

DATA SHEET LRJT 1	FLIGHT PLANNING QUICK DETERMINATION OF FLIGHT PLAN	033-036
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### INTRODUCTION

The following flight planning tables allow the planner to determine trip fuel consumption and trip time required to cover a given air distance.

These tables are established for:

- Takeoff
- Climb profile : 250kt/300kt/M.80
- Cruise mach number: M.80, M.82, M.84, LR
- Descent profile: Cruise Mach number/300kt/250kt
- Approach and landing : 240 kg - 6 minute IFR
- ISA
- CG = 37 %
- Normal air conditioning
- Anti ice OFF

### Note:

1. In the tables, the asterisk (\*) means that a step climb of 4000 feet must be flown to reach the corresponding FL.
2. To obtain a flight plan at optimum cruise level, the highest flight level desired within the flight has to be selected in the table.
3. For each degree Celsius above ISA temperature apply fuel correction  $0.010 \text{ (kg/}^\circ\text{C/NM)} \times \text{ISA}(\text{}^\circ\text{C)} \times \text{Air Distance (NM)}$ .

### CORRECTION FOR DEVIATION FROM REFERENCE LANDING WEIGHT

The fuel consumption must be corrected when the actual landing weight is different from the reference landing weight.

If it is lower (or greater) than the reference landing weight subtract (or add) the value given in the correction part of the table per 1000 kg below (or above) the reference landing weight.

# Annex LRJT Data Sheets

<b>DATA SHEET LRJT 1</b>	<b>FLIGHT PLANNING GROUND DISTANCE/AIR DISTANCE SEQ A</b>	<b>033-037</b>
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GROUND DIST (NM)	AIR DISTANCE (NM)						
	TAILWIND		WIND COMPONENT (KT)			HEADWIND	
	+ 150	+ 100	+ 50	0	- 50	- 100	- 150
<b>10</b>	8	8	9	<b>10</b>	11	13	15
<b>20</b>	15	17	18	<b>20</b>	22	25	29
<b>30</b>	23	25	27	<b>30</b>	34	38	44
<b>40</b>	30	33	36	<b>40</b>	45	51	59
<b>50</b>	38	41	45	<b>50</b>	56	63	73
<b>100</b>	76	83	90	<b>100</b>	112	127	146
<b>200</b>	152	165	181	<b>200</b>	224	254	293
<b>300</b>	228	248	271	<b>300</b>	335	381	439
<b>400</b>	304	330	362	<b>400</b>	447	507	586
<b>500</b>	380	413	452	<b>500</b>	559	634	732
<b>1000</b>	759	825	904	<b>1000</b>	1118	1268	1465
<b>1500</b>	1139	1238	1357	<b>1500</b>	1677	1903	2197
<b>2000</b>	1518	1651	1809	<b>2000</b>	2237	2537	2930
<b>2500</b>	1898	2063	2261	<b>2500</b>	2790	3171	3662
<b>3000</b>	2227	2476	2713	<b>3000</b>	3355	3805	4395
<b>3500</b>	2657	2889	3165	<b>3500</b>	3914	4439	5127
<b>4000</b>	3036	3302	3617	<b>4000</b>	4473	5073	5860
<b>4500</b>	3416	3714	4070	<b>4500</b>	5032	5708	6592
<b>5000</b>	3795	4127	4522	<b>5000</b>	5591	6342	7324
<b>5500</b>	4175	4540	4974	<b>5500</b>	6151	6976	8057
<b>5500</b>	4175	4540	4974	<b>5500</b>	6151	6976	8057
<b>6000</b>	4555	4952	5426	<b>6000</b>	6710	7610	8789
<b>6500</b>	4934	5365	5878	<b>6500</b>	7269	8244	9522
<b>7000</b>	5314	5778	6330	<b>7000</b>	7828	8878	10254
<b>7500</b>	5693	6190	6783	<b>7500</b>	8387	9513	10987
<b>8000</b>	6073	6603	7235	<b>8000</b>	8946	10147	11719
<b>8500</b>	6452	7016	7687	<b>8500</b>	9506	10781	12451
<b>9000</b>	6832	7428	8139	<b>9000</b>	10065	11415	13184
<b>9500</b>	7211	7841	8591	<b>9500</b>	10624	12049	13916
<b>10000</b>	7591	8254	9043	<b>10000</b>	11183	12683	14649

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FCOM-FO-02-05-60-003-070

DATA SHEET LRJT 1		FLIGHT PLANNING QUICK DETERMINATION OF FLIGHT PLAN					033-038		
FLIGHT PLANNING FROM BRAKE RELEASE TO LANDING CLIMB: 250KT/300KT/M.80 - CRUISE : M.82 - DESCENT : M.82/300KT/250KT IMC PROCEDURE : 240 KG (6MIN)									
REF LANDING WEIGHT = 140000 KG NORMAL AIR CONDITIONING ANTI ICING OFF				ISA CG = 37.0 %		FUEL CONSUMED (KG) TIME (H.MIN)			
AIR DIST (NM)	FLIGHT LEVEL						CORRECTION ON FUEL CONSUMPTION (KG/1000KG)		
	310	330	350	370	390	410	FL310 FL330	FL350 FL370	FL390 FL410
200	3537 0.39	3531 0.39					11		
300	4764 0.51	4684 0.52	4622 0.52	4579 0.52	4555 0.52	4548 0.52	13	16	18
400	5993 1.04	5840 1.04	5711 1.04	5609 1.05	5536 1.05	5489 1.05	16	18	22
500	7225 1.16	6998 1.17	6803 1.17	6642 1.17	6519 1.17	6434 1.17	18	21	25
600	8460 1.29	8160 1.29	7898 1.30	7679 1.30	7506 1.30	7383 1.30	20	24	29
700	9698 1.41	9323 1.42	8996 1.43	8718 1.43	8496 1.43	8335 1.43	22	27	32
800	10938 1.54	10490 1.55	10096 1.55	9759 1.56	9490 1.56	9291 1.56	25	29	36
900	12180 2.06	11659 2.07	11199 2.08	10804 2.08	10486 2.09	10251 2.09	27	32	40
1000	13425 2.19	12831 2.20	12305 2.21	11851 2.21	11485 2.21	11213 2.21	29	35	44
1100	14673 2.231	14005 2.32	13413 2.33	12901 2.34	12487 2.34	12180 2.34	32	38	48
1200	15924 2.44	15182 2.45	14525 2.46	13954 2.47	13492 2.47	13149 2.47	34	41	51
1300	17178 2.56	16363 2.58	15640 2.59	15010 3.00	14501 3.00	14123 3.00	37	44	55
1400	18434 3.09	17546 3.10	16758 3.12	16070 3.12	15514 3.12	15101 3.12	39	47	59
1500	19693 3.21	18732 3.23	17879 3.24	17132 3.25	16530 3.25	16083 3.25	42	50	64
1600	20955 3.34	19921 3.36	19003 3.37	18197 3.38	17550 3.38	17069 3.38	45	53	68
1700	22221 3.46	21114 3.48	20129 3.50	19266 3.51	18574 3.51	18060 3.51	47	56	72
1800	23489 3.59	22310 4.01	21260 4.03	20337 4.04	19601 4.04	19054 4.04	50	59	77
1900	24761 4.11	23508 4.13	22394 4.15	21412 4.16	20632 4.16	20052 4.16	53	63	82
2000	26035 4.24	24710 4.26	23531 4.28	22491 4.29	21667 4.29	21067 4.29	56	66	87
2100	27311 4.37	25914 4.39	24671 4.41	23573 4.42	22707 4.42	22078 4.42	58	69	92
2200	28591 4.49	27122 4.51	25814 4.53	24658 4.55	23750 4.55	23093 4.55	61	73	97
2300	29875 5.02	28333 5.04	26960 5.06	25746 5.07	24796 5.08	24113 5.08	64	76	102
2400	31161 5.14	29546 5.16	28110 5.19	26837 5.20	25846 5.20	25136 5.20	67	79	107
2500	32450 5.27	30764 5.29	29263 5.32	27932 5.33	26920 5.33	26165 5.33	70	82	113
2600	33742 5.39	31985 5.42	30419 5.44	29030 5.46	27982 5.46	27198 5.46	73	86	118
2700	35038 5.52	33209 5.54	31577 5.57	30131 5.59	29047 5.59	28237 5.59	75	90	122
PACK FLOW LO Δ FUEL = - 0.4 %		PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTHICE ON Δ FUEL = + 1.5 %		TOTAL ANTI ICE ON Δ FUEL = + 7 %		

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03003501 40 0 260200 90164 18590 FCOM-02-05 40 008-070

DATA SHEET LRJT 1		FLIGHT PLANNING QUICK DETERMINATION OF FLIGHT PLAN					033-039		
<b>FLIGHT PLANNING FROM BRAKE RELEASE TO LANDING</b> CLIMB: 250KT/300KT/M.80 - CRUISE : M.82 - DESCENT : M.82/300KT/250KT IMC PROCEDURE : 240 KG (6MIN)									
REF LANDING WEIGHT = 140000 KG NORMAL AIR CONDITIONING ANTI ICING OFF				ISA CG = 37.0 %		FUEL CONSUMED (KG) TIME (H.MIN)			
AIR DIST (NM)	FLIGHT LEVEL						CORRECTION ON FUEL CONSUMPTION (KG/1000KG)		
	310	330	350	370	390	410	FL310 FL330	FL350 FL370	FL390 FL410
2800	36336 6.04	34437 6.07	32738 6.10	31237 6.11	30117 6.11	29281 6.12	78	94	127
2900	37638 6.17	35668 6.20	33903 6.23	32372 6.24	31191 6.24	30330 6.24	82	97	132
3000	36336 6.04	36902 6.32	35072 6.35	33487 6.37	32269 6.37	31386 6.37	85	103	137
3100	37638 6.17	38139 6.45	36243 6.48	34607 6.50	33351 6.50	32446 6.50	88	105	143
3200	36336 6.04	39379 6.57	37453 7.01	35730 7.03	34439 7.03	33511 7.03	93	109	149
3300	37638 6.17	40622 7.10	38634 7.13	36857 7.15	35532 7.15	34584 7.15	96	114	155
3400	36336 6.04	41911 7.23	39819 7.24	37988 7.28	36628 7.28	35663 7.28	100	116	161
3500	37638 6.17	43166 7.35	41008 7.39	39122 7.41	37729 7.41	36746 7.41	106	120	168
3600	36336 6.04	44426 7.48	42201 7.52	40260 7.54	38835 7.45	37835 7.54	107	124	174
3700	37638 6.17	45690 8.01	43398 8.04	41403 8.07	39944 8.07	38929 8.07	111	128	183
3800	36336 6.04	46958 8.13	44600 8.17	42549 8.19	41060 8.19	40029 8.19	112	133	191
3900	37638 6.17	48230 8.26	45805 8.30	43702 8.32	42181 8.32	41137 8.32	115	137	199
4000	36336 6.04	49505 8.38	47014 8.43	44863 8.45	43306 8.45	42250 8.45	119	142	207
4100	37638 6.17	50785 8.51	48228 8.55	46028 8.58	44438 8.58	43370 8.58	122	146	215
4200	36336 6.04	52068 9.04	49446 9.08	47198 9.11	45577 9.11	44524 9.10*	126	151	223
4300	37638 6.17	53355 9.16	50667 9.21	48374 9.23	46721 9.23	45690 9.23*	130	156	230
4400	36336 6.04	54647 9.29	51892 9.34	49555 9.36	47872 9.36	46862 9.36*	133	161	239
4500	37638 6.17	55943 9.41	53121 9.46	50739 9.49	49028 9.49	48040 9.49	137	166	247
4600	36336 6.04	57242 9.54	54355 9.59	51929 10.02	50190 10.02	49223 10.02*	140	171	255
4700	37638 6.17	58545 10.07	55593 10.12	53123 10.15	51357 10.15	50411 10.14*	144	176	262
4800	36336 6.04	59851 10.19	56836 10.24	54322 10.27	52530 10.27	51604 10.27*	148	181	270
4900	37638 6.17	61162 10.32	58083 10.37	55527 10.40	53707 10.40	52803 10.40*	152	186	277
5000	36336 6.04	62478 10.45	59335 10.50	56737 10.53	54917 10.53	54006 10.53*	156	191	283
5100	37638 6.17	63798 10.57	60592 11.03	57952 11.06	56112 11.06	55217 11.06*	160	196	291
5200	36336 6.04	65121 11.10	61854 11.5	59173 11.19	57312 11.19	56433 11.18*	164	201	300
5300	37638 6.17	66449 11.23	63121 11.28	60400 11.31	58519 11.31	57654 11.31*	167	207	309
PACK FLOW LO Δ FUEL = - 0.4 %		PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %		TOTAL ANTI ICE ON Δ FUEL = + 7 %		

FLIP230 A330-321 PW4164 3420 03701 .000011 0250300 .8000 .000000 240  
03003501 40 0 260200 90164 18590 FCOM-02-05 40 008-070

DATA SHEET LRJT 1		FLIGHT PLANNING								033-040/ 033-045	
INTEGRATED CRUISE											
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTHICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		M.84		OPT FL	
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)
174	4710 587	4724 588	4738 590	4755 592	4772 594	4789 596	4806 599	4823 601	4840 603	4857 605	482
176	4874 607	4891 609	4908 611	4925 613	4942 615	4959 618	4975 620	4992 622	5009 624	5026 626	482
178	5043 628	5059 630	5076 632	5093 634	5109 636	5126 638	5143 640	5159 643	5176 645	5193 647	482
180	5209 649	5226 651	5242 653	5259 655	5276 657	5292 659	5309 661	5325 663	5342 665	5358 667	482
182	5375 669	5391 671	5407 673	5424 675	5440 677	5457 680	5473 682	5489 684	5505 686	5522 688	482
184	5538 690	5554 692	5571 694	5587 696	5603 698	5619 700	5635 702	5652 704	5668 706	5684 708	482
186	5700 710	5716 712	5732 714	5748 716	5764 718	5780 720	5796 722	5812 724	5828 726	5844 728	482
188	5860 730	5876 732	5892 734	5907 736	5923 738	5939 740	5955 742	5971 744	5986 746	6002 747	482
190	6018 749	6034 751	6049 753	6065 755	6081 757	6096 759	6112 761	6127 763	6143 765	6159 767	482
192	6174 769	6189 771	6202 772	6215 774	6230 776	6245 778	6261 780	6276 782	6292 783	6307 785	482
194	6322 787	6338 789	6353 791	6368 793	6384 795	6399 797	6414 799	6430 801	6445 802	6460 804	484
196	6476 806	6491 808	6506 810	6521 812	6536 814	6552 816	6567 818	6582 819	6597 821	6612 823	484
198	6627 825	6642 827	6657 829	6673 831	6688 833	6703 834	6718 836	6733 838	6748 840	6763 842	484
200	6778 844	6793 846	6808 847	6823 849	6838 851	6852 853	6867 855	6882 857	6897 858	6912 860	484
202	6927 862	6942 864	6956 866	6971 868	6986 870	7001 871	7016 873	7030 875	7045 877	7060 879	484
204	7074 880	7089 882	7104 884	7118 886	7133 888	7148 890	7162 891	7177 893	7191 895	7206 897	484
206	7221 899	7235 900	7249 902	7264 904	7278 906	7293 908	7307 909	7322 911	7336 913	7351 915	484
208	7365 916	7379 918	7394 920	7408 922	7422 924	7437 925	7451 927	7465 929	7479 931	7494 932	484
210	7508 934	7522 936	7536 938	7550 939	7565 941	7577 943	7589 944	7601 946	7615 947	7629 949	484
212	7643 951	7657 953	7671 954	7685 956	7699 958	7713 960	7727 961	7741 963	7755 965	7769 966	489
214	7783 968	7797 970	7811 972	7825 973	7839 975	7853 977	7867 978	7881 980	7895 982	7908 983	489
216	7922 985	7936 987	7950 989	7964 990	7978 992	7991 994	8005 995	8019 997	8033 999	8046 1000	489
218	8060 1002	8074 1004	8088 1005	8101 1007	8115 1009	8129 1011	8142 1012	8156 1014	8170 1016	8183 1017	489
PACK FLOW LO $\Delta$ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON $\Delta$ FUEL = + 1 %			ENGINE ANTI ICE ON $\Delta$ FUEL = + 1.5 %		TOTAL ANTI ICE ON $\Delta$ FUEL = + 7 %			

JAR - FCL	FLIGHT PLANNING FUEL TANKING	033-043
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### FUEL TANKING

#### GENERAL

Fuel tanking graphs allow to determine the Optimum fuel quantity to be tanked as a function of the fuel price ratio between departure and destination airports. The following pages present for one flight level per page the Optimum aircraft takeoff weight depending on the fuel price ratio (departure fuel price divided by destination fuel price) and on the air distance to fly.

The computed optimum takeoff weight is based on the additional fuel consumption needed for the transport of the extra (tanked) fuel and it is the weight at which the maximum profit can be achieved. The quantity of extra fuel that can be loaded is calculated as the difference between the Optimum takeoff weight (including extra fuel) and the planned takeoff weight (without fuel tanking).

The graphs are established for:

- FL 290, 310, 330, 350, 370, 390

- Air distances from 500 to 5000 NM

- Flight profile :

Climb 250kt/300kt/M.80

Cruise M.80

Descent M.80/300kt/250kt

#### Note:

1. If necessary, step climbs are performed to reach the indicated flight levels.
2. The crew/operator has to verify that the found aircraft weight complies with basic aircraft limitations (e.g. max fuel capacity) as well as with mission dependent restrictions (e.g. MLW at destination).

#### EXAMPLES

##### 1. Fuel price ratio = 0.930

Cruising Altitude = FL310

Planned TOW = 200 000 kg (mission weight without fuel tanking)

Air Distance = 2500 NM

Enter graph

For the given air distance, the optimum fuel tanking weight is 187 000 kg, which is lower than the planned takeoff weight d no fuel tanking recommended.

##### 2. fuel price ratio = 0.890

Cruising Altitude = FL 350

Planned TOW = 190 000 kg (mission weight without fuel tanking)

Air Distance = 3250 NM

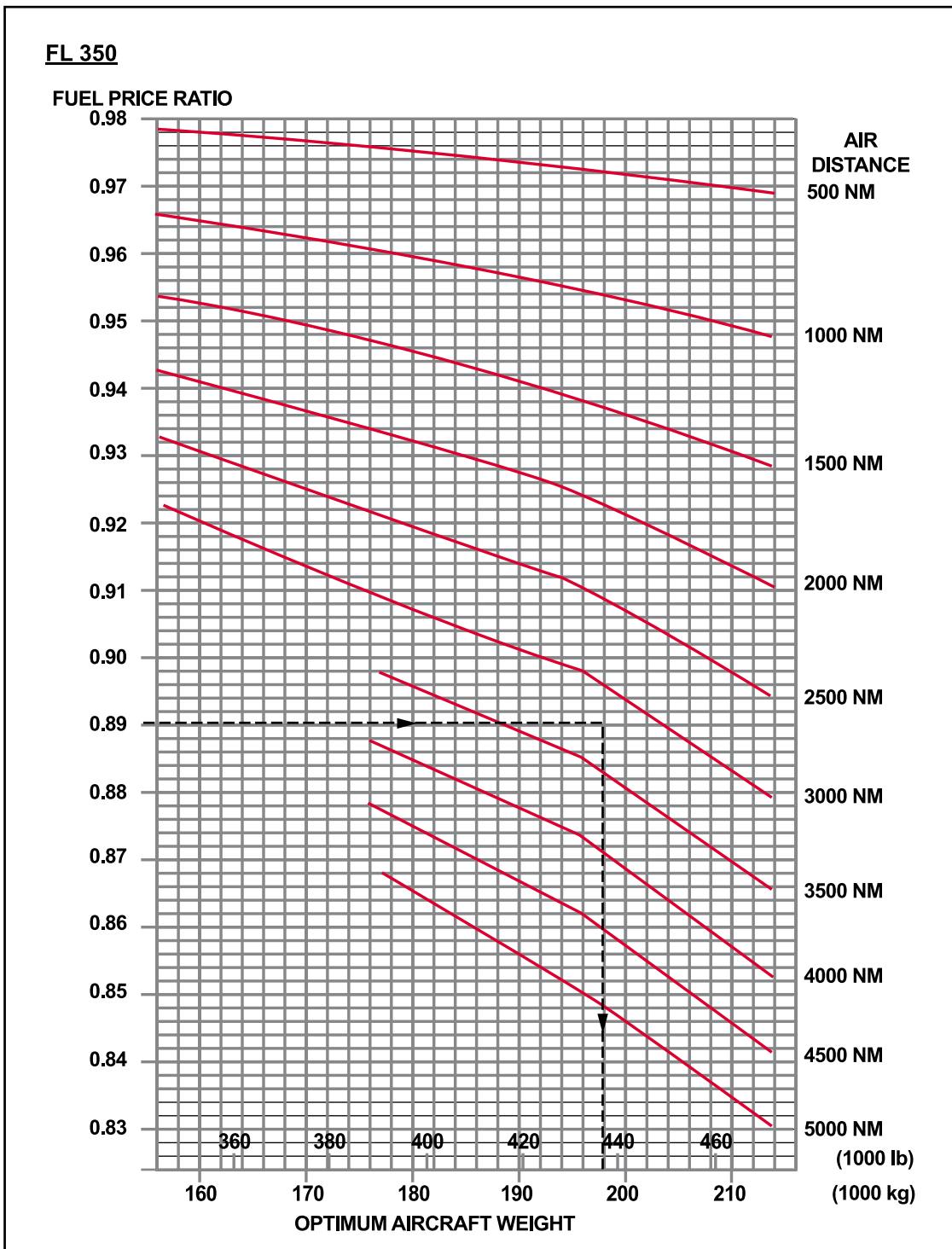
Enter graph

For the given air distance, the optimum fuel tanking weight is 198 000 kg, which is 8 000 kg higher than the planned takeoff weight d optimum quantity of extra fuel is 8 000 kg.

Check :

- a) new TOW less or equal MTOW from departure airport.
- b) total fuel to be loaded less or equal maximum fuel capacity.
- c) MLW at destination

DATA SHEET LRJT 1	FLIGHT PLANNING FUEL TANKING	033-044
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DATA SHEET LRJT 1		FLIGHT PLANNING								033-046	
INTEGRATED CRUISE											
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTHICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		M.80		OPT FL	
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)
174	5088 665	5107 668	5126 670	5144 673	5163 675	5182 678	5200 680	5219 682	5238 685	5256 687	459
176	5275 690	5293 692	5310 695	5330 697	5349 699	5367 702	5385 704	5404 707	5422 709	5441 711	459
178	5459 714	5477 716	5496 719	5514 721	5532 723	5551 726	5569 728	5587 731	5605 733	5623 735	459
180	5642 738	5660 740	5678 742	5696 745	5714 747	5732 750	5750 752	5768 754	5786 757	5804 759	459
182	5822 761	5840 764	5858 765	5875 768	5893 771	5911 773	5929 775	5947 778	5964 780	5982 782	459
184	6000 785	6018 787	6035 789	6053 791	6071 794	6088 796	6105 798	6119 800	6133 802	6151 804	459
186	6168 807	6186 809	6203 811	6220 813	6238 816	6255 818	6273 820	6290 822	6307 825	6325 827	459
188	6342 829	6359 832	6377 834	6394 836	6411 838	6429 841	6446 843	6463 845	6480 847	6497 850	459
190	6515 852	6532 854	6549 856	6566 859	6583 861	6600 863	6617 865	6635 868	6652 870	6669 872	459
192	6686 874	6703 876	6720 879	6737 881	6754 883	6771 885	6788 888	6805 890	6821 892	6838 894	459
194	6855 896	6872 899	6889 901	6906 903	6923 905	6940 907	6956 910	6973 912	6990 914	7007 916	459
196	7023 918	7040 921	7057 923	7073 925	7090 927	7107 929	7123 931	7140 934	7157 936	7173 938	459
198	7190 940	7206 942	7223 944	7239 947	7256 949	7272 951	7289 953	7305 955	7322 957	7338 960	459
200	7354 962	7371 964	7387 966	7403 968	7420 970	7436 972	7452 974	7468 977	7485 979	7501 981	459
202	7517 983	7533 985	7549 987	7566 989	7582 991	7598 993	7614 996	7630 998	7646 1000	7662 1002	459
204	7678 1004	7694 1006	7708 1008	7720 1010	7735 1011	7751 1013	7766 1016	7782 1018	7798 1020	7814 1022	459
206	7830 1024	7846 1026	7861 1028	7877 1030	7893 1932	7909 1034	7925 1036	7940 1038	7956 1040	7972 1042	461
208	7988 1044	8003 1046	8019 1048	8035 1050	8050 1052	8066 1054	8081 1057	8097 1059	8113 1061	8128 1063	461
210	8144 1065	8159 1067	8175 1069	8191 1071	8206 1073	8222 1075	8237 1077	8253 1079	8268 1081	8284 1083	461
212	8299 1085	8315 1087	8330 1089	8345 1091	8361 1093	8376 1095	8392 1097	8407 1099	8422 1101	8438 1103	461
214	8453 1105	8468 1107	8484 1109	8499 1111	8514 1113	8529 1115	8545 1117	8560 1119	8575 1121	8590 1123	461
216	8606 1125	8621 1127	8636 1129	8651 1131	8666 1133	8681 1135	8696 1137	8712 1138	8727 1140	8742 1142	461
218	8757 1144	8772 1146	8787 1148	8802 1150	8817 1152	8832 1154	8847 1156	8862 1158	8877 1160	8892 1162	461
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %			TOTAL ANTI ICE ON Δ FUEL = + 7 %		



DATA SHEET LRJT 1		FLIGHT PLANNING								033-047	
INTEGRATED CRUISE											
MAX CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTI-ICING OFF				ISA CG - 30,0%		DISTANCE (NM) TIME (MIN)		LR		FL 250	
WEIGHT 1000 KG	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KT)
126	0 0	18 3	35 6	53 9	70 12	88 15	105 18	123 21	140 23	157 26	356
128	175 29	192 32	210 35	227 38	245 41	262 44	279 47	297 50	314 53	331 55	359
130	349 58	366 61	383 64	400 67	418 70	435 73	452 75	469 78	487 81	504 84	361
132	521 87	538 90	556 93	573 95	590 98	607 101	624 104	641 107	658 110	676 113	362
134	693 115	710 118	727 121	744 124	761 127	778 129	795 132	812 135	829 138	846 141	362
136	863 144	880 146	897 149	914 152	931 155	948 158	965 160	982 163	999 166	1016 169	363
138	1033 172	1050 174	1067 144	1084 180	1100 183	1117 185	1134 188	1151 191	1168 194	1185 197	364
140	1202 199	1218 202	1235 205	1252 208	1269 210	1285 213	1302 216	1319 219	1336 221	1352 224	365
142	1369 227	1386 230	1403 232	1419 235	1436 238	1453 241	1469 243	1486 246	1503 249	1519 251	366
144	1536 254	1553 257	1569 260	1586 262	1602 265	1619 268	1636 271	1652 273	1669 276	1685 279	366
146	1702 281	1718 284	1735 287	1751 289	1768 292	1784 295	1801 298	1817 300	1834 303	1850 306	367
148	1867 308	1883 311	1899 314	1916 316	1932 319	1949 322	1965 324	1981 327	1998 330	2014 332	368
150	2031 335	2047 338	2063 340	2080 343	2096 346	2112 348	2128 351	2145 354	2161 356	2177 359	369
152	2194 361	2210 364	2226 367	2242 369	2258 372	2275 375	2291 377	2307 380	2323 383	2339 385	369
154	2356 388	2372 390	2388 393	2404 396	2420 398	2436 401	2452 403	2469 406	2485 409	2501 411	370
156	2517 414	2533 416	2549 419	2565 422	2581 424	2597 427	2613 429	2629 432	2645 435	2661 437	371
158	2677 440	2693 442	2709 445	2725 448	2741 450	2757 453	2773 455	2789 458	2805 460	2821 463	371
160	2837 466	2853 468	2868 471	2884 473	2900 476	2916 478	2932 481	2948 483	2964 486	2979 489	372
162	2995 491	3011 494	3027 496	3043 499	3058 501	3074 504	3090 506	3106 509	3121 511	3137 514	373
164	3153 516	3169 519	3184 521	3200 524	3216 527	3231 529	3247 532	3263 534	3278 537	3294 539	373
166	3310 542	3325 544	3341 547	3357 549	3372 552	3388 554	3403 557	3419 559	3434 562	3450 564	374
168	3466 567	3481 569	3497 572	3512 574	3528 577	3543 579	3559 582	3574 584	3590 586	3605 589	375
170	3621 591	3636 594	3652 596	3667 599	3682 601	3698 604	3713 606	3729 609	3744 611	3760 614	375
172	3775 616	3790 618	3806 621	3821 623	3836 626	3852 628	3867 631	3882 633	3898 636	3913 638	376
PACK FLOW LO Δ FUEL: -0.4%			PACK FLOW HI OR/AND CARGO COOL ON Δ FUEL: +1,0%			ENGINE ANTI ICE ON Δ FUEL: +1.5%			TOTAL ANTI ICE ON Δ FUEL: +6,0%		

DATA SHEET LRJT 1		FLIGHT PLANNING								033-048	
INTEGRATED CRUISE											
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTHCING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		LR		FL 350	
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KT)
126	0 0	22 3	43 7	65 10	87 14	108 17	130 21	151 24	173 27	194 31	377
128	216 34	237 37	259 41	280 44	302 47	323 51	344 54	366 57	387 60	408 64	385
130	430 67	451 70	472 73	493 77	514 80	536 83	557 86	578 98	599 93	620 96	392
132	641 99	662 102	683 105	704 108	725 112	746 115	767 118	788 121	809 124	829 127	400
134	850 130	871 133	892 136	913 139	933 142	954 154	975 148	995 151	1016 154	1037 157	411
136	1057 160	1078 163	1099 166	1119 169	1140 172	1160 175	1181 178	1201 180	1222 183	1242 186	418
138	1263 189	1283 192	1304 195	1324 198	1345 201	1365 204	1385 207	1406 210	1426 213	1446 215	420
140	1467 218	1487 221	1507 224	1528 227	1548 230	1568 233	1589 236	1609 239	1629 241	1649 244	421
142	1669 247	1690 250	1710 253	1730 256	1750 259	1770 261	1790 264	1810 267	1830 270	1850 273	423
144	1870 276	1890 278	1910 281	1930 284	1950 287	1970 290	1990 292	2010 295	2030 298	2050 301	425
146	2070 304	2090 306	2109 309	2129 312	2149 315	2169 318	2189 320	2208 323	2228 326	2248 329	427
148	2268 331	2287 334	2307 337	2327 340	2346 342	2366 345	2385 348	2405 351	2425 353	2444 356	429
150	2464 359	2483 361	2503 364	2522 367	2542 370	2561 372	2581 375	2600 378	2619 380	2639 383	431
152	2658 386	2678 388	2697 391	2716 394	2736 396	2755 399	2774 402	2793 404	2813 407	2832 410	434
154	2851 412	2870 415	2889 418	2909 420	2928 423	2947 425	2966 428	2985 431	3004 433	3023 436	437
156	3042 439	3062 441	3081 444	3100 446	3119 449	3138 452	3157 454	3175 457	3194 459	3213 462	439
158	3232 464	3251 467	3270 470	3289 472	3308 475	3327 477	3345 800	3364 482	3383 485	3402 487	441
160	3421 490	3439 493	3458 495	3477 498	3495 500	3514 503	3533 505	3551 508	3570 510	3589 513	442
162	3607 515	3626 518	3645 520	3663 523	3682 525	3700 528	3719 530	3737 533	3756 535	3774 538	444
164	3793 540	3811 543	3830 545	3848 548	3866 550	3885 553	3903 555	3922 558	3940 560	3958 563	446
166	3977 565	3995 567	4013 570	4031 572	4050 575	4068 577	4086 580	4104 582	4123 585	4141 587	448
168	4159 589	4177 592	4195 594	4213 597	4232 599	4250 601	4268 604	4286 606	4304 609	4322 611	450
170	4340 614	4358 616	4376 618	4394 621	4412 623	4430 625	4448 628	4466 630	4484 633	4502 635	451
172	4520 637	4538 640	4555 642	4573 644	4591 647	4609 649	4627 652	4645 654	4662 656	4680 659	453
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %			TOTAL ANTI ICE ON Δ FUEL = + 7 %		

<b>DATA SHEET LRJT 1</b>	<b>FLIGHT PLANNING INTEGRATED CRUISE</b>	<b>033-049</b>
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### CLIMB CORRECTION

The planner must correct the values for the fuel and the time obtained from the integrated cruise tables with the numbers given in the following tables. The tables which are established for M.80, M.82, M.84 and long range speed take into account climbing from the brake release point at 250KT/300KT/M.80.

### LONG RANGE SPEED

CORRECTION ON FUEL CONSUMPTION (1000 kg)												
FL	WEIGHT AT BRAKE RELEASE (1000 kg)											TIME CORRECTION
	140	150	160	170	180	190	200	210	220	230	240	
410	2.3	2.4	2.6	2.7	2.7	-	-	-	-	-	-	5 min
390	2.2	2.3	2.5	2.6	2.8	2.9	-	-	-	-	-	5 min
370	2.1	2.2	2.4	2.5	2.7	2.8	2.9	-	-	-	-	5 min
350	2.0	2.1	2.2	2.4	2.5	2.7	2.8	2.9	3.0	3.1	-	6 min
330	1.9	2.0	2.1	2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.1	6 min
310	1.8	1.9	2.0	2.2	2.3	2.4	2.5	2.7	2.8	2.8	3.0	5 min
290	1.7	1.8	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.8	2.9	5min
270	1.8	1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.7	5min
250	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.5	4 min
200	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	3 min
150	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.8	3 min
100	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.3	3 min

### CLIMB TO OPTIMUM FL

CORRECTION ON FUEL CONSUMPTION (1000 kg)												
SPEED	WEIGHT AT BRAKE RELEASE (1000 kg)											TIME CORRECTION
	140	150	160	170	180	190	200	210	220	230	240	
LRC	2.3	2.4	2.6	2.7	2.7	-	-	-	-	-	-	6 min
M.80	2.2	2.3	2.5	2.6	2.8	2.9	-	-	-	-	-	6 min
M.82	2.1	2.2	2.4	2.5	2.7	2.8	2.9	-	-	-	-	6 min
M.84	2.0	2.1	2.2	2.4	2.5	2.7	2.8	2.9	3.0	3.1	-	7 min

### STEP CLIMB CORRECTION

When the flight includes one or more step climbs (2000 feet below FL290, 4000 feet above), apply a correction of 160 kg per step climb to the fuel consumption.

DATA SHEET LRJT 1	FLIGHT PLANNING INTEGRATED CRUISE	033-050
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**DESCENT CORRECTION**

Correct the fuel and the time values determined in the integrated cruise tables as follows to take into account the descent down to 1500 feet followed by 6 min IFR approach and landing.

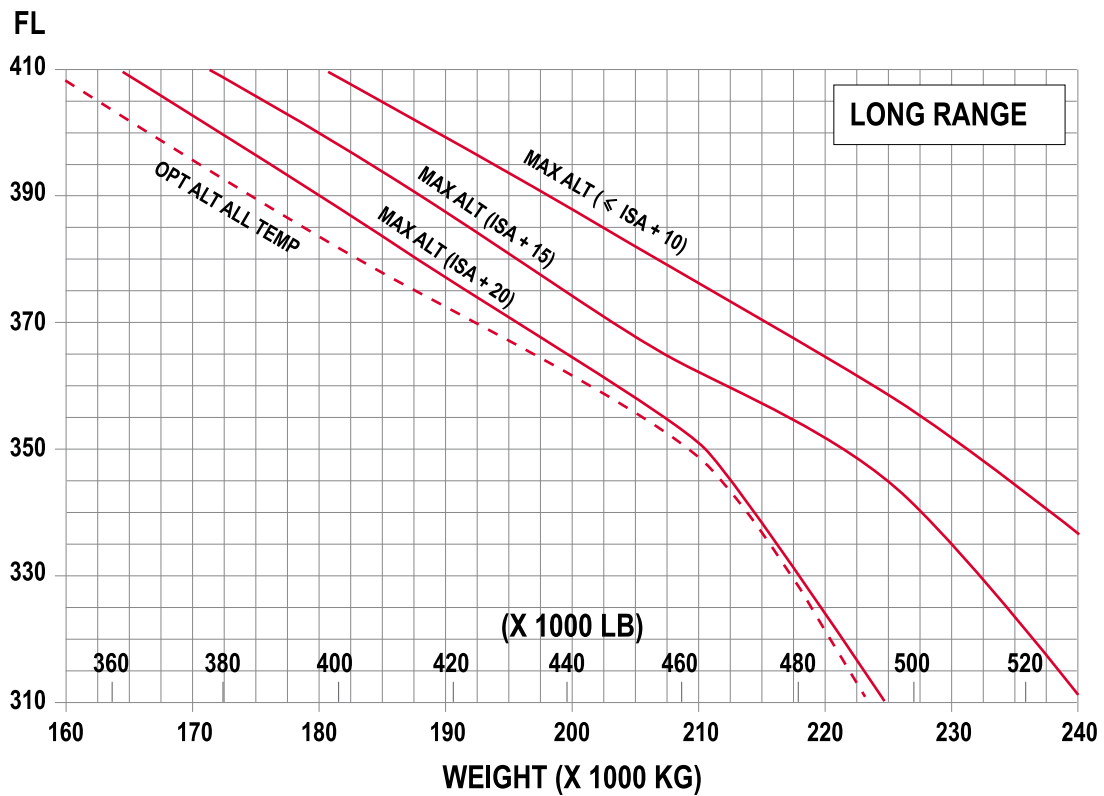
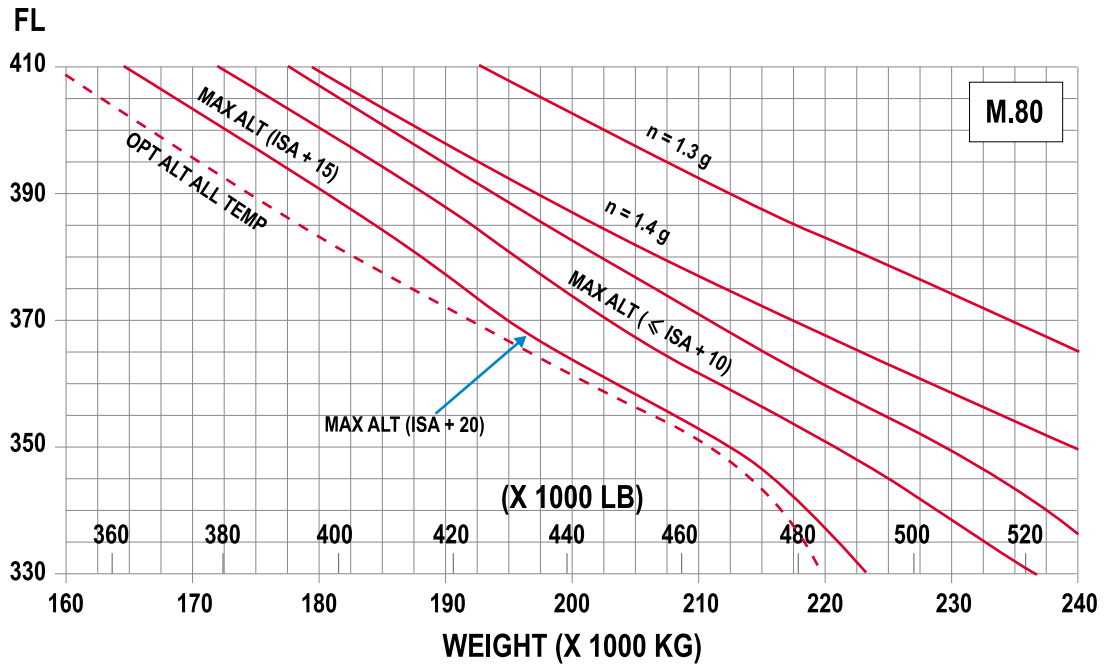
**LONG RANGE SPEED**

CORRECTION ON FUEL CONSUMPTION (1000 kg)								
FL	WEIGHT OVERHEAD DESTINATION (1000 kg)							TIME CORRECTION
	130	140	150	160	170	180	190	
<b>290</b> and above	0.6	0.7	0.7	0.8	0.9	1.0	1.1	<b>10 min</b>
<b>270</b>	0.6	0.7	0.7	0.8	0.9	0.9	1.0	<b>8 min</b>
<b>250</b>	0.6	0.6	0.7	0.7	0.8	0.8	0.9	
<b>200</b>	0.5	0.6	0.6	0.7	0.7	0.8	0.8	
<b>150</b>	0.5	0.5	0.6	0.6	0.6	0.7	0.7	
<b>100</b>	0.4	0.4	0.4	0.5	0.5	0.5	0.5	

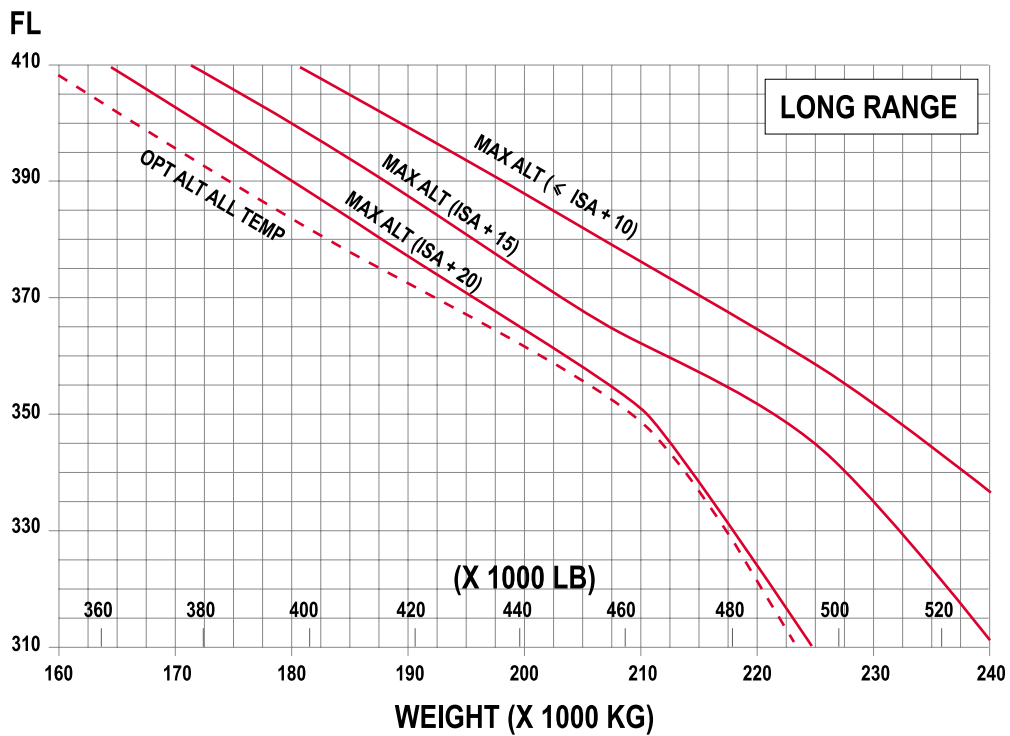
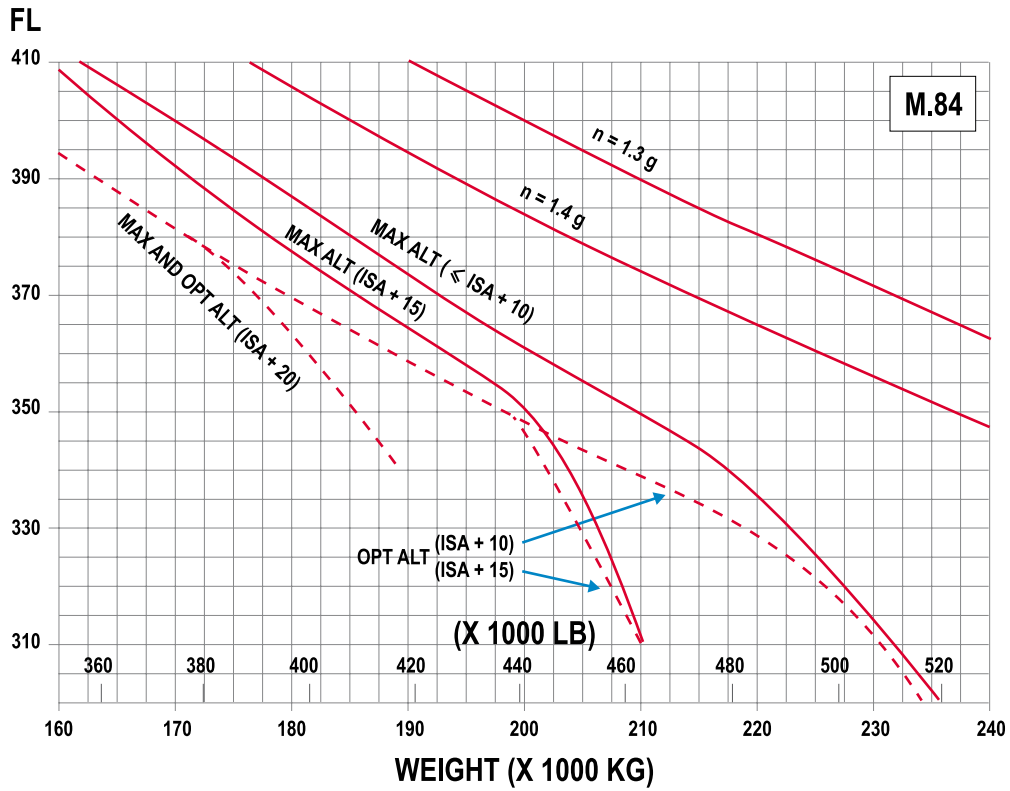
**IRC, M.80, M.82, M.84 FROM OPTIMUM FL**

CORRECTION ON FUEL CONSUMPTION (1000 kg)								
WEIGHT OVERHEAD DESTINATION (1000 kg)							TIME CORRECTION	
130	140	150	160	170	180	190		
0.6	0.7	0.8	0.9	1.0	1.0	1.1	<b>11 min</b>	

<b>DATA SHEET</b> LRJT 1	<b>FLIGHT PLANNING</b> <b>CRUISE LEVEL</b>	<b>033-051</b>
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<b>DATA SHEET LRJT 1</b>	<b>FLIGHT PLANNING CRUISE LEVEL</b>	<b>033-052</b>
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<b>DATA SHEET LRJT 1</b>	<b>FLIGHT PLANNING GROUND DISTANCE/AIR DISTANCE</b>	<b>033-053</b>
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<b>LONG RANGE CRUISE ABOVE FL250</b>
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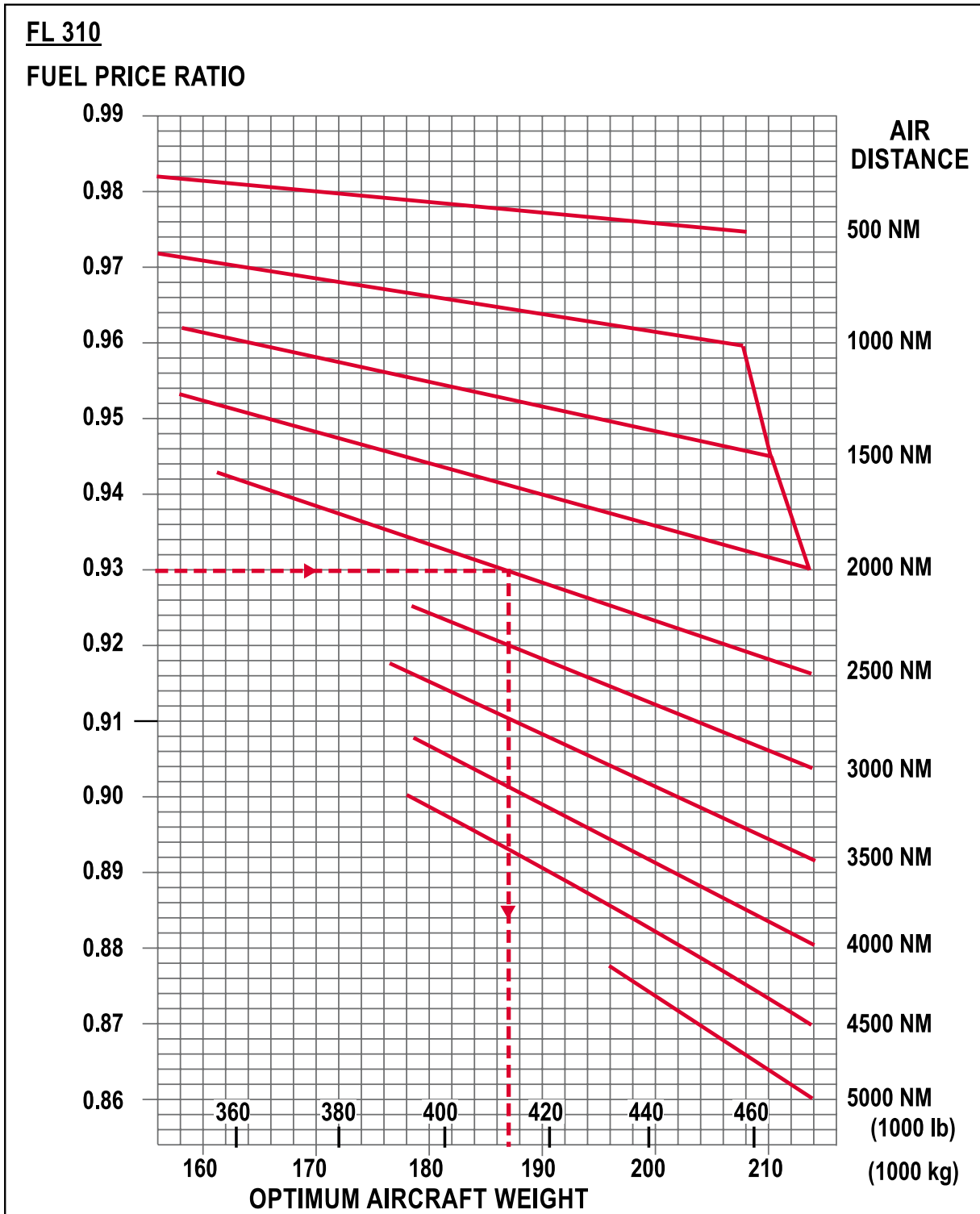
GROUND DIST (NM)	AIR DISTANCE (NM)						
	TAIL WIND		WIND COMPONENT			HEAD WIND	
	<b>+150</b>	<b>+100</b>	<b>+50</b>	<b>0</b>	<b>-50</b>	<b>-100</b>	<b>-150</b>
<b>10</b>	8	8	9	<b>10</b>	11	13	15
<b>20</b>	15	26	18	<b>20</b>	22	25	29
<b>30</b>	23	25	27	<b>30</b>	34	38	44
<b>40</b>	30	33	36	<b>40</b>	45	51	59
<b>50</b>	38	41	45	<b>50</b>	56	64	74
<b>100</b>	76	82	90	<b>100</b>	112	127	147
<b>200</b>	151	165	181	<b>200</b>	224	254	295
<b>300</b>	227	247	271	<b>300</b>	336	382	442
<b>400</b>	303	330	361	<b>400</b>	448	509	589
<b>500</b>	379	412	452	<b>500</b>	560	636	736
<b>1000</b>	757	824	903	<b>1000</b>	1120	1272	1473
<b>1500</b>	1136	1236	1355	<b>1500</b>	1680	1908	2209
<b>2000</b>	1514	1648	1807	<b>2000</b>	2240	2544	2945
<b>2500</b>	1893	2059	2258	<b>2500</b>	2799	3180	3681
<b>3000</b>	2271	2471	2710	<b>3000</b>	3359	3817	4418
<b>3500</b>	2650	2883	3162	<b>3500</b>	3919	4453	5154
<b>4000</b>	3028	3295	3613	<b>4000</b>	4479	5089	5890
<b>4500</b>	3407	3707	4065	<b>4500</b>	5039	5725	6627
<b>5000</b>	3785	4119	4517	<b>5000</b>	5599	6361	7363
<b>5500</b>	4164	4531	4968	<b>5500</b>	6159	6997	8099
<b>6000</b>	4542	4943	5420	<b>6000</b>	6719	7633	8836
<b>6500</b>	4921	5343	5872	<b>6500</b>	7279	8269	9572
<b>7000</b>	5299	5766	6324	<b>7000</b>	7839	8905	10308
<b>7500</b>	5678	6178	6775	<b>7500</b>	8398	9541	11044
<b>8000</b>	6056	6590	7227	<b>8000</b>	8958	10177	11781
<b>8500</b>	6435	7002	7679	<b>8500</b>	9518	10814	12517
<b>9000</b>	6813	7414	8130	<b>9000</b>	10078	11450	13253
<b>9500</b>	7192	7826	8582	<b>9500</b>	10638	12086	13990
<b>10000</b>	7570	8238	9043	<b>10000</b>	11198	12722	14726

DATA SHEET LRJT 1		FLIGHT PLANNING									033-054	
INTEGRATED CRUISE												
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTI-ICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		LR		FL 370		
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)	
174	4845 658	4863 660	4881 662	4899 665	4917 667	4936 670	4954 672	4972 674	4990 677	5008 879	463	
176	5026 881	5044 684	5062 686	5080 688	5098 691	5116 693	5134 695	5152 698	5170 700	5188 702	464	
178	5206 705	5224 707	5241 709	5259 711	5277 714	5295 716	5313 718	5331 721	5348 723	5366 725	465	
180	5384 728	5402 730	5419 732	5437 734	5455 737	5473 739	5490 741	5508 743	5525 746	5543 748	465	
182	5561 750	5578 753	5596 755	5613 757	5631 759	5649 762	5666 764	5684 766	5701 768	5719 771	466	
184	5756 773	5753 775	5771 777	5788 780	5806 782	5823 784	5840 786	5858 789	5875 791	5892 793	466	
186	6010 795	5927 797	5944 800	5962 802	5879 804	5996 806	6013 809	6031 811	6048 813	6065 815	466	
188	6082 817	6099 820	6116 822	6133 824	6151 826	6168 828	6185 831	6202 833	6219 835	6236 837	467	
190	6253 839	6270 842	6287 844	6304 846	6321 848	6338 850	6355 852	6372 855	6388 857	6405 859	467	
192	6422 861	6439 863	6456 865	6473 869	6490 870	6505 872	6523 874	6540 876	6557 878	6573 881	467	
194	6590 883	6607 885	6623 887	6640 889	6857 891	6673 893	6690 895	6707 898	6723 900	6740 902	468	
196	6757 904	6773 906	6790 908	6806 910	6823 912	6839 915	6856 917	6872 919	6999 921	6905 923	468	
198	6921 925	6930 927	6954 929	6070 931	6987 933	7003 936	1011 938	7035 940	7052 942	7068 944	468	
200	7084 946	7100 948	7117 950	7133 952	7149 954	7165 956	7181 958	7197 960	7213 962	7219 964	469	
202	7245 967	7261 969	7277 971	7293 973	7309 975	7325 977	7341 979	7357 981	7373 983	7389 985	470	
204	7405 987	7420 989	7435 991	7452 993	7468 995	7484 997	7490 999	7515 1001	7531 1003	7546 1005	471	
206	7562 1007	7578 1009	7593 1011	7609 1013	7624 1015	7640 1017	7656 1019	7671 1021	7687 1023	7702 1025	471	
208	7718 1027	7733 1029	7749 1031	7764 1033	7779 1035	7795 1037	7810 1039	7825 1041	7841 1042	7856 1044	471	
210	7871 1046	7887 1048	7902 1050	7917 1052	7932 1054	7948 1056	7963 1058	7978 1060	7993 1062	8008 1064	471	
212	8023 1066	8038 1068	8053 1070	8068 1071	8083 1073	8098 1075	8113 1077	8128 1079	8143 1081	8158 1083	471	
214	8173 1085	8188 1087	8203 1089	8217 1090	8232 1092	8747 1094	8262 1096	8271 1098	8291 1100	8306 1102	471	
216	8321 1104	8335 1105	8350 1107	8365 1109	8379 1111						471	
218												
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %			TOTAL ANTI ICE ON Δ FUEL = + 6 %			



**DATA SHEET  
LRJT 1**

JAR - FCL	FLIGHT PLANNING FUEL TANKING	033-055
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DATA SHEET LRJT 1		FLIGHT PLANNING								033-056	
INTEGRATED CRUISE											
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTI-ICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		M.82		OPT FL	
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)
174	5001 638	5019 640	5037 643	5056 645	5074 647	5093 650	5111 652	5129 654	5147 657	5166 659	470
176	5184 661	5202 664	5220 666	5239 668	5257 671	5275 673	5293 675	5311 678	5330 680	5348 682	470
178	5366 685	5384 687	5402 689	5420 691	5438 694	5456 696	5474 698	5492 701	5510 703	5528 705	470
180	5546 707	5564 710	5582 712	5599 714	5617 717	5635 719	5653 721	5671 723	5689 726	5706 728	470
182	5724 730	5742 732	5759 735	5777 737	5795 739	5812 742	5830 744	5848 746	5865 748	5883 750	470
184	5900 753	5918 755	5935 757	5953 759	5970 762	5988 764	6005 766	6023 768	6040 771	6057 773	470
186	6075 775	6092 777	6109 779	6127 782	6144 784	6161 786	6178 788	6196 790	6213 793	6230 795	470
188	6247 797	6264 799	6281 801	6298 803	6315 806	6332 808	6349 810	6366 812	6383 814	6400 817	470
190	6417 819	6431 820	6444 822	6460 824	6477 826	6494 828	6511 831	6528 833	6545 835	6561 837	470
192	6578 839	6595 841	6612 843	6628 846	6645 848	6662 850	6679 852	6695 854	6712 856	6729 858	470
194	6745 860	6762 863	6778 865	6795 867	6812 869	6828 871	6845 873	6861 875	6878 877	6894 880	470
196	6911 882	6927 884	6944 886	6960 888	6977 890	6993 892	7009 894	7026 896	7042 898	7059 900	470
198	7075 903	7091 905	7108 907	7124 909	7140 911	7156 913	7173 915	7189 917	7205 919	7221 921	470
200	7238 938	7254 925	7270 927	7286 929	7302 932	7318 934	7334 936	7350 938	7366 940	7382 962	470
202	7398 944	7414 946	7430 948	7446 950	7462 952	7478 954	7494 956	7510 958	7526 960	7542 962	470
204	7558 964	7574 966	7589 968	7605 970	7621 972	7637 974	7653 976	7668 978	7684 980	7700 982	470
206	7716 984	7731 986	7747 988	7762 990	7778 992	7794 994	7809 996	7825 998	7840 1000	7856 1002	470
208	7872 1004	7887 1006	7902 1008	7918 1010	7933 1012	7949 1014	7064 1016	7977 1018	7989 1019	8003 1021	470
210	8019 1023	8034 1025	8049 1027	8065 1029	8080 1031	8095 1033	8110 1035	8126 1037	8141 1038	8156 1040	473
212	8171 1042	8187 1044	8202 1046	8217 1048	8232 1050	8247 1052	8262 1054	8277 1056	8293 1058	8308 1060	473
214	8323 1062	8338 1063	8353 1065	8368 1067	8383 1069	8398 1071	8413 1073	8428 1075	8443 1077	8458 1079	473
216	8473 1081	8488 1083	8503 1084	8518 1086	8533 1088	8548 1090	8563 1092	8577 1094	8592 1096	8607 1098	473
218	8622 110	8637 1101	8652 1103	8667 1105	8681 1107	8696 1109	8711 1111	8726 1113	8740 1115	8755 1116	473
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %			TOTAL ANTI ICE ON Δ FUEL = + 7 %		

DATA SHEET LRJT 1		FLIGHT PLANNING								033-057	
INTEGRATED CRUISE											
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTI-ICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		M.82		OPT FL	
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)
126	0 0	23 3	46 6	69 9	92 12	115 15	137 18	160 20	183 23	206 26	470
128	229 29	251 32	274 35	297 38	320 41	343 44	365 47	388 49	411 52	433 55	470
130	456 58	479 61	501 64	524 67	546 70	569 73	591 75	614 78	637 81	659 84	470
132	682 87	704 90	726 93	749 96	771 98	794 101	816 104	839 107	861 110	883 113	470
134	906 116	928 118	950 121	972 124	995 127	1017 130	1039 133	1061 135	1084 138	1106 141	470
136	1128 144	1150 147	1172 150	1194 152	1216 155	1239 158	1261 161	1283 164	1305 166	1327 169	470
138	1349 172	1371 175	1393 178	1415 180	1436 183	1458 186	1480 189	1502 192	1524 194	1546 197	470
140	1568 200	1589 203	1611 206	1633 208	1655 211	1677 214	1698 217	1720 219	1742 222	1763 225	470
142	1785 228	1807 230	1828 233	1850 236	1871 239	1893 241	1915 244	1936 247	1958 250	1979 252	470
144	2001 255	2022 258	2043 261	2065 263	2086 266	2108 269	2129 272	2150 274	2172 277	2193 280	470
146	2214 283	2236 285	2257 288	2278 291	2300 293	2321 296	2342 299	2363 301	2384 304	2405 307	470
148	2427 310	2448 312	2469 315	2490 318	2511 320	2532 323	2553 326	2574 328	2595 331	2616 334	470
150	2637 336	2658 339	2679 342	2700 344	2721 347	2742 350	2762 352	2783 355	2804 358	2825 360	470
152	2846 363	2866 366	2887 368	2908 371	2928 374	2949 376	2970 379	2990 381	3011 384	3032 387	470
154	3052 389	3073 392	3093 395	3114 397	3134 400	3155 402	3175 405	3196 408	3216 410	3237 413	470
156	3257 416	3277 418	3298 421	3318 423	3338 426	3359 428	3379 431	3399 434	3420 436	3440 439	470
158	3460 441	3480 444	3500 447	3521 449	3541 452	3561 454	3581 457	3601 459	3621 462	3641 465	470
160	3661 467	3681 470	3701 472	3721 475	3741 477	3761 480	3781 482	3801 485	3821 487	3840 490	470
162	3860 492	3880 495	3900 498	3920 500	3939 503	3959 505	3979 508	3998 510	4018 513	4038 515	470
164	4057 518	4077 520	4097 523	4116 525	4136 528	4155 530	4175 533	4194 535	4213 538	4233 540	470
166	4252 542	4272 545	4291 547	4310 550	4330 552	4349 555	4368 557	4387 560	4406 562	4426 565	470
168	4445 567	4464 569	4483 572	4502 574	4521 577	4540 579	4559 582	4578 584	4597 586	4616 589	470
170	4635 591	4654 594	4673 596	4692 599	4711 601	4729 603	4748 606	4767 608	4786 611	4804 613	470
172	4823 615	4842 618	4860 620	4879 622	4897 625	4916 627	4934 629	4949 631	4964 633	4982 636	470
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %		TOTAL ANTI ICE ON Δ FUEL = + 7 %			

DATA SHEET LRJT 1		FLIGHT PLANNING										033-059
INTEGRATED CRUISE												
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTI-ICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		LR		FL 330		
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)	
<b>126</b>	0 0	21 3	42 7	63 10	84 14	105 17	126 21	147 24	168 27	189 31	<b>368</b>	
<b>128</b>	210 34	231 37	251 41	272 44	293 48	314 51	335 54	355 58	376 61	397 64	<b>370</b>	
<b>130</b>	418 68	438 71	459 74	480 78	500 81	521 84	541 88	562 91	582 94	603 98	<b>371</b>	
<b>132</b>	623 101	644 104	664 108	685 111	705 114	726 117	746 121	766 124	787 127	807 130	<b>373</b>	
<b>134</b>	827 134	848 137	868 140	888 143	908 147	929 150	949 152	969 156	989 159	1009 163	<b>375</b>	
<b>136</b>	1029 166	1049 169	1069 172	1089 175	1109 179	1129 182	1149 185	1169 188	1189 191	1209 194	<b>377</b>	
<b>138</b>	1229 198	1249 201	1269 204	1289 207	1309 210	1328 213	1348 216	1368 219	1389 223	1407 226	<b>379</b>	
<b>140</b>	1427 229	1447 232	1467 235	1486 238	1506 241	1525 244	1545 247	1565 250	1584 253	1604 256	<b>386</b>	
<b>142</b>	1623 259	1643 262	1662 265	1682 268	1701 271	1721 274	1740 277	1759 280	1779 282	1798 285	<b>393</b>	
<b>144</b>	1818 288	1837 291	1856 294	1875 297	1895 300	1914 303	1933 306	1952 308	1971 311	1991 314	<b>400</b>	
<b>146</b>	2010 317	2029 320	2048 322	2067 325	2086 328	2105 331	2124 334	2143 336	2162 339	2181 342	<b>408</b>	
<b>148</b>	2200 345	2219 347	223 350	2257 353	2276 355	2295 358	2314 361	2333 363	2352 366	2370 369	<b>419</b>	
<b>150</b>	2389 371	2408 374	2427 377	2446 379	2464 382	2483 385	2502 387	2521 390	2539 393	2558 395	<b>426</b>	
<b>152</b>	2577 398	2595 401	2614 403	2633 406	2651 408	2670 411	2689 414	2707 416	2726 419	2745 422	<b>425</b>	
<b>154</b>	2763 424	2782 427	2800 429	2819 432	2837 435	2856 437	2874 440	2893 443	2911 445	2930 448	<b>426</b>	
<b>156</b>	2948 450	2967 453	2985 456	3004 458	3022 461	3040 463	3059 466	3077 468	3096 471	3114 474	<b>427</b>	
<b>158</b>	3132 476	3151 479	3169 481	3187 484	3205 486	3224 489	3242 491	3260 494	3278 497	3297 499	<b>428</b>	
<b>160</b>	3315 502	3333 504	3351 507	3369 509	3387 512	3406 514	3424 517	3442 519	3460 522	3478 524	<b>430</b>	
<b>162</b>	3496 527	3514 529	3532 532	3550 534	3568 537	3586 539	3604 542	3622 544	3640 547	3658 549	<b>432</b>	
<b>164</b>	3676 552	3694 554	3712 557	3729 559	3747 562	3765 564	3783 567	3801 569	3819 572	3837 574	<b>434</b>	
<b>166</b>	3854 576	3872 579	3890 581	3908 584	3925 586	3943 589	3961 591	3978 593	3996 596	4014 598	<b>436</b>	
<b>168</b>	4031 601	4049 603	4067 606	4084 608	4102 610	4120 613	4137 615	4155 618	4172 620	4190 622	<b>438</b>	
<b>170</b>	4207 625	4225 627	4242 630	4260 632	4277 634	4295 637	4312 639	4329 641	4347 644	4364 646	<b>441</b>	
<b>172</b>	4382 648	4399 651	4416 653	4434 656	4451 658	4468 660	4486 663	4503 665	4520 667	4538 670	<b>443</b>	
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %			TOTAL ANTI ICE ON Δ FUEL = + 6 %			

DATA SHEET LRJT 1		FLIGHT PLANNING								033-060	
INTEGRATED CRUISE											
MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTICING OFF				ISA CG = 37.0 %		DISTANCE (NM) TIME (MIN)		LR		FL 330	
WEIGHT (1000KG)	0	.2	.4	.6	.8	1.0	1.2	1.4	1.6	1.8	TAS (KS)
174	4555 672	4572 674	4589 677	4607 679	4624 681	4641 684	4658 686	4675 688	4692 690	4710 693	444
176	4727 695	4744 697	4761 700	4778 702	4795 704	4812 707	4829 709	4846 711	4863 713	4880 716	446
178	4897 718	4914 720	4931 723	4948 725	4965 727	4982 729	4999 732	5016 734	5033 736	5050 738	448
180	5067 741	5084 743	5101 745	5117 747	5134 750	5151 752	5168 754	5185 756	5201 759	5218 761	449
182	5235 763	5252 765	5268 768	5285 770	5302 772	5319 774	5335 776	5352 779	5369 781	5385 783	451
184	5402 785	5419 787	5435 790	5452 792	5468 794	5485 796	5501 798	5518 801	5535 803	5551 805	453
186	5568 807	5584 809	5601 812	5617 814	5634 816	5650 818	5666 820	5683 822	5699 825	5716 827	454
188	5732 829	5749 831	5765 833	5781 835	5798 837	5814 840	5830 842	5847 844	5863 846	5879 848	456
190	5895 850	5912 852	5928 855	5944 857	5960 859	5977 861	5993 863	6009 865	6025 867	6042 869	457
192	6058 872	6074 874	6090 876	6106 878	6122 880	6138 882	6154 884	6171 886	6187 888	6203 891	458
194	6219 893	6235 895	6251 897	6267 899	6283 901	6299 903	6315 905	6331 907	6347 909	6363 911	460
196	6379 914	6395 916	6411 918	6427 920	6441 922	6458 924	6474 926	6490 928	6506 930	6522 932	461
198	6538 934	6553 936	6569 938	6585 940	6601 942	6617 944	6632 946	6648 948	6664 950	6680 953	463
200	6695 955	6711 957	6727 959	6743 961	6758 963	6774 965	6790 967	6805 969	6821 971	6836 973	464
202	6852 975	6868 977	6883 979	6899 981	6914 983	6930 985	6946 987	6961 989	6977 991	6992 993	465
204	7008 995	7023 997	7039 999	7054 1001	7070 1003	7085 1005	7100 1007	7116 1109	7131 1011	7147 1013	466
206	7162 1015	7177 1017	7193 1019	7208 1021	7224 1023	7239 1025	7254 1027	7269 1029	7285 1030	7300 1032	467
208	7315 1034	7331 1036	7346 1038	7361 1040	7376 1042	7392 1044	7407 1046	7422 1048	7437 1050	7452 1052	468
210	7467 1054	7483 1056	7498 1058	7513 1060	7528 1062	7543 1064	7558 1066	7573 1067	7588 1069	7603 1071	468
212	7618 1073	7633 1075	7648 1077	7664 1079	7679 1081	7694 1083	7708 1085	7723 1087	7738 1089	7753 1091	469
214	7768 1092	7783 1094	7798 1096	7813 1098	7828 1100	7843 1102	7858 1104	7873 1106	7887 1108	7902 1110	470
216	7917 1111	7932 1113	7947 1115	7962 1117	7976 1119	7991 1121	8006 1123	8021 1125	8035 1126	8050 1128	470
218	8065 1130	8080 1132	8094 1134	8109 1136	8124 1138	8138 1140	8153 1141	8168 1143	8182 1145	8197 1147	471
PACK FLOW LO Δ FUEL = - 0.4 %			PACK FLOW HI OR/ AND CARGO COOL ON Δ FUEL = + 1 %			ENGINE ANTI ICE ON Δ FUEL = + 1.5 %			TOTAL ANTI ICE ON Δ FUEL = + 6 %		