

COMMISSION OF THE EUROPEAN COMMUNITIES

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THE EUROPEAN AEROSPACE INDUSTRY TRADING POSITION AND FIGURES

(Commission staff working paper)

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x A D D E N D U M x
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The tables on pages 80 to 84 presuppose the accession of Spain to the EEC, the turnover figure considered in the these tables beeing the final turnover of Spain at a community level.

Although this solution anticipates political reality to some extent it has been adopted so as to make the tables on pages 80 to 84 conform to those of chapter 6 (pages 55 to 59).

x
x x

PREFACE

This document is a compilation of the most relevant statistics available to the Commission of the European Communities on the aerospace sector in Europe and the United States.

The Directorate-General for the Internal Market and Industrial Affairs has been compiling and collating these statistics since 1972. The very first communication to the Council on this subject, dated 19 July 1972 (COM(72)850), already included a statistical annex on the trading position of the aerospace sector. In subsequent years (1) it became possible to make a more detailed analysis, owing mainly to the co-operation of AECMA member associations which have helped the Commission conduct a survey on turnover and employment among companies in the sector.

This paper gives the trading position of the aerospace sector on 31 December 1978. The general approach adopted last year (see SEC(79)995), which was designed to make the document easier to read and simplify its presentation, has been retained, except for the "companies" chapter which cannot be included this year owing to a major change in the relevant data base. Work now in progress will allow us to present uniform series as from the next edition of the document.

It was thought useful to give a breakdown of extra-Community trade in airframes in Chapter 5 and to include, where possible, Canadian and Japanese data in Chapter 6.

Owing to technical difficulties, data on the fleet of single-engined aircraft, twin-engined aircraft and executive jets are not included in the current edition.

- (1) See:
- | | |
|-------------|---------------------|
| SEC(73)813 | of 1 March 1973 |
| III/243/73 | of 31 December 1973 |
| SEC(75)1539 | of 23 April 1975 |
| SEC(76)2657 | of 9 July 1976 |
| SEC(77)2939 | of 2 August 1977 |
| SEC(78)3298 | of 28 July 1978 |
| SEC(79)995 | of 12 June 1979 |

The current edition also includes data from the Spanish aircraft industry which had arrived at the time of going to press. Technical reasons prevented these data from being incorporated in Chapters 6 and 7 on the turnover of and employment in the aerospace industry. It was nevertheless felt that the Spanish industry's most significant results analysed on the basis of the data kindly supplied by ATECMA (Agrupacion tecnica española de constructores de material aeroespacial), should be included in the annexes to this document.

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CHAPTER 1

CIVIL AIR TRAFFIC

1. In 1979, the volume of world scheduled traffic increased by 13% compared with 1978. A growth rate of this order of magnitude has been reached only once before in the last ten years (in 1972). The fleet load factor was an absolute record in 1979 (66%). The increase in the volume of passengers carried and the improved load factor can largely be attributed to cheap fares.
2. The volume of scheduled traffic carried by AEA member airlines increased by around 10% in 1979 (compared with 13% in 1978). A breakdown into traffic zones shows that domestic traffic increased in volume by about 10.4% in 1979 (compared with 2.3% in 1978), whereas intercontinental traffic, which has increased by 17.3% in 1978, rose by only 11.7% in 1979. The increase in seats available was around 6.5% in both cases.
3. 1979 was again marked by a general reduction (of around 6.5%) in non-scheduled traffic. This is due, in the case of both international and domestic flights, to a reduction in non-scheduled flights by airlines, since charter companies enjoyed an increase in their traffic in 1979.

Non-scheduled traffic in Europe increased by around 6.5% in 1979.

WORLD SCHEDULED TRAFFIC

1) Passengers (billion)

YEAR	Passengers carried	PCK	SAK	Load Factor (%)
Not including USSR				
1973	0,404	520	942	55
1974	0,424	548	966	57
1975	0,436	575	1026	56
1976	0,475	632	1104	57
1977	0,517	691	1180	59
1978	0,581	797	1277	62
1979	0,639	901	1395	65
Including USSR				
1973	0,489	618	1073	58
1974	0,515	656	1108	59
1975	0,534	697	1179	59
1976	0,576	762	1268	60
1977	0,610	818	1346	61
1978	0,678	936	1451	65
1979	0,747	1057	1592	66

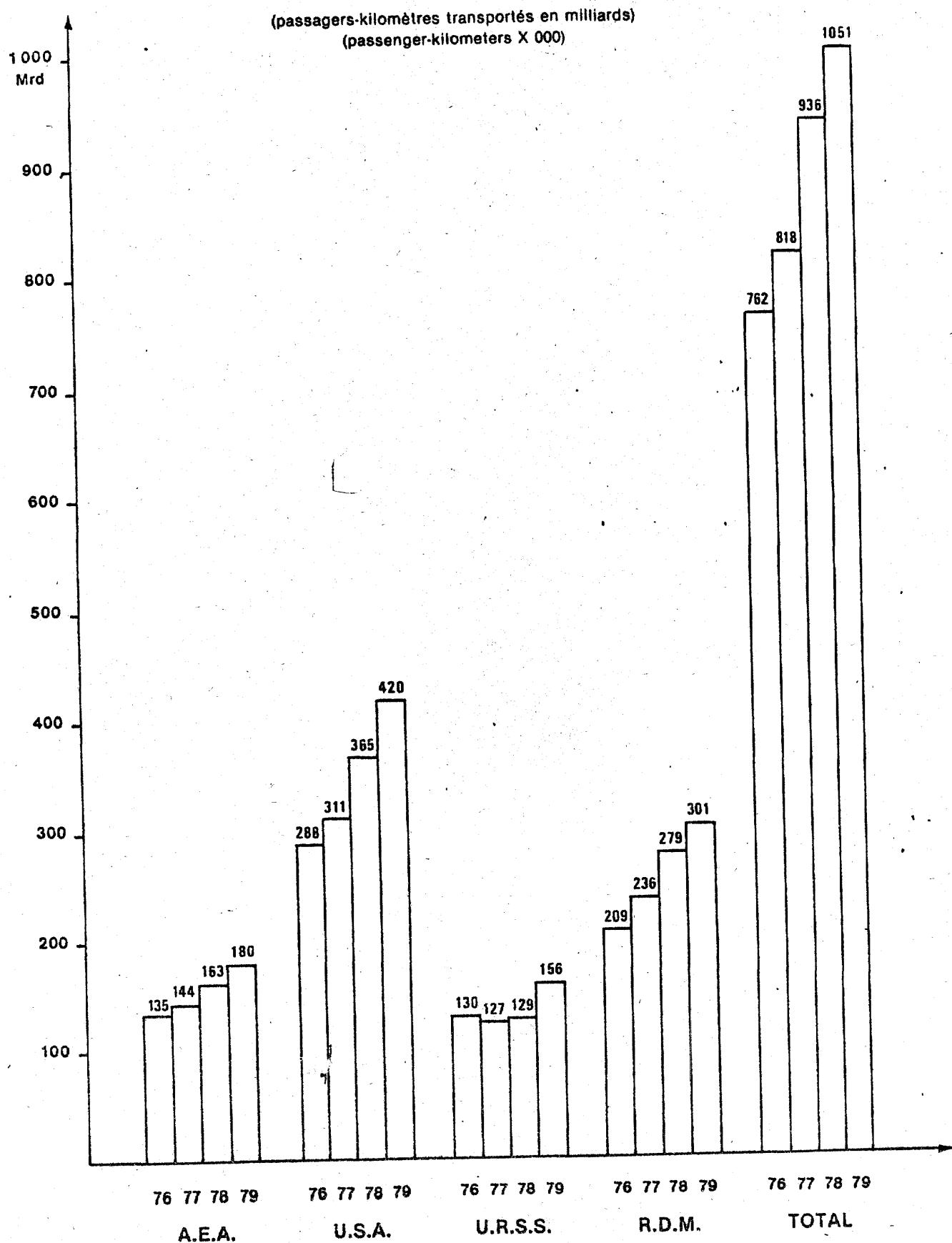
2) Freight (million tonnes)

YEAR	TFC	TKC		
		Freight	Mail	Total
Including USSR				
1973	8,2	17530	2880	20410
1974	8,7	19020	2880	21900
1975	8,7	19370	2900	22270
1976	9,3	21450	3030	24480
1977	10,0	23620	3180	26800
1978	10,6	25930	3270	29200
1979	11,2	27810	3430	31240

- Notes :
- PCK : Passengers carried/km
 - SKO : Seat availables/km
 - TFT : Tonnes Freight Carried
 - TKR : Tonnes/km Covered
 - 1979 : Estimates

Source : ICAO : Airlines in 143 countries

TRAFFIC MONDIAL REGULIER DES COMPAGNIES MEMBRES DE L'ÔACI
WORLD SCHEDULED TRAFFIC CARRIED BY ICAO MEMBER COMPANIES



SOURCE : A.E.A.
SOURCE : A.E.A.

DISTRIBUTION OF WORLD SCHEDULED TRAFFIC
 ('000 million Passengers Carried/km)

Traffic Zones	1976		1977		1978		1979		Trend		
	PCK	%	PCK	%	PCK	%	PCK	%	76/77	77/78	78/79
AEA	135	18	144	18	163	17	180	17	+ 7 %	+ 13 %	+ 10 %
USA	288	38	311	38	365	39	420	40	+ 8 %	+ 17 %	+ 15 %
USSR	130	17	127	15	129	15	156	15	- 3 %	+ 2 %	+ 21 %
Rest of World	209	27	236	29	279	28	301	28	+ 13 %	+ 18 %	+ 8 %
TOTAL	762	100	818	100	936	100	1057	100	+ 7 %	+ 14 %	+ 13 %

Notes : - 1979 : Estimates

- Source : AEA (Association of European Airlines)

AEA AIRLINE TRAFFIC

TRAFFIC	PCK (million)				SAK (million)				Load Factor (%)			
	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
Domestic	15674	17015	17400	19217	24752	25989	26338	28818	63,0	65,5	66,1	66,7
Intra-European	38342	42985	46859	50039	67533	73010	78970	84495	57,0	58,9	59,3	59,2
Intercontinental	80949	84359	98967	110600	142182	144405	160712	170670	57,0	58,4	61,6	64,8

Notes : - As a result of the redefinition of domestic traffic in 1976, thereby including the traffic between parent countries and their overseas territories, domestic traffic has been artificially increased at the expense of intercontinental traffic.

- 1979 : Estimates

- Source : AEA

RATES OF INCREASE IN PASSENGERS CARRIED/KM BY AEA AIRLINES

	Intra-European Traffic	Domestic Traffic	Intercontinental Traffic	TOTAL
1976-1977	12,1	8,6	4,2	7,0
1977-1978	9,0	2,3	17,3	13,1
1978-1979	6,8	10,4	11,7	10,2
1976-1979	30,5	22,7	36,5	33,4

PERCENTAGE DISTRIBUTION OF AEA AIRLINE TRAFFIC

	1976	1977	1978	1979
Domestic Traffic	11,6	11,7	10,6	10,7
Intra-European Traffic	28,4	29,5	29,0	27,8
Intercontinental Traffic	60,0	58,8	60,4	61,5
Total	100,0	100,0	100,0	100,0

CHAPTER 2

THE CIVIL TRANSPORT MARKET

1. The figures in this chapter were prepared for the Commission by the ITA (Air Transport Institute, Paris). They cover virtually all airlines (more than 450) using all types of aircraft, turbo-jets and turboprops built in the United States, Europe, Japan and Canada.
2. The increase in the market share of short-haul and medium-haul aircraft is at the expense of long-haul aircraft. In addition, as regards the geographical distribution of fleets, the relative value of the fleet of the Rest of the World has increased steadily since 1970.
3. A comparison between the trend in the geographical distribution of markets and the trend in the market share of European equipment shows, for the period 1970-80, a 3.5% increase in the value of the European market and an 8.9% drop in the share of European products on this market.
The American industry still has approximately 90% of the world market, whereas its share of the European market has dropped to 79%.

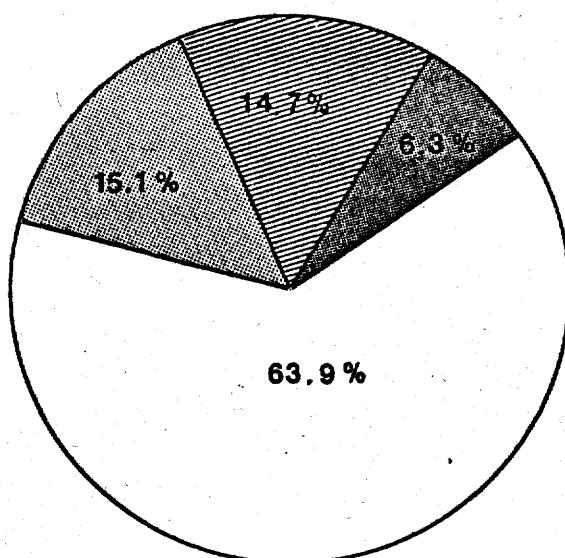
This increase in the share of the European market of European equipment will be confirmed in 1979 on account of the increased sales of A-300 and A-310 Airbuses and F-28 Fokkers.

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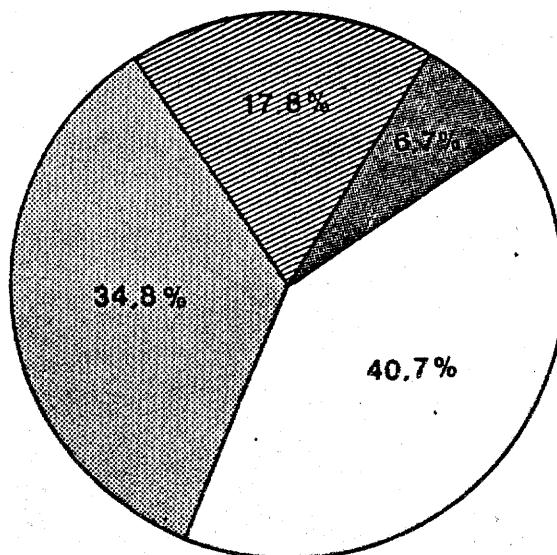
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REPARTITION DU MARCHE GLOBAL
SHARE OF THE OVERALL MARKET

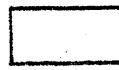
1970



1978



C.E.E.
E.E.C.



U.S.A.



Europe hors C.E.E.
Europe other than E.E.C.



Reste du monde
Rest of the world

VALUE OF AIRCRAFT IN SERVICE OR ON ORDER BUT NOT YET DELIVERED AT 31 DECEMBER 1978 (million EUA)

FLIGHTS	ORIGIN	LONG-HAUL			SHORT- AND MEDIUM-HAUL			TOTAL	%
		USA	EUROPE	OTHER	USA	EUROPE	OTHER		
F.R. Germany	1187,1	-	-	-	1014,1	645,4	-	2846,6	-
Belgium	274,0	-	-	-	147,6	26,1	-	447,7	-
Denmark	21,6	-	-	-	124,0	45,3	-	190,9	-
France	1133,1	226,0	-	-	287,8	867,0	-	2513,9	-
Ireland	97,3	1,2	-	-	99,3	4,9	-	202,7	-
Italy	467,5	-	-	-	398,8	250,1	-	1116,4	-
Luxembourg	154,2	-	-	1,2	18,1	5,2	-	178,7	-
Netherlands	930,0	-	-	-	193,3	43,3	-	1166,6	-
United Kingdom	1983,9	301,4	10,6	1296,3	985,6	-	-	4577,8	-
EEC	6248,7	528,6	11,8	3579,3	2872,9	-	-	13241,3	17,8
Other European Countries	2041,7	-	2,4	2497,0	464,3	-	-	5005,4	6,7
Europe	8290,4	528,6	14,2	6076,3	3337,2	-	-	18246,7	24,5
United States	7916,6	-	2,4	24790,8	663,4	2,8	30376,0	40,7	
Rest of the World	13681,0	2,1	14,2	9025,7	3101,1	174,8	25998,9	34,8	
WORLD	29888,0	530,7	30,8	36892,8	7101,7	177,6	74621,6	100,0	

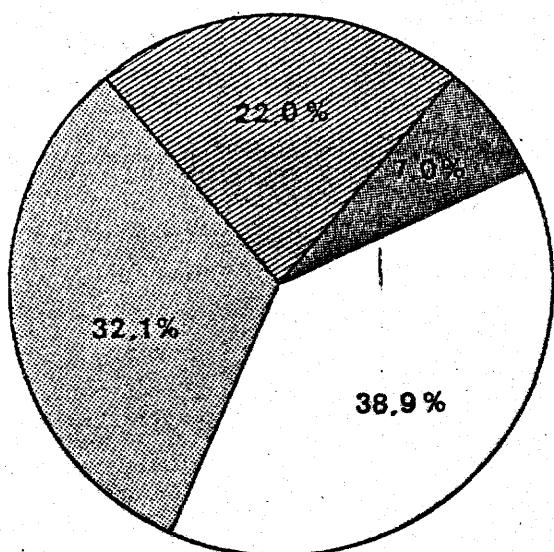
MARKET TRENDS AND MARKET SHARE WON BY COMMUNITY BUILT AIRCRAFT

(% value)

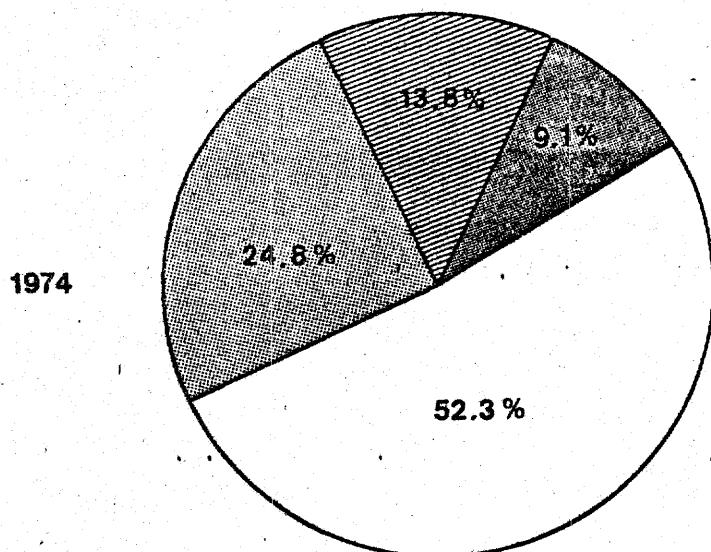
Market (Fleets)	Relative Size of the Market						Market Share Won by Aircraft Built in the EEC				
	1970 %	1974 %	1976 %	1977 %	1978 %	Trend 70/78	1970 %	1974 %	1976 %	1977 %	Trend 70/78
EEC	14,7	18,0	17,6	17,7	17,8	+3,1	33,0	21,4	22,3	23,2	25,7
Other European countries	6,3	8,0	7,9	7,8	6,7	+0,4	23,1	7,7	4,6	6,0	9,3
Europe	(21,0)	(26,0)	(25,5)	(25,5)	(24,5)	(+3,5)	(30,1)	(17,2)	(16,9)	(17,9)	(21,2)
United States	63,9	45,4	42,8	40,7	40,7	-23,2	2,1	0,4	0,2	0,6	2,2
Reste of the World	15,1	28,6	31,7	33,8	34,8	+19,7	12,1	12,6	10,9	12,7	11,9
WORLD	100,0	100,0	100,0	100,0	100,0	-	9,5	8,2	7,8	9,1	10,2

REPARTITION DU MARCHE
BREAKDOWN OF THE MARKET

LONG-COURRIERS
LONG-HAUL



C/M-COURRIERS
SHORT/MEDIUM-HAUL



1974

1978

Europe hors C.E.E.
Europe other than E.E.C.

C.E.E.
E.E.C.

Europe hors C.E.E.
Europe other than E.E.C.

U.S.A.

Reste du monde
Rest of the world

MARKET TRENDS AND MARKET SHARE WON BY COMMUNITY-BUILT AIRCRAFT
 (Breakdown into Short- and Medium-Haul and Long-Haul Aircraft)

(% value)

		Relative Size of the Market				Market Share Won by Aircraft Built in the EEC			
Market	1974 %	1976 %	1977 %	1978 %	Trend 74/78	1974 %	1976 %	1977 %	Trend 74/78
S/M-Haul Aircraft									
EEC	13,8	13,1	12,5	14,6	+0,8	42,9	38,6	42,8	44,6
Other European Countries	9,1	6,3	8,2	6,7	-2,4	14,1	10,2	9,8	15,7
Europe	(22,9)	(19,4)	(20,7)	(21,3)	(-1,6)	31,5	29,4	29,7	35,5
United States	52,3	52,8	51,0	50,8	-1,5	0,7	0,3	0,8	3,0
Rest of the World	24,8	27,8	28,3	27,9	+3,1	25,7	21,8	26,2	25,2
WORLD	100,0	100,0	100,0	100,0		100,0	100,0	100,0	100,0
Long-Haul Aircraft									
EEC	22,0	23,5	24,9	22,3	+0,3	8,6	10,5	9,6	7,8
Other European Countries	7,0	9,9	7,3	6,7	-0,3	0	0	0	0
Europe	(29,0)	(33,4)	(32,2)	(29,0)	0	6,5	7,4	7,4	6,0
United States	38,9	30,0	26,4	26,0	-12,9	0	0	0	0
Rest of the World	32,1	36,6	41,4	45,0	+12,9	3,0	0,1	0	-3,0
WORLD	100,0	100,0	100,0	100,0	-	2,9	2,5	2,4	1,7

BREAKDOWN OF FLEET VALUE INTO GEOGRAPHICAL ZONES

SHORT- AND MEDIUM-HAUL AIRCRAFT IN SERVICE AND ON ORDER

(Value Breakdown)

	1976	1977	1978
Standard Aircraft Wide-Body	72,7 27,3	74,4 25,6	70,3 29,7
TOTAL (%)	100,0	100,0	100,0
Boeing	42,2	43,5	50,5
McDonnell Douglas	29,6	28,9	21,8
Lockheed	15,5	13,0	11,0
Other USA	0,2	0,2	0,2
European Manufacturers	11,9	14,0	16,1
Other Manufacturers	0,6	0,4	0,4
TOTAL (%)	100,0	100,0	100,0

LONG-HAUL AIRCRAFT IN SERVICE AND ON ORDER

(Value Breakdown)

	1976	1977	1978
Standard Aircraft Wide-Body Supersonic	34,8 62,6 2,6	31,8 65,9 2,3	26,6 71,7 1,7
TOTAL (%)	100,0	100,0	100,0
Boeing	66,4	68,2	68,6
McDonnell Douglas	30,6	28,4	26,9
Other USA	0,01	0,9	2,6
European Manufacturers	2,9	2,4	1,8
Other Manufacturers	0,1	0,1	0,1
TOTAL (%)	100,0	100,0	100,0

CHAPTER 3

THE HELICOPTER MARKET

1. Since, for technical reasons, the statistics on the fleet of single-engined aircraft, twin-engined aircraft and executive jets were not compiled within the time-limit, we have not been able to present the relevant tables in this edition. This will, however, be rectified next year.
2. The data on the helicopter fleet are those provided by the Société Aérospatiale. Since the figures in previous editions were based on the Veritas Register (International Aviation Register - Veritas Bureau - French Edition) they should be used with care following the change in the data bank.
3. The French figures relate only to the fleet, for Metropolitan France.

CIVIL HELICOPTER FLEET IN WESTERN EUROPE AND NORTH AMERICA

	Fleet		Fleet Breakdown by Design Origin			
			USA		EEC	
	Number	%	Number (*)	%	Number	%
Belgium	26	2,1	17 (4)	65	9	35
Denmark	37	3,0	37 (2)	100	-	-
France	327	26,6	119 (59)	36	208	64
Ireland	9	0,7	7 (2)	78	2	22
Italy	135	11,0	105 (59)	78	30	22
Luxembourg	-	-	-	-	-	-
Netherlands	30	2,4	15 (1)	50	15	50
F.R. Germany	297	24,1	167 (48)	56	130	44
United Kingdom	371	30,1	333 (102)	90	38	10
EEC	1232	100	807 (277)	64	446	36
Other European Countries	444	-	319 (100)	72	125	28
USA and Canada	7680	-	7306	95	374	5

(*) The number of helicopters manufactured in Europe under licence is given in brackets.

Source : Aerospatiale

CHAPTER 4

THE MILITARY AVIATION MARKET

1. The European military aviation market is illustrated in the tables in this chapter on the basis of data supplied by the American publication DMS (Defense Aerospace Market Intelligence).

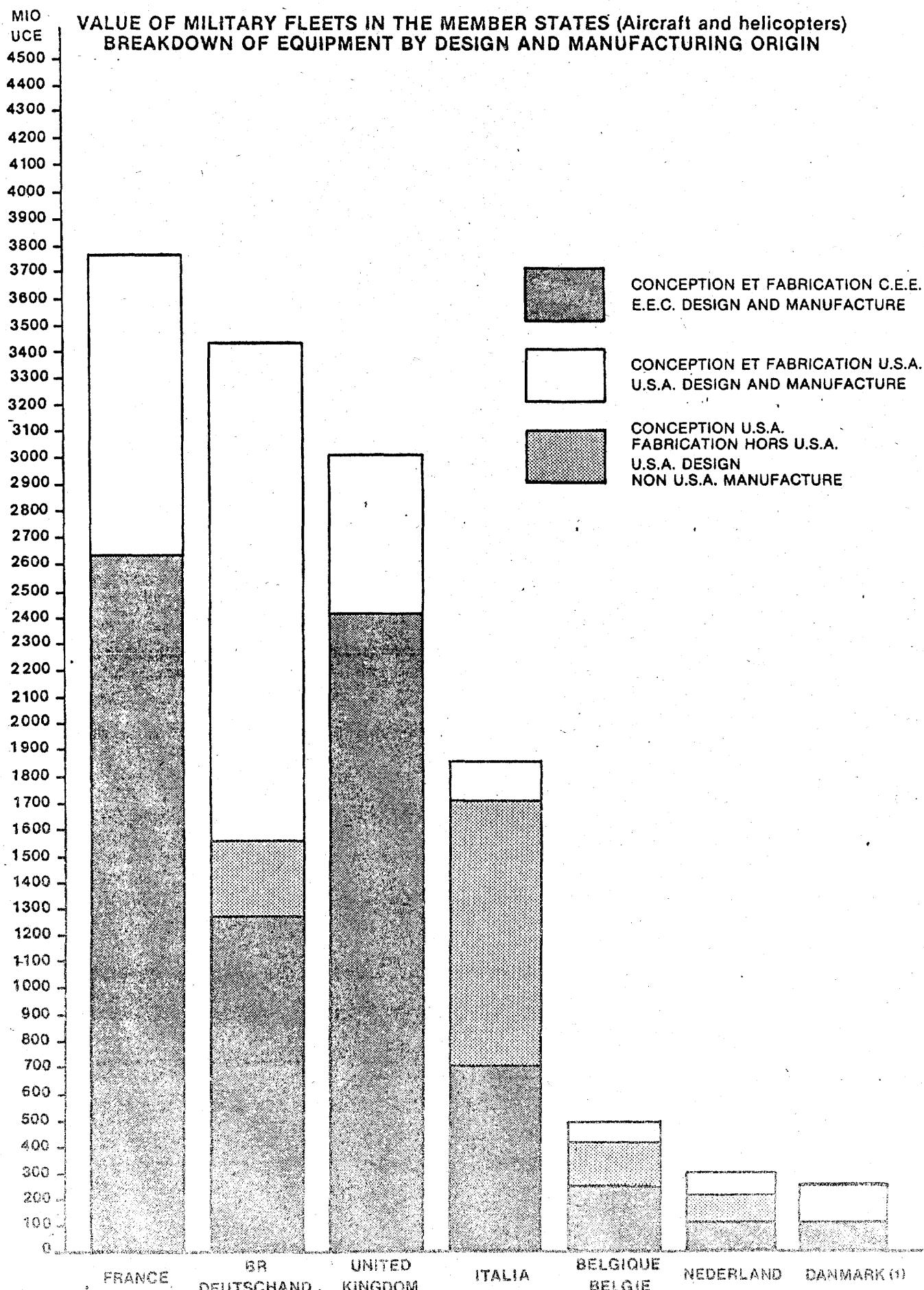
The aircraft and helicopter fleet in 1977 was analysed on the basis of the origin of the equipment design and not on the place of manufacture.

For the European fleet, a distinction has been made depending on whether USA-designed equipment was manufactured in the Community or in the USA.

2. The value of aircraft and helicopters in service is given in millions of 1978 EUA.
3. The figures given in this chapter include aircraft belonging to the fleets of the land, naval and air forces.
4. The share of EEC-designed equipment in the fleets of EEC Member States showed an overall upward trend (+ 3.4%) during the reference period (1976-1978), whereas during the same period there was an overall downward trend (- 6.8%) in the share of EEC-designed equipment in the fleets of non-EEC States.

Given the size of the chronological series involved, however, these trends are not very significant.

VALEURS DES FLOTTES MILITAIRES DES ETATS MEMBRES (Avions et hélicoptères)
REPARTITION SELON LA CONCEPTION ET LA FABRICATION DU MATERIEL



(1) Conception et fabrication Suédoise
Swedish design i manufacture

VALUE OF AIRCRAFT AND HELICOPTERS IN SERVICE IN THE EEC AND BREAKDOWN ACCORDING TO DESIGN ORIGIN

(1978 million EUA)

- 25 -

	E.E.C			U.S.A.			Other	Total	TOTAL
	Aircraft	Helicopters	Total	%	Aircraft	Helicopters			
FRG	1223,7	54,9	1278,6	37,3	1877,4	274,8	2152,2	62,7	-
B	243,7	15,0	258,7	53,3	226,8	-	226,8	46,7	-
DK	-	2,0	2,0	0,8	130,9	6,4	137,3	56,3	104,5
F	3283,7	340,2	3623,9	96,2	142,1	-	142,1	3,8	(1)
IRL	1,6	2,0	3,6	80,0	0,9	-	0,9	20,0	-
I	709,7	3,3	713,0	38,4	763,7	381,8	1145,5	61,6	-
NL	69,1	40,7	109,8	37,8	181,0	-	181,0	62,2	-
UK	2123,3	288,7	2412,0	79,0	638,5	0,7	639,2	20,9	0,6
EEC	7654,8	746,8	8401,6	64,0	3961,3	663,7	4625,0	35,2	105,1
									0,8
									11721,2
									1410,5
									13131,7

(1) Swedish design and manufacture

BREAKDOWN BY MANUFACTURING ORIGIN OF US-DESIGNED
AIRCRAFT IN MEMBER STATES' FLEETS (1978)

	Manufactured in the EEC	Manufactured in the USA
FR Germany	12,8 %	87,2 %
Belgium	63,7 %	36,3 %
Denmark	0,0 %	100,0 %
France	0,0 %	100,0 %
Ireland	11,1 %	88,9 %
Italy	87,3 %	12,7 %
Netherlands(1)	31,0 %	44,8 %
U.K	0,1 %	99,9 %

(1) Part built neither in the EEC, nor in the USA or Canada

TRENDS IN THE PROPORTION OF EEC-DESIGNED AIRCRAFT
IN THE FLEETS OF THE MEMBER STATES

	1976	1977	1978	Trend 1976-1978 (yearly average)
F.R.G.	23,2 %	31,5 %	37,3 %	+ 26,8 %
Belgium	34,2 %	56,3 %	53,3 %	+ 24,8 %
Denmark	0,7 %	0,8 %	0,8 %	+ 6,9 %
France	94,9 %	96,2 %	96,2 %	+ 0,7 %
Ireland	97,0 %	80,0 %	80,0 %	- 8,4 %
Italy	45,8 %	33,7 %	38,4 %	- 7,8 %
Netherlands	31,5 %	26,2 %	37,8 %	+ 9,5 %
U.K.	85,2 %	75,4 %	79,0 %	- 3,6 %
E.E.C.	59,9 %	60,2 %	64,0 %	+ 3,4 %

VALUE IN NON-EEC MARKETS OF AIRCRAFT AND HELICOPTERS IN SERVICE IN 1978 BROKEN DOWN BY DESIGN ORIGIN

(1978 million EUA)

	E.E.C					U.S.A					U.S.S.R					Other	
	Aircraft	Helicopters	Total	%		Aircraft	Helicopters	Total	%		Aircraft	Helicopters	Total	%	Aircraft	%	
U.S.A.	229,1	-	229,1	0,4		55768,1	7385,0	63153,1	99,6		-	-	-	0,0	0,6	0,0	
Canada	8,0	-	8,0	2,1		273,9	75,2	349,1	91,0		-	-	-	0,0	26,3	6,9	
Latin America	671,6	61,1	732,7	29,7		1123,2	174,3	1297,5	52,5		71,0	3,8	74,8	3,0	365,7	14,8	
Non-EEC Europe(1)	787,1	84,8	871,9	16,3		2153,3	510,5	2663,8	50,0		366,5	12,8	379,3	7,1	1417,2	26,6	
Middle East and North Africa (2)	973,5	309,8	1283,3	9,2		7272,5	912,2	8184,7	59,0		3626,2	211,2	3837,4	27,7	573,8	4,1	
Africa South of the Sahara & Malgasy Republic (3)	172,8	46,1	218,9	28,4		193,3	43,0	236,3	30,7		274,9	14,1	289,0	37,6	25,6	3,3	
South Africa and Rhodesia	510,5	77,1	587,6	89,4		49,9	-	49,9	7,6		-	-	-	0,0	20,0	3,0	
Asia	545,0	123,8	668,8	8,9		2916,2	748,4	3664,6	48,6		1343,5	46,8	1390,3	18,4	1816,8	24,1	
Australia	159,8	23,9	183,7	18,7		722,4	55,5	777,9	79,3		-	-	-	0,0	19,3	2,0	
Oceania	51,9	3,2	55,1	15,2		262,9	30,5	293,4	80,9		-	-	-	0,0	14,2	3,9	
World outside EEC	4109,3	729,8	4839,1	5,1		70735,7	9934,6	80670,3	84,2		5682,1	288,7	5970,8	6,2	4279,5	4,5	

(1) Austria, Finland, Greece, Norway, Portugal, Spain, Switzerland, Turkey, Yugoslavia, Sweden.

(2) Abu Dhabi, Algeria, Dubai, Egypt, Iran, Iraq, Israel, Jordan, Koweit, Lebanon, Libya, Morocco, Oman, Saudi Arabia, People's democratic Republic of Yemen, Yemen Arab Republic.

(3) Cameroon, Central African Republic, Chad, Ethiopia, Gabon, Ghana, Ivory Coast, Kenya, Malgasy Republic, Niger, Nigéria, Somalia, Tanzania, Uganda, Republic of Zaire, Zambia.

BREAKDOWN OF EEC DESIGNED AIRCRAFT
IN THE FLEETS OF NON-MEMBER COUNTRIES IN 1978

Middle East and North Africa	26,5 %
Non-EEC Europe	18,0 %
Latin America	15,1 %
Asia	13,8 %
South Africa and Rhodesia	12,2 %
U.S.A.	4,8 %
Africa South of the Sahara and Malgasy Republic	4,5 %
Australia	3,8 %
Oceania	1,1 %
Canada	0,2 %
TOTAL	<u>100,0 %</u>

TRENDS IN THE PROPORTION OF EEC DESIGNED AIRCRAFT
IN THE FLEETS OF NON-MEMBER STATES

	1976	1977	1978	Trends 76-78 (1)
U.S.A.	0,6 %	0,4 %	0,4 %	-16,3 %
Canada	3,6 %	1,9 %	2,1 %	-20,7 %
Latin America	28,3 %	23,4 %	29,7 %	+ 2,6 %
Non-EEC Europe	16,2 %	16,8 %	16,3 %	+ 0,3 %
Middle East & North Africa	12,8 %	9,5 %	9,2 %	-13,6 %
Africa South of the Sahara and Malgasy Republic	28,4 %	33,3 %	28,4 %	0,0 %
South Africa & Rhodesia	82,7 %	75,2 %	89,4 %	+ 4,1 %
Asia	9,8 %	9,1 %	8,9 %	- 4,5 %
Australia	27,5 %	23,6 %	18,7 %	-14,8 %
Oceania	19,4 %	17,3 %	15,2 %	-10,5 %
WORLD OUTSIDE EEC	5,9 %	4,9 %	5,1 %	- 6,8 %

(1) Estimated yearly average

CHAPTER 5

INTERNATIONAL TRADE

1. The figures for external trade in aerospace products, which have been supplied by the Statistical Office of the European Communities (EUROSTAT), are incomplete in two respects:
 - (a) on-board and ground equipment are not included, since national statistics give no indication of the statistical classification of these items;
 - (b) data for the United Kingdom are not included in the figures for trade in airframes, since the UK supplies statistics on parts and spares only.

It should be noted, however, that the entry into force on 1 January 1980 of the GATT Agreement on trade in civil aircraft will allow this equipment to be included in this chapter as from that date. The Statistical Office of the European Communities should also have UK data on civil aircraft as from the same date.

2. The two groups of products under consideration come under the following NIMEXE tariff headings:

Airframes: 8802.10, 8802.31, 8802.33, 8802.35, 8802.36, 8802.38, 8803.90, 8805.30.

Engines: 8406.01, 8406.02, 8406.97, 8408.11, 8408.13, 8408.31, 8408.33, 8408.71.

It was thought worthwhile to give a breakdown of extra-Community trade in airframes this year since the usual summary table does not show the volume of trade for each category.

3. The considerable increase in Community imports of American equipment was the main reason for the deterioration in the EEC's trade balance in the aerospace sector. However, it is difficult to quantify this balance exactly because the UK figures for airframes are not included (see above). This is a significant omission. Nevertheless, although the Community's trade balance is negative vis-à-vis the USA, it should be noted that there has been a marked increase vis-à-vis other countries.

X X

INTRA-COMMUNITY TRADE IN 1978 : AIRFRAMES

(1000 EUA)

Import Export	Germany	France	Italy	Netherl.	Bel/Lux	U K	Ireland	Denmark	EEC
FR Germany	-	59237	5891	24719	28399	37969	57	6225	162497
France	450784	-	23972	17181	38774	75818	757	5013	612399
Italy	22513	12349	-	828	4915	4064	41	135	44845
Netherlands	77891	13257	515	-	7941	5368	55	886	10913
Belgium -									
Luxembourg	6549	21066	685	5395	-	1500	348	59	35602
U K (1)	149282	110356	8761	23821	7604	-	2045	170	302039
Ireland	8	-	-	43	91	718	-	1	861
Denmark	4110	80	244	695	2576	217	26	-	7948
EEC	711137	216345	40068	72782	90300	125654	3329	12489	1272104
BALANCE	-548640	396054	4777	33131	-54698	176385	-2468	-4541	-

(1) Parts and spares only

Source : EUROSTAT Import Tables

INTRA-COMMUNITY TRADE IN 1978 : ENGINES

(1000 EUA)

Import Export	Germany	France	Italy	Netherl.	Bel/Lux	U K	Ireland	Denmark	EEC
FR Germany	-	33189	20869	6692	19801	123651	294	4452	208948
France	19292	-	4152	4362	30785	80533	3797	971	143892
Italy	339	2788	-	134	434	38175	-	6	41876
Netherlands	5822	2556	28	-	4629	7508	8	2813	23364
Belgium	-								
Luxembourg	6102	5922	2	512	-	1164	55	6247	20004
U K	44956	53979	30357	32140	3821	-	1123	5453	171829
Ireland	6	-	1	-	8	1754	-	13	1782
Denmark	851	270	20	55	4278	4294	3	-	9771
EEC	77368	98704	55429	43895	63756	257079	5280	19955	621466
BALANCE	131580	45188	-13553	-20531	-43752	-85250	-3498	-10184	-

Source : EUROSTAT Import Tables

EXTRA-COMMUNITY TRADE IN 1978 : ENGINES

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	46773	68056	21283	41862	25525	-16337	1697	634	-1063	5	9	4
France	179946	130873	-49073	170074	32642	-137432	1391	989	-402	8	1787	1779
Italy	50063	37898	-12165	38811	10605	-28206	2557	109	-2448	13	3	-10
Netherlands	85390	56446	-28944	62498	30198	-32300	1292	455	-837	-	-	-
Belgium-Lux.	68619	7944	-60675	66170	2924	-63246	-	2	2	-	-	-
U K	311750	503165	191415	219805	267792	47987	14166	23004	8838	2552	20539	17987
Ireland	492	1224	732	486	430	-56	6	-	-6	-	-	-
Denmark	113304	13011	-100293	106895	1624	-105271	220	112	-108	-	-	-
EEC	856337	818617	-37720	706601	371895	-334861	21329	25305	3976	2578	22338	19760

Source : EUROSTAT Export - Import Tables

EXTRA-COMMUNITY TRADE IN 1978 : AIRFRAMES

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	552920	175465	-377455	516254	28958	-487296	3444	3265	-179	1	247	246
France	249503	440851	191348	229638	120351	-109287	1765	761	-1004	-	811	811
Italy	82758	277180	194422	73474	36334	-37140	90	1194	1104	8	-	-8
Netherlands	227225	177210	-50015	211493	25400	-186093	3271	327	-2944	184	-	-184
Belgium-Lux.	162205	8412	-153793	154843	3983	-150860	916	12	-904	-	9	9
U K (1)	139504	361277	221773	98267	90066	-8201	2796	14072	11276	804	4646	3842
Ireland	6592	2800	-3792	6497	506	-5991	65	139	74	-	-	-
Denmark	50572	6019	-44553	47762	2445	-45317	-	54	54	123	-	-123
EEC	1471279	1449214	-22065	1338228	308043	-1030185	12347	19824	7477	1120	5713	4593

(1) Parts and spares only

Source : EUROSTAT Export - Import Tables

EXTRA-COMMUNITY TRADE IN 1978 : Gliders

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	385	3866	3481	62	1312	1250	-	75	75	-	45	45
France	200	243	43	190	1	-189	-	1	1	-	-	-
Italy	39	73	34	6	-	-6	-	-	-	-	-	-
Netherlands	97	5	-92	-	-	-	-	-	-	-	-	-
Belgium-Lux.	39	-	-39	-	-	-	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-	-	-
Denmark	87	14	-73	11	-	-11	-	-	-	-	-	-
EEC	847	4201	3354	269	1313	1044	-	76	76	-	45	45

(1) Not available on EUROSTAT

Source: EUROSTAT Import-Export Tables - NIMEXE 8802.10

EXTRA-COMMUNITY TRADE IN 1978 : HELICOPTERS
 (Unladen weight not exceeding 2000 Kg.)

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	3790	38124	34334	1437	403	-1034	-	-	-	-	-	-
France	568	16014	15446	335	2970	2635	-	-	-	-	308	308
Italy	2252	11507	9255	2105	5701	3596	-	-	-	-	-	-
Netherlands	-	1107	1107	-	51	51	-	-	-	-	-	-
Belgium-Lux.	66	-	-66	12	-	-12	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-	-	-
Denmark	129	-	-129	129	-	-129	-	-	-	-	-	-
EEC	6805	66752	59947	4018	9125	5107	-	-	-	-	308	308

(1) Not available on EUROSTAT

Source: EUROSTAT Import-Export Tables - NIMEXE 8802.31

EXTRA-COMMUNITY TRADE IN 1978 : HELICOPTERS
 (unladen weight exceeding 2000 Kg.)

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	1895	-	-1895	1895	-	-1895	-	-	-	-	-	-
France	981	12256	11275	981	1254	273	-	-	-	-	-	-
Italy	6341	117019	110678	2661	-	-2661	-	-	-	-	-	-
Netherlands	5486	-	-5486	5486	-	-5486	-	-	-	-	-	-
Belgium-Lux.	-	-	-	-	-	-	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	1065	-	-1065	1065	-	-1065	-	-	-	-	-	-
Denmark	1046	153	-893	1046	68	-978	-	-	-	-	-	-
EEC	16814	129428	112614	13134	1322	-11812	-	-	-	-	-	-

(1) Not available on EUROSTAT

Source: EUROSTAT Export-Import Tables - NIMEXE 8802.33

EXTRA-COMMUNITY TRADE IN 1978 : AIRPLANES & HYDROPLANES

(unladen weight not exceeding 2000 Kg.)

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	8568	783	-7785	8270	43	-8227	-	-	-	-	-	-
France	6955	7462	507	6799	1627	-5172	-	4	4	-	78	78
Italy	973	23013	22040	954	10	-944	-	-	-	-	-	-
Netherlands	1839	153	-1686	1839	-	-1839	-	-	-	-	-	-
Belgium-Lux.	1308	421	-887	1308	-	-1308	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-	-	-
Denmark	966	-	-966	948	-	-948	-	-	-	-	-	-
EEC	20609	31832	11223	20118	1680	-18438	-	4	4	-	78	78

(1) Not available on EUROSTAT

Source: EUROSTAT Export-Import Tables - NIMEXE 8802.35

EXTRA-COMMUNITY TRADE IN 1978 : AIRPLANES & HYDROPLANES
 (unladen weight exceeding 2000 Kg, but not exceeding 15000 Kg.)

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	62664	24404	-38260	54282	3025	-51257	-	-	-	-	-	-
France	26287	69998	43711	22225	43256	21031	1228	-	-1228	-	-	-
Italy	4047	23880	19833	3634	897	-2737	-	-	-	-	-	-
Netherlands	3968	41535	37567	3360	-	-3360	608	-	-608	-	-	-
Belgium-Lux.	5458	73	-5385	5458	73	-5385	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	2080	-	-2080	2080	-	-2080	-	-	-	-	-	-
Denmark	7197	-	-7197	7075	-	-7075	-	-	-	122	-	-122
EEC	111701	159890	48189	98114	47251	-50863	1836	-	-1836	122	-	-122

(1) Not available on EUROSTAT

Source: EUROSTAT Export-Import Tables - NIMEXE 8802.36

EXTRA-COMMUNITY TRADE IN 1978 : AIRPLANES & HYDROPLANES
 (unladen weight exceeding 15000 Kg.)

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	313458	70413	-243045	296415	16309	-280106	-	-	-	-	-	-
France	73216	201229	128013	73016	58071	-14945	-	-	-	-	-	-
Italy	24981	18482	-6499	24704	10023	-14681	-	-	-	-	-	-
Netherlands	110633	74524	-36099	108927	4301	-104626	-	-	-	-	-	-
Belgium-Lux.	47429	1584	-45845	42717	1012	-41705	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	35	35	-	-	-	-	-	-	-	-	-
Denmark	22383	712	-21671	22383	712	-21671	-	-	-	-	-	-
EEC	592100	366979	-225121	568162	90428	-477734	-	-	-	-	-	-

(1) Not available on EUROSTAT

Source: EUROSTAT Export-Import Tables - NIMEXE 8802.38

EXTRA-COMMUNITY TRADE IN 1978 : PARTS & SPARES OF AIRCRAFT

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	162160	37875	-124285	153893	7866	-146027	3444	3265	-179	1	202	201
France	141296	133649	-7647	126092	13172	-112920	537	761	224	-	425	425
Italy	44125	83206	39081	39410	19703	-19707	90	1	-89	8	-	-8
Netherlands	105208	59886	-45322	91881	21048	-70833	2663	327	-2336	184	-	-184
Belgium-Lux.	107905	6334	-101571	105348	2898	-102450	916	12	-904	-	9	9
U.K.	139504	361277	221773	98267	90066	-8201	2796	14072	11276	804	4646	3842
Ireland	3447	2765	-682	3352	506	-2846	65	139	74	-	-	-
Denmark	18764	5140	-13624	16170	1665	-14505	-	54	54	-	-	-
EEC	722409	690132	-32277	634413	156924	-477389	10511	18631	8120	997	5282	4285

Source: EUROSTAT Export-Import Tables - NIMEXE 8803.90

EXTRA-COMMUNITY TRADE IN 1978 : GROUND FLYING TRAINERS; PARTS THEREOF

(1000 EUA)

	Extra-EEC			United States			Canada			Japan		
	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance	Import	Export	Balance
FR Germany	379	237	-142	134	28	-106	231	130	-101	-	1	1
France	1908	4685	2777	1178	593	-585	-	-	-	-	-	-
Italy	378	159	-219	378	-	-378	-	-	-	-	-	-
Netherlands	84	5	-79	74	5	-69	10	-	-10	-	-	-
Belgium-Lux.	404	4	-400	403	4	-399	-	-	-	-	-	-
U.K. (1)	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-	-	-
Denmark	10	-	-10	6	-	-6	3	-	-3	-	-	-
EEC	3163	5090	1927	2173	630	-1543	244	130	-114	-	1	1

(1) Not available on EUROSTAT

Source: EUROSTAT Export-Import Tables - NIMEXE 8805.30

CHAPTER 6

TURNOVER OF THE **AEROSPACE INDUSTRY**

1. The survey made each year in conjunction with the industrial associations in each Member State enables the turnover of the European aerospace industry to be broken down by type of customer and sector.

2. Mention should be made of the following distinctions:

(a) In each Member State:

Overall Turnover

This includes transactions between aerospace companies within individual Member States. Consequently, it does not show the output of the aerospace industry as such since it does not separate out intermediate trade in each Member State.

Final Turnover in Each Member State

This does not include transactions between aerospace companies within individual Member States, and thus represents to some extent the output of the aerospace industry as such.

Thus, the difference between overall turnover and final turnover (for each Member State) is an indication of the sale of aerospace goods and services between companies within individual Member States in different subsectors (airframes, engines, equipment and space) and between companies within individual Member States in the same subsectors (e.g. subcontracting between airframe manufacturers for certain sub-assemblies).

(b) Within the EEC as a whole:

Final EEC Turnover

This represents the output for the EEC as a whole in that it separates out intra-Community transactions. Community turnover is given in the table entitled: "Final Turnover - Breakdown into Civil and Military Contracts".

3. The constant value figures are given on the basis of 1975 = 100 instead of 1970 = 100, as a result of a change made by the Statistical Office. This offers the advantage of using conversion rates closer to the 1978 situation, though the relative position of the different countries is affected by the change.

4. The items considered in the various subsectors are as follows:

(a) Airframes: (Aeroplanes, helicopters, gliders), missiles, their parts and spares.

(b) Engines: (Piston, turboprop and turbojet engines), their parts and spares, equipment and accessories for installation in the equipment mentioned under (a).

(c) Equipment: All equipment for (a) and (b) (finished products, parts and spares, sub-assemblies), including test and ground-training equipment.

(d) Space: Space vehicles, satellites, launch vehicles, ground installations.

5. The figures for the Italian industry had to be estimated (approximately 2.4%) since the Italian industrial association (AIA) was unable to provide a breakdown for the entire turnover of the Italian aerospace industry.
6. While in 1977 there was a decline in the European aerospace industry's turnover compared with 1976, at constant prices and exchange rates, in 1978 there was an increase of around 3.3% compared with 1977 and of approximately 1.6% compared with the peak reached in 1976. The American industry recorded an increase of approximately 8.7% over 1977 and 9.2% over 1976, thus confirming the trend recorded in 1976 for the first time since 1970.
7. In 1978, a greater proportion of turnover was taken up by exports (41%) at the expense of public contracts (49.6%) and the domestic civil market (9.6%). This was therefore a reversal in the trend recorded in 1976 when public contracts accounted for 64.9% of turnover and exports 21.7%.

x

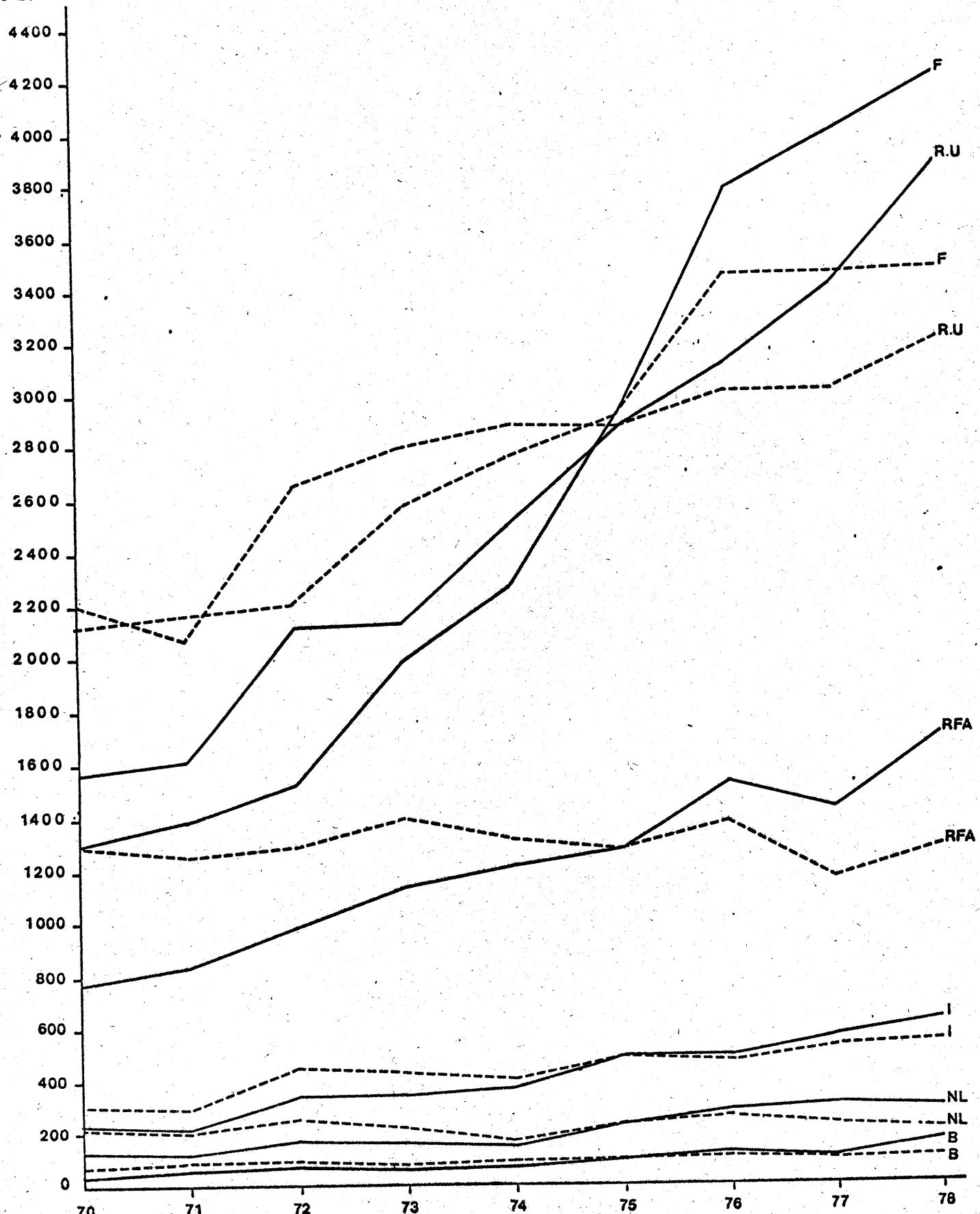
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FINAL TURNOVER OF E.E.C. MEMBER STATES

CHIFFRES D'AFFAIRES FINALS DES ETATS MEMBRES DE LA C.E.E.

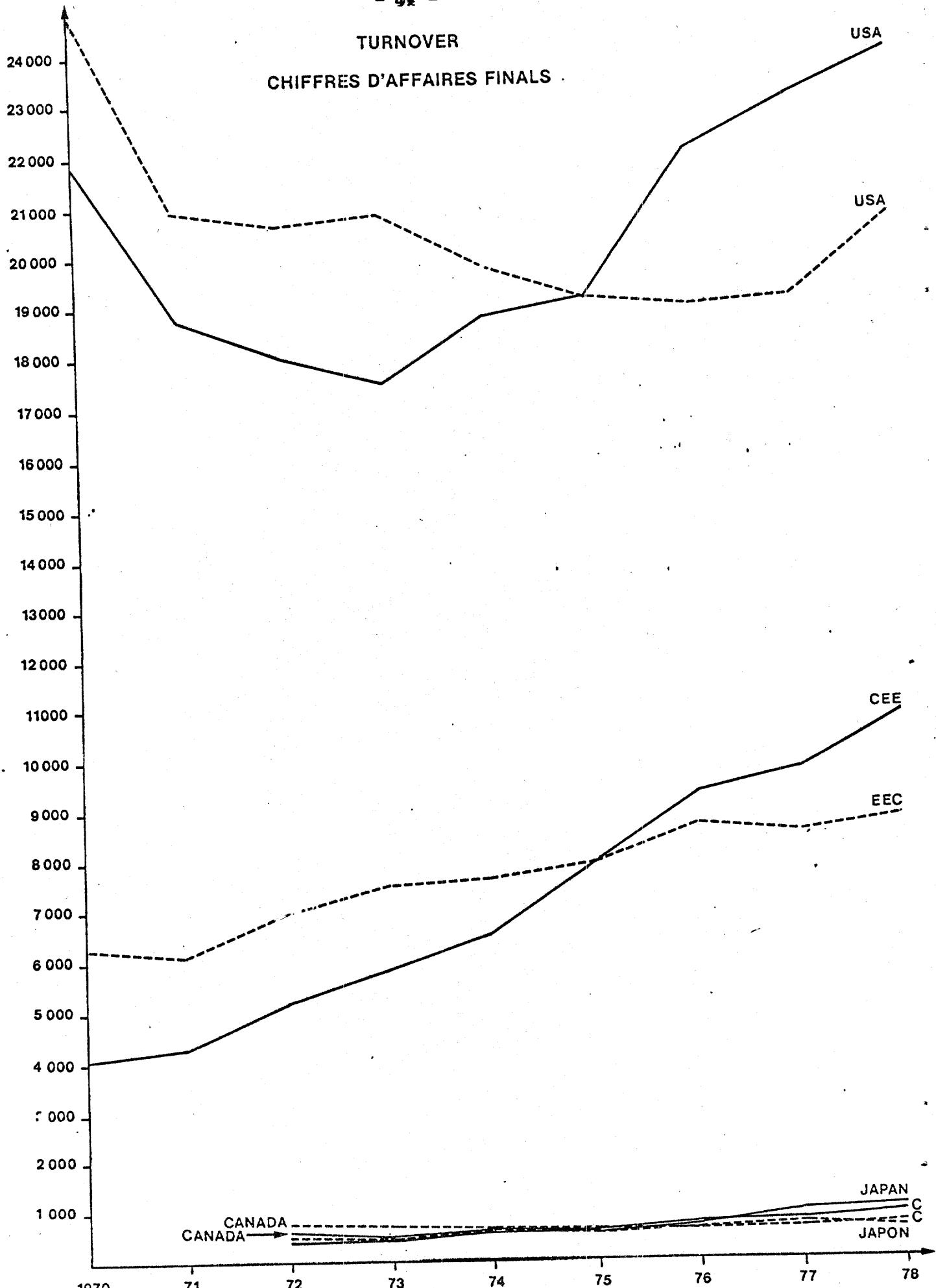
MILLIONS UCE
MIO EUA



PRIX ET TAUX DE CHANGE 1975
1970 PRICES AND EXCHANGE RATES

PRIX COURANTS
CURRENT PRICES

TURNOVER
CHIFFRES D'AFFAIRES FINALS



PRIX ET TAUX DE CHANGE 1975
1975 PRICES AND RATES OF EXCHANGE

PRIX COURANTS
CURRENT PRICES

FINAL TURNOVER

(Million EUA)

	FRG	B	F	I	NL	U.K.	EEC(1)	USA	CANADA	JAPAN
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(current prices)

1970	770	39	1310	227	113	1576	4035	21779	n.a	n.a
1971	823	53	1386	219	119	1610	4210	18750	n.a	n.a
1972	908	65	1529	359	169	2125	5155	17993	586	396
1973	1138	61	1993	353	160	2137	5842	17437	537	401
1974	1213	74	2263	361	141	2500	6552	18735	625	572
1975	1279	99	2924	494	227	2894	7917	19016	622	617
1976	1531	111	3790	491	280	3106	9309	22046	762	746
1977	1433	114	3933	568	301	3425	9774	23017	782	969
1978	1705	132	4220	623	285	3889	10854	23991	790	1046

(1975 prices and exchange rates)

1970	1300	66	2135	317	209	2207	6234	24896	n.a	n.a
1971	1257	85	2170	289	200	2074	6075	20886	n.a	n.a
1972	1288	95	2209	451	256	2662	6961	20616	700	529
1973	1394	81	2583	435	213	2806	7512	20756	671	474
1974	1309	85	2765	407	160	2892	7618	19726	640	587
1975	1279	99	2924	494	227	2894	7917	19016	622	617
1976	1368	98	3471	478	242	3011	8668	18912	607	636
1977	1162	89	3463	503	232	3071	8520	19012	642	723
1978	1284	97	3482	523	205	3211	8802	20661	727	650

- (1) The sum of the final turnovers of all Member States (greater than the final EEC turnover, since intra-Community transactions between EEC aerospace manufacturers have not been deducted).

FINAL TURNOVER OF THE AEROSPACE INDUSTRY IN THE MAIN WESTERN PRODUCING COUNTRIES & JAPAN

(current prices)

	U.S.A		EEC (1)		CANADA		JAPAN	
	Mio EUA	%	Mio EUA	%	Mio EUA	%	Mio EUA	%
1972	17993	74,6	5155	21,4	586	2,4	396	1,6
1973	17437	72,0	5842	24,1	537	2,2	401	1,7
1974	18735	70,7	6552	24,7	625	2,4	572	2,2
1975	19016	67,5	7917	28,1	622	2,2	617	2,2
1976	22046	67,1	9309	28,3	762	2,3	746	2,3
1977	23017	66,6	9774	28,3	782	2,3	969	2,8
1978	23991	65,4	10854	29,6	790	2,2	1046	2,8

(1975 prices and exchange rates)

	U.S.A		EEC (1)		CANADA		JAPAN	
	Mio EUA	%	Mio EUA	%	Mio EUA	%	Mio EUA	%
1972	20616	71,5	6961	24,2	722	2,5	529	1,8
1973	20756	70,6	7512	25,5	671	2,3	474	1,6
1974	19726	69,0	7618	26,7	640	2,2	587	2,1
1975	19016	67,5	7917	28,1	622	2,2	617	2,2
1976	18912	65,6	8668	30,1	607	2,1	636	2,2
1977	19012	65,8	8520	29,5	642	2,2	723	2,5
1978	20661	67,0	8802	28,5	722	2,4	650	2,1

(1) The sum of the final turnovers of all Member States (greater than the final EEC turnover, since intra-Community transactions between EEC aerospace manufacturers have not been deducted).

TREND IN FINAL TURNOVER OF THE AEROSPACE INDUSTRY
AND GDP, 1970 - 1978

(in EUA at constant prices)

	% over the period'		Mean annual growth rate	
	Turnover	GDP	Turnover	GDP
FR Germany	-1,2	23,5	-0,15	2,7
Belgium	47,0	29,4	4,9	3,3
France	63,1	36,2	6,3	3,9
Italy	65,0	24,8	6,5	2,8
Netherlands	-1,9	29,5	-0,24	3,3
U.K.	45,5	20,0	4,8	2,3
EEC (1)	41,1	26,7	4,4	3,0
U.S.A.	-17,0	30,1	-2,0	3,3

(1) The sum of the final turnovers of all Member States (greater than the final EEC turnover, since intra-Community transactions between EEC aerospace manufacturers have not been deducted).

PERCENTAGE OF GDP REPRESENTED BY TURNOVER OF THE AEROSPACE INDUSTRY 1978

(in EUA at constant prices)

FR Germany	0,34 %
Belgium	0,18 %
France	1,14 %
Italy	0,30 %
Netherlands	0,28 %
U.K.	1,60 %
EEC (1)	0,72 %
U.S.A.	1,45 %

(1) The sum of the final turnovers of all Member States (greater than the final EEC turnover, since intra-Community transactions between EEC aerospace manufacturers have not been deducted).

OVERALL TURNOVERS OF THE MEMBER STATES IN 1978

(Mio EUA at current prices)

	Mio EUA	Breakdown by subsector (%)			
		Airframe	Engines	Equipment	Space
FR Germany	1983	64,3	9,6	19,4	6,7
Belgium	145	45,9	28,8	10,4	14,9
France	5083	61,7	18,0	18,4	1,9
Italy	814	66,4	16,3	13,7	3,5
Netherlands	287	86,9	-	9,4	3,7
U.K.	4404	37,9	31,7	29,2	1,2
EEC	12716	54,6	21,0	21,7	2,7
U.S.A. (1)	---	47,2	13,7	17,7	21,4 (2)

(1) Figures estimated from final turnover.

(2) Including missiles

FINAL TURNOVER

Breakdown into civil and military contracts

(Mio EUA at current prices)

Year	E.E.C.			U.S.A.		
	Mio EUA	civil %	military %	Mio EUA	civil %	military %
1974	5732	30	70	18735	35	65
1975	6848	28	72	19016	33	67
1976	7974	28	72	22046	37	63
1977	8274	25	75	23017	37	63
1978	9116	28	72	23991	35	65

PROPORTION OF FINAL TURNOVER OF EACH MEMBER STATE EXPORTED TO

INDUSTRIAL UNDERTAKINGS IN OTHER MEMBER STATES (%)

	1972	1973	1974	1975	1976	1977	1978
FR Germany	7,0	4,8	14,7	12,1	22,8	28,7	28,8
Belgium	45,6	42,0	56,9	60,3	59,4	54,4	37,5
France	9,3	10,7	9,3	10,8	7,8	8,4	8,6
Italy	11,0	14,6	11,0	15,0	9,1	7,4	16,9
Netherlands	1,0	2,3	5,6	6,3	7,5	9,7	11,6
U.K.	7,8	13,0	13,6	15,4	18,0	18,2	17,9
TOTAL EEC	8,6	11,3	12,5	13,5	14,3	15,3	16,0

BREAKDOWN OF FINAL EEC TURNOVER IN 1978 BY CUSTOMER CATEGORY

(Mio EUA at current prices)

Customers	Civil	Military	Total
<u>STATES</u>	<u>392,2</u>	<u>3901,9</u>	<u>4294,1</u>
-R&D contracts	207,1	1222,2	1429,3
-Modifications, Repairs, Maintenance	33,5	608,8	642,3
-Sales	151,6	2070,9	2222,5
<u>AEROSPACE MANUFACTURERS IN NON-MEMBER COUNTRIES</u>	<u>240,3</u>	<u>242,1</u>	<u>482,4</u>
<u>END USERS</u>	<u>1890,6</u>	<u>2448,7</u>	<u>4339,3</u>
-EEC	875,5	192,0	1067,5
-Non-member countries	1015,1	2256,7	3271,8
TOTAL	2523,1	6592,7	9115,8
%	27,7	72,3	100,0

PERCENTAGE BREAKDOWN OF FINAL TURNOVER BY CUSTOMER CATEGORY

Customers	1976		1977		1978	
	Civil	Military	Civil	Military	Civil	Military
<u>STATES</u>	<u>4,6</u>	<u>46,9</u>	<u>5,0</u>	<u>59,8</u>	<u>4,4</u>	<u>42,8</u>
-R&D contracts	3,4	16,9	2,9	12,6	2,3	13,4
-Modifications, Repairs, Maintenance	) 1,2	30,0	2,1	47,2	0,4	6,7
-Sales	)				1,7	22,7
<u>AEROSPACE MANUFACTURERS IN NON-MEMBER COUNTRIES</u>	<u>2,5</u>	<u>2,3</u>	<u>1,8</u>	<u>2,3</u>	<u>2,6</u>	<u>2,7</u>
<u>FINAL USERS</u>	<u>20,7</u>	<u>23,0</u>	<u>18,6</u>	<u>12,5</u>	<u>20,7</u>	<u>26,8</u>
-EEC	12,9	-	13,4	-	9,6	2,1
-Non-member countries	7,8	23,0	5,2	12,5	11,1	24,7
TOTAL (%)	27,8	72,2	25,4	74,6	27,7	72,3

PERCENTAGE BREAKDOWN OF FINAL EEC TURNOVER BY MARKET

	1974	1975	1976	1977	1978
1. <u>Aerospace</u>					
-State	58,9	56,6	51,5	64,9	49,4
-Domestic civil market	8,8	8,2	12,9	13,4	9,6
-Exports	32,3	35,2	35,6	21,7	41,0
2. <u>Aviation</u>					
-State	58,2	56,3	51,0	65,4	49,0
-Domestic civil market	8,5	7,6	12,4	12,5	9,4
-Exports	33,3	36,1	36,6	22,1	41,6
2.1 <u>Airframes</u>					
-State	54,8	52,5	46,3	65,3	44,8
-Domestic civil market	7,6	6,8	12,8	12,4	7,8
-Exports	37,6	40,7	40,9	22,3	47,4
2.2 <u>Engines</u>					
-State	59,4	60,4	58,2	65,8	51,8
-Domestic civil market	9,5	7,9	11,9	14,7	12,1
-Exports	31,1	31,7	29,9	19,5	36,1
2.3 <u>Equipment</u>					
-State	67,9	63,8	62,0	65,3	60,1
-Domestic civil market	10,3	10,3	11,4	10,1	12,3
-Exports	21,8	25,9	26,6	24,6	27,6

BREAKDOWN OF STATE BACKING BY CONTRACT TYPE

(Mio EUA at current prices)

	E.E.C. (1)		U.S.A. (2)	
	Mio EUA	%	Mio EUA	%
R&D contracts	<u>1429,3</u>	<u>31,9</u>	<u>4835,2</u>	<u>31,9</u>
Civil	207,0	4,6		
Military	1222,2	27,3		
Purchase & maintenance contracts	<u>3056,8</u>	<u>68,1</u>	<u>10299,8</u>	<u>68,1</u>
Civil	185,1	4,1		
Military	2871,7	64,0		
TOTAL	4486,1	100,0	15135,0	100,0
As % of final turnover	(9115,8)	49,2	(23017,0)	65,8

(1) 1978

(2) 1977

BREAKDOWN BY SUBSECTOR OF STATE BACKING IN THE EEC IN 1978

(Mio EUA at current prices)

	Mio EUA	%
Airframes	2497,7	55,7
Engines	947,1	21,1
Equipment	888,1	19,8
Space	152,9	3,4
Total	4486,1	100,0

BREAKDOWN OF STATE BACKING FOR THE EEC AVIATION INDUSTRY

BY CONTRACT AND SUBSECTOR

	1974	1975	1976	1977	1978
<u>AIRCRAFT</u>					
<u>-R&D contracts</u>					
civil	9,7	6,2	3,0	1,9	2,7
military	35,4	38,3	39,5	15,8	27,3
<u>-Purchase & maintenance contracts</u>					
civil	1,3	1,4	1,6	2,4	4,5
military	53,6	54,1	55,9	79,9	65,5
TOTAL	100,0	100,0	100,0	100,0	100,0
<u>ENGINES</u>					
<u>-R&D contracts</u>					
civil	13,4	9,4	6,1	3,8	3,8
military	18,6	27,6	28,8	29,7	32,5
<u>-Purchase & maintenance contracts</u>					
civil	4,0	4,3	3,5	3,6	2,2
military	64,0	58,7	61,6	62,9	61,5
TOTAL	100,0	100,0	100,0	100,0	100,0
<u>EQUIPEMENT</u>					
<u>-R&D contracts</u>					
civil	0,6	1,5	0,3	0,3	0,6
military	21,5	22,5	21,5	24,2	25,9
<u>-Purchase & maintenance contracts</u>					
civil	4,9	3,5	3,2	5,8	5,0
military	73,0	72,5	75,0	69,7	68,5
TOTAL	100,0	100,0	100,0	100,0	100,0

TREND IN EEC FINAL TURNOVER AS A PERCENTAGE OF
FINAL TURNOVER IN THE USA

(at current prices)

Year	EEC %	USA %
1970	18,5	100,0
1971	22,5	100,0
1972	28,7	100,0
1973	33,5	100,0
1974	35,0	100,0
1975	41,6	100,0
1976	42,2	100,0
1977	42,5	100,0
1978	45,2	100,0.

(1975 prices and exchange rates)

Year	EEC %	USA %
1970	25,0	100,0
1971	29,1	100,0
1972	33,8	100,0
1973	36,2	100,0
1974	38,6	100,0
1975	41,6	100,0
1976	45,8	100,0
1977	44,8	100,0
1978	42,6	100,0

CHAPTER 7

EMPLOYMENT IN THE
AEROSPACE INDUSTRY

1. The figures for employment in the European aerospace industry are taken from the results of the annual survey conducted in conjunction with the national industrial associations.

Since the Italian industrial association was unable to provide detailed figures, 2 100 units should be added to the figures for Italy in the various tables.

2. The production items taken into consideration in the various sub-sectors are the same as those given in the previous chapter on turnover.
3. The tables showing the distribution of the workforce by occupational grading should be interpreted with a certain amount of caution, since they are not based on standard international definitions.
4. The fluctuations in employment in the Community from year to year make it impossible to detect a definite trend. However, on the whole, it can be considered that employment in this sector is relatively stable. In view of the increase in turnover, this is a sign of increased productivity.

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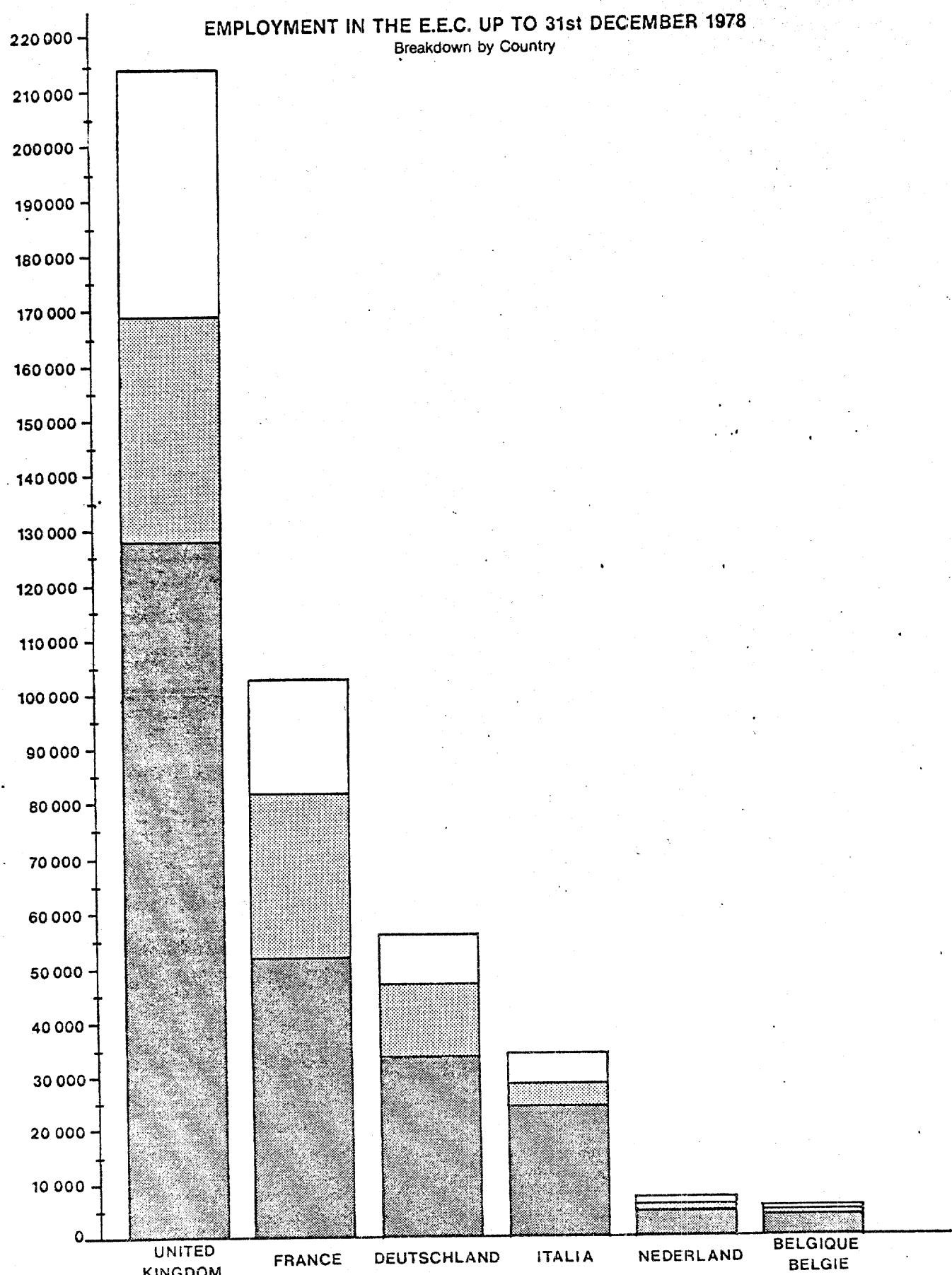
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EFFECTIFS DANS LA C.E.E. AU 31 DECEMBRE 1978

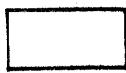
Répartition par pays

EMPLOYMENT IN THE E.E.C. UP TO 31st DECEMBER 1978

Breakdown by Country



R&D
R&D



Commercialisation et gestion
Marketing and Management



Production
Production

EMPLOYMENT TRENDS

	1972	1973	1974	1975	1976	1977	1978
FR Germany	52455	52985	52982	51914	51367	52416	56348
Belgium	4941	4380	4422	4025	5015	4895	5068
France	108525	106132	106769	108915	107454	103295	103424
Italy	28500	30000	30000	30768	31991	32080	34036
Netherlands	6600	7000	6555	7682	7865	7320	7382
U.K.	207500	201700	210100	233792	227402	219251	214918
E.E.C.	408521	402197	410828	437096	431094	419257	421176
U.S.A.	912000	956000	982000	941000	896000	891000	967000
Canada	28800	31700	28400	27300	25300	28900	33800
Japan	26000	26026	25550	26746	n.d.	23756	25398

WORKFORCE IN THE EEC ON 31 DECEMBER 1978

Breakdown by subsector

	AIRFRAMES & SPACE	ENGINES	EQUIPMENT	TOTAL
<u>Occupational grading</u>				
1.Engineers & managerial staff	32686	13141	20450	66277
2.Executive staff				
- technical	51061	19306	23124	93491
- administrative	35140	11762	18127	65029
3.Skilled workers))))
	) 91013	) 51476	) 53890	) 196379
4.Non-skilled workers))))
TOTAL	209900	95685	115591	421176
<u>Main activity</u>				
1.R&D	36993	18136	24242	79371
2.Production	131494	57032	69704	258230
3.Marketeting & management	41413	20517	21645	83575
TOTAL	209900	95685	115591	421176
Répartition (%)	49,8	22,7	27,5	100,0

WORKFORCE IN THE EEC ON 31 DECEMBER 1978

Breakdown by country

	F.R.G	B	F	I	NL	U.K.	E.E.C	%
<u>Occupational grading</u>								
1.Engineers & managerial staff	8564	488	14400	920	652	41253	66277	15,7
2.Executive staff								
- technical	13822	933	36624	8278	1160	32674	93491	22,2
- administrative	10932	598	13400	4587	1537	33975	65029	15,5
3.Skilled workers	18567	2704	) 39000	14618	3339	90232	) 196379	46,6
4.Non-skilled workers	4463	345	)	5633	694	16784)	
TOTAL	56348	5068	103424	34036	7382	214918	421176	100,0
<u>Main activity</u>								
1.R&D	12760	189	19871	4143	1110	41298	79371	18,9
2.Production	33903	4050	61979	24582	5099	128617	258230	61,3
3.MARKETING & management	9685	829	21574	5311	1173	45003	83575	19,8
TOTAL	56348	5068	103424	34036	7382	214918	421176	100,0

BREAKDOWN OF THE WORKFORCE IN THE EEC ON 31 DECEMBER 1978

(Airframes & space subsectors)

	F.R.G	B	F	I	NL	U.K.	E.E.C	%
<u>Occupational grading</u>								
1.Engineers & managerial staff	5592	323	9433	593	459	16286	32686	15,6
2.Executive staff - technical - administrative	9892 7903	635 404	22011 7852	5643 3474	765 1076	12115 14431	51061 35140	24,3 16,7
3.Skilled workers	10759	1751	) 18733	9738	2771	32827	) 91013	43,4
4.Non-skilled workers	3173	57	)	3893	410	6901)	
TOTAL	37319	3170	58029	23341	5481	82560	209900	100,0
<u>Main activity</u>								
1.R&D	9278	132	10135	2865	1035	13548	36993	17,6
2.Production	22051	2297	37257	17070	4128	48691	131494	62,7
3.MARKETING & management	5990	741	10637	3406	318	20321	41413	19,7
TOTAL	37319	3170	58029	23341	5481	82560	209900	100,0

BREAKDOWN OF THE WORKFORCE IN THE EEC ON 31 DECEMBER 1978

(Equipement subsector)

	F.R.G	B	F	I	NL	U.K.	E.E.C	%
<u>Occupational grading</u>								
1.Engineers & managerial staff	1890	54	2275	159	193	15879	20450	17,7
2.Executive staff - technical - administrative	2749 1682	126 37	6896 3042	1554 702	395 461	11404 12203	23124 18127	20,0 15,7
3.Skilled workers	3918	315	) 11561	2477	568	26526	) 53890	46,6
4.Non-skilled workers	996	14	)	702	284	6529)	
TOTAL	11235	546	23774	5594	1901	72541	115591	100,0
<u>Main activity</u>								
1.R&D	2476	16	5389	841	75	15445	24242	21,0
2.Production	6819	500	12468	3958	971	44988	69704	60,3
3.MARKETING & management	1940	30	5917	795	855	12108	21645	18,7
TOTAL	11235	546	23774	5594	1901	72541	115591	100,0

BREAKDOWN OF THE WORKFORCE IN THE EEC ON 31 DECEMBER 1978

(Engines subsector)

	F.R.G	B	F	I	NL	U.K.	E.E.C	%
<u>Occupational grading</u>								
1.Engineers & managerial staff	1082	111	2692	168	-	9088	13141	13,7
2.Executive staff - technical - administrative	1181 1347	172 157	7717 2506	1081 411	-	9155 7341	19306 11762	20,2 12,3
3.Skilled workers	3890	638	) 8706	2403	-	30879	) 51476	53,8
4.Non-skilled workers	294	274	)	1038	-	3354)	
TOTAL	7794	1352	21621	5101	-	59817	95685	100,0
<u>Main activity</u>								
1.R&D	1006	41	4347	437	-	12305	18136	19,0
2.Production	5033	1253	12254	3554	-	34938	57032	59,6
3.Marketeting & management	1755	58	5020	1110	-	12574	20517	21,4
TOTAL	7794	1352	21621	5101	-	59817	95685	100,0

CHAPTER 8

PUBLIC FINANCING OF R&D IN THE CIVIL AEROSPACE INDUSTRIES

1. The figures given in the following tables were supplied by the SOEC¹ and include funds for research and development granted to industry and to research centres, laboratories, universities, etc.
2. For the EEC Member States taken as a whole, 70% of R&D funds granted to the aerospace industry is devoted to civil aviation R&D and 30% to space R&D.
3. Although a comparison of statistics from different sources can sometimes produce misleading results, it should be pointed out that the difference between the figures given in the following table and those given in the chapter on the turnover of the aerospace industry is indicative of the proportion of public funds granted to non-industrial bodies. It would therefore appear that some 72% of aerospace R&D funds goes to industry and the remaining 28% to other research bodies, compared with approximately 90% and 10% respectively in 1977.

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¹ Statistical Office of the European Communities

PUBLIC FINANCING OF AEROSPACE R&D

YEAR 1978

	Civil Aviation manufacture			Space			Total		
	a	b	c	a	b	c	a	b	c
F.R.G	87361	13,6	1,6	235101	36,5	4,2	322462	50,0	5,8
France	138993	23,0	3,5	196939	32,6	5,0	335932	55,6	8,6
Italy	11	0,0	-	78492	54,3	9,9	78503	54,3	9,9
Netherlands	5423	6,2	0,5	36716	42,2	3,6	42139	48,4	4,2
Belgium	438	0,4	-	26661	22,7	3,0	27099	23,1	3,0
U.K.	50507	26,3	2,0	62942	32,8	2,4	113449	59,1	4,4
Ireland	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	8920	29,4	3,5	8920	29,4	3,5
C.E.C (1)	-	-	-	1855	6,8	0,8	1855	6,8	0,8
TOTAL	282733	15,3	2,3	648336	35,1	5,3	930359	50,4	7,6

a. 1000 EUA at current prices

b. % of appropriations for Productivity, Industrial Technology and fare R&D

c. % of total R&D apprriations

(1) Financing provided by the Commission of the European Communities

PUBLIC FINANCING OF AEROSPACE R&D IN 1976-1978

PERCENTAGE BREAKDOWN BY COUNTRY

	Civil Aviation Manufacture			Space			Total		
	1976	1977 (1)	1978	1976	1977	1978	1976	1977 (1)	1978
F.R.G.	19,3	23,8	30,9	37,2	36,0	36,3	30,6	33,1	34,7
France	43,2	51,5	49,1	32,4	32,0	30,4	36,4	39,3	36,1
Italy	-	0,2	-	10,0	10,1	12,1	6,3	7,2	8,4
Netherlands	3,1	4,6	1,9	3,8	4,7	5,7	3,6	4,9	4,5
Belgium	0,1	na	0,2	4,2	4,4	4,1	2,6	na	2,9
U.K.	34,3	19,9	17,9	10,9	10,8	9,7	19,5	14,1	12,2
Ireland	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	1,5	1,7	1,4	1,0	1,2	1,0
C.E.C.	-	-	-	-	0,3	0,3	-	0,2	0,2
TOTAL	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

(1) Approximate figures, since data on appropriations for civil aviation manufacture R&D in Belgium are not available.

A N N E X E S

PRICE INDICES - BASIS : GDP AT MARKET PRICES

(1975 =100)

	FRG	B	F	I	NL	U.K.	EEC	USA	CANADA	JAPAN
1970	72,7	66,1	65,5	56,5	63,9	54,3	64,3	72,1	66,1	63,1
1971	78,3	69,7	69,3	60,6	69,4	59,4	69,1	75,8	68,2	66,1
1972	82,7	74,0	73,6	64,4	75,9	64,0	73,7	78,9	71,6	69,2
1973	87,7	79,2	79,3	71,8	82,3	68,3	79,2	83,4	78,2	76,7
1974	93,7	89,0	88,2	85,1	89,9	78,7	88,0	91,3	90,3	92,1
1975	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1976	103,3	107,8	109,7	118,0	108,9	114,5	109,6	105,1	109,6	105,6
1977	107,1	115,0	119,7	140,3	155,7	130,2	120,0	111,4	117,3	111,5
1978	111,3	120,2	130,8	159,0	121,9	143,6	129,9	119,3	125,2	116,9

EXCHANGE RATES

1 EUA =

	DM	FF	LIT	HFL	BFR	UK £	PTA	DKR	US \$	CA \$	YEN
1970	3,741	5,677	638,8	3,700	51,11	0,4259	71,361	7,666	1,022	-	368,0
1971	3,645	5,772	647,4	3,657	50,86	0,4285	72,570	7,752	1,047	-	363,8
1972	3,576	5,657	654,2	3,599	49,36	0,4489	72,203	7,789	1,121	1,111	339,7
1973	3,276	5,467	716,4	3,428	47,80	0,5023	71,811	7,415	1,231	1,232	333,1
1974	3,083	5,733	775,7	3,202	46,39	0,5098	68,823	7,259	1,192	1,166	347,4
1975	3,049	5,319	809,5	3,134	45,56	0,5600	71,159	7,122	1,240	1,262	367,6
1976	2,815	5,344	930,1	2,955	43,16	0,6215	74,739	6,761	1,118	1,102	331,2
1977	2,648	5,606	1006,0	2,800	40,88	0,6537	86,847	6,855	1,141	1,214	305,8
1978	2,556	5,740	1080,2	2,754	40,06	0,6639	97,429	7,019	1,274	1,454	267,1
1979	2,511	5,829	1138,4	2,749	40,16	0,6464	91,966	7,207	1,371	1,606	300,3

GROSS DOMESTIC PRODUCT AT MARKET PRICES

(current prices)

(Million EUA)

	FRG	B	F	I	NL	U.K.	EEC	USA	CANADA	JAPAN
1970	181417	24693	137831	98425	30962	119303	613012	959862	n.a.	200161
1971	207063	27164	151145	105821	35448	133223	682256	1012745	n.a.	222703
1972	230929	31300	173429	114822	40759	140479	757372	1041494	94212	273014
1973	280365	36695	203777	125263	49033	144623	870210	1057159	99496	339376
1974	320131	44366	222939	142726	59424	161604	985756	1179489	124030	389415
1975	339094	49828	273032	154875	66083	185177	1107628	1230291	127678	405126
1976	398807	59662	312893	168421	81272	198014	1265577	1516503	173475	505575
1977	452020	67902	334491	188699	93715	216882	1405013	1655528	172471	609677
1978	502048	74147	370771	204350	102727	242885	1553159	1657928	158466	772420

GROSS DOMESTIC PRODUCT AT MARKET PRICES

(1975 prices and exchange rates)

(Million EUA)

	FRG	B	F	I	NL	U.K.	EEC	USA	CANADA	JAPAN
1970	306145	41893	224449	137457	57192	167098	968393	1097008	n.a.	317659
1971	316036	43498	236587	139715	59635	171724	1002271	1128716	n.a.	333577
1972	327583	45800	250546	144190	61673	175847	1042644	1193621	115837	364721
1973	343622	48615	263991	154328	65192	189830	1104542	1258388	124209	401020
1974	345476	50781	272524	160720	67498	186986	1122997	1242169	126905	399648
1975	339094	49828	273032	154875	66083	185177	1107628	1230291	127678	405126
1976	356590	52410	286548	163968	70356	191962	1162926	1299769	138213	431311
1977	366373	52948	294613	167258	72324	194491	1190141	1366283	141441	454607
1978	378055	54209	305809	171525	74034	200580	1227188	1426941	145826	479982

THE SPANISH AEROSPACE INDUSTRY

The figures given below have been calculated from data on employment and turnover for the Spanish aerospace industry as supplied to the Commission by ATECMA.

These results have been compiled using the questionnaire previously used by the trade associations who form the members of AECMA, and the Commission. Due to the late arrival of this data, it has not been possible to modify the format of chapters 6 and 7. However, it was thought useful to include the most significant results for this industry in the annexes to this document. The next issue will be duly rectified.

x

x

x

Final Turnover in 1978 : 132 Mio EUA

Overall Turnover in 1978 : 133 Mio EUA

Proportion of Spain's final
turnover exported to industrial
undertakings in EEC member states : 18 %

Percentage of GDP represented by
turnover of the aerospace
industry 1978 (estimate) : 0,12 %

Average exchange rate in 1978 : 1 EUA = 97,43 PTA

SPAIN : BREAKDOWN OF FINAL TURNOVER IN 1978 BY CUSTOMER CATEGORY

(Mio EUA at current prices)

Customers	Civil	Military	Total
<u>STATES</u>	<u>16,7</u>	<u>29,3</u>	<u>46,0</u>
-R&D contracts	0,1	20,6	20,7
-Modifications, Repairs, Maintenance	16,1	5,0	21,1
-Sales	0,5	3,7	4,2
<u>AEROSPACE MANUFACTURERS IN NON-MEMBER COUNTRIES</u>	<u>5,1</u>	<u>18,2</u>	<u>23,3</u>
<u>END USERS</u>	<u>1,0</u>	<u>38,2</u>	<u>39,2</u>
-EEC	0,1	-	0,1
-Non-member countries	0,9	38,2	39,1
TOTAL	22,8	85,7	108,5
%	21,0	79,0	100,0

PERCENTAGE BREAKDOWN OF SPAIN'S FINAL TURNOVER BY CUSTOMER CATEGORY

Customers	1978	
	Civil	Military
<u>STATE</u>	<u>15,4</u>	<u>27,0</u>
-R&D Contracts	0,1	19,0
-Modifications, Repairs, Maintenance	14,8	4,6
-Sales	0,5	3,4
<u>AEROSPACE MANUFACTURERS IN NON-MEMBER COUNTRIES</u>	<u>4,7</u>	<u>16,8</u>
<u>FINAL USERS</u>	<u>0,9</u>	<u>35,2</u>
-EEC	0,1	-
-Non-member countries	0,8	35,2
TOTAL (%)	21,0	79,0

SPAIN : PERCENTAGE BREAKDOWN OF FINAL TURNOVER BY MARKET

	1978
1. <u>Aerospace</u>	
- State	42,4
- Domestic civil market	0,1
- Exports	57,5
2. <u>Aviation</u>	
- State	43,4
- Domestic civil market	0,1
- Exports	56,5
2.1 <u>Airframes</u>	
- State	40,0
- Domestic civil market	-
- Exports	60,0
2.2 <u>Engines</u>	
- State	96,0
- Domestic civil market	-
- Exports	4,0
2.3 <u>Equipment</u>	
- State	92,8
- Domestic civil market	7,2
- Exports	-

SPAIN : BREAKDOWN BY SUBSECTOR OF STATE BACKING IN 1978

(Mio EUA at current prices)

	Mio EUA	%
Airframes	39,8	86,5
Engines	4,5	9,8
Equipment	1,7	3,6
Space	0,04	0,1
Total	46,04	100,0

SPAIN : BREAKDOWN OF STATE BACKING FOR THE AVIATION INDUSTRY

BY CONTRACT AND SUBSECTOR

	1978
<u>AIRCRAFT</u>	
-R&D contracts	
civil	0,3
military	51,5
-Purchase & maintenance contracts	
civil	38,9
military	9,3
TOTAL	100,0
<u>ENGINES</u>	
-R&D contracts	
civil	-
military	-
-Purchase & maintenance contracts	
civil	-
military	100,0
TOTAL	100,0
<u>EQUIPMENT</u>	
-R&D contracts	
civil	-
military	7,4
-Purchase & maintenance contracts	
civil	63,6
military	29,0
TOTAL	100,0

WORKFORCE IN SPAIN ON 31 DECEMBER 1979

Breakdown by subsector

	AIRFRAMES	ENGINES	EQUIPMENT	SPACE	TOTAL	%
<u>Occupational grading</u>						
1.Engineers and managerial staff	449	18	51	52	570	8,6
2.Executive staff						
- technical	834	20	47	35	936	14,1
- administrative	997	41	28	14	1080	16,3
3.Skilled workers	3035	119	95	36	3285	49,4
4.Non-skilled workers	738	16	17	-	771	11,6
TOTAL	6053	214	238	137	6642	100,0
<u>Main activity</u>						
1.R&D	218	-	17	95	330	5,0
2.Production	5394	214	210	42	5860	88,2
3.Marketeting & management	441	-	11	-	452	6,8
TOTAL	6053	214	238	137	6642	100,0