| OF SINGAPORE SINGAPORE CHANGI AIRPORT P.O. BOX 1, SINGAPORE 918141 Tel: (65) 6422 7036 AFS: WSSSYNYX Fax: (65) 64410221 Email: caas_singaporeais@caas.gov.sg URL: www.caas.gov.sg URL: https://aim-sg.caas.gov.sg | SINGAPORE CHANGI AIRPORT P.O. BOX 1, SINGAPORE 918141 Tel: (65) 6422 7036 AFS: WSSSYNYX |
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SINGAPORE FIR - AIRSPACE CLOSURE DUE TO MILITARY EXERCISE 240001UTC TO 311100UTC MARCH 2022

1 INTRODUCTION

1.1 In relation to Air Defence Exercise (ADEX) BERSAMA SHIELD 2022 (BS 22), see <u>AIP Supplement 029/2022</u>, military exercise will also take place within the extension areas of Area B, C and D as well as that of the Naval Firing Area / Air-to-Air Engagement Area (see paragraph 2.2 for lateral and vertical limits) from **240001UTC to 311100UTC March 2022**.

1.2 These exercise airspaces will similarly be active daily during the ADEX with periods of intense aerial activity between **0100-0400UTC and 0530-0830UTC**. There will be an additional period of intense aerial activity from **1100-1400UTC** on 25 and 28 March 2022. The exercise airspace will be released back to civil ATC when not required by military exercise traffic.

2 EXERCISE AIRSPACE

2.1 BS 22 Airspace Cell at the Headquarters Integrated Area Defence System (HQIADS) under the Five Power Defence Arrangements (FPDA) shall be the coordinating authority for the exercise airspace. Outside the ADEX windows, HQIADS will release Area B Extension to the relevant civil aviation authorities when not required for exercise purposes.

2.2 The lateral and vertical limits of the extension areas are as described below and depicted at Charts 1 through 3 to this AIP Supplement.

| | Exercise Area (boundary) | Vertical Limit |
|-------|--|---------------------|
| 2.2.1 | Area B Extension 063000N 1053912E, 063000N 1073000E, 050000N 1073000E, 040000N 1063000E, 031100N 1052000E, 024500N 1051000E, 021600N 1052000E, 013000N 1045200E, 013000N 1043940E, 013800N 1045300E, 015424N 1050512E, 022230N 1050112E, 023000N 1045858E, 025512N 1045130E, 035006N 1044630E, 040300N 1045154E, 050442N 1052848E, 054024N 1054706E, 060548N 1054912E, then to 063000N 1053912E. | See below |
| | Area B (Sector 1) South of 90 DME PU (lower section) | SFC to |
| | Note: Refer to paragraph 3 for variation in vertical limit during specific ADEX windows. Area B (Sector 2) | FL140* FL330 |
| | South of 90 DME PU (upper section) | to FL460 |
| | Area B (Sector 3) Between 90 DME PU and 150 DME PU | SFC to FL230* |
| | Area B (Sector 4) North of 150 DME PU | SFC to FL250* |

| | Exercise Area (boundary) | Vertical Limit |
|-------|--|------------------------|
| 2.2.2 | Area C Extension 012535N 1035647E, 012727N 1034243E, SINJON, 011300N 1035300E, 011300N 1035412E, 011610.111N 1040200.471E, 011622.8N 1040216.6E, 011624N 1040248E, then to 012535N 1035647E Note: Refer to paragraph 7 for airspace within Area C Extension that is designated as civil controlled airspace. | 5,000FT to FL290 |
| 2.2.3 | Area D Extensions 012754N 1043610E, 012354N 1042930E, 011700N 1042918E, 011612N 1040706E, 011317N 1040706E, 011530N 1042424E, 011700N 1043700E, then to 012754N 1043610E; and | SFC to FL190 |
| | 012535N 1035647E, 011624N 1040248E, 011634N 1040700E, 012552N 1040424E, then to 012535N 1035647E | |
| 2.2.4 | Naval Firing Area (NFA) / Air-to-Air Engagement Area (AAEA) Extension 023000N 1045858E, 023000N 1051502E, 021600N 1052000E, 013000N 1045200E, 013000N 1043940E, 013800N 1045300E, 015424N 1050512E, 022230N 1050112E then to 023000N 1045858E. Note: Area can be activated for either Naval Firing activities or Air-to-Air engagements. | SFC to FL550 |

2.3 Civil and non-exercise aircraft may operate up to the limits of the non-exercise airspace. Exercise aircraft will maintain a vertical buffer of 1,000FT and a lateral buffer of 5NM from airspace released for civil use.

3 ADEX WINDOW

3.1 ADEX Window 1 active daily between 0100UTC and 0400UTC:

- i. Vertical limit of Area B Extension for civil use, between 59 DME PU and 90 DME PU, will be from FL180 to FL320.
- ii. Vertical limit of ATS Route A464 between SJ and 70 DME SJ for civil use will be from FL140 to FL260.

3.2 ADEX Window 2 active daily between **0530UTC** and **0830UTC**:

i. Vertical limit of ATS Route A464 between SJ and 70 DME SJ for civil use will be from FL140 to FL260.

3.3 ADEX Window 3 active on 25 and 28 March 2022 between 1100UTC and 1400UTC:

- i. Vertical limit of Area B Extension for civil use, between 59 DME PU to 90 DME PU, will be from FL180 to FL320.
- ii. Vertical limit of ATS Route A464 between SJ and 70 DME SJ for civil use will be from FL140 to FL260.

3.4 Special Activity periods will take place from **270315UTC to 270345UTC and 310315UTC to 310345UTC March 2022**. The following airport / airspace will be closed to non-exercise aircraft:

- i. Singapore Changi Airport
- ii. Seletar / Paya Lebar CTRs
- iii. Sembawang ATZ
- iv. Singapore Light Aircraft Training Areas A, B and C

4 SUSPENSION OF OPERATIONS ON SEGMENT OF ATS ROUTE G334

4.1 All aircraft movements within the following ATS route segment will be temporarily suspended throughout the exercise period. Flights which would normally flight plan to operate along this route segment will plan via the alternate route instead:

| | ATS Route | Affected Segment | Alternate Route | Period affected |
|-------|--------------|------------------|-------------------------------------|-------------------------------------|
| 4.1.1 | G334 | BUNTO to SAROX | M761 KETOD Y336 PADLI Y343 SAROX | Entire duration of exercise period. |

5 REQUESTS FOR CLEARANCES INTO EXERCISE AIRSPACE

5.1 Civil and non-exercise aircraft operating into and out of airports in Peninsular Malaysia and Singapore via established ATS routes which intend to operate in the active exercise areas shall be permitted to operate subject to prior coordination. Pilots of such flights shall conform strictly to the ATC clearances issued before entering active exercise areas. Any clearance into the exercise area will automatically expire if the aircraft cannot remain within 10 minutes of the flight planned ETDs and ETAs.

5.2 Civil and non-exercise aircraft requiring clearance into exercise airspace should submit a flight plan and inform BS 22 Airspace Cell and SATCC at least six hours prior to departure. Submission of flight plan, either by email or fax, will be via the relevant AIS Office/operator. The Airspace Cell will process these requests and endeavour to approve the flight plan or provide a de-conflicted slot time. BS 22 Airspace Cell will then pass this information to the operator and SATCC for approval/rejection dissemination. Any queries should be directed to the BS 22 Airspace Cell at HQIADS, Butterworth.

5.3 In the event of request for clearance into exercise airspace has been approved by BS 22 Airspace Cell, **operator shall** enter this information under item 18 OTHER INFORMATION "RMK/BS22A" when submitting actual flight plan.

6 INTERCEPTION AND IDENTIFICATION OF NON-EXERCISE AIRCRAFT

6.1 All non-exercise SSR transponder-equipped aircraft when operating in the Kuala Lumpur and Singapore FIRs during the exercise period shall have their transponders set to their allocated SSR codes, or if a code has not been allocated, they should set Mode 3/A Code 2000.

6.2 Civil and non-exercise military aircraft entering or transiting the active exercise areas may be intercepted for the purpose of identification. An aircraft which is intercepted by another aircraft shall act in accordance with the instructions in the AIPs (Malaysia ENR 1.12/Singapore ENR 1.12).

6.3 Civil and non-exercise military aircraft experiencing an emergency that necessitates them entering an active exercise area should immediately advise the appropriate ATC agency so that necessary action can be taken to co-ordinate a safe entry into the area.

7 CIVIL CONTROLLED AIRSPACE WITHIN EXERCISE AIRSPACE

7.1 Unless otherwise specified, the following ATS routes and controlled airspace within the Exercise Areas are available as civil controlled airspace throughout the entire period of the exercise.

| | ATS Route | Segments | Vertical Limit |
|-------|--------------|--|------------------|
| 7.1.1 | A464 | SJ to 70 DME SJ | FL140 to FL260 |
| | | 70 DME SJ to Kuala Lumpur TMA boundary | FL140 to FL460 |
| 7.1.2 | G580 | East of HOSBA within Area D | 7,000FT to FL260 |

7.2 Unless otherwise specified, the following civil controlled airspace within the Exercise Areas is available as civil controlled airspace throughout the entire exercise period.

| | Airspace | Vertical Limit |
|-------|--|---|
| 7.2.1 | Changi CTR and the area north of Changi CTR commencing at 013300N 1040154E to 013800N 1040154E, 013800N 1042000E, 013000N 1042000E, 012000N 1041224E, then along the Kuala Lumpur / Singapore FIR boundary to 012542N 1040454E, 013042N 1040700E and 013300N 1040154E Note: During Special Activity periods specified in paragraph 3.4, the vertical limit is FL140 to FL260 | SFC to FL260 |
| 7.2.2 | The area bounded by 011310N 1040615E, 012000N 1041224E, 013000N 1042000E, 013000N 1042426E, 011530N 1042424E and 011310N 1040615E. Note: During Special Activity periods specified in paragraph 3.4, the vertical limit is FL140 to FL260 | 2,000FT to FL260 |
| 7.2.3 | Helicopter Operating Area bounded by 051133N 1033246E then along the Kuala Lumpur / Singapore FIR boundary to 052536N 1032356E thence along the Kuala Terengganu CTR boundary to 055607N 1031526E, 060000N 1031500E, 063000N 1030000E, 064500N 1024000E, 070000N 1030000E, 070000N 1042848E, 054000N 1060000E, 050000N 1060000E, 042000N 1043000E, 042501N 1040500E, thence along the Kerteh CTR boundary to 051133N 1033246E. | SFC to 4,000FT |
| 7.2.4 | Singapore Light Aircraft Training Areas A, B and C together with Seletar CTR (Zone 'A' and Zone 'B'), Paya Lebar CTR and Sembawang ATZ. | Refer to paragraph 3.4 for Special Activity Periods |

| | Airspace | Vertical Limit |
|-------|---|----------------|
| 7.2.5 | Johor Bahru Temporary CTR 012730N 1034400E, 013530N 1033600E, then clockwise around the arc of a circle radius 5.3NM centred on 013742N 1034100E to 014000N 1034555E, 012830N 1034800E, then along the Kuala Lumpur / Singapore FIR boundary to 012730N 1034400E (excluding WMP228) | SFC to 8,000FT |
| 7.2.6 | The area bounded by 014928N 1035014E, 015758N 1034921E, thence clockwise along 35 DME VTK arc to 015439N 1042000E, 013800N 1042000E, 013800N 1040154E, 013300N 1040154E, 012519N 1035813E and 014928N 1035014E (within Area D south | , |
| | of 35 DME VTK). | * FL140 |
| | Note: During Special Activity periods specified in paragraph 3.4, the vertical limit is FL140 | to |
| | to FL260 | FL260 |

8 RESTRICTIONS AND PROCEDURES

8.1 SINGAPORE CHANGI AIRPORT

8.1.1 During the intense aerial activity, ADEX Windows as described in paragraph 3, ATS Route Y339 is not available for flight planning. Aircraft departing from Singapore Changi Airport, routing via Peninsular Malaysia, to file MASBO SID for ATS Route A457 to VKL. Overflights are to flight plan via A457.

8.1.2 Aircraft arriving via ATS Route A464, to file ARAMA STAR, can expect to maintain FL140 until BOBAG. (En-route descent may be available, but it should not be anticipated).

8.1.3 Singapore Changi Airport will be closed during the Special Activity periods from **270315UTC to 270345UTC and 310315UTC to 310345UTC March 2022**.

8.1.4 To ensure that departures from Singapore Changi Airport are able to pass through FL140 prior to the commencement of the Special Activity, ATC will only allow departures up to 10 minutes before airport closure time.

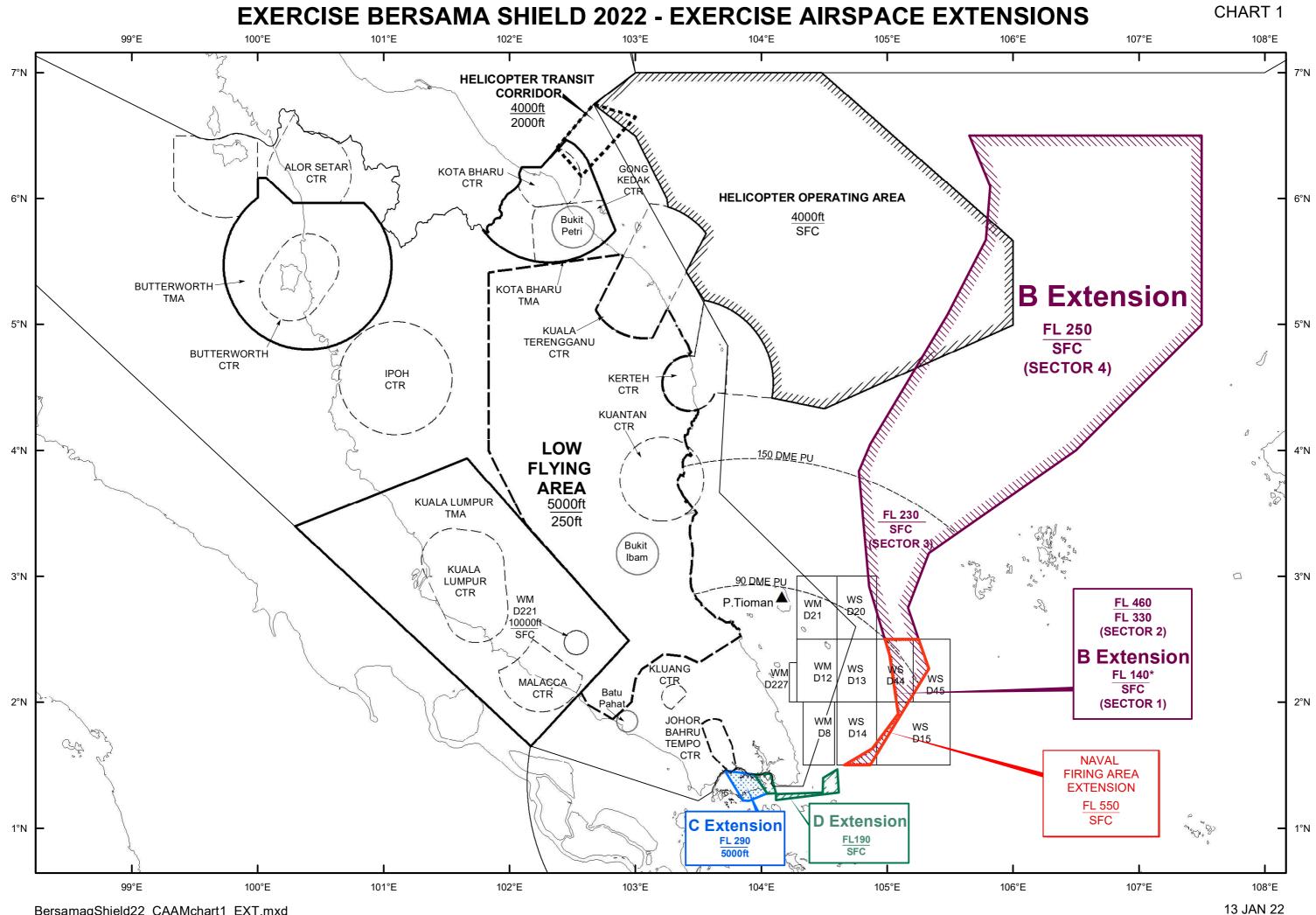
8.2 JOHOR BAHRU / SENAI INTERNATIONAL AIRPORT

8.2.1 The Johor Bahru CTR will be deactivated for the period of the exercise. However, to allow for scheduled civil aircraft operations in and out of Johor Bahru/Senai International Airport, including the completion of standard instrument approaches and departures, a temporary CTR as described in paragraph 7.2.5 will be released to civil ATC. Please refer to <u>AIP Supplement</u> <u>029/2022</u> for more details.

9 COORDINATION TELEPHONE, FACSIMILE NUMBERS AND EMAIL

| Unit | | Contact Details |
|------------------------------------|----------|-------------------------------|
| BS 22 Airspace Cell at HQIADS, | Phone : | +60 43143032 |
| Butterworth (Airspace Coordinator) | | +60 43143342 |
| | Fax : | +60 43239926 |
| | e-mail : | bxa33airspacesg@hqiads.mil.my |
| | | bxa33airspacemy@hqiads.mil.my |
| | | so2plansaira@hqiads.mil.my |
| Exercise Coordinator | Phone : | +6011-65566370 |
| (JAMCC Sepang) | | +6011-65677661 |
| Singapore Area Coordinator | Phone : | +65 65105333 |
| (SATCC) | Fax : | +65 65105314 |
| Kuantan Area Coordinator | Phone : | +60 9-5385232 |
| Butterworth Area Coordinator | Phone : | +60 4-3319740 |
| Kuala Lumpur ACC, Sepang | Phone : | +603-85291242 |
| | | +603-85291245 |
| | Fax : | +603-85291240 |

| Bersama Shield 2022_chart 1 | Chart I |
|-----------------------------|---------|
| Bersama Shield 2022_chart 2 | Chart 2 |
| Bersama Shield 2022_chart 3 | Chart 3 |



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EXERCISE BERSAMA SHIELD 2022 SINGAPORE & KUALA LUMPUR FIRs 240001UTC MAR to 311100UTC MAR 2022

<03> HELICOPTER TRANSIT CORRIDOR M76! PRIX ESBOP/ 4000ft IGAR 2000ft F IP BANGKOL TIDAR 111111 DUDIS R208 FI 460 FI 245 FL460 < 20× FL260 T611 1991 FL260 M75 -644 080.2 ALL N 5000ft 6 SFC Pulau Redang FL460 FL460 FL260 6000ft SFC FL260 KUALA TERENGGANU FL130/CTR SFC FL460 HELICOPTER d JGIT FL260 **OPERATING AREA** FL460 **AVKR** FL460 4000ft 10000ft FL260 SFC LASOB FL460 7000ft DOLO ENREP **WMR102B** M751 S KERTE CTR 9000ft SFC Y514 OBD: ▲ VKP/ **Extens** Β 10000ft or 5000ft FL460 MABL W>63-N881 FL460 10000ft ELALO FL130 635 - 0020 9000ft 1629 4000f T61 FL460 11> 150 DME PU KUANTAN CTR FL260 Y349 FL460 M758 1629 FL460 =L250 FL130 N892 FI 46 M758 LE FL460 M758 Nozs ∀PŔ FL460 FI 240 G582 KIMAT 7344 FL460 FL130 FL460 M761 6<u>0,000ft</u> SFC PADL LEBIN 9000f N884 V343 FL460 000f 15 NM. TIOMAN 00 M761 (% P.Tioman WS G334 SAROX WM 20 WMD221 10000FT D20 FL320 FL180/FL150*)** <u>9000ft</u> D21 SFC 90 DME G334 G334 0 WS 644 59 DME V M761 D45 WM D12 ⁶⁶²⁵ Y513 FL260 WS WS D44 D13 6000ft WM VJB VTK N161 FL460 FL260 3000ft FL260 FL140 WŃ WS D15 WS D14 W5 D8 B348 VJB Δ JB-A464 FL26 TOMAN G580 1762 ∕ COASTAL ANBU HOSBA CORRIDOR WEST ASUNABOBAG SANIKO D Extension 5000ft Airspace Closure CO 250ft 3 RIDOR E 0 240001UTC Mar to 311100UTC Mar 2022 R469 TENGAH *0100UTC to 0400UTC DAILY SCRAMBLE Additional ADEX on 25 and 28 Mar from 1100UTC to 1400UTC TAROS CORRIDOR LOWER LIMIT AT FL180 Ĝ \$5000ft SFC NED **Special Activity Periods** G579 270315UTC to 270345UTC and 310315UTC to 310345UTC Mar 2022 Airspace released for civil use. Pse refer to para 3.4 8

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CHART 2

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EXERCISE BERSAMA SHIELD 2022 SINGAPORE & KUALA LUMPUR FIRs 240001UTC MAR TO 311100UTC MAR 2022

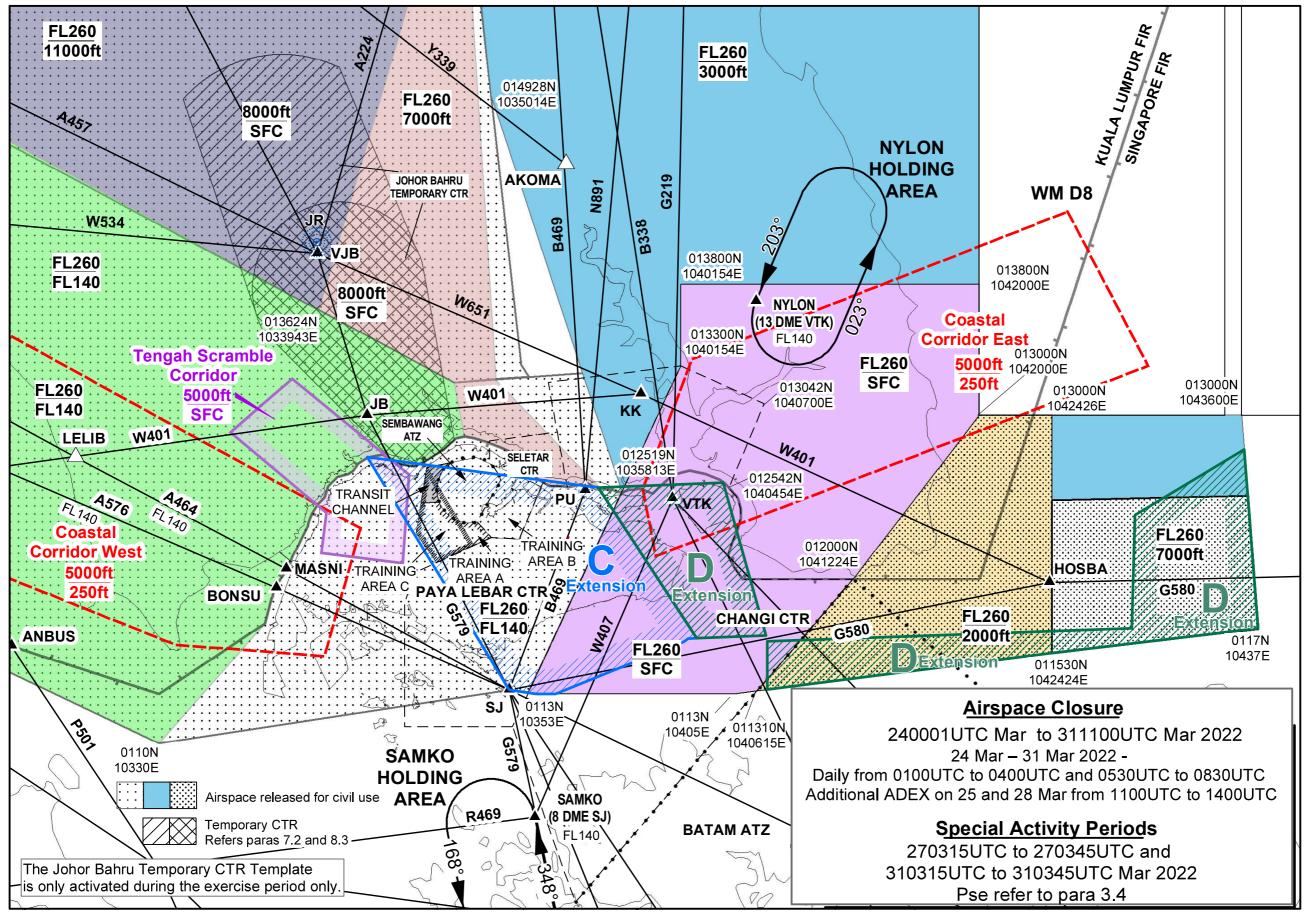


CHART 3

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