

ENR 2 AIR TRAFFIC SERVICES AIRSPACE**ENR 2.1 FIR, UIR, TMA**

Name Lateral limits Upper limit/Lower limit Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hr of ser	Frequency /Purpose	Remarks
1	2	3	4	5
<p align="center">SINGAPORE FIR</p> <p>082500N 1163000E - 025050N 1091629E - 045700N 1081619E - 050012N 1080132E - 045904N 1075525E - 045203N 1074625E - 043820N 1073315E - 041312N 1071743E - 033045N 1055130E - 031727N 1052959E - 031453N 1052619E - 025010N 1051210E - 024348N 1050854E - 023641N 1051311E - 021838N 1052205E - 011947N 1044606E - 012921N 1043441E - 011800N 1043000E - 011500N 1040000E - 010800N 1034500E - 011046N 1034015E - 011200N 1033900E - 011408N 1033142E - 011700N 1033600E thence east along the national boundary of Singapore/ Malaysia, thence along 012000N to 012000N 1042000E - 023600N 1044500E - 034000N 1034000E - 045000N 1034400E - 064500N 1024000E - 070000N 1030000E - 070000N 1080000E - 103000N 1140000E - 082500N 1163000E</p> <p>UNL SFC</p>	SINGAPORE ACC	<p>SINGAPORE RADAR</p> <p>English</p> <p>H24</p>	<p>255.4MHz</p> <p><u>Primary</u> 123.7MHz 133.25MHz 134.4MHz 133.8MHz 134.2 MHz 134.9 MHz 134.7MHz</p> <p><u>Secondary</u> 127.3MHz 135.8MHz 128.1MHz 133.35MHz 134.35 MHz 134.15kHz</p> <p><u>SEA 1</u> 6556kHz 11297kHz</p> <p><u>SEA 2</u> 5655kHz 8942kHz 11396kHz</p> <p><u>SEA 3</u> 6556kHz</p>	<p>The responsibility for providing air traffic services to flights within the following portions of the Singapore FIR is vested in the Kuala Lumpur ACC:</p> <p>The airspace between a line from 023600N 1044500E to 022715N 1051750E - 023641N 1051311E - 024348N 1050854E - 025010N 1051210E - 031453N 1052619E - 031727N 1052959E - 033045N 1055130E - 041312N 1071743E - 043820N 1073315E - 045203N 1074625E - 045904N 1075525E - 050012N 1080132E - 045700N 1081619E - 025050N 1091629E, in the south, and a line along 060000N in the north, and from surface level to FL150 west of longitude 105E and from surface level to FL200 east of longitude 105E.</p> <p>SEA 1, SEA 2, SEA 3: SSB Suppressed Carriers.</p> <p>Suitably equipped aircraft operating outside radar cover and not in ADS-B exclusive airspace within the Singapore FIR should log on to Singapore's AFN LOGON address at least 10 minutes prior to entering the above-mentioned airspace in Singapore FIR. Area Navigation (RNAV) routes suitable for ADS-C and / or CPDLC logon are described in ENR 3.2.</p>
		<p>SINGAPORE CONTROL SOUTH CHINA SEA</p> <p>English H24</p>	<p><u>AFN</u> <u>LOGON</u> WSJC</p>	

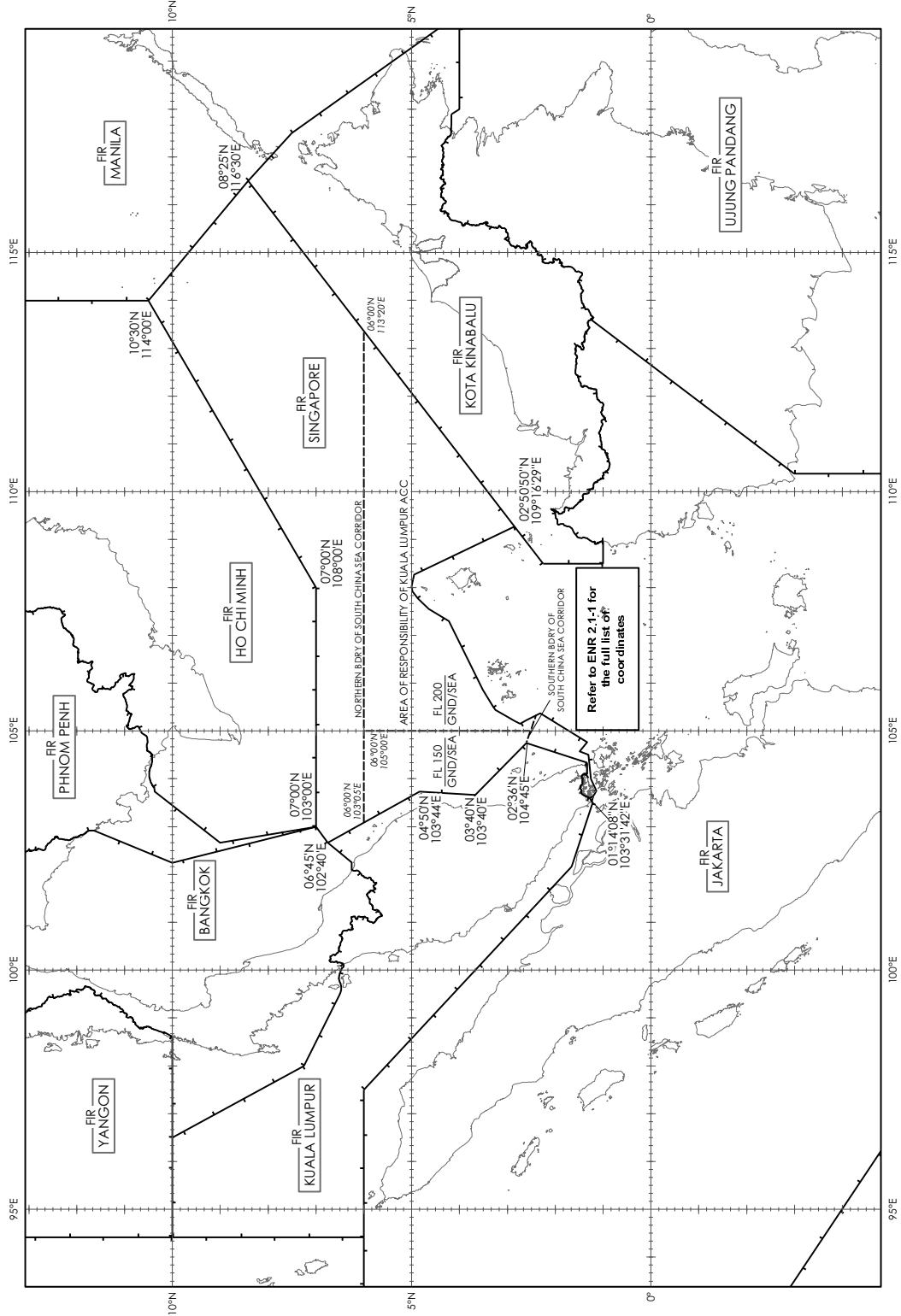
<i>Name</i> <i>Lateral limits</i> <i>Upper limit/Lower limit</i> <i>Class of airspace</i>	<i>Unit providing service</i>	<i>Call sign</i> <i>Languages</i> <i>Area and conditions of use</i> <i>Hr of ser</i>	<i>Frequency /Purpose</i>	<i>Remarks</i>
1	2	3	4	5
AREAS WITHIN JAKARTA FIR WHERE PROVISION OF ATS IS DELEGATED TO SINGAPORE				
<p>The area bounded by 031727N 1052959E - 012450N 1061648E - 001030N 1045656E - 000000N 1050340E - 000000N 1044330E thence around the arc of a circle radius 90 NM centred on 011324N 1035124E to 013430N 1022353E - 011300N 1033000E - 011408N 1033142E - 011200N 1033900E - 011046N 1034015E - 010800N 1034500E - 011500N 1040000E - 011800N 1043000E - 012921N 1043441E - 011947N 1044606E - 021838N 1052205E - 023641N 1051311E - 024348N 1050854E - 025010N 1051210E - 031453N 1052619E - 031727N 1052959E</p> <p>Excluding the Tanjungpinang Terminal Control Area and Control Zone</p> <p><u>FL370</u> SFC</p>	<p>SINGAPORE ACC</p>	<p>SINGAPORE RADAR</p> <p>English H24</p>	<p>255.4MHz</p> <p><u>Primary</u> 133.25MHz 134.4MHz 134.2MHz</p> <p><u>Secondary</u> 135.8MHz 128.1MHz 133.35 MHz</p>	

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AREAS WITHIN THE KUALA LUMPUR FIR FOR WHICH SINGAPORE ACC IS RESPONSIBLE FOR PROVIDING ATS				
SECTOR 1:				
<p>That airspace contained within coordinates 011300N 1033000E - 012203N 1030209E thence along an arc radius 50 DME SJ to 014529N 1031305E - 014225N 1031728E, thence along the Johor TMA western boundary to 013022N 1033437E - 012600N 1034055E, thence along the Peninsular Malaysia and Singapore international boundary to 011700N 1033600E - 011300N 1033000E. The airspace herein is designated as follows:</p> <ul style="list-style-type: none"> a. AREA B (SJ DVOR/DME - 35 DME SJ) - 3 000ft to FL245 b. AREA D (35 DME SJ - 45 DME SJ) - 5 500ft to FL245 c. AREA F (45 DME SJ - 50 DME SJ) - 9 500ft to FL245 	SINGAPORE ACC	SINGAPORE RADAR English H24	<u>Primary</u> 133.25MHz <u>Secondary</u> 135.8MHz	<p>Controlling Authority: Johor APP for airspaces below Sectors 1 and 2, Airway W401 and south of VMR DVOR.</p> <p><u>Note:</u> <i>In the event an aircraft in the areas is forced to make an emergency descent which will penetrate Malaysian airspace, the pilot shall advise Singapore ATC immediately.</i></p>
SECTOR 2:				
<p>That airspace contained within coordinates 013206N 1035031E - 022205N 1034724E - 025234N 1033340E - 025432N 1034341E - 033822N 1034139E - 023600N 1044500E - 012000N 1042000E - 012000N 1040528E thence along the Peninsular Malaysia and Singapore international boundary to 012600N 1034055E to 013022N 1033437E - 013130N 1034236E to 013206N 1035031E. The airspace herein is designated as follows:</p> <ul style="list-style-type: none"> a. AREA A (PU DVOR/DME - 30 DME PU excluding the northern portion of Changi CTR) - 2 000FT to FL245 b. AREA C (30 DME PU - 61 DME PU) - 5 500FT to FL300 c. AREA E (61 DME PU - 90 DME PU) - FL120 to FL360 d. AREA H (from 025432N 1034341E thence along the 90 DME PU arc to the FIR boundary (024712N 1043337E) thence to 033822N 1034139E - 025432N 1034341E) - FL145 to FL360 	SINGAPORE ACC	SINGAPORE RADAR English H24	<u>Primary</u> 123.7MHz 133.8MHz <u>Secondary</u> 127.3MHz	
ATS ROUTES W401 and G579				
<ul style="list-style-type: none"> a. W401 [Airspace between OMKOM and PU radial 324 from 2,000ft to FL245 and PU radial 324 to PIMOK (excluding WMP228) from 3,000ft to FL245]. b. G579 from 2000ft to FL460. 	SINGAPORE ACC	SINGAPORE RADAR English H24		

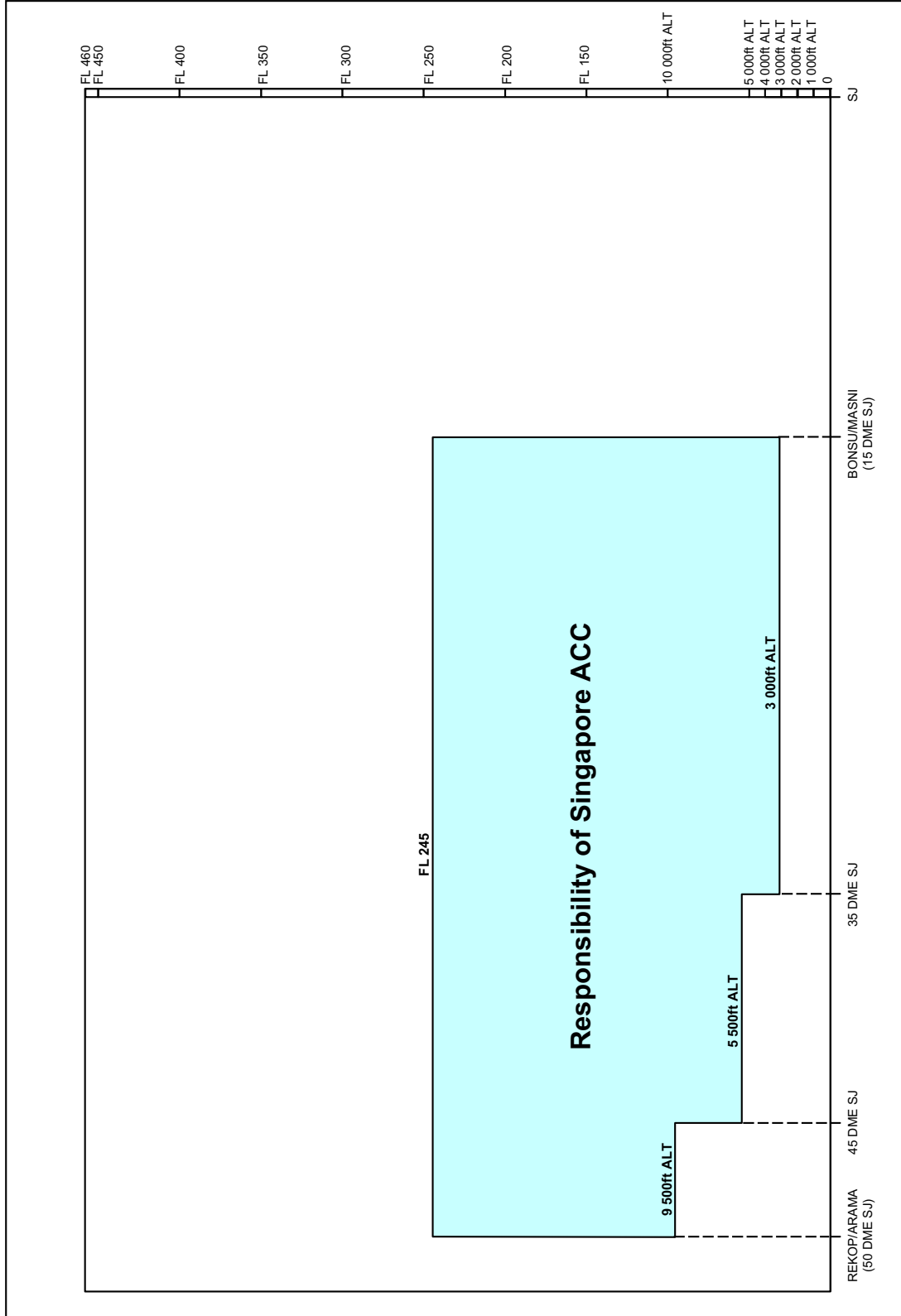
<i>Name</i> <i>Lateral limits</i> <i>Upper limit/Lower limit</i> <i>Class of airspace</i>	<i>Unit providing service</i>	<i>Call sign</i> <i>Languages</i> <i>Area and conditions of use</i> <i>Hr of ser</i>	<i>Frequency /Purpose</i>	<i>Remarks</i>
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<p>SINGAPORE /JOHOR AIRSPACE COMPLEX</p> <p>All controlled airspace within 022600N 1025605E - 022600N 1043400E - 004300N 1043400E - 004300N 1025605E.</p> <p><u>*FL250</u> 2000ft ALT</p>	<p>SINGAPORE ACC</p>	<p>SINGAPORE RADAR</p> <p>English H24</p>	<p><u>Primary</u> 123.7MHz 133.8MHz</p> <p><u>Secondary</u> 127.3MHz</p>	<p>*Upper limit FL450 from HOSBA [34 DME SJ R-079 (24 DME VTK R-103)]</p> <p>Lower limit varies from 2 000ft to 3 500ft ALT.</p>
<p>ALL AIRWAYS WITHIN THE SINGAPORE FIR, KUALA LUMPUR FIR AND ITS TRANSFER AREAS AND KOTA KINABALU FIR</p> <p>(see subsection ENR 3.1)</p>	<p>SINGAPORE ACC</p>	<p>SINGAPORE RADAR</p> <p>English H24</p>	<p><u>Primary</u> 133.25MHz 123.7MHz 133.8MHz</p> <p><u>Secondary</u> 135.8MHz 127.3MHz</p>	<p>Airspaces within the Kuala Lumpur FIR under the control of Singapore ACC are depicted in diagrams in AIP pages: ENR 2.1-11 for AWY A464 ENR 2.1-13 for AWY B469</p>

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1	2	3	4	5
TANJUNGPINANG TMA 002448N 1043700E follow the circle radius 30NM from 005511N 1043134E anti-clockwise until 010342N 1050018E 005612N 1053200E thence along the circle with radius 60NM from 005511N 1043134E clockwise until 000224N 1050206E 002448N 1043700E <u>10 000ft</u> 3000 FT	TANJUNGPINANG APPROACH CONTROL OFFICE (APP)	TANJUNGPINANG RADAR English H24	<u>Primary</u> 130.2MHz <u>Secondary</u> 119.35MHz	
TANJUNGPINANG NORTH CONTROL ZONE (CTR) 011533N 1040852E - 011638N 1041620E - 011305N 1042029E - 010942N 1043500E - thence along the circle radius 27 NM from BTM VOR/DME clockwise until 004236N 1041654E - 005315N 1040335E - 010018N 1035530E - 011553N 1040852E <u>3 000ft</u> GND/MSL				
TANJUNGPINANG SOUTH CONTROL ZONE (CTR) 004236N 1041654E follow the circle radius 27 NM from BTM VOR/DME anti-clockwise until 010942N 1043500E - 010342N 1050018E thence along the circle radius 30 NM from 0055.0N 10432.0E clockwise until 002448N 1043700E - 004236N 1041654E <u>6 000ft</u> GND/MSL				

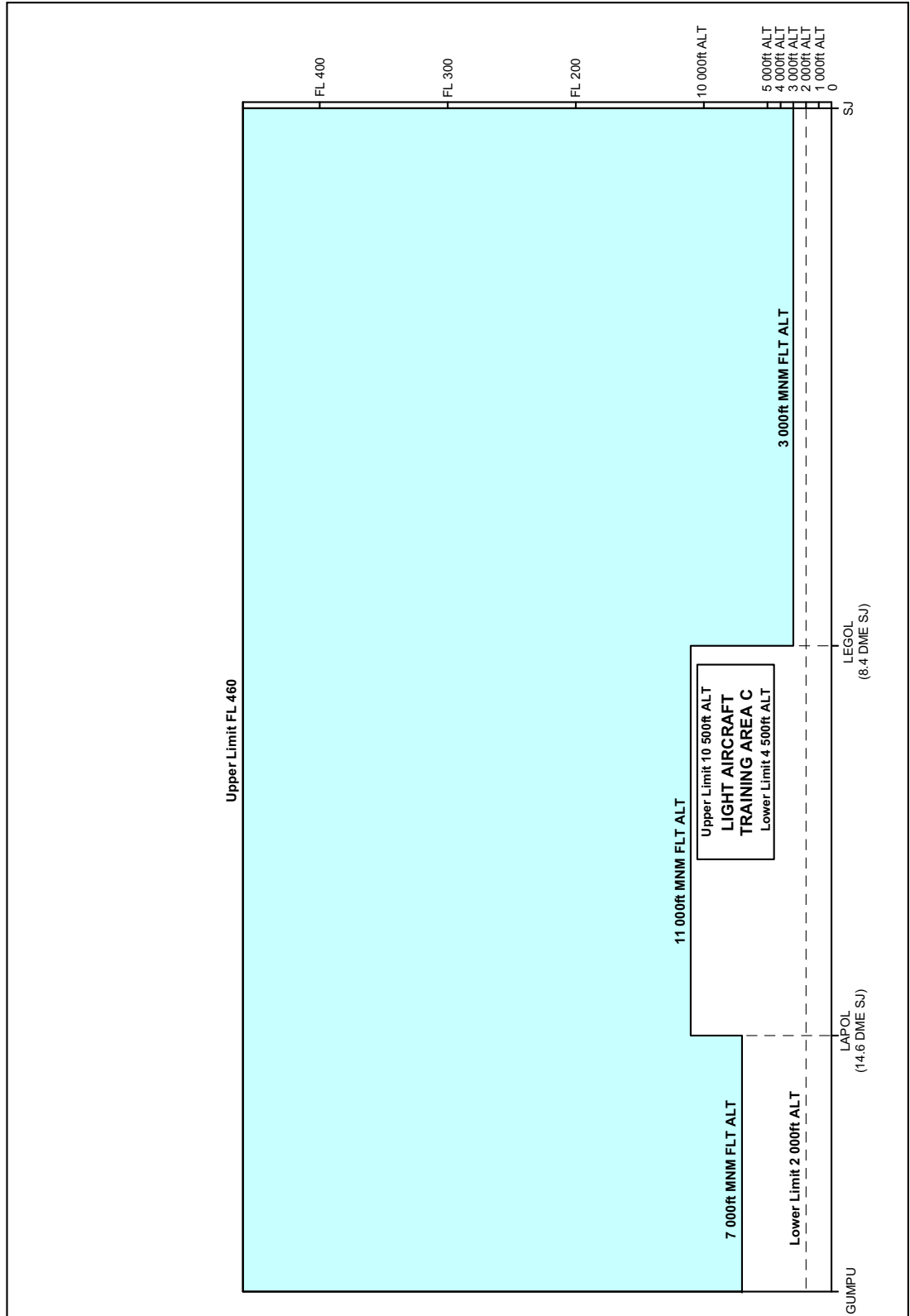
SINGAPORE AND ADJACENT FLIGHT INFORMATION REGIONS



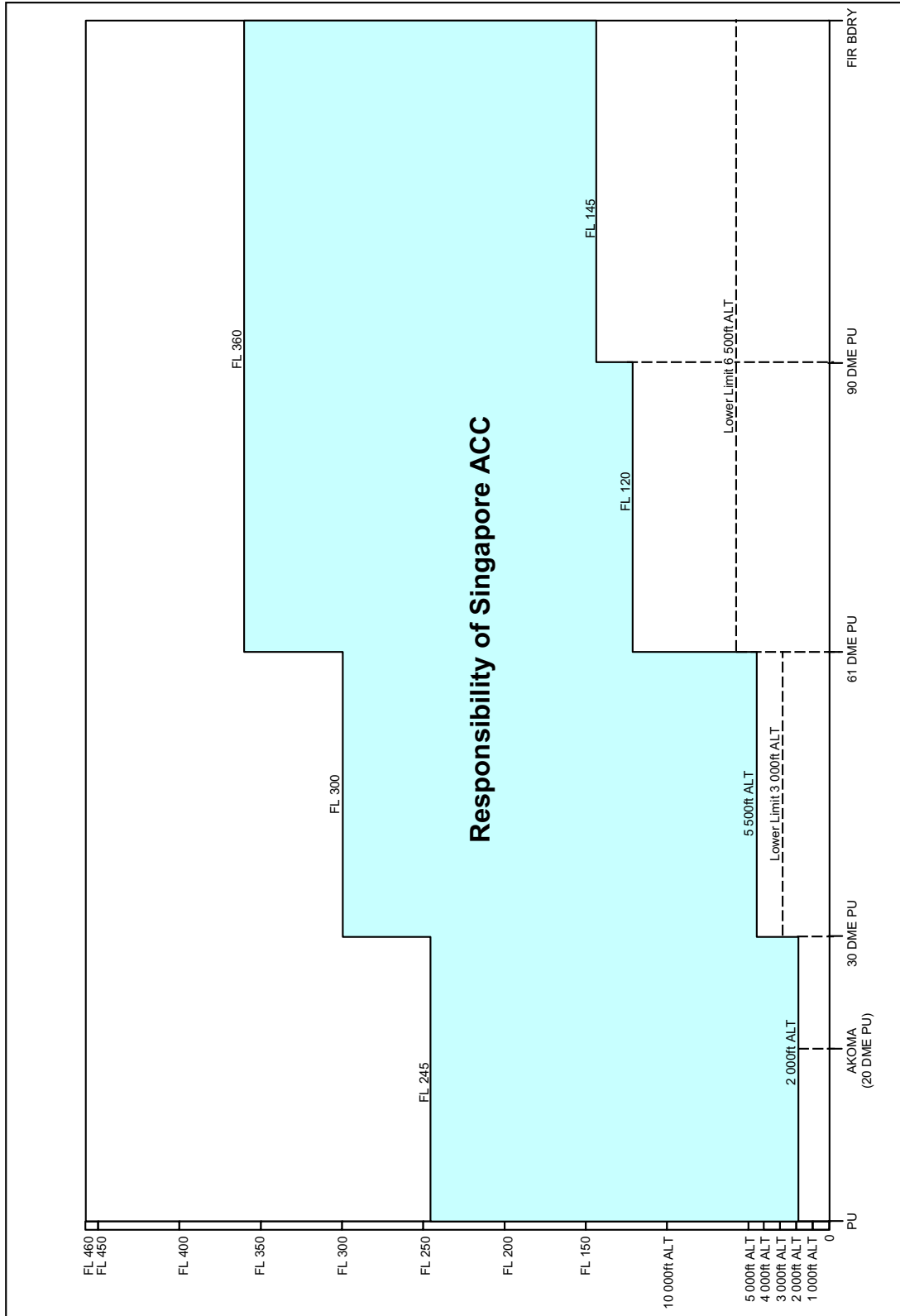
LONGITUDINAL CROSS-SECTION OF SECTOR 1 SJ-REKOP/ARAMA (50 DME SJ)



LONGITUDINAL CROSS-SECTION OF G579 FROM GUMPU TO SJ



LONGITUDINAL CROSS-SECTION OF SECTOR 2 PU-SINGAPORE/LUMPUR FIR BOUNDARY



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