

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

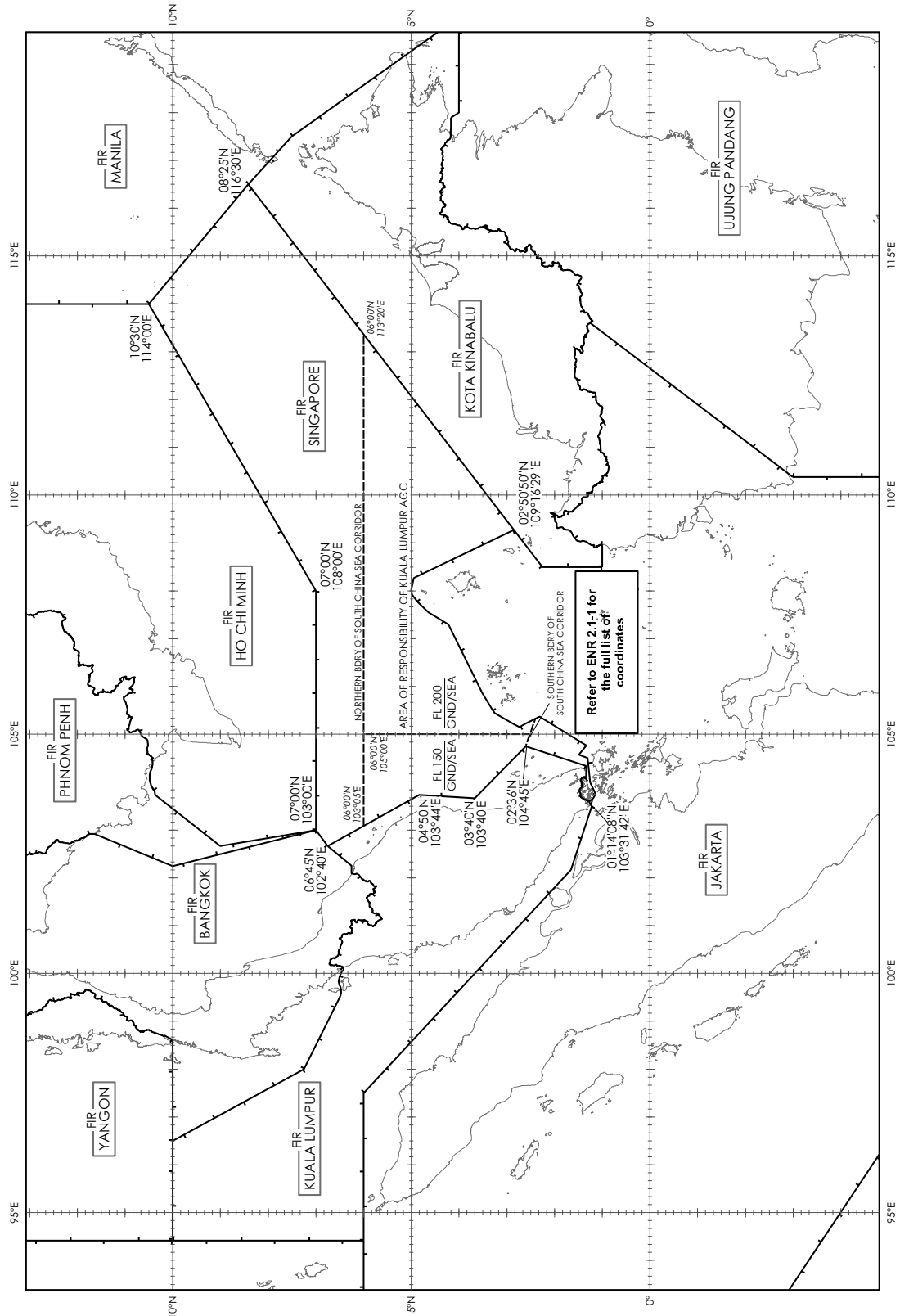
| <i>Name<br/>Lateral limits<br/>Upper limit/Lower limit<br/>Class of airspace</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <i>Unit<br/>providing<br/>service</i> | <i>Call sign<br/>Languages<br/>Area and conditions<br/>of use<br/>Hr of ser</i> | <i>Frequency<br/>/Purpose</i>                                                                                                                                                                                                                                                                                                                                                 | <i>Remarks</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2                                     | 3                                                                               | 4                                                                                                                                                                                                                                                                                                                                                                             | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>SINGAPORE FIR</b><br><br>082500N 1163000E - 025050N 1091629E -<br>045700N 1081619E - 050012N 1080132E -<br>045904N 1075525E - 045203N 1074625E -<br>043820N 1073315E - 041312N 1071743E -<br>033045N 1055130E - 031727N 1052959E -<br>031453N 1052619E - 025010N 1051210E -<br>024348N 1050854E - 023641N 1051311E -<br>021838N 1052205E - 011947N 1044606E -<br>012921N 1043441E - 011800N 1043000E -<br>011500N 1040000E - 010800N 1034500E -<br>011046N 1034015E - 011200N 1033900E -<br>011408N 1033142E - 011700N 1033600E thence<br>east along the national boundary of Singapore/<br>Malaysia, thence along 012000N to 012000N<br>1042000E - 023600N 1044500E - 034000N<br>1034000E - 045000N 1034400E - 064500N<br>1024000E - 070000N 1030000E - 070000N<br>1080000E - 103000N 1140000E - 082500N<br>1163000E<br><br><b>UNL</b><br><b>SFC</b> | SINGAPORE<br>ACC                      | SINGAPORE<br>RADAR<br><br><br>English<br><br><br>H24                            | 255.4MHz<br><br><u>Primary</u><br>123.7MHz<br>133.25MHz<br>134.4MHz<br>133.8MHz<br>134.2 MHz<br>134.9 MHz<br>134.7MHz<br>135.05 MHz<br><br><u>Secondary</u><br>127.3MHz<br>135.8MHz<br>128.1MHz<br>133.35MHz<br>134.35 MHz<br>134.15kHz<br>134.95 MHz<br><br><u>SEA 1</u><br>6556kHz<br>11297kHz<br><u>SEA 2</u><br>5655kHz<br>8942kHz<br>11396kHz<br><u>SEA 3</u><br>6556kHz | The responsibility for providing<br>air traffic services to flights<br>within the following portions of<br>the Singapore FIR is vested in<br>the Kuala Lumpur ACC:<br><br>The airspace between a line<br>from 023600N 1044500E to<br>022715N 1051750E -<br>023641N 1051311E - 024348N<br>1050854E - 025010N<br>1051210E - 031453N<br>1052619E - 031727N<br>1052959E - 033045N<br>1055130E - 041312N<br>1071743E - 043820N<br>1073315E - 045203N<br>1074625E - 045904N<br>1075525E - 050012N<br>1080132E - 045700N<br>1081619E - 025050N<br>1091629E, in the south, and a<br>line along 060000N in the<br>north, and from surface level to<br>FL150 west of longitude 105E<br>and from surface level to<br>FL200 east of longitude 105E.<br><br>SEA 1, SEA 2, SEA 3: SSB<br>Suppressed Carriers. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                       | SINGAPORE<br>CONTROL<br>SOUTH CHINA<br>SEA<br>English<br>H24                    | <u>AFN</u><br><u>LOGON</u><br>WSJC                                                                                                                                                                                                                                                                                                                                            | Suitably equipped aircraft<br>operating outside radar cover<br>and not in ADS-B exclusive<br>airspace within the Singapore<br>FIR should log on to<br>Singapore's AFN LOGON<br>address at least 10 minutes<br>prior to entering the above-<br>mentioned airspace in<br>Singapore FIR. Area<br>Navigation (RNAV) routes<br>suitable for ADS-C and / or<br>CPDLC logon are described in<br>ENR 3.2.                                                                                                                                                                                                                                                                                                                                                                                               |

| <i>Name<br/>Lateral limits<br/>Upper limit/Lower limit<br/>Class of airspace</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>Unit<br/>providing<br/>service</i> | <i>Call sign<br/>Languages<br/>Area and conditions<br/>of use<br/>Hr of ser</i> | <i>Frequency<br/>/Purpose</i>                                                                                                                  | <i>Remarks</i> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2                                     | 3                                                                               | 4                                                                                                                                              | 5              |
| AREAS WITHIN JAKARTA FIR WHERE<br>PROVISION OF ATS IS DELEGATED TO<br>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><br/><b>SFC</b></p> | SINGAPORE ACC                         | <p>SINGAPORE<br/>RADAR</p> <p>English<br/>H24</p>                               | <p>255.4MHz</p> <p><u>Primary</u><br/>133.25MHz<br/>134.4MHz<br/>134.2MHz</p> <p><u>Secondary</u><br/>135.8MHz<br/>128.1MHz<br/>133.35 MHz</p> |                |

| Name<br>Lateral limits<br>Upper limit/Lower limit<br>Class of airspace                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Unit<br>providing<br>service | Call sign<br>Languages<br>Area and conditions<br>of use<br>Hr of ser | Frequency<br>/Purpose                                                  | Remarks                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2                            | 3                                                                    | 4                                                                      | 5                                                                                                                                                                                                                                                                                                              |
| <b>AREAS WITHIN THE KUALA LUMPUR FIR FOR WHICH SINGAPORE ACC IS RESPONSIBLE FOR PROVIDING ATS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                                                                      |                                                                        |                                                                                                                                                                                                                                                                                                                |
| <b>SECTOR 1:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                                                      |                                                                        |                                                                                                                                                                                                                                                                                                                |
| 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:<br>a. <b>AREA B</b> (SJ DVOR/DME - 35 DME SJ)<br>- 3 000ft to FL245<br>b. <b>AREA D</b> (35 DME SJ - 45 DME SJ)<br>- 5 500ft to FL245<br>c. <b>AREA F</b> (45 DME SJ - 50 DME SJ)<br>- 9 500ft to FL245                                                                                                                                                                                                                   | SINGAPORE ACC                | SINGAPORE RADAR<br>English<br>H24                                    | <u>Primary</u><br>133.25MHz<br><u>Secondary</u><br>135.8MHz            | Controlling Authority: Johor APP for airspaces below Sectors 1 and 2, Airway W401 and south of VMR DVOR.<br><br><u>Note:</u><br><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> |
| <b>SECTOR 2:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |                                                                      |                                                                        |                                                                                                                                                                                                                                                                                                                |
| 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:<br>a. <b>AREA A</b> (PU DVOR/DME - 30 DME PU excluding the northern portion of Changi CTR) - 2 000FT to FL245<br>b. <b>AREA C</b> (30 DME PU - 61 DME PU)<br>- 5 500FT to FL300<br>c. <b>AREA E</b> (61 DME PU - 90 DME PU)<br>- FL120 to FL360<br>d. <b>AREA H</b> (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<br>English<br>H24                                    | <u>Primary</u><br>123.7MHz<br>133.8MHz<br><u>Secondary</u><br>127.3MHz |                                                                                                                                                                                                                                                                                                                |
| <b>ATS ROUTES W401 and G579</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |                                                                      |                                                                        |                                                                                                                                                                                                                                                                                                                |
| 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].<br>b. G579 from 2000ft to FL460.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | SINGAPORE ACC                | SINGAPORE RADAR<br>English<br>H24                                    |                                                                        |                                                                                                                                                                                                                                                                                                                |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1</p> <p><b>SINGAPORE /JOHOR AIRSPACE COMPLEX</b></p> <p>All controlled airspace within 022600N 1025605E - 022600N 1043400E - 004300N 1043400E - 004300N 1025605E.</p> <p><u>*FL250</u><br/>2000ft ALT</p>                                                                                                                          | <p>2</p> <p>SINGAPORE<br/>ACC</p>                                | <p>3</p> <p>SINGAPORE<br/>RADAR</p> <p>English<br/>H24</p>                      | <p>4</p> <p><u>Primary</u><br/>123.7MHz<br/>133.8MHz</p> <p><u>Secondary</u><br/>127.3MHz</p>                   | <p>5</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><b>ALL AIRWAYS WITHIN THE SINGAPORE FIR, KUALA LUMPUR FIR AND ITS TRANSFER AREAS AND KOTA KINABALU FIR</b></p> <p>(see subsection ENR 3.1)</p>                                                                                                                                                                                      | <p>SINGAPORE<br/>ACC</p>                                         | <p>SINGAPORE<br/>RADAR</p> <p>English<br/>H24</p>                               | <p><u>Primary</u><br/>133.25MHz<br/>123.7MHz<br/>133.8MHz</p> <p><u>Secondary</u><br/>135.8MHz<br/>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> |
| <p><b>TANJUNGPINANG TMA</b></p> <p>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</p> <p><u>10 000ft</u><br/>3000 FT</p>                 | <p>TANJUNGPINANG<br/>G APPROACH<br/>CONTROL<br/>OFFICE (APP)</p> | <p>TANJUNGPINANG<br/>RADAR</p> <p>English<br/>H24</p>                           | <p><u>Primary</u><br/>130.2MHz</p> <p><u>Secondary</u><br/>119.35MHz</p>                                        |                                                                                                                                                                        |
| <p><b>TANJUNGPINANG NORTH CONTROL ZONE (CTR)</b></p> <p>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</p> <p><u>3 000ft</u><br/>GND/MSL</p>              |                                                                  |                                                                                 |                                                                                                                 |                                                                                                                                                                        |
| <p><b>TANJUNGPINANG SOUTH CONTROL ZONE (CTR)</b></p> <p>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</p> <p><u>6 000ft</u><br/>GND/MSL</p> |                                                                  |                                                                                 |                                                                                                                 |                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                        |                                                                  |                                                                                 |                                                                                                                 |                                                                                                                                                                        |

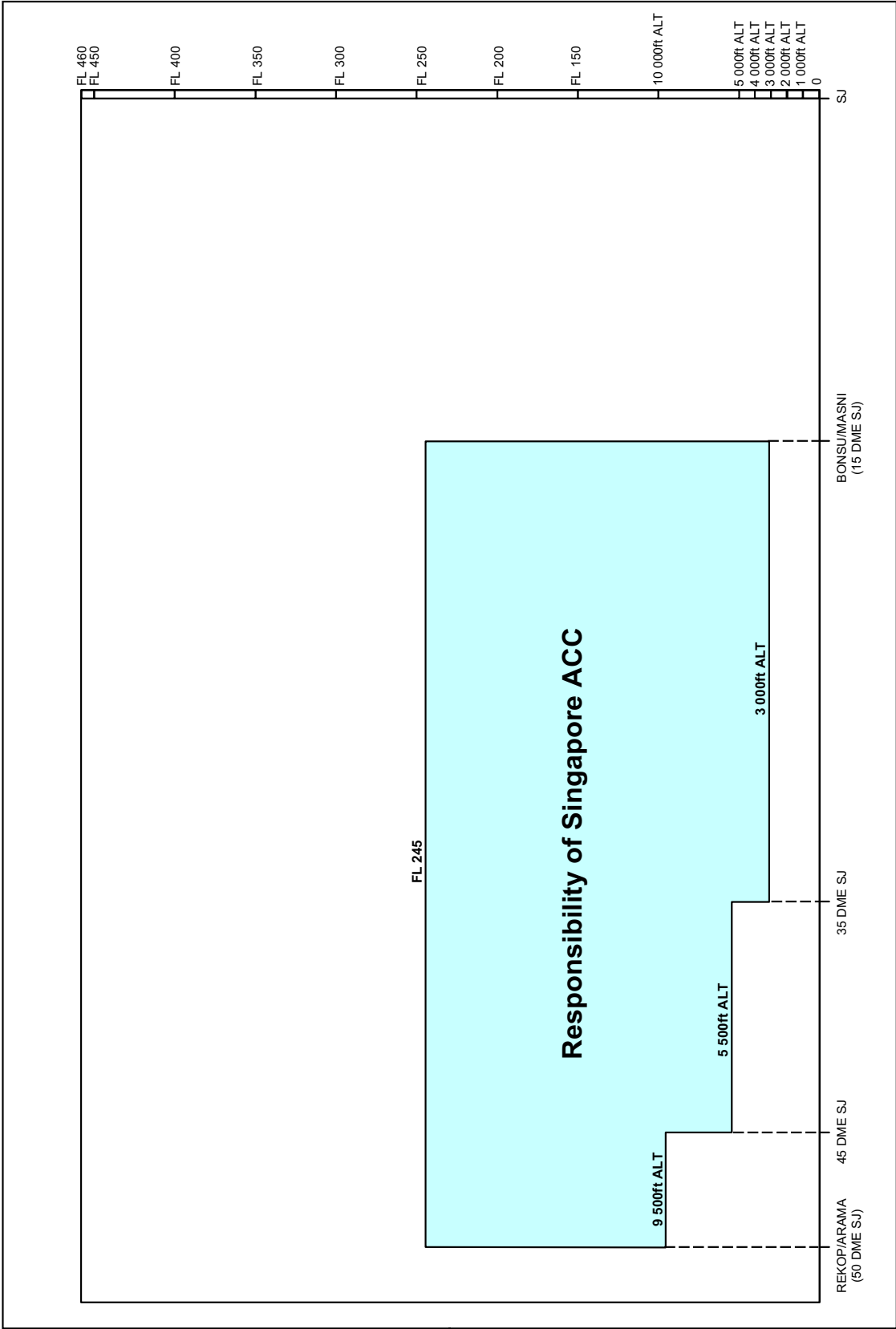
## SINGAPORE AND ADJACENT FLIGHT INFORMATION REGIONS



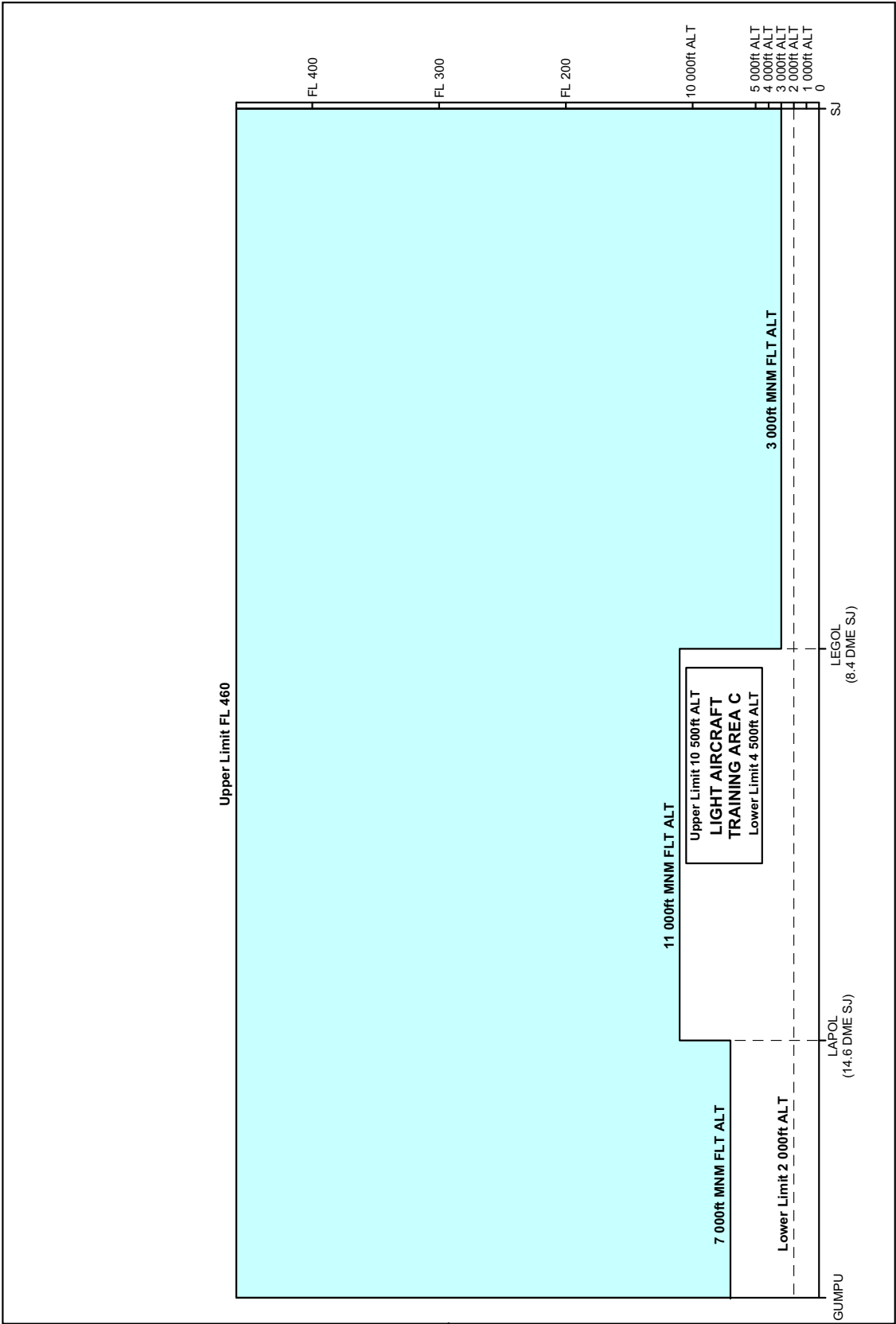
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**CHANGES :** Amendment of ATS Routes M763 and Y332 where TAXUL and PADLI are located.

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

