

**KUALA LUMPUR FLIGHT INFORMATION REGION (KL FIR)
ROUTE AIR NAVIGATION SERVICES (RANS)CHARGES
REVISED CHARGEABLE DISTANCES**

1. INTRODUCTION

- 1.1 The purpose of this circular is to notify all relevant operators and aviation partners regarding revised RANS chargeable distances for flights operating within KL FIR due to the implementation of the Performance Based Navigation (PBN) concept airspace structure. New RNAV routes are being introduced, some ATS/RNAV routes revised and a few ATS routes have been withdrawn. New Instrument Flight Procedures (IFP) were introduced in a few airports.
- 1.2 All flights entering the airspace within the boundaries of Kuala Lumpur Flight Information Regions (except exempted flights in GEN 4.2 para 6) are subjected to air navigation services charges which shall be payable to the Authority at the rates specified in the Civil Aviation (Fees and Charges) Regulations 2016.
- 1.3 The distance calculations are based on the Flight Planning Requirement for Aircraft Operating in Kuala Lumpur FIR.

2. DISTANCE CHARGEABLE

- 2.1 The revised chargeable distances are as indicated in ATTACHMENT 1 - 4
- a) Attachment 1 : Departing and Landing at Airport within Kuala Lumpur
 - b) Attachment 2 : Flights to Destination outside Kuala Lumpur FIR
 - c) Attachment 3 : Flights Entering Kuala Lumpur FIR from Adjacent FIR
 - d) Attachment 4 : Flights Overflying Kuala Lumpur FIR

3. IMPLEMENTATION DATE

- 3.1 The revised chargeable distances will become effective from 18 June 2021.

4. FURTHER INFORMATION / QUERIES

For further information or inquiries, please direct it to: query.rans@caam.gov.my.

- END -

1. Flights Departing and Landing at Airports within Kuala Lumpur FIR.

From	To	Route	Distance
Destination within Singapore FIR	WMKM	G579 VJB A457 W535 VMK	107
	WMKK	G579 VJB A457 GUPTA	149
	WMSA	G579 VJB A457 GUPTA	232
	WMKI	Y339 AROSO Y513 KALIL Y504 BILIK Y506 TEPUS W532 VIH	307
	WMKP	Y339 AROSO Y513 KALIL Y504 BILIK Y506 VPG	343
	WMKB	Y339 AROSO Y513 KALIL Y504 BILIK Y506 VPG DCT VBT	356
	WMKL	Y339 AROSO Y513 KALIL Y504 BILIK Y506 VPG W525 VPL	413
	WMKA	Y339 AROSO Y513 KALIL Y504 BILIK Y506 VPG A457 VAS	397
	WMKC	B469 VPK W540 VKB	303
	WMGK	B469 VPK W540 GUGIT DCT VGK	278
	WMKN	B469 VPK W540 GUNBO R208 VKR	253
	WMPR	B469 VPK W540 GUNBO R208 VKR DCT	276
	WMKE	B469 VPK DCT VKN W533 VKP	197
	WMKD	B469 VPK DCT VKN	150

From	To	Route	Distance
WMKJ	WMKM	A457 GUPTA W535 VMK	95
	WMKK	A457 GUPTA	136
	WMSA	A457 GUPTA	219
	WMKI	DCT AROSO Y513 KALIL Y504 BILIK Y506 TEPUS W532 VIH	283
	WMKP	DCT AROSO Y513 KALIL Y504 BILIK Y506 VPG	319
	WMKB	DCT AROSO Y513 KALIL Y504 BILIK Y506 VPG DCT VBT	332
	WMKL	DCT AROSO Y513 KALIL Y504 BILIK Y506 VPG W525 VPL	390
	WMKA	DCT AROSO Y513 KALIL Y504 BILIK Y506 VPG A457 VAS	373
	WMKC	A224 VMR B469 VPK W540 VKB	292
	WMGK	A224 VMR B469 VPK W540 GUGIT DCT VGK	267
	WMKN	A224 VMR B469 VPK W540 GUNBO R208 VKR	242
	WMPR	A224 VMR B469 VPK W540 GUNBO R208 VKR DCT	265
	WMKE	A224 VMR B469 VPK DCT VKP	159
	WMKD	A224 VMR B469 VPK DCT VKN	139

From	To	Route	Distance
WMKM	Destination within Singapore FIR	OGAKO A464 ARAMA	102
	WMKJ	OGAKO A464 TOPOR W534 VJB	100
	WMKK	W536 SAPAT A457 VKL	45
	WMSA	W536 SAPAT A457 VBA	128
	WMKI	SAPAT A457 TEPUS W532 VIH	188
	WMKP	SAPAT A457 VPG	224
	WMKB	SAPAT A457 VPG DCT VBT	237
	WMKL	SAPAT A457 BILIK Y506 VPG W525 VPL	295
	WMKA	SAPAT A457 VAS	278
	WMKC	SAPAT A457 VKL R208 MATSU Y345 GUGIT W540 VKB	219
	WMGK	SAPAT A457 VKL R208 MATSU Y345 GUGIT DCT VGK	193
	WMKN	SAPAT A457 VKL R208 VKR	221
	WMPR	W536 SAPAT A457 VKL R208 VKR DCT	244
	WMKE	SAPAT A457 VKL W533 VKP	198
	WMKD	SAPAT A457 VKL W533 VKN	151

From	To	Route	Distance
WMKK	Destination within Singapore FIR	RUSBU Y511 TOPOR A464 ARAMA	144
	WMKJ	RUSBU Y511 TOPOR W534 VJB	142
	WMKM	A464 DUMOK W535 VMK	48
	WMKI	ATIMU DCT TEPUS W532 VIH	146
	WMKP	ATIMU Y506 VPG	182
	WMKB	ATIMU Y506 VPG DCT VBT	195
	WMKL	ATIMU Y506 VPG W525 VPL	253
	WMKA	ATIMU Y506 VPH A457 VAS	236
	WMKC	PIBOS R208 MATSU Y345 GUGIT W540 VKB	221
	WMGK	PIBOS R208 MATSU Y345 GUGIT DCT VGK	195
	WMKN	PIBOS R208 VKR	182
	WMPR	KIMAT R208 VKR	238
	WMKE	KIMAT W533 VKP	159
	WMKD	KIMAT W533 VKN	111

From	To	Route	Distance
WMSA	Destination within Singapore FIR	RUSBU Y511 TOPOR A464 ARAMA	192
	WMKJ	RUSBU Y511 TOPOR W534 VJB	190
	WMKM	A464 DUMOK W535 VMK	72
	WMKI	ATIMU DCT TEPUS W532	119
	WMKP	ATIMU Y506 VPG	155
	WMKB	ATIMU Y506 VPG DCT VBT	168
	WMKL	ATIMU Y506 VPG W525 VPL	226
	WMKA	ATIMU Y506 VPG A457 VAS	209
	WMKC	PIBOS R208 MATSU Y345 GUGIT W540 VKB	225
	WMGK	PIBOS R208 MATSU Y345 GUGIT DCT VGK	199
	WMKN	PIBOS R208 VKR	186
	WMPR	PIBOS R208 VKR DCT	209
	WMKE	PIBOS G582 ADNUT W533 VKP	174
	WMKD	PIBOS G582 ADNUT W533 VKN	126

From	To	Route	Distance	
WMKI	Destination within Singapore FIR	DUDAD DCT KAKAK Y507 MAKNA Y511 TOPOR A464 ARAMA	263	
	WMKJ	DUDAD DCT KAKAK Y507 MAKNA Y511 TOPOR W534 VJB	260	
	WMKM	DUDAD DCT KAKAK Y507 VKL A464 DUMOK W535 VMK	165	
	WMKK	DUDAD DCT Y507 KAKAK	123	
	WMSA	DUDAD DCT Y507 KAKAK		94
		A464 DAKUS (APPLICABLE FOR NON-RNAV FLIGHTS)		91
	WMKP	AGRES DCT VPG	85	
	WMKB	AGRES DCT VPG DCT VBT	99	
	WMKL	AGRES DCT VPG W525 VPL	156	
	WMKA	AGRES DCT VPG A457 VAS	139	
	WMKC	AGRES DCT VPG W546 VKB	229	
	WMGK	AGRES DCT VPG W546 OPOMO DCT VGK	222	
	WMKN	DUDAD DCT KAKAK Y507 VBA G582 PIBOS R208 VKR	253	
	WMPR	DUDAD DCT KAKAK Y507 VBA G582 PIBOS R208 VKR DCT	277	
	WMKE	DUDAD DCT KAKAK Y507 VBA G582 ADNUT W533 VKP	242	
WMKD	DUDAD DCT KAKAK Y507 VBA G582 ADNUT W533 VKN	194		

From	To	Route	Distance
WMKP	Destination within Singapore FIR	BOGUK DCT ANBIK Y507 MAKNA Y511 TOPOR A464 ARAMA	327
	WMKJ	BOGUK DCT ANBIK Y507 MAKNA Y511 TOPOR W534 VJB	325
	WMKM	BOGUK DCT ANBIK Y507 VKL A464 DUMOK W535 VMK	230
	WMKK	BOGUK DCT ANBIK Y507 KAKAK (FOR RWY 14/32)	188
		UDIKO DCT OREKA Y508 NIREN (FOR RWY 15/33)	222
	WMSA	BOGUK DCT ANBIK Y507 KAKAK	158
		KABOT DCT W530 VIH A464 DAKUS (FOR NON-RNAV FLIGHTS)	157
	WMKI	KABOT DCT W530 VIH	67
	WMKB	DCT VBT	16
	WMKL	OMBOK DCT VPL	74
	WMKA	LUNTU DCT VAS	57
	WMKC	W546 VKB	146
	WMGK	W546 OPOMO DCT VGK	139
	WMKN	W546 OPOMO DCT PALNO	183
	WMPR	W546 OPOMO DCT PALNO DCT	207
	WMKE	W546 OPOMO DCT GUNBO DCT VKP	234
WMKD	W546 OPOMO DCT GUNBO DCT VKN	262	

From	To	Route	Distance
WMKB	Destination within Singapore FIR	Y507 MAKNA Y511 TOPOR A464 ARAMA	357
		W530 VIH A464 ARAMA	340
	WMKJ	Y507 MAKNA Y511 TOPOR W534 VJB	355
		W530 VIH A464 TOPOR W534 VJB	338
	WMKM	Y507 VKL A464 DUMOK W535 VMK	260
		W530 VIH A464 DUMOK W535 VMK	243
	WMKK	Y507 KAKAK	218
		W530 VIH A464 DAKUS	200
	WMSA	Y507 KAKAK	188
		W530 VIH A464 DAKUS	171
	WMKI	W530 VIH	80
	WMKP	DCT VPG	14
	WMKL	W525 VPL	87
	WMKA	A457 VAS	70
	WMKC	W546 VKB	159
	WMGK	W546 OPOMO DCT VGK	153
	WMKN	W546 OPOMO DCT PALNO	197
	WMPR	W546 OPOMO DCT PALNO DCT	221
WMKE	W546 OPOMO DCT GUNBO DCT VKP	247	
WMKD	W546 OPOMO DCT GUNBO DCT VKN	275	

From	To	Route	Distance
WMKL	Destination within Singapore FIR	ISTEL DCT RINBA Y507 MAKNA Y511 TOPOR A464 ARAMA	401
	WMKJ	ISTEL DCT RINBA Y507 MAKNA Y511 TOPOR W534 VJB	399
	WMKM	ISTEL DCT RINBA Y507 VKL A464 DUMOK W535 VMK	304
	WMKK	ISTEL DCT RINBA Y507 KAKAK (FOR RWY 14/32)	261
		RUVTO DCT Y509 ANGUN Y508 NIREN (FOR RWY 15/33)	290
	WMSA	ISTEL DCT RINBA Y507 KAKAK	232
		W531 VIH A464 DAKUS (FOR NON-RNAV FLIGHTS)	225
	WMKI	W531 VIH	135
	WMKP	W525 VPG	74
	WMKB	W525 VPG DCT VBT	87
	WMKA	W542 VAS	45
	WMKC	ISTEL DCT RINBA W546 VKB	203
	WMGK	W525 VPG W546 OPOMO DCT VGK	196
	WMKN	ISTEL DCT RINBA W546 OPOMO DCT PALNO	240
	WMPR	ISTEL DCT RINBA W546 OPOMO DCT PALNO DCT	264
WMKE	ISTEL DCT RINBA W456 OPOMO DCT GUNBO DCT VKP	291	
WMKD	ISTEL DCT RINBA W546 OPOMO DCT GUNBO DCT VKN	219	

From	To	Route	Distance
WMKA	Destination within Singapore FIR	Y502 RINBA Y507 MAKNA Y511 TOPOR A464 ARAMA	375
	WMKJ	Y502 RINBA Y507 MAKNA Y511 TOPOR W534 VJB	373
	WMKM	Y502 RINBA Y507 VKL A464 DUMOK W535 VMK	278
	WMKK	Y502 RINBA Y507 KAKAK (FOR RWY 14/32)	236
		AKMIS Y508 NIREN (FOR RWY 15/33)	302
	WMSA	GUTEB DCT RINBA R325 VIH A464 DAKUS (FOR NON-RNAV FLIGHTS)	205
		Y502 RINBA Y507 KAKAK	206
	WMKI	GUTEB DCT VIH	115
	WMKP	OMBUL DCT VPG	57
	WMKB	DCT VBT	43
	WMKL	W541 VPL	42
	WMKC	GUTEB DCT RINBA W546 VKB	178
	WMGK	GUTEB DCT RINBA W546 OPOMO DCT VGK	171
	WMKN	GUTEB DCT RINBA W546 OPOMO DCT PALNO	215
	WMPR	GUTEB DCT RINBA W546 OPOMO DCT PALNO DCT	239
	WMKE	GUTEB DCT RINBA W546 OPOMO DCT GUNBO DCT VKP	265
	WMKD	GUTEB DCT RINBA W546 OPOMO DCT GUNBO DCT VKN	293

From	To	Route	Distance
WMKC	Destination within Singapore FIR	EMPUR Y514 NUFFA	310
	WMKJ	EMPUR Y514 NUFFA DCT BIKTA B469 VMR A224 VJB	299
	WMKM	G466 VKL A464 W535 VMK	255
	WMKK	G466 PULIP	212
	WMSA	G466 PULIP	199
	WMKI	W546 RINBA R325 VIH	167
	WMKP	W546 VPG	146
	WMKB	W546 VPG DCT VBT	159
	WMKL	W546 VPG W525 VPL	217
	WMKA	W546 VPG A457 VAS	200
	WMGK	DCT V GK	26
	WMKN	W540 PALNO DCT VKR	86
	WMPR	W540 PALNO DCT VKR DCT	110
	WMKE	W540 GUNBO DCT VKP	136
	WMKD	W540 GUNBO DCT VKN	164

From	To	Route	Distance
WMGK	Destination within Singapore FIR	EMPUR Y514 NUFFA	298
	WMKJ	EMPUR Y514 NUFFA DCT BIKTA B469 VMR A224 VJB	287
	WMKM	G466 VKL A464 W535 VMK	277
	WMKK	G466 PULIP	234
	WMSA	G466 PULIP	187
	WMKI	W546 RINBA R325 VIH	190
	WMKP	W546 VPG	169
	WMKB	W546 VPG DCT VBT	182
	WMKL	W546 VPG W525 VPL	240
	WMKA	W546 VPG A457 VAS	223
	WMKC	DCT VKB	26
	WMKN	W540 PALNO DCT VKR	57
	WMPR	W540 PALNO DCT VKR DCT	81
	WMKE	W540 GUNBO DCT VKP	107
	WMKD	W540 GUNBO DCT VKN	138

From	To	Route	Distance
WMKN	Destination within Singapore FIR	LASOB Y346 LATER Y514 NUFFA	276
	WMKJ	LASOB Y346 LATER Y514 NUFFA DCT BIKTA B469 VMR A224 VJB	265
	WMKM	LASOB Y346 PULIP VKL A464 DUMOK W535 VMK	233
	WMKK	LASOB Y346 PULIP	190
	WMSA	LASOB Y346 PULIP	176
	WMKI	LASOB Y346 VBA G582 BILIK Y506 TEPUS W532 VIH	307
	WMKP	LASOB W540 VKB W546 VPG	233
	WMKB	LASOB W540 VKB W546 VPG DCT VBT	246
	WMKL	LASOB W540 VKB W546 VPG W525 VPL	304
	WMKA	LASOB W40 VKB W546 VPG A457 VAS	287
	WMKC	LASOB W540 VKB	90
	WMGK	LASOB W540 VKB DCT VGK	64
	WMKE	W540 GUNBO DCT VKP	56
	WMKD	GUNBO DCT VKN	104

From	To	Route	Distance
WMKE	Destination within Singapore FIR	W533 VKN DCT VPK B469 BIKTA	197
	WMKJ	W533 VKN DCT VPK B469 VMR A224 VJB	186
	WMKM	W533 VKL A464 DUMOK W535 VMK	201
	WMKK	W533 VKN DCT BEKSO Y349 PULIP	187
	WMSA	W533 VKN DCT PULIP	173
	WMKI	W533 VKN DCT PULIP Y346 VBA B466 SUKAT A457 TEPUS W532	261
	WMKP	W533 VKN DCT PULIP Y346 VBA B466 SUKAT A457 VPG	303
	WMKB	W533 VKN DCT PULIP Y346 VBA B466 SUKAT A457 VPG DCT VBT	316
	WMKL	W533 VKN DCT PULIP Y346 VBA B466 SUKAT A457 VPG W525 VPL	374
	WMKA	W533 VKN DCT PULIP Y346 VBA B466 SUKAT A457 VAS	357
	WMGK	DCT GUNBO W540 VKB DCT VGK	101
	WMKC	DCT GUNBO W540 VKB	126
	WMKN	DCT GUNBO R208 VKP	76
	WMKD	W533	48

From	To	Route	Distance
WMKD	Destination within Singapore FIR	B469 BIKTA	150
	WMKJ	B469 VMR A224 VJB	139
	WMKM	W533 VKL A464 DUMOK W535 VMK	154
	WMKK	B469 PADLI Y343 SAROX	156
	WMSA	B469 PADLI Y343 SAROX	207
	WMKI	DCT PULIP Y346 VBA B466 SUKAT A457 TEPUS W532	213
	WMKP	DCT PULIP Y346 VBA B466 SUKAT A457 VPG	255
	WMKB	W533 ADNUT G582 VBA B466 SUKAT A457 VPG DCT VBT	269
	WMKL	DCT PULIP Y346 VBA B466 SUKAT A457 VPG W525 VPL	269
	WMKA	DCT PULIP Y346 VBA B466 SUKAT A457 VAS	309
	WMGK	W540 VKB DCT VGK	129
	WMKC	W540 VKB	154
	WMKN	W540 GUNBO R208 VKR	104
	WMKE	W533	48

ATTACHMENT 2

2 Flights to Destination outside Kuala Lumpur FIR

From	Entering Adjacent FIR	Joining Airways or Waypoint	FPL Route	Distance
WMKM	Bangkok FIR	DUBAX	IRMIB DCT OGANA Y501 RINBA Y502	257
		TAMOS	IRMIB DCT OGANA Y501 RINBA R325 VAS A457	294
		RIGTO	IRMIB DCT OGANA Y501	306
		PASVA	W536 SAPAT A457 VKL R208 MATSU Y345 GUGIT M751 VKB A334 PASVA	274
		GOLUD	W536 SAPAT A457 VKL R208 MATSU Y345 GUGIT M751 VKB M751 GOLUD	267
		KADAX	W536 SAPAT A457 VKL R208 MATSU Y345 GUGIT M751 VKB M626 KADAX	266
		ABTOK	W536 SAPAT A457 VKL R208 MATSU Y345 GUGIT M751 VKB M644 ABTOK	268
WMKK	Bangkok FIR	DUBAX	BIKDU Y501 RINBA Y502	227
		TAMOS	ATIMU Y506 VPG A457 (FOR VTSS)	252
			BIKDU Y501 RINBA R325 VAS A457	264
		RIGTO	BIKDU Y501	276
		PASVA	PIBOS R208 MATSU Y345 GUGIT M751 VKB A334	235
		GOLUD	PIBOS R208 MATSU Y345 GUGIT M751	227
		KADAX	PIBOS R208 MATSU Y345 GUGIT M751 VKB M626	226
ABTOK	PIBOS R208 MATSU Y345 GUGIT M751 VKB M644	228		
WMSA	Bangkok FIR	DUBAX	ATIMU Y506 VPG Y351	209
		TAMOS	ATIMU Y506 VPG A457	215
		RIGTO	ATIMU Y506 VPG Y350	225
		PASVA	PIBOS R208 MATSU Y345 GUGIT M751 VKB A334	239
		GOLUD	PIBOS R208 MATSU Y345 GUGIT M751	231
		KADAX	PIBOS R208 MATSU Y345 GUGIT M751 VKB M626	230
		ABTOK	PIBOS R208 MATSU Y345 GUGIT M751 VKB M644	232
WMKI	Bangkok FIR	DUBAX	AGRES DCT VPG Y351	153
		TAMOS	AGRES DCT VPG A457	159
		RIGTO	AGRES DCT VPG Y350	169
WMKP	Bangkok FIR	DUBAX	Y351	71
		TAMOS	LUNTU DCT VAS A457	77
		RIGTO	Y350	87
WMKB	Bangkok FIR	DUBAX	Y351	85
		TAMOS	LUNTU DCT VAS A457	91
		RIGTO	Y350	101
WMKA	Bangkok FIR	DUBAX	R325	22
		TAMOS	A457	21
		RIGTO	M769	33
WMKL	Bangkok FIR	DUBAX	W542 VAS R325	66
		TAMOS	W542 VAS A457	65
		RIGTO	W542 VAS M769	77
WMKC	Bangkok FIR	PASVA	DCT PASVA A334	17
		GOLUD	M751 GOLUD	9
		KADAX	DCT KADAX M626	8
		ABTOK	M644 ABTOK	10
WMGK	Bangkok FIR	PASVA	DCT PASVA A334	40
		GOLUD	DCT VKB M751 GOLUD	32
		KADAX	DCT KADAX M626	31
		ABTOK	DCT VKB M644 ABTOK	33

From	Entering Adjacent FIR	Joining Airways or Waypoint	FPL Route	Distance
WMKN/ WMPR	Bangkok FIR	PASVA	W540 VKB A334	90
		GOLUD	W540 VKB M751	82
		KADAX	W540 VKB M626	82
		ABTOK	W540 VKB M644	83
WMKE		PASVA	DCT GUNBO M751 VKB A334 PASVA	216
		GOLUD	DCT GUNBO M751 GOLUD	208
		KADAX	DCT GUNBO M751 VKB M626 KADAX	207
		ABTOK	DCT GUNBO M751 VKB M644 ABTOK	209
WMKD		PASVA	M751 VKB A334	168
		GOLUD	M751	160
		KADAX	M751 VKB M626	160
		ABTOK	M751 VKB M644	161
WMKJ		DUBAX	DCT AROSO Y513 KALIL Y501 RINBA Y502	373
		TAMOS	DCT AROSO Y513 KALIL Y501 RINBA R325 VAS A457	373
		RIGTO	DCT AROSO Y513 KALIL Y501	385
		PASVA	A224 VMR B469 VPK M751 VKB A334	306
	GOLUD	A224 VMR B469 VPK M751	298	
	KADAX	A224 VMR B469 VPK M751 VKB M626	298	
	ABTOK	A224 VMR B469 VPK M751 VKB M644	299	
	NOPEK	SAPAT A457 VKL R461 PUGER P574	213	
WMKM	ANOKO	SAPAT A457 AGOSA R467 GUNIP B466	467	
	IGOGU	SAPAT A457 AGOSA R467 GUNIP N571	572	
	IGREX	SAPAT A457 VPG B579 VPL P628	677	
	NOPEK	PUGER P574	173	
WMKK	ANOKO	IBUKU Y504 GUNIP B466	429	
	IGOGU	IBUKU Y504 GUNIP N571	534	
	IGREX	ATIMU Y506 VPG B579 VPL P628	632	
	NOPEK	PUGER P574	157	
WMSA	ANOKO	IBUKU Y504 GUNIP B466	406	
	IGOGU	IBUKU Y504 GUNIP N571	510	
	IGREX	ATIMU Y506 VPG B579 VPL P628	594	
	ANOKO	MADUM DCT G468 GUNIP B466	320	
WMKP	IGOGU	MADUM DCT G468 GUNIP N571	496	
	IGREX	OMBOK W525/B579 VPL P628	456	
	ANOKO	MADUM DCT G468 GUNIP B466	334	
WMKB	IGOGU	MADUM DCT G468 GUNIP N571	510	
	IGREX	OMBOK W525/B579 VPL P628	470	
	ANOKO	W525 VPG G468 GUNIP B466	391	
WMKL	IGOGU	RUVTO DCT ANGUN G468 GUNIP N571	496	
	IGREX	AKRAB DCT GIVAL P628	385	
	NOPEK	G466 PULIP DCT VBA G582 PUGER P574 NOPEK	331	
WMKC	ANOKO	W546 VPG G468 GUNIP B466	464	
	IGOGU	W546 VPG G468 GUNIP N571	605	
	IGREX	W546 VPG B579 VPL P628	599	
	NOPEK	G466 PULIP DCT VBA G582 PUGER P574 NOPEK	331	

From	Entering Adjacent FIR	Joining Airways or Waypoint	Route	Distance	
WMGK	Chennai FIR	NOPEK	DCT RUPOS G466 PULIP DCT VBA G582 PUGER P574 NOPEK	314	
		ANOKO	W546 VPG G468 GUNIP B466	487	
		IGOGU	W546 VPG G468 GUNIP N571	591	
		IGREX	W546 VPG B579 VPL P628	622	
WMKN/ WMPR		NOPEK	Y346 PULIP DCT VBA G582 PUGER P574 NOPEK	308	
		ANOKO	W540 VKB W546 VPG G468 GUNIP B466	501	
		IGOGU	W540 VKB W546 VPG G468 GUNIP N571	605	
		IGREX	W540 VKB W546 VPG B579 VPL P628	636	
WMKJ		NOPEK	DCT AROSO Y513 KALIL Y504 BILIK G582 PUGER P574	316	
		ANOKO	A457 SUKAT B466	562	
		IGOGU	DCT AROSO Y513 KALIL Y504 GUNIP N571	601	
		IGREX	DCT AROSO Y513 KALIL Y504 BILIK Y506 VPG B579 VPL P628	683	
WMKI		NOPEK	A464 VBA G582 PUGER P574 NOPEK	223	
		ANOKO	W532 TEPUS A457 VPG G468 GUNIP B466 ANOKO	424	
		IGOGU	W532 TEPUS A457 VPG G468 GUNIP N571 IGOGU	528	
		IGREX	W532 TEPUS A457 VPG B579 VPL P628 IGREX	559	
WMKA	NOPEK	R325 VIH A464 VBA G582 PUGER P574 NOPEK	328		
	ANOKO	A457 VPG G468 GUNIP B466 ANOKO	375		
	IGOGU	A457 VPG G468 GUNIP N571 IGOGU	479		
	IGREX	A457 VPG B579 VPL P628 IGREX	510		
WMKE	NOPEK	W533 ADNUT G582 PUGER P574 NOPEK	306		
	ANOKO	W533 ADNUT G582 VBA B466 ANOKO	551		
	IGOGU	W533 ADNUT G582 VBA B466 GUNIP N571 IGOGU	656		
	IGREX	W533 ADNUT G582 VBA B466 SUKAT A457 VPG B579 VPL P628 IGREX	757		
WMKD	NOPEK	W533 ADNUT G582 PUGER P574 NOPEK	257		
	ANOKO	W533 ADNUT G582 VBA B466 ANOKO	504		
	IGOGU	W533 ADNUT G582 VBA B466 GUNIP N571 IGOGU	608		
	IGREX	W533 ADNUT G582 VBA B466 SUKAT A457 VPG B579 VPL P628 IGREX	715		
WMKJ	Jakarta FIR	PUGER	DCT AROSO Y513 KALIL Y504 BILIK G582 PUGER R461	241	
		SALAX	A457 GUPTA Y340 SALAX	135	
WMKM		DOSIK	R579	32	
		PUGER	W536 SAPAT A457 VKL R467 GOBAS G582 PUGER	143	
WMKK		PUGER	R461	98	
		SALAX	N633	35	
WMSA		PUGER	R461	83	
		SALAX	N633	118	
WMKI		SALAX	A464 VKL N633 SALAX	150	
WMKP		GOTLA	AGRES DCT VPG G468	165	
		SALAX	W530 VIH A464 VKL N633 SALAX	216	
WMKB		GOTLA	MADUM DCT GUNIP G468	82	
		SALAX	DCT VIH A464 VKL N633 SALAX	231	
			GOTLA	MADUM DCT GUNIP G468	96

From	Entering Adjacent FIR	Joining Airways or Waypoint	Route	Distance
WMKL	Jakarta FIR	SALAX	W531 VIH A464 VKL N633 SALAX	285
		GOTLA	Y509 ANGUN G468	147
WMKC		GOTLA	W546 VPG G468	226
		SALAX	G466 VKL N633	242
WMKA		GOTLA	A457 VPG G468 GOTLA	136
		SALAX	A464 VKL N633 SALAX	256
WMGK		GOTLA	DCT OPOMO W546 VPG G468 GOTLA	248
		SALAX	DCT RUPOS G466 VKL N633 SALAX	226
WMKN/ WMPR		PUGER	Y346 PULIP DCT VBA G582 PUGER	233
		GOTLA	Y346 LASOB DCT GUGIT M751 VKB G546 VPG G468 GOTLA	312
		SALAX	Y346 PULIP G466 VKL N633 SALAX	220
WMKE		PUGER	W533 ADNUT G582 PUGER	231
		SALAX	W533 VKL N633 SALAX	189
WMKD		PUGER	W533 ADNUT G582 PUGER	183
		SALAX	W533 VKL N633 SALAX	141
WMKK		BEYOND Singapore FIR	SUKRI	MITOS M630
	BUVAL		KIMAT Y344 VPK L629	136
	IDSEL		KIMAT Y344 VPK M758	144
	KETOD		KIMAT Y344 VPK M761	160
WMSA	SUKRI		MITOS M630	140
	BUVAL		PIBOS G582 VPK L629	154
	IDSEL		PIBOS G582 VPK M758	161
	KETOD		PIBOS G582 VPK M761	177
WMKP	SUKRI		BOGUK DCT ANBIK Y507 MITOS M630	332
	BUVAL		W530 VIH A464 VBA G582 VPK L629 BUVAL	285
	IDSEL		BOGUK DCT ANBIK Y507 VBA G582 VPK M758	310
	KETOD		BOGUK DCT ANBIK Y507 VBA G582 VPK M761	326
WMKB	SUKRI		DCT VIH A464 VKL Y341 MITOS M630 SUKRI	311
	BUVAL		DCT VIH A464 VBA G582 VPK L629 BUVAL	299
	IDSEL		DCT VIH A464 VBA G582 VPK M758 IDSEL	306
WMKL	KETOD		DCT VIH A464 VBA G582 VPK M761 KETOD	322
	SUKRI	ISTEL DCT RINBA Y507 MITOS M630	369	
	BUVAL	W531 VIH A464 VBA G582 VPK L629 BUVAL	353	
	IDSEL	ISTEL DCT RINBA Y507 VBA G582 VPK M758	364	
WMKC	KETOD	ISTEL DCT RINBA Y507 VBA G582 VPK M761	380	
	PU	M751 VPK B469	303	
	VMR	DUBMU DCT LERKA Y514 NUFFA B469	310	
	BUVAL	M751 VPK L629 BUVAL	203	
	IDSEL	DUBMU DCT LERKA Y514 BEKSO Y512 VPK M758	217	
WMKD	KETOD	DUBMU DCT LERKA Y514 BEKSO Y512 VPK M761	233	
	PU	DCT VPK B469	150	
	BUVAL	VPK L629	49	
	IDSEL	VPK M758	57	
WMKJ	KETOD	VPK M761	73	
	VMR/ RAXIM	A224 VMR M771	94	
	KK	W651 KK W401	46	

From	Entering Adjacent FIR	Joining Airways or Waypoint	Route	Distance
WMKM	BEYOND Singapore FIR	SUKRI	DCT MITOS M630 SUKRI	83
		BUVAL	W536 SAPAT A457 VKL W533 KIMAT Y344 VPK L629 BUVAL	176
		IDSEL	W536 SAPAT A457 VKL W533 KIMAT Y344 VPK M758 IDSEL	184
		KETOD	W536 SAPAT A457 VKL W533 KIMAT Y344 VPK M761 KETOD	199
WMKI		SUKRI	A464 VKL Y341 MITOS M630 SUKRI	231
		BUVAL	A464 VBA G582 VPK L629 BUVAL	219
		IDSEL	A464 VBA G582 VPK M758 IDSEL	226
		KETOD	A464 VBA G582 VPK M761 KETOD	242
WMKA		BUVAL	R325 VIH A464 VBA G582 VPK L629 BUVAL	324
		IDSEL	R325 VIH A464 VBA G582 VPK M758 IDSEL	332
		KETOD	R325 VIH A464 VBA G582 VPK M761 KETOD	347
WMGK		PU	DCT GUGIT M751 VPK B469	278
		BUVAL	DCT GUGIT M751 VPK L629 BUVAL	177
		IDSEL	DCT GUGIT M751 VPK M758 IDSEL	185
		KETOD	DCT GUGIT M751 VPK M761 KETOD	201
WMKN/ WMPR		PU	Y346 LASOB DCT GUNBO M751 VPK B469	267
		BUVAL	Y346 LASOB DCT GUNBO M751 VPK L629 BUVAL	166
		IDSEL	Y346 LASOB DCT GUNBO M751 VPK M758 IDSEL	174
		KETOD	Y346 LASOB DCT GUNBO M751 VPK M761 KETOD	190
WMKE		PU	W533 VKN DCT VPK B469	197
	BUVAL	W533 VKN DCT VPK L629 BUVAL	97	
	IDSEL	W533 VKN DCT VPK M758 IDSEL	105	
	KETOD	W533 VKN DCT VPK M761 KETOD	120	
WMKK	Ho Chi Minh FIR	IGARI	PIBOS R208	205
			PIBOS R208	209
WMKP			W546 VKB M765	180
WMKB			DCT BETNU W546 VKB M765	193
			ISTEL DCT RINBA W546 VKB M765	234
			M765	37
WMKC			DCT VENLI M765	37
WMKM			W536 SAPAT A457 VKL R208	244
WMKI			W532 TEPUS A457 VPG W546 VKB M765	283
WMKA			A457 VPG W546 VKB M765	234
WMGK			DCT VKB M765	60
WMKN/ WMPR			R208	27
WMKE			DCT VKR R208	79
WMKD			DCT GUNBO R208	127

ATTACHMENT 3

3 Flights Entering Kuala Lumpur FIR from Adjacent FIR

From Adjacent FIR	To	From Airways or Waypoints	Route	Distance
Bangkok FIR	WMKJ	DALAN	B579 VPL Y503 RINBA Y507 MAKNA Y511 TOPOR W534 VJB	403
		KARMI	Y507 MAKNA Y511 TOPOR W534 VJB	379
		TAMOS	TAMOS A457 VAS R325 VIH A464 TOPOR W534 VJB	385
		PASVA	Y514 NUFFA DCT BIKTA B469 VMR A224 VJB	304
		GOLUD	GOLUD M751 VKB M751 VPK B469 VMR A224 VJB	298
		KADAX	KADAX M626 VKB M751 VPK B469 VMR A224 VJB	297
Chennai FIR		ABTOK	ABTOK M644 VKB M751 VPK B469 VMR A224 VJB	299
		EMRAN	L510 GIVAL P628 VPL Y503 RINBA Y507 MAKNA Y511 TOPOR W534 VJB	740
		IGOGU	N571 GUNIP M630 NIREN Y511 TOPOR W534 VJB	669
		ANOKO	B466 GUNIP R467 VKL A464 TOPOR W534 VJB	567
Jakarta FIR		NOPEK	NOPEK P574 PUGER R461 VKL A464 TOPOR W534 VJB	313
		PUGER	R461 VIDEX Y511 TOPOR W534 VJB	234
BEYOND Singapore FIR	SALAX	Y340 BATAR A464 TOPOR W534 VJB	134	
	KIBOL/VMR	N892 A224 VJB	93	
Bangkok FIR	KK	W401 KK W651 VJB	46	
	DALAN	B579 VPL Y503 RINBA Y507 VKL A464 DUMOK W535 VMK	308	
	KARMI	Y507 VKL A464 DUMOK W535 VMK ...	284	
Chennai FIR	TAMOS	TAMOS A457 VAS R325 VIH A464 DUMOK W535 VMK	288	
	EMRAN	EMRAN L510 GIVAL P628 VPL W531 VIH A464 DUMOK W535 VMK	642	
	IGOGU	IGOGU N571 GUNIP B466 VBA A464 DUMOK W535 VMK	580	
	ANOKO	ANOKO B466 VBA A464 DUMOK W535 VMK	476	
Jakarta FIR	NOPEK	NOPEK P574 PUGER R461 VKL A464 DUMOK W535 VMK	216	
	PUGER	R461 VKL A464 DUMOK W535 VMK	141	
Ho Chi Minh FIR	DOSIK	R579	32	
	IGARI	R208 VKR Y346 PULIP G466 VKL A464 DUMOK W535 VMK	256	
BEYOND Singapore FIR	SABKA	A457 GUPTA W535 VMK	107	
	DOVOL	DOVOL Y334 PADLI Y343 SAROX DCT GEMAS DCT VMK	185	
	IDSEL	IDSEL Y335 PADLI Y343 SAROX DCT GEMAS DCT VMK	186	
	KETOD	KETOD Y336 PADLI Y343 SAROX DCT GEMAS DCT VMK	195	
	TAXUL	TAXUL Y349 PULIP G466 VKL A464 DUMOK W535 VMK	210	

From Adjacent FIR	To	From Airways or Waypoints	Route	Distance
Bangkok FIR	WMKK	DALAN	B579 VPL Y509 ANGUN Y508 NIREN (FOR RWY 15/33)	247
			B579 VPL Y503 RINBA Y507 KAKAK (FOR RWY 14/32)	266
		KARMI	Y507 KAKAK (FOR RWY 14/32)	242
			Y508 NIREN (FOR RWY 15/33)	258
		TAMOS	TAMOS A457 VAS R325 VIH A464 VKL	245
		PASVA	Y514 EMPUR G466	243
		KADAX	KADAX M626 VKB G466 VKL	217
		ABTOK	ABTOK M644 VKB G466 VKL	219
GOLUD		GOLUD M751 VKB G466 VKL	218	
Chennai FIR		EMRAN	L510 GIVAL P628 VPL Y509 ANGUN Y508 NIREN (FOR RWY 15/33)	584
			L510 GIVAL P628 VPL Y503 RINBA Y507 KAKAK (FOR RWY 14/32)	603
		IGOGU	N571 GUNIP Y347 KAKAK (FOR RWY 14/32)	543
			N571 GUNIP M630 NIREN (FOR RWY 15/33)	556
		ANOKO	B466 GUNIP R467 VKL	427
		NOPEK	NOPEK P574 PUGER R461 VKL	173
Ho Chi Minh FIR		PUGER	R461	121
BEYOND Singapore FIR	SALAX	N633	35	
	IGARI	R208 VKR Y346 PULIP	213	
	SABKA	A457 GUPTA	149	
	DOVOL	Y334 PADLI Y343 SAROX	142	
	IDSEL	Y335 PADLI Y343 SAROX	143	
	KETOD	Y336 PADLI Y343 SAROX	153	
TAXUL	Y349 PULIP	167		
Bangkok FIR	WMSA	DALAN	B579 VPL Y503 RINBA Y507 KAKAK	236
			B579 VPL W531 VIH A464 DAKUS (FOR NON-RNAV FLIGHTS)	233
		KARMI	Y507 KAKAK	212
			A464 DAKUS (FOR NON-RNAV FLIGHTS)	210
		TAMOS	TAMOS A457 VAS R325 VIH A464 VBA	216
		PASVA	Y514 EMPUR G466 PULIP	204
		KADAX	KADAK M626 VKB G466 VBA	204
		ABTOK	ABTOK M644 VKB G466 VBA	206
GOLUD		GOLUD M751 VKB G466 VBA	205	
Chennai FIR		EMRAN	L510 GIVAL P628 VPL Y503 RINBA Y507 KAKAK	573
		IGOGU	N571 GUNIP Y347 KAKAK	513
		ANOKO	B466 GUNIP R467 GOBAS	407
		NOPEK	NOPEK P574 PUGER G582 VBA	158
Jakarta FIR		PUGER	G582 GOBAS	83
Ho Chi Minh FIR	SALAX	N633	118	
	IGARI	R208 VKR Y346 PULIP	199	
BEYOND Singapore FIR	SABKA	LAPOL G579 VJB A457 VBA	232	
	VPK	G582 PIBOS (FOR NON-RNAV FLIGHTS)	131	
	DOVOL	Y334 PADLI Y343 SAROX	193	
	IDSEL	Y335 PADLI Y343 SAROX	193	
	KETOD	Y336 PADLI Y343 SAROX	203	
	TAXUL	Y349 PULIP	154	

From Adjacent FIR	To	From Airways or Waypoints	Route	Distance	
Bangkok FIR	WMKI	DALAN	B579 VPL W531 VIH	143	
		KARMI	Y507 RINBA Y501 VIH	121	
		TAMOS	TAMOS A457 VAS R325 VIH A464 VIH	126	
Chennai FIR		EMRAN	EMRAN L510 GIVAL P628 VPL W531 VIH	480	
		IGOGU	IGOGU N571 GUNIP G468 VPG W530 VIH	489	
		ANOKO	ANOKO B466 GUNIP G468 VPG W530 VIH	385	
Jakarta FIR		NOPEK	NOPEK P574 PUGER G582 BILIK A457 TEPUS W532 VIH	211	
		SALAX	SALAX N633 VKL A457 TEPUS W532 VIH	172	
Ho Chi Minh FIR		GOTLA	G468 VPG W530 VIH	147	
		IGARI	M765 VKB W546 VPG W530 VIH	241	
BEYOND Singapore FIR		AROSO	G579 VJB Y342 AROSO Y513 KALIL Y504 BILIK Y506 TEPUS W532 VIH	289	
		SABKA	G579 VJB A457 TEPUS W532 VIH (FOR FL220 AND BELOW)	285	
		DOVOL	DOVOL L635 VPK G582 VBA B466 SUKAT A457 TEPUS W532 VIH	244	
		IDSEL	IDSEL M758 VPK G582 VBA B466 SUKAT A457 TEPUS W532 VIH	248	
		KETOD	KETOD M761 VPK G582 VBA B466 SUKAT A457 TEPUS W532 VIH	264	
	TAXUL	TAXUL Y349 PULIP DCT VBA B466 SUKAT A457 TEPUS W532 VIH	241		
Bangkok FIR	WMKP	DALAN	W525 VPG	81	
		KARMI	M757 VAS A457 VPG	76	
		TAMOS	TAMOS A457 VPG	76	
Chennai FIR		EMRAN	L510 GIVAL P628 VPL B579 VPG	418	
		IGOGU	N571 GUNIP G468 VPG	425	
Jakarta FIR		ANOKO	B466 GUNIP G468 VPG	320	
		SALAX	SALAX N633 VKL A457 VPG	214	
Ho Chi Minh FIR		GOTLA	G468 VPG	82	
		IGARI	M765 VKB W546 VPG	180	
Bangkok FIR		WMKB	DALAN	DALAN B579 VPG DCT VBT	95
			KARMI	KARMI M757 VAS A457 VPG DCT VBT	89
			TAMOS	TAMOS A457 VPG DCT VBT	90
Chennai FIR	EMRAN		EMRAN L510 GIVAL P628 VPL B579 VPG DCT VBT	431	
	IGOGU		IGOGU N571 GUNIP G468 VPG DCT VBT	438	
	ANOKO		ANOKO B466 GUNIP G468 VPG DCT VBT	265	
Jakarta FIR	SALAX		SALAX N633 VKL A457 VPG DCT VBT	227	
	GOTLA		GOTLA G468 VPG DCT VBT	95	
Ho Chi Minh FIR	IGARI		M765 VKB W546 VPG DCT VBT	193	
BEYOND Singapore FIR	AROSO		Y339 GEMAS B466 SUKAT A457 VPG DCT VBT	351	
	DOVOL		DOVOL L635 VPK G582 VBA B466 SUKAT A457 VPG DCT VBT	299	
	IDSEL		IDSEL M758 VPK G582 VBA B466 SUKAT A457 VPG DCT VBT	304	
	KETOD		KETOD M761 VPK G582 VBA B466 SUKAT A457 VPG DCT VBT	320	

From Adjacent FIR	To	From Airways or Waypoints	Route	Distance
Bangkok FIR	WMKL	DALAN	B579 VPL	10
		KARMI	M757 VAS W541 VPL	61
		TAMOS	TAMOS A457 VAS W541 VPL	62
Chennai FIR		EMRAN	L510 GIVAL P628 VPL	347
		IGOGU	N571 GUNIP G468 VPG W525 VPL	496
		ANOKO	B466 GUNIP G468 VPG W525 VPL	391
Jakarta FIR		SALAX	SALAX N633 VKL A457 VPG B579 VPL	285
		GOTLA	G468 VPG W525 VPL	153
Ho Chi Minh FIR		IGARI	M765 VKB W546 VPG W525 VPL	251
BEYOND Singapore FIR			G579 VJB Y342 AROSO Y513 KALIL Y504 BILIK Y506 VPG W525 VPL	403
	SABKA	G579 VJB A457 VPG W525 VPL (FOR FL220 AND BELOW)	398	
	DOVOL	L635 VPK G582 BILIK Y506 VPG W525 VPL	362	
	IDSEL	M758 VPK G582 BILIK Y506 VPG W525 VPL	367	
	KETOD	M761 VPK G582 BILIK Y506 VPG W525 VPL	383	
Bangkok FIR	WMKC	PASVA	PASVA A334 VKB	17
		KADAX	KADAK M626 VKB	8
		ABTOK	ABTOK M644 VKB	10
		GOLUD	GOLUD M751 VKB	9
Chennai FIR		EMRAN	EMRAN L510 GIVAL P628 VPL B579 VPG W546 VKB	562
		IGOGU	IGOGU N571 GUNIP G468 VPG W546 VKB	568
		ANOKO	ANOKO B466 GUNIP G468 VPG W546 VKB	464
Jakarta FIR		NOPEK	NOPEK P574 PUGER G582 PIBOS R208 MATSU Y345 GUGIT W540 VKB	357
		GOTLA	GOTLA G468 VPG W546 VKB	226
Ho Chi Minh FIR		SALAX	SALAX N633 VKL R208 MATSU Y345 GUGIT W540 VKB	251
	IGARI	M765 VKB	37	
BEYOND Singapore FIR	PU	PU B469 VPK M751 VKB	303	
	VMR	B469 VPK M751 VKB	303	
	DOVOL	L635 VPK M751 VKB	205	
	IDSEL	M758 VPK M751 VKB	211	
	KETOD	M761 VPK M751 VKB	226	
Bangkok FIR	WMKA	DALAN	B579 VPL W542 VAS	52
		KARMI	M757 VAS	21
		TAMOS	TAMOS A457 VAS	21
Jakarta FIR		GOTLA	G468 VPG A457 VAS	136
		SALAX	N633 VKL R467 BILIK Y506 VPG A457 VAS	306
Ho Chi Minh FIR		IGARI	M765 VKB W546 VPG A457 VAS	267
	NOPEK	P574 PUGER G582 BILIK Y506 VPG A457 VAS	306	

From Adjacent FIR	To	From Airways or Waypoints	Route	Distance
BEYOND Singapore FIR	WMKA	AROSO	DCT AROSO Y513 KALIL Y504 BILIK Y506 VPG A457 VAS	213
		DOVOL	L635 VPK G582 BILIK Y506 VPG A457 VAS	344
		IDSEL	M758 VPK G582 BILIK Y506 VPG A457 VAS	350
		KETOD	M761 VPK G582 BILIK Y506 VPG A457 VAS	365
		TAXUL	Y349 PULIP Y346 BILIK Y506 VPG A457 VAS	342
Bangkok FIR	WMGK	PASVA	Y514 EMPUR DCT VGK	47
		KADAX	M626 VKB DCT EMPUR DCT VGK	47
		ABTOK	M644 VKB DCT EMPUR DCT VGK	49
		GOLUD	M751 VKB DCT EMPUR DCT VGK	48
Chennai FIR		EMRAN	L510 GIVAL P628 VPL B579 VPG W546 DCT EMPUR DCT VGK	538
		IGOGU	N571 GUNIP G468 VPG W546 DCT EMPUR DCT VGK	561
		ANOKO	B466 GUNIP G468 VPG W546 DCT EMPUR DCT VGK	457
Jakarta FIR		NOPEK	P574 PUGER G582 PIBOS R208 MATSU Y345 GUGIT DCT VGK	331
		GOTLA	G468 VPG W546 DCT EMPUR DCT VGK	219
Ho Chi Minh FIR		SALAX	N633 VKL R208 MATSU Y345 GUGIT DCT VGK	225
		IGARI	M765 VKB DCT VGK	60
BEYOND Singapore FIR		PU	PU B469 VPK M751 GUGIT DCT VGK	278
	DOVOL	L635 VPK M751 GUGIT DCT VGK	180	
	IDSEL	M758 VPK M751 GUGIT DCT VGK	185	
	KETOD	M761 VPK M751 GUGIT DCT VGK	201	
Bangkok FIR	WMKN/ WMPR	PASVA	Y514 EMPUR DCT GUGIT DCT VKR	90
		KADAX	M626 VKB DCT EMPUR DCT GUGIT DCT VKR	90
		ABTOK	M644 VKB DCT EMPUR DCT GUGIT DCT VKR	91
		GOLUD	M751 VKB DCT EMPUR DCT GUGIT DCT VKR	90
Chennai FIR		EMRAN	L510 GIVAL P628 VPL B579 VPG W546 DCT EMPUR DCT GUGIT DCT VKR	580
		IGOGU	N571 GUNIP G468 VPG W546 DCT EMPUR DCT GUGIT DCT VKR	604
		ANOKO	B466 GUNIP G468 VPG W546 DCT EMPUR DCT GUGIT DCT VKR	499
Jakarta FIR		NOPEK	P574 PUGER G582 PIBOS R208 VKR	317
		PUGER	G582 PIBOS R208 VKR	243
		GOTLA	G468 VPG W546 DCT EMPUR DCT GUGIT DCT VKR	261
Ho Chi Minh FIR		SALAX	N633 VKL R208 VKR	211
		IGARI	R208 VKR	27
BEYOND Singapore FIR		PU	PU B469 VPK M751 GUNBO R208 VKR	253
		DOVOL	L635 VPK M751 GUNBO R208 VKR	156
		IDSEL	M758 VPK M751 GUNBO R208 VKR	161
		KETOD	M761 VPK M751 GUNBO R208 VKR	176

- All adjacent FIR to WMPR must plus additional 25NM from VOR WMKN.

From Adjacent FIR	To	From Airways or Waypoints	Route	Distance
Bangkok FIR	WMKE	PASVA	Y514 GUPAR DCT VKP	150
		KADAX	M626 VKB DCT EMPUR Y514 GUPAR DCT VKP	125
		ABTOK	M644 VKB DCT EMPUR Y514 GUPAR DCT VKP	126
		GOLUD	M751 VKB DCT EMPUR Y514 GUPAR DCT VKP	126
Chennai FIR		EMRAN	L510 GIVAL P628 VPL B579 VPG W546 DCT EMPUR Y514 GUPAR DCT VKP	670
		IGOGU	N571 GUNIP G468 VPG W546 DCT EMPUR Y514 GUPAR DCT VKP	664
		ANOKO	B466 GUNIP G468 VPG W546 DCT EMPUR Y514 GUPAR DCT VKP	560
		NOPEK	P574 PUGER G582 ADNUT W533 VKP	305
Jakarta FIR		PUGER	G582 ADNUT W533 VKP	231
		SALAX	N633 VKL W533 VKP	189
Ho Chi Minh FIR		IGARI	R208 VKR DCT VKP	79
BEYOND Singapore FIR		PU	PU B469 VPK DCT VKN W533 VKP	197
		DOVOL	L635 VPK DCT VKN W533 VKP	99
		IDSEL	M758 VPK DCT VKN W533 VKP	105
		KETOD	M761 VPK DCT VKN W533 VKP	120
Bangkok FIR		WMKD	PASVA	Y514 BEKSO DCT VKN
	KADAX		M626 VKB DCT EMPUR Y514 BEKSO DCT VKN	170
	ABTOK		M644 VKB DCT EMPUR Y514 BEKSO DCT VKN	171
	GOLUD		M751 VKB DCT EMPUR Y514 BEKSO DCT VKN	171
Chennai FIR	EMRAN		L510 GIVAL P628 VPL Y503 RINBA W546 DCT EMPUR Y514 BEKSO DCT VKN	660
	IGOGU		N571 GUNIP G468 VPG W546 DCT EMPUR Y514 BEKSO DCT VKN	684
	ANOKO		B466 GUNIP G468 VPG W546 DCT EMPUR Y514 BEKSO DCT VKN	579
	NOPEK		P574 PUGER G582 ADNUT W533 VKN	258
Jakarta FIR	PUGER		G582 ADNUT W533 VKN	183
	SALAX		N633 VKL W533 VKN	141
Ho Chi Minh FIR	IGARI		R208 GUPAR Y514 BEKSO DCT VKN	127
BEYOND Singapore FIR	PU		B469 VPK DCT VKN	150
	DOVOL		L635 VPK DCT VKN	52
	IDSEL		M758 VPK DCT VKN	57
	KETOD		M761 VPK DCT VKN	73

ATTACHMENT 4

4 Flights Overflying Kuala Lumpur FIR

From Adjacent FIR	To	From Airways or Waypoints	JOINING Airways or Waypoints	Route	Distance	
Bangkok FIR	Chennai FIR	SAPAM	SAPAM	L645 SAMAK	187	
			IGREX	L645 MAPSO P628 IGREX	214	
		RUSET	IGOGU	P627 NILAM N571 IGOGU	224	
			NOPEK	P627 IGEBO P574 NOPEK	227	
	Jakarta FIR	RUSET	POVUS	P627 POVUS	211	
		DALAN	GOTLA	B579 VPL Y509 ANGUN G468 GOTLA	154	
		KARMI		Y508 ANGUN G468 GOTLA	154	
	Singapore FIR and beyond	DALAN	ARAMA (For destination within Singapore FIR)	B579 Y503 RINBA Y507 MAKNA Y511 TOPOR A464	405	
		KARMI		Y507 MAKNA Y511 TOPOR A464	381	
		TAMOS		TAMOS A457 VAS R325 VIH A464	387	
		DALAN	SUKRI	B579 Y503 RINBA Y507 MITOS M630 SUKRI	377	
		KARMI		Y507 MITOS M630 SUKRI	352	
		TAMOS		TAMOS A457 VAS R325 VIH A464 VKL Y341 MITOS M630 SUKRI	356	
		TIDAR	ENREP	M904 UPRON	109	
		GOLUD	VPK	M751 VKB Y514 NUFFA DCT BIKTA B469	316	
		ABTOK		M644 VKB Y514 NUFFA DCT BIKTA B469	317	
		KADAX		M626 VKB Y514 NUFFA DCT BIKTA B469	316	
		PASVA		PASVA A334 VKB M751 VPK B469	317	
				Y514 NUFFA DCT BIKTA B469	316	
				KETOD	PASVA Y514 VPK M761	244
		IDSEL		PASVA Y514 VPK M758	228	
	Chennai FIR	Bangkok FIR	SAMAK	SAPAM	L645 SAPAM	187
			EMRAN		L510 IDKUT L645 SAPAM	195
			IGOGU	RUSET	N571 NILAM P627 RUSET	224
			NOPEK		P574 IGEBO P627 RUSET	227
		Jakarta FIR	NOPEK	ANSAX	P574 ANSAX	75
		Ho Chi Minh FIR	IGOGU	IGARI	N571 GUNIP G468 VPG W546 VKB M765 IGARI	602
EMRAN			L510 GIVAL P628 VPL Y503 RINBA W546 VKB M765 IGARI		579	
Singapore FIR and beyond		EMRAN	ARAMA (For destination within Singapore FIR)	L510 GIVAL P628 VPL W531 VIH A464	741	
		IGOGU		N571 GUNIP R467 VKL A464	674	
		ANOKO		B466 GUNIP R467 VKL A464	569	
		NOPEK		P574 PUGER R461 VKL A464	315	
		EMRAN	SUKRI	L510 GIVAL P628 VPL Y503 RINBA Y507 MITOS M630 SUKRI	714	
		IGOGU		N571 GUNIP M630 SUKRI	639	
		ANOKO		B466 GUNIP M630 SUKRI	534	
		NOPEK		P574 PUGER R461 VESIS M630 SUKRI	278	

From Adjacent FIR	To	From Airways or Waypoints	JOINING Airways or Waypoints	Route	Distance
Jakarta FIR	Bangkok FIR	POVUS	RUSET	P627 RUSET	211
		GOTLA	RIGTO	G468 VPG Y350 RIGTO	166
			DUBAX	G468 VPG Y351 DUBAX	150
			TAMOS	G468 VPG A457 TAMOS	156
			KADAX	G468 VPG W546 VKB M626 KADAX	231
			GOLUD	G468 VPG W546 VKB M751 GOLUD	232
			ABTOK	G468 VPG W546 VKB M644 ABTOK	233
		SALAX	RIGTO	N633 VKL A457 VPG Y350 RIGTO	298
			DUBAX	N633 VKL A457 VPG Y351 DUBAX	282
			TAMOS	N633 VKL A457 TAMOS	288
			KADAX	N633 VKL R208 MATSU Y345 GUGIT M751 VKB M626 KADAX	256
			GOLUD	N633 VKL R208 MATSU Y345 GUGIT M751 GOLUD	257
	ABTOK	N633 VKL R208 MATSU Y345 GUGIT M751 VKB M644 ABTOK	258		
	Ho Chi Minh FIR	GOTLA	IGARI	G468 VPG W546 VKB M765	260
		SALAX		N633 VKL R208	234
	Singapore FIR and beyond	PUGER	ARAMA (For Destination within Singapore FIR)	PUGER R461 VKL A464	240
		SALAX		SALAX Y340 BATAR A464	136
				R461 VESIS M630 SUKRI	203
		SALAX		SALAX DCT MITOS M630 SUKRI	99
	Ho Chi Minh FIR	Chennai FIR	VENLI	IGREX	M765 VKB W546 RINBA Y503 VPL P628 IGREX
IGOGU				M765 VKB W546 VPG G468 GUNIP N571 IGOGU	602
Jakarta FIR		VENLI	GOTLA	M765 VKB W546 VPG G468 GOTLA	260
			SALAX	R208 VKR Y346 PULIP G466 VKL N633 SALAX	243
			PUGER	R208 VKR Y346 VBA G582 PUGER	257
Singapore FIR and beyond		IGARI	ENREP	N891	109

From Adjacent FIR	To	From Airways or Waypoints	JOINING Airways or Waypoints	Route	Distance
Singapore FIR and beyond	Bangkok FIR	ENREP	TIDAR	M904	109
		AROSO	TAMOS	AROSO Y513 KALIL Y501 RINBA R325 VAS A457 TAMOS	391
			RIGTO	AROSO Y513 KALIL Y501 RIGTO	409
			DUBAX	AROSO Y513 KALIL Y501 RINBA Y502 DUBAX	392
			VPK	PASVA	B469 VPK M751 VKB A334 PASVA
		KADAX		B469 VPK M751 VKB M626 KADAX	309
		ABTOK		B469 VPK M751 VKB M644 ABTOK	310
		GOLUD		B469 VPK M751 GOLUD	309
	Chennai FIR	AROSO	IGREX	AROSO Y513 KALIL Y501 RINBA Y503 VPL P628 IGRX	733
			IGOGU	AROSO Y513 KALIL Y504 GUNIP N571 IGOGU	634
			ANOKO	VJB A457 SUKAT B466 ANOKO	575
			NOPEK	AROSO Y513 KALIL Y504 BILIK G582 PUGER P574 NOPEK	340
	Jakarta FIR	AROSO	PUGER	AROSO Y513 KALIL Y504 BILIK G582 PUGER R461	265
		SABKA	SALAX	G579 VJB A457 GUPTA Y340 SALAX	147
	Ho Chi Minh FIR	ENREP	IGARI	N891 IGARI	109
	Singapore FIR	PU	LENDA	N884	109
			RAXIM	M771	105
			MANIM	N891	110
			EGOLO	L642	115
		ELALO	STAR	STAR WSSS/WSSL	115