1945 V 14)

"Demand for services by general aviation will increase substantially in the next decade, but the relative simplicity of small aircraft maintenance, the low utilization of such aircraft, and the presence of other maintenance facilities at Winnipeg and at other places in the region closer to the bases of general aviation, all tend to limit the support of the Winnipeg base (that of AC) which might be expected from this direction.

In sum, there is likely to be a growing demand for aircraft maintenance and overhaul from commercial and private aircraft operators in the region. Given aggressive management of a maintenance facility at the Air Canada base, this new demand could make at least some contribution to future employment. However, the potention is nebulous, it has not been quantified, and it should not be relied upon to take up the slack of the Viscount phase-out."

This subject is further discussed in Section E of this Part 3.

(h) General observations and recommendations relating to Winnipeg as an aviation centre

It seems to the Commission that a number of steps should be taken not only to ensure that Winnipeg has improved flight services, regional, national and international, to the extent that present available traffic reasonably warrants, but also to stimulate air traffic to the point where additional services and facilities are justified from a national or economic standpoint.

Mr. J.K. Galbraith in his report of September 18, 1963, Canadian-American Civil Air Relations, said that air policy between the two countries should incorporate

"Full accommodation to the travel habits of the people of the two countries with a minimum of artificial restraint arising from the international factor."

The Heeney-Merchant report of June 28, 1965 restated this policy by saying there should be a

"development of a continental pattern of air travel which would be responsive to the travel requirements of both countries."

On the signing of the new Canada-U.S. Air Transport Agreement on January 17, 1966 the Honourable Paul Martin stated:

"...it was at a meeting in 1963 that Prime Minister Pearson and the late President Kennedy agreed that a new approach should be taken to the air relations between Canada and the United States. Subsequently the President asked Professor J.K. Galbraith of Harvard University to make a special study of the matter.

In his report to the President, Professor Galbraith dwelt upon the rapid technological evolution in civil aviation and the great increase in travel which had taken place since the conclusion of the 1949 bilateral air Agreement. He recommended that the Agreement should be renegotiated because it no longer provided a satisfactory framework for the civil aviation arrangements between our two countries. He outlined certain general principles which he thought should be reflected in the new Agreement. It was desirable to develop a continental approach to air transport which would more adequately meet the needs of the travelling public of both countries, make more rational use of modern jet aircraft, and at the same time provide for an equitable sharing of traffic between Canadian and United States carriers.

These principles were taken into account in the negotiations which opened early in 1964. The resulting Agreement provides for a marked improvement in the air services and a substantial expansion of routes, including access for Canadian carriers beyond the trans-border points to more distant parts of the United States.

Since this Agreement pioneers new ground we have made provision for periodic review of the route patterns to ensure that the changing and growing requirements of travellers and air freight shippers are met. The first such review will take place early in 1969.

It is our view that this Agreement marks the opening of a new era in air relations between Canada and the United States. While the interests of the airline industry have received due attention our primary concern has been to meet the needs of the public of both countries.

Mr. Ambassador, it has not been a simple matter to arrive at an agreement which represents a significant departure from earlier concepts. During the past two years of negotiations we have had to work hard to reconcile various interests. I am satisfied that we have now achieved a long step forward in the development of our air relations which will be of great general benefit to our two peoples."

At that time His Excellency, W. Walton Butterworth, U.S. Ambassador, in a note to the Honourable Paul Martin said:

"This Agreement provides for a substantial expansion of air services by airlines of both countries and will be of major importance for the airlines and their users. The rapid continuing growth of air traffic between Conada and the United States however will require that the two Governments consider again within a reasonable period of time what additional

changes may be necessary to ensure that air services between our two countries satisfy the needs of the travelling public and the airlines of both countries, consonant with the principles set forth in the Preamble of the Agreement and the objectives set forth in paragraphs (a) and (b) of Article I.

It is also recognized on both sides that certain proposals which were made regarding additional routes or services have not been included in the Agreement. It is understood that the United States is interested in direct access for its airlines to the City of Montreal from the City of Chicago. Similarly, Canada is interested in access for its airlines to the City of Los Angeles from the City of Vancouver and in providing service from the City of Winnipeg to the City of Chicago.

During the discussions it became apparent that, for various reasons relating to the present volume of traffic and other factors, the time had not yet come to deal with these particular matters. On the other hand, continuing growth of air traffic may well before many years have passed change the situation with regard to the matters mentioned in the preceding paragraph of this Note and may create new situations in which consideration should be given to other and new direct through services between the two countries. Recognizing the importance of the principles which underlie the new Agreement and the progress which it represents, as well as the need to ensure that the Agreement is reviewed from time to time so that it may reflect traffic growth, it is proposed that the situation with regard to air routes should be re-examined early in 1969. specific issues mentioned above which have been left outstanding, as well as new route interests which may arise in the intervening period should then be discussed to determine whether a further improvement and extension of routes in the interests of the users and the airlines of both countries would be desirable."

It is clear that the door has been left open for the negotiation early in 1969 of the Winnipeg-Chicago route, much desired by Winnipeggers.

The policy expressed by Mr. Galbraith and in the Heeney-Merchant report and applied in part in the recently negotiated Canada-U.S. bilateral, might well be extended and applied by and between Canada and other countries, as well as between Canada and the U.S.

Manitoba and the rest of Western Canada can . reasonably expect that regional air services should be adequate to serve and develop its far flung areas and resources and this could properly require some type of subsidization in the public interest.

The provision of adequate air services cannot be left solely to the airlines but is obviously a matter of governmental air transport policy.

Mr. J.S. Merrett, economist and a consultant to the Province of Manitoba, dealt with these situations when he said, in relation to Canada-U.S. air service: (T 1589 V 11)

> "In Canada, as in many other nations, international air transport policy tends to become geared to the needs and aspirations of the airlines, and unless conscious effort is made at the highest level of government, other interests may be neglected. undoubtedly many opportunities for improved transborder services which would benefit Canada and its regions as well as contiguous areas of the United States. Such opportunities may be relatively far down the airlines' lists of priorities and therefore may easily be denied the attention they deserve in establishing objectives in bilateral air negotiations. this reason, it is important that national policy recognize regional needs and provide for them in air transport relations with the United States."

These comments might well be applied to all air services. The needs of our national carriers must be recognized but the needs of the travelling public are of overriding importance and are the main needs with which air policy should be concerned.

It is therefore recommended that with a view to appropriate improvement of Winnipeg's position as an aviation centre

- 1. AC's services between Western Canada (via Winnipeg) and Europe by way of the Polar route and the existing and potential traffic (both passenger and cargo) be reviewed by the Air Transport Board to ascertain whether the volume of traffic originating in or destined for Western Canada warrants additional air service between Winnipeg and Europe via that route, and any additional service found warranted be provided. That such additional service might result in diversion to the Polar route of mainline traffic between Winnipeg-Toronto-Montreal and Europe should be disregarded.
- 2. The rate structure for traffic (passenger and cargo) between Western Canada and Europe via the Polar route be reviewed by the Air Transport Board, keeping in mind the lesser mileage related to the Winnipeg-Montreal-Europe route, and suitable adjustments of rates be negotiated with the International Air Transport Association or other appropriate rate-setting body.
- 3. If AC is not prepared to provide Polar services found justified by available and potential traffic a foreign carrier or carriers now overflying Winnipeg should be encouraged to apply through appropriate channels to Canada for Third, Fourth and Fifth Freedoms at Winnipeg.
- 4. The Air Transport Board be instructed to review the traffic potentials of a direct air service Winnipeg-Chicago and to report thereon prior to 1969, with a view to negotiation then with the U.S. for an amendment to the recently signed bilateral to provide for such service.

- 5. The position of regional air carriers in Canada (and particularly that of TransAir Limited) in relation to mainline carriers and the provision of adequate regional air services be clarified at the earliest possible moment, with a view to removal of uncertainties and the provision of appropriate services.
- 6. A modern air cargo terminal be constructed at Winnipeg on a co-operative basis between the governments of Canada and Manitoba and the airlines of Canada, including AC, C.P.A. and TransAir.
- 7. AC and C.P.A. be requested to further examine their scheduling of air services with a view to providing greater convenience to the travelling public and in particular to the provision of suitable connections between their flights and those of U.S. carriers at Winnipeg and at Vancouver.