## Chapter 3



## DEVELOPMENT OF FREIGHT TRAFFIC AT THE AIRPORT

To study the development of freight traffic, the statistical data of freight quantity or revenue and many other records of air transport concerning with air freight are required. The comparison of the volume of freight traffic to other kinds of air transport is one way to show the growth of air freight.

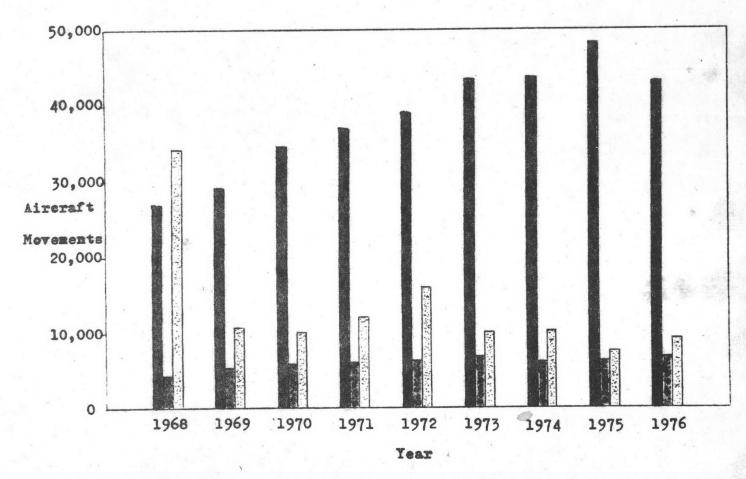
It is estimated that in the next 10 years the air freight traffic may increase five time that of the present. This prediction is obtained from the record of growth in number of sold aircraft and the statistical records of air cargo inward and outward of international airports. The improvement of the existing airport facilities at Don Muang, especially for air cargo is now hurriedly required to make this international airport be able to cope with this growth.

Graphs , charts and tables are provided here to visualize the state of development of freight traffic at Bangkok International  $\Lambda$ irport .

Aircraft Movements and Total Air Transport

Aircraft movements

According to the co-usage of runways and airspace above Don Nuang with Royal Thai Air Force, this international airport seems to be so



Pigure 3.1 Aircraft Movements at Bangkok International

International

Other

Airport

busy compared with another international airports in this zone at equal level. Diagram in Figure 3.1 shows the fluctuation of aircraft movements at Bangkok International Airport which is composed of international, domestic and other kinds of aircraft movements. The international aircraft movements have increased about 10 % since 1968.

From 1973 to 1976, the fluctuation of international aircraft movements seemed to be very few. This may be according to the maximum level of convenient this international airport can provide. The movement of Rosyal Thai Air Force from the west side of the airport that is doing now and some improvements of the airport facilities may be the onuse of some raising in volume of international aircraft movements at this international airport.

As it is known that this international airport is also used by Royal Thai Air Force, the comparison of commercial, military and other aircraft movements seems to be an interesting figure to compose in the study of air cargo development at this international airport. The numerical display as shown in <a href="#Table 3.1">Table 3.1</a> is something as mentioned before. The period of 1968 to 1976 is available in this comparison. The continuous decrease in number of military aircraft movements at this airport seems to be the hope for increase in commercial flights which means more income to the international airport and to Thailand.

Fluctuations of freight, mail and passengers

Since 1966, there has been a rise of about more than 5 times of air freight handling at Don Muang. It is predicted that the quantity

Table 3.1 Comparison of commercial, military and other aircraft movements at Bangkok International Airport

Year	Commercial	%Variation	Military	%Variation	Other	%Variation
1968	37,660		98,295	-	34,441	-
1969	41,972	+11.17	80,600	-18.19	10,736	-68.28
1970	46,751	+11.16	78,696	-2.29	10,082	-6.98
1971	48,827	+4.21	70,067	-10.76	12,003	+19.54
1972	50,562	+3.27	65 <b>,</b> 836	-6.27	16,083	+33.12
1973	53 <b>,</b> 569	+5•48	66,027	+0.19	10,047	-37.85
1974	51,868	-3.94	41,279	-37.32	10,647	+5.98

Remark ; Variations in % compared with the previous year

of air freight movements at this international airport will continue to grow in volume as there is no other mode of transportation is faster and safer as that by air . Air mail seems to be less important compared with those of freight and passengers . Annual records of freight , mail and passengers are shown in Table 3.2 , Table 3.3 and Table 3.4 . Those records are of total international and domestic air transport at this airport . For only international air freight movement , details of this activity are displayed in Figure 3.2 . Three columns of records are separated as unloaded, loaded and transit. There are some significances about these values that have to be mentioned . Such air freight moved down from aircrafts at the airport may be the incoming air cargo to this country or air cargo that have to be transferred to another flights , both are recorded as unloaded air cargo . Again , outgoing air cargo and air cargo transferred to another flights moved up are called as loaded air cargo . For transit air freight it is meaned that air cargo that have not been moved down from aircrafts landed here .

The quantity of transit air freight at this international airport seems to be an unfavorable situation in term of lost income that should be protected by the warehouses and other ground facilities. Percentage of quantity of transit air freight compared with total air freight is quite large. This means that very large volume of air freight have been rejected to use ground facilities and warehouses at this airport. If the income from this volume of freight is clearly thought of, it is quite an interesting problem to be solved.

Table 3.2 Total air freight at Bangkok International Airport (1966 - 1976)

Year	Quantity of Freight, kg.				
	Unloaded	Loaded	Transit		
1966	4,552,075	4,825,996	9,885,007		
1967	5,672,208	6,302,687	8,995,353		
1968	7,037,273	8,137,733	10,243,279		
1969	7,740,757	8,235,174	12,691,753		
1970	9,635,038	11,942,130	16,028,348		
1971	9,414,720	16,265,780	18,837,123		
1972	9,931,826	16,701,478	23,446,057		
1973	14,012,612	19,313,068	25,681,975		
1974	17,385,281	28,479,808	35,304,194		
1975	22,067,253	30,741,393	47,002,065		
1976	21,623,186	35,425,554	34,570,854		

Table 3.3 Total air mail at Bangkok International Airport (1966 - 1976)

Year	Quantity of Mail , kg.				
I Gai	Unloaded	Loaded	Transit		
1966	1,818,480	1,298,614	1,508,849		
1967	1,549,558	1,366,700	1,308,635		
1968	877,951	1,191,510	1,287,501		
1969	906,382	1,028,861	1,277,196		
1970	1,100,385	1,505,440	1,671,226		
1971	1,031,409	1,601,856	1,787,851		
1972	1,282,942	1,763,429	1,802,418		
1973	1,806,951	1,517,933	1,295,050		
1974	1,733,952	1,732,579	1,552,099		
1975	1,949,070	1,776,735	1,274,453		
1976	1,525,312	1,772,842	1,148,935		

Table 3.4 Total passengers at Bangkok International Airport (1966 - 1976)

Year	Number of Passengers			
TOGE	Unloaded	Loaded	Transit	
1966	337,090	330,002	247,417	
1967	443,727	434,877	276,395	
1968	515,329	512,296	331,773	
1969	629,733	633,577	376,474	
1970	760,954	768,215	490,142	
1971	750,100	751,039	574,419	
1972	909,034	904,660	741,081	
1973	1,104,273	1,101,681	896,343	
1974	1,159,570	1,168,153	880,996	
1975	1,285,381	1,298,784	934,162	
1976	1,346,867	1,374,959	976,783	

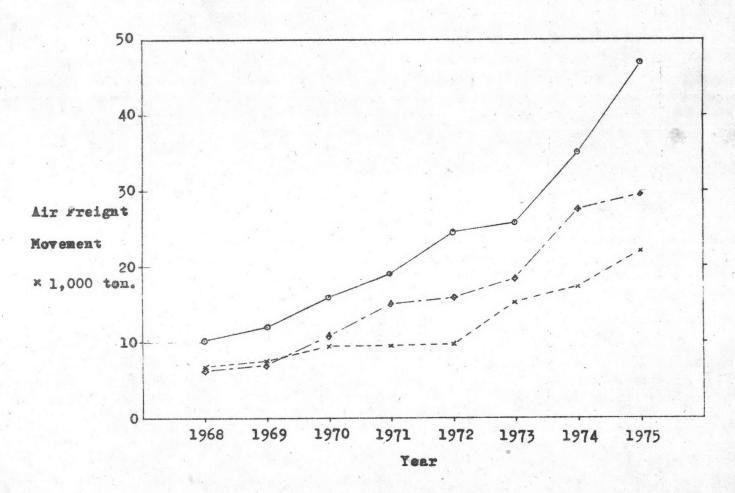


Figure 3.2 Fluctuation of Total International Transit,
Loaded and Unloaded Air Preight at Bangkok International Airport

• Transit

• Loaded

v----
Unloaded

## All-Freight/Mail Services at This International Airport

In Asia and Pacific, only two of region's airlines have been providing all-freight/mail services, they are Japan Airlines and Korean Airlines. Most carriers offering all-freight/mail services with B-707 and DC-8 freighters. The new type of aircraft, B-747F, is quite an interesting one which has been widely used in many airlines for this purpose, but still has not made an appearance at this airport. There are 8 carriers offering all-freight/mail services at Bangkok International Airport as shown in Table 3.5.

Table 3.5 All-freight/mail flight services at Bangkok International Airport (October, 1977)

No.	Airline	Type of Aircraft	
1	Air France	B-707	
2	British Overseas Airways Division	B-707	
3	Cargolux Airlines International	DG-8 , CL-44	
4	Flying Tiger Line , Inc.	DC-8 , CL-44	
5	Japan Airlines Company Ltd.	. DC-8	
6	KLM. Royal Dutch Airlines	DC=8	
7	Lufthansa German Airlines	B⊕707	
.8	Trans Mediteranean Airlines	B-707	

In Figure 3.3 and Figure 3.4 monthly fluctuations of loaded and unloaded air freight at Bangkok International Airport in 1974, 1975 and 1976 are shown, for the variations of loaded air cargo, fluctuations in 1974 and 1975 seemed to be quite similar . It indicates that more business occurred during March to June in both years . In 1976 peak demand for air cargo from Thailand occurred in August . As it is known that highest freight weight carried out from Thailand by air are vegetable and fruits and in the said period such commodities were available to export according to their productive season . However , fluctuations of loaded air cargo at this international airport depends on the demand from foreign consumers rather than other reason . For Thailand can produce various kinds of vegetable and fruit all years round during to the favourable climatic condition, also many kinds of fruit that are available for export are circulatory ripe all year round . Keeping standard quality of such air cargo and efficient searching markets will be the power to improve quantity of air freight outing from Thailand .

For quantity of unloaded air cargo, no significance affected fluctuations other than demand. Variations in each year made it unreliable to say which period was the most busy. The same situation occurred to quantities of loaded and unloaded air mail at this international airport. Fluctuations of this kind of service are as shown in Appendix B-11, Appendix B-12 and Appendix B-13.