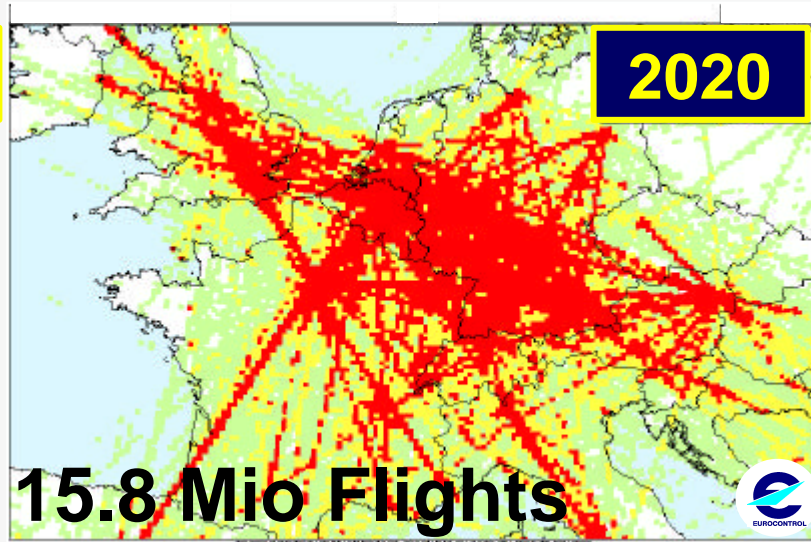
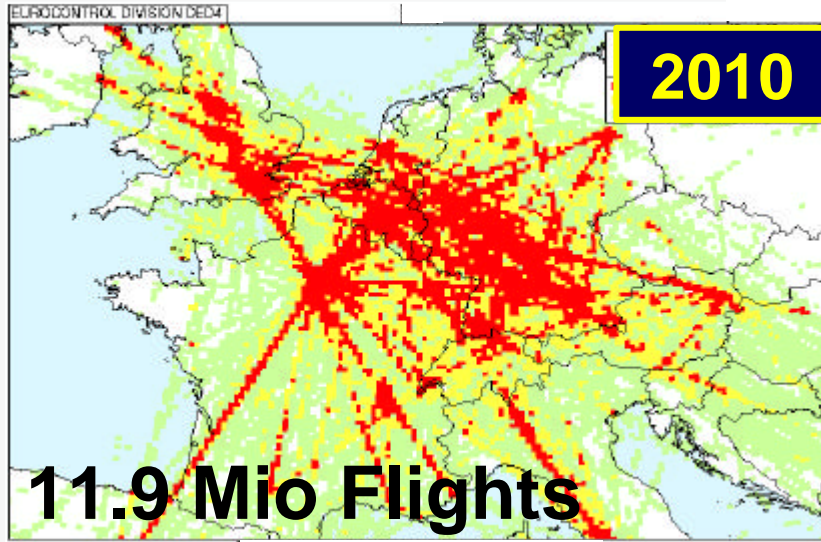
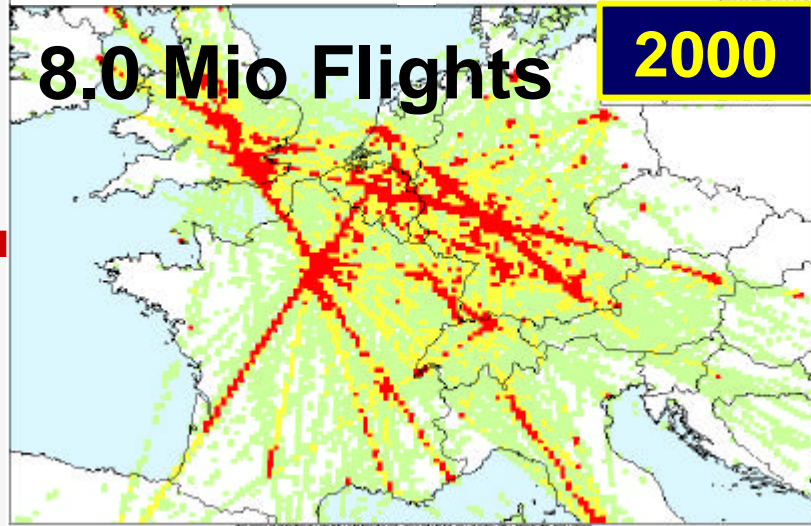
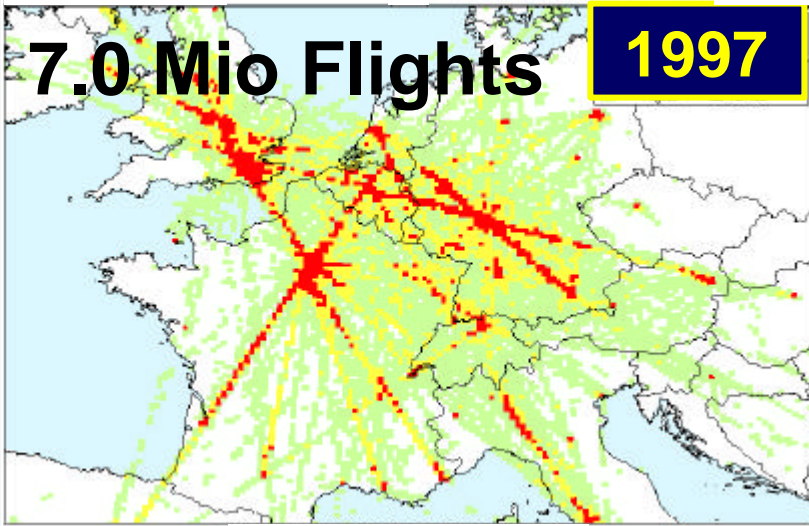
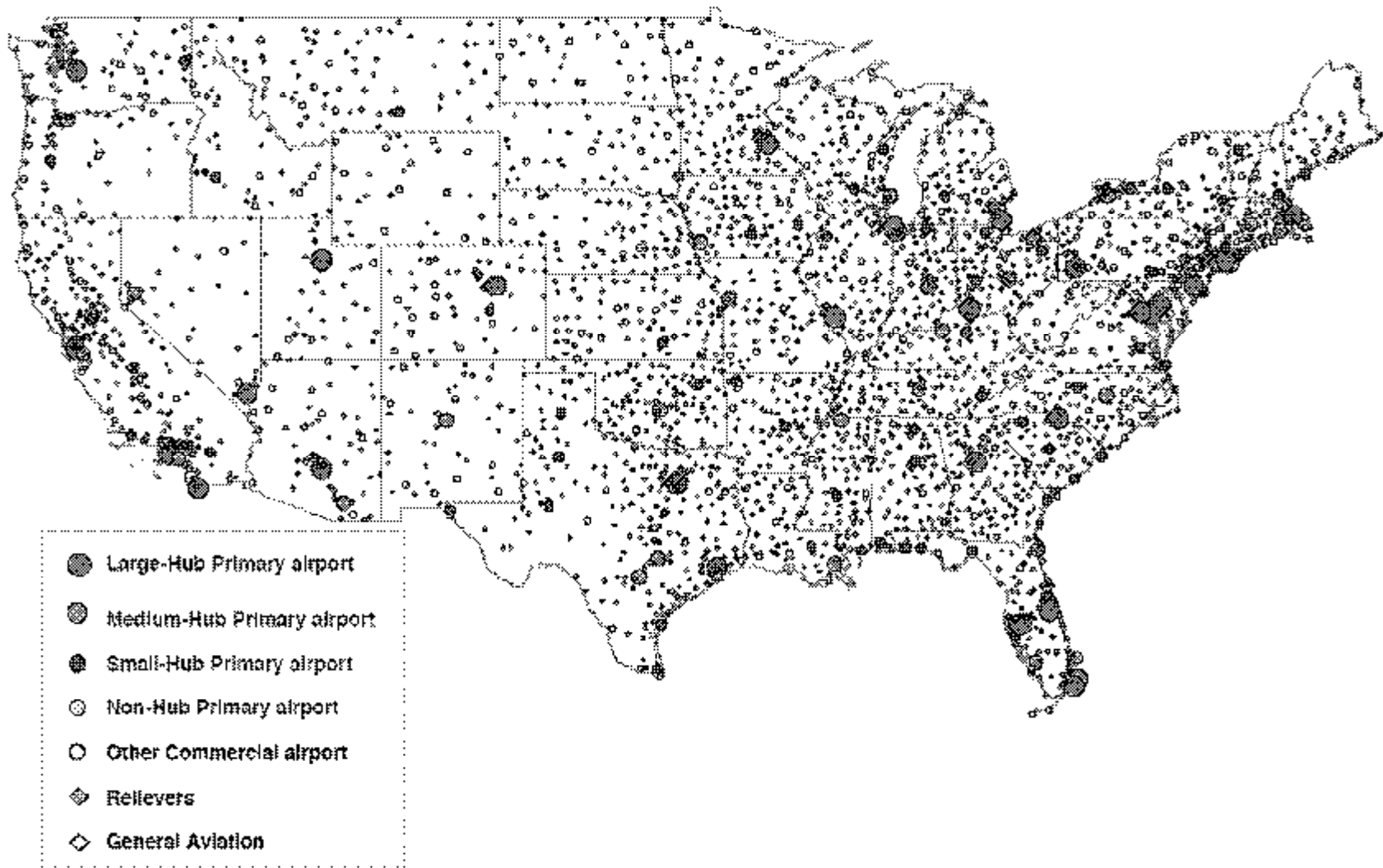


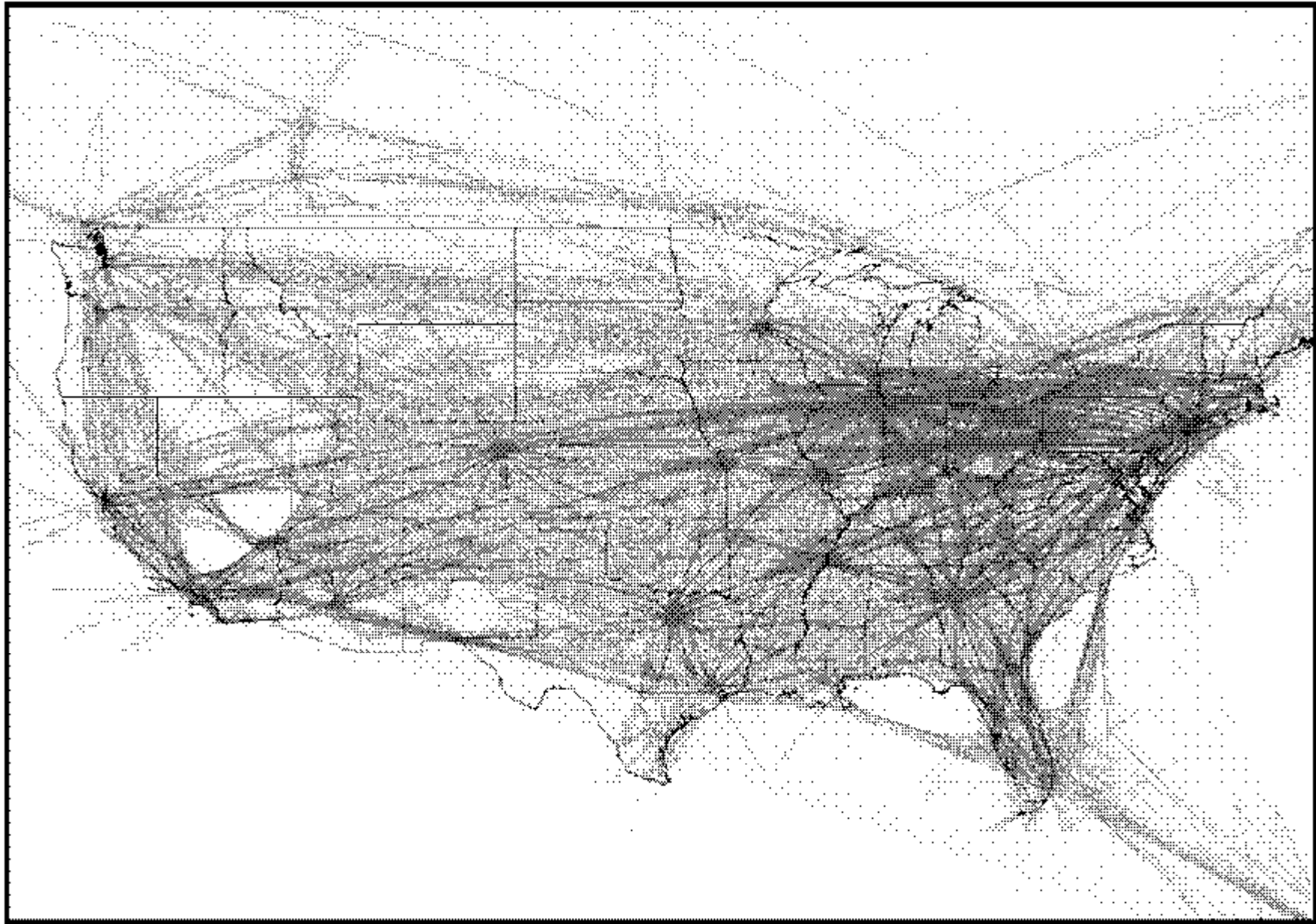
PROCEDURE DI VOLO TECNICHE DI PILOTAGGIO: PIANO DI VOLO



Cpt G. MANSUTTI - CEDRA
Aeroporti & Ambiente
Procedure di Volò e Navigazione







Cpt G. MANSUTTI - CEDRA
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Procedure di Volo e Navigazione

TOTALI (ESCLUSO L'AVVIO 2017)							
N.	Aeroporto	Movimenti	%	Passeggeri	%	Cargo (tons)	%
1	Alghero	13.804	25,2	1.300.115	21,5	774	27,1
2	Ancona	13.921	-5,4	500.126	3,8	6.128	15,6
3	Bari	31.352	14,9	2.368.313	20,0	4.040	17,3
4	Bergamo	61.364	8,9	5.741.734	9,5	134.449	-4,4
5	Bologna	66.698	4,9	4.361.951	9,0	18.700	-42,4
6	Bolzano	17.556	5,9	83.245	9,3		
7	Brescia	14.455	48,8	189.964	-18,3	47.155	93,0
8	Brindisi	11.169	4,4	929.854	14,0	256	-51,1
9	Cagliari	34.569	10,7	2.671.306	7,2	5.000	4,2
10	Catania	60.953	13,2	6.083.735	12,7	8.613	-4,6
11	Crotone	1.748	-13,9	106.122	1,6		
12	Cuneo	7.012	-14,8	64.135	82,7	9	28,6
13	Firenze	35.288	28,5	1.918.751	25,3	1.399	-38,8
14	Foggia	3.662	3,4	9.394	14,2		
15	Forlì	8.813	5,5	708.681	14,6	37	-94,0
16	Genova	29.457	7,7	1.129.767	4,6	5.608	-7,5
17	Lamezia T.	14.596	-0,3	1.458.612	7,5	2.081	-9,0
18	Milano LIN	130.038	-1,2	9.926.530	2,4	23.498	-14,5

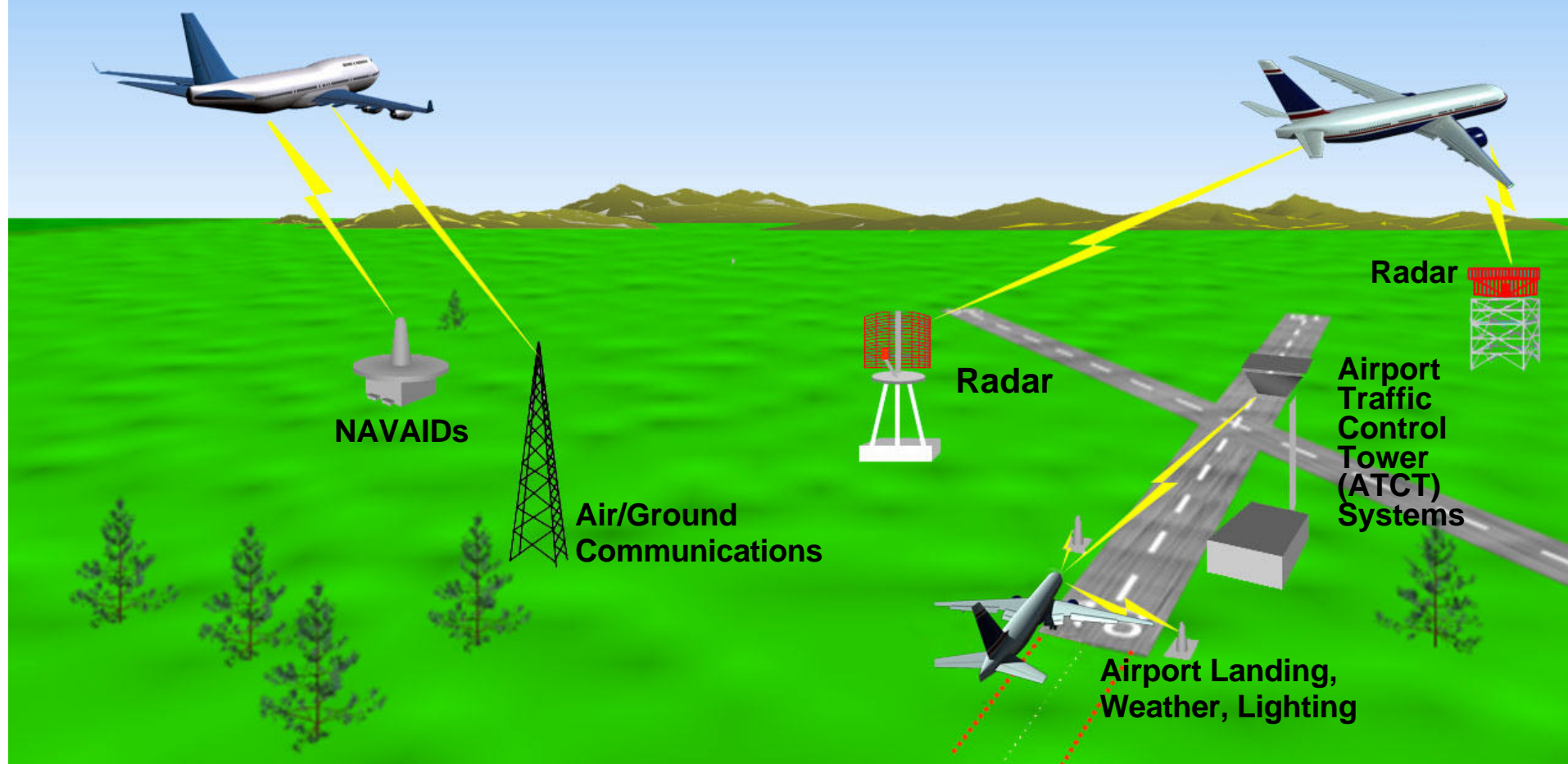
Cpt G. MANSUTTI - CEDRA
Aeroporti & Ambiente
Procedure di Volo e Navigazione

Fonte Assoeroporti

19	Milano-MXP	267.941	8,3	23.885.391	9,7	486.666	16,1
20	Napoli	72.330	17,2	5.775.838	13,3	7.863	-5,9
21	Olbia	34.013	3,3	1.800.206	-1,7	1.504	64,6
22	Palermo	51.217	8,2	4.511.165	5,4	4.384	-15,5
23	Parma	10.615	-1,9	145.916	14,3		
24	Pertugia	8.500	12,0	97.027	114,9		
25	Pescara	12.085	-0,4	371.247	9,0	3.291	15,5
26	Pisa	42.691	13,8	3.725.770	23,6	15.099	8,1
27	Reggio-Cal.	10.954	-4,0	583.596	-4,0	335	70,1
28	Rimini	9.132	30,7	498.473	53,6	1.595	-27,5
29	Roma-CIA	65.633	2,7	5.401.475	9,2	23.006	-3,3
30	Roma-FCO	334.848	6,1	32.945.223	9,2	154.831	-6,0
31	Siena	5.809	-34,4	7.395	-37,9		
32	Torino	62.136	2,1	3.509.253	7,6	13.667	5,2
33	Trapani	8.700	36,4	507.185	62,3	28	-78,0
34	Treviso	19.320	12,7	1.548.219	15,5	17.593	-10,2
35	Trieste - Ronchi dei L.	18.977	9,8	742.136	9,6	1.215	18,4
36	Venezia	88.778	8,0	7.076.114	11,6	23.962	-10,2
37	Verona	43.026	7,7	3.510.259	16,7	9.158	-24,6
	Totali	1.723.160	7,3	136.194.223	10,1	1.022.145	4,9

SISTEMA TRASPORTO AEREO XXI SECOLO

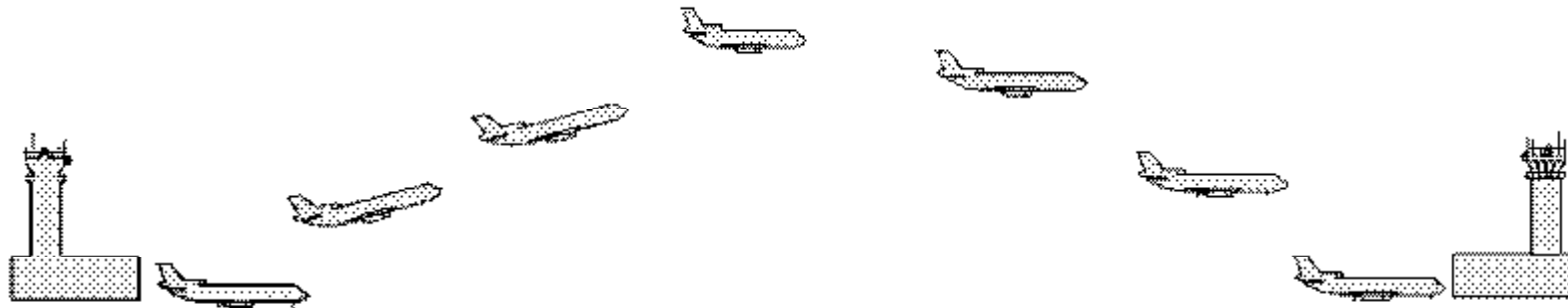
- **COMUNICAZIONI TERRA BORDO TERRA**
- **SISTEMA AUTOMATIZZATO GRAVITA SU UOMO**



PIANO DI VOLO

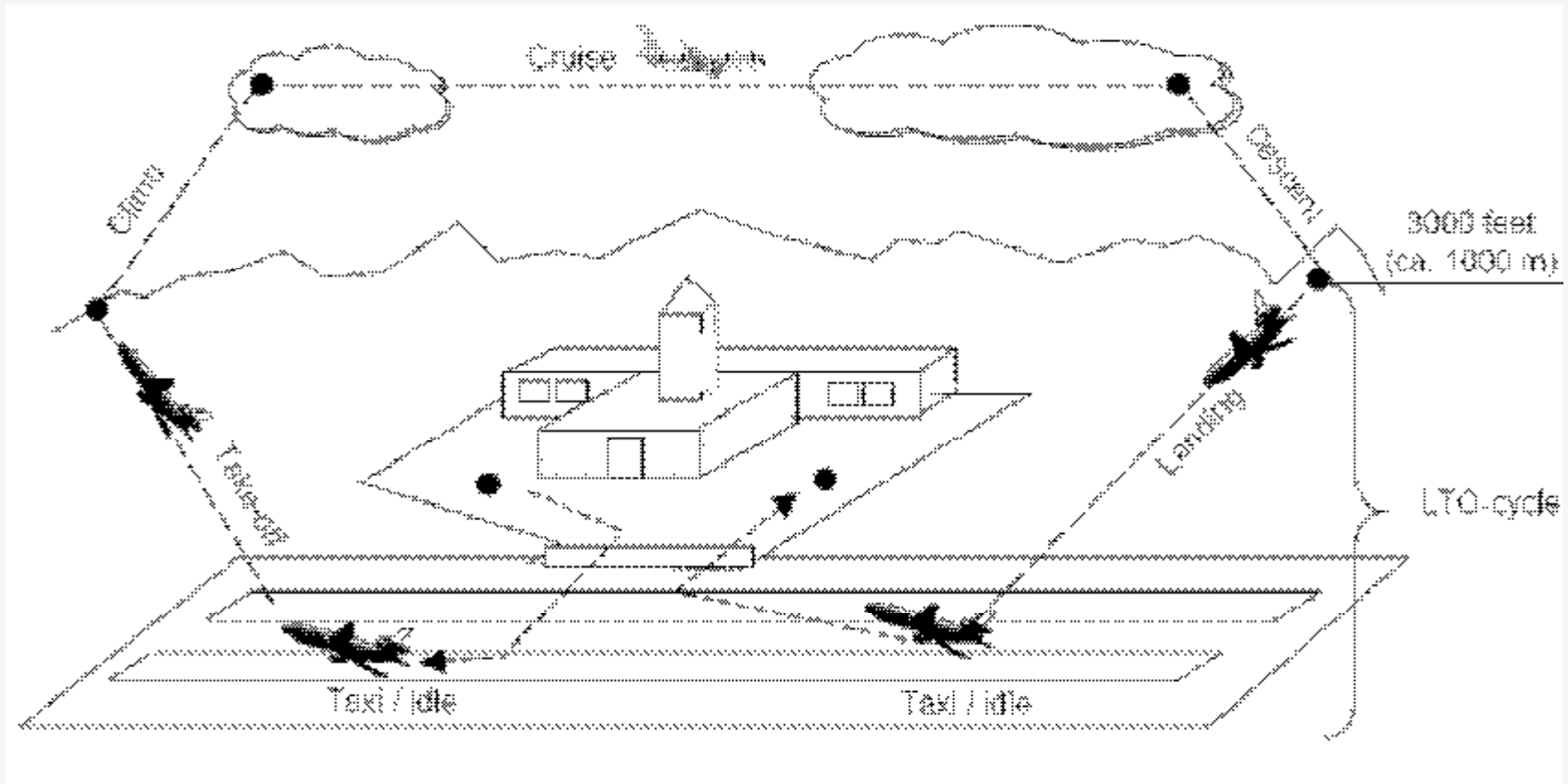
- CALCOLO QUANTITA' CARBURANTE
- ROTTA, DESTINAZIONE - ALTERNATO
- SID – STAR
- LIVELLO - QUOTA DI VOLO
- CARICO PAGANTE
 - PASSEGGERI
 - BAGAGLI
 - MERCI

SISTEMA TRASPORTO AEREO XXI SECOLO



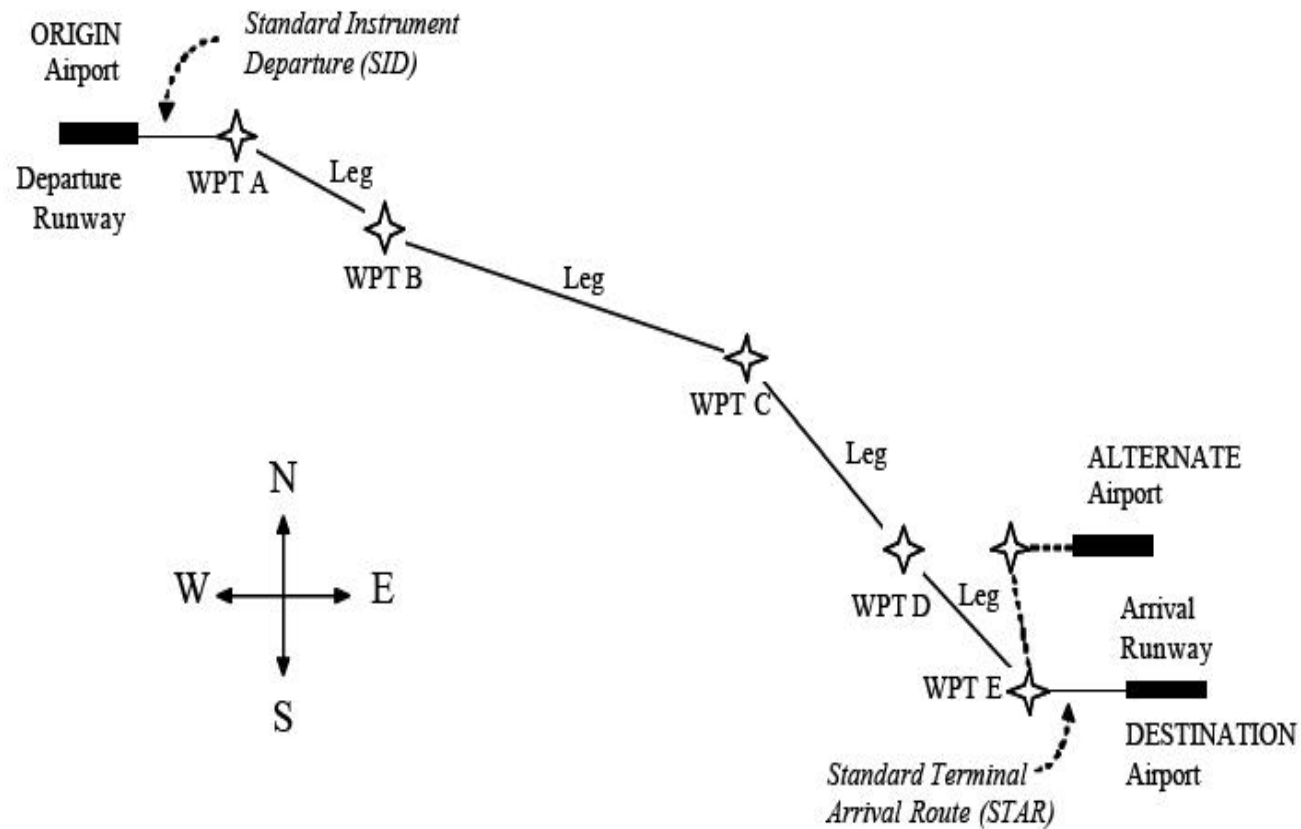
<i>Taxi</i>	<i>Takeoff</i>	<i>Departure</i>	<i>En Route</i>	<i>Approach</i>	<i>Land</i>	<i>Taxi</i>
<u>From Aircraft</u>	<u>From Aircraft</u>	<u>From Aircraft</u>	<u>From Aircraft</u>	<u>From Aircraft</u>	<u>From Aircraft</u>	<u>From Aircraft</u>
Link Test/Clock Update Fuel/Crew Information Delay Reports Out	Off	Engine Data	Position Reports Weather Reports Delay Info/ETA Voice Request	Provisioning Gate Requests Estimated Time-of-Arrival Special Requests Engine Information Maintenance Reports	On	In Fuel Information Crew Information Fault Data (from Central Maintenance Computer)
<u>To Aircraft</u>		<u>To Aircraft</u>	<u>To Aircraft</u>	<u>To Aircraft</u>		
PDC ATIS Weight and Balance Airport Analysis V-Speeds Flight Plan-Hard Copy Load EMC		Flight Plan Update Weather Reports	Maintenance Reports ATC Oceanic Clearances Weather Reports Reclearance Ground Voice Request (SELCAL)	Maintenance Reports Gate Assignment Connecting Gates Passengers and Crew ATIS		

FASI DEL VOLO

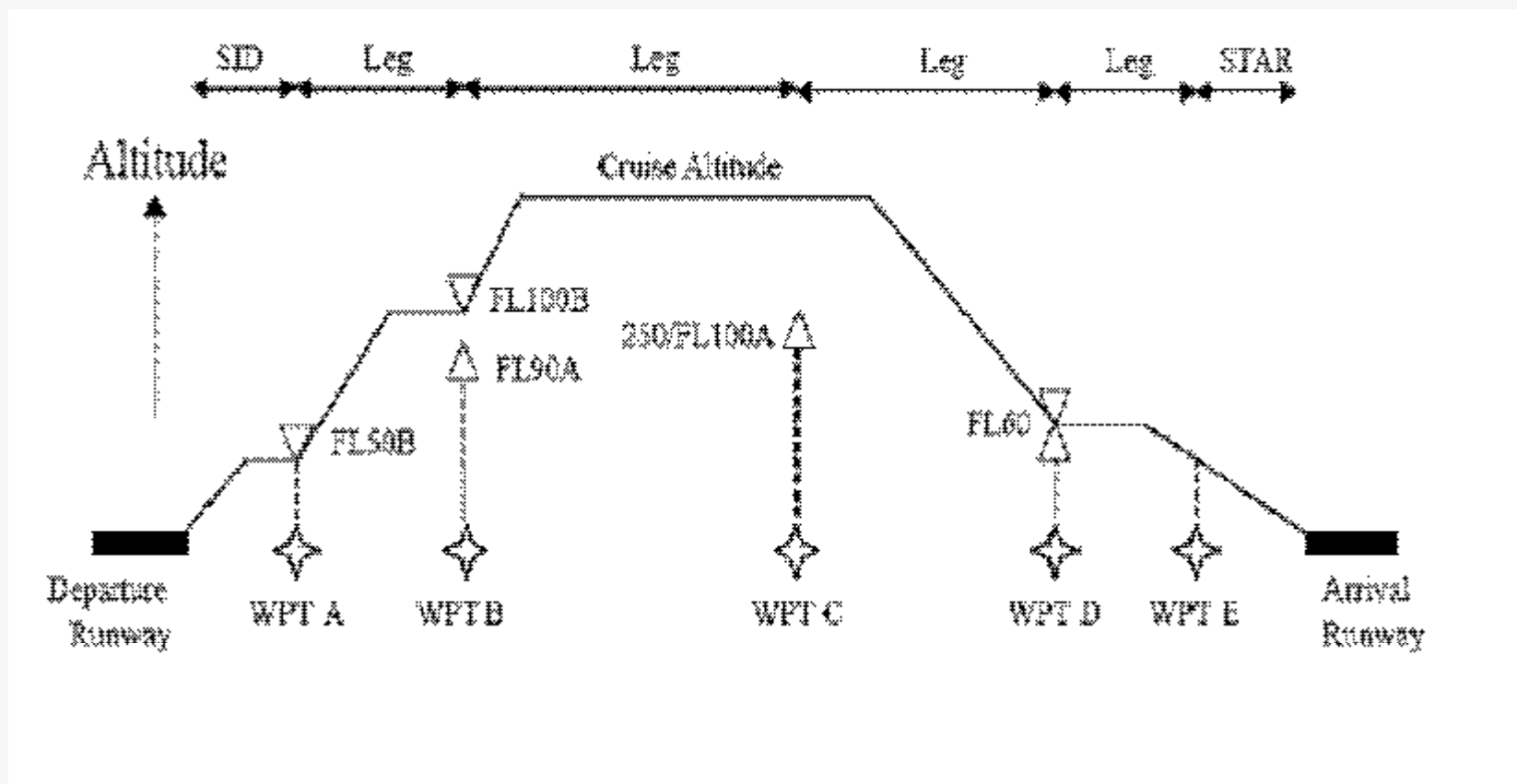


Cpt G. MANSUTTI - CEDRA
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Procedure di Volo e Navigazione

ARCHITETTURA DEL VOLO



ARCHITETTURA VERTICALE DEL VOLO



NIP- LIRP/15 ELBA
 LIRP- N4148.8 E01215.2
 MIPAL- N4209.2 E01122.0
 GILIG- N4352.0 E01053.0
 REL- N4230.8 E01023.8

AZ204710 MD60 LIRP/REGAL
 VIA : NOLEMI

LINE	POSITION	FL	TR	DIST	SEPS	TAS	CS	W/V
010 AIG	COORDINATES		TR	KM	BT	IAS	MACH	
000	LIRP N4148.8 E01215.2			400	7.0			013/001
001	ELB/114.70 N4243.8 E01023.8	CLB	304	103	8.2	48	285	230/018
001	L.O.F N4248.1 E01041.7	350	305	10	8.1	53	285	230/019
002	DORTY N4287.2 E00845.0	350		22	6.9	53	285	217/017
006	ARBDA N5007.0 E50145.5	350	325	44	8.8	56	432	453/036
001	T.O.F N5012.4 E00105.7	350	327	11	8.7	56	432	453/037
002	DIAL N5025.0 E00122.0	350		10	8.7	48	470	040/025
001	ALFEO N5034.5 E00113.3	350	313	9	8.7	38	433	081/034
011	RELI N5128.7 E00027.7	351	30	30	8.8	39	474	082/036

AVG WIC 7017 (WIC) DIST 780 HIGHS FULL 800 ...

STAB. RCIL 278 EIG00
 ALFEO N5034.5 E00113.5
 TIGER N5111.0 E00028.4
 RIG N5110.0 E00002.1
 RELI N5128.7 E00027.7


ALTERNATES MDP VIA
 LIRP/201 2011 MAYCP MAY ICI
 LIRP/204 2041 2000 WAPF DEL DCT
 LIRP/203 2000 WAPF DEL DCT
 LIRP/202 2002 WAPF DEL DCT REG GILIG/15

A320 FLEET/143
 NF 00000000 LPT/0000
 LIRP/201
 (+PL-AZ204-15
 +MIR/31-3000/5
 LIRP/100
 +MIR/3000 DU 10000 PIGS ENP21-KDPER UT120 R/100 L/120 ALFEO BIC/0
 E010101 L/000
 MIPAL/100012 LIRP/027 E0106145 REL/BACK-DOR/01110

La struttura dell'OFP è qui suddivisa, ai soli fini illustrativi, nelle seguenti sezioni:

1. **identificazione dell'OFP, identificazione del volo, dell'a/m, della tratta, dati di pianificazione**
2. **quantitativi carburante, autonomie orarie, "gain/loss"**
3. **pesi caratteristici**
4. **"FMS information"**
5. **"flight dispatcher"**
6. **firma del Comandante - "dispatch briefing" - "ATS route"**
7. **alternato al decollo - alternati a destinazione**
8. **"flight plan details"**
9. **SID/STAR**
10. **MDF**
11. **piano di volo ATS**

ATR 72 Fuel Planner



ATR 72-500

2051 Kgs. 2051 Kgs.

Trip Information

Trip Distance: 950 n.m.

Cruising Altitude: FL240

Trip Wind: Headwind: 50 kts.

Trip Temperature: 10 C

Alternate Distance: 150 n.m.

Alternate Cruising Altitude: FL200

Alternate Wind: Tailwind: 35 kts.

Weights

Basic Operating Weight: 13500 Kgs.

Payload Weight: 650 Kgs.

Zero Fuel Weight: 14150 Kgs.

Ramp Weight: 18252 Kgs.

Gross Takeoff Weight: 18236 Kgs.

Landing Weight: 15381 Kgs.

Alternate Landing Weight: 14550 Kgs.

Fuel

Taxi Fuel: 16 Kgs.

Trip Fuel: 2855 Kgs.

Holding Fuel: 500 Kgs.

Alternate Fuel: 331 Kgs.

Reserve Fuel: 400 Kgs.

Total Fuel at Taxi: 4102 Kgs.

V-Speeds

V1Ar: 106 VmLB0: 149

V2: 111 VmLB15: 118

Vfto: 115 VmHB30: 107

Icing

Operating Limitations Units: Kgs.

Read Payload Weight Board Fuel

Print About Exit