Contact Post: AERONAUTICAL INFORMATION SERVICES Civil Aviation Authority of Singapore, Singapore Changi Airport, P. O. Box 1 Singapore 918141 Tel: (65) 65956051 Fax: (65) 64410221

Email: caas singaporeais@caas.gov.sg



AMDT 01/2019 Effective date 03 JAN 2019 Publication date 03 JAN 2019

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1. Significant information and changes

1.1 Singapore FIR

- a. Segregation of Light Aircraft Training Area A into Area A (East) and Area A (West) to enable aircraft on ILS for landing into Seletar Airport to carry out missed approach safely and efficiently
- b. Designation of area within Paya Lebar Control Zone for unmanned aircraft operations

1.2 Singapore Changi Airport

- a. Amendment to the scheduled closure of Runway 02C/20C for preventive maintenance works
- b. Change of frequency 129.95MHz to 121.00MHz for ground emergency
- c. Amendment to the coordinates for Runway 20C ILS MM

1.3 Seletar Airport

- a. Installation of Instrument Landing System for Runway 21 to enhance the provision of air navigation services to aircraft operators
- b. Extension of night flight restriction to all flights except for medical evacuation and emergency flights

2. This amendment incorporates information contained in the listed NOTAMs and AIP Supplements which are hereby superseded:

NOTAMs: A3724/18 dated 25/09/18 A4130/18 dated 19/10/18 A4355/18 dated 02/11/18 A4356/18 dated 02/11/18 A4364/18 dated 05/11/18 A4462/18 dated 09/11/18 A4632/18 dated 23/11/18 A5144/18 dated 31/12/18

AIP Supplements: 032/2018 dated 23/07/18 063/2018 dated 25/09/18 079/2018 dated 01/12/18 086/2018 dated 24/12/18

Amended Pages

GEN 0.2-1/2:	: replace.
GEN 0.3-1/2:	: replace.
GEN 0.3-3/4:	: replace.
GEN 0.4-1/2:	: replace.
GEN 0.4-3:	: replace.
GEN 0.6-1/2:	: replace.
GEN 1.6-1/2:	: replace.
GEN 1.6-3/4:	: replace.
GEN 1.6-5:	: insert.
GEN 1.7-1/2:	: replace.
GEN 1.7-3/4:	: replace.
GEN 1.7-5:	: replace.
GEN 3.2-3/4:	: replace.
GEN 3.2-5/6:	: replace.
ENR 0.6-5/6:	: replace.
ENR 2.1-1/2:	: replace.
ENR 2.1-3/4:	: replace.
ENR-3.5-3:	: replace.
ENR-3.6-5:	: replace.
ENR-3.6-7:	: replace.
ENR-3.6-9:	: replace.
ENR-5.1-9:	: replace.
ENR 5.2-1/2:	: replace.
ENR 5.2-3:	: insert.
ENR 5.5-1:	: replace.
AD 0.6-3/4:	: replace.
AD 2.WSSS-13/14:	: replace.
AD 2.WSSS-19/20:	: replace.
AD-2-WSSS-ADC-2:	: replace.
AD-2-WSSS-IAC-11:	: replace.
AD-2-WSSS-VAC-1:	: replace.
AD 2.WSSL-1/2:	: replace.
AD 2.WSSL-3/4:	: replace.
AD 2.WSSL-5/6:	: replace.
AD 2.WSSL-7/8:	: replace.
AD 2.WSSL-9/10:	: replace.
AD 2.WSSL-11/12:	: replace.
AD 2.WSSL-13/14:	: replace.
AD 2.WSSL-15/16:	: replace.
AD 2.WSSL-17/18:	: replace.
AD 2.WSSL-19/20:	: replace.
AD 2.WSSL-21/22:	: replace.
AD-2-WSSL-ADC-1:	: replace.
AD-2-WSSL-ADC-2:	: replace.
AD-2-WSSL-IAC-1:	: insert.
AD-2-WSSL-VAC-1:	: replace.
AD-2-WSSL-VAC-2:	: replace.
AD-2-WSSL-VAC-3:	: replace.
AD-2-WSSL-VAC-4:	: replace.
AD-2-WSSL-VDC-1:	: replace.
AD-2-WSSL-VDC-2:	: replace.
AD 2.WIDN-1/2:	: replace.

GEN 0.2 RECORD OF AIP AMENDMENTS

AIP AMENDMENT				
NR/Year	Publication date	Date inserted	Inserted by	
5/2014	18 SEP 2014	18 SEP 2014		
6/2014	13 NOV 2014	13 NOV 2014		
1/2015	08 JAN 2015	08 JAN 2015		
2/2015	05 MAR 2015	05 MAR 2015		
3/2015	30 APR 2015	30 APR 2015		
4/2015	25 JUN 2015	25 JUN 2015		
5/2015	20 AUG 2015	20 AUG 2015		
6/2015	15 OCT 2015	15 OCT 2015		
07/2015	10 DEC 2015	10 DEC 2015		
01/2016	04 FEB 2016	04 FEB 2016		
02/2016	31 MAR 2016	31 MAR 2016		
03/2016	26 MAY 2016	26 MAY 2016		
04/2016	21 JUL 2016	21 JUL 2016		
05/2016	15 SEP 2016	15 SEP 2016		
06/2016	10 NOV 2016	10 NOV 2016		
01/2017	05 JAN 2017	05 JAN 2017		
02/2017	02 MAR 2017	02 MAR 2017		
03/2017	27 APR 2017	27 APR 2017		
04/2017	22 JUN 2017	22 JUN 2017		
05/2017	17 AUG 2017	17 AUG 2017		
06/2017	12 OCT 2017	12 OCT 2017		
07/2017	07 DEC 2017	07 DEC 2017		
01/2018	01 FEB 2018	01 FEB 2018		
02/2018	29 MAR 2018	29 MAR 2018		
03/2018	24 MAY 2018	24 MAY 2018		
04/2018	19 JUL 2018	19 JUL 2018		
05/2018	13 SEP 2018	13 SEP 2018		

	AIP AMENDMENT					
NR/Year	Publication date	Date inserted	Inserted by			
06/2018	08 NOV 2018	08 NOV 2018				
01/2019	03 JAN 2019	03 JAN 2019				

GEN 0.3 RECORD OF CURRENT AIP SUPPLEMENTS

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
004/2016	Singapore Changi Airport - Shortening of Runway 02C Approach Lighting System to 810M to Facilitate southern End-Round-Taxiway Construction	AD	01 JUN 2016 / 30 APR 2020	
039/2016	Paya Lebar Airport - Topless Cranes	AD	04 MAR 2016 / 31 JAN 2019	
067/2016	Paya Lebar Airport - Topless Cranes and Luffer Crane	AD	04 AUG 2016 / 31 MAR 2019	
068/2016	Paya Lebar Airport - Topless Cranes and Luffer Cranes	AD	04 AUG 2016 / 01 JUN 2019	
069/2016	Paya Lebar Airport - Saddle Cranes	AD	04 AUG 2016 / 30 JUN 2019	
070/2016	Paya Lebar Airport - Luffer Cranes and Topless Cranes	AD	04 AUG 2016 / 31 DEC 2019	
025/2017	Paya Lebar Airport - Topless Cranes	AD	10 JAN 2017 / 21 NOV 2019	
026/2017	Paya Lebar Airport - Luffer Crane	AD	10 JAN 2017 / 08 DEC 2019	
051/2017	Paya Lebar Airport - Mobile Cranes	AD	13 APR 2017 / 05 MAR 2019	
052/2017	Paya Lebar Airport - Topless Cranes	AD	13 APR 2017 / 14 MAR 2019	
053/2017	Paya Lebar Airport - Luffer Crane	AD	13 APR 2017 / 14 MAR 2019	
054/2017	Paya Lebar Airport - Luffer Crane	AD	13 APR 2017 / 23 MAR 2019	
055/2017	Paya Lebar Airport - Topless Cranes and Luffer Crane	AD	13 APR 2017 / 31 MAR 2019	
056/2017	Paya Lebar Airport - Topless Cranes	AD	13 APR 2017 / 30 APR 2019	
057/2017	Paya Lebar Airport - Luffer Cranes	AD	13 APR 2017 / 14 JAN 2020	
058/2017	Paya Lebar Airport - Topless Cranes	AD	13 APR 2017 / 26 OCT 2020	
063/2017	Paya Lebar Airport - Topless Cranes and Luffer Crane	AD	13 APR 2017 / 15 APR 2019	
067/2017	Sembawang Aerodrome - Topless Crane	AD	27 APR 2017 / 01 FEB 2020	
068/2017	Paya Lebar Airport - Obstacles	AD	27 APR 2017 / 26 OCT 2020	
079/2017	Paya Lebar Airport - Topless Crane	AD	11 JUL 2017 / 28 APR 2019	
080/2017	Paya Lebar Airport - Topless Cranes	AD	11 JUL 2017 / 29 APR 2019	
081/2017	Paya Lebar Airport - Luffer Crane	AD	11 JUL 2017 / 01 MAY 2019	
082/2017	Paya Lebar Airport - Topless Cranes	AD	11 JUL 2017 / 31 DEC 2019	
083/2017	Paya Lebar Airport - Topless Cranes	AD	11 JUL 2017 / 31 DEC 2019	
084/2017	Paya Lebar Airport - Luffer Cranes	AD	11 JUL 2017 / 31 DEC 2019	
085/2017	Paya Lebar Airport - Topless Cranes	AD	11 JUL 2017 / 01 JUN 2020	
095/2017	Paya Lebar Airport - Topless Crane and Luffer Cranes	AD	26 SEP 2017 / 31 DEC 2019	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
098/2017	Paya Lebar Airport - Topless Cranes	AD	26 SEP 2017 / 31 DEC 2019	
108/2017	Paya Lebar Airport - Topless Crane and Luffer Cranes	AD	30 SEP 2017 / 06 JUL 2020	
113/2017	Paya Lebar Airport - Topless Cranes	AD	24 OCT 2017 / 18 OCT 2019	
114/2017	Paya Lebar Airport - Luffer Crane	AD	24 OCT 2017 / 20 OCT 2019	
115/2017	Paya Lebar Airport - Topless Cranes	AD	24 OCT 2017 / 24 OCT 2019	
120/2017	Paya Lebar Airport - Flat Top Cranes	AD	10 DEC 2017 / 30 JUN 2019	
121/2017	Paya Lebar Airport - Topless Cranes and Luffer Cranes	AD	10 DEC 2017 / 30 SEP 2020	
122/2017	Paya Lebar Airport - Luffer Cranes	AD	10 DEC 2017 / 31 DEC 2020	
123/2017	Paya Lebar Airport - Luffer Cranes	AD	10 DEC 2017 / 31 DEC 2020	
124/2017	Paya Lebar Airport - Luffer Crane	AD	10 DEC 2017 / 31 DEC 2020	
125/2017	Paya Lebar Airport - Topless Cranes	AD	10 DEC 2017 / 18 DEC 2019	
126/2017	Paya Lebar Airport - Luffer Cranes	AD	10 DEC 2017 / 19 DEC 2019	
003/2018	Paya Lebar Airport - Luffer Crane	AD	22 JAN 2018 / 31 DEC 2019	
004/2018	Paya Lebar Airport - Crawler Cranes and Boring Rigs	AD	22 JAN 2018 / 31 DEC 2019	
005/2018	Paya Lebar Airport - Topless Cranes	AD	22 JAN 2018 / 29 FEB 2020	
006/2018	Paya Lebar Airport - Topless Crane and Luffer Crane	AD	22 JAN 2018 / 28 FEB 2021	
015/2018	Paya Lebar Airport - Luffer Crane	AD	06 APR 2018 / 31 DEC 2019	
016/2018	Paya Lebar Airport - Luffer Crane and Topless Cranes	AD	06 APR 2018 / 01 JAN 2020	
017/2018	Paya Lebar Airport - Luffer Crane	AD	06 APR 2018 / 15 MAR 2020	
018/2018	Paya Lebar Airport - Topless Cranes and Luffer Crane	AD	25 APR 2018 / 27 OCT 2020	
019/2018	Paya Lebar Airport - Luffer Crane	AD	06 APR 2018 / 31 DEC 2020	
020/2018	Paya Lebar Airport - Mobile Crane	AD	06 APR 2018 / 03 FEB 2021	
021/2018	Paya Lebar Airport - Luffer Crane and Saddle Cranes	AD	06 APR 2018 / 31 DEC 2022	
024/2018	Paya Lebar Airport - Crawler Cranes	AD	20 JUN 2018 / 29 JAN 2019	
025/2018	Paya Lebar Airport - Crawler Cranes	AD	20 JUN 2018 / 29 JAN 2019	
026/2018	Paya Lebar Airport - Crawler Cranes	AD	20 JUN 2018 / 30 APR 2020	
027/2018	Paya Lebar Airport - Mobile Crane	AD	20 JUN 2018 / 10 MAY 2020	
028/2018	Paya Lebar Airport - Saddle Cranes	AD	20 JUN 2018 / 31 DEC 2022	
029/2018	Paya Lebar Airport - Luffer Cranes	AD	20 JUN 2018 / 31 DEC 2021	
030/2018	Paya Lebar Airport - Luffer Crane and Topless Cranes	AD	20 JUN 2018 / 31 DEC 2021	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
031/2018	Singapore Changi Airport - Updated information and data for Runway 02R/20L	AD	<i>31 JUL 2018</i> PERM	
048/2018	Paya Lebar Airport - Crawler Crane	AD	25 SEP 2018 / 31 JAN 2019	
049/2018	Paya Lebar Airport - Mobile Crane	AD	25 SEP 2018 / 31 MAR 2019	
050/2018	Tengah Aerodrome - Vessel	AD	25 SEP 2018 / 30 APR 2019	
051/2018	Paya Lebar Airport - Crawler Crane	AD	25 SEP 2018 / 02 MAY 2019	
052/2018	Paya Lebar Airport - Topless Cranes	AD	25 SEP 2018 / 31 AUG 2019	
053/2018	Sembawang Aerodrome - Saddle Cranes	AD	25 SEP 2018 / 31 DEC 2021	
054/2018	Paya Lebar Airport - Luffer Cranes	AD	25 SEP 2018 / 31 DEC 2019	
055/2018	Paya Lebar Airport - Topless Cranes	AD	25 SEP 2018 / 31 DEC 2019	
056/2018	Paya Lebar Airport - Obstacles	AD	25 SEP 2018 / 31 DEC 2019	
057/2018	Paya Lebar Airport - Luffer Cranes	AD	25 SEP 2018 / 30 MAR 2020	
058/2018	Paya Lebar Airport - Luffer Crane	AD	25 SEP 2018 / 14 AUG 2020	
059/2018	Paya Lebar Airport - Topless Cranes	AD	25 SEP 2018 / 31 AUG 2020	
060/2018	Paya Lebar Airport - Topless Cranes	AD	25 SEP 2018 / 01 SEP 2020	
061/2018	Paya Lebar Airport - Luffer Cranes	AD	25 SEP 2018 / 10 SEP 2020	
062/2018	Paya Lebar Airport - Topless Cranes and Luffer Cranes	AD	25 SEP 2018 / 31 DEC 2020	
065/2018	Paya Lebar Airport - Mobile Crane	AD	13 NOV 2018 / 01 FEB 2019	
066/2018	Paya Lebar Airport - Mobile Crane	AD	18 NOV 2018 / 28 FEB 2019	
067/2018	Paya Lebar Airport - Crawler Crane	AD	13 NOV 2018 / 30 MAR 2019	
068/2018	Paya Lebar Airport - Topless Cranes	AD	13 NOV 2018 / 31 OCT 2019	
069/2018	Paya Lebar Airport - Mobile Crane	AD	13 NOV 2018 / 10 MAY 2020	
070/2018	Paya Lebar Airport - Luffer Cranes and Flat Top Cranes	AD	13 NOV 2018 / 31 DEC 2020	
071/2018	Paya Lebar Airport - Saddle Cranes	AD	13 NOV 2018 / 31 DEC 2023	
072/2018	Singapore Changi Airport - Works schedule and movement area restrictions pertaining to Changi East development works	AD	26 NOV 2018 / 27 MAR 2019	
073/2018	Paya Lebar Airport - Obstacles	AD	28 NOV 2018 / 30 JUN 2019	
074/2018	Paya Lebar Airport - Mobile Crane	AD	28 NOV 2018 / 30 JUN 2019	
075/2018	Paya Lebar Airport - Luffer Crane	AD	28 NOV 2018 / 31 MAR 2020	
076/2018	Paya Lebar Airport - Topless Cranes	AD	29 NOV 2018 / 30 NOV 2020	
077/2018	Paya Lebar Airport - Luffer Crane	AD	28 NOV 2018 / 18 NOV 2021	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
078/2018	Paya Lebar Airport - Luffer Cranes	AD	28 NOV 2018 / 30 DEC 2022	
080/2018	Paya Lebar Airport - Topless Cranes and Luffer Cranes	AD	30 DEC 2018 / 30 JUN 2019	
081/2018	Paya Lebar Airport - Topless Cranes	AD	30 DEC 2018 / 31 JUL 2019	
082/2018	Paya Lebar Airport - Crawler Cranes	AD	20 DEC 2018 / 30 AUG 2019	
083/2018	Paya Lebar Airport - Mobile Crane	AD	20 DEC 2018 / 31 AUG 2019	
084/2018	Paya Lebar Airport - Hammerhead Cranes	AD	30 DEC 2018 / 30 SEP 2019	
085/2018	Paya Lebar Airport - Mobile Crane	AD	20 DEC 2018 / 31 JAN 2020	

GEN 0.4 CHECKLIST OF AIP PAGES

	GEN 3 2-5	03 JAN 2019	ENB-1 6-11	21 11 2016
Part 1 – General (GEN)	GEN 3.2-5	31 MAR 2016	ENR 1 7-1	12 NOV 2015
	GEN 3 3-1	12 NOV 2015	ENR 1 7-2	12 NOV 2015
GEN U	GEN 3 3-2	21 111 2016	ENR 1 7-3	12 NOV 2015
GEN 0 1-1 08 NOV 2018	CEN 2.4.1	12 NOV 2015		17 AUC 2013
GEN 0.1-2 08 NOV 2018	GEN 3.4-1	12 NOV 2013		17 AUG 2017
CEN 0.1-2 00 NOV 2010	GEN 3.4-2	02 MAR 2017	ENR 1.7-5	12 NOV 2015
CEN 0.2.1 12 CED 2018	GEN 3.4-3	02 MAR 2017	ENR 1.7-6	07 DEC 2017
GEN 0.2-1 13 SEF 2010	GEN 3.4-4	02 MAR 2017	ENR 1.7-7	12 NOV 2015
GEN 0.2-2 03 JAN 2019	GEN 3.4-5	12 NOV 2015	ENR 1.7-8	12 NOV 2015
GEN 0.3-1 03 JAN 2019	GEN-3.4-7	21 JUL 2016	ENR 1.7-9	12 NOV 2015
GEN 0.3-2 03 JAN 2019	GEN-3.4-9	21 JUL 2016	ENR 1.8-1	07 DEC 2017
GEN 0.3-3 03 JAN 2019	GEN 3.5-1	12 NOV 2015	ENR 1.8-2	29 MAR 2018
GEN 0.3-4 03 JAN 2019	GEN 3.5-2	08 NOV 2018	ENR 1.8-3	29 MAR 2018
GEN 0.4-1 03 JAN 2019	GEN 3.5-3	19 JUL 2018	ENR 1.8-4	29 MAR 2018
GEN 0.4-2 03 JAN 2019	GEN 3.5-4	08 NOV 2018	ENR 1.8-5	29 MAR 2018
GEN 0.4-3 03 JAN 2019	GEN 3.5-5	19 JUL 2018	ENB 1.8-6	29 MAB 2018
GEN 0.5-1 05 JAN 2017	GEN 3 5-6	12 NOV 2015	ENB 1 8-7	29 MAR 2018
GEN 0.6-1 13 SEP 2018	GEN 3.5-7	12 NOV 2015	ENR 1 8-8	29 MAR 2018
GEN 0.6-2 03 JAN 2019	GEN 25 9	22 IUN 2017		20 MAD 2010
GEN 0.6-3 22 II IN 2017	GEN 3.3-0	22 JUN 2017		29 MAR 2010
	GEN 3.5-9	08 NOV 2018		29 MAR 2018
GEN 1	GEN 3.6-1	12 NOV 2015	ENR 1.8-11	29 MAR 2018
	GEN 3.6-2	12 NOV 2015	ENR 1.8-12	29 MAR 2018
GEN 1.1-1 10 NOV 2016	GEN 3.6-3	12 NOV 2015	ENR 1.8-13	29 MAR 2018
GEN 1.1-2 07 DEC 2017	GEN 3.6-4	12 NOV 2015	ENR 1.8-14	29 MAR 2018
GEN 1.2-1 15 SEP 2016	GEN-3.6-5	21 JUL 2016	ENR 1.8-15	29 MAR 2018
GEN 1.2-2 19 JUL 2018			ENR 1.8-16	29 MAR 2018
GEN 1.2-3 19 JUL 2018		GEN 4	ENR 1.8-17	29 MAR 2018
GEN 1.2-4 19 JUL 2018	GEN 4 1-1	15 SEP 2016	ENR 1.8-18	29 MAR 2018
GEN 1.2-5 24 MAY 2018	GEN 4 2-1	24 MAY 2018	ENB 1 8-19	29 MAR 2018
GEN 1 2-6 24 MAY 2018	GEN 422	12 NOV 2015	ENR 1 8-20	13 SEP 2018
GEN 1 3-1 21.IIII 2016		12 NOV 2015		20 MAD 2019
GEN 13-2 12 NOV 2015	GEN 4.2-3	12 NOV 2015		20 MAD 2010
CEN 1.2.2 12 NOV 2013	GEN 4.2-4	12 NOV 2015		29 MAR 2010
CEN 1.2-5 29 MAR 2010	GEN 4.2-5	12 NOV 2015	ENR 1.8-23	24 MAY 2018
GEN-1.3-5 21 JUL 2016	GEN 4.2-6	12 NOV 2015	ENR 1.8-24	29 MAR 2018
GEN-1.3-7 21 JUL 2016	Dort 2		ENR 1.8-25	29 MAR 2018
GEN 1.4-1 12 NOV 2015	Faitz		ENR 1.8-26	29 MAR 2018
GEN 1.4-2 12 NOV 2015		ENR 0	ENR 1.8-27	29 MAR 2018
GEN 1.4-3 12 NOV 2015			ENR 1.8-28	29 MAR 2018
GEN 1.5-1 12 NOV 2015	ENR 0.6-1	08 NOV 2018	ENR 1.8-29	29 MAR 2018
GEN 1.6-1 03 JAN 2019	ENR 0.6-2	29 MAR 2018	ENR 1.8-30	29 MAR 2018
GEN 1.6-2 03 JAN 2019	ENR 0.6-3	29 MAR 2018	ENR 1.9-1	07 DEC 2017
GEN 1.6-3 03 JAN 2019	ENR 0.6-4	29 MAR 2018	ENB 1.9-2	01 FFB 2018
GEN 1.6-4 03 JAN 2019	ENB 0.6-5	29 MAB 2018	ENR 1 9-3	27 APR 2017
GEN 1 6-5 03 JAN 2019	ENB 0.6-6	03.JAN 2019		27 APR 2017
GEN 1.7-1 03 JAN 2019		00 0AN 2015		27 AFR 2017
GEN 1.7-1 03 0AN 2013		ENR 1		27 AFR 2017
CEN 1.7-2 03 JAN 2019		10 NOV 0015		01 FEB 2018
GEN 1.7-5 03 JAN 2019	ENR I.I-I	12 NOV 2015	ENR 1.10-2	29 MAR 2018
GEN 1.7-4 03 JAN 2019	ENR 1.1-2	12 NOV 2015	ENR 1.10-3	29 MAR 2018
GEN 1.7-5 03 JAN 2019	ENR 1.1-3	12 NOV 2015	ENR 1.11-1	12 NOV 2015
GEN 2	ENR 1.1-4	12 NOV 2015	ENR 1.12-1	12 NOV 2015
GEN E	ENR 1.1-5	12 NOV 2015	ENR 1.12-2	12 NOV 2015
GEN 2.1-1 12 NOV 2015	ENR 1.1-6	12 NOV 2015	ENR 1.12-3	12 NOV 2015
GEN 2.1-2 13 SEP 2018	ENR 1.1-7	12 NOV 2015	ENR 1.12-4	12 NOV 2015
GEN 2.2-1 02 MAR 2017	ENR 1.1-8	12 NOV 2015	ENR 1.13-1	12 NOV 2015
GEN 2.2-2 02 MAR 2017	ENR 1.1-9	12 NOV 2015	ENR 1.14-1	10 DEC 2015
GEN 2.2-3 02 MAR 2017	ENR 1.1-10	08 NOV 2018	ENR 1.14-2	15 SEP 2016
GEN 2 2-4 05 JAN 2017	ENR 1 1-11	08 NOV 2018	ENB-1 14-3 to ENB-1 14-4	15 SEP 2016
GEN 2 2-5 10 NOV 2016	ENR 1 1-12	08 NOV 2018	ENB-1 14-5 to ENB-1 14-6	15 SEP 2016
GEN 2 3-1 12 NOV 2015	ENR 1 1-13	08 NOV 2018	ENB-1 14-7 to ENB-1 14-8	15 SEP 2016
CEN 2.2.2 12 NOV 2015		00 NOV 2010		15 OLI 2010
CEN 2.2.2 12 NOV 2015		00 NOV 2010	ENR 2	
GEN 2.3-3 12 NOV 2015		00 NOV 2010		
GEN 2.4-1 12 NOV 2015	ENR 1.2-1	21 JUL 2016	ENR 2.1-1	03 JAN 2019
GEN 2.5-1 21 JUL 2016	ENR 1.3-1	12 NOV 2015	ENR 2.1-2	03 JAN 2019
GEN-2.5-3 21 JUL 2016	ENR 1.4-1	12 NOV 2015	ENR 2.1-3	03 JAN 2019
GEN 2.6-1 12 NOV 2015	ENR 1.5-1	12 NOV 2015	ENR 2.1-4	03 JAN 2019
GEN 2.6-2 12 NOV 2015	ENR 1.5-2	17 AUG 2017	ENR-2.1-7	21 JUL 2016
GEN 2.7-1 12 NOV 2015	ENR 1.5-3	08 NOV 2018	ENR-2.1-9	29 MAR 2018
	ENR 1.5-4	08 NOV 2018	ENR-2.1-11A	21 JUL 2016
GEN 3	ENR 1.6-1	12 NOV 2015	ENR-2.1-11B	21 JUL 2016
GEN 3.1-1 08 NOV 2018	ENR 1.6-2	12 NOV 2015	ENR-2.1-13	21 .101 2016
GEN 3.1-2 08 NOV 2018	ENR 1.6-3	12 NOV 2015	ENB-2.1-15	29 MAR 2018
GEN 3 1-3 13 SEP 2018	ENR 1.6-4	17 ALIG 2017		
GEN 3 1.4 13 GEP 2010	ENR 1 6-5	29 MAR 2018	ENR 3	
GEN 3 2-1 01 UL 0010		20 MAR 2010	END 2.1.1	
CEN 2.2.1 21 JUL 2016		23 MAR 2010		U2 MAR 201/
GEN 3.2-2 31 MAR 2016		23 MAD 2010	ENR 3.1-2	02 MAR 2017
GEN 3.2-3 31 MAR 2016			ENR 3.1-3	10 NOV 2016
GEN 3.2-4 03 JAN 2019	ENU-1.0-9	21 JUL 2016	ENR 3.1-4	10 NOV 2016

ENB 3 1-5	12 NOV 2015	ENR 4 4-1	19.111 2018	AD 2 WSSS-28	13 SEP 2018
	02 MAR 2017		10 111 2010	AD 2 WEEE 20	12 SED 2010
			19 JUL 2010	AD 2.W000-29	10 0ED 0010
ENR 3.1-7	19 JUL 2018	ENR 4.4-3	19 JUL 2018	AD 2.00555-30	13 SEP 2018
ENR 3.1-8	10 NOV 2016	ENR 4.4-4	07 DEC 2017	AD 2.WSSS-31	13 SEP 2018
ENR 3.1-9	12 NOV 2015	ENR 4.4-5	17 AUG 2017	AD 2.WSSS-32	13 SEP 2018
ENR 3.1-10	02 MAR 2017	ENR 4.4-6	17 AUG 2017	AD 2.WSSS-33	13 SEP 2018
ENR 3 1-11	02 MAR 2017		12 OCT 2017	AD 2 WSSS-34	13 SED 2018
		LINIT 4.5-1	12 001 2017	AD 2.W000-04	10 0010
EINR 3.1-12	10 NOV 2016	ENB 5		AD 2.00555-35	13 SEP 2018
ENR 3.1-13	19 JUL 2018			AD 2.WSSS-36	13 SEP 2018
ENR 3.1-14	02 MAR 2017	ENR 5.1-1	12 NOV 2015	AD 2.WSSS-37	13 SEP 2018
ENB 3.1-15	12 NOV 2015	ENB 5 1-2	19.111 2018	AD 2 WSSS-38	13 SEP 2018
ENB 3 1-16	02 MAR 2017		10 111 2019	AD 2 WSSS-39	13 SEP 2018
	10 NOV 2015		19 JUL 2010		10 000 2010
	12 NOV 2015	ENR 5.1-4	19 JUL 2018	AD 2.00555-40	13 SEF 2010
ENR 3.1-18	02 MAR 2017	ENR 5.1-5	19 JUL 2018	AD-2-WSSS-ADC-1	15 SEP 2016
ENR 3.1-19	02 MAR 2017	ENR-5.1-7	22 JUN 2017	AD-2-WSSS-ADC-2	03 JAN 2019
ENR 3.1-20	12 NOV 2015	ENR-5.1-9	03 JAN 2019	AD-2-WSSS-ADC-3	12 OCT 2017
ENB-3.1/ATS Chart	19 JUI 2018	ENB 5 2-1	03 JAN 2019	AD-2-WSSS-AOC-1	07 DEC 2017
ENB 3 3-1	07 DEC 2017		02 14NI 2010	AD-2-WSSS-AOC-2	29 MAR 2018
	07 DEC 2017		03 JAN 2019		10 000 0010
EINR 3.3-2	02 IVIAR 2017	ENR 5.2-3	03 JAN 2019	AD-2-W555-AUC-3	13 SEP 2018
ENR 3.3-3	19 JUL 2018	ENR 5.3-1	13 SEP 2018	AD-2-WSSS-PATC-1	01 FEB 2018
ENR 3.3-4	12 NOV 2015	ENR 5.4-1	12 NOV 2015	AD-2-WSSS-PATC-2	01 FEB 2018
ENR 3.3-5	12 NOV 2015	ENB 5 5-1	03 JAN 2019	AD-2-WSSS-SID-1 to 1.1	08 NOV 2018
ENB 3 3-6	22 JUN 2017	ENR 5.6-1	24 MAX 2018	AD-2-WSSS-SID-2 to 2.1	08 NOV 2018
	10 111 2019		24 MAT 2010		00 NOV 2010
	19 JUL 2010	ENR 5.0-2	12 NOV 2015	AD-2-W333-3ID-3 to 3.1	00 100 2010
	UZ MAR 201/	ENR 6		AD-2-W555-SID-4 to 4.1	U8 NUV 2018
ENR 3.3-9	07 DEC 2017	LINITO		AD-2-WSSS-SID-5 to 5.1	08 NOV 2018
ENR 3.3-10	07 DEC 2017	ENR 6-1	15 SEP 2016	AD-2-WSSS-SID-6 to 6.1	08 NOV 2018
ENR 3.3-11	29 MAR 2018	FBC-6-1 En-Boute Chart	13 SEP 2018	AD-2-WSSS-SID-7 to 7.1	08 NOV 2018
ENIR 3 3-12	10 11 2018			AD-2-W/SSS-SID-8 to 8 1	08 NOV 2018
	07 DEC 2010	WAC-2860-Singapore-Island	17 AUG 2017	AD-2-W333-31D-0 to 0.1	00 NOV 2010
EINR 3.3-13	07 DEC 2017			AD-2-W555-SID-9 to 9.1	08 NOV 2018
ENR 3.3-14	07 DEC 2017	Part 3 – AERODROM	IES (AD)	AD-2-WSSS-SID-10 to 10.1	08 NOV 2018
ENR 3.3-15	07 DEC 2017			AD-2-WSSS-SID-11 to 11.1	08 NOV 2018
ENR 3.3-16	07 DEC 2017	AD 0		AD-2-WSSS-SID-12 to 12.1	08 NOV 2018
ENB 3 3-17	07 DEC 2017	AD 0.6-1	13 SEP 2018	AD-2-WSSS-SID-13 to 13 1	08 NOV 2018
ENR 3 3-18	07 DEC 2017	AD 0.6-2	13 SED 2018	AD-2-WSSS-SID-14 to 14.1	08 NOV 2018
		AD 0.0-2		AD-2-W000-01D-14 to 14.1	00 NOV 2010
ENR 3.3-19	19 JUL 2018	AD 0.6-3	03 JAN 2019	AD-2-WSSS-SID-15 to 15.1	08 NOV 2018
ENR 3.3-20	07 DEC 2017	AD 0.6-4	19 JUL 2018	AD-2-WSSS-SID-16 to 16.1	08 NOV 2018
ENR 3.3-21	19 JUL 2018	AD 0.6-5	19 JUL 2018	AD-2-WSSS-SID-17 to 17.1	08 NOV 2018
ENR 3.3-22	19 JUL 2018	AD 0.6-6	19 JUL 2018	AD-2-WSSS-SID-18 to 18.1	08 NOV 2018
ENB 3.3-23	07 DFC 2017	AD 0.6-7	19 JUI 2018	AD-2-WSSS-STAB-1 to 1.1	12 OCT 2017
ENR 3.3-23	07 DEC 2017	AD 0.6-7	19 JUL 2018	AD-2-WSSS-STAR-1 to 1.1	12 OCT 2017
ENR 3.3-23 ENR 3.3-24	07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1	19 JUL 2018	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25	07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1	19 JUL 2018	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1	12 OCT 2017 12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1 AD 1.1-1	19 JUL 2018 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1	12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1 AD 1.1-1 AD 1.1-2	19 JUL 2018 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-5 to 5.1	12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1 AD 1.1-1 AD 1.1-2 AD 1.1-3	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1	12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 FNR 3.3-29	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018	AD 0.6-7 AD 1 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1 1-4	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7 1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-29	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018 07 DEC 2017	AD 0.6-7 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-4 AD 1.2 1	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-29 ENR 3.3-20	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018 07 DEC 2017	AD 0.6-7 AD 1 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-4 AD 1.2-1	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-30 ENR 3.3-31	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-3 AD 1.1-4 AD 1.2-1 AD 1.3-1	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1 AD-2-WSSS-STAR-9 to 9.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-30 ENR 3.3-31 ENR 3.3-32	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018 07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-4 AD 1.2-1 AD 1.2-1 AD 1.3-1 AD-1.3-3	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 21 JUL 2016	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-6 to 4.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1 AD-2-WSSS-STAR-9 to 9.1 AD-2-WSSS-STAR-11 to 11.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-30 ENR 3.3-31 ENR 3.3-31 ENR 3.3-32 ENR 3.3-33	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-4 AD 1.2-1 AD 1.3-1 AD-1.3-3 AD 1.4-1	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 21 JUL 2016 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1 AD-2-WSSS-STAR-9 to 9.1 AD-2-WSSS-STAR-11 to 11.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-30 ENR 3.3-31 ENR 3.3-31 ENR 3.3-33 ENR 3.3-33 ENR 3.3-34	07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 19 JUL 2018 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-3 AD 1.1-4 AD 1.2-1 AD 1.3-1 AD-1.3-3 AD 1.4-1 AD 1.5-1	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 21 JUL 2016 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1 AD-2-WSSS-STAR-9 to 9.1 AD-2-WSSS-STAR-11 to 11.1 AD-2-WSSS-STAR-13 to 13.1	12 OCT 2017 12 OCT 2017
ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-28 ENR 3.3-29 ENR 3.3-30 ENR 3.3-31 ENR 3.3-31 ENR 3.3-33 ENR 3.3-33 ENR 3.3-34 ENR 3.3-35	07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-3 AD 1.1-4 AD 1.2-1 AD 1.2-1 AD 1.3-1 AD-1.3-3 AD 1.4-1 AD 1.5-1	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 21 JUL 2016 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-4 to 4.1 AD-2-WSSS-STAR-5 to 5.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1 AD-2-WSSS-STAR-9 to 9.1 AD-2-WSSS-STAR-11 to 11.1	12 OCT 2017 12 OCT 2017
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ENR 3.3-23 ENR 3.3-24 ENR 3.3-25 ENR 3.3-26 ENR 3.3-27 ENR 3.3-29 ENR 3.3-29 ENR 3.3-30 ENR 3.3-31 ENR 3.3-32 ENR 3.3-33 ENR 3.3-33 ENR 3.3-35 ENR 3.3-36 ENR 3.2 27	07 DEC 2017 07 DEC 2017	AD 0.6-7 AD 1.1-1 AD 1.1-2 AD 1.1-3 AD 1.1-4 AD 1.2-1 AD 1.3-1 AD-1.3-3 AD 1.4-1 AD 1.5-1 AD 2	19 JUL 2018 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015 21 JUL 2016 12 NOV 2015 12 NOV 2015 12 NOV 2015 12 NOV 2015	AD-2-WSSS-STAR-1 to 1.1 AD-2-WSSS-STAR-2 to 2.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-3 to 3.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-6 to 6.1 AD-2-WSSS-STAR-7 to 7.1 AD-2-WSSS-STAR-8 to 8.1 AD-2-WSSS-STAR-9 to 9.1 AD-2-WSSS-STAR-11 to 11.1 AD-2-WSSS-STAR-11 to 13.1 AD-2-WSSS-STAR-14 to 14.1	12 OCT 2017 12 OCT 2017
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GEN 1.6 SUMMARY OF NATIONAL REGULATIONS AND INTERNATIONAL AGREEMENTS/CONVENTIONS

1 LIST OF CIVIL AVIATION LEGISLATION, AIR NAVIGATION REGULATIONS AND ORDERS

The following is a list of legislation (Acts and subsidiary legislation) affecting aviation and air navigation in the Republic of Singapore together with the International Agreements/Conventions acceded to by the Republic of Singapore. It is essential that anyone engaged in air operations be acquainted with the relevant legal documents.

Copies of the legislation may be obtained as follows:

Electronic versions of the legislation may be freely accessed at http://sso.agc.gov.sg http://www.caas.gov.sg

Electronic versions of all Singapore legislation may be accessed via subscription to Lawnet at http://www.lawnet.com.sg

Print copies of all the legislation may be purchased (by post) from:

Post:

Toppan Leefung Pte. Ltd., No. 1 Kim Seng Promenade, #18-01, Great World City, East Tower Singapore 237994. Tel: (65) 68269600 Fax: (65) 68203341 URL: www.toppanleefung.com

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1 CIVIL AVIATION LEGISLATION

	No	Legislation	Citation
	Civil Aviation	Authority of Singapore Act & related legislation	
	1	Civil Aviation Authority of Singapore Act	Cap. 41 (2014 Rev Ed.)
\leftarrow	2	Civil Aviation Authority of Singapore (Airport Development Levy) Order 2018	S437/2018
\leftarrow	3 Civil Aviation Authority of Singapore S522/2018 (Aviation Levy) Order 2018		S522/2018
\leftarrow	4	Civil Aviation Authority of Singapore (Airport Master Plan) Rules 2009	S458/2009
\leftarrow	5	Civil Aviation Authority of Singapore (Changi Airport) By-laws 2009	S313/2009
\leftarrow	6	Civil Aviation Authority of Singapore (Changi Airport) Notification 2009	S293/2009
\leftarrow	7	Civil Aviation Authority of Singapore (Composition of Offences) Regulations 2009	S315/2009
\leftarrow	8	Civil Aviation Authority of Singapore (Licensing of Airport Operators) Regulations 2009	S311/2009
\leftarrow	9	Civil Aviation Authority of Singapore (Price Control of Aeronautical Charges) Rules 2009	S298/2009
\leftarrow	10	Civil Aviation Authority of Singapore (Seletar Airport) By-laws 2009	S314/2009
\leftarrow	11	Civil Aviation Authority of Singapore (Seletar Airport) Notification 2009	S294/2009
\leftarrow	12	Civil Aviation Authority of Singapore (Service Charge) Order 2009	S310/2009
l	13	Delegation of Powers	S337/2000
	Air Navigatio	n Act & related legislation	
\leftarrow	14	Air Navigation Act	Cap. 6 (2014 Rev Ed.)
\leftarrow	15	Air Navigation Order	Cap. 6, O2 (1990 Rev Ed.)
\leftarrow	16	Air Navigation (119 – Air Operator Certification) Regulations 2018	S443/2018
\leftarrow	17	Air Navigation (121 – Commercial Air Transport by Large Aeroplanes) Regulations 2018	S444/2018

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No	Legislation	Citation
18	Air Navigation (125 – Complex General Aviation) Regulations 2018	S501/2018
19	Air Navigation (135 – Commercial Air Transport by Helicopters and Small Aeroplanes) Regulations 2018	S445/2018
20	Air Navigation (137 – Aerial Work) Regulations 2018	S502/2018
21	Air Navigation (91 – General Operating Rules) Regulations 2018	S441/2018
22	Air Navigation (98 – Special Operations) Regulations 2018	S442/2018
23	Air Navigation (Investigation of Accidents and Incidents) Order	Cap. 6, O7
24	Air Navigation (Wreck and Salvage of Aircraft) Regulations	Cap. 6, RG 1
25	Air Navigation (Aviation Security) Order	Cap. 6, O5
26	Air Navigation (Regulated Air Cargo Agents) Regulations 2017	S166/2017
27	Air Navigation (Protected Areas) Order 2015	S350/2015
28	Air Navigation (Protected Areas) (No. 2) Order 2015	S435/2015
29	Air Navigation (Composition of Offences) Rules 2017	S667/2017
30	Air Navigation (Delegation of Powers) Notification	Cap. 6, N3
31	Designation of Authorised Persons	Cap. 6, N2
32	Air Navigation (Licensing of Air Services) Regulations	Cap. 6, RG 2
33	Air Navigation (Paya Lebar and Tengah Aerodrome Fees) Order	Cap. 6, O1
34	Air Navigation (Prohibited Flights) Order	Cap. 6, O6
35	Use of Seletar Aerodrome	Cap. 6, N1
Other Acts &	related legislation	
36	Carriage by Air Act	Cap. 32A (2001 Rev Ed.)
37	Carriage by Air (Parties to Conventions) Order	Cap. 32A, O1
38	Carriage by Air (Singapore Currency Equivalents) Order	Cap. 32A, O2
39	Carriage by Air (Montreal Convention, 1999) Act	Cap. 32B (2008 Rev Ed.)
40	Carriage by Air (Montreal Convention, 1999) (Exclusion from Convention) Order	Cap. 32B, O1
41	Cybersecurity Act 2018	Act 9 of 2018
42	Cybersecurity (Critical Information Infrastructure) Regulations 2018	S519/2018
43	Cybersecurity (Confidential Treatment of Information) Regulations 2018	S520/2018
44	Energy Conservation Act	Cap. 92C (2014 Rev Ed.)
45	Energy Conservation (Transport Facility Operators) Order 2013	S806/2013
46	Energy Conservation (Energy Management Practices For Transport Facility Operators) Regulations 2013	S807/2013
47	Tokyo Convention Act	Cap. 327 (1985 Rev Ed.)
48	Tokyo Convention (Convention Countries) Notification	Cap. 327, N1
49	Hijacking of Aircraft and Protection of Aircraft and International Airports Act	Cap. 124 (1997 Rev Ed.)
50	International Interests in Aircraft Equipment Act	Cap. 144B (2012 Rev Ed.)
51	Infrastructure Protection Act 2017	Act 41 of 2017
52	Infrastructure Protection (Designation of Special Developments) Order 2018	S819/2018
53	Infrastructure Protection (Special Developments and Special Infrastructures) Regulations 2018	S816/2018
54	Infrastructure Protection (Protected Areas and Protected Places) (Photography) (Exemption) Order 2018	S818/2018
55	Immigration Act	Cap. 133 (2008 Rev Ed.)
56	Immigration (Authorised Places Of Entry And Departure, And Rates) Notification 2012	S627/2012
57	Immigration Regulations	Cap. 133, RG 1
58	Arms and Explosives Act	Cap. 13 (2003 Rev Ed.)
59	Arms and Explosives (Aircraft Exemption) Rules	Cap. 13, R3
60	Arms and Explosives (Explosives) Rules	Cap. 13, R2
61	Arms and Explosives (Movement Control) Rules	Cap. 13, R4
62	International Organisations (Immunities and Privileges) Act	Cap. 145 (2013 Rev Ed.)
63	International Organisations (Immunities and Privileges)	Cap. 145, OR 4

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1.2 OTHER RELEVANT LEGISLATION

No	Legislation	Citation
1	Infectious Diseases Act	Cap. 137 (2003 Rev Ed.)
2	Infectious Diseases (Quarantine) Regulations	Cap. 137, RG 1
3	Infectious Diseases (Measures to Prevent or Control the Spread of Infectious Diseases) Regulations 2004	S13/2004
4	Infectious Diseases (Certificates of Vaccination or Other Prophylaxis) Regulations 2008	S611/2008
5	Arms and Explosives (Arms) Rules	Cap. 13, R1
6	Inspector of Explosives	Cap. 13, N1
7	Arms Offences Act	Cap. 14 (2008 Rev Ed.)

Note: "Cap." means "Chapter of the 1985 Revised Edition of the Acts of Singapore", unless otherwise stated.

1.3 INTERNATIONAL CONVENTIONS AND PROTOCOLS

No	Legislation
Chicago Conv	ention & related treaties
1	Convention on International Civil Aviation, done at Chicago on 7 December 1944
2	International Air Services Transit Agreement, signed at Chicago on 7 December 1944
3	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 93 bis], signed at Montreal on 27 May 1947
4	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 45], signed at Montreal on 14 June 1954
5	Protocol Relating to Certain Amendments to the Convention on International Civil Aviat [Articles 48(a), 49(e) and 61], signed at Montreal on 14 June 1954
6	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 50(a)], signed at Montreal on 21 June 1961
7	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 48(a)], signed at Rome on 15 September 1962
8	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 50(a)], signed at New York on 12 March 1971
9	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 56], signed at Vienna on 7 July 1971
10	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 50(a)], signed at Montreal on 16 October 1974
11	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 83 bis], signed at Montreal on 6 October 1980
12	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 56], signed at Montreal on 6 October 1989
13	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Article 50(a)], signed at Montreal on 26 October 1990
14	Protocol on the Authentic Trilingual Text of the Convention on International Civil Aviat (Chicago, 1944), signed at Buenos Aires on 24 September 1968
15	Protocol Relating to an Amendment to the Convention on International Civil Aviation [Fi Paragraph, Russian Text], signed at Montreal on 30 September 1977

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No	Legislation
16	Protocol on the Authentic Quadrilingual Text of the Convention on International Civ
	Aviation (Chicago, 1944),
	signed at Montreal on 30 September 1977
Hague Conven	tion (Suppression of Unlawful Seizure of Aircraft)
17	Convention for the Suppression of Unlawful Seizure of Aircraft,
	signed at The Hague on 16 December 1970
Montreal Conv	rention (Suppression of Unlawful Acts against the Safety of Civil Aviation) & rela
treaties	
18	Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation
	signed at Montreal on 23 September 1971
19	Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving Internat
	Civil Aviation, Supplementary to the Convention for the Suppression of Unlawful Ac
	against the Safety of Civil Aviation,
	done at Montreal on 23 September 1971,
	signed at Montreal on 24 February 1988
Warsaw Conve	ention & related treaties
20	Convention for the Unification of Certain Rules Relating to International Carriage by
	signed at Warsaw on 12 October 1929
21	Protocol to Amend the Convention for the Unification of Certain Rules Relating to
	International Carriage by Air signed at Warsaw on 12 October 1929,
	done at The Hague on 28 September 1955
22	Montreal Protocol No. 4 Relating to an Amendment to the Convention for the Unifica
	of Certain Rules Relating to International Carriage by Air.
	signed at Montreal on 25 September 1975
23	Convention for the Unification of Certain Rules for International Carriage by Air.
23	Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999
23 Tokyo Conven	Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999 tion & related treaties
23 <u>Tokyo Conven</u>	Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999 tion & related treaties
23 Tokyo Conven 24	Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999 tion & related treaties Convention on Offences and Certain Other Acts Committed on Board Aircraft,
23 <u>Tokyo Conven</u> 24	Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999 tion & related treaties Convention on Offences and Certain Other Acts Committed on Board Aircraft, signed at Tokyo on 14 September 1963
23 <u>Tokyo Conven</u> 24 25	Convention for the Unification of Certain Rules for International Carriage by Air, signed at Montreal on 28 May 1999 tion & related treaties Convention on Offences and Certain Other Acts Committed on Board Aircraft, signed at Tokyo on 14 September 1963 Protocol to Amend the Convention on Offences and Certain Other Acts Committed
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2 TAXATION IN THE FIELD OF INTERNATIONAL AIR TRANSPORT

2.1 Petroleum exemptions and income tax

- a. Petroleum for aircraft is granted GST (Goods and Services Tax) relief under item 11 of Part 1 of the Schedule to the GST (Imports Relief) Order (2001 Rev Ed.) respectively.
- b. The matter of income tax on air transport is contained within Section 12(2) of the Income Tax Act.

Where a non-resident person carries on either:

- i. the business of shipowner or charterer, or
- ii. the business of air transport,

and any ship or aircraft owned or chartered by him calls at a port, an aerodrome or an airport in Singapore, his full profits arising from the carriage of passengers, mail, livestock or goods shipped, or loaded into an aircraft, in Singapore shall be deemed to accrue in Singapore.

This subsection shall not apply to passengers, mail, livestock or goods which are brought to Singapore solely for transhipment, or for transfer from one aircraft to another or from an aircraft to a ship or from a ship to an aircraft.

2.2 Capital gains tax, or income on wealth, etc.

There is no capital gains tax, or income on wealth, etc., which are chargeable on the sale or use of international air transport.

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GEN 1.7 DIFFERENCES FROM ICAO STANDARDS, RECOMMENDED PRACTICES AND PROCEDURES

I	ANNEX 1	Personnel Licensing, 12th Edition		
		Chapter 2 (10th edition, Amendment 169)		
		2.3.3.1.2	Due to local geographical constraints and boundary, it is not possible to complete one cross-country flight totalling not less than 270km (150NM) in the course of which full- stop landings at two different aerodromes are made. In such cases, a Private Pilot Licence with restriction to fly within Singapore only will be issued.	
		2.8.2.1	Singapore issues two types of ratings for flying instructors: Flying Instructor Rating and Assistant Flying Instructor Rating. Both ratings meet the ICAO standards for flying instructors. Newly qualified instructors are issued with an Assistant Flying Instructor Rating, and may qualify for a Flying Instructor Rating after acquiring additional flying and instructional experience.	
			An Assistant Flying Instructor Rating does not entitle the holder to:	
			a. give flying instructions unless under the supervision of a person holding	
			 b. give directions in respect of the student pilot's first solo day/night flight and first solo cross-country day/night flight. 	
		2.9.1.1	The applicant for a Commercial Pilot Licence (Gliders) shall not be less than 18 years of age.	
		2.10.1.1	The applicant for a Private Pilot Licence (Balloons and Airships) shall not be less than 17 years of age. The applicant for a Commercial Pilot Licence (Balloons and Airships) shall not be less than 18 years of age.	
I	ANNEX 2	Rules of the Air, 10th Edition		
		Appendix 3 (Amendment 42)	lment 42)	
		VFR or IFR flights when operatin 3,000ft and below FL250 are red (quadrantal rule) as shown in pa	en operating in uncontrolled airspace within certain parts of the Singapore FIR at or above 250 are required to use the cruising levels specified in the quadrantal table of cruising levels hown in page ENR 1.7-5 para 4.4.	
I	DOC 4444	Procedures for Air Navigatio	n Services - Air Traffic Management, 15th Edition (PANS-ATM)	
I		- NIL Difference		
I	DOC 7030	Regional Supplementary Pro	cedures, 5th Edition	
		MID/ASIA REGIONAL SUPPLE	EMENTARY PROCEDURES	
		1.2.1	Flights shall be conducted in accordance with the Instrument Flight Rules (even when not operating in instrument meteorological conditions) when operated:	
			a. Above FL200.	
I	ANNEX 3	Meteorological Service for International Air Navigation, 20th Edition		
		Chapter 4	(Amendment 75)	
		4.3.2(a)	The automated weather observing system (AWOS) provides for visual display system at the appropriate ATS units (corresponding to the visual display system in the meteorological station) showing real-time weather conditions at appropriate locations along the runways. The ATS units use these real-time weather conditions for aircraft landing and take-off. The information provided by the visual display system at the ATS units is used in place of specifically-formatted local routine reports.	

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ANNEX 4	Aeronautical Charts, 11th Ed	ition
	- NIL Difference	
ANNEX 5	Units of Measurement to be used in Air and Ground Operations, 5th Edition	
	- NIL Difference	
ANNEX 6	Operation of Aircraft	
	Part I	(International Commercial Air Transport - Aeroplanes) - 11th Edition
	Chapter 12	(Amendment 34)
	12.4(b)	Singapore regulations do not require all cabin crew to be trained on the use of automated external defibrillator (AED). However, the regulations require that at least one senior cabin crew on board every aircraft carrying AED to be trained on the use of AED.
	Part II	(International General Aviation - Aeroplanes) - 10th Edition
	Chapter 6	(Amendment 29)
	6.1.1	General aviation aircraft in Singapore are required to be registered in the Public Transport Category.
	Part III	(International Operations - Helicopters) - 9th Edition
	- NIL Difference	
ANNEX 7	 7 Aircraft Nationality and Registration Marks, 6th Edition - NIL Difference. 	
ANNEX 8	3 Airworthiness of Aircraft, 12th Edition	
	- NIL Difference	
ANNEX 9	Facilitation, 15th Edition	
	Chapter 2	
	2.4	General Declaration is required.
	2.5	Name of flight crew members are required and to be provided on General Declaration on entry and departure of aircraft.
	2.6	Two copies of Embarking Passenger manifests are required.
	2.12	Crew lists are required.
	2.15	Crew lists are required.
	2.18	Documents for entry and departure of aircraft should be in English.
	Chapter 3	
	3.7	Visa is only required for persons who are holders of Certificate of Identity and Travel Documents issued by countries which have not entered visa agreement with the Singapore Government.
	3.8	Visa fees are payable at standard rates.
	3.8.4	Permanent residents who are not Singapore Citizens are required to be in possession of Re-Entry Permits when they return from overseas trips.
	3.9	Embarkation/Disembarkation forms and certain supplementary information are required.

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	3.10	Embarkation/Disembarkation forms and certain supplementary information are required.
	3.23	Crew members when travelling as passengers are required to be in possession of passports.
	Chapter 4	
	4.8	Except for certain scheduled items for which a Diversion Certificate or other authority is required, in/out cargo is as free as possible of governmental documentary requirements.
	Chapter 5	
	5.2	Facilities for provisional declarations are available to expedite clearance.
	5.4.1	Passports and visas, when necessary, are required where passengers have to leave the International Airport and stay in Singapore.
	Chapter 6	
	6.57	Any requests to station representatives of the public authorities of another State will be considered on its merits.
	Chapter 8	
	8.1	As laws differ between Government Departments, the use of a single comprehensive bond is not acceptable.
	8.14	There is a medical centre at the airport which provides consultation, pharmaceutical, dental, x-ray and minor operations facilities. Requests for medical care and assistance could be made prior to arrival of aircraft.
ANNEX 10	Aeronautical Telecommunic	ations
	Volume I	(Radio Navigation Aids) - 7th Edition
	Volume II	(Communication Procedures including those with PANS status) - 7th Edition
	Volume III	(Communication Systems) - 2nd Edition
		Part I - Digital Data Communication Systems
		Part II - Voice Communication Systems
	Volume IV	(Surveillance and Collision Avoidance Systems) - 5th Edition
	Volume V	(Aeronautical Radio Frequency Spectrum Utilization) - 3rd Edition
	- NIL Difference	
ANNEX 11	Air Traffic Services,15th Editi	on
	Chapter 4	(Amendment 47)
	4.3.6.1(g)	The AWOS systems at the airports have visual display systems at the relevant ATS units showing real-time weather conditions at appropriate locations along the runways. The ATS units use these real-time weather conditions for aircraft landing and take-off. However, specifically formatted MET REPORT and SPECIAL as described in Annex 3 paragraphs 4.3.2(a) and 4.4.2(a) are not prepared.
ANNEX 12	Search and Rescue, 8th Edition	on
	- NIL Difference	

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ANNEX 13 Aircraft Accident and Incident Investigation, 11th Edition

	Chapter 5	(Amendment 13)
	5.1.2	ICAO requires States to investigate serious incident involving aircraft of a maximum certificated take-off (MCT) mass of over 2250kg. With effect from 2 August 2010, Singapore requires all serious incidents to be investigated, regardless of the aircraft's MCT mass.
ANNEX 14	Aerodromes	
	Volume I	(Aerodrome Design and Operations) - 8th Edition
	Chapter 3	
	3.4.3	The words "wherever practicable" in Annex 14 paragraph 3.4.3 have been removed in our national regulations. Without exception, the width of the runway strip shall be 140m where the code number is 3 or 4; and 70m where the code number is 1 or 2.
	Chapter 4	
	4.2.1.4	For a precision approach runway category I, the inner approach surface; inner transitional surfaces; and balked landing surface shall be established, in addition to the conical surface; inner horizontal surface; approach surface and transitional surfaces.
	Chapter 6	
	6.1.1.6	Annex 14 paragraph 6.1.1.6(c) which states that the marking may be omitted when the obstacle is lighted by high-intensity obstacle lights by day has been removed from our national regulations.
	Chapter 7	
	7.4.1	Relating to the display of unserviceability markers, our national regulations require additionally that "unserviceability markers shall also be displayed at the entrances to a permanently or temporarily closed runway or taxiway, or part thereof".
	Chapter 9	
	9.2.3	Relating to the level of rescue and fire fighting protection to be provided, the remission factor has been removed from our national regulations.
	Volume II	(Heliports) - 4th Edition
	- Not applicable	
ANNEX 15	Aeronautical Information Ser	vices, 16th Edition
	- NIL Difference	
ANNEX 16	Environmental Protection	
	Volume I	(Aircraft Noise) - 8th Edition
	Volume II	(Aircraft Engine Emissions) - 4th Edition
	- NIL Difference	
ANNEX 17	Security - Safeguarding Inter	national Civil Aviation Against Acts of Unlawful Interference, 10th Edition
	- NIL Difference	
ANNEX 18	The Safe Transport of Dange	rous Goods by Air, 4th Edition
	- NIL Difference	

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ANNEX 19 Safety Management, 1st Edition

- NIL Difference

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k. Visual Approach Chart - ICAO

This chart is produced for aerodromes used by civil aviation where:

- only limited navigation facilities are available; or
 - radio communication facilities are not available; or
- no adequate aeronautical charts of the aerodrome and its surroundings at 1:500 000 or greater scale are available; or
- visual approach procedures have been established

The aeronautical data shown include information on aerodromes obstacles, designated airspace, visual approach information, radio navigation aids and communication facilities, as appropriate.

	GI	EN 3.2.5 LIST	OF AERONAUTICAL CHART	S AVAILABLE		
	Title of Chart Series	Scale Name and/or number		Price (\$)	Date	
	World Aeronautical Chart ICAO (WAC)	1:1 000 000		WAC 2860	In AIP	17 AUG 17
	Enroute Chart ICAO (ENRC)			ERC 6-1	In AIP	13 SEP 18
	Instrument Approach Chart		Singapore Changi			
	ICAO (IAC)	1:400 000	BWY 021 - ICW II S/DMF	AD-2-WSSS-IAC-1	In AIP	13 SFP 18
		1:400 000	RWY 02C - ICE ILS/DME	AD-2-WSSS-IAC-2	In AIP	13 SEP 18
		1.400 000	BWY 20B - ICH II S/DME	AD-2-WSSS-IAC-5	In AIP	13 SEP 18
		1.400 000	BWY 20C - ICC II S/DME	AD-2-WSSS-IAC-6	In AIP	13 SEP 18
		1:400 000	BWY 20C - VTK DVOB/DMF	AD-2-WSSS-IAC-7	In AIP	13 SEP 18
		1:400 000	RWY 02L - BNAV(GNSS)	AD-2-WSSS-IAC-9	In AIP	13 SEP 18
		1.400.000	BWY 02C - BNAV(GNSS)	AD-2-WSSS-IAC-10	In AIP	13 SEP 18
		1.400.000	BWY 20B - BNAV(GNSS)	AD-2-WSSS-IAC-11	In AIP	03.JAN 19
		1:400 000	RWY 20C - RNAV(GNSS)	AD-2-WSSS-IAC-12	In AIP	13 SEP 18
			Seletar			
		1:250 000	RWY 21 - SEL ILS	AD-2-WSSL-IAC-1	In AIP	03 JAN 19
			Paya Lebar			
		1:400 000	RWY 20 - PU DVOR/DME	AD-2-WSAP IAC-1	In AIP	13 SEP 1
		1:400 000	RWY 02 - PU DVOR/DME	AD-2-WSAP IAC-2	In AIP	13 SEP 1
		1:400 000	RWY 20 - IPS ILS/DME	AD-2-WSAP IAC-3	In AIP	13 SEP 1
		1:400 000	RWY 02 - IPN ILS/DME	AD-2-WSAP IAC-4	In AIP	13 SEP 1
		1:400 000	RWY 02 - RNAV(GNSS)	AD-2-WSAP-IAC-5	In AIP	13 SEP 1
		1:400 000	RWY 20 - RNAV(GNSS)	AD-2-WSAP-IAC-6	In AIP	13 SEP 1
	Visual Approach Chart ICAO (VAC)	1:400 000	Singapore Changi	AD-2-WSSS-VAC-1	In AIP	03 JAN 1
			Seletar			
		1:100 000	RWY 03	AD-2-WSSL-VAC-1	In AIP	03 JAN 1
		1:100 000	RWY 21	AD-2-WSSL-VAC-2	In AIP	03 JAN 1
		1:100 000	RWY 03	AD-2-WSSL-VAC-3	In AIP	03 JAN 1
		1:100 000	RWY 21	AD-2-WSSL-VAC-4	In AIP	03 JAN 1
	Visual Departure Chart		Seletar			
		1:100 000	RWY 03	AD-2-WSSL-VDC-1	In AIP	03 JAN 1
		1:100 000	RWY 21	AD-2-WSSL-VDC-2	In AIP	03 JAN 1
	Aerodrome Chart		Singapore Changi	AD-2-WSSS-ADC-2	In AIP	03 JAN 1
	ICAO (AC)		Seletar	AD-2-WSSL-ADC-1	In AIP	03 JAN 1
			Paya Lebar	AD-2-WSAP-ADC-1	In AIP	12 NOV 1
ŀ	Aerodrome Obstacle Chart		Singapore Changi			
	ICAO TYPE A (AOC)	1:10 000	RWY 20R/02L	AD-2-WSSS-AOC-1	In AIP	07 DEC 1
		1:10 000	RWY 20C/02C	AD-2-WSSS-AOC-2	In AIP	29 MAR 1
			Seletar			
		1:10 000	RWY 03/21	AD-2-WSSL-AOC-1	In AIP	17 AUG 1
		1.20.000	Paya Lebar			
		1.20 000	11001 20/02	ALTZ-WOAT-AUG-1		10 NOV

GEN 3.2.5 LIST OF AERONAUTICAL CHARTS AVAILABLE						
Title of Chart Series	Scale	Name and/or number Price (\$) Dat		Date		
Aerodrome Obstacle Chart ICAO TYPE B (AOC)	erodrome Obstacle Chart Singapore Changi CAO TYPE B (AOC) 1:20 000 RWY 02L/20R and 02C/20C AD-2-WSSS-AOC-3 Seletar		In AIP	13 SEP 18		
	1.20 000		AD-2-1155L-AUC-2		00 NOV 10	
Chart Chart	1:2 500	RWY 02L	AD-2-WSSS-PATC-1	In AIP	01 FEB 18	
ICAO (PATC)	1:2 500	RWY 20C	AD-2-WSSS-PATC-2	In AIP	01 FEB 18	

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INDEX TO THE WORLD AERONAUTICAL CHART (WAC) - ICAO 1:1 000 000



7	CORRECTIONS TO	CORRECTIONS TO CHARTS NOT CONTAINED IN THE AIP					
	Identification of charts	Location on the chart where the correction has to be made	Precise details of the corrections to be made				
	NIL	NIL	NIL				

		29 MAR 2018
<u>3.2</u>	PROVISION OF ATFM SERVICES	ENR 1.9-2
<u>3.3</u>	ATFM AFFECTED ATS ROUTES, FLIGHT LEVELS AND APPLICABLE HOURS	ENR 1.9-2
<u>3.4</u>	MANDATORY CTOT AND KABUL FIR SLOT ALLOCATION	ENR 1.9-3
<u>3.5</u>	BOBCAT OPERATING PROCEDURES	ENR 1.9-3
<u>3.6</u>	SLOT ALLOCATION PROCESS	ENR 1.9-3
<u>3.7</u>	SUBMISSION OF ATS FLIGHT PLAN	ENR 1.9-3
<u>3.8</u>	AIRCRAFT OPERATOR / PILOT-IN-COMMAND AND ANSP RESPONSIBILITIES	ENR 1.9-4
<u>3.9</u>	COORDINATION BETWEEN AIRCRAFT OPERATOR / PILOT-IN-COMMAND, ANSPs AND BANGKOK ATFMU	ENR 1.9-4
<u>3.10</u>	BASIC COMPUTER REQUIREMENT	ENR 1.9-4
<u>3.11</u>	ATFM USERS HANDBOOK	ENR 1.9-5
<u>3.12</u>	CONTINGENCY PROCEDURES	ENR 1.9-5
<u>3.13</u>	ATFM SYSTEM FAULT REPORTING	ENR 1.9-5
<u>3.14</u>	ADDRESS OF AIR TRAFFIC FLOW MANAGEMENT UNIT (ATFMU)	ENR 1.9-5
<u>ENR 1.10</u>	FLIGHT PLANNING	ENR 1.10-1
<u>1</u>	PROCEDURES FOR SUBMISSION OF A FLIGHT PLAN	ENR 1.10-1
<u>1.1</u>	Requirement for submission of a Flight Plan	ENR 1.10-1
<u>1.2</u>	Requirement for submission of a Flight Plan for Test Flights	ENR 1.10-1
<u>1.3</u>	Lead time for filing flight plans and flight plan associated messages	ENR 1.10-1
<u>1.4</u>	Persons on board (POB)	ENR 1.10-2
<u>1.5</u>	DATA LINK Communication and Surveillance	ENR 1.10-2
<u>1.6</u>	RNAV Approved Aircraft	ENR 1.10-2
<u>1.7</u>	RVSM and NON-RVSM Approved Aircraft	ENR 1.10-3
<u>1.8</u>	Other Documentary and / or Permit Requirements	ENR 1.10-3
<u>ENR 1.11</u>	ADDRESSING OF FLIGHT PLAN MESSAGES	ENR 1.11-1
ENR 1.12	INTERCEPTION OF CIVIL AIRCRAFT	ENR 1.12-1
<u>1.1</u>	ACTION BY INTERCEPTED AIRCRAFT	ENR 1.12-1
<u>1.2</u>	RADIO COMMUNICATION DURING INTERCEPTION	ENR 1.12-1
<u>ENR 1.13</u>	UNLAWFUL INTERFERENCE	ENR 1.13-1
<u>ENR 1.14</u>	AIR TRAFFIC INCIDENTS	ENR 1.14-1
<u>1</u>		ENR 1.14-1
<u>2</u>	USE OF AIR TRAFFIC INCIDENT REPORTING FORMS	ENR 1.14-1
<u>3</u>	AIR TRAFFIC INCIDENT REPORTING PROCEDURES	ENR 1.14-1
4		ENR 1.14-2
<u>5</u>		ENR 1.14-2
<u>6</u>	OTHER REPORTS UNDER ICAO INITIATIVE FOR DATA COLLECTION AND ANALYSIS PURPOSES	ENR 1.14-2
7	INDEX OF REPORTING FORMS APPENDED TO THIS SECTION	ENR 1.14-2
<u>ENR 2</u>		
ENR 2.1	FIR, UIR, TMA	ENR 2.1-1
<u>ENR 2.2</u>	[NIL] OTHER REGULATED AIRSPACE	ENR 2.2-1
<u>ENR 3</u>	ATS ROUTES	
ENR 3.1	ATS ROUTES	ENR 3.1-1
ENR 3.2	[NIL] UPPER ATS ROUTES	ENR 3.2-1
ENR 3.3	AREA NAVIGATION (RNAV) ROUTES	ENR 3.3-1
<u>ENR 3.4</u>	HELICOPTER ROUTES	ENR 3.4-1
<u>1</u>	HELICOPTER OPERATIONS OVER SINGAPORE ISLAND	ENR 3.4-1

AIP	Singapore
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<u>2</u>	PROCEDURES FOR THE CONTROL OF HELICOPTER OPERATIONS AT SINGAPORE CHANGI AIRPORT	ENR 3.4-4
ENR 3.5	OTHER ROUTES	ENR 3.5-1
1	SINJON CROSSING BY MILITARY AIRCRAFT	ENR 3.5-1
<u>2</u>	TRANSIT CHANNEL	ENR 3.5-2
<u>3</u>	HORSBURGH LIGHTHOUSE	ENR 3.5-2
ENR 3.6	ENROUTE HOLDING	ENR 3.6-1
<u>ENR 4</u>	RADIO NAVIGATION AIDS/SYSTEMS	
ENR 4.1	RADIO NAVIGATION AIDS - ENROUTE	ENR 4.1-1
ENR 4.2	[NIL] SPECIAL NAVIGATION SYSTEM	ENR 4.2-1
ENR 4.3	GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)	ENR 4.3-1
ENR 4.4	NAME-CODE DESIGNATIONS FOR SIGNIFICANT POINTS	ENR 4.4-1
ENR 4.5	AERONAUTICAL GROUND LIGHTS - ENROUTE	ENR 4.5-1
<u>ENR 5</u>	NAVIGATION WARNINGS	
ENR 5.1	PROHIBITED, RESTRICTED AND DANGER AREAS	ENR 5.1-1
<u>1</u>	INTRODUCTION	ENR 5.1-1
<u>2</u>	DANGER AREA	ENR 5.1-1
<u>3</u>	PROHIBITED AREA	ENR 5.1-1
<u>4</u>	RESTRICTED AREA	ENR 5.1-1
<u>5</u>	DESIGNATION OF AREA	ENR 5.1-1
ENR 5.2	MILITARY EXERCISE AND TRAINING AREAS	ENR 5.2-1
ENR 5.3	OTHER ACTIVITIES OF A DANGEROUS NATURE	ENR 5.3-1
<u>1</u>	WEATHER BALLOONS	ENR 5.3-1
ENR 5.4	AIR NAVIGATION OBSTACLES - AREA 1	ENR 5.4-1
ENR 5.5	AERIAL SPORTING AND RECREATIONAL ACTIVITIES	ENR 5.5-1
<u>1</u>	AERO MODELLING AND KITE FLYING	ENR 5.5-1
<u>2</u>	AIRCRAFT OPERATIONS PROHIBITED OVER THE TERRITORY OF SINGAPORE	ENR 5.5-1
<u>3</u>	SEARCHLIGHT DISPLAY / LASER SHOWS - PAYA LEBAR CTR	ENR 5.5-1
<u>4</u>	UNMANNED AIRCRAFT OPERATIONS - PAYA LEBAR CTR	ENR 5.5-1
ENR 5.6	BIRD MIGRATION	ENR 5.6-1
<u>1</u>	BIRD MIGRATION	ENR 5.6-1
<u>2</u>	REPORTING OF WILDLIFE STRIKE	ENR 5.6-1
<u>ENR 6</u>	EN-ROUTE CHARTS	ENR 6-1

Note: The following sections in this chapter are intentionally left blank: ENR 0.1, ENR 0.2, ENR 0.3, ENR 0.4, ENR 0.5.

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ENR 2 AIR TRAFFIC SERVICES AIRSPACE

ENR 2.1 FIR, UIR, IMA					
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	
SINGAPORE FIR 070000N 1030000E 070000N 1080000E	SINGAPORE	SINGAPORE	255.4MHz	The responsibility for providing	
103000N 1140000E 082500N 1163000E 021500N 1083000E 010000N 1083000E 010000N 1085400E, thence south along the coastline of Borneo to 001500N 1090000E to Equator 1090000E Equator 1080000E 005000S 1060000E Equator 1051000E Equator 1044600E, thence around the arc of a circle radius 100NM centred on Singapore	ACC	RADAR English H24	Primary 123.7 MHz 133.25MHz 134.4MHz 133.8MHz 134.2MHz 134.35 MHz	air traffic services to flights within the following portions of the Singapore FIR lying between Kuala Lumpur and Kota Kinabalu Flight Information Regions, shall be vested in the Kuala Lumpur ACC.	
Island to 013900N 1021000E 011300N 1033000E 011700N 1033600E, thence east along the international boundary of Singapore/Peninsular Malaysia, thence along 012000N to 012000N 1042000E 023600N 1044500E 034000N 1034000E 045000N 1034400E 064500N 1024000E 070000N 1030000E. UNL GND/MSL			<u>Secondary</u> 127.3 MHz 135.8MHz 128.1MHz 133.35MHz 133.6 MHz <u>SEA 1</u> 6556kHz 11297kHz <u>SEA 2</u> 5655kHz 8942kHz 11396kHz <u>SEA 3</u> 6556kHz	The airspace bounded by a line from 023600N 1044500E to 020000N 1070000E and thereafter along 020000N in the Singapore and Kota Kinabalu FIR boundary, thence along this boundary to 060000N 1132000E thence along 060000N to the Singapore and Kuala Lumpur FIR boundary thence along the boundary to 023600N 1044500E and from surface level to FL150 west of longitude 105E and, from surface level to FL200 east of longitude 105E. (Ref ANP-ASIA/PAC, Rec 7/4) SEA 1, SEA 2, SEA 3: SSB Suppressed Carriers.	
		SINGAPORE CONTROL SOUTH CHINA SEA English H24	<u>AFN</u> <u>LOGON</u> WSJC	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 3.3.	

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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
AREAS WITHIN THE KUALA LUMPUR FIR FOR WHICH SINGAPORE ACC IS RESPONSIBLE FOR PROVIDING ATS				
SECTOR 1: 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: 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	SINGAPORE RADAR English H24	<u>Primary</u> 133.25MHz <u>Secondary</u> 135.8MHz	Controlling Authority: Johor APP for airspaces below Sectors 1 and 2, Airway W401 and south of VMR DVOR. <u>Note:</u> 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.
SECTOR 2: 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: 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	SINGAPORE RADAR English H24	Primary 123.7 MHz 133.8 MHz <u>Secondary</u> 127.3 MHz	
 a. W401 [Airspace between KK 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		

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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
SINGAPORE /JOHOR AIRSPACE COMPLEX				
All controlled airspace within 022600N 1025605E 022600N 1043400E 004300N 1043400E 004300N 1025605E.	SINGAPORE ACC	SINGAPORE RADAR English	Primary 123.7 MHz 133.8 MHz	*Upper limit FL450 from HOSBA [34 DME SJ R-079 (24 DME VTK R-103)]
2 000ft ALT		H24	<u>Secondary</u> 127.3 MHz	to 3 500ft ALT.
ALL AIRWAYS WITHIN THE SINGAPORE FIR, KUALA LUMPUR FIR AND ITS TRANSFER AREAS AND KOTA KINABALU FIR (see subsection <u>ENR 3.1</u>)	SINGAPORE ACC	SINGAPORE RADAR English H24	Primary 133.25MHz 123.7 MHz 133.8 MHz <u>Secondary</u> 135.8MHz 127.3 MHz	Airspaces within the Kuala Lumpur FIR under the control of Singapore ACC are depicted in diagrams in AIP pages: <u>ENR 2.1-11</u> for AWY A464 <u>ENR 2.1-13</u> for AWY B469
OCEANIC CONTROL AREA WITHIN SINGAPORE FIR (CTA) 011800N 1035330E 011138N 1040740E 011510N 1042610E 011525N 1042950E 010235N 1043405E 002500N 1074200E Equator 1083600E to Equator 1080000E to 005000S 1060000E and thence along the Singapore/Jakarta FIR boundary to intersect the western boundary of G579 drawn on a 7.5° deg tolerance from SJ DVOR/DME FL460 6 000ft ALT	SINGAPORE ACC	SINGAPORE RADAR English H24	134.4MHz (PRI) 128.1MHz (SRY) 255.4MHz	Portion of Airways A464, A576, B469, B470 and G579 are within these lateral limits.

I

12345TANJUNG PINANG TMA002448N 1043700E follow the circle radius 30NM from TI NDB (0055.0N 10432.0E) anti-clockwise until 010342N 1050018E 005612N 1053200E thence along the circle with radius 60NM from TI NDB (0055.0N 10432.0E) clockwise until 000224N 1050206E 002448N 1043700ETANJUNG PINANG APPROACH CONTROL OFFICE (APP)TANJUNG PINANG APPROACH CONTROL OFFICE (APP)Tanjung Pinang Approad Control Office (APP) sha responsible for the provis Air Traffic Control Servic controlled flights within Ta Pinang TMA/CTR.10 000ft 3000 FT10 000ft TANJUNG PINANG NORTH CONTROL ZONE (CTR)TANJUNG PINANG NORTH CONTROL ZONE (CTR)TANJUNG PINANG NORTH CONTROL ZONE (CTR)TANJUNG PINANG NORTH CONTROL ZONE (CTR)2345	Name Lateral limits Upper limit/Lower limit Class of airspace	Call sign Unit Languages providing conditions of /Purpose Bervice Use Hr of ser	ks
TANJUNG PINANG TMATANJUNG PINANG anti-clockwise until 010342N 1050018E 005612N 1053200E thence along the circle with radius 60NM from TI NDB (0055.0N 10432.0E) clockwise until 000224N 1050206E 002448N 1043700ETANJUNG PINANG APPROACH CONTROL OFFICE (APP)TANJUNG PINANG APPROACH CONTROL OFFICE (APP)130.2MHzTanjung Pinang Approad Control Office (APP) sha responsible for the provis Air Traffic Control Servic controlled flights within Ta Pinang TMA/CTR.10 000ft 	1	2 3 4 5	
002448N 1043700E follow the circle radius 30NM from TI NDB (0055.0N 10432.0E) anti-clockwise until 010342N 1050018E 005612N 1053200E thence along the circle with radius 60NM from TI NDB (0055.0N 10432.0E) clockwise until 000224N 1050206E 002448N 1043700ETANJUNG PINANG APPROACH CONTROL OFFICE (APP)130.2MHzTanjung Pinang Approad Control Office (APP) sha responsible for the provis Air Traffic Control Servic controlled flights within Ta Pinang TMA/CTR.10 000ft 3000 FT3000 FT0000-120010000-120010000-1200TANJUNG PINANG NORTH CONTROL ZONE (CTR)TANJUNG PINANG NORTH CONTROL ZONE (CTR)APPROACH PROACHAPPROACH APPROACH130.2MHzTanjung Pinang Approad Control Office (APP) sha responsible for the provis Air Traffic Control Servic controlled flights within Ta Pinang TMA/CTR.	IG PINANG TMA		
10 000ft The provision of Air Traft 3000 FT Control Service within Ta TANJUNG PINANG NORTH CONTROL Pinang CTR between ZONE (CTR) APP/ACC.	I 1043700E follow the circle radius T om TI NDB (0055.0N 10432.0E) I cwise until 010342N 1050018E AF I 1053200E thence along the circle C us 60NM from TI NDB (0055.0N C E) clockwise until 000224N 1050206E I I 1043700E I	TANJUNG PINANG APPROACH CONTROL (APP)TANJUNG PINANG APPROACH English 0000-1200130.2MHzTanjung Pinang A Control Office (Af responsible for the Air Traffic Contro controlled flights w Pinang TMA/CTF	Approach PP) shall be e provision of I Service to vithin Tanjung R.
ZONE (CTR)		The provision of A Control Service w Pinang CTR betw 1200-0000UTC s provided by Sina	Air Traffic ithin Tanjung /een hall be apore
	TR)	APP/ACC.	
012000N 1041224E 011305N 1042029E 010942N 1043500E thence along the circle radius 27NM from BTM VOR/DME clockwise until 004236N 1041654E 005315N 1040335E 010018N 1035530E 012000N 1041224EPosition Reporting Proce Aircraft operating within a about to enter Tanjung P CTR shall report position a. Over Tanjung Pina TMA boundary.	I 1041224E 011305N 1042029E I 1043500E thence along the circle YNM from BTM VOR/DME clockwise 236N 1041654E 005315N 1040335E I 1035530E 012000N 1041224E	Aircraft operating about to enter Tai CTR shall report a. Over Tanju TMA bound	<u>g Procedures</u> within or njung Pinang position: ng Pinang darv.
3 000ft b. Over any other point time as instructed and the second secon	t GL	b. Over any o time as inst ATC.	ther point or ructed by
TANJUNG PINANG SOUTH CONTROL ZONE (CTR)	IG PINANG SOUTH CONTROL CTR)	VFR Flights	
004236N 1041654E follow the circle radius 27NM from BTM VOR/DME anti-clockwise until 010942N 1043500E 010342N 1050018E thence along the circle radius 30NM from TI NDB clockwise until 002448N 1043700E 004236N 1041654E1. Flight Information a a lerting service sha be provided to VFR operating within Ta Pinang CTR/TMA request. VFR flight requesting this ser shall report intended action and comply the position or as required by ATC.2. No aircraft shall op under VFR within Tanjung Pinang TMA/CTR until priva authorization has to obtained from Tan Pinang Approach.	I 1041654E follow the circle radius om BTM VOR/DME anti-clockwise 942N 1043500E 010342N 1050018E ong the circle radius 30NM from TI ckwise until 002448N 1043700E I 1041654E t SL	1. Flight Informalerting semble provided operating with Pinang CTI request. VF requesting shall report action and the position required by 2. No aircraft under VFR Tanjung Pin TMA/CTR authorization obtained from Pinang App	mation and vice shall only to VFR flight ithin Tanjung R/TMA on FR flight this service intended comply with or as ATC. shall operate within nang until prior on has been om Tanjung proach.
Altimeter Setting Procedures shall used by aircraft operating within Tanjung Pinang C Transition Level: FL130 Transition Altitude: 11 00		Altimeter Setting The ICAO Standa Setting Procedure used by aircraft o within Tanjung Pi Transition Level: Transition Altitude	Procedures ard Altimeter es shall be perating nang CTR: FL130 e: 11 000ft


AIP

AMDT 01/2019





MASBO

TOPOR

A576

SUKRI

L762

R469



AIRSPACE CLASSIFICATION IN THE SINGAPORE FIR				
Airspace		Levels	Classification	
Controlled airspace		FL150 to FL460	A	
		Surface to FL150	В	
Controlled airspac seaward from the	e more than 100 nm shoreline	Lower limit to FL460 A		
Control Zone (CTRs)	ontrol Zone Changi CTR		С	
	Paya Lebar CTR	Surface to upper limit	D	
	Seletar CTR		С	
ATZs		Surface to upper limit	D	
Uncontrolled airspace			G*	

SINGAPORE	D-ATIS	128.6
	APP	120.3
	TWR	118.6 118.25

PROHIBITED, RESTRICTED AND DANGER AREAS

ACTIVITY		ACTIVITY UPPER LIMIT	
WSD1	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WSR2	Jet Let-down Sector	FL 300 3 000ft MSL	Permanently Active as in ENR 5
WSP3	-	750ft ALT GND	Permanently Active as in ENR 5
WSD4	A/G and G/G Firing Range	<u>FL 160</u> GND/WATER	Permanently Active as in ENR 5
WSD5	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WMD8	Naval Air/Air Firing Range	FL 550 WATER	Activation by NOTAM
WSD11	Small Arm Firing	<u>1 300ft ALT</u> GND	Permanently Active as in ENR 5
WSD11A	Artillery Firing	<u>FL 125</u> GND	Activation by NOTAM
WSD11B	Artillery Firing	<u>FL 125</u> GND	Activation by NOTAM
WMD12	Naval Anti-aircraft Firing	FL 550 WATER	Activation by NOTAM
WSD13	Naval Anti-aircraft Firing	FL 550 WATER	Activation by NOTAM
WSD14	Naval Anti-aircraft Firing & Live Air/Air Firing	FL 550 WATER	Activation by NOTAM
WSP24	-	800ft ALT GND/WATER	Permanently Active as in ENR 5
WSR31	Training Area	10 000ft ALT 3 500ft MSL	Permanently Active as in ENR 5
WSD33	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WSD34	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WSD35	Rifle Range	900ft ALT GND	Permanently Active as in ENR 5
WSR10	-	<u>5 500ft ALT</u> GND	Permanently Active as in ENR 5
WSR38	-	10 000ft ALT GND	Permanently Active as in ENR 5
WSP49	-	<u>300ft ALT</u> GND	Permanently Active as in ENR 5
	Transit Channel	2 000ft ALT GND	Activated only for Military acft crossing
*	Light Aircraft Training Area A	<u>4 500ft ALT</u> GND/*2 000ft	Training & Local Flts in VMC only
*	Light Aircraft Training Area B	10 500ft ALT 4 500ft ALT	High Flying Training Ops in VMC only
*	Light Aircraft Training Area C	10 500ft ALT 4 500ft ALT	High Flying Training Ops in VMC only
WMR223	Parachute Dropping	<u>10 000ft ALT</u> GND	Permanently Active as in ENR 5
WMD224	Firing Range	12 000ft ALT SEA	Activation by NOTAM
WMR225	RMAF Helicopter Training Area	<u>3 500ft AL</u> T GND	Permanently Active as in ENR 5
WMR226	RMAF Helicopter Training Area	<u>2 000ft AL</u> T GND	Permanently Active as in ENR 5
WMD227	Radar Bombing Range	10 000ft ALT SEA	Activation by NOTAM
WMP228	Sultan's Palace	5 000ft ALT GND	Permanently Active as in ENR 5
WMR229	Helicopter Operations	<u>1 500ft AL</u> T GND	Permanently Active as in ENR 5
WMD230	Artillery Firing Range	<u>2 000ft AL</u> T GND	Permanently Active as in ENR 5
WMD231	Artillery Firing Range	<u>2 000ft AL</u> T GND	Permanently Active

SPECIAL NOTE :-

1. WEATHER BALLOONS

BALLOONS WILL BE RELEASED FOR MET OBSERVATION AT THE CENTRE FOR CLIMATE RESEARCH SINGAPORE, UPPER AIR OBSERVATORY (012025N 1035317E), BEARING 244° MAG AND DISTANCE 1.5NM FROM SOUTHERN END OF PAYA LEBAR RWY 02.

- (I) BALLOONS WILL BE RELEASED DAILY AT 2330UTC AND 1040UTC. CUT-OFF TIMINGS FOR THE RELEASE ARE AT 0030UTC AND 1230UTC RESPECTIVLEY. RATE OF ASCENT IS 320M PER MIN. MAX HGT OF BALLOON 115 000FT (35 000M). THE BALLOON, UNCOLOURED AND 162CM IN DIAMETER, IS ATTACHED WITH RADIOSONDE EQUIPMENT. IT WILL BURST 1.5 TO 2HRS AFTER RELEASE AND RADIOSONDE EQUIPMENT WILL DECSEND WITHIN 60NM RADIUS.
- (II) A BALLOON WILL BE RELEASED BETWEEN 2330UTC AND 0030UTC ON EITHER THE 3rd OR 4th WEEK OF THE MONTH. RATE OF ASCENT IS 320M PER MIN. MAX HGT OF BALLOONS IS 115 000FT (35 000M). THE BALLOON, UNCOLOURED AND 191CM IN DIAMETER, IS ATTACHED WITH OZONESONDE/RADIOSONDE EQUIPMENT AND PARACHUTE. IT WILL BURST 1.5 TO 2HR AFTER RELEASE.

2. AEROMODELLING AND KITE FLYING

(A) GENERAL WARNING

- i) PILOTS FLYING AT LOW ALTITUDES SHOULD WATCH OUT FOR POSSIBLE HAZARDS SUCH AS MODEL AIRCRAFT AND KITES, ESPECIALLY WHEN FLYING NEAR PARKS AND OPEN GROUND.
- ii) THE LOCATION OF SOME OF THE PARKS IN SINGAPORE WHERE KITE AND AERO MODEL FLYING MAY OCCUR ARE SHOWN ON ENR 3.4-5. PILOTS SHOULD NOTE THAT THE CHART AT ENR 3.4-5 DOES NOT SHOW ALL THE PARKS IN SINGAPORE AND THAT HAZARDS SUCH AS KITE FLYING AND AERO MODEL FLYING MAY TAKE PLACE AT PARKS AND OPEN GROUND NOT INDICATED IN ENR 3.4-5.
- iii) ACCORDING TO THE SINGAPORE AIR NAVIGATION ORDER, 1985, KITE FLYING AND AERO MODEL FLYING ARE NOT PERMITTED ABOVE 200ft OR WITHIN 5km OF AN AERODROME. HOWEVER, PILOTS ARE ADVISED TO LOOK OUT FOR SUCH HAZARDS AT ALL TIMES AS MEMBERS OF THE PUBLIC MAY INADVERTENTLY FLY KITES OR AERO MODELS ABOVE THE HGT OF 200ft OR WITHIN 5km OF AN AERODROME.

In Transit Channel

* AEROBATICS IS PROHIBITED IN LIGHT AIRCRAFT TRAINING AREAS A, B and C.



Airspace		Levels	Classification
Controlled airspace		FL150 to FL460	A
		Surface to FL150	В
Controlled airspac seaward from the	e more than 100 nm shoreline	Lower limit to FL460	А
Control Zone (CTRs)	Changi CTR		с
	Paya Lebar CTR	Surface to upper limit	D
	Seletar CTR		с
ATZs		Surface to upper limit	D
Uncontrolled airsp	ace		G*

SINGAPORE	D-ATIS	128.6
	APP	120.3
		119.3
	TWR	118.6 118.25

PROHIBITED, RESTRICTED AND DANGER AREAS

ACTIVITY		ACTIVITY UPPER LIMIT	
WSD1	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WSR2	Jet Let-down Sector	FL 300 3 000ft MSL	Permanently Active as in ENR 5
WSP3	-	750ft ALT GND	Permanently Active as in ENR 5
WSD4	A/G and G/G Firing Range	<u>FL 160</u> GND/WATER	Permanently Active as in ENR 5
WSD5	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WMD8	Naval Air/Air Firing Range	FL 550 WATER	Activation by NOTAM
WSD11	Small Arm Firing	<u>1 300ft ALT</u> GND	Permanently Active as in ENR 5
WSD11A	Artillery Firing	<u>FL 125</u> GND	Activation by NOTAM
WSD11B	Artillery Firing	<u>FL 125</u> GND	Activation by NOTAM
WMD12	Naval Anti-aircraft Firing	FL 550 WATER	Activation by NOTAM
WSD13	Naval Anti-aircraft Firing	FL 550 WATER	Activation by NOTAM
WSD14	Naval Anti-aircraft Firing & Live Air/Air Firing	FL 550 WATER	Activation by NOTAM
WSP24	-	800ft ALT GND/WATER	Permanently Active as in ENR 5
WSR31	Training Area	10 000ft ALT 3 500ft MSL	Permanently Active as in ENR 5
WSD33	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WSD34	Rifle Range	500ft ALT GND	Permanently Active as in ENR 5
WSD35	Rifle Range	900ft ALT GND	Permanently Active as in ENR 5
WSR10	-	<u>5 500ft ALT</u> GND	Permanently Active as in ENR 5
WSR38	-	10 000ft ALT GND	Permanently Active as in ENR 5
WSP49	-	<u>300ft ALT</u> GND	Permanently Active as in ENR 5
	Transit Channel	2 000ft ALT GND	Activated only for Military acft crossing
*	Light Aircraft Training Area A	<u>4 500ft ALT</u> GND/*2 000ft	Training & Local Flts in VMC only
*	Light Aircraft Training Area B	10 500ft ALT 4 500ft ALT	High Flying Training Ops in VMC only
*	Light Aircraft Training Area C	10 500ft ALT 4 500ft ALT	High Flying Training Ops in VMC only
WMR223	Parachute Dropping	<u>10 000ft ALT</u> GND	Permanently Active as in ENR 5
WMD224	Firing Range	12 000ft ALT SEA	Activation by NOTAM
WMR225	RMAF Helicopter Training Area	<u>3 500ft AL</u> T GND	Permanently Active as in ENR 5
WMR226	RMAF Helicopter Training Area	<u>2 000ft AL</u> T GND	Permanently Active as in ENR 5
WMD227	Radar Bombing Range	10 000ft ALT SEA	Activation by NOTAM
WMP228	Sultan's Palace	5 000ft ALT GND	Permanently Active as in ENR 5
WMR229	Helicopter Operations	<u>1 500ft AL</u> T GND	Permanently Active as in ENR 5
WMD230	Artillery Firing Range	<u>2 000ft AL</u> T GND	Permanently Active as in ENR 5
WMD231	Artillery Firing Range	<u>2 000ft AL</u> T GND	Permanently Active

SPECIAL NOTE :-

1. WEATHER BALLOONS

BALLOONS WILL BE RELEASED FOR MET OBSERVATION AT THE CENTRE FOR CLIMATE RESEARCH SINGAPORE, UPPER AIR OBSERVATORY (012025N 1035317E), BEARING 244° MAG AND DISTANCE 1.5NM FROM SOUTHERN END OF PAYA LEBAR RWY 02.

- (I) BALLOONS WILL BE RELEASED DAILY AT 2330UTC AND 1040UTC. CUT-OFF TIMINGS FOR THE RELEASE ARE AT 0030UTC AND 1230UTC RESPECTIVLEY. RATE OF ASCENT IS 320M PER MIN. MAX HGT OF BALLOON 115 000FT (35 000M). THE BALLOON, UNCOLOURED AND 162CM IN DIAMETER, IS ATTACHED WITH RADIOSONDE EQUIPMENT. IT WILL BURST 1.5 TO 2HRS AFTER RELEASE AND RADIOSONDE EQUIPMENT WILL DECSEND WITHIN 60NM RADIUS.
- (II) A BALLOON WILL BE RELEASED BETWEEN 2330UTC AND 0030UTC ON EITHER THE 3rd OR 4th WEEK OF THE MONTH. RATE OF ASCENT IS 320M PER MIN. MAX HGT OF BALLOONS IS 115 000FT (35 000M). THE BALLOON, UNCOLOURED AND 191CM IN DIAMETER, IS ATTACHED WITH OZONESONDE/RADIOSONDE EQUIPMENT AND PARACHUTE. IT WILL BURST 1.5 TO 2HR AFTER RELEASE.

2. AEROMODELLING AND KITE FLYING

(A) GENERAL WARNING

- i) PILOTS FLYING AT LOW ALTITUDES SHOULD WATCH OUT FOR POSSIBLE HAZARDS SUCH AS MODEL AIRCRAFT AND KITES, ESPECIALLY WHEN FLYING NEAR PARKS AND OPEN GROUND.
- ii) THE LOCATION OF SOME OF THE PARKS IN SINGAPORE WHERE KITE AND AERO MODEL FLYING MAY OCCUR ARE SHOWN ON ENR 3.4-5. PILOTS SHOULD NOTE THAT THE CHART AT ENR 3.4-5 DOES NOT SHOW ALL THE PARKS IN SINGAPORE AND THAT HAZARDS SUCH AS KITE FLYING AND AERO MODEL FLYING MAY TAKE PLACE AT PARKS AND OPEN GROUND NOT INDICATED IN ENR 3.4-5.
- iii) ACCORDING TO THE SINGAPORE AIR NAVIGATION ORDER, 1985, KITE FLYING AND AERO MODEL FLYING ARE NOT PERMITTED ABOVE 200ft OR WITHIN 5km OF AN AERODROME. HOWEVER, PILOTS ARE ADVISED TO LOOK OUT FOR SUCH HAZARDS AT ALL TIMES AS MEMBERS OF THE PUBLIC MAY INADVERTENTLY FLY KITES OR AERO MODELS ABOVE THE HGT OF 200ft OR WITHIN 5km OF AN AERODROME.

In Transit Channel

* AEROBATICS IS PROHIBITED IN LIGHT AIRCRAFT TRAINING AREAS A, B and C.





ENR 5.2 MILITARY EXERCISE AND TRAINING AREAS

1. LIGHT AIRCRAFT TRAINING AREAS

1.1 The airspaces designated as Light Aircraft Training Areas are for Local Flying and Training purposes. Flights are to be conducted during DAYLIGHT hours and in VMC ONLY. The Training Areas are uncontrolled airspaces. It will be the responsibility of pilots to maintain adequate separation with other aircraft including those operating in the Seletar and Sembawang aerodrome circuits. All aircraft are to operate strictly within the designated areas and not to stray out of the areas or intrude into adjacent controlled airspaces.

1.2 Aerobatics and test flights are prohibited in Light Aircraft Training Areas A, B and C.

1.3 The provision of FIS is the responsibility of Paya Lebar Approach. However, due to the nature of training operations carried out, position and altitude of aircraft will not be made available. The only information that can be provided to pilots will be the number of REPORTED aircraft within the areas concerned.

1.4 On receipt of the relevant information, it shall be the responsibility of the pilot to decide whether his intended flight can be carried out safely in view of the prevailing air traffic.

1.5 To enable Paya Lebar Approach to maintain an accurate record of aircraft operating in the areas and to disseminate up-to-date information, all pilots must report entering and leaving the Training Areas to Paya Lebar Approach.

1.6 Pilots of all aircraft operating within the areas are required to keep a listening watch on the appropriate Paya Lebar Approach VHF/RT control frequency 127.7 MHz.

1.7 All flights in the Training Areas are to be conducted on Singapore QNH. This value can be obtained from Paya Lebar Approach.

1.8 In the interest of flight safety, aircraft operating in Light Aircraft Training Area A are advised to make a broadcast on the controlling frequency specifying their callsign and position when climbing or descending through 2,000ft.

	Upper Limit	Bomarks
Name and Lateral limits	Lower Limit	Time of Act
1	2	3
LIGHT AIRCRAFT TRAINING AREA A		
(Training and Local Flying)	4 500ft ALT	# Above Transit Channel
All the airspace contained within the boundaries	GND	(see chart ENR 3.5-3)
bounded by the following:		@ Closest Visual Beference Point
012650N 1034619E	3 500ft ALT	(see chart ENR 5.1-9)
@ (Woodlands Customs Checkpoint) (a)	2 000ft ALT#	
	N 4	Daylight hour and in VMC only
012249N 1034540E	Maximum	
@ (cross-road junction of Upper Bukit Timan Road	4 000ft	
and Bukit Falijang Road/Grida Chu Kang Road) (b)	4 00011	
012100N 1034654E		
@ (Bukit Timah) (c)		
012222NI 1025016E		
@ (Mayflower Garden) (d)		
012327N 1034922E		
@ (Sembawang ATZ bdry) and along the bdry of		
Sembawang ATZ (e)		
012714N 1034752F		
@ (Admiralty Road West/Attap Valley Road) (f)		
012650N 1034619E		
@ (woodiands Customs Checkpoint) (a)		

Name and Lateral limits	Upper Limit Lower Limit	Remarks Time of Act
1	2	3
LIGHT AIRCRAFT TRAINING AREA A (EAST)		
012423N 1034714E (m)	4 500ft ALT	To enable aircraft on ILS for landing into WSSL to
thence along the boundary of Sembawang ATZ to	GND	carry out missed approach safely and efficiently, Light Aircraft Training Area A would be temporarily
012327N 1034922E (e)	3 500ft ALT	segregated into Area A (East) and Area A (West).
012232N 1035016E (d)	2 00011 AL 1#	When instructed, all aircraft operating in Light Aircraft Training Area A are to vacate the Area A
012133N 1034807E (k)	Maximum Usable ALT:	(East) and operate only in Area A (West) or operate in the other Light Aircraft Training Areas B or C.
012423N 1034714E (m)	4 000ft	Whenever there is an aircraft on ILS for landing into
LIGHT AIRCRAFT TRAINING AREA A (WEST)		WSSL, Light Aircraft Training Area A (East) will
012650N 1034619E (a)	4 500ft ALT	temporarily be designated as Class D airspace to
012714N 1034752E (f)	GND	aircraft.
there a leng the boundary of Cambouran ATZ to	3 500ft ALT	
there along the boundary of Sembawang ATZ to	2 000ft ALT#	
012423N 1034714E (m)	Maximum	
012133N 1034807E (k)	Usable ALT: 4 000ft	
012100N 1034654E (c)		
012249N 1034540E (b)		
012650N 1034619E (a)		
LIGHT AIRCRAFT TRAINING AREA B		
 (High Flying Training Ops) The area includes the airspace above Seletar CTR A, Sembawang ATZ, parts of Paya Lebar CTR and Light Aircraft Training Area A and is contained within the following: 012650N 1034619E @ (Woodlands Customs Checkpoint) (a) 	10 500ft ALT 4 500ft ALT Maximum Usable ALT: 10 000ft	
012205N 1034910E @ (Eastern Edge of Pierce Reservoir) (j)	Minimum Usable ALT:	
012232N 1035016E @ (Mayflower Garden) (d)	5 000ft	
012227N 1035158E @ (Seletar Hill Estate) (i)		
012537N 1035319E @ (East of Seletar Airfield) (h)		
012727N 1034921E @ (Canberra/Admiralty Rd) (g)		
012650N 1034619E @ (Woodlands Customs Checkpoint) (a)		

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	1	
	Upper Limit	Bemarks
Name and Lateral limits	Lower Limit	Time of Act
1	2	3
LIGHT AIRCRAFT TRAINING AREA C		
012650N 1034619E	10 500ft	The minimum flight altitude over Light Aircraft
012249N 1034540E	4 500ft	Training Area C is 11,000ft.
012100N 1034654E		
012205N 1034910E		
012650N 1034619E	Maximum	
	Usable ALT:	
	10 000ft	
	Minimum	
	Usable ALT:	
	5 000ft	
LOW FLYING OPERATIONS		
Helicopter Operations		All aircraft intending to operate within this area are
		to contact Natuna Radio on 9025KHz, 122.1MHz
Extensive low flying operations mainly by nelicopter		or 118.1MHz for traffic information.
Operate during daylight hours within the		
the South China Soa Corridor between the	GND/SEA	
longitudes 105°F and 110°F and the Indonesian		
Mainland.		

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

1 AERO MODELLING AND KITE FLYING

1.1 General Warning

- 1.1.1 Pilots flying at low altitudes should watch out for possible hazards such as model aircraft and kites, especially when flying near parks and open ground.
- 1.1.2 The location of some of the parks in Singapore where kite and aero model flying may occur are shown in chart ENR 3.4-5. Pilots should note that chart ENR 3.4-5 does not show all the parks in Singapore and that hazards such as kite flying and aero model flying may take place at parks and open ground not indicated in chart ENR 3.4-5.
- 1.1.3 According to the Singapore Air Navigation Order, kite flying and aero model flying are not permitted above 200ft or within 5km of an aerodrome. However, pilots are advised to look out for such hazards at all times as members of the public may inadvertently fly kites or aero models above the height of 200ft or within 5km of an aerodrome.

\leftarrow 2 AIRCRAFT OPERATIONS PROHIBITED OVER THE TERRITORY OF SINGAPORE

2.1 Owing to the high concentration of built-up areas, severe airspace limitations and intense low flying aircraft operations, flights by the following aircraft types are prohibited over the territory of Singapore: Aircraft principally designed for the purpose of sports or recreation, commonly referred to as home-built, ultralight, microlight, hang-glider and such others, even though they may have a valid Certificate of Registration or a Certificate of Airworthiness.

← 3 SEARCHLIGHT DISPLAY / LASER SHOWS - PAYA LEBAR CTR

3.1 BTN 1200-1215 and 1330-1345 daily searchlight display and laser shows will take place at 011658N 1035138E (within Paya Lebar CTR). Additional show time will be BTN 1500-1515 on FRI and SAT. Danger Height UNL.

← 4 UNMANNED AIRCRAFT OPERATIONS - PAYA LEBAR CTR

4.1 Unmanned aircraft operations may take place up to 200ft AMSL at Paya Lebar CTR and within the following coordinates: 011828.092N 1034706.884E, 011831.855N 1034726.944E, 011734.453N 1034758.093E, 011720.214N 1034727.096E, 011754.341N 1034657.173E.

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AIP Singapore		AD 0.6-3 03 JAN 2019
WSSS AD 2.24	CHARTS RELATED TO AN AERODROME	AD 2.WSSS-40
WSSL	SINGAPORE / SELETAR	
WSSL AD 2.1	AERODROME LOCATION INDICATOR AND NAME	AD 2.WSSL-1
WSSL AD 2.2	AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA	AD 2.WSSL-1
WSSL AD 2.3	OPERATIONAL HOURS	AD 2.WSSL-1
WSSL AD 2.4	HANDLING SERVICES AND FACILITIES	AD 2.WSSL-2
WSSL AD 2.5	PASSENGER FACILITIES	AD 2.WSSL-2
WSSL AD 2.6	RESCUE AND FIRE FIGHTING SERVICES	AD 2.WSSL-2
WSSL AD 2.7	SEASONAL AVAILABILITY - CLEARING	AD 2.WSSL-2
WSSL AD 2.8	APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA	AD 2.WSSL-3
WSSL AD 2.9	SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS	AD 2.WSSL-3
WSSL AD 2.10	AERODROME OBSTACLES	AD 2.WSSL-9
WSSL AD 2.11	METEOROLOGICAL INFORMATION PROVIDED	AD 2.WSSL-9
WSSL AD 2.12	RUNWAY PHYSICAL CHARACTERISTICS	AD 2.WSSL-10
WSSL AD 2.13	DECLARED DISTANCES	AD 2.WSSL-10
WSSL AD 2.14	APPROACH AND RUNWAY LIGHTING	AD 2.WSSL-11
WSSL AD 2.15	OTHER LIGHTING, SECONDARY POWER SUPPLY	AD 2.WSSL-11
WSSL AD 2.16	HELICOPTER LANDING AREA	AD 2.WSSL-12
WSSL AD 2.17	ATS AIRSPACE	AD 2.WSSL-12
WSSL AD 2.18	ATS COMMUNICATION FACILITIES	AD 2.WSSL-13
WSSL AD 2.19	RADIO NAVIGATION AND LANDING AIDS	AD 2.WSSL-14
WSSL AD 2.20	LOCAL TRAFFIC REGULATIONS	AD 2.WSSL-15
<u>1</u>	LOCAL FLYING RESTRICTIONS:	AD 2.WSSL-15
<u>2</u>	TEST/TRAINING FLIGHTS	AD 2.WSSL-15
<u>3</u>	WRONG APPROACHES AND LANDINGS OF AIRCRAFT BOUND FOR SELETAR AERODROME AND SEMBAWANG MILITARY AERODROME	AD 2.WSSL-15
WSSL AD 2.21	NOISE ABATEMENT PROCEDURES	AD 2.WSSL-16
WSSL AD 2.22	FLIGHT PROCEDURES	AD 2.WSSL-18
<u>1</u>	PROCEDURES FOR ARRIVALS INTO SELETAR AERODROME	AD 2.WSSL-18
<u>2</u>	DEPARTURES FROM SELETAR AERODROME	AD 2.WSSL-20
WSSL AD 2.23	ADDITIONAL INFORMATION	AD 2.WSSL-21
<u>1</u>	BIRD CONCENTRATION IN THE VICINITY OF THE AIRPORT	AD 2.WSSL-21
<u>2</u>	HELICOPTER CROSSING SELETAR NORTHERN EXTENDED CENTRELINE	AD 2.WSSL-21
WSSL AD 2.24	CHARTS RELATED TO SELETAR AIRPORT	AD 2.WSSL-22
<u>WSAP</u>	PAYA LEBAR	
WSAP AD 2.1	AERODROME LOCATION INDICATOR AND NAME	AD 2.WSAP-1
WSAP AD 2.2	AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA	AD 2.WSAP-1
WSAP AD 2.3	OPERATIONAL HOURS	AD 2.WSAP-1
WSAP AD 2.4	HANDLING SERVICES AND FACILITIES	AD 2.WSAP-2
WSAP AD 2.5	PASSENGER FACILITIES	AD 2.WSAP-2
WSAP AD 2.6	RESCUE AND FIRE FIGHTING SERVICES	AD 2.WSAP-2
WSAP AD 2.7	SEASONAL AVAILABILITY - CLEARING	AD 2.WSAP-2
WSAP AD 2.8	APRONS, TAXIWAYS AND CHECK LOCATIONS DATA	AD 2.WSAP-2
WSAP AD 2.9	SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS	AD 2.WSAP-3
WSAP AD 2.10	AERODROME OBSTACLES	AD 2.WSAP-5
WSAP AD 2.11	METEOROLOGICAL INFORMATION PROVIDED	AD 2.WSAP-6

	AIP Singapore
RUNWAY PHYSICAL CHARACTERISTICS	AD 2.WSAP-6
DECLARED DISTANCES	AD 2.WSAP-6
APPROACH AND RUNWAY LIGHTING	AD 2.WSAP-7
OTHER LIGHTING, SECONDARY POWER SUPPLY	AD 2.WSAP-7
[NIL] HELICOPTER LANDING AREA	NIL
ATS AIRSPACE	AD 2.WSAP-7
ATS COMMUNICATION FACILITIES	AD 2.WSAP-8
RADIO NAVIGATION AND LANDING AIDS	AD 2.WSAP-8
LOCAL TRAFFIC REGULATIONS - DESIGNATION OF PAYA LEBAR AIRPORT AS AN ALTERNATE AD FOR SINGAPORE CHANGI AIRPORT	AD 2.WSAP-9
INTRODUCTION	AD 2.WSAP-9
MANNING OF PAYA LEBAR AIRPORT	AD 2.WSAP-9
OPERATIONAL SERVICES	AD 2.WSAP-9
PASSENGER CLEARANCE	AD 2.WSAP-9
SECURITY	AD 2.WSAP-9
AIRCRAFT STAND ALLOCATION	AD 2.WSAP-10
AIRCRAFT REFUELLING	AD 2.WSAP-10
GROUND OPERATIONS	AD 2.WSAP-10
FULL EMERGENCY/CRASH PROCEDURE	AD 2.WSAP-10
METEOROLOGICAL AND AERONAUTICAL INFORMATION SERVICE	AD 2.WSAP-10
ATC SERVICE OUTSIDE STIPULATED OPERATING HOURS	AD 2.WSAP-10
[NIL] NOISE ABATEMENT PROCEDURES	NIL
FLIGHT AND GROUND PROCEDURES	AD 2.WSAP-10
DEPARTURE AND ARRIVAL PROCEDURES	AD 2.WSAP-10
STANDARD INSTRUMENT DEPARTURES	AD 2.WSAP-10
STANDARD ARRIVALS	AD 2.WSAP-10
ADDITIONAL INFORMATION	AD 2.WSAP-11
OUTDOOR LIGHT AND WATER SHOW	AD 2.WSAP-11

WSAT TENGAH WSAT AD 2.1 AERODROME LOCATION INDICATOR AND NAME

WSAT AD 2.1	AERODROME LOCATION INDICATOR AND NAME	AD 2.WSAT-1
WSAT AD 2.2	AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA	AD 2.WSAT-1
WSAT AD 2.3	OPERATIONAL HOURS	AD 2.WSAT-1
WSAT AD 2.4	HANDLING SERVICES AND FACILITIES	AD 2.WSAT-1
WSAT AD 2.5	PASSENGER FACILITIES	AD 2.WSAT-2
WSAT AD 2.6	RESCUE AND FIRE FIGHTING SERVICES	AD 2.WSAT-2
WSAT AD 2.7	SEASONAL AVAILABILITY - CLEARING	AD 2.WSAT-2
WSAT AD 2.8	APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA	AD 2.WSAT-2
WSAT AD 2.9	[NIL] SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS	NIL
WSAT AD 2.10	AERODROME OBSTACLES	AD 2.WSAT-2
WSAT AD 2.11	[NIL] METEOROLOGICAL INFORMATION PROVIDED	NIL
WSAT AD 2.12	RUNWAY PHYSICAL CHARACTERISTICS	AD 2.WSAT-3
WSAT AD 2.13	DECLARED DISTANCES	AD 2.WSAT-3
WSAT AD 2.14	APPROACH AND RUNWAY LIGHTING	AD 2.WSAT-3
WSAT AD 2.15	OTHER LIGHTING, SECONDARY POWER SUPPLY	AD 2.WSAT-3
WSAT AD 2.16	[NIL] HELICOPTER LANDING AREA	NIL
<u>WSAT AD 2.17</u>	ATS AIRSPACE	AD 2.WSAT-4

CHARTS RELATED TO PAYA LEBAR AIRPORT

AD 2.WSAP-11

WSAP AD 2.12

WSAP AD 2.13

WSAP AD 2.14

WSAP AD 2.15

WSAP AD 2.16

WSAP AD 2.17

WSAP AD 2.18 WSAP AD 2.19

WSAP AD 2.20

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WSAP AD 2.21

WSAP AD 2.22

WSAP AD 2.23

WSAP AD 2.24

WSSS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Singapore Changi (WSSS)
2	Hours of service	H24
3	Office responsible for TAF preparation Periods of validity	Singapore Changi (WSSS) 12, 30
4	Type of landing forecast, Interval of issuance	TREND
5	Briefing/consultation provided	Р
6	Flight documentation, Language used	Charts or Tabular forms, English
7	Charts and other information available for briefing or consultation	S, U, P
8	Supplementary equipment available for providing information	HRPT: High Resolution Picture Transmission APT: Automatic Picture Transmission MDWR: MET Doppler Weather Radar MAINT: Second WED of every month BTN 0200-0900 ALTN period: THU following the second WED.
9	ATS units provided with information	Singapore ACC, Singapore RCC
10	Additional information	Tel: 65422837 (MET Office)

WSSS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY	Strength (PCN) and surface of RWY and SWY	THR coordinates (THR Geoid Undulation)	THR elevation and highest elevation of TDZ of precision APCH RWY
1	2	3	4	5	6
02L	023.02°	4000 M x 60 M	72/F/B/W/U Grooved Bituminous concrete	012056.27N 1035838.82E (10.24 M)	6.66 M 6.23 M
20R (Threshold displaced by 740m southwards)	203.02°	4000 M x 60 M	72/F/B/W/U Grooved Bituminous concrete	012233.95N 1035920.06E (10.25 M)	4.01 M 4.31 M
02C	023.03°	4000 M x 60 M	72/F/B/W/U Bituminous concrete	011943.51N 1035905.86E (10.27 M)	4.22 M 4.52 M
20C	203.03°	4000 M x 60 M	72/F/B/W/U Bituminous concrete	012143.37N 1035956.46E (10.30 M)	4.48 M 4.56 M

Slope of RWY-SWY Transverse / Longitudinal	SWY Dimensions (m)	CWY Dimensions (m)	STRIP dimensions (m)	OFZ	Remarks
7	8	9	10	11	12
RWY 02L 0.76 / 0.24%	60 X 60	270 X 150	4240 X 300		
RWY 20R 1.45 / 0.25%	60 X 60	270 X 150	4240 X 300	Voc	Scheduled closure of
RWY 02C 1.50 / 0.03%	60 X 60	60 X 150	4240 X 300	163	runways (see below)
RWY 20C 1.38 / 0.07%	60 X 60	60 X 150	4240 X 300		

Remarks (continued from above)

 Scheduled Closure of RWY 02L/20R

 1a)
 BTN 1630-2200 on every MON and THU of the month (preventive maintenance work). In the event of an emergency, RWY will be re-opened within 30 minutes.

 1b)
 BTN 0225-0240 0630-0635 1000-1005 2300-2305 daily (inspection). In the event of an emergency, RWY will be re-opened within 5 minutes.

 Scheduled Closure of RWY 02C/20C

 2a)
 BTN 1630-2200 every SUN and WED (preventive maintenance work). In the event of an emergency, RWY will be re-opened within 30 minutes.

 2b)
 BTN 0300-0315 0650-0655 1020-1025 2320-2325 daily (inspection). In the event of emergency, RWY will be re-opened within 5 minutes.

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Service Designation	Call sign	Frequency (P-Pri, S-Sec)	Hours of operation	Remarks
TWR	Singapore	118.6 MHz	H24	for TKOF/LDG.
	Tower		0000-1600	for ACFT operating on RWY 02L/20R
		118.25 MHz	0000-1600	for ACFT operating on RWY 02C/20C
	Singapore Ground	124.3 MHz	1600-0000 0000-1600	for push-back / taxiing of all aircraft for ground movement of aircraft (including towing aircraft) west of Terminal 3
		121.725 MHz	0000-1700 2100-0000	for push-back / taxiing of all aircraft for ground movement of aircraft (including towing aircraft) east of Terminal 2
		121.85 MHz	0000-1800 2300-0000	for push-back / taxiing of all aircraft for ground movement of aircraft (including towing aircraft) north of Terminal 1
		121.00 MHz	H24	for ground emergency
		122.55 MHz	H24	for push-back / taxiing of all aircraft for ground movement of aircraft (including towing aircraft) of Terminal 4
		125.65 MHz	H24	for push-back / taxiing of all aircraft for ground movement of aircraft (including towing aircraft) west of Terminal 4
	Singapore	121.65 MHz	H24	for Pre-flight check/ATC clearance
	Delivery	119.6 MHz	0030-0230 1200-1300	for issuance of ATC clearance
	Changi Tower / Changi Apron	121.9 MHz	H24	Requests for engine runs on aprons and taxiways, excluding runways, would be regulated by Changi Apron. All towing request to contact Changi Apron followed by instruction to contact respective Singapore Ground frequency for towing clearance. All personnel operating the radio station on board an aircraft that is on the ground in Changi Airport should possess the Aircraft Radio Operator Approval (AROA) or other equivalent certification.
D-ATIS	Singapore Changi Airport Information	128.6 MHz	H24	Data Link Service available. AP IDENT WSSS Messages comply with ARINC 623 Standards. Updating of data: H+00 to H+10 and H+30 to H+40

WSSS AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid and Variation	IDENT	Frequency	OPR Hour	Position of Transmitting Antenna Coordinates	DME Transmitting Antenna Elevation / Remarks
1	2	3	4	5	6 & 7
SINJON DVOR/DME	SJ	113.5 MHz CH82X	H24	011319.28N 1035120.08E	201° MAG 14.5km from THR RWY 02 (Paya Lebar). Antenna HGT: 194ft AMSL. Coverage 200NM. EM: F1. Maintenance period: Third Thursday of every month between 0200-0600
TEKONG DVOR/DME	VTK	116.5 MHz CH112X	H24	012455.36N 1040120.17E	023° MAG 6.4km from THR RWY 20C (Singapore Changi). Antenna HGT: 150ft AMSL. Coverage 200NM. EM: F1 Maintenance Period: Third Friday of every month between 0200-0600
RWY 20C ILS LLZ	ICC	109.7MHz	H24	011932.48N 1035901.21E	Located 368m (1207ft) from THR RWY 02C, along RWY centreline. Course width 3.38°. EM: A0/A2.

Type of aid and Variation	IDENT	Frequency	OPR Hour	Position of Transmitting Antenna Coordinates	DME Transmitting Antenna Elevation / Remarks
1	2	3	4	5	6 & 7
RWY 20C ILS GP	-	333.2MHz	H24	012131.70N 1035955.79E	Located 338m (1109ft) from THR RWY 20C on left side of RWY, 120m (394ft) from RWY centreline. GP angle 3°. HGT of ILS Reference Datum: 17m (56ft). EM: A0/A2.
RWY 20C ILS DME	ICC	CH34X	H24	012131.70N 1035955.79E	DME co-located with GP. EM: P9.
RWY 20C ILS MM	-	75MHz	H24	012212.17N 1040008.60E	Located 960m (3150ft) from THR RWY 20C along extended centreline of RWY. No back beam.
RWY 02C ILS LLZ	ICE	108.3MHz	H24	012154.39N 1040001.14E	Located 368m (1207ft) from THR RWY 20C, along RWY centreline. Course width 3.38°. EM: A0/A2.
RWY 02C ILS GP	-	334.1MHz	H24	011952.09N 1035913.75E	Located 338m (1109ft) from THR RWY 02C on left side of RWY, 120m (394ft) from RWY centreline. GP angle 3°. HGT of ILS Reference Datum: 17m (56ft). EM: A0/A2.
RWY 02C ILS DME	ICE	CH20X	H24	011952.09N 1035913.75E	DME co-located with GP. EM: P9.
RWY 02C ILS MM	-	75MHz	H24	011915.04N 1035853.83E	Located 945m (3100ft) from THR RWY 02C along extended centreline of RWY. No back beam.
RWY 20R ILS LLZ	ICH	108.9MHz	H24	012045.23N 1035834.17E	Located 368m (1207ft) from THR RWY 02L, along centreline of the RWY. Course width 3.38°. EM: A0/A2.
RWY 20R ILS GP	-	329.3MHz	H24	012225.59N 1035912.29E	Located 330m (1083ft) from displaced THR RWY 20R on right side of the RWY, 120m (394ft) from RWY centreline. GP angle 3°. HGT of ILS Reference Datum: 17m (56ft). EM: A0/A2.
RWY 20R ILS DME	ICH	CH26X	H24	012225.59N 1035912.29E	DME co-located with GP. RWY 20R ILS DME not available beyond 15 degrees west of RWY 20R centreline below 2500ft. EM: P9.
RWY 20R ILS MM	-	75MHz	H24	012307.51N 1035934.24E	Located 1122m (3681ft) from displaced THR RWY 20R, along centreline of the RWY.
RWY 02L ILS LLZ	ICW	110.9MHz	H24	012307.03N 1035934.03E	Located 1105m (3625ft) from displaced THR RWY 20R, along centreline of RWY. Course width 2.81°. EM:A0/A2.
RWY 02L ILS GP	-	330.8MHz	H24	012108.35N 1035838.86E	Located 343m (1125ft) from THR RWY 02L on left side of RWY, 143m (469ft) from RWY centreline. GP angle 3°. HGT of ILS Reference Datum: 17m (56ft). EM:A0/A2.
RWY 02L ILS DME	ICW	CH46X	H24	012108.35N 1035838.86E	DME co-located with GP. EM:P9.
RWY 02L ILS MM	-	75MHz	H24	012027.54N 1035826.68E	Located 957m (3140ft) from THR RWY 02L along extended centreline of RWY. No back beam.

AIP Singapore



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Changes : New aircraft stands 481 to 487, Taxilane S6 and Taxiway S7 added. 02R Airfield Lighting Control Centre and iFERRET Towers along Runway 2 added. Coordinates and elevation of Aircraft Stand C16 revised. Elevations of Aircraft Stands 461 to 469 at South Apron revised.

AD-2-WSSS-ADC-2 3 JAN 2019

AIP AMDT 01/2019

INS COORDINATES FOR AIRCRAFT STANDS AND PRE-FLIGHT ALTIMETER CHECK LOCATIONS

LOCATION STAND NR NORTH LAT EAST LONG ELEVATION **T3 SOUTH APRON** 4.65m (15.26f 4.66m (* 4.79m (15.72ft) 4.86m (15.94ft) 5.02m (16.47ft) 5.04m (16.54ft) 5.25m (17.22ft) 5.38m (17.65ft) A10 A11 A14 A15 46m (17 91f A16 51m (18 08f 23m (17.16ft 37m (17.62ft A18 A19 5.40m (17.) A20 A2 45m (17.88ft 01 20 57 10 5.49m (18.01ft) T3 NORTH APRON 103 59 08 4.82m (15.81ft) 4.68m (15.35ft 4.65m (15.26ft 1,75m (15,58ft) 4.80m (15.75ft 4.96m (16.27ft 01 21 37.65 103 59 13.93 4.97m (16.31ft) 01 21 39.94 01 21 42.19 01 21 44.47 5.09m (16.70ft 103 59 15 20 5.10m (16.73ft) 103 59 17.1 T1 WEST APRON 1 21 46 7 1 48 8 15m (16.90ft) 5.08m (16.67ft) 4.89m (16.04ft) 5.01m (16.44ft T1 CENTRAL APRON 1 21 47 42 4.86m (15.94ft) 5.03m (16.50ft) 4.99m (16.37ft) 01 21 44 54 .02m (16.47ft) .06m (16.60ft) 1 97m (16 31fl 4 99m (16 37ft) **T1 EAST APRON** 103 59 32.89 103 59 32.83 .09m (16.70ft) 01 21 38.77 5.13m (16.83ft) 103 59 32.84 01 21 40.30 01 21 42.77 .07m (16.63ft)

01 21 42.00

01 21 43.45

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01 21 24.15 01 21 25.57 01 21 27.20

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103 59 29.06

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103 59 29.96

103 59 30,96

103 59 30.86

103 59 30.91

103 59 31.89

5,15m (16,89ft)

5.12m (16.79ft)

5.21m (17.09ft)

5.14m (16.86ft)

5.08m (16.67ft)

4.93m (16.17ft)

4.97m (16.31ft)

4.98m (16.34ft)

4.68m (15.35ft)

4 71m (15 45ft)

4.78m (15.68ft)

4.75m (15.58ft)

5.04m (16.54ft)

5.07m (16.63ft)

5.09m (16.70ft)

5.10m (16.73ft)

5.08m (16.67ft)

5.08m (16.67ft)

5.07m (16.62ft)

5.03m (16.48ft

5.12m (16.80ft)

5.08m (16.67ft)

D41 D42

D42L

D44

D46 D47

D48

D49

E12

E20

E22

E24

E24R

E26

E27

E27L

E27R

T2 NORTH APRON

D42R

INS COORDINATES FOR AIRCRAFT STANDS AND PRE-FLIGHT ALTIMETER CHECK LOCATIONS

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
T2 CENTRAL APRON	E1 E2 E3 E4 E5 E6 E7	01 21 20.02 01 21 19.28 01 21 18.44 01 21 18.10 01 21 19.56 01 21 21.22 01 21 22.48	103 59 25.58 103 59 27.30 103 59 29.27 103 59 31.70 103 59 33.72 103 59 35.93 103 59 37.46	4.91m (16.11f 4.90m (16.08f 4.82m (15.81f 4.80m (15.75f 4.90m (16.08f 4.84m (15.88f 4.73m (15.52f
	F30 F31 F32 F33 F34 F35 F355 F355 F35R F35R F36	01 21 14.71 01 21 13.87 01 21 13.03 01 21 11.30 01 21 08.98 01 21 06.60 01 21 06.06 01 21 06.96 01 21 04.34	$\begin{array}{c} 103 \ 59 \ 23.33 \\ 103 \ 59 \ 25.30 \\ 103 \ 59 \ 27.26 \\ 103 \ 59 \ 28.54 \\ 103 \ 59 \ 28.96 \\ 103 \ 59 \ 29.55 \\ 103 \ 59 \ 30.13 \\ 103 \ 59 \ 30.13 \\ 103 \ 59 \ 29.05 \\ 103 \ 59 \ 29.67 \end{array}$	4.92m (16.14f 4.91m(16.11f 4.85m (15.91f 4.91m (16.11f 4.92m (16.14f 4.91m (16.14f 4.74m (15.55f 5.04m (16.54f 4.82m (15.81f
T2 SOUTH APRON	F37 F40 F41 F42	01 20 59.83 01 21 05.62 01 21 03.19 01 21 00.61	103 59 27.87 103 59 25.34 103 59 25.58 103 59 25.96	4.75m (15.58f 4.85m (15.91f 4.82m (15.81f 4.72m (15.49f
	F50 F52 F52L F54 F56 F56R F56R F58 F59 F59L F59R F60	$\begin{array}{c} 01 \ 21 \ 10.69 \\ 01 \ 21 \ 08.51 \\ 01 \ 21 \ 07.82 \\ 01 \ 21 \ 09.04 \\ 01 \ 21 \ 09.04 \\ 01 \ 21 \ 03.96 \\ 01 \ 21 \ 03.96 \\ 01 \ 21 \ 03.96 \\ 01 \ 21 \ 03.96 \\ 01 \ 21 \ 03.96 \\ 01 \ 21 \ 03.96 \\ 01 \ 21 \ 03.96 \\ 01 \ 20 \ 59.41 \\ 01 \ 20 \ 59.93 \\ 01 \ 20 \ 59.93 \\ 01 \ 20 \ 56.91 \end{array}$	$\begin{array}{c} 103 \ 59 \ 21.32 \\ 103 \ 59 \ 20.40 \\ 103 \ 59 \ 20.62 \\ 103 \ 59 \ 20.62 \\ 103 \ 59 \ 19.40 \\ 103 \ 59 \ 18.48 \\ 103 \ 59 \ 18.18 \\ 103 \ 59 \ 18.70 \\ 103 \ 59 \ 17.47 \\ 103 \ 59 \ 16.55 \\ 103 \ 59 \ 16.78 \\ 103 \ 59 \ 16.78 \\ 103 \ 59 \ 16.78 \\ 103 \ 59 \ 15.50 \end{array}$	5.03m (16.50f 5.11m (16.93f 5.08m (16.93f 5.22m (17.13f 5.30m (17.39f 5.42m (17.78f 5.34m (17.52f 5.49m (18.50f 5.64m (18.60f 5.67m (18.30f 5.60m (18.37f 5.77m (18.93f
EAST REMOTE APRON	200 200L 200R 201 202 202L 202R 202R 203	01 20 47.83 01 20 46.91 01 20 48.35 01 20 49.99 01 20 52.34 01 20 51.65 01 20 52.87 01 20 54.52	103 59 11.67 103 59 11.92 103 59 11.89 103 59 12.62 103 59 13.57 103 59 13.28 103 59 13.79 103 59 14.47	6.23m (20.44f 6.29m (20.64f 6.18m (20.28f 5.96m (19.55f 5.94m (19.49f 5.76m (18.90f 5.73m (18.80f 5.92m (19.42f
SOUTH-EAST REMOTE APRON	205 206 207 208 209	01 20 43.91 01 20 46.08 01 20 47.91 01 20 49.48 01 20 51.06	103 59 17.06 103 59 17.98 103 59 18.88 103 59 19.54 103 59 20.21	4.77m (15.65f 4.76m (15.62f 4.74m (15.55f 4.74m (15.55f 4.75m (15.58f
NORTH REMOTE APRON	I 300 301 302 303 304 305 306 307 308 309 310	$\begin{array}{c} 01 \ 22 \ 06.95 \\ 01 \ 22 \ 05.21 \\ 01 \ 22 \ 05.21 \\ 01 \ 22 \ 03.55 \\ 01 \ 22 \ 02.84 \\ 01 \ 22 \ 02.84 \\ 01 \ 22 \ 02.14 \\ 01 \ 22 \ 02.14 \\ 01 \ 22 \ 02.14 \\ 01 \ 22 \ 03.65 \\ 01 \ 21 \ 58.96 \\ 01 \ 21 \ 58.96 \\ 01 \ 21 \ 58.92 \\ 01 \ 21 \ 58.74 \ 58.74 \ 5$	$\begin{array}{c} 103 \ 59 \ 22.67 \\ 103 \ 59 \ 24.69 \\ 103 \ 59 \ 31.40 \\ 103 \ 59 \ 33.06 \\ 103 \ 59 \ 33.06 \\ 103 \ 59 \ 34.71 \\ 103 \ 59 \ 36.42 \\ 103 \ 59 \ 40.36 \\ 103 \ 59 \ 41.35 \\ 103 \ 59 \ 43.17 \\ 103 \ 59 \ 44.96 \end{array}$	4.53m (14.86f 4.93m (16.17f 4.97m (16.31f 5.35m (17.55f 5.30m (17.55f 5.30m (17.59f 5.16m (16.93f 5.16m (16.93f 5.16m (16.60f 5.06m (16.60f 4.74m (15.55f
NORTH-EAST REMOTE APRON	400 401 402 403 404	01 21 38.71 01 21 40.98 01 21 42.85 01 21 44.37 01 21 45.45	103 59 40.14 103 59 41.10 103 59 41.89 103 59 42.53 103 59 42.98	4.31m (14.14f 4.31m (14.14f 4.30m (14.11f 4.29m (14.07f 4.20m (13.78f
WEST CARGO APRON	502 503 504 506 507 508 507 508 511 512 514 514 514 516 516 516 517 517R	$\begin{array}{c} 01 \ 22 \ 22.23 \\ 01 \ 22 \ 24.98 \\ 01 \ 22 \ 27.26 \\ 01 \ 22 \ 9.54 \\ 01 \ 22 \ 31.81 \\ 01 \ 22 \ 34.11 \\ 01 \ 22 \ 34.11 \\ 01 \ 22 \ 39.12 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 41.37 \\ 01 \ 22 \ 51.9 \ 51.9 \ 51.$	$\begin{array}{c} 103 \ 59 \ 31.62 \\ 103 \ 59 \ 32.78 \\ 103 \ 59 \ 33.74 \\ 103 \ 59 \ 34.70 \\ 103 \ 59 \ 35.66 \\ 103 \ 59 \ 35.66 \\ 103 \ 59 \ 37.61 \\ 103 \ 59 \ 38.76 \\ 103 \ 59 \ 38.76 \\ 103 \ 59 \ 40.18 \\ 103 \ 59 \ 41.09 \\ 103 \ 59 \ 42.92 \\ 103 \ 59 \ 43.20 \\ 103 \ 59 \ 43.20 \\ 103 \ 59 \ 43.20 \\ 103 \ 59 \ 43.20 \\ 103 \ 59 \ 43.25 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.25 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 43.80 \\ 103 \ 59 \ 44.35 \\ \end{array}$	4.35m (14.27f 4.29m (14.07f 4.29m (14.07f 4.32m (14.17f 4.38m (14.30f 4.29m (14.30f 4.29m (14.30f 4.29m (13.42f 4.19m (13.75f 4.22m (13.85f 4.24m (13.91f 4.26m (13.94f 4.36m (14.30f 4.09m (13.43f 4.09m (13.29f 3.95m (12.98f 3.96m (12.98f

INS COORDINATES FOR AIRCRAFT STANDS AND PRE-FLIGHT ALTIMETER CHECK LOCATIONS

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
EAST CARGO APRON	600 600L 600R 601 602 603 604 605	$\begin{array}{c} 01 \ 22 \ 14.12 \\ 01 \ 22 \ 13.28 \\ 01 \ 22 \ 14.58 \\ 01 \ 22 \ 16.52 \\ 01 \ 22 \ 18.80 \\ 01 \ 22 \ 21.15 \\ 01 \ 22 \ 23.46 \\ 01 \ 22 \ 25.19 \end{array}$	$\begin{array}{c} 103 \ 59 \ 48.10 \\ 103 \ 59 \ 48.27 \\ 103 \ 59 \ 48.81 \\ 103 \ 59 \ 49.27 \\ 103 \ 59 \ 49.27 \\ 103 \ 59 \ 51.02 \\ 103 \ 59 \ 51.09 \\ 103 \ 59 \ 52.75 \end{array}$	4.25m (13.94ft) 4.22m (13.83ft) 4.15m (13.60ft) 4.27m (14.01ft) 4.30m (14.11ft) 4.29m (14.07ft) 4.31m (14.14ft) 4.27m (14.01ft)
EAST SERVICE APRON	606 609	01 22 10.00 01 22 12.95	103 59 52.53 103 59 55.04	2.43m (7.97ft) 2.91m (9.55ft)
ACEHUB	611 612	01 22 22.14 01 22 24.50	104 00 02.87 104 00 02.87	4.01m (13.16ft) 3.91m (12.83ft)
SOUTH APRON	461 462 462R 463L 463L 463R 464 465 466 467 468 467 468 469 481 482 483 484 485 486 487		$\begin{array}{c} 103 \ 58 \ 52.75 \\ 103 \ 58 \ 50.37 \\ 103 \ 58 \ 50.37 \\ 103 \ 58 \ 51.02 \\ 103 \ 58 \ 49.71 \\ 103 \ 58 \ 47.76 \\ 103 \ 58 \ 47.72 \\ 103 \ 58 \ 47.20 \\ 103 \ 58 \ 47.20 \\ 103 \ 58 \ 45.05 \\ 103 \ 58 \ 45.05 \\ 103 \ 58 \ 45.73 \\ 103 \ 58 \ 45.73 \\ 103 \ 58 \ 45.73 \\ 103 \ 58 \ 45.96 \\ 103 \ 58 \ 32.56 \\ 103 \ 58 \ 34.84 \\ 103 \ 58 \ 34.84 \\ 103 \ 58 \ 34.84 \\ 103 \ 58 \ 35.41 \\ 103 \ 58 \ 35.98 \\ \end{array}$	5.28m (17.32ft) 5.75m (18.86ft) 5.71m (18.73ft) 5.97m (19.59ft) 5.82m (19.10ft) 5.82m (19.10ft) 4.98m (16.34ft) 5.01m (16.44ft) 5.01m (16.44ft) 5.01m (16.44ft) 5.00m (16.41ft) 5.22m (17.13ft) 5.22m (17.13ft) 5.22m (17.13ft) 5.22m (17.13ft) 5.22m (17.13ft) 5.22m (17.13ft) 5.22m (17.13ft) 5.22m (17.13ft)
T4 APRON	G1 G2 G4 G5 G6 G7 G9 G11 G12 G15 G16 G18 G19 G19 G19 G19 G19 G20 G20 G21 G21 G21 G21 C21 C21 C21 C21 C21 C21 C21 C21 C21 C	$\begin{array}{c} 01 \ 20 \ 07.58\\ 01 \ 20 \ 10.18\\ 01 \ 20 \ 10.18\\ 01 \ 20 \ 11.48\\ 01 \ 20 \ 12.77\\ 01 \ 20 \ 12.77\\ 01 \ 20 \ 15.70\\ 01 \ 20 \ 15.70\\ 01 \ 20 \ 15.70\\ 01 \ 20 \ 19.60\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 22.20\\ 01 \ 20 \ 23.15\\ 01 \ 20 \ 32.65\\ 01 \ 20 \ 32.65\\ 01 \ 20 \ 32.65\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.77\\ 01 \ 20 \ 32.64\\ 01 \ 20 \ 32.64\\ 01 \ 20 \ 33.99\\ 01 \ 20 \ 35.24\\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 35.20\ 01 \ 20 \ 20 \ 20 \ 20 \ 20 \ 20 \ 2$	$\begin{array}{c} 103 \ 59 \ 00.97 \\ 103 \ 59 \ 01.52 \\ 103 \ 59 \ 02.07 \\ 103 \ 59 \ 02.07 \\ 103 \ 59 \ 02.07 \\ 103 \ 59 \ 03.17 \\ 103 \ 59 \ 03.17 \\ 103 \ 59 \ 03.17 \\ 103 \ 59 \ 03.17 \\ 103 \ 59 \ 05.12 \\ 103 \ 59 \ 05.12 \\ 103 \ 59 \ 05.12 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 06.77 \\ 103 \ 59 \ 06.77 \\ 103 \ 59 \ 06.77 \\ 103 \ 59 \ 07.31 \\ 103 \ 59 \ 08.41 \\ 103 \ 59 \ 08.41 \\ 103 \ 59 \ 08.96 \\ 103 \ 59 \ 08.96 \\ 103 \ 59 \ 08.96 \\ 103 \ 59 \ 08.96 \\ 103 \ 59 \ 08.96 \\ 103 \ 59 \ 11.26 \\ 103 \ 59 \ 09.25 \\ 103 \ 59 \ 11.26 \\ 103 \ 59 \ 09.26 \\ 103 \ 59 \ 09.66 \\ 103 \ 59 \ 06.65 \\ 103 \ 59 \ 06.61 \\ 103 \ 59 \ 06.10 \\ 103 \ 59 \ 04.98 \\ 103 \ 59 \ 04.98 \\ 103 \ 59 \ 04.98 \\ 103 \ 59 \ 04.98 \\ 103 \ 59 \ 04.98 \\ 103 \ 59 \ 04.98 \\ 103 \ 59 \ 03.49 \end{array}$	3.95m (12.96ft) 3.95m (12.96ft) 3.95m (12.96ft) 3.94m (12.93ft) 3.94m (12.93ft) 3.93m (12.89ft) 3.85m (12.63ft) 3.85m (12.63ft) 3.85m (12.66ft) 3.84m (12.66ft) 3.84m (12.66ft) 3.84m (12.57ft) 3.82m (12.57ft) 3.82m (12.57ft) 3.88m (12.57ft) 3.88m (12.57ft) 3.88m (12.57ft) 3.88m (12.57ft) 3.88m (12.57ft) 3.88m (12.57ft) 4.05m (13.12ft) 4.05m (14.30ft) 4.56m (14.96ft) 4.57m (14.83ft) 4.55m (14.83ft) 4.55m (14.83ft)

RESTRICTIONS ON TAXIWAYS

1) Pilots are advised to apply minimum thrust when

i) turning into TWY A1, A3, A4 and Taxilane A5 while taxiing either northwards or southwards on Taxilane A6, and ii) thereafter when taxiing along TWY A1 up to and including the TWY A7/A1 junction. This is in view of apron activities at aircraft stands D40, D41, D47, D48, D49, E22, E24, E27 and E28.

- 2) TWY SA can only be used by aircraft with maximum wingspan 65m. TWY SA is a one-way live TWY for aircraft taxiing into SASCO hangar via RWY 02L. Only tow-out operation is allowed from SASCO hangar into TWY SA and RWY 02L.
- 3) TWY NC3 (between TWY WA and TWY A6) can only be used by aircraft with maximum wingspan 65m.
- 4) Taxiway centreline along TWY EP between TWY B1 and B3 offset eastward by 2.5m away from aircraft stands E7 and F36.
- 5) Pilots are advised to apply minimum thrust when turning into taxiway WA from taxilane V6.
- 6) Taxilane U4 (behind aircraft stands A18 to A21) can only be used by aircraft with maximum wingspan 61m.
- 7) Taxilane N1 (behind aircraft stands C16 to C19 and between TWY NC2 and TWY NC3), Taxilane N2 and Taxilane N3 (behind aircraft stands D35 to D38 and between TWY NC2 and TWY NC3) can only be used by aircraft with maximum wingspan 65m.
- 8) Taxilane A6 (behind aircraft stands E20 to E24) and Taxilane C6 (behind aircraft stands F50 to F54) can only be used by aircraft with maximum wingspan 65m (towing and pushback exempted).
- 9) Taxilane L5 can only be used by aircraft with maximum wingspan 36m.
- 10) TWY L8, L9 and L10 can only be used by aircraft with maximum wingspan 65m.
- 11) Pilots are advised to exercise caution when taxiing near Taxilane L5, L8, L9 and L10.
- 12) Pilots are advised to apply speed limit of 20 knots when taxiing along TWY SOUTH CROSS 1 and SOUTH CROSS 2.
- 13) Pilots turning aircraft into aircraft stand A2 or aircraft stand B2 are advised to wait for any aircraft holding at Taxilane V6, at the inner cul-de-sac portion of the terminal building to vacate this portion before turning into aircraft stand A2 or aircraft stand B2.
- 14) TWY M, M4, M5, M6 and M7 are solely for use by Republic of Singapore Air Force (RSAF) aircraft.
- 15) TWY located western side of RWY 02L/20R, between TWY M5 and TWY M6 is solely for use by Republic of Singapore Air Force (RSAF) aircraft.

RADIO ALTIMETER OPERATIONS AREA

A radio altimeter operating area is established in the pre-threshold area of Runway 02L/20R and Runway 02C/20C. The size of the radio altimeter operating area is 300m length and 120m width.

AIRCRAFT STANDS WITH SAFEGATE AIRCRAFT DOCKING GUIDANCE SYSTEM.

TOTAL AIRCRAFT PARKING POSITIONS : 218





PAPI 3° (MEHT)*					
Pilot's eye height over the	RUNWAY				
threshold when the following PAPI lights come in view.	02L	20R	02C	20C	
2 White lights and 2 Red lights	20.0m	20.0m	19.8m	19.8m	
3 White lights and 1 Red light	24.0m	22.6m	23.7m	23.7m	
4 White lights	26.4m	25.0m	26.2m	26.2m	
*MEHT: Minimum Eye Height Over the Threshold. Note: Aircraft with eye-to-wheel height greater than 8 metres are advised to fly with 2 white lights and 2 red lights visible so as to achieve sufficient wheel clearance.					

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WSSL — SINGAPORE / SELETAR

WSSL AD 2.1 AERODROME LOCATION INDICATOR AND NAME

WSSL — SINGAPORE / SELETAR

WSSL AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP Coordinates and Site at AD	012501.04N 1035203.52E
2	Direction and distance from (city)	006°, 14.6km from city centre (The Fullerton Hotel, Singapore)
3	Elevation/Reference Temperature	14 M (46ft) / 33.5 °C
4	Geoid Undulation	9.78 M
5	MAG VAR	0°26' E (2015)
6	AD Administration, Address, Telephone, Telefax, AFS	Address: CHANGI AIRPORT GROUP (S) PTE LTD SELETAR AIRPORT 21 Seletar Aerospace Road 1 Singapore 797405 TEL: (65)64812909, Fax: (65)64833044 (AIS) TEL: (65)64812893, Fax: (65)64831656 (Control Tower) TEL: (65)64815077, 97533361 FAX: (65)64831754 (Airside Operations) AFS: WSSLYDYX
7	Types of Traffic Permitted	IEB and VEB
8	Remarks	 a. Scheduled Closure Periods for RWY 03/21: see AIP section WSSL AD 2.12 item 12 i). b. Night flight restriction for noise abatement purpose (see AIP section WSSL AD 2.21). c. PPR for aircraft not equipped with RTF. d. A subsonic jet aircraft, unless otherwise exempted, is not permitted to operate in Singapore unless it possesses a noise certificate stating that it meets the noise standards of ICAO Annex 16, Volume 1, Chapter 3, or equivalent. The noise certificate may also take the form of a suitable statement contained in another document approved by the State of Registry of the aircraft. e. Direct transit area. Overnight transit in Singapore city. f. All arriving and departing aircraft are required to appoint a licensed Ground Handling Agent (GHA). List of Seletar GHAs can be downloaded from URL - http://www.seletarairport.com/ground-handling-agents-at-seletar-airport.html

WSSL AD 2.3 OPERATIONAL HOURS

1	Aerodrome Administration	H24	5	ATS Reporting Office	H24
2	Customs and Immigration	H24	6	MET Briefing Office	H24
3	Health and Sanitation	H24	7	Air Traffic Services	H24
4	AIS Self-Briefing Office	H24	8	Apron Control Office	H24

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WSSL AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo Handling Facilities	Provided by handling agent.
2	Fuel / Oil Types	AVGAS 100LL, JET A1
3	Fuelling Facilities / Capacity	SUN/MON to THU/FRI BTN 2330-1400; SAT, SUN and Public holidays BTN 0030-0930 Contact during operating hours: TEL: (65)68538320 (Operations Room) Contact after operating hours: TEL: (65)91130816 (H24 Operations Mobile) FAX: (65)64839246 Group email: GX-SAV-Seletar-Operations24by7@shell.com PPP link: http://www.shell.com/business-customers/aviation/ppp.html
4	Hangar space for visiting aircraft	By arrangement with handling agent.
5	Repair facilities for visiting aircraft	By arrangement with handling agent.
6	Remarks	NIL

WSSL AD 2.5 PASSENGER FACILITIES

1	Hotels	NIL	
2	Restaurants	Public area of terminal building	
3	Transportation	Handling agent provides its own transport service for passengers and crew between airport and city. Public buses and private hired taxis are available at airport terminal.	
4	Medical Facilities	NIL	
5	Bank and Post Office	NIL	
6	Tourist Office	NIL	
7	Remarks	Internet address : <u>http://www.seletarairport.com</u> / for airport and flight information, facilities and services.	

WSSL AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT7 (No facilities for foaming of runways).	
2	Rescue equipment	Adequately provided as recommended by ICAO.	
3	Capability for removal of disabled aircraft	Up to B757-200. Contact Seletar Airside Operations at: +65 64815077 or +65 97533361	
4	Remarks	All Airport Emergency Service personnel are trained in rescue and fire-fighting as well as medical first-aid.	

WSSL AD 2.7 SEASONAL AVAILABILITY - CLEARING

The aerodrome is available throughout the year

WSSL AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	Surface: Bituminous concrete (aircraft stand C7) Strength: PCN44/F/C/X/T Surface: Concrete (all other aircraft stands) Strength: PCN41/R/C/W/T	
2	Taxiway width, surface and strength	Width: Surface: Bitun Strength: PCN	23 M (75.5ft), 18 M (59.1ft)TWY EC4, EC5 AND EC6 8 M (26.2ft) TWY WS1 and WS2 ninous concrete J44/F/C/X/T
3	Remarks : NIL	•	

WSSL AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

	SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS			
1	Use of aircraft stand ID signs, TWY guidelines and visual docking/parking guidance system of aircraft stands	Taxiing guidance signs at all intersections with TWY and RWY at all holding positions. Guidelines at apron. Nose-in guidance at aircraft stands.		
2 RWY and TWY markings and LGT		<u>RWY LGT:</u> refer to page WSSL AD 2-5 for details. RWY Turn Pad LGT / Markings: Only AVBL at THR RWY 03. Yellow turnpad centreline.		
		TWY LGT: TWY Edge LGT: Blue LGT, inset, elevated and omni-directional. TWY Centreline LGT: Green LGT, fixed. Intermediate Holding Position LGT: Yellow LGT, fixed, unidirectional. TWY markings: Yellow TWY centreline.		
		The fixed green taxiway centreline lights and fixed unidirectional yellow intermediate holding position lights shall be switched on between sunset and sunrise or during periods of poor visibility. ATC will continue to verbalise the taxi route as per current practice. Pilots shall continue to adhere strictly to the taxi clearances issued by ATC at all times.		
		In the event that the fixed green taxiway centreline lights and fixed unidirectional yellow intermediate holding position lights become unserviceable, pilots shall taxi following the single continuous yellow taxiway centreline markings and intermediate holding position markings (single broken line laid across the entire width of the taxiway) as per mode of operations during VMC daylight hours.		
		MARKING AIDS: Threshold, touchdown zone, centreline stripes and RWY designation. RWY width outline from bituminous concrete surface by white lines.		
		AIMING POINT MARKINGS: RWY 03: coincident with PAPI origin located 311.6m from THR respectively. RWY 21: coincident with PAPI origin located 232.8m from THR respectively.		

	SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS			
3	Stop Bars	Stop Bars: Red LGT across taxiways W1, W2, W3, E1, E2, E3 and E4, flushed with TWY surface and are supplemented with elevated RWY guard LGT at the sides. By default, red stop bar lights remain on unless deselected by the runway controller. When deselected, these stop bar lights will re-activate automatically after 45 seconds. Pilots shall not cross any lighted red stop bar lights. Pilots and drivers shall enter / cross the runway only when both the following conditions are met: The crew have a) received positive ATC clearance to enter / cross the runway or taxiway, and b) observed that the red stop bar lights are turned off. Crash Alarm Stop Bars: Red LGT across junctions of EP, EC4 and EH2 TWY, flushed with TWY surface. (Note to pilots and tow-crew: Slow down when taxiing / towing on TWY EP between TWY EC4 and abeam the Control Tower. Keep a lookout for emergency vehicles that may cross the taxiway to respond to emergency on the BWY.)		
4	Remarks	a. Aircraft operators/ground handlers shall be responsible for the safe and smooth operations of aircraft at the aircraft stands.		
		b. To enhance airside safety, all aircraft larger than Code A (i.e. up to but not including 15m wingspan) shall be marshalled into the aircraft stands.		
		c. Arriving aircraft will be assigned an aircraft stand. A ground handler shall marshall the aircraft into the aircraft stand.		
		d. A ground handler shall be at the aircraft stand when the aircraft is ready to depart. When the pilot signals that he is ready to taxi, the ground handler shall ensure that the area around the aircraft is clear before marshalling the aircraft out of the aircraft stand.		
		e. Only Code A aircraft, Code B aircraft, aircraft type Global Express (GLEX), Global 5000 (GL5T), Global Express XRS (GLEX), Fokker 50 (F50), Fokker 70 (F70), Fokker 100 (F100), Gulfstream 500 (GLF5), Gulfstream 550 (GLF5), ATR 42-500 (AT45), ATR 42-600 (AT46), ATR 72-500 (AT75), DASH 7 (DHC7)and Falcon 7X (FA7X) are allowed to self-power out from aircraft stands C1, C2, C3, C4, C5 and C6.		
		f. Aircraft at stand C1 shall self-power out towards the north only.		
		g. Aircraft at stand C6 shall self-power towards the south only.		
		h. Aircraft at stands C2, C3, C4 and C5 are allowed to self-power out towards the south or the north.		
		i. Aircraft can self-power in from the north as well as the south via TWY WA.		
		j. All personnel, tow tugs and equipment shall be cleared from the aircraft stand and red chevron markings on the adjacent aircraft stands before self-power out can commence.		
		k. Aircraft with wingspan larger than 28.35m are not allowed to park at aircraft stand C7. Refuelling will not be allowed at aircraft stand C7.		
		I. Aircraft stands D50, D51, D52, D53, D54, D55 and D56 will be used for tow operations only.		
		m. Only aircraft type ATR72 and Code C and below aircraft with wingspan less than 27.2m can be parked at aircraft stands C60, C61 and C62.		

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS			
Aircraft Stands	Pushback / Tow Forward Procedures	Phraseology Used By SELETAR GROUND	
C1/C2/C3/ C4/C5/C6	PUSHBACK The aircraft (on idle thrust) shall be pushed back onto TWY WA to face North (or South) until its nose wheel is at the intersection of the aircraft stand lead-in line and the centreline of TWY WA. The aircraft may breakaway from there.	Pushback approved, to face North (or South)	
	TOW FORWARD The aircraft (on idle thrust) shall be towed forward onto the centreline of TWY WP to face North (or South) until its nose wheel is at the intersection of the aircraft tow-out line and TWY WP centreline. The aircraft may breakaway from there.	Tow forward approved, to face North (or South)	
C7	PUSHBACK		
	The aircraft (on idle thrust) shall be pushed back onto TWY WA to face North (or South) until its nose wheel is at the intersection of the aircraft stand lead-in line and the centreline of TWY WA. The aircraft may breakaway from there.	Pushback approved, to face North (or South)	
C50/C51/C52	PUSHBACK		
	The aircraft (on idle thrust) shall be pushed back onto TWY ES to face North (or South) until its nose wheel is at the intersection of the aircraft stand lead-in line (or pushback line) and the centreline of TWY ES. The aircraft may breakaway from there.	Pushback approved, to face North (or South)	
D1/D2	PUSHBACK AND TOW FORWARD TO TWY WP		
(for B757-200 and C130)	The tow-crew shall request from Seletar Ground (vehicular) on 122.9MHz for departure pushback approval. Upon receiving the approval, the aircraft shall be pushed back onto TWY WA to face South until its nose wheel is at the intersection of the aircraft stand lead-in line and TWY WA centreline. The aircraft shall then be towed forward to TWY WP until the tow tug towing the aircraft is at the intermediate holding position short of TWY W1 (see chart AD 2.WSSL-6) or TWY W3 (see chart AD 2.WSSL-7). Once the tow tug is disengaged, the aircraft will request start up approval from Seletar Ground (aircraft) on 121 6MHz.	 Tow approved to intermediate holding position on TWY WP short of TWY W1 to face North; or Tow approved to intermediate holding position on TWY WP short of TWY W3 to face South 	
	(ancial) of 121.00012. The ancial shall bleakaway northinele.		
	FOR LANDED B757-200/C130 AIRCRAFT EXITING VIA TWY W1 After landing, B757-200/C130 aircraft exiting TWY W1 shall stop when its nose is at the information marking "B757/C130 HOLD FOR TOW" on TWY W1. The aircraft shall be on tow starting from this point onwards until they park inside the aircraft stands.	Not applicable	
	FOR LANDED B757-200/C130 AIRCRAFT EXITING VIA TWY W2 After landing, B757-200/C130 aircraft exiting TWY W2 shall stop when its nose is at the information marking "B757/C130 HOLD FOR TOW" on TWY W2. The aircraft shall be on tow starting from this point onwards until they park inside the aircraft stands.	Not applicable	
	FOR LANDED B757-200/C130 AIRCRAFT EXITING VIA TWY W3		
	After landing, B757-200/C130 aircraft exiting TWY W3 shall stop when its nose is at the information marking "B757/C130 HOLD FOR TOW" on TWY W3. The aircraft shall be on tow starting from this point onwards until they park inside the aircraft stands.	Not applicable	
D50 /D51/ D52/D53/ D54/D55/ D56	The tow crew shall request from Seletar Ground (vehicular) on 122.9MHz for pushback approval. Upon receiving the approval, the aircraft shall be pushed back onto TWY EN to face South until its nose wheel is at the intersection of the aircraft stand pushback line and TWY EN centreline. The aircraft shall then be towed from there.	Pushback approved to face South	

Aircraft Stands	Pushback / Tow Forward Procedures	Phraseology Used By SELETAR GROUND
C60/C61	Pushback to face North	
	The aircraft (on idle thrust) shall be pushed back onto TWY EC to face North until its nose wheel is abeam the centreline of aircraft stand C62. The aircraft may break away from there.	Pushback approved, to face North.
	Pushback to face East	
	The aircraft (on idle thrust) shall be pushed back onto TWY EC2 to face East until its nose wheel is at the "EOP C60/C61" position. The aircraft may break away from there.	Pushback approved, to face East.
C62	Pushback to face North	
	The aircraft (on idle thrust) shall be pushed back onto TWY EC to face North until its nose wheel is at the "EOP C62" position. The aircraft may break away from there.	Pushback approved, to face North.
	Pushback to face South	
	The aircraft (on idle thrust) shall be pushed back onto TWY EC to face South until its nose wheel is abeam the centreline of aircraft stand C61. The aircraft may break away from there.	Pushback approved, to face South.




WSSL AD 2.10 AERODROME OBSTACLES

	IN APPROA	CH / TKOF AREAS	IN CIRC	IN CIRCLING AREA AND AT AD		
RWY/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates		
а	b	С	а	b		
RWY 03 TKOF RWY 21 APCH	1) Mast HGT ranging from 98ft AMSL and above in shipping channel	Approximately 1525m from THR RWY 21	1) Power station chimney 407ft AMSL	012656.8N1035251.7E		
	2) Steel structure 300ft AMSL	012709.78N1035318.74E	2) Radio mast 217ft AMSL	012258.8N1035113.8E		
	3) Chimney 276ft AMSL	012700.18N1035321.93E	3) Radio masts 184ft AMSL	012454N 1035300E		
	4) Chimney 273ft AMSL	012651.81N1035330.23E	4) Radar tower 177ft AMSL marked/LGTD	012537.79N1035306.74E (reclaimed land north of RWY)		
	5) Chimney 286ft AMSL	012646.99N1035331.46E	5) Mobile cranes 420ft AMSL	within area bounded by 012711.78N1035223.74E 012729.78N1035223.74E 012729.78N1035247.74E 012656.78N1035247.74E		
	6) Mobile cranes 330ft AMSL	within area bounded by 012627.24N1035313.00E 012607.79N1035333.95E 012614.23N1035337.07E 012623.93N1035316.02E	6) Glide Path Antenna 72ft AMSL	012512N1035215E		
	7) Silo, 342 ft AMSL, mark and lighted	012659.1N1035325.3E				
Obstacles	in the approach /	TKOF areas, circling area and at the ae	rodrome are shown	on the AOC and VAC		

WSSL AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Seletar
2	Hours of service	H24
3	Office responsible for TAF preparation, Periods of validity	Singapore Changi, 30 hours
4	Type of landing forecast, Interval of issuance	METAR, SPECI and AD warning of adverse weather (H24). TREND NIL.
5	Briefing/consultation provided	NIL
6	Flight documentation, Language(s) used	Tabular forms, English
7	Charts/other information available for briefing or consultation	NIL
8	Supplementary equipment available for providing information	MDWR (Met Doppler Weather Radar) Maintenance Period: Second WED of every month between 0200-0900. In case of bad weather, THU following the second WED between 0200-0900.
9	ATS units provided with information	NIL
10	Additional information	TEL: 64815978 (MET Office)

WSSL AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (m)	Strength (PCN) and Surface of RWY and SWY	THR coordinates (THR GEOID Undulation)	THR Elevation
1	2	3	4	5	6
03	033.33°	1836 x 46	44/F/C/X/T Bituminous Concrete	012430.846N 1035143.791E (9.78M)	14 M
21	213.33°	1836 x 46	44/F/C/X/T Bituminous Concrete	012520.791N 1035216.425E (9.78M)	5 M

RWY End Elevation	Highest Elevation of Touchdown Zone	CWY Dimensions	STRIP Dimensions (m)	OFZ	Remarks (continued below)
7	8	9	10	11	12
5 M	13 M	60 M x 150 M	1056 M x 150 M	Not	RESA RWY 03 - 240m X 92m
14 M	10 M		1950 IVI X 150 IVI	applicable	RESA RWY 21 - 240m X 150m

12 Remarks:

i) Scheduled closure period for RWY 03/21

a. BTN 1600-2300 on first and third FRI of every month or the following FRI if the first or third FRI is a public holiday. RWY CLSD to all TFC except medevac and EMERG flights. Advance notice of 30 minutes is required for EMERG reopening of RWY.

b. BTN 0500-0515, 1030-1045, 1600-1615 and 2300-2315 daily for RWY inspection. Aircraft to expect delay.

ii) A lighted RWY turn pad with centreline marking is provided at the threshold of RWY 03 which is able to serve aircraft up to B757-200.

iii) Orange frangible posts are positioned along the boundary 90m on either sides of the RWY centreline demarcating the boundary for grass cutting and other maintenance works.

iv) Wind Direction Indicators (WDIs) are located at both northern and southern ends of the RWY.

WSSL AD 2.13 DECLARED DISTANCES

RWY Designator	TORA(m)	TODA(m)	ASDA(m)	LDA(m)	Remarks
1	2	3	4	5	6
03	1836	1896	1836	1836	NIL
21	1836	1896	1836	1836	NIL

WSSL AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	THR LGT Colour WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN	RWY CL LGT,LEN, spacing, colour, INTST	RWY edge LGT LEN, spacing colour, INTST	RWY End LGT Colour WBAR	SWY LGT LEN Colour
1	2	3	4	5	6	7	8	9
03	Simple APCH LGT: 4 rows of barettes of 3 LGT each and 1 crossbar of 13 LGT. White, elevated, uni -directional APCH LGT and white, omni-directional CGL on top of elevated APCH LGT. Simple TDZ LGT: 2 pairs white, inset, uni-directional LGT.	Green with THR IDENT LGT	PAPI 3° (both sides of RWY) 2 white 2 red LGT (17.720m) 3 white 1 red LGT (20.323m) 4 white LGT (22.927m). ACFT with eye-to-wheel HGT greater than 6.3m are ADZ to fly with 2 white 2 red LGT visible so as to achieve sufficient wheel CLR.	NIL	NIL	White with yellow on last 600m of either end. Elevated, omni- directional and brilliancy controlled.	Red	NIL
21	APCH LGT: 1 row of inset APCH LGT of 4 LGT and 4 rows of barettes of 4 LGT each. White inset uni-directional APCH LGT and white omni-directional CGL on top of white, elevated uni-directional APCH LGT. Simple TDZ LGT: 2 pairs white, inset, uni-directional LGT. BWY 21 THB and BWY	Green with THR IDENT LGT	PAPI 3.5° (both sides of RWY) 2 white 2 red LGT (17.720m) 3 white 1 red LGT (19.286m) 4 white LGT (20.871m). ACFT with eye-to-wheel HGT greater than 6.3m are ADZ to fly with 2 white 2 red LGT visible so as to achieve sufficient wheel CLR.	NIL	NIL	White with yellow on last 600m of either end. Elevated, omni- directional and brilliancy controlled.	Red	NIL
	RWY 21 THR and RWY	'END LGT	reinstated to inset fitting	i iii ∠ g g.	roups with a	a yap between in	e groups	-

WSSL AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 012448.000N 1035207.960E (on top of Control Tower) ALTN FLG W G EV 2.5 SEC. HN and IMC IBN: 012509.939N 1035152.143E (on top of West Substation) Flashing G 'SL' repeatedly. HN and IMC
2	LD and LGTI location Ultrasonic wind sensor location and LGT	Ultrasonic wind sensors and windsocks at ends of RWY.
3	TWY edge and centreline lighting	TWY Edge LGT: Blue, elevated and omni-directional. TWY Centreline LGT: Green , fixed. Intermediate holding position LGT: Yellow, fixed, unidirectional.
4	Secondary power supply/switch-over time	Automatic standby generator power supply available for airfield lighting.
5	Remarks	Vehicles painted yellow or displaying checkered red/white or orange/white flag at highest point of vehicle. WDI lighted.

WSSL AD 2.16 HELICOPTER LANDING AREA

1	Coordinates of THR of FATO Geoid undulation	H03 H21 012437.963N 1035152.072E 012446.046N 1035157.344E
2	FATO elevation M/FT	H03- 10.45m/34.3ft; H21 - 9.36m/30.7ft
3	FATO area dimensions, surface, strength, marking	Rectangle 297m x 21.5m, compacted turf, helicopter landing area designations, outline by concrete kerbs painted white.
4	True BRG of FATO	033.33/213.33° Direction of TKOF zones: 034°GEO / 214°GEO
5	Declared distance available	TODAH RTODAH LDAH H03 297m 297m 297m H21 297m 297m 297m
6	Approach and FATO lighting	Nil
7	Remarks	Slope of helicopter landing area (transverse/longitudinal) H03 - 1.19%/0.44% ; H21 - 0.96%/0.44%

WSSL AD 2.17 ATS AIRSPACE

1	Designation and Lateral Limits	SELETAR CTR 012703N 1035009E 012825N 1035009E 012900N 1035425E 012534N 1035454E thence along international boundary to 012556N 1035326E 012227N 1035158E 012232N 1035016E 012327N 1034922E 012607N 1035053E and thence an arc of 2NM radius (centred at position 012527N 1034856E) joining 012607N 1035053E and 012703N 1035009E SELETAB CONTROL ZONE A
		Portion of Seletar CTR within Singapore FIR is known as Seletar CTR 'A'.
		SELETAR CONTROL ZONE 'B' The part in the Kuala Lumpur FIR is known as Seletar CTR 'B' and is bounded by 012825N 1035009E, 012900N 1035425E, 012534N 1035454E thence along the Peninsular Malaysia/Singapore international boundary to 012808N 1035010E to 012825N 1035009E from GND/sea level to 3,000ft. It will be activated only with prior approval of Johor Bahru ATC. (see chart AD-2-WSSL-VFR-1).
2	Vertical Limits	SELETAR CONTROL ZONE A SFC to 4 500ft ALT Maximum Usable ALT 4 000ft
		SELETAR CONTROL ZONE B SFC to 3 000ft ALT
3	Airspace Classification	С
4	ATS Unit Call sign	SELETAR TOWER
	Language(S)	English
5	Transition Altitude	11000 FT (3,350m)
6	Remarks	NIL

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WSSL AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency P-Pri S-Sec	Hours of operation	Remarks
TWR	Seletar Tower	P118.45 MHz S130.2 MHz 270.4 MHz		
	Seletar Ground	121.6 MHz * 122.9 MHz	H24	* for vehicular movements
ACC	Singapore Radar	P123.7 MHz S127.3 MHz		For AWY B469, G334, R208, L625, L629, L635, L642, M751, M753, M758, M761, M763, M771,
		133.8 MHz	0000-1430	N884, N891 and N892
		P133.25 MHz S135.8 MHz		For AWY A457, A464, A576, B466, L762, R325 (all northbound) and R469.
		P134.2 MHz S133.35 MHz		For AWY G580, M646 and M767
		P134.4 MHz S128.1 MHz 255.4 MHz		For AWY A464, A576, G579 (all southbound), B470, G220, N875 and in area in the immediate vicinity of Singapore
				Radar Maintenance Period: Monthly - every third SAT BTN 1601-2359
	Singapore Radio	6556 kHz 11297 kHz		SEA 1. SATCOM SER AVBL SSB suppressed carrier
		5655 kHz 8942 kHz 11396 kHz	H24	SEA 2. SATCOM SER AVBL SSB suppressed carrier
		6556 kHz		SEA 3. SATCOM SER AVBL SSB suppressed carrier
APP	Singapore Approach	P120.3 MHz S124.6 MHz		TAR:a) Intermediate APCH to Singapore Changi AP and other airports in Singaporeb) DEP from all airports in Singapore
				Maintenance Period: Monthly: every first SAT BTN 1601-2359 (ASR I) and every fourth SAT BTN 1601-2359 (ASR II)
	Seletar Approach	126.025 MHz	0000-1500	TAR - Intermediate and final approach to Seletar Airport

WSSL AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid and Variation	IDENT	Frequency	OPR Hour	Position of Transmitting Antenna Coordinates	DME Transmitting Antenna Elevation / Remarks
1	2	3	4	5	6 & 7
JAYBEE NDB	JB	400 KHz (80w)	H24	012959.77N 1034241.82E	BRG 298° DIST 19.6km from ARP Seletar. Coverage 50NM. Unusable 285°-060° beyond 20NM. Bearing fluctuations greater than +/- 10° may be observed in sector 138° to 148°. EM: A0/A2
KONG KONG NDB	КК	286 KHz (70w)	H24	013117.76N 1035923.69E	BRG 049° DIST 17.7km from ARP Seletar. Coverage 50NM. Unusable 270°-010° beyond 30NM. Bearing fluctuations greater than +/- 10° may be observed in sector 048° to 052°. EM: A0/A2
SELETAR NDB	SEL	220 KHz	H24	012448.50N 1035210.16E	BRG 152° DIST 0.44km from ARP Seletar. Coverage 50NM. EM: A0/A2
RWY 21 ILS LLZ	SEL	110.3 MHz	H24	012422.38N 1035138.28E	Located 309m (1014ft) from THR RWY 03, along RWY centreline. Course width 5.71°. EM: A0/A2. Maintenance Period: First Friday of every month between 1600-2300 or second Friday if the first Friday is a public holiday.
RWY 21 ILS GP	-	335 MHz	H24	012511.78N 1035214.97E	Located 255m (837ft) from THR RWY 21 on left side of the RWY, 114m (374ft) from RWY centreline. GP angle 3.5°. HGT of ILS Reference Datum: 16.2m (53ft) EM: A0/A2
RWY 21 ILS DME	SEL	CH40X	H24	012511.78N 1035214.97E	DME co-located with GP. EM: P9

WSSL AD 2.20 LOCAL TRAFFIC REGULATIONS

1 LOCAL FLYING RESTRICTIONS:

- 1.1 Fixed-wing aircraft operations including circuit flying and training operations are restricted to the west of Seletar runway. Helicopter operations are confined to the west of Seletar runway between sunset and sunrise, subject to the restrictions in paragraph 1.3 below.
- 1.2 Circuit Heights:

Light aircraft 800ft (west of Seletar runway only);

Other aircraft 1,000ft - 1,500ft (west of Seletar runway only);

Helicopter-only area east of runway up to 600ft AGL

- 1.3 Circuit Flying and Training Operations are not permitted between 1400-2300 daily.
- 1.4 Pilots are required to keep clear of PAYA LEBAR CTR and SEMBAWANG ATZ.

2 TEST/TRAINING FLIGHTS

- 2.1 Flight notification shall be given prior to departure. Flight notification by means of RTF should be avoided.
- 2.2 For circuits and landings or flights to Light Aircraft Training Areas A, B and C, locally based operators shall submit details of their flight by electronic mail using the Seletar Test / Training Form which can be retrieved from webpage:

https://fpl-1.caasaim.gov.sg

- 2.3 For test/currency maintenance flight in the fixed-wing circuit, the operator shall contact Seletar Tower Manager, giving at least 2 days' advance notice from the date of flight. The Tower Manager will then liaise with the host slot-time operator during which the test/currency maintenance flight is to be conducted. The advance notice will enable the host slot-time operator to adjust its training programme to accommodate the flight.
- 2.4 Flight details should contain the following information:
 - a. Aircraft identification;
 - b. Name and contact number of pilot;
 - c. Number of persons on board;
 - d. ETD;
 - e. Flight duration;
 - f. Total endurance;
 - g. Area of flight (Light Aircraft Training Areas A, B or C)
- 2.5 For flights other than those classified in para 2.2 and 2.3 above, a flight plan shall be filed.
- 2.6 Light aircraft engaged in flying training shall maintain VHF communication.
- 2.7 Light aircraft flying on airways shall, in addition to radio communication apparatus, be equipped with a radio compass.
- 2.8 All fixed wing aircraft are to use the runway for take-off and landing. After landing, the pilot-in-command shall vacate the runway as soon as possible via TWY W1, W2 or W3, or in accordance with instructions from Aerodrome Control.
- 2.9 Fixed-wing circuit patterns are left hand for RWY 03 and right hand for RWY 21 (arrival and departure).
- 2.10 All light aircraft training flights shall not descend below 200ft on Seletar QNH when on final approach to land or for a touch-and-go landing unless a landing/touch-and-go clearance has been obtained from ATC. If no such clearance has been obtained from ATC by 200ft the aircraft shall break-off its approach and carry out a go-around procedure.

3 WRONG APPROACHES AND LANDINGS OF AIRCRAFT BOUND FOR SELETAR AERODROME AND SEMBAWANG MILITARY AERODROME

3.1 INTRODUCTION

3.1.1 The attention of all pilots is drawn to the existence of RSAF Sembawang Aerodrome, 3NM to the west of Seletar Aerodrome. The runway at Sembawang is orientated in almost the same direction as the runway at Seletar Aerodrome i.e. 03/21 for Seletar Aerodrome and 05/23 for Sembawang. Due to the close proximity of these two runways, pilots are cautioned against mistaking Sembawang Aerodrome for Seletar Aerodrome and thus making an inadvertent visual landing or approach to land at Sembawang.

- 3.1.2 Erroneous approaches or landings usually occurred in marginal weather conditions. In almost every instance, the prevailing weather at the time of the incident contributed towards a hasty and erroneous identification of the correct aerodrome.
- 3.1.3 There is intensive local flying at both aerodromes during the day and night. As pilot training is the major activity at both aerodromes, the risk of collision is very great if a wrong approach or landing is made at either of the two aerodromes.

3.2 POINTS TO BEAR IN MIND WHEN APPROACHING SELETAR AD OR SEMBAWANG AD

- 3.2.1 The following points are highlighted to serve as a guide to assist pilots in identifying Seletar AD or Sembawang AD and should be remembered and followed:
 - a. The runways at Seletar and Sembawang are almost identically aligned. Extra vigilance, therefore, is required when approaching either aerodrome, or when commencing an approach to land.
 - b. Make full use of available navigational and landing aids, and positively identify each aid used.
 - c. Adhere strictly to the joining instructions issued by ATC.

3.3 AERODROME CHARACTERISTICS OF SELETAR AND SEMBAWANG AERODROMES

Aeronautical Service	Seletar AD	Sembawang AD	Significant Differences and Remarks
RWY Designation	03/21	05/23	Exercise caution due to almost similar RWY alignment
Location	Adjacent to the Straits of Johor on the eastern bank of Seletar River. Seletar AD is situated APRX 3NM NW of Paya Lebar AP.	APRX 3NM west of Seletar AD and 3NM inland from the Straits of Johor	Seletar RWY commences almost from the edge of the shore. Also note that Sembawang AD is inland and not next to the sea.
RWY LGT	White/Amber RWY edge LGT	NIL	Sembawang AD has no RWY LGT
Approach LGT	Simple approach LGT available for RWY 03 approach, consisting of 4 rows of barettes and 1 crossbar (5th row). <u>RWY 03</u> - white, elevated, uni-directional approach LGT and white, omni-directional CGL on top of elevated approach LGT. Approach LGT available for RWY 21 approach, consisting of 1 row of inset approach LGT (1st row) and 4 rows of barettes. <u>RWY 21</u> - white, inset and elevated, uni-directional approach LGT and white, omni-directional CGL on top of elevated approach LGT. Simple touchdown zone LGT for both RWY 03 and RWY 21 approach consisting of 2 pairs of white, inset, uni-directional LGT	NIL	No visual approach slope indicator at Sembawang AD
IBN	Flashing Green 'SL'	Flashing R 'AG' EV 20 SEC HN and IMC	NIL
ABN	ALTN Flashing W G EV 2.5 SEC	NIL	Sembawang AD has no ABN
Parking Apron	Relatively large aircraft parking apron to the west of RWY, connected to the RWY by three taxiways	Small aircraft parking apron	Differences in size and location of the parking apron

WSSL AD 2.21 NOISE ABATEMENT PROCEDURES

← 1.1

To alleviate the problem of noise, no flights are permitted between 1400-2300, other than MEDEVAC and emergency flights.

1.2 1.3

All aircraft on AWY G579 between SINJON (SJ) and JAYBEE (JB) shall operate at/above 5,000ft.

.3 Aircraft are restricted from overflying the built-up residential areas around Seletar Airport that are bounded by the following points, at any altitude below 1,500ft (see Charts AD-2-WSSL-VAC-1, AD-2-WSSL-VAC-2, AD-2-WSSL-VAC-3 AND AD-2-WSSL-VAC-4):

POINT	COORDINATES
А	012551.0N 1035044.3E
В	012549.9N 1035059.2E
С	012522.3N 1035102.3E
D	012458.3N 1035044.4E
E	012443.4N 1035005.3E
F	012335.6N 1035006.0E
G	012324.6N 1035023.1E
Н	012237.4N 1035040.4E
I	012234.4N 1035048.7E
J	012231.1N 1035051.8E
K	012232.2N 1035016.2E
L	012315.1N 1034937.1E
М	012322.4N 1034942.2E
N	012317.5N 1034957.3E

1.4

The map below shows the location of the satellite dishes as well as the overflight restriction areas west and south of Seletar Control Zone.



- 1.5 Aircraft types which are unable to safely manoeuvre clear of the built-up residential areas are not allowed to operate at Seletar Airport. As a visual reference, pilots may wish to use the satellite dish located south of 012349.0N 1035003.7E (Lower Seletar Reservoir) as a guide when making approaches for Runway 03.
- \leftarrow 1.6 No engine run up shall be permitted between 1400-2300.

WSSL AD 2.22 FLIGHT PROCEDURES

1 PROCEDURES FOR ARRIVALS INTO SELETAR AERODROME

1.1 Introduction

- 1.1.1 Aircraft on VFR flight plan, routing via Tebrau City Mall (013259N1034748E) to Seletar shall follow the joining procedures as described in paragraph 1.2 and illustrated in charts AD-2-WSSL-VAC-1, AD-2-WSSL-VAC-2 and AD-2-WSSL-VFR-1.
- 1.1.2 Aircraft returning from Light Aircraft Training Areas shall follow the joining procedures as described in paragraph 1.3 and illustrated in charts AD-2-WSSL-VAC-1 and AD-2-WSSL-VAC-2.
- 1.1.3 Aircraft on IFR flight plan, routing via JB or KK to Seletar shall be vectored under radar for a visual approach. Paya Lebar Approach shall provide the radar service. When Paya Lebar Approach is closed, Singapore Approach shall provide the service. Unless authorised by ATC, pilots shall follow the joining procedures as described in paragraph 1.4 and 1.5. The joining procedures are illustrated in charts AD-2-WSSL-VAC-3, AD-2-WSSL-VAC-4, AD-2-WSSL-IFR-1 and AD-2-WSSL-IFR-2.
- 1.1.4 When within 5km of the aerodrome reference point, aircraft are to fly; at a manoeuvring speed of not more than 170kt unless otherwise authorised by ATC. All aircraft are required to keep well clear of Sembawang ATZ and Paya Lebar CTR.
- 1.1.5 Circuit traffic already downwind shall have priority. Arriving aircraft shall position and sequence itself accordingly, unless directed otherwise by ATC.
- 1.1.6 Pilots shall not fly east of the runway. This is due to tall buildings up to 90m (296ft) AMSL to the east of Seletar CTR (the location is depicted in charts AD-2-WSSL-VAC-1 to AD-2-WSSL-VAC-4.

1.2 Joining Procedures for VFR flights from Tebrau City Mall (013259N1034748E)

- 1.2.1 Aircraft on VFR flight plan joining Seletar CTR from East of JB Town are to descend to altitude cleared by ATC. From Tebrau City Mall (013259N1034748E) descend in VMC to altitude cleared by ATC and proceed to POINT 'X' (located 012830N 1034954E or radial 297/7DME from PU DVOR/DME) keeping clear of WMP228 and then direct to overhead the airfield.
- 1.2.2 When overhead the airfield, the joining aircraft shall make a turn overflying the runway and after passing abeam the Control Tower, commence descent as cleared to cross the upwind end of the runway at 1,500ft. Passing over the end of the runway, descend to circuit altitude as cleared by ATC. Pilots shall ensure to keep clear of Sembawang ATZ and Paya Lebar CTR and not to fly east of the runway. This is to keep clear of tall buildings up to 90m AMSL to the east of Seletar CTR. The area where the tall buildings are located is indicated in the Seletar Visual Approach Charts AD-2-WSSL-VAC-1 to AD-2-WSSL-VAC-4. Procedures are illustrated in the following charts:
 - i. AD-2-WSSL-VAC-1 : Visual Approach Chart RWY 03
 - ii. AD-2-WSSL-VAC-2 : Visual Approach Chart RWY 21
- 1.2.3 Traffic permitting and in good visibility, joining aircraft may be cleared to join directly for right base when landing on RWY 21 or turn downwind for RWY 03 from Position 'A'.

1.3 Joining Procedures from Light Aircraft Training Areas

- 1.3.1 Unless otherwise authorised by ATC, aircraft are to join overhead the airfield at 2,000ft keeping clear of Sembawang ATZ and Paya Lebar CTR.
- 1.3.2 When overhead the airfield, the joining aircraft shall make a turn to the eastern side of the runway and after passing abeam the Control Tower, commence descent as cleared to cross the upwind end of the runway at 1,500ft. Passing over the end of the runway, descend to circuit altitude as cleared by ATC. Pilots shall ensure to keep clear of Sembawang ATZ and Paya Lebar CTR and not to fly east of the runway. This is to keep clear of tall buildings up to 90m AMSL to the east of Seletar CTR. The area where the tall buildings are located is indicated in the Seletar Approach Charts AD-2-WSSL-VAC-1 to AD-2-WSSL-VAC-4. Procedures are illustrated in the following charts:

- i. AD-2-WSSL-VAC-1: Visual Approach Chart RWY 03
- ii. AD-2-WSSL-VAC-2: Visual Approach Chart RWY 21
- 1.3.3 Traffic permitting and in good visibility, joining aircraft may be cleared to join directly for right base when landing on RWY 21 or turn downwind for RWY 03 from Position 'A'.

1.4 Joining Procedures for IFR flights from KK or JB - RWY 03

1.4.1 From KK

Cross KK at or above 3,000ft. On passing KK descend in VMC to 2,000ft or altitude cleared by ATC and join downwind RWY 03.

- Straight-in-Approach
 Join downwind RWY 03 at 2,000ft (keeping clear of Sembawang ATZ). When downwind descend from 2,000ft for visual approach RWY 03, or as cleared by ATC. Pilots should have the runway in sight.
- ii. Circling Approach

Join downwind RWY 03 at 2,000ft (keeping clear of Sembawang ATZ). At end of downwind turn left and overfly the runway. When passing over Position A (north end of the runway), descend from 2,000ft to 1,500ft and turn left for downwind RWY 03. At downwind descend for a visual approach RWY 03 or as cleared by ATC. Pilots should have the runway in sight.

1.4.2 From JB

Cross JB at or above 6,000ft enroute to Point ALFA. On passing Point ALFA, descend in VMC to 2,000ft or altitude cleared by ATC. (Point ALFA is located at 013033N 1034942E or Radial 296/7 DME VTK)

i. Straight-in-approach

On passing Point ALFA, turn right for downwind RWY 03 (keeping clear of Sembawang ATZ). At downwind descend from 2,000ft for a visual approach RWY 03, or as cleared by ATC. Pilots should have the runway in sight.

ii. Circling Approach

On passing Point ALFA, turn right for downwind RWY 03 (keeping clear of Sembawang ATZ). At end of downwind, turn left and overfly the runway. Passing over Position A (north end of the runway), descend from 2,000ft to 1,500ft and turn left for downwind RWY 03. At downwind descend for a visual approach RWY 03 or as cleared by ATC. Pilots should have the runway in sight. Procedures are illustrated in the following charts:

- * AD-2-WSSL-VAC-3 : Visual Approach Chart RWY 03
- AD-2-WSSL-IFR-1 : Seletar Aerodrome joining Procedures (IFR flights) from JB and KK RWY 03

1.5 Joining Procedures for IFR flights from KK or JB - RWY 21

1.5.1 From KK

Cross KK at or above 3,000ft. On passing KK descend in VMC to 2,000ft or altitude cleared by ATC.

- i. Straight-in-Approach Join direct for a straight-in visual approach Rwy 21 descending from 2,000ft, or as cleared by ATC. Pilots should have the runway in sight.
- ii. Circling Approach

Overfly the runway at 2,000ft, or as cleared by ATC. Passing over Position A (the south-end of the runway), descend from 2,000ft to 1,500ft and turn right for downwind RWY 21 (keeping clear of Light Aircraft Training Area A and Sembawang ATZ). At downwind descend for a visual approach RWY 21 or as cleared by ATC. Pilots should have the runway in sight.

1.5.2 From JB

Cross JB at or above 6,000ft enroute to Point ALFA. On passing Point ALFA, descend in VMC to 2,000ft or altitude cleared by ATC. (Point ALFA is loc at 013033N 1034942E or Radial 296 VTK)

- Straight-in-approach On passing Point ALFA, join direct for a straight-in visual approach RWY 21 descending from 2,000ft, or as cleared by ATC (keeping clear of Sembawang ATZ).
- ii. Circling Approach

On passing Point ALFA, overfly the runway at 2,000ft. When passing over Position A (the south end of the RWY), descend from 2,000ft to 1,500ft and turn right for downwind RWY 21 (keeping clear of Light Aircraft Training Area A and Sembawang ATZ). At downwind descend for a visual approach RWY 21 or as cleared by ATC. Pilots should have the runway in sight. Procedures are illustrated in the following charts:

- * AD-2-WSSL-VAC-4 : Visual Approach Chart RWY 21
- AD-2-WSSL-IFR-2 : Seletar Aerodrome Joining Procedures (IFR flights) from JB and KK RWY 21

1.6 Holding Procedure

1.6.1 A low level holding procedure is established at SJ DVOR/DME. Suitably equipped aircraft bound for Seletar which may wish to hold for weather improvement may use this procedure (ENR 3.6-3 refers)

1.7 Approaches to Seletar Aerodrome

- 1.7.1 A deep-water shipping channel approximately 1525m from the northern threshold cuts across the extended centreline of Seletar RWY 21.
- 1.7.2 Information on the mast heights of tall vessels is relayed to ATC by Maritime and Port Authority of Singapore. ATC shall inform pilots of landing and departing aircraft of such information if the reported mast height of the vessel is above 30m.
- 1.7.3 At night ATC shall not permit landing on RWY 21 when vessels of mast height above 30m are reported.
- 1.7.4 Aircraft making approaches into Seletar are required to keep clear of Sembawang ATZ.
- 1.7.5 Aircraft are restricted from overflying built-up residential areas around Seletar Airport (charts AD-2-WSSL-VAC-1 to AD-2-WSSL-VAC-4 refer) at an altitude of below 1,500ft. Aircraft types which are unable to safely manoeuvre clear of the built-up residential areas are not allowed to operate at Seletar Airport.

2 DEPARTURES FROM SELETAR AERODROME

- 2.1 Aircraft departing Seletar on RWY 21 are required to keep clear of Sembawang ATZ.
- 2.2 The pilot-in-command or the operator of IFR flight operating out of Seletar is required to file via KK under Item 15 of the flight plan.

WSSL AD 2.23 ADDITIONAL INFORMATION

1 BIRD CONCENTRATION IN THE VICINITY OF THE AIRPORT

- 1.1 A number of varieties of birds are found in Singapore throughout the year. The larger birds commonly found in Seletar Airport includes the following:
 - Cattle egrets (weighing approximately 300g each)
 - Brahminy kites (weighing approximately 600g each)
- 1.2 There could be an increase in bird activities during the usual migratory months of September to April. During this period, migratory birds may use the airport as their feeding ground.
- 1.3 Handheld laser device, long range acoustic device and alternating amplified bird cries of distress are used for bird dispersal within Seletar Airport.

2 HELICOPTER CROSSING SELETAR NORTHERN EXTENDED CENTRELINE

- 2.1 Due to flying activities in Seletar Control Zone, all helicopters flying on Heli-route Alpha and intending to cross the northern extended centreline of Seletar Aerodrome shall obtain a positive clearance from Seletar Tower on 118.45MHz prior to crossing (see chart below).
- 2.2 For eastbound crossing, all helicopters are to hold over the western tip of Seletar Island until a clearance has been issued by Seletar Tower.
- 2.3 For westbound crossing, all helicopters are to hold on Heli-route Alpha abeam the coastal mast until a clearance has been issued by Seletar Tower.
- 2.4 The holding altitude is 200 feet or otherwise instructed by ATC.



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WSSL AD 2.24 CHARTS RELATED TO SELETAR AIRPORT

Aerodrome Chart - ICAO	AD-2-WSSL-ADC-1
Layout of Significant Aerodrome Buildings and Apron Facilities	AD-2-WSSL-ADC-2
Aerodrome Hotspots	AD-2-WSSL-ADC-3
Aerodrome Obstacle Chart (AOC) - ICAO - TYPE A - RWY 03/21	AD-2-WSSL-AOC-1
Aerodrome Obstacle Chart (AOC) - ICAO - TYPE B - RWY 03/21	AD-2-WSSL-AOC-2
Instrument Approach Chart (IAC)- ICAO - RWY 21 - SEL ILS	AD-2-WSSL-IAC-1
Visual Approach Chart (VAC) - ICAO - RWY 03	AD-2-WSSL-VAC-1
Visual Approach Chart (VAC) - ICAO - RWY 21	AD-2-WSSL-VAC-2
Visual Approach Chart (VAC) - ICAO - Joining procedures From JB and KK - RWY 03	AD-2-WSSL-VAC-3
Visual Approach Chart (VAC) - ICAO - Joining procedures From JB and KK - RWY 21	AD-2-WSSL-VAC-4
Visual Departure Chart - RWY 03	AD-2-WSSL-VDC-1
Visual Departure Chart - RWY 21	AD-2-WSSL-VDC-2
Joining Procedures - VFR Flights from JB	AD-2-WSSL-VFR-1
Joining procedures - IFR Flights from JB and KK - RWY 03	AD-2-WSSL-IFR-1
Joining procedures - IFR Flights from JB and KK - RWY 21	AD-2-WSSL-IFR-2



INS COORDINATES FOR AIRCRAFT STANDS

	STAND NR	NORTH LATITUDE	EAST LONGITUDE	ELEVATION
	A1	01 25 13.102	103 51 56.167	6.181m (20.280ft)
	A2	01 25 12.779	103 51 56.653	6.338m (20.795ft)
	A3	01 25 12.350	103 51 57.301	6.586m (21.609ft)
	CA4	01 25 12.029	103 51 57.787	6.761m (22.183ft)
	A50	01 24 51.431	103 52 05.765	7.807m (25.615ft)
	A51	01 24 51.110	103 52 06.251	7.948m (26.077ft)
	A52	01 24 50.681	103 52 06.900	8.105m (26.593ft)
	A53	01 24 50.358	103 52 07.387	8.211m (26.940ft)
	A54	01 24 50.036	103 52 07.874	8.337m (27.354ft)
	A55	01 24 48.591	103 52 06.930	8.750m (28.709ft)
	A56	01 24 48.913	103 52 06.443	8.587m (28.174ft)
	A57	01 24 49.236	103 52 05.957	8.402m (27.567ft)
	A58	01 24 49.665	103 52 05.309	8.179m (26.835ft)
	A59	01 24 49.987	103 52 04.822	8.014m (26.294ft)
	B1	01 25 11.401	103 51 55.231	6.301m (20.674ft)
	B2	01 25 10.817	103 51 56.116	6.639m (21.783ft)
	B3	01 25 10.221	103 51 57.014	6.967m (22.859ft)
	B4	01 25 09.180	103 52 00.361	7.703m (25.274ft)
	B5	01 25 08.258	103 51 59.758	7.933m (26.028ft)
	B6	01 25 07.348	103 51 59.163	8.163m (26.783ft)
	B7	01 25 04.505	103 51 57.519	8.442m (27.698ft)
	B8	01 25 03.635	103 51 56.951	8.406m (27.580ft)
	B9	01 25 02.765	103 51 56.382	8.396m (27.547ff)
	B10	01 25 01.893	103 51 55.814	8.383m (27.505ft)
	BII	01 25 01.006	103 51 55.237	8.330m (27.331ft)
	B12	01 23 00.109	103 51 54.650	8.449m (27.721ft)
	B13	01 24 59.374	103 51 54.170	8.57 Im (28.12 Ift) 8.752m (28.710ft)
	B30	01 24 43.007	103 52 00.875	8.847m (20.027#)
	B51	01 24 43 153	103 51 59 681	8.988m (29.490ft)
	B53	01 24 41 328	103 51 59 202	9 183m (30 129ft)
	B54	01 24 40 154	103 51 58 435	9 358m (30 704ft)
	B55	01 24 39 420	103 51 57 954	9 434m (30 953ft)
	B56	01 24 38 347	103 51 57 253	9 592m (31 471ft)
	B57	01 24 37.614	103 51 56.774	9.679m (31.757ft)
	B58	01 24 36.462	103 51 56.021	9.806m (32.172ft)
	B59	01 24 35.728	103 51 55.541	9.930m (32.580ft)
	B60	01 24 32.416	103 51 53.376	10.094m (33.117ft)
	B61	01 24 31.265	103 51 52.624	10.177m (33.389ft)
	B62	01 24 30.529	103 51 52.144	10.246m (33.617ft)
	B63	01 24 23.858	103 51 47.937	10.639m (34.907ft)
	C1	01 25 18.803	103 52 06.627	5.105m (16.750ft)
	C2	01 25 17.498	103 52 05.773	5.423m (17.793ft)
	C3	01 25 16.192	103 52 04.921	5.759m (18.895ft)
	C4	01 25 14.887	103 52 04.067	6.256m (20.526ft)
	C5	01 25 13.581	103 52 03.214	6.824m (22.390ft)
	C6	01 25 12.275	103 52 02.360	7.304m (23.964ft)
	C7	01 25 05.738	103 51 54.466	7.192m (23.596ft)
	C50	01 24 29.476	103 51 51.396	10.381m (34.060ft)
	C51	01 24 27.626	103 51 50.188	10.589m (34.743ft)
	C52	01 24 25.781	103 51 48.979	10.770m (35.335ft)
	C60	01 24 54.470	103 52 16.296	6.280m (20.604ft)
	C61	01 24 53.483	103 52 15.651	6.301m (20.673ft)
\rightarrow	C62	01 24 52.496	103 52 15.006	6.312m (20.709ft)
	D1	01 25 14.663	103 51 58.151	6.408m (21.025ft)
	D2	01 25 24.033	103 52 04.804	3.471m (11.388ft)
	D50	01 25 00.056	103 52 11.563	6.680m (21.916ft)
	D51	01 25 01.585	103 52 12.561	6.440m (21.129ft)
	D52	01 25 02.828	103 52 13.373	6.280m (20.604ft)
	D53	01 25 04.357	103 52 14.372	6.040m (19.816ft)
	D54	01 25 05.600	103 52 15.184	5.820m (19.094tt)
	D55	01 25 07.129	103 52 16.184	5.550m (18.209tt)
	000	UI 20 U0.3/2	103 32 10.99/	J.J∠UIII (17.454IL)



SELETAR AERODROME LAYOUT OF SIGNIFICANT AERODROME BUILDINGS AND APRON FACILITIES



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CHANGES : New Aircraft stands C60 to C62 and Runway Strip added.

AD-2-WSSL-ADC-2 3 JAN 2019

AIP AMDT 01/2019



<u>ILS RWY 21</u>

Designator	Path Term	Waypoint Name	Fly-Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Dir	Altitude	Speed (IAS)	VPA/ TCH(ft)	Navigation Spec
ILS RWY 21	IF	AKOTI (IAF)	-	-	-	-	-	A035+	-	-	RNP APCH
ILS RWY 21	TF	TODOS (IF)	-	213 (213.5)	-0.5	3.5	-	A020@	-	-	RNP APCH
ILS RWY 21	TF	BATOR (FAP/FAF)	-	213 (213.5)	-0.5	3.0	-	A020@	-	-	RNP APCH
ILS RWY 21	TF	RW21 (MAPt)	Y	213 (213.5)	-0.5	5.2	-	-	-	-3.5°/ 56	RNP APCH
ILS RWY 21	CA	-	-	213 (213.5)	-0.5	-	-	A015	160	-	RNP APCH
ILS RWY 21	DF	POPOM	-	-	-	-	-	A020-	-	-	RNP APCH
ILS RWY 21	TF	BETBA	-	028 (028.5)	-	6.8	L	A040+	-	-	RNP APCH
ILS RWY 21	TF	TATIN	-	005 (005.5)	-0.5	3.3	-	A050+	-	-	RNP APCH
ILS RWY 21	TF	AKOMA	Y	005 (005.5)	-0.5	9.0	-	A050+	-	-	RNP APCH

Waynoint	Coordinates				
waypoint	Latitude	Longitude			
AKOTI (IAF)	01° 35' 07.96" N	103° 58' 40.08" E			
TODOS (IF)	01° 32' 12.16" N	103 ° 56' 45.21" E			
BATOR (FAP/FAF)	01° 29' 41.48" N	103° 55' 06.76" E			
RW21 (MAPt)	01° 25' 20.79" N	103° 52' 16.43" E			
POPOM	01° 26' 58.95" N	103° 50' 13.80" E			
BETBA	01° 33' 02.00" N	103° 53' 31.00" E			
TATIN	01° 36' 19.53" N	103° 53' 50.48" E			
AKOMA	01° 45' 22.00" N	103° 54' 43.00" E			





AIP Singapore

AD-2-WSSL-VAC-3 3 JAN 2019









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WIDN — TANJUNG PINANG/RAJA HAJI FISABILILLAH (INDONESIA)

Note: The following sections in this chapter are intentionally left blank: AD 2.2, AD 2.3, AD 2.4, AD 2.5, AD 2.6, AD 2.7, AD 2.8, AD 2.9, AD 2.10, AD 2.11, AD 2.12, AD 2.13, AD 2.14, AD 2.15, AD 2.16, AD 2.19, AD 2.20, AD 2.21, AD 2.22, AD 2.23.

WIDN AD 2.1 AERODROME LOCATION INDICATOR AND NAME

WIDN — TANJUNG PINANG/RAJA HAJI FISABILILLAH (INDONESIA)

WIDN AD 2.17 ATS AIRSPACE

1	Designation and Lateral Limits	Tanjung Pinang North Control Zone (CTR):
		012000N 1041224E 011305N 1042029E 010942N 1043500E thence along the
		circle radius 27nm from BTM VOR/DME clockwise until 004236N 1041654E
		005315N 1040335E 010018N 1035530E 012000N 1041224E.
		Tanjung Pinang South Control Zone (CTR):
		004236N 1041654E follow the circle radius 27nm from BTM VOR/DME
		anti-clockwise until 010942N 1043500E 010342N 1050018E thence along the
		circle radius 30nm from TI NDB clockwise until 002448N 1043700E 004236N
		1041654E.
2	Vertical Limits	Tanjung Pinang North Control Zone (CTR)
		GND/WATER up to 3,000ft
		Tanjung Pinang South Control Zone (CTR)
		GND/WATER up to 6,000ft
3	Airspace Classification	C
4	ATS Unit Callsign	Tanjung Pinang Approach
5	Language(s)	English
6	Transition Altitude	11,000ft
7	Remarks	NIL

WIDN AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Callsign	Frequency	Hours of operation	Remarks
TWR	RAJA TOWER	118.95 MHz	0000-1100	TWR coordinates: 005524.59N 1043144.53E
APP	TANJUNG PINANG APPROACH	P 130.2 MHz S 119.35 MHz	H24	Radar Service

WIDN AD 2.24 CHARTS RELATED TO AN AERODROME

 SID - RWY 04/22 WEST POINT 1A/1B DEP, KIRDA 1A/1B DEP
 AD-2-WIDN-SID-1

 SID - RWY 04/22 SINGKEP 1A/1B DEP, TANGO INDIA 1A/1B DEP
 AD-2-WIDN-SID-2

 SID - RWY 04/22 TOMAN 1A/1B DEP, JITLIM 1 AD A/1B DEP
 AD-2-WIDN-SID-3

SID - RWY 04/22 TEKONG TA/TB DEP	AD-2-WIDN-SID-4
STAR - RWY 04/22 WEST POINT 1A/1B ARR, TANGO INDIA 1A/1B ARR	AD-2-WIDN-STAR-1
STAR - RWY 04/22 TOMAN 1A/1B ARR, JITLIM 1A/1B ARR	AD-2-WIDN-STAR-2
STAR - RWY 04/22 SINGKEP 1A/1B ARR, PARDI 1A/1B ARR	AD-2-WIDN-STAR-3
STAR - RWY 04/22 TEKONG 1A/1B ARR	AD-2-WIDN-STAR-4