

## **Timetables as a Source of Statistical Data**

### **Occasional Paper**

The purpose of this paper is to describe in some detail the various types of statistical data that can be obtained from timetable sources, particularly the provision of cross-classifications of data not normally produced as part of the normal statistical task. The main advantage claimed for this technique is that the statistics can be compiled as soon as timetables are announced and even before the services begin. This can be of great benefit when up-to-date statistical information is required. Another advantage claimed for timetable sources is that all of the relevant data items appear in the one document thus simplifying the task of producing the statistics.

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BUREAU OF TRANSPORT ECONOMICS

TIMETABLES AS A SOURCE OF STATISTICAL DATA:  
THE EXAMPLE OF AUSTRALIAN INTERNAL AIR PASSENGER SERVICES

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## FOREWORD

The ability to carry out transport research has in the past been restricted by the limited amount of statistical data that are available. Much progress has been made in the collection, processing and compilation of relevant statistical data but there are never enough resources available to produce all the figures required.

In this paper Dr Quinlan has detailed a method for obtaining a range of useful transport statistics from timetables. He has illustrated this with actual figures extracted from airline timetables for a number of years. This technique, which uses simple hand compilation methods for processing of data, has considerable merit in that it is both quick and cheap and releases computer resources for other more complex tasks.

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## CHAPTER 1 - INTRODUCTION

When considering the size of transport operations it is usual to seek statistics of vehicle miles travelled, and the passenger and freight volumes carried. If indications of performance are required, the relevant statistics are passenger kilometres and freight tonne kilometres. Any transport operation has to provide capacity to handle the available traffic: and this can be measured as payload capacity tonne kilometres.

All major transport operators compile these statistics from administrative documents raised in the course of providing the service, namely, records of ticket sales, freight consignment notes, vehicle logs, vehicle load sheets, etc. The statistical processing of these documents requires the handling of many records and there is usually a considerable time lag after the end of any period before statistics become available.

All statistics which accurately measure the size of a transport operation have to be produced in this way, although the effort can often be lessened by the use of sampling techniques. However, for modes having vehicles whose capacity payloads do not vary greatly, it is possible to derive reasonably accurate statistics suitable for many purposes from information set out in published timetables.

The purpose of this paper is to describe in some detail the various types of statistical data that can be obtained from timetable sources, particularly the provision of cross-classifications of data not normally produced as part of the normal statistical task. The main advantage claimed for this technique is that the statistics can be compiled as soon as timetables are announced and even before the services begin. This can be of great benefit when up-to-date statistical information is required. Another advantage claimed for timetable sources is that all of the relevant data items appear in the one document thus simplifying the task of producing the statistics.

Australian internal airline timetables are used as examples for the explanation of this technique, and selections of aggregated statistics obtained by the methods outlined in this paper are presented. It is not the aim of this paper to analyse the resulting statistics.

#### GENERAL TRANSPORT APPLICATION

The scheduled operating timetable of a transport undertaking usually shows the following information:

- . operator
- . vehicle (particular ship) or vehicle type (aircraft)
- . origin
- . departure time
- . destination
- . arrival time at destination
- . any intermediate places of call and associated arrival and departure times
- . frequency of service

By multiplying the distances between the places visited and the frequency of movement it is possible to calculate the distance travelled by the vehicle in any period of time. The vehicle payload capacity provided can be obtained by multiplying this total distance travelled by the payload capacity of the particular vehicle type. The resultant figure represents the 'payload capacity tonne kilometres' or 'capacity passenger kilometres' provided. If a combined payload capacity tonne kilometre figure for both passenger and freight operation is required it can be calculated after assigning a certain weight for each passenger and associated baggage.

The use being made of a particular terminal can be obtained by noting the number of scheduled vehicle movements through the terminal in a given time period. A better measure of overall terminal capacity would be obtained by multiplying these vehicle

movement figures by the payload capacity of the various vehicle types used: figures of 'capacity tonne' or 'capacity passenger movements' are thus obtained. While any such figures would usually have a definite relationship to the available traffic at places where services begin and end, it must be noted that at intermediate terminals the available capacity figures so derived would tend to overstate actual capacities available for traffic because much of the capacity is already occupied by traffic transitting through the intermediate terminal.

Payload capacity figures obtained from timetable sources have greater reliability if there is a close relationship between scheduled services and services that are actually operated. An exact reconciliation is almost impossible to achieve because it is the normal practice to provide additional services at short notice to meet peak loadings, while not operating some scheduled services because of vehicle unserviceability or because of insufficient traffic. Some modes, such as air, are more sensitive to variations in loadings and timetables are revised frequently to allow for changing traffic patterns.<sup>(1)</sup> Timetables for other modes may change less frequently.

Any extraction of timetable data showing the operations of a fixed fleet of vehicles should cover a time period sufficiently long to enable all vehicles to reposition themselves back to their original starting positions. For air transport this time period is usually one week but for coastal shipping the time for a complete cycle of ship movements could be 28 days or more. For vessels trading overseas the cycle is even longer.

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(1) The Australian interstate airlines now issue only two timetables a year to coincide with periods of normal and daylight saving time. Those timetables do not reflect actual services operated as closely as they did in the past when more frequent issues were made.



## CHAPTER 2 - THE EXAMPLE OF AUSTRALIAN INTERNAL AIR PASSENGER SERVICES

This analysis of Australian internal air passenger services is based on scheduled airline<sup>(1)</sup> timetables in effect at the beginning of the years 1965, 1970 and 1973 to 1977 inclusive<sup>(2)</sup>.

This analysis is constructed around the following source information:

- . airline
- . aircraft type
- . origin airport
- . destination airport
- . intermediate airports of call
- . flights scheduled per week

All of these details were extracted for one week and processed to indicate aircraft kilometres flown and payload capacities provided<sup>(3)</sup> by airline, aircraft type, and region in which the service operated. Also, the number of aircraft movements<sup>(4)</sup> at each airport was determined for each airline and aircraft type.

A full description of the steps followed in carrying out this task is set out in Annex A. Complete details of the statistical components which were aggregated to produce the summaries that follow are set out in Annexes B and C.

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- (1) For this study an 'airline' is a carrier operating Regular Public Transport Services and the services included are those that the airline provides with its own aircraft. Commuter air services, which began on 1 July 1967, and RPTS services operated by charter firms, are excluded from this study.
  - (2) Data for the beginning of 1972 are also available.
  - (3) Payload capacity is expressed in tonnes. Most of this capacity is available for the carriage of passengers and the remainder for freight. For planning purposes the weight of a passenger and associated baggage is assumed to be 90kg.
  - (4) A landing and take-off at an airport count as two movements.

## RELIABILITY OF DATA

The use that can be made of any statistic depends largely on its reliability. In the case of figures produced from timetable sources it is possible to assess their accuracy by comparing two statistical series which are also compiled from actual data, namely, aircraft kilometres and payload capacities provided<sup>(1)</sup>. Comparable figures for the years 1964-65 to 1975-76 for both these series are set out in Table 1.

Despite the different bases on which the aircraft kilometres figures were compiled, Table 1 shows that to 1975-76 there was a close relationship which in any year did not exceed 2.9 per cent. The 1975-76 variation of 6.8 per cent was due to significantly greater variations for the interstate airlines<sup>(2)</sup> brought about by more than normal cancellation of flights in response to the traffic decline experienced in that year.

However, in respect of payload capacity, figures derived from timetable sources show an overstatement of between 21 and 29 per cent. The main reason for this is the use of capacities based on maximum technical loadings. These loadings are known to be overstated in practice because they assume that maximum payload would be carried over all stages; this is not possible on the longer stages where the extra fuel that has to be carried requires payload reductions so that the aircraft does not exceed its maximum all-up weight. These overstatements can be avoided by making arbitrary reductions to maximum loadings based on known operating conditions; however, in the context of this paper it was not considered necessary to depart from a definable position.

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- (1) To obtain annual figures from timetable data, figures for the week at the beginning of January are multiplied by 52.  
(2) Trans-Australia Airlines and Ansett Airlines of Australia. See Table 2.

TABLE 1 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES:

## COMPARISONS OF SCHEDULED AND ACTUAL DATA

Year	Aircraft kilometres			Capacity tonne kilometres		
	Actual	Scheduled	Proportion	Actual	Scheduled	Proportion
	(a)	(b)	scheduled to actual	(a)	(b)	scheduled to actual
	Million		%	Million		%
1964-65	77.1	79.4	102.9	411	498	121.1
1969-70	98.9	95.9	97.1	714	870	121.9
1971-72	109.1	110.4	101.1	852	1095	128.5
1972-73	114.9	113.6	98.9	923	1152	124.7
1973-74	129.4	128.1	99.0	1101	1420	129.0
1974-75	133.5	134.1	100.5	1235	1547	125.2
1975-76	129.3	138.0	106.8	1240	1602	129.2
1976-77	(c)	119.7	(c)	(c)	1397	(c)

- (a) Source: Department of Transport, Domestic Air Transport Statistics for the years shown. The following services are excluded: Trans-Australia Airlines and Ansett Airlines of Australia flights to New Guinea and all cargo services; Ansett Airlines of South Australia charter flights to Woomera; and Qantas Norfolk Island services.
- (b) Source: Airline timetables operative at the beginning of January of the years shown. Annual figures have been obtained by multiplying weekly figures by 52.
- (c) Not yet available.

Table 2 indicates for each airline the proportions that scheduled data bear to actual data for the years 1971-72 to 1975-76 in respect of aircraft kilometres and capacity tonne kilometres. It would appear that the January timetable data slightly overstate an average week for both Trans-Australia Airlines, Ansett Airlines of Australia and, for most years, understates an average week for other airlines apart from Connair<sup>(1)</sup>.

The differences between scheduled and actual capacity tonne kilometres is more marked for the interstate airlines than for the regional airlines, possibly reflecting the longer stages flown by these airlines and the consequent reductions in available payload necessitated in practice because of the need to carry additional fuel. Thus, it would appear that the data based on January timetables are more reliable in respect of aircraft kilometres than capacity payloads. Nevertheless, the figures set out in this paper for payload capacities, although overstated, can be used for broad comparisons between airlines, regions, etc., but the limitations of the data must be recognised when using in any absolute sense the capacity tonne kilometre figures set out in this paper.

The following sections present a number of examples of the way that statistical data derived from timetable sources can be presented. It should be noted that more cross-classifications of data can be produced from timetable sources than those shown.

#### OVERALL PATTERN OF GROWTH

Figures of weekly aircraft kilometres, weekly payload capacity provided, and average aircraft capacity obtained from timetables are set out in Table 3 together with the proportional variations since 1964-65. Each of the three series indicates a distinct rate of change.

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(1) The apparent deficiency of MMA scheduled aircraft kilometres when compared with actual data for years after 1971-72 is due to the fact that scheduled data excludes all cargo flights which are included in actual data.

TABLE 2 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES: SCHEDULED  
DATA <sup>(a)</sup> AS PROPORTIONS OF ACTUAL DATA <sup>(b)</sup>

(Per cent)					
Airline	1971-72	1972-73	1973-74	1974-75	1975-76
AIRCRAFT KILOMETRES					
Trans-Australia Airlines(c)	102.5	100.9	100.5	101.9	108.8
Ansett Airlines of Australia(c)	101.9	100.0	100.5	104.4	110.0
Ansett Airlines of N.S.W.	94.7	92.3	98.5	98.8	104.3
Ansett Airlines of S.A. (d)	84.5	86.4	90.1	90.2	97.1
MacRobertson Miller Airlines	102.8	88.5	87.6	83.9	89.0
East West Airlines	87.6	97.2	93.2	89.8	95.2
Connair Pty Ltd	103.9	99.0	102.4	95.9	112.3
ALL AIRLINES	101.1	98.9	99.0	100.5	106.8
CAPACITY TONNE KILOMETRES					
Trans-Australia Airlines(c)	130.0	126.0	132.4	125.8	130.5
Ansett Airlines of Australia(c)	127.8	126.2	129.2	128.4	130.9
Ansett Airlines of N.S.W.	118.0	114.3	122.3	121.3	125.3
Ansett Airlines of S.A. (d)	90.0	94.5	102.7	96.4	117.5
MacRobertson Miller Airlines	144.2	116.1	115.1	110.6	117.2
East West Airlines	100.0	110.6	103.9	97.1	104.2
Connair Pty Ltd	139.6	131.6	125.9	98.0	114.5
ALL AIRLINES	128.5	124.7	129.0	125.2	129.2

- (a) Source: Airline timetables operative at the beginning of January of the years shown. Annual figures have been obtained by multiplying weekly figures by 52.
- (b) Source: Department of Transport, Domestic Air Transport Statistics for the years shown.
- (c) Excludes flights to New Guinea and all cargo services.
- (d) Excludes charter flights to Woomera.

TABLE 3 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES:

KEY INDICATORS AS SCHEDULED

January	Weekly aircraft kilometres		Weekly aircraft payload capacity tonne kilometres		Average aircraft payload capacity	
	'000	Index	'000	Index	'000	Index
1965	1526.6	100	9585.1	100	6.3	100
1970	1844.2	121	16721.5	174	9.1	144
1972	2122.7	139	21066.6	220	9.9	158
1973	2184.3	143	22150.6	231	10.1	162
1974	2463.4	161	27300.8	285	11.1	177
1975	2578.8	169	29747.9	310	11.5	184
1976	2654.0	174	30813.8	321	11.6	185
1977	2301.9	151	26856.6	280	11.7	186

Source: Airline timetables operative at beginning of the years indicated.

In the eleven years from 1965 to 1976 the weekly distance flown by airline passenger aircraft increased 73 per cent from 1.5m to 2.6m kilometres, but declined to 2.3m kilometres in 1977. This is in accord with the traffic downturn experienced by the airlines. The progressive introduction of larger aircraft types during the period increased the average aircraft payload capacity over the period by 86 per cent. In every year the growth from the base year of average aircraft capacity exceeded the growth in distance flown: the compounding of these two factors resulted in the proportional increases in total airline payload capacity being much greater than for the other indicators shown. The number of weekly payload capacity tonne kilometres provided increased by 221 per cent from 1965 to 1976, but declined in 1977 to a level 180 per cent above the 1965 figure.

#### AIRLINE SHARES

The Australian airline industry is dominated by two interstate airlines, Trans-Australia Airlines and Ansett Airlines of Australia which in 1977 together provided over 90 per cent of the total industry's available payload capacity in near equal shares (Table 4). MacRobertson Miller Airlines is the largest of the other airlines with nearly 5 per cent of the total, followed by the two New South Wales regional airlines, Airlines of New South Wales and East-West Airlines each with a 2 per cent share of the industry total.

Over the twelve year period all airlines increased payload capacity provided but some airlines increased payload capacity greater than the industry as a whole (which recorded 180 per cent growth in the 12 years from 1965 to 1977). Connair, the Northern Territory-based operator, recorded an increase of 300 per cent from a very small January 1965 figure: in January 1977 Connair was still the smallest of the airlines. The two interstate airlines recorded increases slightly above the industry average, 208 per cent for Ansett Airlines of Australia and 197 per cent for Trans-Australia Airlines. All other airlines had shares

**TABLE 4 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES: WEEKLY**  
**AIRCRAFT PAYLOAD CAPACITY SCHEDULED BY INDIVIDUAL AIRLINES**  
('000 tonne km)

Airline	Weekly aircraft payload capacity scheduled in January						
	1965	1970	1973	1974	1975	1976	1977
Trans-Australia Airlines	4091	7443	10030	12381	13607	14005	12152
Ansett Airlines of Australia	3945	7444	9928	12366	13514	14085	12149
Ansett Airlines of New South Wales	453	493	451	503	533	537	474
Queensland Airlines	132	-	-	-	-	-	-
Ansett Airlines of South Australia	94	78	106	124	129	170	166
MacRobertson Miller Airlines	634	813	1076	1297	1304	1321	1328
East-West Airlines	220	410	509	558	573	579	520
Connair Pty Ltd	17	41	50	73	88	118	68
ALL AIRLINES	9585	16722	22151	27301	29748	30814	26857

NOTE: Certain figures may not add due to rounding.

Source: Airline timetables operative at beginning of the years indicated.



lower than the industry average: East-West Airlines recorded 136 per cent increase over the same period; MacRobertson Miller Airlines, 109 per cent; while Airlines of South Australia and Airlines of New South Wales recorded 77 per cent and 5 per cent respectively.

#### AIRCRAFT TYPES

The period from 1965 to 1977 saw a considerable change in aircraft types used by the airlines. In January 1965, the first jets (Boeing 727s) had only just been introduced and prop-jet types were the mainstay of the fleet contributing 66 per cent of total aircraft kilometres flown. The corresponding figure for the jets was only 12 per cent. At this time, the piston-engined types were flying nearly twice the distance of the jets. However, even at this early stage the Boeing 727s, which were both larger and faster than the propeller types, were providing 26 per cent of the total industry payload capacity compared to the prop-jets' share of 61 per cent.

The progressive introduction of more Boeing 727s followed by McDonnell Douglas DC9-30s led to the Electra prop-jets being phased out of service on the intercapital routes after January 1970. By that time smaller Fellowship jets had been introduced on the regional network in Western Australia. By January 1977, the situation had been reached where the jet aircraft were providing 91 per cent of total payload capacity.

Details of aircraft kilometres flown and payload capacity provided from January 1965 to January 1977 for each aircraft type are shown in Tables 5 and 6 respectively<sup>(1)</sup>.

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(1) In Tables 5 and 6 jet aircraft are shown as turbo-fan types, this being a more precise description of the engines fitted.

TABLE 5 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES: WEEKLY  
AIRCRAFT KILOMETRES SCHEDULED

('000 km)

Aircraft type	Weekly aircraft kilometres scheduled in January						
	1965	1970	1973	1974	1975	1976	1977
<u>Turbo-fan types</u>							
Boeing 727/DC9	187	967	1488	1711	1842	1894	1635
Fellowship	-	41	136	164	165	167	169
Total	187	1007	1624	1875	2007	2061	1804
<u>Prop-jet types</u>							
Electra	237	133	-	-	-	-	-
Viscount	406	61	-	-	-	-	-
Friendship	371	549	475	515	498	503	453
Twin Otter	-	30	31	17	16	11	5
Total	1015	772	507	532	513	514	458
<u>Piston-engined types</u>							
Douglas DC6B	66	-	-	-	-	-	-
Douglas DC4	14	-	-	-	-	-	-
Metropolitan	12	9	-	-	-	-	-
Sandringham	6	6	6	6	-	-	-
Douglas DC3	179	3	-	10	18	21	17
Heron	7	16	25	28	31	38	16
Other <sup>(a)</sup>	41	26	17	8	5	6	3
Total	324	60	48	51	54	66	36
<u>Helicopter</u>							
Sikorsky S61N	-	4	6	5	5	4	4
ALL TYPES	1527	1844	2184	2463	2579	2645	2302

(a) Piaggio, Beechcraft, Piper and Cessna types.

NOTE: Certain figures may not add due to rounding.

Source: Airline timetables operative at beginning of the years indicated.

TABLE 6 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES: WEEKLY  
AIRCRAFT PAYLOAD CAPACITY SCHEDULED  
( '000 tonne-km)

Aircraft type	Weekly aircraft payload capacity scheduled in January						
	1965	1970	1973	1974	1975	1976	1977
<u>Turbo-fan types</u>							
Boeing 727/DC9	2456	12081	18558	23299	25834	26802	23180
Fellowship	-	318	1062	1278	1286	1301	1321
Total	2456	12398	19621	24576	27120	28103	24501
<u>Prop-jet types</u>							
Electra	1874	1047	-	-	-	-	-
Viscount	2154	340	-	-	-	-	-
Friendship	1857	2746	2376	2576	2488	2560	2267
Twin Otter	-	59	62	34	31	22	10
Total	5885	4193	2439	2610	2519	2582	2277
<u>Piston-engined types</u>							
Douglas DC6B	580	-	-	-	-	-	-
Douglas DC4	86	-	-	-	-	-	-
Metropolitan	55	44	-	-	-	-	-
Sandringham	28	28	28	28	-	-	-
Douglas DC3	448	7	-	24	45	53	41
Heron	10	26	40	45	49	61	26
Other <sup>(a)</sup>	37	15	10	4	3	4	2
Total	1244	120	78	101	98	118	69
<u>Helicopter</u>							
Sikorsky S61N	-	10	14	14	11	11	11
ALL TYPES	9585	16722	22151	27301	29748	30814	26857

(a) Piaggio, Beechcraft, Piper and Cessna types.

NOTE: Certain figures may not add due to rounding.

Source: Airline timetables operative at beginning of the years indicated.

## CENTRES SERVED

The results of airline operations can be viewed in terms of the number and location of the centres served, and the aircraft movements through each centre.

Over the twelve year period of quite remarkable growth in payload capacity provided the number of centres receiving airline services declined 62 per cent from 413 in January 1975 to 158 in January 1977. The numbers of centres served declined in all States and the Northern Territory, with the largest reductions being in Queensland, Western Australia and the Northern Territory (Table 7). The reduction in the number of centres receiving air services is not as great as these figures would indicate as many of the centres that lost airline services are now being served by commuter operators.

In January 1977, the number of aircraft movements through airports varied greatly ranging from 1450 per week at Sydney to only 1 at a number of airports mainly in the Kimberleys<sup>(1)</sup>. Half of the airports served in January 1977 received fewer than 16 movements per week and only 14 airports recorded more than 100 airline movements per week (Table 8).

A greater variation between airports with very large and very small traffic volumes would be seen if instead of using just aircraft movement figures a series of figures based on the payload capacities of these aircraft had have been compiled.

## REGIONAL TRAFFIC

A further development of the analysis of movements through individual airports is the grouping of services into regions. Each flight can be allocated to a particular region after taking into account the type of service provided and the particular

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(1) One aircraft movement per week is equivalent to a centre receiving and despatching one aircraft per fortnight.

TABLE 7 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES:

## AIRPORTS SERVED

(Number of airports)

State	At January -						
	1965	1970	1973	1974	1975	1976	1977
N.S.W.	52	40	36	35	35	34	31
Vic.	12	6	3	3	3	3	3
Qld	109	95	83	42	41	38	37
S.A.	22	16	16	10	11	11	10
W.A.	90	42	40	39	37	35	20
Tas.	9	7	6	6	5	5	5
N.T.	118	98	92	81	72	69	51
A.C.T.	1	1	1	1	1	1	1
Australia	413	305	277	217	205	196	158

Source: Airline timetables operative at beginning of years indicated.

TABLE 8 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES: AIRPORTS

## CLASSIFIED BY SCHEDULED AIRCRAFT MOVEMENTS, JANUARY 1977

(Number of airports)

Aircraft movements (per week)	Airport located in								Aust
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	
1-2	1	-	-	3	6	-	24	-	34
3-5	-	-	8	2	-	-	7	-	17
6-10	2	-	2	-	2	-	6	-	12
11-15	5	1	6	-	2	1	2	-	17
16-20	6	-	6	-	-	-	1	-	13
21-25	3	-	-	-	1	-	4	-	8
26-30	5	-	2	1	4	-	-	-	12
31-35	3	1	1	1	1	-	2	-	9
36-40	-	-	2	1	-	-	-	-	3
41-45	3	-	-	1	-	-	2	-	6
46-50	1	-	-	-	2	-	1	-	4
51-60	-	-	-	-	1	-	-	-	1
61-80	1	-	2	-	-	2	-	-	5
81-100	-	-	3	-	-	-	-	-	3
101-150	-	-	1	-	-	2	2	-	5
151-200	-	-	2	-	-	-	-	-	2
201-300	-	-	1	-	1	-	-	1	3
Over 300	1	1	1	1	-	-	-	-	4
ALL AIRPORTS	31	3	37	10	20	5	51	1	158

Source: Airline timetables operative at beginning of 1977.

location of the route within the continent. A very striking feature of the Australian airline industry is the importance of services over the routes which directly link the mainland capital cities: the largest aircraft are used on these routes and services, particularly on the East Coast, are very frequent. By the very nature of their operations these services justify separate regional identification. Other regions tend to be localised, usually embracing all routes located within a State or part of a State.

Any grouping of airline services into regions is somewhat arbitrary but in this study all flights have been allocated to the following regional groupings:

Intercapital Regions: Flights directly linking the six mainland State capitals of Sydney, Melbourne, Brisbane, Adelaide, Perth and Canberra.

Sydney Region: Flights from Sydney which are not destined direct to another mainland capital. Includes the Sydney-Williamstown-Coolangatta-Brisbane services as far as Coolangatta.

Victoria Region: Flights from Melbourne to mainland ports other than those direct to capital cities. Includes Melbourne-Albury-Canberra flights and Melbourne-Hamilton-Mount Gambier-Adelaide flights as far as Mount Gambier. Most services included in this regional grouping are direct between Melbourne and Coolangatta.

Tasmania Region: Includes flights from Melbourne to Tasmanian ports and, at January 1965, the internal services within Tasmania operated by TAA.

Queensland Coast Region: Flights linking Queensland coastal centres from Brisbane to Cairns. Includes helicopter services from Mackay and Proserpine to off-shore resort islands.

Queensland Inland Region: Flights linking Brisbane and other Queensland coastal ports with inland towns in Queensland and Darwin and other Northern Territory centres.

Brisbane South Region: Includes all flights over the link between Brisbane and Coolangatta and flights over links between these centres and centres in New South Wales which are also served by flights from Sydney.

Cape York Region: Flights northwards from Cairns to Thursday Island and centres on Cape York Peninsula.

Arnhem Region: Flights direct to Gove and Groote Eylandt from Darwin, Mount Isa, Cairns and Townsville.

Adelaide Region: Flights from Adelaide excluding those destined direct to another mainland capital and to places in the Northern Territory.

Territory Region: Flights from Adelaide to Northern Territory ports and flights between Alice Springs and Darwin.

Perth Region: Flights from Perth which are not destined direct to another mainland capital.

Gulf Country Region: Flights from Mount Isa and Cairns to Norman- ton and other Gulf country centres. Airline services in this region ceased in 1973.

Channel Country Region: Flights through the Queensland channel country from Charleville, Longreach, Winton, Mt Isa, Leigh Creek and Broken Hill. An extension of the Channel country flight from Leigh Creek to Adelaide has been included in 'Territory'. Airline services in this region ceased in 1973.

Connair Region: All flights operated by Connair. These extend throughout the Northern Territory, northern South Australia, the Eastern Kimberleys of Western Australia, and to Mount Isa and Cairns.

While most flights can easily be allocated to a particular region there are some that have merits for inclusion in more than one region. In these instances it has been the practice to split flights at some intermediate airport and allocate the two parts to separate regions.<sup>(1)</sup>

Table 9 shows the aircraft payload capacity provided in each of the regions so defined from January 1965 to January 1977. The figures show the dominance of the Intercapitals Region in all years: 61 per cent of total industry capacity was provided in this region in January 1977 compared with 55 per cent in January 1965. The Queensland Coast, Tasmania, Sydney, Perth, Queensland Inland, and Territory regions also had lesser but still significant proportions of total industry capacity provided.

In the twelve year period from January 1965 to January 1977 the rate of growth in payload capacity for the Intercapitals Region was 208 per cent, slightly more than the rate for the industry as a whole (180 per cent). Other regions with growth rates in excess of the industry average were Arnhem (1800 per cent)<sup>(2)</sup>, Territory (492 per cent), Connair (300 per cent), Cape York (284 per cent), Victoria (273 per cent), Queensland Coast (252 per cent) and Queensland Inland (215 per cent). Other important regions with

---

(1) This can be done easily for flights linking capital cities through intermediate airports. More difficulty is experienced when a flight from one capital joins the route of flights which predominantly emanate from another capital. The first flight is then considered to be in two parts linked where the routes join, e.g. the Sydney-Mackay-Townsville flight when it operated was considered to have the Sydney-Mackay part in the Sydney Region and the Mackay-Townsville part in the Queensland Coast Region.

(2) This very large growth is due to the establishment during the period of large mining and ore processing operations at Gove and Groote Eylandt.



TABLE 9 - AUSTRALIAN INTERNAL AIR PASSENGER SERVICES: WEEKLY  
AIRCRAFT PAYLOAD CAPACITY SCHEDULED IN REGIONS  
( '000 tonne km)

Region (a)	Weekly aircraft payload capacity scheduled in January						
	1965	1970	1973	1974	1975	1976	1977
Inter- capitals	5304	10470	13691	17030	18553	18860	16340
Sydney	825	1171	1466	1724	1861	1893	1420
Victoria	146	369	481	629	531	821	545
Tasmania	1149	1245	1300	1665	1847	1952	1806
Queensland Coast	789	1364	1962	2530	2969	2978	2778
Queensland Inland	368	611	955	1089	1252	1409	1158
Brisband South	10	9	11	12	12	12	8
Cape York	25	65	73	73	79	87	96
Channel/ Gulf Country	27	20	20	-	-	-	-
Adelaide	114	101	129	146	157	123	166
Territory	177	402	884	986	1046	1047	1047
Arnhem	8	78	112	116	129	205	155
Perth	614	766	1009	1219	1216	1255	1264
Kimberleys	12	10	10	10	9	8	6
Connair	17	41	50	73	88	118	68
AUSTRALIA	9585	16722	22151	27301	29748	30767	26857

(a) For description of regions see pages 17, 18 and 19.

NOTE: Certain figures may not add due to rounding.

large traffic volumes recorded growth rates that were less than the industry total: Sydney (172 per cent), Perth (106 per cent), Tasmania (57 per cent) and Adelaide (46 per cent).

#### SPATIAL ANALYSIS

Airline schedules can be very useful in showing variations in service patterns by the use of maps. One such method which measures the effects of changing areas of influence over time is to consider the exclusive hinterlands of each of the five mainland State Capital cities.<sup>(1)</sup>

Centres connected by flights from the five mainland State capitals, here called foci, are located throughout the continent. Some centres have air services to two (and sometimes more) of these foci and are, therefore, included in the total hinterland of more than one focus. The existence of such centres causes overlapping of the various 'total' hinterland boundaries and it is convenient to treat these multi-focal centres separately. The remaining centres within each hinterland are connected with only one focus and it is possible to draw a line around the farthest centres served and call the enclosed area the 'exclusive' hinterland.

Figure 1 shows the exclusive hinterlands of the five foci at January 1965 and January 1977, with the multi-focal centres at each date also marked. In the twelve-year period the number of multi-focal centres declined by nearly half from 25 to 11. No new multifocal centres were added in the period<sup>(2)</sup>. For all five

- 
- (1) This technique is described in detail by the author at five yearly intervals from January 1945 to January 1965 in 'The geography of Australian internal air passenger services', Unpublished Ph.D. thesis, ANU, 1968. Details of the exclusive hinterlands at January 1952 and January 1962 appear in an article by the author entitled 'The changing role of Sydney in Australia's air transport', Australian Geographical Studies, Vol. 1, No. 1, April 1963.
- (2) Maroochydore, north of Brisbane, appears as a multi-focal centre but in January 1977 received air services only from Sydney.

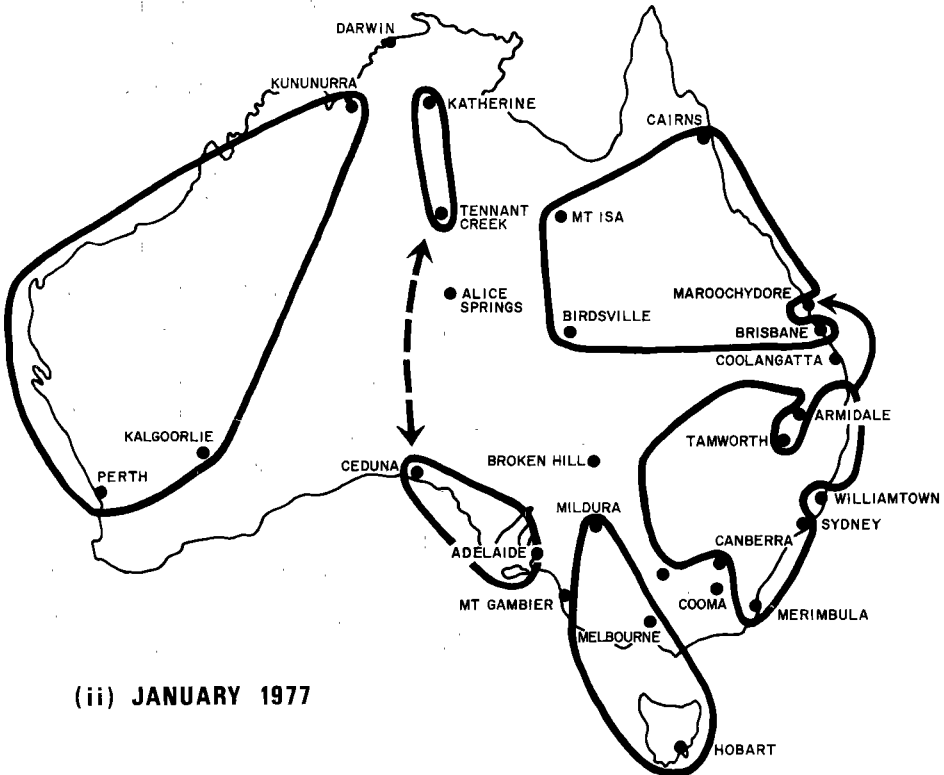
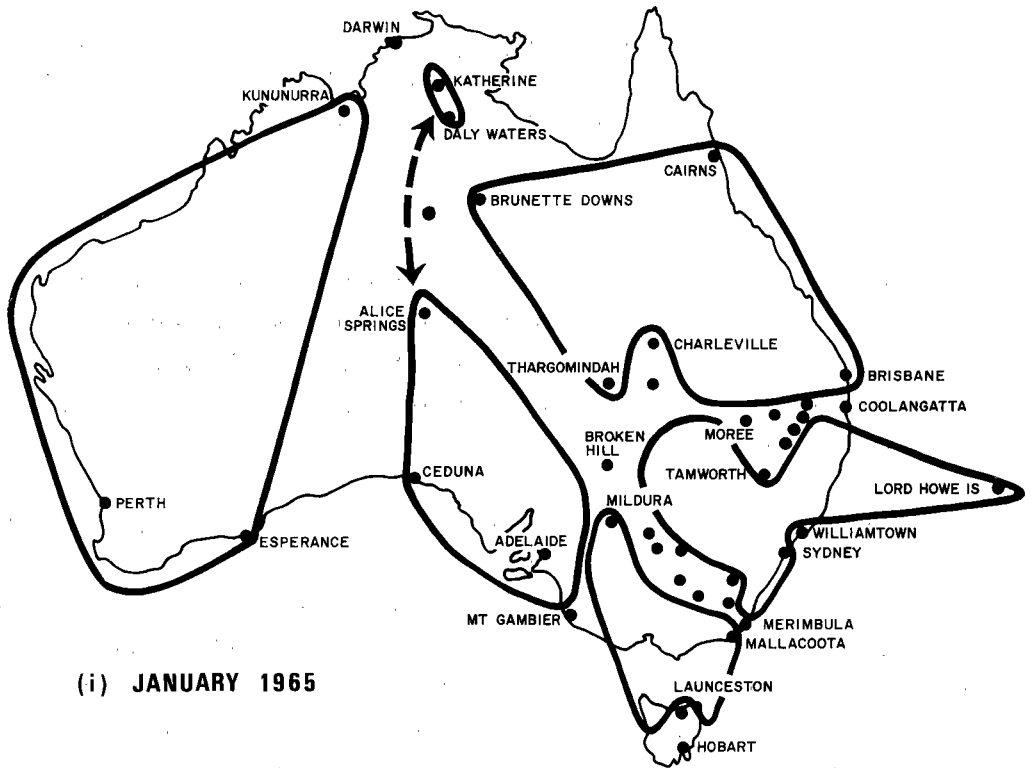


FIG.1 EXCLUSIVE HINTERLANDS AND MULTI-FOCAL CENTRES

exclusive hinterlands there has been considerable movements in the boundaries over the twelve-year period. These changes can be summarised as follows:

Perth A contraction in the southern boundary has occurred because airline services no longer call at Albany, Norseman and Esperance<sup>(1)</sup>.

Adelaide This hinterland, which is in two parts, has shown an expansion in the size of the Northern Territory part to include Katherine and Tennant Creek but, at the same time, there has been a very considerable contraction of the southern part around Adelaide.

Melbourne This hinterland on the mainland has contracted to exclude Gippsland centres but, in Tasmania, has expanded to embrace the whole of the island.

Sydney The main change has been a contraction of the eastern boundary due to the cessation of airline services to Lord Howe Island. There has been a northwards expansion to include Maroochydore.

Brisbane Contractions in the Brisbane exclusive hinterland boundary were caused by Maroochydore becoming linked solely to Sydney, and by the withdrawal of services from Mount Isa into the Northern Territory. A straightening of the southern boundary occurred because of the cessation of flights from Sydney to Charleville and Cunnamulla.

It must be noted that if the commuter operations in January 1977 had have been included, the limits of the exclusive hinterlands at that date would more closely have resembled the January 1965 boundaries<sup>(2)</sup>.

---

(1) These centres are currently being served by a commuter operator.

(2) There were no commuter services prior to 1 July 1967.

## OBSERVATIONS

The above examination shows that the period from January 1965 to January 1976 was for the airlines one of growth, followed by a reduction in services to January 1977. The overall traffic increase during the twelve-year period was substantial with most of the growth occurring on the busier routes. At the same time there has been a marked contraction of the route network with airline services being withdrawn from many of the smaller centres. These changes were brought about by the introduction of larger and more economical aircraft (in terms of seat kilometre costs) which could be used only where appreciable traffic volumes were available and where airports of adequate standard existed. Many of the centres which lost airline services during the period are now served by commuter operators using aircraft types much smaller than those of the airlines.

Throughout the period the dominant position of the two interstate airlines was maintained, a feature of the working of Australia's 'two-airline policy'. The end of the period saw four aircraft types doing most of the work, these being the Boeing 727, DC9 and Fellowship jets, and the Friendship prop-jet.

The analysis of airline timetable data covered in this paper provides a speedy and efficient way of measuring changes sooner than they could be revealed by actual statistics.

## ANNEX A

### DATA PROCESSING

This annex sets out details of the manner in which the basic data was extracted from the airline timetables, summarised and used to prepare statistical tables included in this Paper. An outline of the steps followed is set out in Figure A.1 and more detailed information on the key aspects is described below.

#### EXTRACTION OF DATA FROM TIMETABLES

From earlier studies of the airline industry an understanding was gained of the existing pattern of services and the aircraft types used. It was thus possible to conceive a regional framework of services considered adequate for the purposes of this study. For each airline a series of diagrams were drawn showing for each airline and aircraft type used the linkage of airports (or stages) flown in each region.

The flights listed in the airline timetable were carefully perused with regard to the desired regional groupings and at the same time all duplication of flights between the various tables in the timetable were noted so that any particular flight would be counted only once. For each aircraft type the flights in both directions over each stage were counted and added to the diagram in the appropriate place. Figure A.2 is a representative diagram showing TAA Friendship flights on the Queensland Coast in January 1977.

It is essential to check that the total number of flights over stages appearing in each table of the airline timetable and the total number of flights on the diagram agree. It is also necessary to count the number of aircraft movements through each airport on each diagram and to ensure that the total of movements equals twice the number of flights. Another check on the arithmetical accuracy of the extraction is to see that the number of movements through each airport is an even number. This is not always the

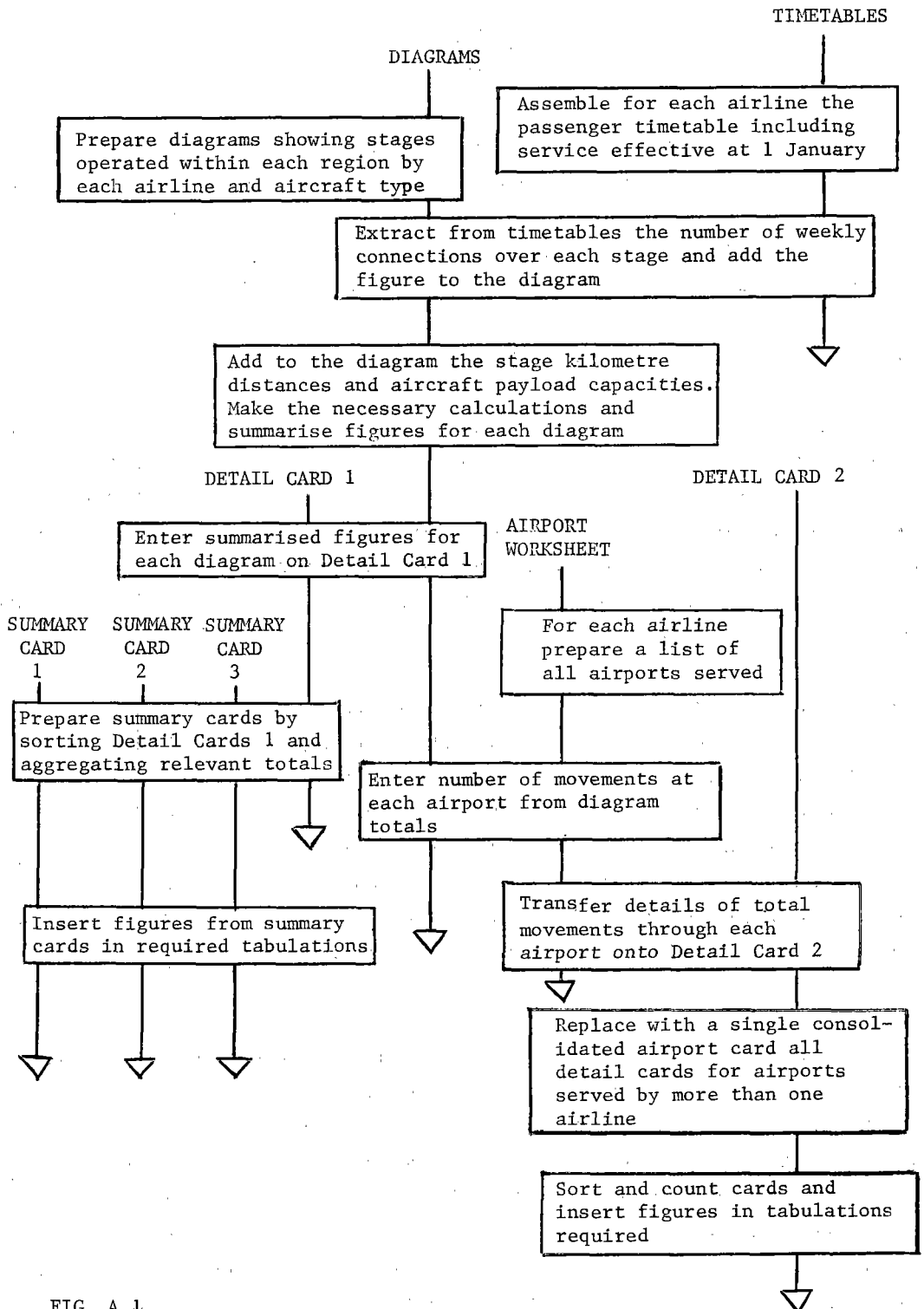
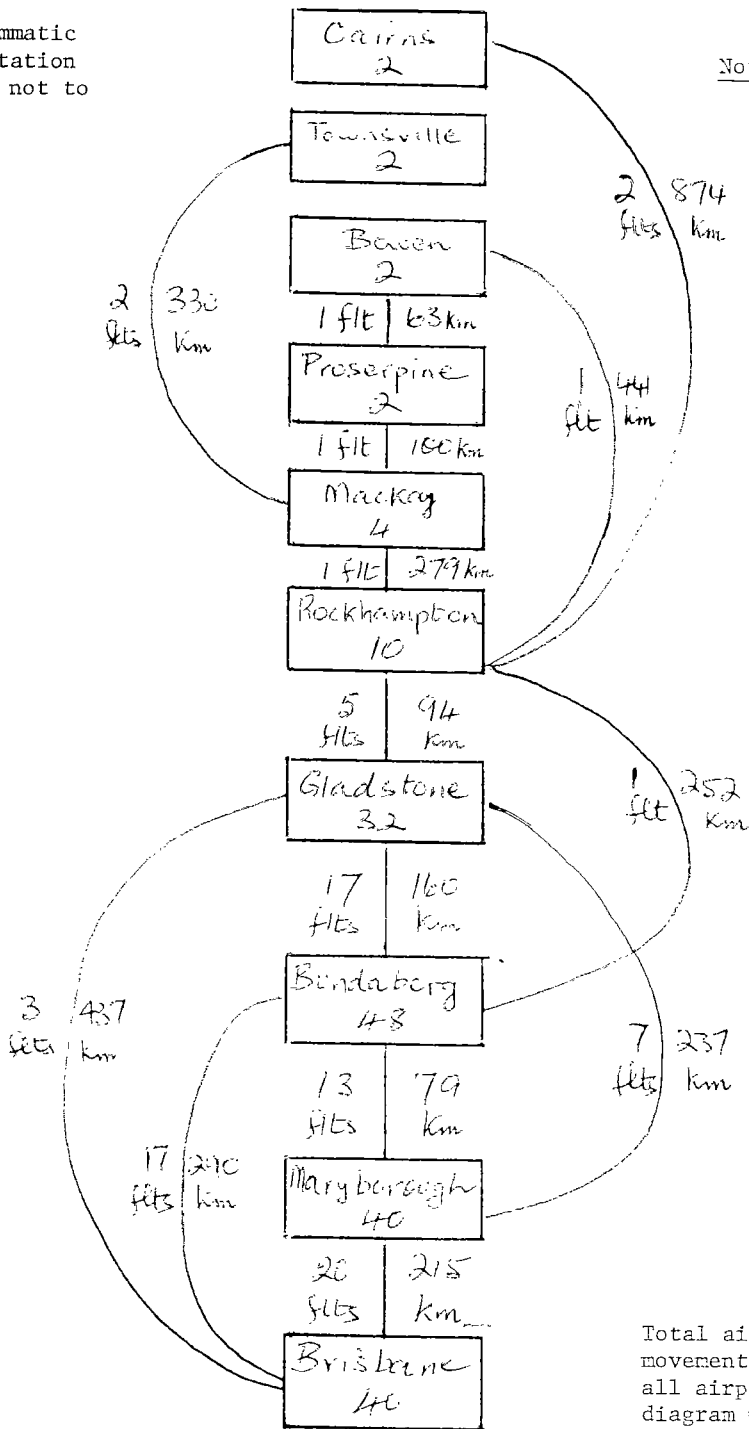


FIG. A.1  
PROCEDURES FOLLOWED IN PROCESSING AIRLINE TIMETABLE DATA

Diagrammatic presentation only - not to scale



Note: Numbers beneath airport name indicate the total number of aircraft movements scheduled through the airport

Total aircraft movements through all airports in diagram = 182

FIG. A.2 - TRANS-AUSTRALIA AIRLINES QUEENSLAND COAST FRIENDSHIP SERVICES:  
WEEKLY FLIGHTS SCHEDULED IN JANUARY 1977



case because occasional freighter flights by passenger aircraft and the repositioning flights of passenger aircraft are excluded from passenger timetables; experience reveals the airports where imbalances are likely to occur.

Some flights by Connair are shown in the schedules with optional ports of call. This information can be presented by the airline in two ways:

- (a) by indicating movements through an airport with stated arrival and departure times but with the airport concerned marked as an optional port of call on that particular service;
- (b) by indicating for a particular flight that an airport is an optional port of call but showing no scheduled arrival and departure times.

The practice followed in this study is to include an optional port of call if arrival and departure times are printed in the schedule and to exclude optional airports if times are not specified. The assumption is that if times are shown then the airline has allowed for a call in its scheduling and the probability of an aircraft calling is fairly high.

#### CALCULATION OF SUMMARY STATISTICS FROM DIAGRAM INFORMATION

For each diagram it is necessary to calculate both the total weekly aircraft kilometres flown and, using the accepted payload capacity for the particular type of aircraft, the total payload capacity tonne kilometres provided.

To facilitate the calculation of distances flown it is necessary to insert on the diagram (preferably in different coloured ink) the straight line distance along each stage using distances produced by the Research and Planning Branch of the Department of Transport using the geographical co-ordinates of each airport location. Typical calculations for the representative diagram

CALCULATIONS USING SOURCE DATA SHOWN IN FIG. A.2

Frequency	Stages	Flights	Stage km	Aircraft km
1	5	5	1135	1135
2	2	4	1200	2408
3	1	3	437	1311
5	1	5	94	470
7	1	7	237	1659
13	1	13	79	1027
17	2	34	450	7650
20	1	20	215	4300
	<hr/> 14	<hr/> 91	<hr/> 3851	<hr/> 19960

Aircraft payload capacity tonne km = aircraft km x aircraft payload capacity (tonnes)

$$= 19960 \times 5.0$$

$$= 99800$$

$$= 99.8 \text{ thousand tonne km}$$

FIG. A.3 - TRANS-AUSTRALIA AIRLINES QUEENSLAND COAST FRIENDSHIP SERVICES:  
WEEKLY FLIGHTS SCHEDULED IN JANUARY 1977

(Figure A.2) are set out in Figure A.3. Because of the great number of stages appearing on some diagrams it has been found easier to aggregate the total distance of all stages with a specified flight frequency, and then to multiply this total figure by the frequency.

The aircraft payload capacity in practice depends on a number of factors, the principal one being the extent to which payload is reduced because of fuel load<sup>(1)</sup>. As nearly every individual flight has a unique capacity determination for each stage flown it is quite impractical to attempt to collect these masses of individual data. For a study such as this, sufficiently reliable information can be obtained by using a standard capacity figure for each aircraft type which can be applied to all airlines and through time<sup>(2)</sup>.

The payload capacity figures used in this study are the maximum technical loadings of the particular aircraft type as shown in manufacturers' specification with minimum fuel loads. These maximum technical loadings are expressed in tonnes and, besides the weight of passengers and their baggage, include some allowance for freight.

The payload capacity figures used for the various aircraft types covered in this study are as follows (all being in tonnes):

Boeing 727-200	18.5	Sandringham	4.5
Boeing 727-100	13.1	DC3	2.5
DC9-30	11.8	Sikorsky S61N Helicopter	2.5
DC6B	8.8	Twin Otter	2.0

---

(1) Another determining factor can be temperature. A description of the operational restraints on payload appears in 'The geography of Australian internal air passenger services', Chapter 4.

(2) Small variations in payload capacity of a particular aircraft type which occur over time are not taken into account in this study. The figures used are those currently applicable.

Electra	7.9	Heron	1.6
Fellowship	7.8	Queen Air	1.2
DC4	6.0	Portofino	1.2
Viscount 800	5.6	Twin Bonanza	0.6
Viscount 700	5.1	Cherokee 6	0.5
Friendship	5.0	Travel Air	0.5
Metropolitan	4.8	Cessna 182	0.3

Difficulty arose in respect of those flights scheduled by the interstate airlines as being operated with 'Jet' aircraft, for this term includes two types of Boeing 727 and the DC9. Besides having all three types currently operating on the East Coast routes and both Boeings on the longer routes to Perth and Darwin, the picture is further complicated by the variations in the mix of aircraft that have occurred over the years.

The problem of obtaining 'jet' capacity figures for each route was overcome by obtaining from one of the interstate airlines the average number of weekly flights by each type of jet aircraft over each route in 1974-75. Using the maximum technical loadings listed above, the exact amount of jet payload capacity over each route was calculated for this airline. In order to apply this operating pattern to both interstate airlines, a more generalised mix of aircraft types was drawn up which approximated the total average aircraft capacity figure that was determined over each route for this airline. Care was taken to see that the total payload capacity for all routes derived in this way approximated the total payload capacity that was derived from the actual data supplied by the airline. For years other than 1974-75 the capacity figures were varied by allowing for the numbers of the various types of jet aircraft in service. Table A.1 sets out the jet capacity figures that were used in this study.

TABLE A.1 - ESTIMATES OF PAYLOAD CAPACITIES OF JET AIRCRAFT  
OPERATING INTERSTATE SERVICES <sup>(a)</sup>

(Tonnes)							
Assumed mix of aircraft type and route	January						
	1970	1972	1973	1974	1975	1976	1977
<u>Boeing 727-200 <sup>(b)</sup></u>							
Adelaide-Perth )	13.1	13.1	13.1	13.1	13.1	13.1	13.1
Adelaide-Sydney)							
<u>Weighted average of all Boeing types <sup>(b)</sup></u>							
Perth-Sydney )							
Melbourne-Perth )	13.1	13.1	13.1	14.5	15.5	15.8	15.8
Adelaide-Darwin )							
Brisbane-Darwin )							
<u>Weighted average of all three jet types</u>							
Brisbane-Melbourne )	12.4	12.2	12.2	12.9	13.6	13.8	13.8
Brisbane-Sydney )							
Melbourne-Sydney )							
Adelaide-Melbourne )							
<u>Boeing 727-100</u>							
Melbourne-Coolangatta)							
Sydney-Coolangatta)	13.1	13.1	13.1	13.1	13.1	13.1	13.1
<u>Simple average of Boeing 727-100 and DC9</u>							
Canberra-Melbourne)							
Canberra-Sydney )	12.45	12.45	12.45	12.45	12.45	12.45	12.45
<u>DC9-30</u>							
All Tasmanian routes)							
All Queensland coast routes )	11.8	11.8	11.8	11.8	11.8	11.8	11.8

(a) The only jet type operating in January 1965 was the Boeing 727-100.

(b) Prior to January 1974 the only Boeing type operated was the 727-100.

## MANIPULATION OF DATA

Hand extraction and sorting methods were employed to handle the relatively small number of records used in this study. Using both a system of detailed cards and summary cards, the sorting tasks were simplified and the chance of arithmetical error eliminated. Two detailed cards types were used and every card carried relevant data for all years covered by the study. This was a very valuable check on the information compiled as variations between years were immediately obvious.

Detail Card 1 (Figure A.4a) was used to carry the summary calculations determined for each diagram or airline/aircraft/region combination. The number of airports served shown on this card type was a count of the airports appearing on the relevant diagram. To facilitate later aggregation of information each horizontal line of figures was written in alternating lines of black and red ink. Altogether there were 119 such cards.

The Detail Cards 1 were then sorted and three summary cards were prepared which in turn were all balanced to a single summary card for all airline operations. The three summary cards were:

Summary Card 1 (Figure A.4b): Nine cards were raised, one for each airline.

Summary Card 2 (Figure A.5a): Seventeen cards were raised, one for each aircraft type<sup>(1)</sup>.

The aircraft capacity shown on the card was obtained by dividing the aircraft capacity tonne kilometres by the aircraft kilometres shown on the card; this was used as an arithmetic check.

Summary Card 3 (Figure A.5b): Fifteen cards were raised, one for each region.

---

(1) A consolidated card was raised for all jets operated by TAA and AAA and all Connair types smaller than the Heron (Twin Bonanza, Cherokee 6, Travel Air and Cessna types).

(a)

## DETAIL CARD 1

= 119

TAA	FRIENDSHIP			QUEENSLAND COAST		
65	9	10	85	3643	246	122.9
70	11	23	163	7387	496	247.8
72	9	17	126	5838	352	176.0
73	9	15	155	4667	43.7	218.6
74	9	11	160	3153	36.9	184.7
75	8	8	132	1966	243	121.4
76	8	11	105	3336	240	120.0
77	10	14	91	3851	20.0	99.8
Year	Airports	Stages	Flights	Stage km	Aircraft km ( '000)	Aircraft Capacity tonne km ( '000)

(b)

## SUMMARY CARD 1

= 9

TOTAL TAA	AIR AIRCRAFT TYPES			AIR REGIONS	
65	1211	2422	7.0	5838	4090.5
70	1406	2812	10.2	732.6	7443.1
72	1451	2902	10.9	884.2	9343.1
73	1494½	2989	11.1	906.0	10029.7
74	1645	3290	12.3	1002.9	12381.2
75	1731	3462	12.8	1059.6	13606.9
76	1687	3374	13.0	1080.3	14005.4
77	1452	2904	13.0	934.9	12151.6
Year	Flights	Aircraft Movements	Aircraft Capacity (Tonnes)	Aircraft km ( '000)	Aircraft Capacity tonne km ( '000)

FIG. A.4

(a)

## SUMMARY CARD 2

= 17

ALL FRIENDSHIP FLIGHTS	ALL AIRLINES	ALL REGIONS
65	S.O	371.4 1857.4
70	S.O	549.3 2746.0
72	S.O	474.4 2371.3
73	S.O	475.3 2376.1
74	S.O	515.2 2576.4
75	S.O	497.6 2487.8
76	S.O	512.0 2560.3
77	S.O	453.0 2267.2

Year

Aircraft  
Capacity  
(Tonnes)Aircraft km  
( '000)Aircraft  
Capacity tonne  
km ( '000)

(b)

## SUMMARY CARD 3

= 15

ALL QUEENSLAND COAST FLIGHTS	ALL AIRLINES	ALL AIRCRAFT TYPES
65		159.8 788.7
70		178.1 1364.1
72		177.0 1571.6
73		216.2 1962.2
74		267.5 2529.8
75		286.3 2968.6
76		284.7 2978.1
77		262.8 2777.7

Year

Aircraft km  
( '000)Aircraft  
Capacity tonne  
km ( '000)

FIG. A.5



All figures of aircraft movements through airports were obtained using Detail Card 2 (Figure A.6a). These cards were not raised direct from the diagrams but via an airport worksheet which was compiled for each airline. This worksheet listed all airports served and the figures shown on all diagrams were transferred to the worksheet and aggregated for each airport. It was the figure for each airport listed on this worksheet, dissected by aircraft type, which was transferred to Detail Card 2. The use of the intermediate airport worksheet ensured that the total number of movements through all airports by an airline agreed exactly with the total number of movements on all diagrams recorded for that same airline. Altogether, some 591 Detail Cards 2 were raised.

Tabulations appearing in Annex C were prepared from decks of Detail Card 2 for each airline. However, as some tabulations did not require details for individual airlines (Tables 7 and 8) an unduplicated deck of airport cards was produced by withdrawing all cards for airports which were served by more than one airline and replacing them in the card deck with a consolidated card for each of these same airports (Figure A.6b). There were 482 cards in this unduplicated airport card deck.

(a)

## DETAIL CARD 2

= 446

MARYBOROUGH								THH
<u>1965</u>	<u>1970</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	
28f	38f	42f	46f	64f	72f	58f	40f	
2c		2c	4c					
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	
30	38	44	50	64	72	58	40	

f = Friendship

c = DC3

t = Twin Otter

(b)

## CONSOLIDATED AIRPORT CARD

= 36

MARYBOROUGH								MYB	(SLD)
	<u>1965</u>	<u>1970</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	
THH	30	38	44	50	64	72	58	40	
AAH	-	40	40	40	62	70	60	44	
SLH	56	-	-	-	-	-	-	-	
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	
	86	80	84	90	126	142	118	84	

FIG. A.6

ANNEX B  
DETAILED AIRLINE FLIGHT DATA

This Annex shows all details of the airline flights which have been aggregated into the statistical tables set out in this Paper. A description of the regions into which services have been grouped is set out in pages 17 to 19.

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TABLE B.1 - PASSENGER SERVICES: TRANS-AUSTRALIA AIRLINES

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
<u>Boeing 727</u>			
Intercapitals	5	93.7	1228.0
<u>Douglas DC6B</u>			
Intercapitals	2	6.0	52.6
Tasmania	3	22.0	193.7
<u>Electra</u>			
Intercapitals	5	109.5	864.7
Tasmania	2	8.7	68.4
<u>Viscount</u>			
Intercapitals	5	79.6	412.8
Sydney	3	13.2	67.1
Tasmania	5	47.2	241.0
Queensland Coast	5	42.7	239.1
Queensland Inland	5	17.8	90.7
Territory	4	10.6	53.9
<u>Friendship</u>			
Intercapitals	3	19.3	96.7
Sydney	3	4.7	23.5
Victoria	3	6.7	33.6
Tasmania	2	5.3	26.4
Queensland Coast	9	24.6	122.9
Queensland Inland	20	28.4	142.0
Brisbane South	2	0.4	1.8
Territory	8	13.6	68.1
<u>Douglas DC3</u>			
Queensland Coast	3	1.1	2.7
Queensland Inland	14	12.9	32.3
Territory	2	0.5	1.2
Channel/Gulf country	50	6.9	17.2
<u>Queen Air</u>			
Tasmania	7	6.0	7.2
Queensland Coast	5	2.4	2.9
TOTAL	100	583.8	4090.5

TABLE B.1 - PASSENGER SERVICES: TRANS-AUSTRALIA AIRLINES (CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1970			
<u>Boeing 727/DC9</u>			
Intercapitals	5	394.9	4971.4
Sydney	2	3.4	40.1
Victoria	2	9.3	109.9
Tasmania	3	16.8	201.0
Queensland Coast	5	37.0	430.7
Queensland Inland	3	14.6	191.5
Territory	3	10.5	130.8
<u>Electra</u>			
Intercapitals	4	18.1	143.0
Sydney	2	10.9	85.8
Tasmania	3	37.8	298.8
<u>Viscount</u>			
Intercapitals	3	22.7	127.1
Tasmania	3	8.0	45.0
<u>Friendship</u>			
Intercapitals	4	5.4	26.9
Sydney	3	4.7	23.5
Victoria	3	6.7	33.6
Tasmania	3	14.1	70.3
Queensland Coast	11	49.6	247.8
Queensland Inland	19	27.2	135.9
Brisbane South	2	0.4	1.8
Arnhem	3	4.1	20.6
Territory	8	11.7	58.4
<u>Twin Otter</u>			
Queensland Coast	7	3.2	6.4
Queensland Inland	21	10.8	21.5
Territory	2	0.5	1.0
Channel/Gulf country	49	10.2	20.3
TOTAL	100	732.6	7443.1
JANUARY 1973			
<u>Boeing 727/DC9</u>			
Intercapitals	5	548.2	6850.7
Sydney	2	19.0	249.1
Victoria	2	13.3	174.2
Tasmania	3	41.5	490.2
Queensland Coast	5	65.8	775.9
Queensland Inland	3	29.2	382.6
Territory	3	28.9	378.4

TABLE B.1 - PASSENGER SERVICES: TRANS-AUSTRALIA AIRLINES (CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1973 (CONTD).			
<u>Friendship</u>			
Intercapitals	4	6.5	32.7
Sydney	3	4.7	23.5
Victoria	3	6.7	33.6
Tasmania	4	29.1	145.5
Queensland Coast	9	43.7	218.6
Queensland Inland	16	25.0	124.8
Brisbane South	2	0.4	1.8
Arnhem	4	6.5	32.7
Territory	7	13.4	67.2
<u>Twin Otter</u>			
Queensland Coast	7	1.7	3.5
Queensland Inland	17	12.2	24.3
Channel/Gulf Country	49	10.2	20.4
TOTAL	96	906.0	10029.7
JANUARY 1974			
<u>Boeing 727/DC9</u>			
Intercapitals	6	603.3	8455.7
Sydney	4	25.6	335.9
Victoria	2	21.3	278.8
Tasmania	3	57.1	673.4
Queensland Coast	5	88.1	1039.9
Queensland Inland	3	32.4	469.1
Territory	3	28.9	418.8
<u>Friendship</u>			
Intercapitals	3	11.3	56.6
Sydney	3	8.3	41.3
Victoria	3	9.3	46.4
Tasmania	3	25.7	128.7
Queensland Coast	9	36.9	184.7
Queensland Inland	21	27.7	138.8
Brisbane South	2	0.7	3.7
Arnhem	4	5.4	27.1
Territory	4	13.5	67.4
<u>Twin Otter</u>			
Queensland Coast	4	1.1	2.2
Queensland Inland	8	6.3	12.7
TOTAL	49	1002.9	12381.2

TABLE B.1 - PASSENGER SERVICES: TRANS-AUSTRALIA AIRLINES (CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1975			
<u>Boeing 727/DC9</u>			
Intercapitals	6	637.4	9284.6
Sydney	3	28.5	373.4
Victoria	2	16.0	209.1
Tasmania	3	63.0	743.3
Queensland Coast	5	113.5	1339.3
Queensland Inland	3	35.0	542.2
Brisbane South	2	0.1	1.1
Territory	3	28.9	447.7
<u>Friendship</u>			
Intercapitals	3	6.1	30.7
Sydney	3	6.3	31.7
Victoria	3	9.3	46.4
Tasmania	3	32.9	164.5
Queensland Coast	8	24.3	121.4
Queensland Inland	21	31.4	157.2
Brisbane South	2	0.6	2.8
Arnhem	3	5.7	28.3
Territory	4	13.9	69.7
<u>Twin Otter</u>			
Queensland Coast	4	1.3	2.7
Queensland Inland	4	5.4	10.8
TOTAL	47	1059.6	13606.9
JANUARY 1976			
<u>Boeing 727/DC9</u>			
Intercapitals	6	638.8	9397.2
Sydney	4	31.1	407.3
Victoria	2	21.3	278.8
Tasmania	3	68.3	805.6
Queensland Coast	5	113.3	1337.0
Queensland Inland	3	40.2	634.6
Territory	3	28.9	456.4
<u>Friendship</u>			
Intercapitals	2	1.9	9.4
Sydney	3	7.7	38.5
Victoria	3	11.1	55.4
Tasmania	3	33.0	165.2
Queensland Coast	8	24.0	120.0
Queensland Inland	20	27.9	139.5
Brisbane South	2	0.7	3.7
Arnhem	3	17.4	86.9
Territory	4	13.4	67.2

TABLE B.1 - PASSENGER SERVICES: TRANS-AUSTRALIA AIRLINES (CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1976 (CONTD).			
<u>Twin Otter</u>			
Queensland Coast	4	1.3	2.7
TOTAL	44	1080.3	14005.4
JANUARY 1977			
<u>Boeing 727/DC9</u>			
Intercapitals	6	551.3	8166.6
Sydney	2	14.9	195.7
Victoria	2	13.3	174.2
Tasmania	3	65.8	776.2
Queensland Coast	5	108.7	1283.1
Queensland Inland	3	31.8	503.0
Territory	3	28.9	456.4
<u>Friendship</u>			
Intercapitals	2	0.5	2.4
Sydney	3	7.7	38.5
Victoria	3	11.6	57.8
Tasmania	3	23.8	119.2
Queensland Coast	10	20.0	99.8
Queensland Inland	21	30.5	152.4
Brisbane South	2	0.7	3.7
Arnhem	3	10.4	52.1
Territory	4	13.4	67.2
<u>Twin Otter</u>			
Queensland Coast	4	1.6	3.3
TOTAL	45	934.9	12151.6



TABLE B.2 - PASSENGER SERVICES: ANSETT AIRLINES OF AUSTRALIA

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
<u>Boeing 727</u>			
Intercapitals	5	93.7	1228.0
<u>Douglas DC6B</u>			
Intercapitals	2	6.0	52.6
Tasmania	3	32.0	281.2
<u>Electra</u>			
Intercapitals	5	110.4	872.0
Tasmania	2	8.7	68.4
<u>Viscount</u>			
Intercapitals	5	77.4	418.3
Sydney	3	13.9	69.7
Victoria	4	5.5	28.1
Tasmania	5	32.6	172.8
Queensland Coast	5	42.1	236.0
Queensland Inland	4	8.9	49.7
Brisbane South	2	0.1	0.5
Adelaide	2	4.1	20.8
Territory	4	10.6	53.9
<u>Friendship</u>			
Intercapitals	3	15.6	78.0
Victoria	4	4.8	24.0
Tasmania	7	17.0	85.0
Queensland Coast	8	20.8	104.2
Cape York	3	3.4	17.2
Gulf country	3	1.0	5.2
<u>Douglas DC3</u>			
Victoria	19	24.2	60.5
Tasmania	4	1.6	4.1
Cape York	5	3.1	7.7
Gulf country	13	1.8	4.5
<u>Piaggio Portofino</u>			
Queensland Coast	3	1.7	2.1
TOTAL	63	541.0	3944.5

TABLE B.2 - PASSENGER SERVICES: ANSETT AIRLINES OF AUSTRALIA

(CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1970			
<u>Boeing 727/DC9</u>			
Intercapitals	5	390.6	4919.4
Sydney	2	3.4	40.1
Victoria	2	9.3	109.9
Tasmania	3	15.2	182.8
Queensland Coast	5	36.5	430.7
Queensland Inland	3	14.6	191.5
Territory	3	10.5	130.8
<u>Electra</u>			
Intercapitals	4	17.7	139.6
Sydney	2	10.9	85.8
Tasmania	3	37.2	294.2
<u>Viscount</u>			
Intercapitals	3	24.6	137.6
Tasmania	3	5.5	30.7
<u>Friendship</u>			
Intercapitals	2	0.9	4.7
Victoria	10	23.2	115.8
Tasmania	7	24.3	121.7
Queensland Coast	11	47.6	238.1
Queensland Inland	18	14.2	71.0
Cape York	6	13.0	64.9
Arnhem	3	4.1	20.6
Adelaide	2	4.5	22.3
Territory	8	16.2	81.0
<u>S61N Helicopter</u>			
Queensland Coast	6	4.2	10.4
TOTAL	62	728.2	7443.6

JANUARY 1973

<u>Boeing 727/DC9</u>			
Intercapitalis	5	541.8	6774.6
Sydney	2	18.3	240.2
Victoria	2	16.0	209.1
Tasmania	3	40.6	479.1
Queensland Coast	5	66.6	786.0
Queensland Inland	3	32.3	423.3
Brisbane South	2	0.1	1.1
Territory	3	26.3	343.9

TABLE B.2 - PASSENGER SERVICES: ANSETT AIRLINES OF AUSTRALIA

(CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1973 (CONTD).			
<u>Friendship</u>			
Intercapitals	4	6.5	32.7
Victoria	6	12.8	64.0
Tasmania	6	37.0	184.9
Queensland Coast	9	32.9	164.4
Cape York	6	14.5	72.5
Arnhem	2	4.4	21.8
Adelaide	2	4.5	22.3
Territory	7	18.8	94.0
<u>S61N Helicopter</u>			
Queensland Coast	6	5.5	13.8
TOTAL	42	878.9	9927.7
JANUARY 1974			
<u>Boeing 727/DC9</u>			
Intercapitals	6	605.7	8477.9
Sydney	3	22.5	294.1
Victoria	2	18.6	243.9
Tasmania	3	56.5	666.4
Queensland Coast	5	89.6	1057.2
Queensland Inland	3	32.3	468.6
Territory	3	28.9	418.8
<u>Friendship</u>			
Intercapitals	4	7.9	39.5
Victoria	6	12.0	60.0
Tasmania	6	39.3	196.4
Queensland Coast	9	46.4	232.2
Cape York	6	14.5	72.5
Arnhem	2	4.4	21.8
Adelaide	2	4.5	22.3
Territory	5	16.1	80.6
<u>S61N Helicopter</u>			
Queensland Coast	6	5.4	13.6
TOTAL	40	1004.6	12365.8

TABLE B.2 - PASSENGER SERVICES: ANSETT AIRLINES OF AUSTRALIA

(CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1975			
<u>Boeing 727/DC9</u>			
Intercapitals	6	633.5	9225.0
Sydney	3	27.3	357.7
Victoria	2	16.0	209.1
Tasmania	3	64.2	757.4
Queensland Coast	5	114.7	1354.0
Queensland Inland	3	35.0	542.2
Territory	3	28.9	447.7
<u>Friendship</u>			
Intercapitals	3	2.5	12.6
Victoria	5	13.4	66.8
Tasmania	4	36.3	181.6
Queensland Coast	9	28.0	140.1
Cape York	6	15.7	78.7
Arnhem	2	4.4	21.8
Adelaide	2	5.6	27.8
Territory	5	16.1	80.6
<u>S61N Helicopter</u>			
Queensland Coast	6	4.5	11.1
TOTAL	39	1046.1	13514.2

JANUARY 1976

<u>Boeing 727/DC9</u>			
Intercapital	6	640.1	9448.8
Sydney	3	25.9	339.0
Victoria	2	31.9	418.2
Tasmania	3	68.0	802.5
Queensland Coast	5	117.4	1385.6
Queensland Inland	3	40.2	634.6
Territory	3	28.9	456.4
<u>Friendship</u>			
Intercapital	2	0.9	4.7
Victoria	5	13.7	68.6
Tasmania	4	35.8	179.0
Queensland Coast	8	24.5	122.3
Cape York	6	17.4	86.9
Arnhem	3	12.1	60.4
Territory	4	13.5	67.4

TABLE B.2 - PASSENGER SERVICES: ANSETT AIRLINES OF AUSTRALIA  
(CONTD) .

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1976 (CONTD) .			
<u>S61N Helicopter</u>			
Queensland Coast	6	4.2	10.5
TOTAL	39	1074.5	14084.9
JANUARY 1977			
<u>Boeing 727/DC9</u>			
Intercapitals	6	551.3	8166.6
Sydney	2	14.9	195.7
Victoria	2	18.6	243.9
Tasmania	3	65.8	776.4
Queensland Coast	5	108.7	1283.1
Queensland Inland	3	31.8	502.4
Territory	3	28.9	456.4
<u>Friendship</u>			
Intercapitals	2	0.9	4.7
Victoria	5	13.7	68.6
Tasmania	4	26.9	134.6
Queensland Coast	9	19.6	97.9
Cape York	4	19.1	95.6
Arnhem	3	9.1	45.6
Territory	4	13.5	67.4
<u>S61N Helicopter</u>			
Queensland Coast	6	4.2	10.5
TOTAL	37	927.0	12149.4

TABLE B.3 - PASSENGER SERVICES: ANSETT AIRLINES OF NEW SOUTH WALES

Aircraft type	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
Douglas DC4	4	14.3	86.0
Friendship	22	55.3	276.6
Sandringham	2	6.2	27.9
Douglas DC3	18	25.1	62.7
TOTAL	35	100.9	453.2
JANUARY 1970			
Friendship	23	92.8	463.8
Sandringham	2	6.2	27.9
Douglas DC3	2	0.4	0.9
TOTAL	24	99.4	492.6
JANUARY 1973			
Friendship	20	84.7	423.4
Sandringham	2	6.2	27.9
TOTAL	21	90.9	451.3
JANUARY 1974			
Friendship	20	94.9	474.6
Sandringham	2	6.2	27.9
TOTAL	21	101.1	502.5
JANUARY 1975			
Friendship	20	104.6	522.9
Heron	2	6.2	9.9
TOTAL	21	110.8	532.8
JANUARY 1976			
Friendship	20	107.4	537.1
JANUARY 1977			
Friendship	17	94.8	473.8

NOTE: All flights are within Sydney Region.

TABLE B.4 - PASSENGER SERVICES: QUEENSLAND AIRLINES, (a)  
JANUARY 1965

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
<u>Friendship</u>			
Queensland Coast	5	10.4	52.1
Queensland Inland	11	4.5	22.5
<u>Douglas DC3</u>			
Queensland Coast	5	7.6	19.0
Queensland Inland	16	10.5	26.3
<u>Piaggio Portfino</u>			
Queensland Coast	5	6.4	7.7
Queensland Inland	5	4.0	4.8
TOTAL	23	43.4	132.4

(a) After November 1966 the operations of Queensland Airlines were incorporated with those of Ansett Airlines of Australia.

TABLE B.5 - PASSENGER SERVICES: ANSETT AIRLINES OF SOUTH  
AUSTRALIA

Aircraft type	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
Metropolitan	5	11.5	55.1
Douglas DC3	11	13.4	33.4
Piaggio Portofino	5	4.2	5.0
TOTAL	15	29.1	93.5
JANUARY 1970			
Friendship	8	5.6	27.9
Metropolitan	5	9.2	44.0
Douglas DC3	6	2.5	6.3
TOTAL	8	17.3	78.2
JANUARY 1973			
Friendship	8	21.3	106.3
JANUARY 1974			
Friendship	6	24.8	124.1
JANUARY 1975			
Friendship	6	25.8	128.9
JANUARY 1976			
Friendship	7	33.9	169.5
JANUARY 1977			
Friendship	7	33.2	165.8

NOTE: All flights are within Adelaide Region.



TABLE B.6 - PASSENGER SERVICES: MACROBERTSON MILLER AIRLINES

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
<u>Friendship</u>			
Perth	23	104.3	521.3
<u>Douglas DC3</u>			
Perth	46	37.2	93.1
Arnhem	7	3.1	7.8
Kimberleys	43	4.6	11.6
TOTAL	96	149.2	633.8
JANUARY 1970			
<u>Fellowship</u>			
Perth	5	40.7	317.6
<u>Friendship</u>			
Perth	18	89.7	448.7
Arnhem	3	7.4	36.8
<u>Twin Otter</u>			
Kimberleys	20	4.9	9.8
TOTAL	38	142.7	812.9
JANUARY 1973			
<u>Fellowship</u>			
Perth	13	128.8	1004.8
Arnhem	3	7.4	57.3
<u>Twin Otter</u>			
Perth	4	2.1	4.3
Kimberleys	21	5.0	9.9
TOTAL	37	143.3	1076.3
JANUARY 1974			
<u>Fellowship</u>			
Perth	13	155.2	1210.5
Arnhem	3	8.6	67.4
<u>Twin Otter</u>			
Perth	5	4.4	8.7
Kimberleys	21	5.0	9.9
TOTAL	37	173.2	1296.5

TABLE B.6 - PASSENGER SERVICES: MACROBERTSON MILLER AIRLINES

(CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1975			
<u>Fellowship</u>			
Perth	13	154.8	1207.5
Arnhem	3	10.1	78.9
<u>Twin Otter</u>			
Perth	5	4.1	8.2
Kimberleys	20	4.7	9.4
TOTAL	36	173.7	1304.0
JANUARY 1976			
<u>Fellowship</u>			
Perth	13	159.5	1243.9
Arnhem	3	7.4	57.3
<u>Twin Otter</u>			
Perth	7	5.6	11.1
Kimberleys	14	4.2	8.3
TOTAL	30	176.7	1320.6
JANUARY 1977			
<u>Fellowship</u>			
Perth	13	162.0	1263.8
Arnhem	3	7.4	57.3
<u>Twin Otter</u>			
Kimberleys	9	3.2	6.4
TOTAL	23	172.6	1327.5

TABLE B.7 - PASSENGER SERVICES: EAST-WEST AIRLINES

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
<u>Friendship</u>			
Sydney	14	30.5	152.4
Brisbane South	3	0.8	3.9
<u>Douglas DC3</u>			
Sydney	16	23.7	59.3
Brisbane South	6	1.7	4.2
TOTAL	22	56.7	219.8
JANUARY 1970			
<u>Friendship</u>			
Sydney	17	80.6	403.2
Brisbane South	4	1.3	6.7
TOTAL	19	81.9	409.9
JANUARY 1973			
<u>Friendship</u>			
Sydney	16	100.3	501.5
Brisbane South	3	1.6	7.9
TOTAL	17	101.9	509.4
JANUARY 1974			
<u>Friendship</u>			
Sydney	17	110.0	549.8
Brisbane South	3	1.6	7.9
TOTAL	18	111.6	557.7
JANUARY 1975			
<u>Friendship</u>			
Sydney	17	113.1	565.4
Brisbane South	3	1.6	7.9
TOTAL	18	114.7	573.3

TABLE B.7 - PASSENGER SERVICES: EAST-WEST AIRLINES (CONTD).

Aircraft type and region	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1976			
<u>Friendship</u>			
Sydney	17	114.1	570.7
Brisbane South	3	1.6	7.9
TOTAL	18	115.7	578.6
JANUARY 1977			
<u>Friendship</u>			
Sydney	17	103.2	516.2
Brisbane South	3	0.8	3.9
TOTAL	18	104.0	520.1

TABLE B.8 - PASSENGER SERVICES: CONNAIR PTY LTD

Aircraft type	Airports served (Number)	Scheduled weekly -	
		Aircraft km ('000)	Payload capacity tonne km ('000)
JANUARY 1965			
Heron	18	6.5	10.4
Smaller types	122	16.0	7.0
TOTAL	127	22.5	17.4
JANUARY 1970			
Heron	26	16.2	25.9
Smaller types	105	25.9	15.3
TOTAL	112	42.1	41.2
JANUARY 1973			
Heron	27	25.2	40.3
Smaller types	91	16.8	9.6
TOTAL	105	42.0	49.9
JANUARY 1974			
Douglas DC3	10	9.7	24.3
Heron	39	27.8	44.5
Smaller types	52	7.7	4.2
TOTAL	93	45.2	73.0
JANUARY 1975			
Douglas DC3	21	18.0	45.1
Heron	38	24.7	39.5
Smaller types	38	5.4	3.2
TOTAL	86	48.1	87.8
JANUARY 1976			
Douglas DC3	26	21.3	53.3
Heron	30	37.9	60.6
Smaller types	55	6.3	3.8
TOTAL	86	65.5	117.7
JANUARY 1977			
Douglas DC3	20	16.5	41.2
Heron	11	16.0	25.5
Smaller types	27	2.9	1.7
TOTAL	54	35.4	68.4

## ANNEX C

### DETAILED DATA OF AIRCRAFT MOVEMENTS THROUGH AIRPORTS

This Annex sets out numbers of aircraft movements through all individual airports which have been aggregated into statistical tables set out in this Paper. Numbers of movements by each aircraft type are available but not included in this Annex.

A landing and take-off at an airport counts as two movements. In the tables in this Annex, a figure of 1 aircraft movement per week indicates that the airport received a fortnightly service, and a figure of  $\frac{1}{2}$  aircraft movement a four-weekly service.

It should be noted that a discontinuity of service at an airport revealed in a particular table may be explained by the service to that airport having been taken over by another airline or a commuter operator.

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TABLE C.1 - AIRCRAFT MOVEMENTS: TRANS-AUSTRALIA AIRLINES

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Adelaide SA	101	138	143	146	152	155	152
Albury NSW	28	28	28	38	38	46	48
Alice Springs NT	18	18	30	32	32	32	32
Aramac Qld	4	6	2	2	2	2	4
Arrabury Qld	2	2	2	-	-	-	-
Augustus Downs Qld	2	2	2	-	-	-	-
Ayr Qld	12	6	4	-	-	-	-
Bedourie Qld	2	4	4	-	-	-	-
Betoota Qld	2	2	2	-	-	-	-
Birdsville Qld	3	5	5	4	4	4	4
Blackall Qld	12	14	10	12	12	12	12
Boulia Qld	4	4	4	-	-	-	-
Bowen Qld	16	8	4	6	8	8	10
Brighton Downs Qld	1	1	1	-	-	-	-
Brisbane Qld	191	246	327	372	402	360	312
Broken Hill NSW	1	1	1	-	-	-	-
Brunette Downs NT	4	4	4	4	-	-	-
Bundaberg Qld	-	32	48	54	64	48	48
Burketown Qld	2	4	4	-	-	-	-
Cairns Qld	26	38	42	56	56	60	50
Camooeal Qld	4	4	4	4	-	-	-
Canberra ACT	134	166	156	204	192	208	160
Canobie Qld	2	2	2	-	-	-	-
Charleville Qld	27	31	23	20	20	18	18
Charters Towers Qld	12	14	4	4	6	6	4
Chinchilla Qld	-	6	4	-	-	-	-
Cloncurry Qld	30	30	30	22	22	22	16
Cluny Qld	2	-	-	-	-	-	-
Coolangatta Qld	22	36	46	64	62	64	48
Cordillo Downs SA	2	2	2	-	-	-	-
Cuddapan Qld	2	2	2	-	-	-	-
Dalby Qld	22	18	12	10	8	-	-
Daly Waters NT	4	2	-	-	-	-	-
Darwin NT	10	12	22	26	30	40	32
Davenport Downs Qld	1	1	1	-	-	-	-
Devonport Tas	48	28	40	40	50	52	32
Diamantina Lakes Qld	1	1	1	-	-	-	-
Doomadgee Mission Qld	2	6	6	-	-	-	-
Durham Downs Qld	2	2	2	-	-	-	-
Durrie Qld	2	2	2	-	-	-	-
Eromanga Qld	2	-	-	-	-	-	-
Gladstone Qld	-	24	40	46	56	32	32
Glengyle Qld	2	2	2	-	-	-	-
Gove NT	-	4	6	6	6	20	12
Gregory Downs Qld	2	2	2	-	-	-	-
Hobart Tas	90	62	44	68	74	78	74
Hughenden Qld	24	26	22	22	22	20	20

TABLE C.1 - AIRCRAFT MOVEMENTS: TRANS-AUSTRALIA AIRLINES (CONTD).

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Iffley Qld	2	2	2	-	-	-	-
Ingham Qld	16	16	-	-	-	-	-
Injune Qld	-	4	-	-	-	-	-
Innaminka SA	2	2	3	-	-	-	-
Innisfail Qld	16	10	-	-	-	-	-
Isisford Qld	4	4	4	4	4	4	4
Julia Creek Qld	18	18	18	16	16	16	16
Jundah Qld	2	2	2	-	-	-	-
Kamileroi Qld	2	2	2	-	-	-	-
Katherine NT	8	12	12	20	18	18	18
Launceston Tas	96	74	68	84	96	78	70
Lawn Hill Qld	1	2	2	-	-	-	-
Leigh Creek SA	14	6	5	-	-	-	-
Longreach Qld	28	20	14	12	12	12	12
Lorraine Qld	2	2	2	-	-	-	-
Mackay Qld	62	76	66	77	74	80	68
Marion Downs Qld	1	1	1	-	-	-	-
Maryborough Qld	30	38	50	64	72	58	40
Melbourne Vic	394	492	546	625	666	685	582
Miles Qld	6	6	4	-	-	-	-
Mitchell Qld	8	8	6	4	4	4	4
Monkira Qld	3	2	2	-	-	-	-
Mooraberrie Qld	2	2	2	-	-	-	-
Morney Qld	2	2	2	-	-	-	-
Mornington Island Qld	1	4	4	-	-	-	-
Mount Isa Qld	34	36	44	38	44	46	44
Muttaborra Qld	4	6	2	2	2	2	4
Nappamerrie Qld	2	2	2	-	-	-	-
Normanton Qld	2	4	4	-	-	-	-
Oakey Qld	20	8	4	-	-	-	-
Oodnadatta SA	8	6	2	-	-	-	-
Orientos Qld	2	2	2	-	-	-	-
Perth WA	24	40	58	62	62	62	56
Proserpine Qld	32	18	12	9	16	16	12
Quilpie Qld	9	10	8	4	4	4	4
Richmond Qld	18	18	14	14	14	14	14
Rockhampton Qld	52	72	80	90	112	100	94
Roma Qld	26	28	22	22	20	-	16
Roseberth Qld	2	1	1	-	-	-	-
Saint Helens Tas	8	-	-	-	-	-	-
Smithton Tas	4	-	-	-	-	-	-
South Galway Qld	2	2	2	-	-	-	-
Springvale Qld	1	1	1	-	-	-	-
Strahan Tas	4	-	-	-	-	-	-
Sydney NSW	348	481	536	603	630	634	510
Tanbar Qld	2	2	2	-	-	-	-
Tara Qld	12	-	-	-	-	-	-



TABLE C.1 - AIRCRAFT MOVEMENTS: TRANS-AUSTRALIA AIRLINES (CONTD).

Airport and State	(Number)						
	Weekly sheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Taroom Qld	10	8	4	-	-	-	-
Tennant Creek NT	14	14	14	22	16	18	16
Thargomindah Qld	1	2	2	-	-	-	-
Thylungra Qld	2	2	2	-	-	-	-
Tibooburra NSW	2	2	2	-	-	-	-
Toowoomba Qld	-	22	26	32	36	-	-
Townsville Qld	87	104	108	140	138	144	122
Williamtown NSW	22	22	22	36	28	32	32
Windorah Qld	6	6	6	4	4	4	4
Winton Qld	12	8	6	4	6	4	6
Wondoola Qld	2	2	2	-	-	-	-
Wynyard Tas	48	28	40	40	50	52	36
ALL PORTS	2422	2812	2989	3290	3462	3374	2904

TABLE C.2 - AIRCRAFT MOVEMENTS: ANSETT AIRLINES OF AUSTRALIA

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Adelaide SA	106	148	152	160	171	160	152
Alice Springs NT	8	20	32	32	32	30	30
Alpha Qld	-	6	-	-	-	-	-
Bairnsdale Vic	6	-	-	-	-	-	-
Barcaldine Qld	-	8	-	-	-	-	-
Brisbane Qld	142	221	292	333	360	348	294
Broken Hill NSW	8	6	-	-	-	-	-
Bundaberg Qld	-	42	49	52	68	50	52
Cairns Qld	42	49	70	74	80	84	76
Canberra ACT	113	134	139	182	162	182	138
Clermont Qld	-	10	-	-	-	-	-
Coen Qld	4	2	2	4	4	2	-
Cooktown Qld	10	10	10	10	12	10	12
Coolangatta Qld	16	28	40	44	48	60	36
Cooma NSW	16	8	6	4	4	4	4
Corryong Vic	6	6	-	-	-	-	-
Croydon Qld	6	-	-	-	-	-	-
Cunnamulla Qld	-	4	-	-	-	-	-
Daly Waters NT	-	2	-	-	-	-	-
Darwin NT	6	12	24	24	26	32	30
Daydream Island Qld	-	10	32	34	28	28	28
Delta Downs Qld	2	-	-	-	-	-	-
Deniliquin NSW	12	-	-	-	-	-	-
Devonport Tas	30	28	44	42	54	46	32
Dirranbandi Qld	-	8	-	-	-	-	-
Dunbar Qld	2	-	-	-	-	-	-
Emerald Qld	-	14	-	-	-	-	-
Flinders Island Tas	12	10	10	10	-	-	-
Gladstone Qld	-	22	29	40	38	28	32
Goondiwindi Qld	-	8	-	-	-	-	-
Gove NT	-	4	4	4	4	8	10
Griffith NSW	6	-	-	-	-	-	-
Hamilton Vic	12	24	24	24	30	32	32
Happy Bay Qld	-	16	20	24	20	18	20
Hay NSW	12	-	-	-	-	-	-
Hayman Island Qld	-	30	50	50	40	38	38
Hobart Tas	74	54	44	64	76	76	74
Ingham Qld	18	8	-	-	-	-	-
Inkerman Qld	2	-	-	-	-	-	-
Innisfail Qld	18	10	-	-	-	-	-
Iron Range Qld	4	2	2	2	2	2	-
Karumba Qld	2	-	-	-	-	-	-
Katherine NT	-	10	20	20	20	20	18
Kerang Vic	4	-	-	-	-	-	-
King Island Tas	22	20	22	22	12	12	12
Koolatah Qld	2	-	-	-	-	-	-
Launceston Tas	140	84	94	102	78	88	80

TABLE C.2 - AIRCRAFT MOVEMENTS: ANSETT AIRLINES OF AUSTRALIA  
(CONTD).

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Leigh Creek SA	-	8	2	-	-	-	-
Longreach Qld	4	6	-	-	-	-	-
Mackay Qld	60	78	84	94	102	120	88
Mallacoota Vic	4	-	-	-	-	-	-
Maryborough Qld	-	46	46	62	70	60	44
Melbourne Vic	476	538	570	657	683	706	608
Merimbula NSW	4	-	-	-	-	-	-
Mildura Vic	22	24	14	14	14	14	14
Miranda Downs Qld	2	-	-	-	-	-	-
Mitchell River Qld	2	-	-	-	-	-	-
Monto Qld	-	12	-	-	-	-	-
Mount Gambier SA	22	24	24	24	30	16	16
Mount Isa Qld	10	12	14	14	24	28	18
Narrandera NSW	6	-	-	-	-	-	-
Nhill Vic	6	-	-	-	-	-	-
Normanton Qld	8	-	-	-	-	-	-
Oodnadatta SA	-	6	2	-	-	-	-
Perth WA	24	40	58	62	62	62	56
Portland Vic	-	12	-	-	-	-	-
Proserpine Qld	20	42	24	28	22	20	20
Rockhampton Qld	44	71	65	84	92	112	92
Rutland Plains Qld	2	-	-	-	-	-	-
Saint George Qld	-	8	-	-	-	-	-
Sale Vic	12	-	-	-	-	-	-
Smithton Tas	4	4	-	-	-	-	-
South Molle Island Qld	-	26	32	34	28	28	28
Swan Hill Vic	4	-	-	-	-	-	-
Sydney NSW	311	442	510	575	594	602	486
Tennant Creek NT	4	12	20	20	20	20	18
Thangool Qld	-	14	-	-	-	-	-
Thursday Island Qld	4	8	8	8	8	10	12
Townsville Qld	66	67	102	123	122	126	100
Vanrook Qld	2	-	-	-	-	-	-
Wagga NSW	12	6	-	-	-	-	-
Warracknabeal Vic	12	-	-	-	-	-	-
Warrnambool Vic	24	24	-	-	-	-	-
Weipa Qld	12	22	28	28	30	32	38
Wrotham Park Qld	2	-	-	-	-	-	-
Wynyard Tas	32	34	48	46	58	48	34
ALL PORTS	2080	2664	2862	3230	3328	3362	2872

TABLE C.3 - AIRCRAFT MOVEMENTS: ANSETT AIRLINES OF NEW SOUTH WALES

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Bathurst NSW	48	-	-	-	-	-	-
Bourke NSW	8	8	6	6	6	6	-
Brewarrina NSW	8	8	6	4	2	2	-
Broken Hill NSW	8	8	8	8	8	8	8
Burren Junction NSW	2	-	-	-	-	-	-
Canberra ACT	25	-	-	-	-	-	-
Casino NSW	14	28	26	28	28	28	28
Charleville Qld	2	2	-	-	-	-	-
Cobar NSW	14	14	14	14	16	12	2
Coffs Harbour NSW	18	56	40	36	28	28	32
Collarenebri NSW	2	-	-	-	-	-	-
Coolah NSW	6	-	-	-	-	-	-
Cooma NSW	32	28	20	20	20	22	20
Coonabarabran NSW	12	16	12	12	12	12	12
Coonamble NSW	18	16	6	6	6	6	6
Corryong Vic	6	-	-	-	-	-	-
Cunnamulla Qld	4	2	-	-	-	-	-
Dubbo NSW	25	42	44	38	46	46	42
Forster NSW	6	-	-	-	-	-	-
Goodooga NSW	2	-	-	-	-	-	-
Griffith NSW	14	20	20	20	24	26	24
Kempsey NSW	12	-	-	-	-	-	-
Lord Howe Island NSW	8	8	8	8	8	-	-
Merimbula NSW	12	12	16	20	20	22	20
Moree NSW	12	22	14	14	16	20	16
Moruya NSW	24	8	-	-	-	-	-
Mudgee NSW	13	12	10	12	12	12	12
Narrabri NSW	24	30	16	16	16	18	16
Narrandera NSW	14	20	20	20	24	26	24
Nyngan NSW	12	10	12	12	12	12	-
Parkes NSW	24	-	-	-	-	-	-
Scone NSW	14	-	-	-	-	-	-
Sydney NSW	211	211	194	216	240	238	212
Wagga NSW	36	39	38	42	48	48	44
Walgett NSW	10	8	6	6	8	8	6
ALL PORTS	700	628	536	558	600	600	524

TABLE C.4 - AIRCRAFT MOVEMENTS: QUEENSLAND AIRLINES

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Alpha Qld	4)						
Barcaldine Qld	10)						
Bollon Qld	4)						
Brisbane Qld	93)						
Bundaberg Qld	74)						
Clermont Qld	10)						
Cunnamulla Qld	10)						
Dirranbandi Qld	6)						
Emerald Qld	10)						
Gayndah Qld	8)						
Gladstone Qld	34)						
Goondiwindi Qld	20)						
Kingaroy Qld	8)						
Longreach Qld	4)						
Maroochydore Qld	6)						
Maryborough Qld	56)						
Monto Qld	8)						
Moree NSW	2)						
Mungindi NSW	2)						
Rockhampton Qld	29)						
Saint George	20)						
Thangool Qld	12)						
Wondai Qld	8)						
ALL PORTS	438)						

After November 1966 the operations of Queensland Airlines were incorporated with those of Ansett Airlines of Australia

TABLE C.5 - AIRCRAFT MOVEMENTS: ANSETT AIRLINES OF SOUTH AUSTRALIA  
(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Adelaide SA	108	86	84	102	108	134	132
Broken Hill NSW	14	12	12	12	12	12	12
Ceduna SA	4	4	4	4	4	4	4
Cleve SA	6	8	8	-	-	-	-
Cowell SA	6	-	-	-	-	-	-
Kimba SA	2	-	-	-	-	-	-
Kingscote SA	20	22	20	28	32	36	36
Mildura Vic	6	-	-	-	-	-	-
Millicent SA	6	-	-	-	-	-	-
Minnipa SA	8	6	4	-	-	-	-
Mount Gambier SA	-	-	-	-	-	18	16
Naracoorte SA	6	-	-	-	-	-	-
Port Lincoln SA	34	26	26	40	40	42	42
Port Pirie SA	10	-	-	-	-	-	-
Renmark SA	12	-	-	-	-	-	-
Whyalla SA	22	22	22	26	28	30	30
ALL PORTS	264	186	180	212	224	276	272

TABLE C.6 - AIRCRAFT MOVEMENTS: MACROBERTSON MILLER AIRLINES

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Albany WA	8	-	-	-	-	-	-
Alice Downs WA	$\frac{1}{2}$	-	-	-	-	-	-
Argyle Downs WA	1	-	-	-	-	-	-
Balgo Hill WA	1	1	1	1	1	-	-
Bamboo Springs WA	1	-	-	-	-	-	-
Barloweerie WA	1	-	-	-	-	-	-
Barrow Island WA	6	16	-	-	-	-	-
Bedford Downs WA	1	3	1	1	1	1	-
Beverley Springs WA	-	-	1	1	1	1	1
Billiluna WA	1	1	1	1	1	-	-
Bohemia Downs WA	1	-	-	-	-	-	-
Broome WA	26	24	30	30	32	28	28
Bullo River Valley NT	1	-	-	-	-	-	-
Callawa WA	1	-	-	-	-	-	-
Calwynyardah WA	1	-	-	-	-	-	-
Camballin WA	1	-	-	-	-	-	-
Carnarvon WA	28	28	22	26	24	22	22
Cherrabun WA	1	1	1	1	1	1	-
Christmas Creek WA	1	1	1	1	1	1	-
Coolawanyah WA	2	-	-	-	-	-	-
Croker Island NT	1	-	-	-	-	-	-
Cue WA	8	-	-	-	-	-	-
Darwin NT	12	20	24	26	28	24	24
Derby WA	31	42	41	39	45	45	47
Edmund WA	1	-	-	-	-	-	-
Elcho Island NT	2	-	-	-	-	-	-
Esperance WA	6	-	-	-	-	-	-
Fitzroy Crossing WA	4	6	6	8	10	10	8
Flora Valley WA	2	-	-	-	-	-	-
Fossil Downs WA	1	-	-	-	-	-	-
Gascoyne Junction WA	2	-	-	-	-	-	-
Geraldton WA	38	20	24	30	28	30	34
Gibb River WA	1	1	1	1	1	1	1
Glenroy WA	1	1	1	1	1	1	-
Gordon Downs WA	$\frac{1}{2}$	-	-	-	-	-	-
Goulburn Island NT	1	-	-	-	-	-	-
Gove NT	4	10	10	12	14	10	10
Groote Eylandt NT	4	10	10	10	12	10	10
Halls Creek WA	6	6	8	8	8	8	6
Hillside WA	2	-	-	-	-	-	-
Jubilee Downs WA	1	-	-	-	-	-	-
Kalgoorlie WA	14	16	14	16	16	14	12
Kalumburu WA	$\frac{1}{2}$	1	1	1	1	1	1
Kalyeeda WA	1	-	-	-	-	-	-
Karratha WA	-	22	48	52	55	59	48
Karunjie WA	1	-	-	-	-	-	-
Kimberley Downs WA	1	-	-	-	-	-	-
Kununurra WA	13	16	24	26	28	26	26
Lansdowne WA	1	1	1	1	1	1	1

TABLE C.6 - AIRCRAFT MOVEMENTS: MACROBERTSON MILLER AIRLINES

(CONTD).

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Laverton WA	1	-	-	-	-	-	-
Learmonth WA	12	28	16	16	16	14	12
Leonora WA	2	-	-	-	-	-	-
Leopold Downs WA	1	-	-	-	-	-	-
Mandoora WA	1	-	-	-	-	-	-
Marble Bar WA	4	-	-	-	-	-	-
Mardie WA	1	-	-	-	-	-	-
Margaret River WA	1	1	1	1	1	1	1
Meekatharra WA	20	-	-	-	-	-	-
Millingimbi NT	8	-	-	-	-	-	-
Mitchell Plateau WA	-	3	1	1	1	-	-
Morawa WA	4	-	-	-	-	-	-
Mount House WA	1	1	1	1	1	1	1
Mount Magnet WA	9	-	-	-	-	-	-
Mount Vernon WA	1	-	-	-	-	-	-
Muccan WA	1	-	-	-	-	-	-
Myroodah WA	1	-	-	-	-	-	-
Nerrima WA	1	-	-	-	-	-	-
Newman WA	-	20	28	28	30	34	28
Nicholson WA	2	2	2	2	2	-	-
Noonkanbah WA	1	-	-	-	-	-	-
Norseman WA	4	-	-	-	-	-	-
Nullagine WA	4	-	-	-	-	-	-
Onslow WA	14	4	-	-	-	-	-
Ord River WA	3½	2	1	1	1	-	-
Paraburdoo WA	-	-	32	48	44	52	30
Pardoo WA	1	-	-	-	-	-	-
Perth WA	80	96	86	110	111	114	116
Port Hedland WA	31	52	56	86	76	66	58
Port Keats NT	2	-	-	-	-	-	-
Roebourne WA	12	4	-	-	-	-	-
Rosewood WA	1	-	-	-	-	-	-
Rottnest Island WA	22	-	-	-	-	-	-
Roy Hill WA	2	-	-	-	-	-	-
Sandstone WA	1	-	-	-	-	-	-
Shark Bay WA	4	-	-	-	-	-	-
Shaw River WA	2	-	-	-	-	-	-
Tableland WA	1	1	1	1	1	1	-
Talgarno WA	1	-	-	-	-	-	-
Tom Price WA	1	18	22	34	31	36	-
Turkey Creek WA	1	1	1	1	-	-	-
Turner WA	2	-	-	-	-	-	-
Victoria River Downs NT	2	-	-	-	-	-	-
Wallal WA	1	-	-	-	-	-	-
Warrawagine WA	1	-	-	-	-	-	-
Wave Hill NT	2	-	-	-	-	-	-



TABLE C.6 - AIRCRAFT MOVEMENTS: MACROBERTSON MILLER AIRLINES  
(CONTD).

Airport and State	(Number)						
	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Wiluna WA	2	-	-	-	-	-	-
Wittenoom WA	26	16	10	16	17	15	-
Wyndham WA	15½	10	3	3	1	-	-
Yalgoo WA	4	-	-	-	-	-	-
Yarraloola WA	2	-	-	-	-	-	-
Yarrie WA	1	-	-	-	-	-	-
ALL PORTS	561½	506	536	642	643	628	525

TABLE C.7 - AIRCRAFT MOVEMENTS: EAST-WEST AIRLINES

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Albury NSW	12	24	28	30	32	36	30
Alice Springs NT	-	-	-	4	4	4	4
Armidale NSW	28	32	36	38	40	40	34
Bathurst NSW	-	24	28	30	32	30	28
Brisbane Qld	6	4	4	4	4	4	2
Condobolin NSW	8	10	-	-	-	-	-
Coolangatta Qld	6	4	18	22	22	18	16
Cowra NSW	28	24	26	26	28	28	20
Glen Innes NSW	16	18	14	14	14	14	14
Grafton NSW	14	20	42	34	34	38	42
Gunnedah NSW	18	12	-	-	-	-	-
Inverell NSW	16	18	14	20	16	14	14
Kempsey NSW	-	14	14	14	14	14	14
Lake Cargelligo NSW	4	-	-	-	-	-	-
Maroochydore Qld	-	-	12	20	18	12	14
Orange NSW	24	34	28	30	34	30	28
Parkes NSW	-	24	26	26	28	28	20
Port Macquarie NSW	16	20	30	36	36	36	28
Quirindi NSW	18	-	-	-	-	-	-
Stanthorpe Qld	8	-	-	-	-	-	-
Sydney NSW	149	233	253	296	307	275	242
Tamworth NSW	59	53	55	54	59	55	50
Taree NSW	16	20	26	28	28	28	28
Temora NSW	8	-	-	-	-	-	-
Warwick Qld	8	-	-	-	-	-	-
West Wyalong NSW	8	10	-	-	-	-	-
Williamstown NSW	4	-	-	-	-	-	-
ALL PORTS	474	598	654	726	750	704	628

TABLE C.8 - AIRCRAFT MOVEMENTS: CONNAIR PTY LTD

Airport and State	(Number)						
	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Alcoota NT	4	-	-	-	-	-	-
Alexandria NT	2	4	4	-	-	-	-
Alice Springs NT	19	19	24	22	24	28	36
Alroy Downs NT	2	2	2	-	-	-	-
Amata SA	2	2	2	2	2	2	4
Ammaroo NT	2	2	2	2	2	2	2
Andado NT	2	2	2	2	2	2	2
Angas Downs NT	2	-	-	-	-	-	-
Anningie NT	2	2	2	2	2	2	2
Annitowa NT	2	2	2	2	2	2	2
Anthony Lagoon NT	2	2	2	-	-	-	-
Areyonga NT	2	-	-	-	-	-	-
Argadargada NT	2	2	2	2	2	2	2
Argyle Downs WA	2	2	-	-	-	-	-
Auvergne NT	4	4	4	2	-	-	-
Ayers Rock NT	-	-	-	-	4	8	34
Balgo Hill WA	-	-	-	-	-	4	-
Bathurst Island NT	2	10	18	20	24	24	46
Benmara NT	-	-	4	2	-	-	-
Billiluna WA	-	-	-	-	-	1	-
Birrindudu NT	2	2	2	2	2	2	-
Borrooloola NT	2	2	4	4	2	8	-
Brunchilly NT	2	4	6	-	-	-	-
Brunette Downs NT	-	-	-	-	-	2	-
Bulloo River Valley NT	-	2	2	-	-	-	-
Cairns Qld	-	-	-	6	10	14	-
Calvert Hills NT	2	2	-	-	-	-	-
Camfield NT	2	2	2	2	1	-	-
Camooeal Qld	-	2	-	-	-	-	-
Carlton WA	2	2	2	-	-	-	-
Cattle Creek NT	2	2	2	2	1	-	-
Coa Downs NT	-	2	-	-	-	-	-
Cooinda NT	-	-	4	2	4	-	-
Coolibah NT	2	2	-	-	-	-	-
Creswell Downs NT	2	2	-	-	-	-	-
Croker Island NT	-	6	4	8	4	4	6
Curtin Springs NT	2	-	-	-	-	-	-
Daly River NT	2	4	4	4	4	-	2
Darwin NT	11	46	62	76	62	60	64
Delamere NT	2	-	-	-	-	-	-
Delissaville NT	2	2	2	2	-	-	-
Delmore Downs NT	2	-	-	-	-	-	-
De Rose Hill SA	2	2	2	2	2	2	2
Docker River NT	-	-	-	-	2	4	2
Elcho Island NT	-	4	10	16	12	24	24
Elkedra NT	2	2	-	2	2	2	2
Epenarra NT	2	2	2	2	2	-	-

TABLE C.8 - AIRCRAFT MOVEMENTS: CONNAIR PTY LTD

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Erlunda NT	2	-	-	-	-	-	-
Ernabella SA	2	2	2	2	4	4	4
Eva Downs NT	2	-	2	-	-	-	-
Flora Valley WA	-	-	2	2	-	-	-
Garden Point NT	2	8	8	8	14	24	24
Glen Helen NT	2	-	-	-	-	-	-
Gordon Downs WA	2	2	2	2	2	2	-
Goulburn Island NT	-	6	4	8	8	8	8
Gove NT	-	-	4	8	6	12	12
Groote Eylandt NT	6	12	6	6	4	12	4
Haast Bluff NT	2	2	2	2	2	2	2
Halls Creek WA	4	2	2	2	2	6	-
Hartz Range NT	2	-	-	-	-	-	-
Hatches Creek NT	-	-	-	2	1	-	-
Henbury NT	2	-	-	-	-	-	-
Hermannsburg NT	2	2	2	2	-	-	-
Hooker Creek NT	6	6	8	8	12	12	4
Horseshoe Bend NT	2	-	-	-	-	-	-
Humbert River NT	2	2	2	2	1	-	-
Idracowra NT	2	2	2	2	2	2	2
Indiana NT	2	2	2	2	2	2	2
Indulkana SA	-	-	-	-	2	2	-
Innesvale NT	-	2	2	-	-	-	-
Inverway NT	2	4	4	2	2	2	-
Jabiru NT	-	-	6	10	6	6	4
Jervois Range NT	2	2	2	2	2	2	2
Kalkgurung NT	-	-	-	-	4	6	4
Katherine NT	11	18	22	20	16	10	6
Kidman Springs NT	-	2	-	-	-	-	-
Kildurk NT	2	2	2	2	1	1	-
Killarney NT	-	-	-	-	-	-	-
Kirkimbie NT	2	2	2	2	2	2	-
Kulgera NT	2	-	-	-	-	-	-
Kununurra WA	-	18	4	4	8	18	-
Kurundi NT	2	2	2	2	2	-	-
Lake Evella NT	-	-	-	-	-	6	4
Lake Nash NT	2	2	-	-	-	2	-
Legune NT	2	2	2	-	-	-	-
Lilla Creek NT	2	-	-	-	-	-	-
Limbunya NT	2	2	2	2	2	2	-
Lissadell WA	2	2	2	2	2	2	-
Lucy Creek NT	2	2	2	2	2	2	2
MacDonald Downs NT	2	2	2	2	2	-	-
Mainoru NT	2	2	2	2	1	-	-
Mallapunyah NT	2	2	2	2	-	2	-
Maningrida NT	6	22	20	26	12	20	20
McArthur River NT	8	14	-	-	-	10	-

TABLE C.8 - AIRCRAFT MOVEMENTS: CONNAIR PTY LTD

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Millingimbi NT	-	8	12	16	12	24	22
Milton Park NT	2	-	-	-	-	-	-
Mittiebah NT	-	2	2	-	-	2	-
Mongrel Downs NT	-	-	-	-	-	2	-
Montejinnie NT	2	-	-	-	-	-	-
Moroak NT	2	2	2	2	1	2	-
Mountain Valley NT	2	4	2	2	1	-	-
Mount Cavanagh NT	2	2	2	2	2	2	2
Mount Dare SA	2	2	2	2	2	2	2
Mount Denison NT	2	2	2	2	2	2	2
Mount Ebenezer NT	2	-	-	-	-	-	-
Mount Isa Qld	9	15	20	18	20	34	-
Mount Riddock NT	2	2	2	2	2	2	2
Mount Sanford NT	-	2	2	2	1	-	-
Mount Swan NT	2	-	-	-	-	-	-
Mount Wedge NT	2	-	2	2	-	-	-
Mulga Park NT	2	2	2	2	2	2	-
Munmalary NT	-	8	2	-	-	-	-
Murray Downs NT	2	2	-	-	-	-	-
Napperby NT	2	2	2	2	2	2	2
Narwietooma NT	2	6	8	8	4	2	4
Newhaven NT	2	-	-	-	-	-	-
Newry NT	2	-	-	-	-	-	-
Nicholson WA	2	2	2	4	2	2	-
Numbulwar NT	2	10	8	8	8	14	6
Nutwood Downs NT	2	2	2	2	2	2	-
Oenpelli NT	4	20	4	8	6	4	4
Ooratippra NT	2	2	2	2	2	2	2
Ord River WA	2	2	-	-	-	1	-
Palmer Valley NT	2	-	-	-	-	-	-
Papunya NT	2	2	2	2	2	2	2
Plenty River NT	2	2	2	2	2	2	2
Port Keats NT	4	2	4	6	10	16	6
Port Stuart NT	2	-	-	-	-	-	-
Ramingining NT	-	-	-	-	-	8	12
Renners Rock NT	2	-	-	-	-	-	-
Ringwood NT	2	2	2	2	2	2	2
Robinson River NT	2	2	2	2	-	-	-
Rockhampton Downs NT	2	2	4	-	-	-	-
Roper Bar NT	2	4	2	2	-	-	-
Roper River NT	2	10	10	10	12	14	6
Roper Valley NT	2	2	2	2	1	2	-
Rosewood WA	2	2	-	-	-	-	-
Ruby Plains WA	2	-	-	-	-	-	-
Santa Teresa NT	2	2	2	-	-	-	-
Snake Bay NT	2	12	18	20	24	24	24
Springvale WA	2	2	2	2	2	2	-

TABLE C.8 - AIRCRAFT MOVEMENTS: CONNAIR PTY LTD

(Number)

Airport and State	Weekly scheduled aircraft movements at January -						
	1965	1970	1973	1974	1975	1976	1977
Sturt Creek WA	2	2	2	2	2	2	-
Tempe Downs NT	2	2	-	-	-	-	-
Tennant Creek NT	-	-	2	-	6	4	-
The Derwent NT	2	-	-	-	-	-	-
Tieyon SA	2	2	2	2	2	2	2
Timber Creek NT	2	2	4	2	-	-	-
Top Springs NT	2	2	2	-	-	-	-
Turner WA	2	-	-	-	-	-	-
Utopia NT	4	2	-	2	-	-	-
Vaughan Springs NT	2	2	2	2	2	2	2
Victoria River Downs NT	8	16	10	12	4	4	2
Walhallow NT	-	-	2	-	-	2	-
Waterloo NT	2	2	2	2	2	2	-
Wave Hill NT	4	6	4	6	2	2	-
Willeroo NT	2	-	-	-	-	-	-
Willowra NT	2	2	2	2	2	2	2
Wollogorang NT	-	2	4	2	-	-	-
Woodgreen NT	2	-	-	-	-	-	-
Wyndham WA	10	4	-	-	-	-	-
Yuendumu NT	4	2	6	6	10	8	6
ALL PORTS	344	494	488	504	458	585	452