Contact

Post:
AERONAUTICAL
INFORMATION SERVICES
Civil Aviation Authority of
Singapore,
Singapore Changi Airport,
P. O. Box 1
Singapore 918141
Tel: (65) 64227036
Fax: (65) 64410221
Email: caas_singaporeais@caas.gov.sg

eAIP

AMDT
07/2019
Effective date
05 DEC 2019
Publication date
05 DEC 2019

wp-AMDT-2019-07

1. Significant information and changes

1.1 Singapore Changi Airport

a. Updated sunrise-sunset table for the Year 2020 to Year 2024.

b. Updated Aerodrome Certificates.

1.2 Seletar Airport

a. Revised distance of the aiming point markings, glide slope of RWY 03 PAPI to 3.2 degrees and the respective distance for PAPI indication (2 white 2 red, 3 white 1 red and 4 white).

2. This amendment incorporates information contained in the listed NOTAM which is hereby superseded:

NOTAM
A3016/19 dated 21/08/19

Amended Pages

GEN 0.2-1/2: *: replace.*
GEN 0.3-1/2: *: replace.*
GEN 0.3-3/4: *: replace.*
GEN 0.3-5/6: *: replace.*
GEN 0.4-1/2: *: replace.*
GEN 0.4-3: *: replace.*
GEN 1.1-1/2: *: replace.*
GEN 2.7-1: *: replace.*
GEN 3.2-3/4: *: replace.*
GEN 3.5-1/2: *: replace.*
ENR 1.8-25/26: *: replace.*
ENR 3.1-7/8: *: replace.*
AD 1.5-1: *: replace.*
AD-2-WSSS-ADC-2: *: replace.*
AD-2-WSSS-SID-6 to 6.1: *: replace.*
AD 2.WSSL-3/4: *: replace.*
AD 2.WSSL-5/6: *: replace.*
AD 2.WSSL-13/14: *: replace.*
AD-2-WSSL-ADC-1: *: replace.*
AD-2-WSSL-ADC-2: *: replace.*
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.*

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	
02/2019	28 FEB 2019	28 FEB 2019	
03/2019	25 APR 2019	25 APR 2019	
04/2019	20 JUN 2019	20 JUN 2019	
05/2019	15 AUG 2019	15 AUG 2019	
06/2019	10 OCT 2019	10 OCT 2019	
07/2019	05 DEC 2019	05 DEC 2019	

GEN 0.3 RECORD OF CURRENT AIP SUPPLEMENTS

NR/Year	*Subject*	*AIP section(s) affected*	*Period of validity (from/to)*	*Cancellation record*
070/2016	Paya Lebar Airport - Luffer Cranes and Topless Cranes	AD	*04 AUG 2016 / 31 DEC 2019*	
026/2017	Paya Lebar Airport - Luffer Crane	AD	*10 JAN 2017 / 08 DEC 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*	
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*	
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*	
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*	
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*	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
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*	
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*	
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*	
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*	
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*	
078/2018	Paya Lebar Airport - Luffer Cranes	AD	*28 NOV 2018 / 30 DEC 2022*	
085/2018	Paya Lebar Airport - Mobile Crane	AD	*20 DEC 2018 / 31 JAN 2020*	
005/2019	Paya Lebar Airport - Topless Cranes	AD	*14 FEB 2019 / 30 JUN 2020*	
006/2019	Paya Lebar Airport - Topless Cranes and Luffer Crane	AD	*30 JAN 2019 / 09 JAN 2021*	
007/2019	Tengah Aerodrome - Topless Cranes and Luffer Crane	AD	*30 JAN 2019 / 31 JAN 2021*	
008/2019	Paya Lebar Airport - Mobile Crane	AD	*31 JAN 2019 / 31 JAN 2021*	
009/2019	Paya Lebar Airport - Luffer Cranes	AD	*01 JUN 2019 / 31 MAY 2021*	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
011/2019	Paya Lebar Airport - Mobile Crane	AD	*01 FEB 2019 / 22 DEC 2020*	
012/2019	Sembawang Aerodrome - Mobile Crane	AD	*01 FEB 2019 / 22 DEC 2019*	
014/2019	Paya Lebar Airport - Topless Cranes	AD	*01 FEB 2019 / 31 JAN 2021*	
016/2019	Singapore Changi Airport - Updated information and data for Runway 02R/20L	AD	*15 FEB 2019* PERM	
024/2019	Sembawang Aerodrome - Topless Cranes	AD	*27 MAR 2019 / 31 DEC 2019*	
025/2019	Paya Lebar Airport - Mobile Cranes	AD	*31 MAR 2019 / 31 DEC 2019*	
026/2019	Paya Lebar Airport - Luffer Crane	AD	*27 MAR 2019 / 31 JAN 2020*	
027/2019	Paya Lebar Airport - Luffer Crane	AD	*27 MAR 2019 / 30 JUN 2020*	
028/2019	Paya Lebar Airport - Topless Cranes	AD	*27 MAR 2019 / 20 MAR 2021*	
029/2019	Paya Lebar Airport - Topless Cranes	AD	*27 MAR 2019 / 20 MAR 2021*	
030/2019	Paya Lebar Airport - Luffer Crane and Topless Cranes	AD	*27 MAR 2019 / 30 JUL 2021*	
031/2019	Paya Lebar Airport - Luffer Cranes	AD	*27 MAR 2019 / 28 JAN 2022*	
032/2019	Paya Lebar Airport - Topless Cranes	AD	*27 MAR 2019 / 09 MAR 2022*	
033/2019	Paya Lebar Airport - Luffer Crane	AD	*27 MAR 2019 / 31 DEC 2022*	
034/2019	Paya Lebar Airport - Saddle Cranes	AD	*27 MAR 2019 / 31 DEC 2022*	
035/2019	Paya Lebar Airport - Luffer Crane	AD	*27 MAR 2019 / 31 DEC 2022*	
041/2019	Paya Lebar Airport - Crawler Crane	AD	*04 APR 2019 / 29 FEB 2020*	
042/2019	Paya Lebar Airport - Luffer Cranes	AD	*04 APR 2019 / 31 DEC 2020*	
043/2019	Paya Lebar Airport - Saddle Cranes	AD	*04 APR 2019 / 31 DEC 2020*	
044/2019	Paya Lebar Airport - Luffer Crane	AD	*04 APR 2019 / 13 MAR 2021*	
048/2019	Paya Lebar Airport - Topless Cranes	AD	*07 MAY 2019 / 29 APR 2020*	
049/2019	Paya Lebar Airport - Topless Cranes	AD	*07 MAY 2019 / 30 DEC 2020*	
050/2019	Paya Lebar Airport - Crawler Crane	AD	*07 MAY 2019 / 30 NOV 2020*	
051/2019	Paya Lebar Airport - Luffer Crane	AD	*07 MAY 2019 / 22 APR 2021*	
052/2019	Paya Lebar Airport - Cranes and Piling Rig	AD	*07 MAY 2019 / 31 AUG 2020*	
053/2019	Paya Lebar Airport - Saddle Cranes and Luffer Crane	AD	*07 MAY 2019 / 31 DEC 2023*	
054/2019	Paya Lebar Airport - Topless Cranes	AD	*07 MAY 2019 / 30 SEP 2020*	
055/2019	Paya Lebar Airport - Topless Cranes	AD	*07 MAY 2019 / 25 APR 2021*	
056/2019	Paya Lebar Airport - Luffing Crane	AD	*07 MAY 2019 / 30 JUN 2020*	
060/2019	Paya Lebar Airport - Topless Crane	AD	*06 JUN 2019 / 14 NOV 2021*	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
061/2019	Paya Lebar Airport - Crawler Cranes	AD	*06 JUN 2019 / 30 JUN 2020*	
064/2019	Paya Lebar Airport - Luffing Crane	AD	*04 JUL 2019 / 30 AUG 2020*	
065/2019	Paya Lebar Airport - Mobile Cranes	AD	*04 JUL 2019 / 30 JUN 2020*	
066/2019	Paya Lebar Airport - Luffing Crane	AD	*04 JUL 2019 / 16 JUN 2021*	
067/2019	Paya Lebar Airport - Topless Cranes	AD	*04 JUL 2019 / 30 JUN 2021*	
068/2019	Paya Lebar Airport - Luffing Crane	AD	*04 JUL 2019 / 30 DEC 2021*	
069/2019	Paya Lebar Airport - Luffing Crane	AD	*04 JUL 2019 / 30 DEC 2020*	
072/2019	Paya Lebar Airport - Luffing Cranes	AD	*19 AUG 2019 / 01 AUG 2020*	
073/2019	Paya Lebar Airport - Luffer Cranes	AD	*19 AUG 2019 / 31 DEC 2021*	
074/2019	Paya Lebar Airport - Crawler Cranes	AD	*19 AUG 2019 / 30 DEC 2019*	
075/2019	Paya Lebar Airport - Luffing Crane	AD	*19 AUG 2019 / 31 DEC 2021*	
076/2019	Paya Lebar Airport - Luffer Cranes	AD	*19 AUG 2019 / 17 JUL 2020*	
077/2019	Paya Lebar Airport - Mobile Crane	AD	*19 AUG 2019 / 28 MAY 2020*	
079/2019	Paya Lebar Airport - Mobile Crane	AD	*19 AUG 2019 / 31 DEC 2019*	
080/2019	Sembawang Aerodrome - Mobile Crane	AD	*19 AUG 2019 / 13 JUL 2020*	
081/2019	Sembawang Aerodrome - Obstacles	AD	*19 AUG 2019 / 31 DEC 2019*	
084/2019	Paya Lebar Airport - Topless Cranes	AD	*10 SEP 2019 / 02 SEP 2020*	
085/2019	Paya Lebar Airport - Luffer Cranes	AD	*10 SEP 2019 / 30 SEP 2020*	
086/2019	Paya Lebar Airport - Luffing Crane	AD	*10 SEP 2019 / 01 OCT 2020*	
087/2019	Paya Lebar Airport - Mobile Crane	AD	*10 SEP 2019 / 31 MAR 2020*	
088/2019	Paya Lebar Airport - Mobile Crane	AD	*10 SEP 2019 / 31 MAR 2020*	
089/2019	Paya Lebar Airport - Mobile Crane	AD	*10 SEP 2019 / 31 MAR 2020*	
090/2019	Paya Lebar Airport - Mobile Crane	AD	*10 SEP 2019 / 31 MAR 2020*	
091/2019	Paya Lebar Airport - Cranes	AD	*10 SEP 2019 / 30 DEC 2021*	
092/2019	Paya Lebar Airport - Mobile Crane	AD	*10 SEP 2019 / 31 MAR 2020*	
093/2019	Paya Lebar Airport - Obstacles	AD	*10 SEP 2019 / 16 FEB 2020*	
094/2019	Paya Lebar Airport - Cranes	AD	*10 SEP 2019 / 28 AUG 2020*	
095/2019	Paya Lebar Airport - Mobile Cranes	AD	*10 SEP 2019 / 30 DEC 2020*	
096/2019	Paya Lebar Airport - Flat Top Cranes	AD	*10 SEP 2019 / 31 DEC 2020*	
097/2019	Paya Lebar Airport - Cranes	AD	*10 SEP 2019 / 31 DEC 2020*	

NR/Year	Subject	AIP section(s) affected	Period of validity (from/to)	Cancellation record
099/2019	Paya Lebar Airport - Luffer Cranes	AD	*10 SEP 2019 / 05 AUG 2020*	
100/2019	Paya Lebar Airport - Cranes	AD	*10 SEP 2019 / 31 DEC 2020*	
101/2019	Paya Lebar Airport - Topless Cranes	AD	*10 SEP 2019 / 31 DEC 2019*	
102/2019	Paya Lebar Airport - Luffer Crane	AD	*10 SEP 2019 / 17 JUL 2020*	
103/2019	Sembawang Aerodrome - Mobile Crane	AD	*10 SEP 2019 / 31 DEC 2019*	
104/2019	Sembawang Aerodrome - Mobile Crane	AD	*10 SEP 2019 / 31 DEC 2019*	
105/2019	Paya Lebar Airport - Cranes	AD	*10 OCT 2019 / 31 DEC 2020*	
106/2019	Paya Lebar Airport - Obstacles	AD	*10 OCT 2019 / 30 SEP 2020*	
107/2019	Paya Lebar Airport - Cranes	AD	*10 OCT 2019 / 01 OCT 2020*	
108/2019	Paya Lebar Airport - Cranes	AD	*10 OCT 2019 / 30 DEC 2020*	
109/2019	Paya Lebar Airport - Mobile Cranes	AD	*10 OCT 2019 / 20 JUN 2020*	
110/2019	Paya Lebar Airport - Topless Cranes	AD	*10 OCT 2019 / 01 OCT 2020*	
111/2019	Paya Lebar Airport - Luffer Cranes	AD	*10 OCT 2019 / 20 JUN 2020*	
112/2019	Sembawang Aerodrome - Crawler Cranes	AD	*10 OCT 2019 / 22 SEP 2020*	
113/2019	Singapore Changi Airport - Works schedule and movement area restrictions pertaining to Changi East development works	AD	*14 OCT 2019 / 28 MAR 2020*	
114/2019	Paya Lebar Airport - Luffer Cranes	AD	*12 NOV 2019 / 02 NOV 2020*	
116/2019	Paya Lebar Airport - Luffer Cranes	AD	*12 NOV 2019 / 30 NOV 2020*	
117/2019	Paya Lebar Airport - Luffing Crane	AD	*12 NOV 2019 / 31 MAR 2021*	
118/2019	Paya Lebar Airport - Flat Top Cranes	AD	*12 NOV 2019 / 31 DEC 2020*	
119/2019	Paya Lebar Airport - Topless Cranes	AD	*12 NOV 2019 / 24 OCT 2020*	
120/2019	Paya Lebar Airport - Topless Cranes	AD	*12 NOV 2019 / 31 DEC 2020*	
121/2019	Paya Lebar Airport - Obstacles	AD	*12 NOV 2019 / 30 AUG 2020*	
122/2019	Paya Lebar Airport - Luffer Cranes	AD	*12 NOV 2019 / 31 OCT 2020*	
123/2019	Paya Lebar Airport - Mobile Crane	AD	*12 NOV 2019 / 31 DEC 2020*	
124/2019	Paya Lebar Airport - Cranes	AD	*12 NOV 2019 / 31 DEC 2020*	
125/2019	Paya Lebar Airport - Luffer Cranes	AD	*12 NOV 2019 / 31 DEC 2020*	
126/2019	Paya Lebar Airport - Luffer Cranes	AD	*12 NOV 2019 / 31 DEC 2022*	
127/2019	Flying displays in conjunction with the Singapore Airshow 2020 Exhibition from Thursday 6 February to Sunday 16 February 2020	AD/ENR	*06 FEB 2020 / 16 FEB 2020*	

NR/Year	*Subject*	*AIP section(s) affected*	*Period of validity (from/to)*	*Cancellation record*
128/2019	Paya Lebar Airport - Obstacles	AD	*05 DEC 2019 / 21 NOV 2020*	
129/2019	Paya Lebar Airport - Cranes	AD	*05 DEC 2019 / 20 NOV 2020*	
130/2019	Paya Lebar Airport - Tower Crane	AD	*14 DEC 2019 / 30 APR 2020*	
131/2019	Paya Lebar Airport - Cranes	AD	*31 DEC 2019 / 31 DEC 2020*	
132/2019	Paya Lebar Airport - Tower Cranes	AD	*14 DEC 2019 / 30 APR 2020*	
133/2019	Paya Lebar Airport - Mobile Cranes	AD	*05 DEC 2019 / 08 MAR 2020*	
134/2019	Paya Lebar Airport - Obstacles	AD	*05 DEC 2019 / 31 JAN 2020*	
135/2019	Paya Lebar Airport - Mobile Crane	AD	*05 DEC 2019 / 05 JAN 2020*	
136/2019	Paya Lebar Airport - Cranes	AD	*05 DEC 2019 / 31 DEC 2020*	
137/2019	Paya Lebar Airport - Mobile Cranes	AD	*05 DEC 2019 / 20 JUN 2020*	

GEN 0.4 CHECKLIST OF AIP PAGES

Part 1 – General (GEN)

GEN 0

GEN 0.1-1	10 OCT 2019
GEN 0.1-2	10 OCT 2019
GEN-0.1-3	08 NOV 2018
GEN 0.2-1	13 SEP 2018
GEN 0.2-2	05 DEC 2019
GEN 0.3-1	05 DEC 2019
GEN 0.3-2	05 DEC 2019
GEN 0.3-3	05 DEC 2019
GEN 0.3-4	05 DEC 2019
GEN 0.3-5	05 DEC 2019
GEN 0.3-6	05 DEC 2019
GEN 0.4-1	05 DEC 2019
GEN 0.4-2	05 DEC 2019
GEN 0.4-3	05 DEC 2019
GEN 0.5-1	05 JAN 2017
GEN 0.6-1	20 JUN 2019
GEN 0.6-2	03 JAN 2019
GEN 0.6-3	22 JUN 2017

GEN 1

GEN 1.1-1	05 DEC 2019
GEN 1.1-2	25 APR 2019
GEN 1.2-1	15 SEP 2016
GEN 1.2-2	19 JUL 2018
GEN 1.2-3	19 JUL 2018
GEN 1.2-4	19 JUL 2018
GEN 1.2-5	24 MAY 2018
GEN 1.2-6	24 MAY 2018
GEN 1.3-1	25 APR 2019
GEN 1.3-2	25 APR 2019
GEN 1.3-3	25 APR 2019
GEN 1.3-4	25 APR 2019
GEN 1.3-5	25 APR 2019
GEN-1.3/ARR PAX FLOW	25 APR 2019
GEN-1.3/DEP PAX FLOW 1	25 APR 2019
GEN-1.3/DEP PAX FLOW 2	25 APR 2019
GEN 1.4-1	20 JUN 2019
GEN 1.4-2	15 AUG 2019
GEN 1.4-3	15 AUG 2019
GEN 1.5-1	12 NOV 2015
GEN 1.6-1	03 JAN 2019
GEN 1.6-2	03 JAN 2019
GEN 1.6-3	03 JAN 2019
GEN 1.6-4	03 JAN 2019
GEN 1.6-5	03 JAN 2019
GEN 1.7-1	03 JAN 2019
GEN 1.7-2	03 JAN 2019
GEN 1.7-3	03 JAN 2019
GEN 1.7-4	03 JAN 2019
GEN 1.7-5	03 JAN 2019

GEN 2

GEN 2.1-1	12 NOV 2015
GEN 2.1-2	10 OCT 2019
GEN 2.2-1	02 MAR 2017
GEN 2.2-2	02 MAR 2017
GEN 2.2-3	02 MAR 2017
GEN 2.2-4	05 JAN 2017
GEN 2.2-5	10 NOV 2016
GEN 2.3-1	12 NOV 2015
GEN 2.3-2	12 NOV 2015
GEN 2.3-3	12 NOV 2015
GEN 2.4-1	25 APR 2019
GEN 2.5-1	28 FEB 2019
GEN-2.5-3	21 JUL 2016
GEN 2.6-1	12 NOV 2015
GEN 2.6-2	12 NOV 2015
GEN 2.7-1	05 DEC 2019

GEN 3

GEN 3.1-1	10 OCT 2019
GEN 3.1-2	10 OCT 2019
GEN 3.1-3	10 OCT 2019
GEN 3.1-4	10 OCT 2019
GEN 3.2-1	10 OCT 2019
GEN 3.2-2	31 MAR 2016
GEN 3.2-3	31 MAR 2016
GEN 3.2-4	05 DEC 2019
GEN 3.2-5	25 APR 2019
GEN 3.2-6	31 MAR 2016
GEN 3.3-1	12 NOV 2015
GEN 3.3-2	21 JUL 2016
GEN 3.4-1	12 NOV 2015
GEN 3.4-2	02 MAR 2017
GEN 3.4-3	02 MAR 2017
GEN 3.4-4	02 MAR 2017
GEN 3.4-5	12 NOV 2015
GEN-3.4-7	21 JUL 2016
GEN-3.4-9	21 JUL 2016
GEN 3.5-1	25 APR 2019
GEN 3.5-2	05 DEC 2019
GEN 3.5-3	25 APR 2019
GEN 3.5-4	08 NOV 2018
GEN 3.5-5	10 OCT 2019
GEN 3.5-6	12 NOV 2015
GEN 3.5-7	25 APR 2019
GEN 3.5-8	25 APR 2019
GEN 3.5-9	08 NOV 2018
GEN 3.6-1	12 NOV 2015
GEN 3.6-2	12 NOV 2015
GEN 3.6-3	12 NOV 2015
GEN 3.6-4	12 NOV 2015
GEN-3.6-5	21 JUL 2016

GEN 4

GEN 4.1-1	15 SEP 2016
GEN 4.2-1	24 MAY 2018
GEN 4.2-2	12 NOV 2015
GEN 4.2-3	12 NOV 2015
GEN 4.2-4	12 NOV 2015
GEN 4.2-5	12 NOV 2015
GEN 4.2-6	12 NOV 2015

Part 2 – EN-ROUTE (ENR)

ENR 0

ENR 0.6-1	08 NOV 2018
ENR 0.6-2	15 AUG 2019
ENR 0.6-3	15 AUG 2019
ENR 0.6-4	15 AUG 2019
ENR 0.6-5	29 MAR 2018
ENR 0.6-6	03 JAN 2019

ENR 1

ENR 1.1-1	25 APR 2019
ENR 1.1-2	12 NOV 2015
ENR 1.1-3	12 NOV 2015
ENR 1.1-4	12 NOV 2015
ENR 1.1-5	12 NOV 2015
ENR 1.1-6	12 NOV 2015
ENR 1.1-7	12 NOV 2015
ENR 1.1-8	12 NOV 2015
ENR 1.1-9	12 NOV 2015
ENR 1.1-10	08 NOV 2018
ENR 1.1-11	08 NOV 2018
ENR 1.1-12	08 NOV 2018
ENR 1.1-13	08 NOV 2018
ENR 1.1-14	08 NOV 2018
ENR 1.1-15	08 NOV 2018
ENR 1.2-1	21 JUL 2016
ENR 1.3-1	12 NOV 2015
ENR 1.4-1	12 NOV 2015
ENR 1.5-1	12 NOV 2015
ENR 1.5-2	17 AUG 2017
ENR 1.5-3	10 OCT 2019
ENR 1.5-4	10 OCT 2019
ENR 1.6-1	12 NOV 2015
ENR 1.6-2	12 NOV 2015
ENR 1.6-3	12 NOV 2015
ENR 1.6-4	17 AUG 2017
ENR 1.6-5	15 AUG 2019
ENR 1.6-6	29 MAR 2018
ENR 1.6-7	29 MAR 2018
ENR 1.6-8	29 MAR 2018
ENR-1.6-9	21 JUL 2016
ENR-1.6-11	21 JUL 2016
ENR 1.7-1	15 AUG 2019
ENR 1.7-2	15 AUG 2019
ENR 1.7-3	15 AUG 2019
ENR 1.7-4	15 AUG 2019
ENR 1.7-5	15 AUG 2019
ENR 1.7-6	15 AUG 2019
ENR 1.7-7	15 AUG 2019
ENR 1.8-1	10 OCT 2019
ENR 1.8-2	15 AUG 2019
ENR 1.8-3	15 AUG 2019
ENR 1.8-4	15 AUG 2019
ENR 1.8-5	15 AUG 2019
ENR 1.8-6	15 AUG 2019
ENR 1.8-7	29 MAR 2018
ENR 1.8-8	29 MAR 2018
ENR 1.8-9	29 MAR 2018
ENR 1.8-10	29 MAR 2018
ENR 1.8-11	29 MAR 2018
ENR 1.8-12	15 AUG 2019
ENR 1.8-13	15 AUG 2019
ENR 1.8-14	15 AUG 2019
ENR 1.8-15	15 AUG 2019
ENR 1.8-16	15 AUG 2019
ENR 1.8-17	15 AUG 2019
ENR 1.8-18	15 AUG 2019
ENR 1.8-19	15 AUG 2019
ENR 1.8-20	15 AUG 2019
ENR 1.8-21	15 AUG 2019
ENR 1.8-22	15 AUG 2019
ENR 1.8-23	15 AUG 2019
ENR 1.8-24	15 AUG 2019
ENR 1.8-25	05 DEC 2019
ENR 1.8-26	15 AUG 2019
ENR 1.8-27	15 AUG 2019
ENR 1.8-28	15 AUG 2019
ENR 1.8-29	15 AUG 2019
ENR 1.9-1	07 DEC 2017
ENR 1.9-2	01 FEB 2018
ENR 1.9-3	27 APR 2017
ENR 1.9-4	27 APR 2017
ENR 1.9-5	27 APR 2017
ENR 1.10-1	10 OCT 2019
ENR 1.10-2	10 OCT 2019
ENR 1.10-3	29 MAR 2018
ENR 1.11-1	12 NOV 2015
ENR 1.12-1	12 NOV 2015
ENR 1.12-2	12 NOV 2015
ENR 1.12-3	12 NOV 2015
ENR 1.12-4	12 NOV 2015
ENR 1.13-1	12 NOV 2015
ENR 1.14-1	10 DEC 2015
ENR 1.14-2	15 SEP 2016
ENR-1.14-3 to ENR-1.14-4	15 SEP 2016
ENR-1.14-5 to ENR-1.14-6	15 SEP 2016
ENR-1.14-7 to ENR-1.14-8	15 AUG 2019

ENR 2

ENR 2.1-1	03 JAN 2019
ENR 2.1-2	03 JAN 2019
ENR 2.1-3	03 JAN 2019
ENR 2.1-4	25 APR 2019
ENR-2.1-7	21 JUL 2016
ENR-2.1-9	29 MAR 2018
ENR-2.1-11A	21 JUL 2016
ENR-2.1-11B	21 JUL 2016
ENR-2.1-13	21 JUL 2016
ENR-2.1-15	28 FEB 2019

ENR 3

ENR 3.1-1	02 MAR 2017
ENR 3.1-2	02 MAR 2017

AD 2.WSSL-3	15 AUG 2019
AD 2.WSSL-4	05 DEC 2019
AD 2.WSSL-5	05 DEC 2019
AD 2.WSSL-6	15 AUG 2019
AD 2.WSSL-7	15 AUG 2019
AD 2.WSSL-8	15 AUG 2019
AD 2.WSSL-9	15 AUG 2019
AD 2.WSSL-10	15 AUG 2019
AD 2.WSSL-11	15 AUG 2019
AD 2.WSSL-12	15 AUG 2019
AD 2.WSSL-13	05 DEC 2019
AD 2.WSSL-14	15 AUG 2019
AD 2.WSSL-15	15 AUG 2019
AD 2.WSSL-16	10 OCT 2019
AD 2.WSSL-17	15 AUG 2019
AD 2.WSSL-18	15 AUG 2019
AD 2.WSSL-19	15 AUG 2019
AD 2.WSSL-20	10 OCT 2019
AD 2.WSSL-21	15 AUG 2019
AD 2.WSSL-22	10 OCT 2019
AD 2.WSSL-23	10 OCT 2019
AD 2.WSSL-24	15 AUG 2019
AD 2.WSSL-25	10 OCT 2019
AD-2-WSSL-ADC-1	05 DEC 2019
AD-2-WSSL-ADC-2	05 DEC 2019
AD-2-WSSL-ADC-3	08 NOV 2018
AD-2-WSSL-AOC-1	17 AUG 2017
AD-2-WSSL-AOC-2	08 NOV 2018
AD-2-WSSL-VAC-1	05 DEC 2019
AD-2-WSSL-VAC-2	05 DEC 2019
AD-2-WSSL-VAC-3	05 DEC 2019
AD-2-WSSL-VAC-4	05 DEC 2019
AD-2-WSSL-VDC-1	05 DEC 2019
AD-2-WSSL-VDC-2	05 DEC 2019
AD-2-WSSL-VFR-1	15 AUG 2019
AD-2-WSSL-IFR-1	10 OCT 2019
AD-2-WSSL-IFR-2	10 OCT 2019
AD 2.WSAP-1	19 JUL 2018
AD 2.WSAP-2	19 JUL 2018
AD 2.WSAP-3	10 OCT 2019
AD 2.WSAP-4	19 JUL 2018
AD 2.WSAP-5	10 OCT 2019
AD 2.WSAP-6	12 OCT 2017
AD 2.WSAP-7	19 JUL 2018
AD 2.WSAP-8	25 APR 2019
AD 2.WSAP-9	25 APR 2019
AD 2.WSAP-10	25 APR 2019
AD 2.WSAP-11	25 APR 2019
AD-2-WSAP-ADC-1	12 NOV 2015
AD-2-WSAP-ADC-2	12 OCT 2017
AD-2-WSAP-AOC-1	10 NOV 2016
AD-2-WSAP-IAC-1	10 OCT 2019
AD-2-WSAP-IAC-2	10 OCT 2019
AD-2-WSAP-IAC-3	10 OCT 2019
AD-2-WSAP-IAC-4	10 OCT 2019
AD-2-WSAP-IAC-5	10 OCT 2019
AD-2-WSAP-IAC-6	10 OCT 2019
AD 2.WSAT-1	25 APR 2019
AD 2.WSAT-2	25 APR 2019
AD 2.WSAT-3	25 APR 2019
AD 2.WSAT-4	25 APR 2019
AD 2.WSAT-5	25 APR 2019
AD 2.WSAT-6	25 APR 2019
AD 2.WSAT-7	12 NOV 2015
AD 2.WSAT-8	12 NOV 2015
AD-2-WSAT-ADC-1	12 NOV 2015
AD 2.WSAG-1	12 NOV 2015
AD 2.WSAG-2	08 NOV 2018
AD 2.WSAG-3	07 DEC 2017
AD 2.WMKJ-1	12 NOV 2015
AD 2.WIDD-1	12 NOV 2015
AD 2.WIDD-2	12 NOV 2015
AD-2-WIDD-SID-1	12 NOV 2015
AD-2-WIDD-SID-2	12 NOV 2015
AD-2-WIDD-SID-3	12 NOV 2015
AD-2-WIDD-SID-4	12 NOV 2015
AD-2-WIDD-STAR-1	12 NOV 2015
AD-2-WIDD-STAR-2	12 NOV 2015
AD-2-WIDD-STAR-3	12 NOV 2015
AD-2-WIDD-STAR-4	12 NOV 2015
AD 2.WIDN-1	03 JAN 2019
AD 2.WIDN-2	03 JAN 2019
AD-2-WIDN-SID-1	12 NOV 2015
AD-2-WIDN-SID-2	12 NOV 2015
AD-2-WIDN-SID-3	12 NOV 2015
AD-2-WIDN-SID-4	12 NOV 2015
AD-2-WIDN-STAR-1	12 NOV 2015
AD-2-WIDN-STAR-2	12 NOV 2015
AD-2-WIDN-STAR-3	21 JUL 2016
AD-2-WIDN-STAR-4	12 NOV 2015

PAGE INTENTIONALLY LEFT BLANK

GEN 1 NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 DESIGNATED AUTHORITIES

The authority responsible for civil aviation in Singapore is the Civil Aviation Authority of Singapore under the Ministry of Transport. The addresses of the designated authorities concerned with facilitation of international air navigation are as follows:

1 CIVIL AVIATION

Post:
CIVIL AVATION AUTHORITY OF SINGAPORE
SINGAPORE CHANGI AIRPORT, P.O. BOX 1
SINGAPORE 918141
Tel: (65) 65421122
Fax: (65) 65421231
AFS: WSSSYAYX
URL: www.caas.gov.sg

2 METEOROLOGY

Post:
DIRECTOR-GENERAL METEOROLOGICAL SERVICE SINGAPORE
Singapore Changi Airport, P.O. Box 8
SINGAPORE 918141
Tel: (65) 65457190
Fax: (65) 65457192
AFS: WSSSYMYX
URL: www.weather.gov.sg

3 CUSTOMS

Post:
SINGAPORE CUSTOMS
55 Newton Road #10-01, Revenue House
SINGAPORE 307987
Tel: (65) 63552000
Fax: (65) 62508663
URL: www.customs.gov.sg

4 IMMIGRATION

Post:
IMMIGRATION & CHECKPOINTS AUTHORITY
10 Kallang Road, #08-00 ICA Building
SINGAPORE 208718
Tel: (65) 63916100
Fax: (65) 62980837
URL: www.ica.gov.sg

5 HEALTH

Post:
MINISTRY OF HEALTH
16 College Road, College of Medicine Building
SINGAPORE 169854
Tel: (65) 63259220
Fax:
URL: www.moh.gov.sg

6 ENROUTE AND AERODROME CHARGES

Post:
CIVIL AVIATION AUTHORITY OF SINGAPORE
Singapore Changi Airport P.O. Box 1
SINGAPORE 918141
Tel: (65) 65421122
Fax: (65) 65421231
AFS: WSSSYAYX

Post:
CHANGI AIRPORT GROUP (S) PTE LTD
SELETAR AIRPORT
21 Seletar Aerospace Road 1 #02-01
SINGAPORE 797405
Tel: (65)64815077 Airside Operations
Fax: (65)64831754

7 AGRICULTURE QUARANTINE

Post:
Head Office: AGRI FOOD AND VET AUTHORITY
JEM Office Tower, 52 Jurong Gateway Road #14-01
SINGAPORE 608550
Tel: (65) 68052992
Fax: (65) 63341831
URL: www.ava.gov.sg

Post:
CHANGI ANIMAL AND PLANT QUARANTINE STATION
AGRI-FOOD AND VETERINARY AUTHORITY
Gate C7, Airport Cargo Road Changi Airfreight Centre
Changi Animal and Plant Quarantine
SINGAPORE 918104
Tel: (65) 65457522
Fax: (65) 65453023

8 TRANSPORT SAFETY INVESTIGATION BUREAU

Post:
Director (TSIB)
MINISTRY OF TRANSPORT
c/o Changi Airport Post Office P.O. Box 1005
SINGAPORE 918155
Tel: (65) 65412798
Fax: (65) 65422394
URL: www.mot.gov.sg

GEN 2.7 SUNRISE/SUNSET TABLES

1 The sunrise/sunset table is prepared by the Meteorological Service Singapore of the National Environment Agency and is reproduced here with their permission. The table includes all the airports and aerodromes being served by the Singapore air traffic services.

← 1.1 The times in the Sunrise-Sunset table is in UTC for sunrise (SR) and sunset (SS) for Year 2020 to Year 2024.

← 1.2 The times shown in the Sunrise-Sunset table, calculated for the year 2022, is an “average year” for the years from 2020 to 2024. In this period, the times on an arbitrary date and place will deviate less than 2 minutes from the times on the same date and place in the “average year”.

2 SUNRISE-SUNSET TABLES

Latitude : (012200N) Longitude: (1035900E)

MONTH/DAY		SR	SS	MONTH/DAY		SR	SS	MONTH/DAY		SR	SS
JAN	01-04	2306	1110	**MAY**	01-07	2256	1106	**SEP**	01-06	2300	1108
	05-09	2308	1112		08-23	2255	1106		07-09	2258	1106
	10-14	2310	1114		24-26	2255	1107		10-12	2257	1105
	15-20	2312	1116		27-31	2256	1107		13-18	2255	1103
	21-27	2314	1118						19-23	2253	1101
	28-31	2315	1119						24-28	2252	1059
									29-30	2251	1057
FEB	01-20	2316	1120	**JUN**	01-04	2256	1108	**OCT**	01-07	2250	1056
	21-28	2315	1120		05-09	2257	1109		08-10	2248	1054
					10-14	2258	1110		11-18	2247	1053
					15-23	2259	1112		19-23	2246	1051
					24-28	2301	1113		24-31	2246	1050
					29-30	2302	1114				
MAR	01-03	2313	1119	**JUL**	01-04	2303	1114	**NOV**	01-15	2247	1050
	04-09	2313	1118		05-09	2303	1115		16-17	2247	1051
	10-13	2311	1117		10-16	2304	1116		18-24	2248	1052
	14-17	2309	1116		17-31	2305	1116		25-27	2250	1153
	18-22	2308	1115						28-30	2251	1054
	23-28	2306	1114								
	29-31	2305	1112								
APR	01-06	2303	1112	**AUG**	01-10	2305	1115	**DEC**	01-05	2252	1056
	07-09	2302	1110		11-17	2304	1114		06-09	2255	1058
	10-14	2300	1109		18-24	2302	1112		10-14	2256	1100
	15-20	2259	1108		25-31	2301	1110		15-18	2258	1102
	21-26	2258	1107						19-22	2300	1104
	27-30	2257	1106						23-26	2302	1106
									27-28	2304	1107
									29-31	2305	1109

PAGE INTENTIONALLY LEFT BLANK

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.

5 LIST OF AERONAUTICAL CHARTS AVAILABLE

GEN 3.2.5 LIST OF AERONAUTICAL CHARTS 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	15 AUG 19
Instrument Approach Chart ICAO (IAC)		***Singapore Changi***			
	1:400 000	RWY 02L - ICW ILS/DME	AD-2-WSSS-IAC-1	In AIP	10 OCT 19
	1:400 000	RWY 02C - ICE ILS/DME	AD-2-WSSS-IAC-2	In AIP	10 OCT 19
	1:400 000	RWY 20R - ICH ILS/DME	AD-2-WSSS-IAC-5	In AIP	10 OCT 19
	1:400 000	RWY 20C - ICC ILS/DME	AD-2-WSSS-IAC-6	In AIP	10 OCT 19
	1:400 000	RWY 20C - VTK DVOR/DME	AD-2-WSSS-IAC-7	In AIP	10 OCT 19
	1:400 000	RWY 02L - RNAV(GNSS)	AD-2-WSSS-IAC-9	In AIP	10 OCT 19
	1:400 000	RWY 02C - RNAV(GNSS)	AD-2-WSSS-IAC-10	In AIP	10 OCT 19
	1:400 000	RWY 20R - RNAV(GNSS)	AD-2-WSSS-IAC-11	In AIP	10 OCT 19
	1:400 000	RWY 20C - RNAV(GNSS)	AD-2-WSSS-IAC-12	In AIP	10 OCT 19
		Paya Lebar			
	1:400 000	RWY 20 - PU DVOR/DME	AD-2-WSAP IAC-1	In AIP	10 OCT 19
	1:400 000	RWY 02 - PU DVOR/DME	AD-2-WSAP IAC-2	In AIP	10 OCT 19
	1:400 000	RWY 20 - IPS ILS/DME	AD-2-WSAP IAC-3	In AIP	10 OCT 19
	1:400 000	RWY 02 - IPN ILS/DME	AD-2-WSAP IAC-4	In AIP	10 OCT 19
	1:400 000	RWY 02 - RNAV(GNSS)	AD-2-WSAP-IAC-5	In AIP	10 OCT 19
	1:400 000	RWY 20 - RNAV(GNSS)	AD-2-WSAP-IAC-6	In AIP	10 OCT 19
Visual Approach Chart ICAO (VAC)	1:400 000	***Singapore Changi***	AD-2-WSSS-VAC-1	In AIP	10 OCT 19
		Seletar			
←	1:100 000	RWY 03	AD-2-WSSL-VAC-1	In AIP	05 DEC 19
←	1:100 000	RWY 21	AD-2-WSSL-VAC-2	In AIP	05 DEC 19
←	1:100 000	RWY 03	AD-2-WSSL-VAC-3	In AIP	05 DEC 19
←	1:100 000	RWY 21	AD-2-WSSL-VAC-4	In AIP	05 DEC 19
Visual Departure Chart		***Seletar***			
←	1:100 000	RWY 03	AD-2-WSSL-VDC-1	In AIP	05 DEC 19
←	1:100 000	RWY 21	AD-2-WSSL-VDC-2	In AIP	05 DEC 19
← **Aerodrome Chart**		***Singapore Changi***	AD-2-WSSS-ADC-2	In AIP	05 DEC 19
← ICAO (AC)		***Seletar***	AD-2-WSSL-ADC-1	In AIP	05 DEC 19
		Paya Lebar	AD-2-WSAP-ADC-1	In AIP	12 NOV 15
Aerodrome Obstacle Chart ICAO TYPE A (AOC)		***Singapore Changi***			
	1:10 000	RWY 20R/02L	AD-2-WSSS-AOC-1	In AIP	07 DEC 17
	1:10 000	RWY 20C/02C	AD-2-WSSS-AOC-2	In AIP	29 MAR 18
		Seletar			
	1:10 000	RWY 03/21	AD-2-WSSL-AOC-1	In AIP	17 AUG 17
		Paya Lebar			
	1:20 000	RWY 20/02	AD-2-WSAP-AOC-1	In AIP	10 NOV 16
Aerodrome Obstacle Chart ICAO TYPE B (AOC)		***Singapore Changi***			
	1:20 000	RWY 02L/20R and 02C/20C	AD-2-WSSS-AOC-3	In AIP	13 SEP 18
		Seletar			
	1:20 000	RWY 03/21	AD-2-WSSL-AOC-2	In AIP	08 NOV 18
Precision Approach Terrain Chart ICAO (PATC)		***Singapore Changi***			
	1:2 500	RWY 02L	AD-2-WSSS-PATC-1	In AIP	10 OCT 19
	1:2 500	RWY 20C	AD-2-WSSS-PATC-2	In AIP	01 FEB 18

GEN 3.5 METEOROLOGICAL SERVICES

1 RESPONSIBLE SERVICE

1.1 The meteorological services for civil aviation are provided by the Meteorological Service Singapore of the National Environment Agency.

Post:
THE DIRECTOR-GENERAL
Meteorological Service Singapore
Singapore Changi Airport,
P.O. Box 8
SINGAPORE 918141
Tel: (65) 65457190(HQ)
(65) 65425059 / (65) 65422837 (MET Office)
Fax: (65) 65457192 (HQ)
(65) 65425026 (MET Office)
AFS: WSSSYMYX
URL: www.weather.gov.sg

1.2 The service is provided in accordance with the provisions contained in the following ICAO documents:

Annex 3 – *Meteorological Service for International Air Navigation*
Doc 7030 – *Regional Supplementary Procedures Part 3 - Meteorology*

1.3 Differences to these provisions are detailed in subsection GEN 1.7.

2 AREA OF RESPONSIBILITY

2.1 Area meteorological watch is provided for the Singapore FIR.

3 METEOROLOGICAL OBSERVATIONS AND REPORTS

TABLE GEN 3.5.3 Meteorological Observations and Reports

Name of Station/ Location Indicator	*Type & Frequency of Observation/ Automatic Observing Equipment*	*Types of MET Reports & Supplementary Information included*	*Observation System & Sites (s)*	*Hours of Operation*	*Climatological Information*
1	2	3	4	5	6
SINGAPORE/ Singapore Changi WSSS	Half hourly plus special observations	METAR SPECI TREND WS	a. Ultrasonic Wind Sensor at MET station situated 345m west of centre of RWY 02L/20R. (wind report in METAR and SPECI taken from this measurement). b. Cup anemometers and wind vanes at ends and middle of both runways. c. Windsocks at ends of both runways. d. Transmissometers at both ends and in the middle of both runways. e. Low level wind shear observations made continuously by system of 13 surface wind sensors located in the airport and its vicinity. f. MET Doppler Weather Radar detecting windshear within 20km and monitoring storms up to 480km.	H24	Climatological Summaries available at Meteorological Service Singapore of the National Environment Agency.
← SINGAPORE/ Seletar WSSL	Hourly plus special observations	METAR SPECI	a. Ultrasonic wind sensors at the ends of runway (surface wind report in METAR and SPECI is taken from measurements of the ultrasonic wind sensor at RWY 03). b. Windsocks at both ends of RWY 03 and 21. c. Transmissometers at both ends of RWY 03 and 21.	H24	NIL
SINGAPORE/ Paya Lebar WSAP	Hourly plus special observations	METAR SPECI	a. Cup anemometers and wind vanes at both ends of RWY 02/20 (wind report in METAR and SPECI taken from the measurement associated with the RWY in use).	H24	NIL

8.10 CONTINGENCY ROUTES

8.10.1 Between Singapore and Manila FIR

8.10.1.1 The following table shows the Contingency Routes (CR) Structure, Flight Level Allocation Scheme (FLAS) and Transfer of Control and Communication (TOC) between Singapore and Manila FIR.

CR	ATS Route	Direction	FLAS	ACC	Transfer of Communication (TOC)	Remarks
CRS-3	N884 (075400N 1122000E - LAXOR)	East	FL310 FL350	Manila ACC	At 075400N 1122000E, contact Manila ACC: - ADS/CPDLC: Logon RPHI - HF: 5655 / 8942 - VHF : 118.9 (LAXOR)	Aircraft operators may choose to avoid the Singapore FIR by using alternate ATS routes in other FIRs.
CRM-3	N884 (LAXOR - CAB)	East	FL310 FL350 FL390	Kobe ACC	At CAB, contact Tokyo Radio: - HF: 8903 / 4666 - VHF: 123.9 (LEBIX)	Aircraft operators may choose to avoid the Manila FIR by using alternate ATS routes in other FIRs.
CRM-4	M767 (JOM - TEGID)	West	FL320 FL360 FL400	Singapore ACC	At JOM, contact Singapore ATC: - ADS/CPDLC: Logon WSJC - HF: 5655 / 8942	Aircraft operators may choose to avoid the Manila FIR by using alternate ATS routes in other FIRs.
N/A	M772	N/A	N/A	N/A	Not applicable. M772 will be suspended. No flight planning is allowed.	N/A

8.10.2 Between Singapore and Ho Chi Minh FIR

8.10.2.1 The following table shows the Contingency Routes (CR) Structure, Flight Level Allocation Scheme (FLAS) and Transfer of Control and Communication (TOC) between Singapore and Ho Chi Minh FIR.

CR	ATS Route	Direction	FLAS	ACC	Transfer of Communication (TOC)	Remarks
CRS-1	L642 (ESPOB – 060000N 1045600E)	West	FL360 FL400	Ho Chi Minh ACC	At 060000N 1045600E, contact Kuala Lumpur ATC: - VHF: 132.6 - HF: 5655 / 8942	International operators may choose to avoid the Singapore FIR by using alternate ATS routes in other FIRs.
CRS-2	M771 (060000N 1060900E – DUDIS)	East	FL350 FL390	Ho Chi Minh ACC	At 060000N 1060900E, contact Ho Chi Minh ATC: - ADS / CPDLC: Logon VVTS - VHF: 133.05 / 120.9 - HF: 5655 / 8942	International operators may choose to avoid the Singapore FIR by using alternate ATS routes in other FIRs.
CRS-3	N884 (060000N 1095600E – 075400N 1122000E)	East	FL310 FL350	Ho Chi Minh ACC	At 060000N 1095600E, contact Ho Chi Minh ATC: - ADS / CPDLC: Logon VVTS - VHF: 133.05 / 120.7 - HF: 5655 / 8942 At 075400N 1122000E, contact Manila ATC: - ADS / CPDLC: Logon RPHI - VHF: 118.9 (LAXOR) - HF: 5655 / 8942	International operators may choose to avoid the Singapore FIR by using alternate ATS routes in other FIRs.
CRS-4	M768 (064600N 1121500E - AKMON)	East	FL330	Ho Chi Minh ACC	At 064600N 1121500E, contact Kota Kinabalu ATC: - ADS / CPDLC: Logon WBFC - VHF: 126.1	International operators may choose to avoid the Singapore FIR by using alternate ATS routes in other FIRs.
		West	FL380	Ho Chi Minh ACC	At 064600N 1121500E, contact Ho Chi Minh ATC: - ADS / CPDLC: Logon VVTS - VHF: 133.05 / 120.7	
CRH-1	N891 (XONAN - IGARI)	North	FL300	Hanoi ACC	At IGARI, contact Hanoi ACC: - VHF: 120.9	International operators may choose to avoid the Ho Chi Minh FIR by using alternate ATS routes in other FIRs.
		South	FL330	Hanoi ACC	At IGARI, contact Singapore ATC: - ADS / CPDLC: Logon WSJC - VHF: 134.35 - HF: 5655 / 8942	
CRH-2	M753 (OSOTA – IPRIX)	North	FL270	Hanoi ACC	At IPRIX, contact Hanoi ACC: - VHF: 120.9	International operators may choose to avoid the Ho Chi Minh FIR by using alternate ATS routes in other FIRs.
		South	FL260	Hanoi ACC	At IPRIX, contact Singapore ATC: - ADS / CPDLC: Logon WSJC - VHF: 134.35 - HF: 5655 / 8942	

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit / Lower limit	MNM FLT ALT	Lateral limits NM	FL series ↓	FL series ↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	8	9	10
B469	*Route availability:* (1) H24								
▲ PEKAN DVOR/DME (VPK)	032259N 1032524E								*(4)*
	335° / 155°	14.9NM		FL 460 / 7500 FT ALT	8000 FT	10	Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150]
∆ PADLI	030918N 1033133E								
	335° / 155°	17.1NM		FL 460 / 7500 FT ALT	8000 FT	10	Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150]
▲ 90DME (90 DME PU)	025341N 1033836E								
	335° / 155°	11.0NM		FL 460 / 7500 FT ALT	8000 FT	10	Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150]
▲ BIKTA	024337N 1034308E								
	335° / 155°	22.2NM		FL 460 / 7500 FT ALT	8000 FT	10	Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150]
▲ MERSING DVOR/DME (VMR) (58 DME PU)	022318N 1035218E								
	356° / 176°	27.9NM		FL 460 / 3000 FT ALT	4000 FT		Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150] *(2)*
∆ 30DME (30 DME PU)	015520N 1035405E								
	356° / 176°	9.9NM		FL 460 / 2000 FT ALT	4000 FT		Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150] *(2)*
∆ AKOMA (20 DME PU)	014522N 1035443E								
	356° / 176°	10.0NM		FL 460 / 2000 FT ALT	4000 FT		Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150] *(2)*
∆ 10DME (10 DME PU)	013523N 1035522E								
	356° / 176°	10.0NM		FL 460 / GND	4000 FT		Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150] *(2)*
▲ PAPA UNIFORM DVOR/DME (PU)	012523.99N 1035559.74E								*(5)*
	201° / 021°	12.9NM		FL 460 / 3000 FT ALT	4000 FT		Odd*(1)*	Even*(1)*	[Class A –ABV FL150 Class B –BLW FL150] *(3)*
▲ SINJON DVOR/DME (SJ)	011319N 1035120E								
	157° / 337°	30.2NM		FL 460 / 2000 FT ALT	4000 FT	10	Odd*(1)*		[Class A –ABV FL150 Class B –BLW FL150]
∆ BAVAL (30 DME SJ)	004518N 1040242E								
←	159° / 339°	61.7NM		FL 460 / 2000 FT ALT	5000 FT	10	Odd*(1)*		[Class A –ABV FL150 Class B –BLW FL150]
∆ FIRJ1 (WSJC/WIIZ FIR BDRY)	001230S 1042424E								
←	148° / 328°	19.4NM		FL 460 / 2000 FT ALT	5000 FT	10	Odd*(1)*		[Class A –ABV FL150 Class B –BLW FL150]
▲ SINGKEP NDB (NE)	002858.79S 1043433.57E								

Route Remarks:
Flight Planning
Flights overflying Singapore to destinations beyond Jakarta FIR are to flight plan via B470 ANITO

Singapore ACC FREQ:
P123.7MHz, S127.3MHz

Point/Segment Remarks:
(2) **Lateral Limits:**
The eastern and western airway sectors are enclosed by a line joining
022830N 1035504E 015100N 1041436E 013542N 1041442E 012550N 1040109E
to a point 5NM west of PU DVOR/DME and northwards to a point 5NM west of VMR DVOR/DME.
(3) Within the lateral limits of Paya Lebar CTR.
(4) Eastbound Flight (report FL and flight condition over North CTR boundary). Westbound Flight (report FL and flight condition over VPK).
(5) Kuala Lumpur/Singapore FIR BDRY APRX 0.5NM north of PU.

Route Designator {RNP Type}	[Route Usage Notes]								
Significant Point Name	Significant Point Coordinates								Remarks
{RNP Type}	Track MAG ↓ ↑	Dist NM	(COP)	Upper limit / Lower limit	MNM FLT ALT	Lateral limits NM	FL series ↓	FL series ↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	8	9	10
B470	*Route availability:* (1) H24								
▲ SINJON DVOR/DME (SJ)	011319N 1035120E								
	145° 325°	30.1NM		FL 460 2000 FT ALT	3000 FT		Odd(1)	Even(1)	[Class A –ABV FL150 Class B –BLW FL150] (2)
∆ UDONI (30 DME SJ)	004818N 1040806E								
	145° 325°	60.9NM		FL 460 2000 FT ALT	5000 FT		Odd(1)	Even(1)	[Class A –ABV FL150 Class B –BLW FL150] (2)
FIRJ2 (WSJC/WIIZ FIR BDRY)	000224S 1044205E								(3)
	145° 325°	17.6NM		FL 460 2000 FT ALT	5000 FT		Odd(1)	Even(1)	[Class A –ABV FL150 Class B –BLW FL150] (2)
▲ ANITO	001700S 1045200E								

Route Remarks:
Singapore ACC FREQ:
P134.4MHz S128.1MHz

Point/Segment Remarks:

(2) **Lateral Limits:**
The lateral limits of this airway commence from 5NM either side of a line joining SJ DVOR/DME to OI NDB funnelling out from the SJ DVOR/DME on a 7½° tolerance to intersect the boundary of a similarly projected airway from OI NDB but on a 12° tolerance.
One way routeing from Singapore to Soekarno-Hatta and to destinations beyond. Two-way routeing Singapore/Pangkal Pinang for flights below FL200.

(3) Not a REP.
Reduced separation minima will be applied on B470 south of ANITO between RNAV-equipped aircraft using MNT.

AD 1.5 STATUS OF CERTIFICATION OF AERODROMES

Aerodrome Name and Location Indicator	Status of Certification	Date of Certificate	Validity of Certification	Remarks
← Singapore Changi WSSS	Certified	1 July 2019	5 years from the date of certification	Code 4F
← Seletar WSSL	Certified	1 July 2019	5 years from the date of certification	Code 3C

PAGE INTENTIONALLY LEFT BLANK

AERODROME CHART - ICAO

01° 21' 33"N
103°59' 22"E

AERODROME ELEVATION 6.66m

TWR	118.6 / 118.25
GND	124.3 / 121.85 / 121.725
DELIVERY	121.65

RAMP TWR	
GND	122.55 (GMC 4 EAST)
	125.65 (GMC 4 WEST)

SINGAPORE/SINGAPORE CHANGI

PAPI 3° (MEHT)*				
Pilot's eye height over the threshold when the following PAPI lights come into view.	**RUNWAY**			
	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.

RWY	DIRECTION	THR	GEOID UNDULATION	BEARING STRENGTH
02L	023°	01 20 56.27N 103 58 38.82E	10.24m	PCN 72/F/B/W/U
20R (DISP THR)	203°	01 22 33.95N 103 59 20.06E	10.25m	
02C	023°	01 19 43.51N 103 59 05.86E	10.27m	
20C	203°	01 21 43.37N 103 59 56.46E	10.30m	

TAXIWAYS	**BEARING STRENGTH** PCN 85/R/B/W/U - Taxiways W1, W9, E1, E3, E11 and EP (between E10-E11) PCN 72/F/B/W/U - All other Taxiways
APRONS	**BEARING STRENGTH** PCN 85/R/B/W/U

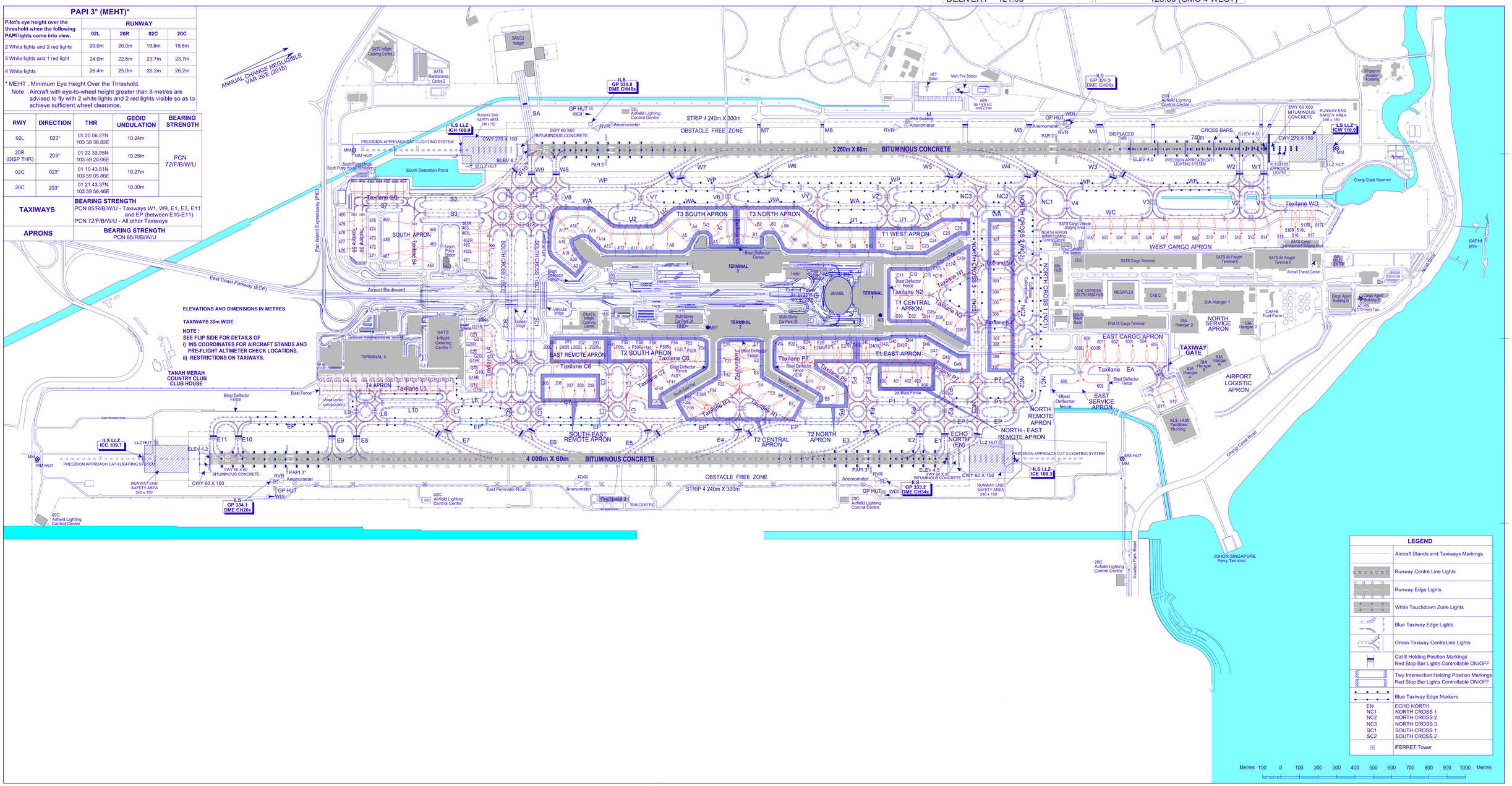
ANNUAL CHANGE NEGLIGIBLE VAR 26E (2015)

ELEVATIONS AND DIMENSIONS IN METRES

TAXIWAYS 30m WIDE

NOTE :
SEE FLIP SIDE FOR DETAILS OF
i) INS COORDINATES FOR AIRCRAFT STANDS AND PRE-FLIGHT ALTIMETER CHECK LOCATIONS.
ii) RESTRICTIONS ON TAXIWAYS.

TANAH MERAH COUNTRY CLUB CLUB HOUSE



LEGEND	
	Aircraft Stands and Taxiways Markings
	Runway Centre Line Lights
	Runway Edge Lights
	White Touchdown Zone Lights
	Blue Taxiway Edge Lights
	Green Taxiway CentreLine Lights
	Cat II Holding Position Markings Red Stop Bar Lights Controllable ON/OFF
	Twy Intersection Holding Position Markings Red Stop Bar Lights Controllable ON/OFF
	Blue Taxiway Edge Markers
EN	ECHO NORTH
NC1	NORTH CROSS 1
NC2	NORTH CROSS 2
NC3	NORTH CROSS 3
SC1	SOUTH CROSS 1
SC2	SOUTH CROSS 2
	iFERRET Tower

Changes : East Perimeter Road near Runway 02C end re-aligned. New access Road to 02C Airfield Lighting Control Centre added.

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

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
T3 SOUTH APRON	A1	01 21 21.52	103 59 06.25	4.75m (15.58ft)
	A2	01 21 21.75	103 59 04.00	4.65m (15.26ft)
	A3	01 21 19.86	103 59 02.79	4.66m (15.29ft)
	A4	01 21 17.61	103 59 02.54	4.79m (15.72ft)
	A5	01 21 15.50	103 59 03.62	4.86m (15.94ft)
	A9	01 21 12.56	103 59 03.65	5.02m (16.47ft)
	A10	01 21 10.34	103 59 02.40	5.04m (16.54ft)
	A11	01 21 07.93	103 59 01.41	5.25m (17.22ft)
	A12	01 21 05.76	103 59 00.49	5.38m (17.65ft)
	A13	01 21 03.59	103 58 59.58	5.48m (17.98ft)
	A14	01 21 01.66	103 58 57.59	5.57m (18.27ft)
	A15	01 21 00.77	103 58 55.41	5.46m (17.91ft)
	A16	01 20 59.27	103 58 54.20	5.51m (18.08ft)
	A17	01 20 57.25	103 58 54.06	5.23m (17.16ft)
	A18	01 20 55.87	103 58 55.25	5.37m (17.62ft)
	A19	01 20 55.26	103 58 57.13	5.40m (17.72ft)
	A20	01 20 56.09	103 58 58.83	5.45m (17.88ft)
	A21	01 20 57.10	103 59 00.80	5.49m (18.01ft)
T3 NORTH APRON	B1	01 21 26.86	103 59 08.37	4.82m (15.81ft)
	B2	01 21 28.18	103 59 06.82	4.68m (15.35ft)
	B3	01 21 30.33	103 59 07.30	4.65m (15.26ft)
	B4	01 21 32.03	103 59 08.60	4.75m (15.58ft)
	B5	01 21 32.98	103 59 10.89	4.80m (15.75ft)
	B6	01 21 35.15	103 59 13.16	4.96m (16.27ft)
	B7	01 21 37.65	103 59 13.93	4.97m (16.31ft)
	B8	01 21 39.94	103 59 15.20	5.09m (16.70ft)
	B9	01 21 42.19	103 59 16.16	5.13m (16.83ft)
	B10	01 21 44.47	103 59 17.12	5.10m (16.73ft)
T1 WEST APRON	C1	01 21 46.75	103 59 18.08	5.09m (16.70ft)
	C20	01 21 48.83	103 59 19.23	5.08m (16.67ft)
	C22	01 21 51.00	103 59 20.13	5.15m (16.90ft)
	C23	01 21 53.56	103 59 20.77	5.08m (16.67ft)
	C24	01 21 56.54	103 59 20.97	4.89m (16.04ft)
	C25	01 21 59.12	103 59 20.59	4.99m (16.37ft)
	C26	01 22 01.48	103 59 20.76	5.01m (16.44ft)
T1 CENTRAL APRON	C11	01 21 47.42	103 59 23.82	5.07m (16.63ft)
	C13	01 21 49.64	103 59 24.75	5.05m (16.57ft)
	C15	01 21 51.90	103 59 25.71	5.05m (16.57ft)
	C16	01 21 53.47	103 59 26.62	4.86m (15.94ft)
	C17	01 21 55.50	103 59 26.20	5.01m (16.44ft)
	C17L	01 21 54.75	103 59 26.22	4.96m (16.27ft)
	C17R	01 21 56.01	103 59 25.68	5.12m (16.80ft)
	C18	01 21 57.86	103 59 25.75	4.99m (16.37ft)
	C19	01 21 59.79	103 59 25.63	4.95m (16.24ft)
	D30	01 21 44.54	103 59 30.14	5.09m (16.70ft)
	D32	01 21 46.73	103 59 31.07	5.08m (16.67ft)
	D34	01 21 49.03	103 59 32.04	5.07m (16.63ft)
	D35	01 21 50.87	103 59 32.82	5.02m (16.47ft)
	D36	01 21 51.98	103 59 34.52	5.06m (16.60ft)
	D37	01 21 53.37	103 59 36.28	4.97m (16.31ft)
	D38	01 21 54.58	103 59 37.77	4.99m (16.37ft)
T1 EAST APRON	D40	01 21 38.13	103 59 32.89	5.11m (16.77ft)
	D40L	01 21 37.38	103 59 32.83	5.09m (16.70ft)
	D40R	01 21 38.77	103 59 32.84	5.13m (16.83ft)
	D41	01 21 40.30	103 59 33.81	5.07m (16.63ft)
	D42	01 21 42.77	103 59 34.58	5.15m (16.89ft)
	D42L	01 21 42.00	103 59 34.47	5.12m (16.79ft)
	D42R	01 21 43.45	103 59 34.44	5.21m (17.09ft)
	D44	01 21 44.97	103 59 35.44	5.14m (16.86ft)
	D46	01 21 47.40	103 59 36.72	5.08m (16.67ft)
	D47	01 21 49.19	103 59 38.89	4.93m (16.17ft)
	D48	01 21 50.60	103 59 40.77	4.97m (16.31ft)
	D49	01 21 52.23	103 59 42.35	4.98m (16.34ft)
T2 NORTH APRON	E8	01 21 27.99	103 59 38.45	4.68m (15.35ft)
	E10	01 21 24.15	103 59 32.67	4.71m (15.45ft)
	E11	01 21 25.57	103 59 34.37	4.78m (15.68ft)
	E12	01 21 27.20	103 59 36.42	4.75m (15.58ft)
	E20	01 21 24.36	103 59 27.08	5.04m (16.54ft)
	E22	01 21 26.64	103 59 28.04	5.07m (16.63ft)
	E24	01 21 29.01	103 59 29.06	5.09m (16.70ft)
	E24L	01 21 28.32	103 59 28.77	5.10m (16.73ft)
	E24R	01 21 29.53	103 59 29.28	5.08m (16.67ft)
	E26	01 21 31.19	103 59 29.96	5.08m (16.67ft)
	E27	01 21 33.56	103 59 30.96	5.07m (16.62ft)
	E27L	01 21 32.79	103 59 30.86	5.03m (16.48ft)
	E27R	01 21 34.20	103 59 30.91	5.12m (16.80ft)
	E28	01 21 35.74	103 59 31.89	5.08m (16.67ft)

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

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
T2 CENTRAL APRON	E1	01 21 20.02	103 59 25.58	4.91m (16.11ft)
	E2	01 21 19.28	103 59 27.30	4.90m (16.08ft)
	E3	01 21 18.44	103 59 29.27	4.82m (15.81ft)
	E4	01 21 18.10	103 59 31.70	4.80m (15.75ft)
	E5	01 21 19.56	103 59 33.72	4.90m (16.08ft)
	E6	01 21 21.22	103 59 35.93	4.84m (15.88ft)
	E7	01 21 22.48	103 59 37.46	4.73m (15.52ft)
	F30	01 21 14.71	103 59 23.33	4.92m (16.14ft)
	F31	01 21 13.87	103 59 25.30	4.91m(16.11ft)
	F32	01 21 13.03	103 59 27.26	4.85m (15.91ft)
	F33	01 21 11.30	103 59 28.54	4.91m (16.11ft)
	F34	01 21 08.98	103 59 28.96	4.92m (16.14ft)
	F35	01 21 06.60	103 59 29.55	4.91m (16.11ft)
	F35L	01 21 06.06	103 59 30.13	4.74m (15.55ft)
	F35R	01 21 06.96	103 59 29.05	5.04m (16.54ft)
	F36	01 21 04.34	103 59 29.67	4.82m (15.81ft)
T2 SOUTH APRON	F37	01 20 59.83	103 59 27.87	4.75m (15.58ft)
	F40	01 21 05.62	103 59 25.34	4.85m (15.91ft)
	F41	01 21 03.19	103 59 25.58	4.82m (15.81ft)
	F42	01 21 00.61	103 59 25.96	4.72m (15.49ft)
	F50	01 21 10.69	103 59 21.32	5.03m (16.50ft)
	F52	01 21 08.51	103 59 20.40	5.11m (16.77ft)
	F52L	01 21 07.82	103 59 20.11	5.16m (16.93ft)
	F52R	01 21 09.04	103 59 20.62	5.08m (16.67ft)
	F54	01 21 06.14	103 59 19.40	5.22m (17.13ft)
	F56	01 21 03.96	103 59 18.48	5.30m (17.39ft)
	F56L	01 21 03.27	103 59 18.18	5.42m (17.78ft)
	F56R	01 21 04.49	103 59 18.70	5.34m (17.52ft)
	F58	01 21 01.58	103 59 17.47	5.49m (18.01ft)
	F59	01 20 59.41	103 59 16.55	5.64m (18.50ft)
	F59L	01 20 58.72	103 59 16.26	5.67m (18.60ft)
	F59R	01 20 59.93	103 59 16.78	5.60m (18.37ft)
	F60	01 20 56.91	103 59 15.50	5.77m (18.93ft)
EAST REMOTE APRON	200	01 20 47.83	103 59 11.67	6.23m (20.44ft)
	200L	01 20 46.91	103 59 11.92	6.29m (20.64ft)
	200R	01 20 48.35	103 59 11.89	6.18m (20.28ft)
	201	01 20 49.99	103 59 12.62	5.96m (19.55ft)
	202	01 20 52.34	103 59 13.57	5.94m (19.49ft)
	202L	01 20 51.65	103 59 13.28	5.76m (18.90ft)
	202R	01 20 52.87	103 59 13.79	5.73m (18.80ft)
	203	01 20 54.52	103 59 14.47	5.92m (19.42ft)
SOUTH-EAST REMOTE APRON	205	01 20 43.91	103 59 17.06	4.77m (15.65ft)
	206	01 20 46.08	103 59 17.98	4.76m (15.62ft)
	207	01 20 47.91	103 59 18.88	4.74m (15.55ft)
	208	01 20 49.48	103 59 19.54	4.74m (15.55ft)
	209	01 20 51.06	103 59 20.21	4.75m (15.58ft)
NORTH REMOTE APRON	300	01 22 06.95	103 59 22.67	4.53m (14.86ft)
	301	01 22 06.41	103 59 24.69	4.93m (16.17ft)
	302	01 22 05.21	103 59 26.75	4.97m (16.31ft)
	303	01 22 03.55	103 59 31.40	5.32m (17.45ft)
	304	01 22 02.84	103 59 33.05	5.35m (17.55ft)
	305	01 22 02.14	103 59 34.71	5.30m (17.39ft)
	306	01 22 01.41	103 59 36.42	5.16m (16.93ft)
	307	01 21 59.39	103 59 40.36	5.16m (16.93ft)
	308	01 21 58.96	103 59 41.35	5.10m (16.73ft)
	309	01 21 58.52	103 59 43.17	5.06m (16.60ft)
	310	01 21 57.42	103 59 44.96	4.74m (15.55ft)
NORTH-EAST REMOTE APRON	400	01 21 38.71	103 59 40.14	4.31m (14.14ft)
	401	01 21 40.98	103 59 41.10	4.31m (14.14ft)
	402	01 21 42.85	103 59 41.89	4.30m (14.11ft)
	403	01 21 44.37	103 59 42.53	4.29m (14.07ft)
	404	01 21 45.45	103 59 42.98	4.20m (13.78ft)
WEST CARGO APRON	502	01 22 22.23	103 59 31.62	4.35m (14.27ft)
	503	01 22 24.98	103 59 32.78	4.29m (14.07ft)
	504	01 22 27.26	103 59 33.74	4.29m (14.07ft)
	505	01 22 29.54	103 59 34.70	4.32m (14.17ft)
	506	01 22 31.81	103 59 35.66	4.38m (14.37ft)
	507	01 22 34.11	103 59 36.64	4.36m (14.30ft)
	508	01 22 36.41	103 59 37.61	4.29m (14.07ft)
	509	01 22 39.12	103 59 38.76	4.09m (13.42ft)
	510	01 22 41.37	103 59 40.18	4.19m (13.75ft)
	511	01 22 43.54	103 59 41.09	4.22m (13.85ft)
	512	01 22 45.71	103 59 42.01	4.24m (13.91ft)
	513	01 22 47.89	103 59 42.92	4.26m (13.98ft)
	514	01 22 50.19	103 59 43.54	4.36m (14.30ft)
	515	01 22 52.90	103 59 43.20	4.09m (13.43ft)
	516	01 22 55.39	103 59 43.97	4.04m (13.26ft)
	516L	01 22 56.24	103 59 43.80	3.96m (12.98ft)
	516R	01 22 54.93	103 59 43.25	3.95m (12.97ft)
	517	01 22 58.02	103 59 45.08	4.05m (13.27ft)
	517L	01 22 58.83	103 59 44.99	3.98m (13.05ft)
	517R	01 22 57.55	103 59 44.35	3.96m (12.98ft)

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

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
EAST CARGO APRON	600	01 22 14.12	103 59 48.10	4.25m (13.94ft)
	600L	01 22 13.28	103 59 48.27	4.22m (13.83ft)
	600R	01 22 14.58	103 59 48.81	4.15m (13.60ft)
	601	01 22 16.52	103 59 49.27	4.27m (14.01ft)
	602	01 22 18.80	103 59 50.23	4.30m (14.11ft)
	603	01 22 21.15	103 59 51.02	4.29m (14.07ft)
	604	01 22 23.46	103 59 51.99	4.31m (14.14ft)
	605	01 22 25.19	103 59 52.75	4.27m (14.01ft)
EAST SERVICE APRON	606	01 22 10.00	103 59 52.53	2.43m (7.97ft)
	609	01 22 12.95	103 59 55.04	2.91m (9.55ft)
ACEHUB	611	01 22 22.14	104 00 02.87	4.01m (13.16ft)
	612	01 22 24.50	104 00 02.87	3.91m (12.83ft)
SOUTH APRON	461	01 20 39.67	103 58 52.75	5.28m (17.32ft)
	462	01 20 40.69	103 58 50.37	5.75m (18.86ft)
	462L	01 20 40.41	103 58 51.02	5.48m (17.98ft)
	462R	01 20 40.97	103 58 49.71	5.71m (18.73ft)
	463	01 20 41.80	103 58 47.76	5.97m (19.59ft)
	463L	01 20 41.52	103 58 48.42	5.82m (19.10ft)
	463R	01 20 42.06	103 58 47.17	5.82m (19.10ft)
	464	01 20 32.33	103 58 49.39	4.98m (16.34ft)
	465	01 20 33.61	103 58 47.20	5.01m (16.44ft)
	466	01 20 34.53	103 58 45.05	5.01m (16.44ft)
	467	01 20 27.32	103 58 45.73	5.01m (16.44ft)
	468	01 20 28.34	103 58 43.34	5.00m (16.41ft)
	469	01 20 29.36	103 58 40.96	5.02m (16.47ft)
	471	01 20 23.76	103 58 44.49	5.16m (16.93ft)
	472	01 20 24.55	103 58 43.24	5.16m (16.93ft)
	473	01 20 25.12	103 58 41.90	5.16m (16.93ft)
	474	01 20 25.70	103 58 40.56	5.16m (16.93ft)
	475	01 20 26.27	103 58 39.22	5.16m (16.93ft)
	476	01 20 19.16	103 58 41.47	5.16m (16.93ft)
	477	01 20 19.74	103 58 40.13	5.16m (16.93ft)
	478	01 20 20.31	103 58 38.79	5.16m (16.93ft)
	479	01 20 20.88	103 58 37.45	5.16m (16.93ft)
	480	01 20 21.45	103 58 36.11	5.16m (16.93ft)
	481	01 20 25.27	103 58 32.56	5.22m (17.13ft)
	482	01 20 26.62	103 58 33.13	5.22m (17.13ft)
	483	01 20 27.96	103 58 33.70	5.22m (17.13ft)
	484	01 20 29.31	103 58 34.27	5.22m (17.13ft)
	485	01 20 30.66	103 58 34.84	5.22m (17.13ft)
	486	01 20 32.01	103 58 35.41	5.22m (17.13ft)
	487	01 20 33.36	103 58 35.98	5.22m (17.13ft)
T4 APRON	G1	01 20 07.58	103 59 00.97	3.95m (12.96ft)
	G2	01 20 08.88	103 59 01.52	3.95m (12.96ft)
	G3	01 20 10.18	103 59 02.07	3.95m (12.96ft)
	G4	01 20 11.48	103 59 02.07	3.94m (12.93ft)
	G5	01 20 12.77	103 59 03.17	3.94m (12.93ft)
	G6	01 20 14.49	103 59 03.89	3.93m (12.89ft)
	G7	01 20 15.70	103 59 04.57	3.89m (12.76ft)
	G8	01 20 17.01	103 59 05.12	3.85m (12.63ft)
	G9	01 20 18.31	103 59 05.67	3.85m (12.63ft)
	G10	01 20 19.60	103 59 06.22	3.86m (12.66ft)
	G11	01 20 20.90	103 59 06.77	3.84m (12.60ft)
	G12	01 20 22.20	103 59 07.31	3.83m (12.57ft)
	G13	01 20 23.50	103 59 07.86	3.82m (12.53ft)
	G14	01 20 24.79	103 59 08.41	3.83m (12.57ft)
	G15	01 20 26.09	103 59 08.96	3.88m (12.73ft)
	G16	01 20 27.39	103 59 09.50	4.05m (13.29ft)
	G17	01 20 28.69	103 59 10.05	4.00m (13.12ft)
	G18	01 20 31.53	103 59 11.86	4.36m (14.30ft)
	G18L	01 20 32.05	103 59 12.85	4.34m (14.24ft)
	G18R	01 20 31.65	103 59 11.26	4.43m (14.53ft)
	G19	01 20 32.64	103 59 09.25	4.56m (14.96ft)
	G19L	01 20 33.17	103 59 11.26	4.47m (14.67ft)
	G19R	01 20 32.77	103 59 08.66	4.56m (14.96ft)
	G20	01 20 33.75	103 59 06.65	4.52m (14.83ft)
	G20L	01 20 34.13	103 59 07.58	4.44m (14.57ft)
	G20R	01 20 33.99	103 59 06.10	4.52m (14.83ft)
	G21	01 20 34.87	103 59 04.04	4.51m (14.80ft)
	G21L	01 20 35.24	103 59 04.98	4.52m (14.83ft)
	G21R	01 20 35.10	103 59 03.49	4.55m (14.93ft)

RESTRICTIONS ON TAXIWAYS

1) Pilots are advised to apply minimum thrust when
   i) turning into TWY P2, P4, P5 and Taxilane P6 while taxiing either northwards or southwards on Taxilane P7, and
   ii) thereafter when taxiing along TWY P2 up to and including the TWY P1/P2 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 P7) can only be used by aircraft with maximum wingspan 65m.

4) Taxiway centreline along TWY EP between TWY R1 and R3 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 P7 (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 : 230

STANDARD DEPARTURE CHART RNAV (GNSS) - INSTRUMENT (SID)

TWR 118.6 / 118.25
APP 120.3
ACC 134.2

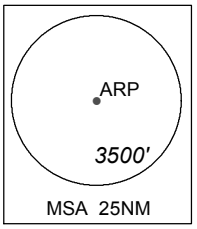
TRANSITION ALTITUDE
11 000ft

D-ATIS AP ID-WSSS
128.6

SINGAPORE/Singapore Changi
RWY 02C/20C
TOMAN DEPARTURES
TOMAN 2A (R02C)
TOMAN 4B (R20C)

ELEV, ALT IN FEET
BEARINGS, TRACKS AND
RADIALS ARE MAGNETIC
VAR 26'E (2015)

DISTANCES IN NM



NOTE: RADAR REQUIRED

NOTE: RNAV-1 NAVIGATION SPECIFICATION GNSS REQUIRED

NOTE: ACFT UNABLE TO FLY THE SID PROFILE SHALL INFORM ATC PRIOR TO DEPARTURE AND TO EXPECT RADAR VECTORING, IF NECESSARY

NOTE: WHEN TAKEN OFF THE SID, AS INSTRUCTED BY ATC, REFER TO ENR 1.5, SECTION 3, PARAGRAPH 3.3 [A] - FOR RWY 02C MINIMUM CLIMB GRADIENT AND PARAGRAPH 3.4.1 - FOR RWY 20C MINIMUM CLIMB GRADIENT

NOTE: REFER TO BACK PAGE FOR
- FORMAL AND TABULAR DESCRIPTIONS
- RADIO COM FAILURE PROCEDURES

GENERAL INFORMATION

INITIAL CLIMB 3000FT

ALL SIDs INCLUDE NOISE PREFERENTIAL ROUTES.

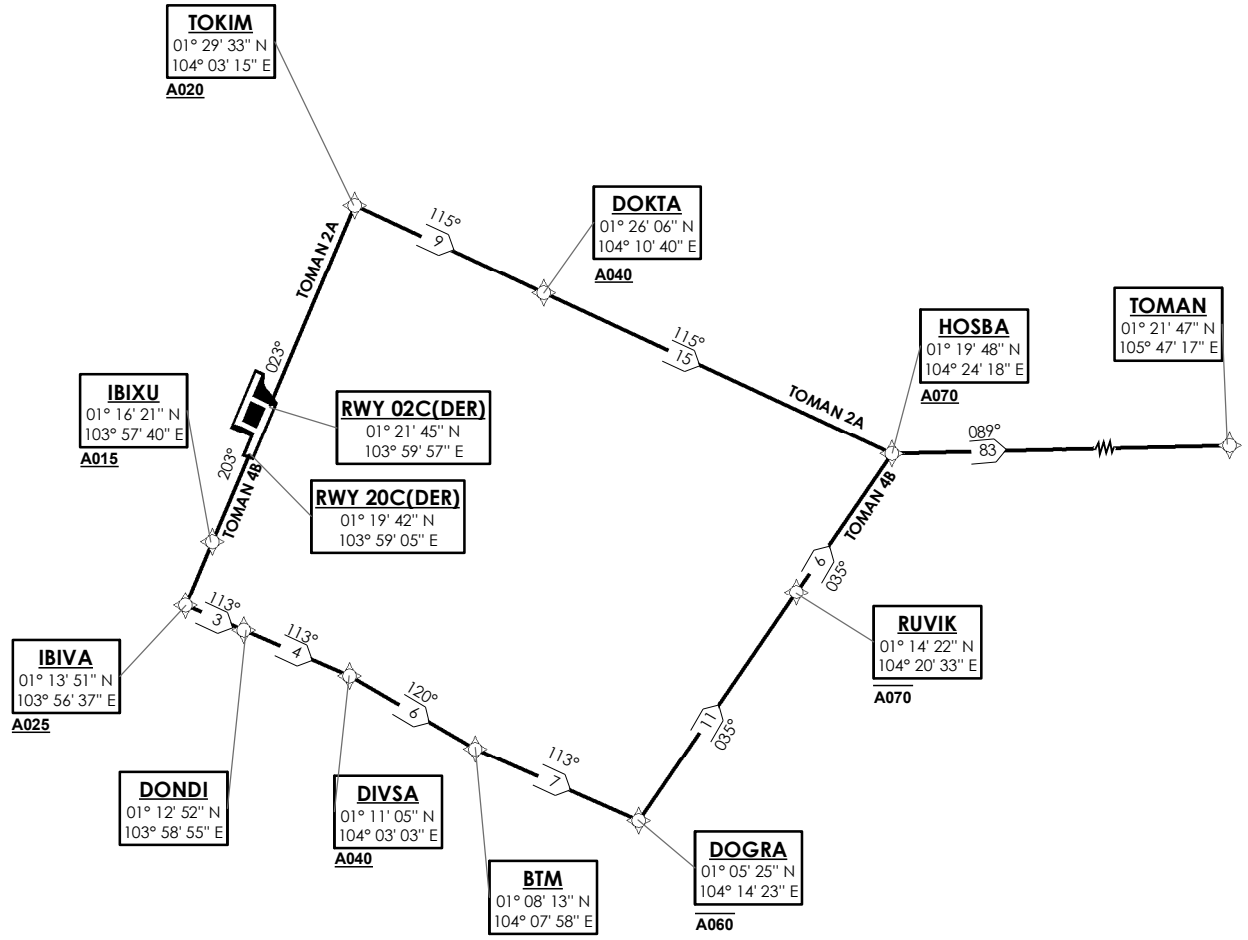
RWY 02C

SHALL NOT EXCEED IAS 230KTS UNTIL PASSING 4000FT AMSL AND NOT EXCEED IAS 250KTS UNTIL PASSING 10000FT AMSL.
CRUISING LEVELS WILL BE ISSUED AFTER TAKE-OFF BY SINGAPORE RADAR.
SID SHALL BE ON A MINIMUM CLIMB GRADIENT OF 3.3%.

RWY 20C

SHALL NOT EXCEED IAS 230KTS UNTIL PASSING 4000FT AMSL AND NOT EXCEED IAS 250KTS UNTIL PASSING 10000FT AMSL.
CRUISING LEVELS WILL BE ISSUED AFTER TAKE-OFF BY SINGAPORE RADAR.
SID SHALL BE ON A MINIMUM CLIMB GRADIENT OF 7% UNTIL REACHING OR PASSING 2500FT, THEREAFTER 3.3%.

GND SPEED - KNOTS	75	100	150	200	250	300
7% V/V (fpm)	532	709	1062	1416	1769	2123
3.3% V/V (fpm)	251	334	501	668	835	1003



NOT TO SCALE

CHANGES : Reprint.

TOMAN 2A (SID) RNAV GNSS RWY 02C - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To TOKIM on course 023° at or above 2000ft, turn right. To DOKTA at or above 4000ft. To HOSBA at or above 7000ft, turn left. To TOMAN.	TOKIM [M023; A020+; R] - DOKTA [A040+] - HOSBA [A070+; L] - TOMAN	CF TF TF TF	N N N N

Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
CF	TOKIM	-	023(022.5)	-0.5	R	A020+	-	RNAV1
TF	DOKTA	-	115(114.5)	-0.5	-	A040+	-	RNAV1
TF	HOSBA	-	115(114.5)	-0.5	L	A070+	-	RNAV1
TF	TOMAN	-	089(088.5)	-0.5	-	-	-	RNAV1

TOMAN 4B (SID) RNAV GNSS RWY 20C - DESCRIPTIONS

Formal & Abbreviated Descriptions

Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
To IBIXU on course 203° at or above 1500ft. To IBIVA at or above 2500ft, turn left. To DONDI. To DIVSA at or above 4000ft, turn right. To BTM, turn left. To DOGRA at or below 6000ft, turn left. To RUVIK at or below 7000ft. To HOSBA at or above 7000ft, turn right. To TOMAN.	IBIXU [M203; A015+] - IBIVA [A025+; L] - DONDI - DIVSA [A040+; R] - BTM [L] - DOGRA [A060-; L] - RUVIK [A070-] - HOSBA [A070+; R] - TOMAN	CF TF TF TF TF TF TF TF TF	N N N N N N N N N

Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
CF	IBIXU	-	203(202.5)	-0.5	-	A015+	-	RNAV1
TF	IBIVA	-	203(202.5)	-0.5	L	A025+	-	RNAV1
TF	DONDI	-	113(112.5)	-0.5	-	-	-	RNAV1
TF	DIVSA	-	113(112.5)	-0.5	R	A040+	-	RNAV1
TF	BTM	-	120(119.5)	-0.5	L	-	-	RNAV1
TF	DOGRA	-	113(112.5)	-0.5	L	A060-	-	RNAV1
TF	RUVIK	-	035(034.5)	-0.5	-	A070-	-	RNAV1
TF	HOSBA	-	035(034.5)	-0.5	R	A070+	-	RNAV1
TF	TOMAN	-	089(088.5)	-0.5	-	-	-	RNAV1

RADIO COMMUNICATIONS FAILURE PROCEDURE

1	**SET TRANSPONDER TO MODE A/C CODE 7600**
2	**COMMUNICATIONS FAILURE OCCURS IMMEDIATELY AFTER DEPARTURE ON:** **RWY 02C -** PROCEED STRAIGHT AHEAD TO NYLON HOLDING AREA (NHA) CLIMBING TO THE LAST ASSIGNED ALTITUDE, THEREAFTER REFER TO SINGAPORE AIP ON RADIO COMMUNICATIONS FAILURE PROCEDURE. **RWY 20C -** PROCEED STRAIGHT AHEAD TO SAMKO HOLDING AREA (SHA) CLIMBING TO THE LAST ASSIGNED ALTITUDE, THEREAFTER REFER TO SINGAPORE AIP ON RADIO COMMUNICATIONS FAILURE PROCEDURE.

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: 23 M (75.5ft), 18 M (59.1ft)TWY EC4, EC5 AND EC6 8 M (26.2ft) TWY WS1 and WS2 Surface: Bituminous concrete Strength: PCN44/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*	RWY LGT: 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 423.542m from THR respectively. RWY 21: coincident with PAPI origin located 271.279m from THR respectively.
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 RWY.)

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS			
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 6000, 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.
		l.	Aircraft stands D50, D51, D52, D53, D54, D55 and D56 can support arriving taxi in operations for aircraft types up to B757-200, and departing aircraft taxi out operations for Code A aircraft, Code B aircraft and Code C aircraft (A319, A320, A321, ATR 42, ATR 72, DASH 7, Embraer 190STD, ERJ 135ER, Falcon 7X, Fokker 50, Fokker 70, Fokker 100, Global Express, Global 5000, Global 6000, Global Express XRS, Gulfstream 500, Gulfstream 550 and Q400 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.
		n.	Aircraft type C130 is restricted to tow in operations at aircraft stand D50. Aircraft is required to shut down at designated shut down area and be towed to aircraft stand D50.

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. **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.	Pushback approved, to face North (or South) 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)
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 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 North. 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 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 North. Pushback approved, to face South.

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 3.2° (both sides of RWY) 2 white 2 red LGT (21.24m) 3 white 1 red LGT (22.27m) 4 white LGT (24.75m). 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.	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 symmetrically disposed in 2 groups with a gap between the groups. RWY 21 THR and RWY END LGT reinstated to inset fitting.							

WSSL AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	*ABN/IBN location, characteristics and hours of operation*	ABN: 012448.00N 1035207.96E (on top of Control Tower) ALTN FLG W G EV 2.5 SEC. HN and IMC IBN: 012509.94N 1035152.14E (on top of West Substation) FLG G 'SL' EV 7 SEC. 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 **SELETAR 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*	C
4	*ATS Unit Call sign Language(s)*	SELETAR TOWER English
5	*Transition Altitude*	11000 FT (3,350m)
6	*Remarks*	NIL

AERODROME CHART - ICAO

01° 25' 01.04"N
103° 52' 03.52"E

ELEV 14m

TWR 118.45
121.6

SINGAPORE/SELETAR

RWY	DIRECTION	THR	RUNWAY BEARING STRENGTH
03	033°	01 24 30.846N 103 51 43.791E	PCN 44/F/C/X/T
21	213°	01 25 20.791N 103 52 16.425E	
APRONS		BEARING STRENGTH All Aircraft Stands PCN 41/R/C/W/T except C7 PCN44/F/C/X/T	

ELEVATIONS AND DIMENSIONS IN METRES

VAR 26E (2015)
ANNUAL CHANGE NEGLIGIBLE

Pulau Ponggol Barrat

RESA 240 x 150m

CWY 60 x 150m

AP IBN
Flg G 'SL'

PAPI 3.5°

GP Antenna

STRIP 1956m X 280m

Paved Shoulder

1836m X 46m BITUMINOUS CONCRETE

PAPI 3.2°

Compass Swing Area

NEW SELETAR PASSENGER TERMINAL

SELETAR NDB 220 SEL

ABN
Altn Flg W & G every 2.5 sec

CONTROL TWR
AIS, MET, FIRE STATION
EAST AFLCC

Helicopter Landing Area
(Restricted to normal landing and take-off operations only. Running landing not allowed due to unsuitable ground condition.)

SELETAR AEROSPACE DRIVE

CWY 60 x 150m

RESA 240 x 92m

ELEV 14

LOCALISER

LLZ BDLG

Metres
100 0 100 200 300
400 0 400 800 1200
Feet

PAPI 3.2°(RWY 03)/3.5°(RWY21) (MEHT) *		
Pilot's eye height over the threshold when the following PAPI lights come into view.	RUNWAY 03	RUNWAY 21
2 White lights and 2 Red lights	21.24m	17.720m
3 White lights and 1 Red lights	22.27m	19.286m
4 White lights	24.75m	20.871m

* MEHT : Minimum Eye Height Over the Threshold
Note Aircraft with eye-to-wheel height greater than 6.3 metres are advised to fly with 2 white lights and 2 red lights visible so as to achieve sufficient wheel clearance.

LEGEND	
AIRCRAFT STAND	C8
Taxiway Centre Line Lights	
Runway Edge Lights	
Taxiway Edge Lights	
TAXI HOLDING POSITION	
STOP BAR	
MAST FOR WIND MONITORING SYSTEM	⊗
THRESHOLD IDENTIFICATION LIGHTS 15m FROM RUNWAY EDGES	•

MARKING AIDS RWY 03/21 AND EXIT TWY

LIGHTING AIDS RWY 03/21 AND EXIT TWY

LOCALISER

PRECISION APPROACH CAT 1 LIGHTING SYSTEM (BARRETTE CENTRE LINE)

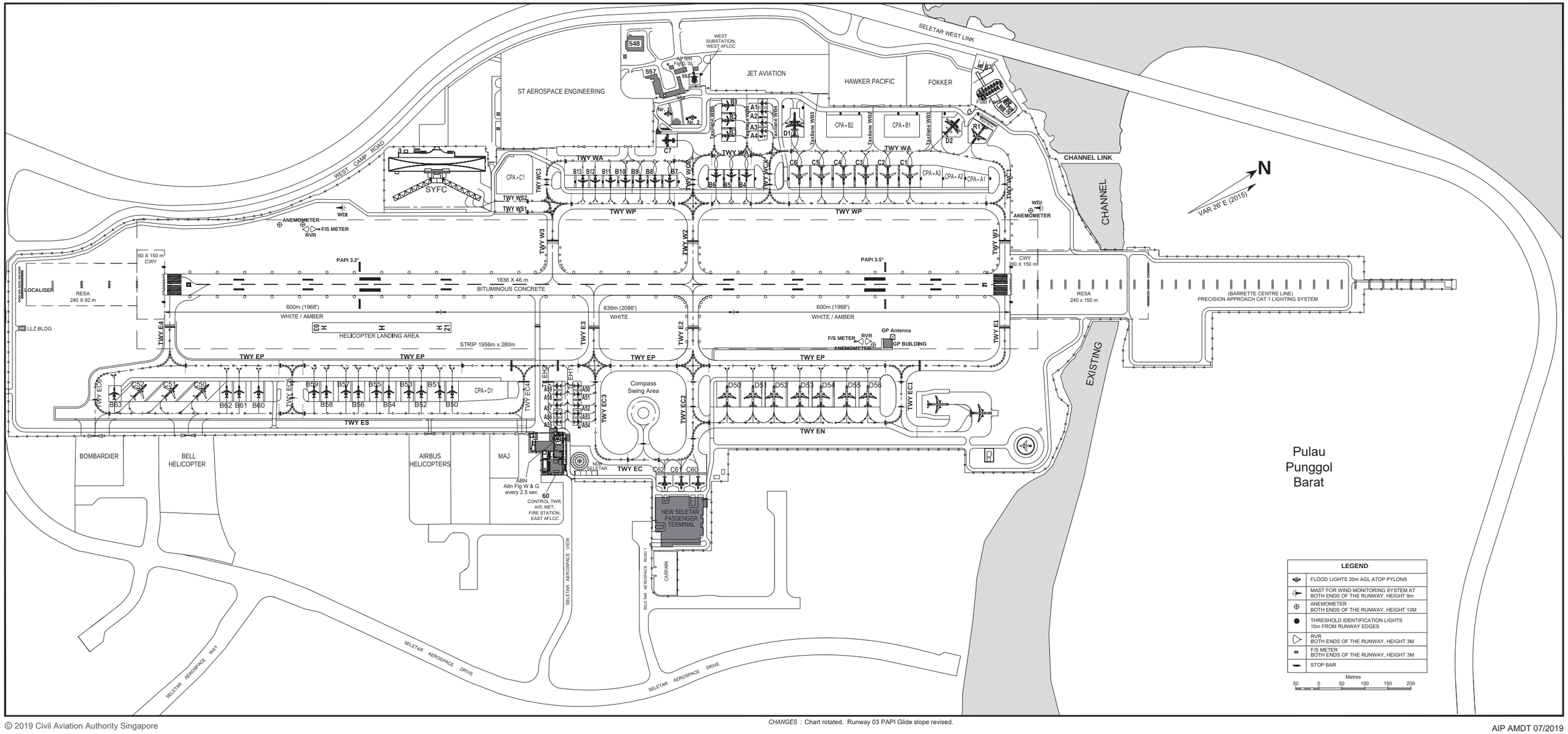
CHANGES : Runway 03 PAPI Glide slope and MEHT revised.

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)
A4	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 (27.547ft)
B10	01 25 01.893	103 51 55.814	8.383m (27.505ft)
B11	01 25 01.006	103 51 55.237	8.330m (27.331ft)
B12	01 25 00.109	103 51 54.650	8.449m (27.721ft)
B13	01 24 59.374	103 51 54.170	8.571m (28.121ft)
B50	01 24 43.887	103 52 00.875	8.753m (28.719ft)
B51	01 24 43.153	103 52 00.394	8.847m (29.027ft)
B52	01 24 42.063	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)
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 (19.094ft)
D55	01 25 07.129	103 52 16.184	5.550m (18.209ft)
D56	01 25 08.372	103 52 16.997	5.320m (17.454ft)

SELETAR AERODROME

LAYOUT OF SIGNIFICANT AERODROME BUILDINGS AND APRON FACILITIES



CHANGES : Chart rotated. Runway 03 PAPI Glide slope revised.

PAGE INTENTIONALLY LEFT BLANK

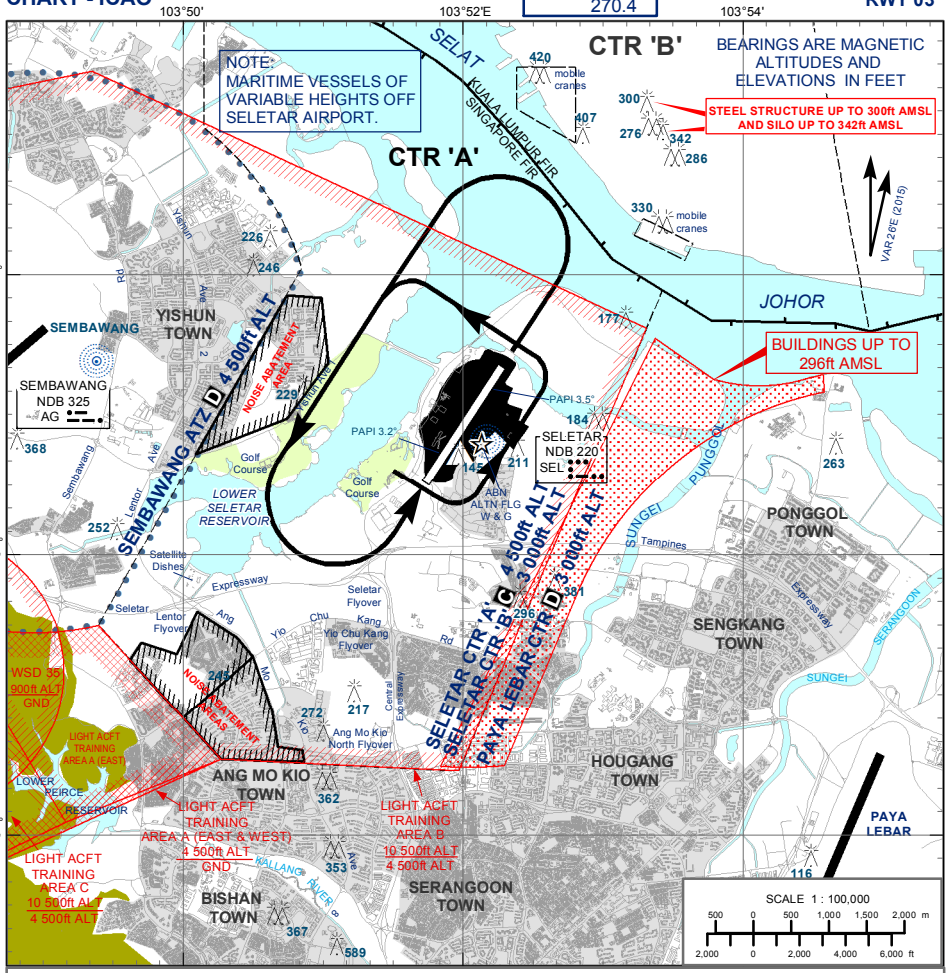
VISUAL APPROACH CHART - ICAO

AD ELEV 46 ft

APP	120.3
	126.025
TWR	118.45
	270.4

SINGAPORE/SELETAR

RWY 03



JOINING PROCEDURE - RWY 03

1) Join overhead at 2 000ft ALT or as cleared by ATC and at a speed of not more than 170kt.

2) When over the south-end of the runway (THR RWY 03), join the circuit crossing the upwind north-end of the runway (THR RWY 21) at 1 500ft ALT or above or at the altitude cleared by ATC.

3) Joining aircraft shall give way to circuit traffic already on downwind.

CAUTION

a) Pilots are required to keep clear of Sembawang ATZ.

b) Pilots should not fly to the east of the runway.
This is to keep clear of tall buildings up to 296ft AMSL to the east of Seletar CTR.
(See area shaded in red).

Minimum altitudes apply over noise abatement areas (WSSL AD 2.21)
Aircraft types which are unable to safely manoeuvre clear of the noise abatement areas are not allowed to operate at Seletar Airport.

PAPI 3.2°		
Pilot's eye height over the threshold when the following PAPI lights come into view	RUNWAY	
	03	21
2 white lights and 2 red lights (MEHT)*	21.24m	17.720m
3 white lights and 1 red light	22.27m	19.286m
4 white lights	24.75m	20.871m

*MEHT : Minimum Eye Height Over the Threshold.

Note : Aircraft with eye-to-wheel height greater than 6.3 metres are advised to fly with 2 white and 2 red lights visible so as to achieve sufficient wheel clearance.

Note:
1) Pilots are to be advised of the steel structure 300ft AMSL and the Silo 342ft AMSL 2nm north of the airfield.
2) Pilots are required to keep their turns within Seletar Control Zone.
3) Pilots are required to keep clear of Sembawang CTR and Paya Lebar CTR.

CHANGES : Runway 03 PAPI Glide slope and MEHT revised.

PAGE INTENTIONALLY LEFT BLANK

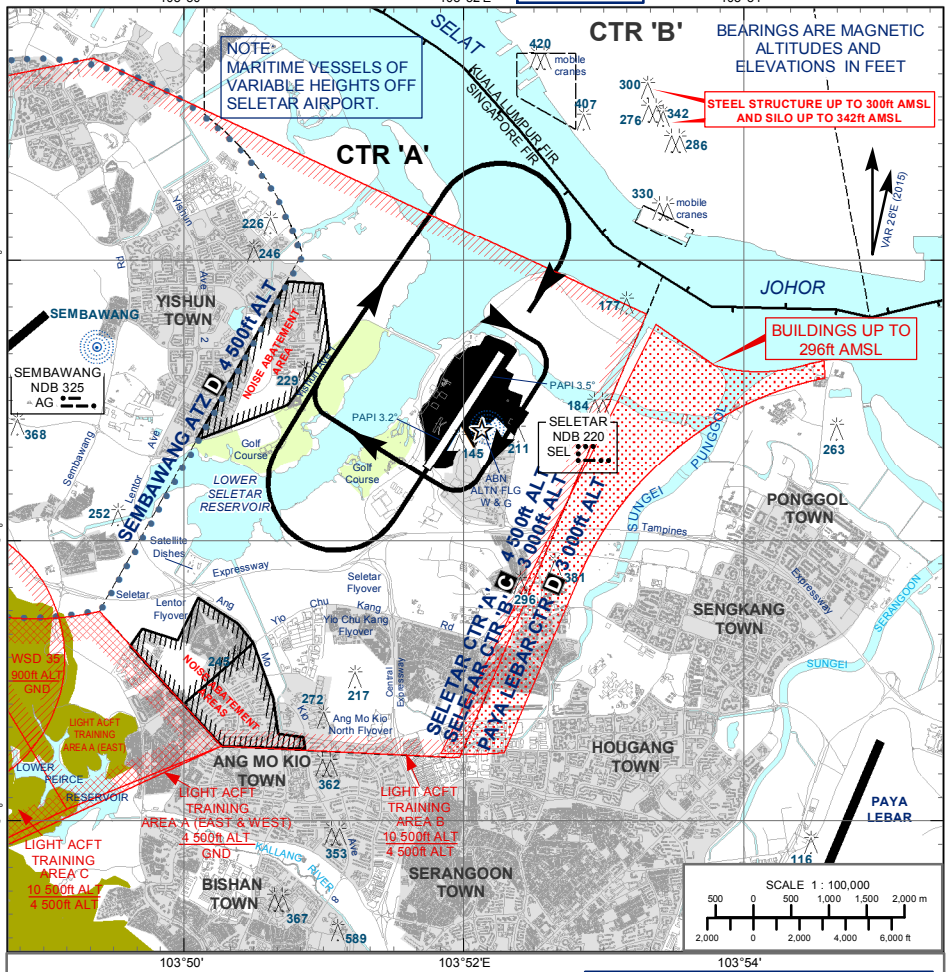
VISUAL APPROACH CHART - ICAO

AD ELEV 46 ft

APP	120.3
	126.025
TWR	118.45
	270.4

SINGAPORE/SELETAR

RWY 21



JOINING PROCEDURE - RWY 21

1) Join overhead at 2 000ft ALT or as cleared by ATC and at a speed of not more than 170kt.

2) When over the north-end of the runway (THR RWY 21), join the circuit crossing the upwind south-end of the runway (THR RWY 03) at 1 500ft ALT or above or at the altitude cleared by ATC.

3) Joining aircraft shall give way to circuit traffic already on downwind.

CAUTION

a) Pilots are required to keep clear of Sembawang ATZ.

b) Pilots should not fly to the east of the runway.
This is to keep clear of tall buildings up to 296ft AMSL to the east of Seletar CTR.
(See area shaded in red).

Minimum altitudes apply over noise abatement areas (WSSL AD 2.21)
Aircraft types which are unable to safely manoeuvre clear of the noise abatement areas are not allowed to operate at Seletar Airport.

PAPI 3.5°		
Pilot's eye height over the threshold when the following PAPI lights come into view	RUNWAY	
	03	21
2 white lights and 2 red lights (MEHT)*	21.24m	17.720m
3 white lights and 1 red light	22.27m	19.286m
4 white lights	24.75m	20.871m

*MEHT : Minimum Eye Height Over the Threshold.

Note : Aircraft with eye-to-wheel height greater than 6.3 metres are advised to fly with 2 white and 2 red lights visible so as to achieve sufficient wheel clearance.

Note:
1) Pilots are to be advised of the steel structure 300ft AMSL and the Silo 342ft AMSL 2nm north of the airfield.
2) Pilots are required to keep their turns within Seletar Control Zone.
3) Pilots are required to keep clear of Sembawang CTR and Paya Lebar CTR.

CHANGES : Runway 03 PAPI Glide slope and MEHT revised.

PAGE INTENTIONALLY LEFT BLANK

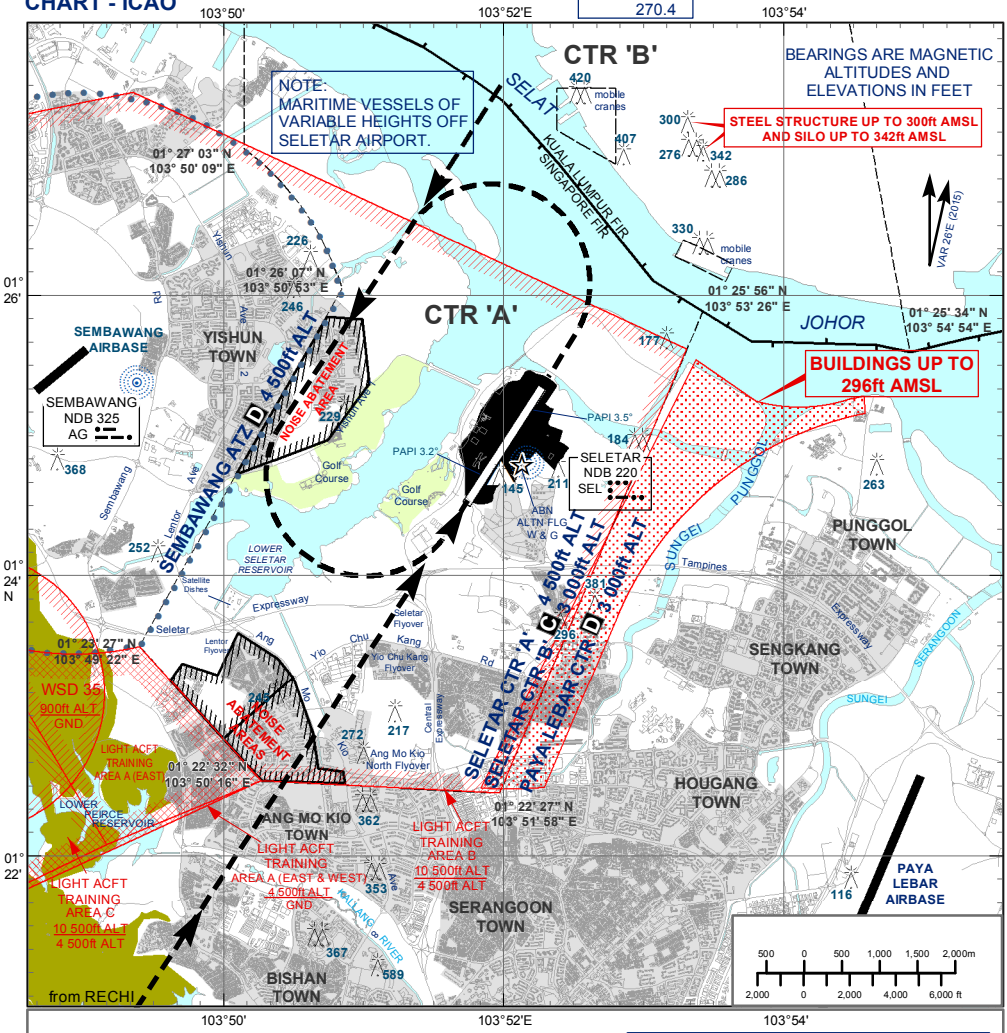
VISUAL APPROACH CHART - ICAO

AD ELEV 46 ft

APP	120.3 126.025
TWR	118.45 270.4

SINGAPORE/SELETAR

RWY 03



ADVISORY JOINING PROCEDURES - RWY 03

Straight-in Approach

1) From JB or KK, join downwind at 2 000ft at a speed of not more than 170kt. When downwind, descend from 2 000ft for visual approach or as cleared by ATC. Pilots should have runway in sight.
2) From SJ-PONJO-RECHI, join direct for visual approach, descending from 2 000ft at a speed of not more than 170kt, or as cleared by ATC. Pilots should have runway in sight.
3) Joining aircraft shall give way to circuit traffic already on downwind.

Circling Approach

1) From JB or KK, join downwind at 2 000ft at a speed of not more than 160kt. Passing over north-end of the runway (THR RWY 21), descend from 2 000ft to 1 500ft and turn left for downwind RWY 03. At downwind, descend for a visual approach or as cleared by ATC. Pilots should have the runway in sight.
2) From SJ-PONJO-RECHI, overfly the runway at 2 000ft at a speed of not more than160kt. or as cleared by ATC. When passing over the north-end of the runway (THR 21), descend from 2 000ft to 1 500ft and turn left for downwind RWY 03. At downwind, descend for a visual approach or as cleared by ATC. Pilots should have runway in sight.
3) Joining aircraft shall give way to circuit traffic already on downwind.

CAUTION

a) Pilots are required to keep clear of Sembawang ATZ. Turns should therefore be kept within Seletar CTR.
b) Pilots should not fly to the east of the runway. This is to keep clear of tall buildings up to 296ft AMSL there. Pilots should have all relevant obstructions in sight, including the steel structure 300ft AMSL and the Silo 342ft AMSL 2nm north of the airfield.
c) Minimum altitudes apply over noise abatement areas (WSSL AD 2.21) Aircraft types which are unable to safely manoeuvre clear of the noise abatement areas are not allowed to operate at Seletar Airport.

PAPI 3.2°		
Pilot's eye height over the threshold when the following PAPI lights come into view	RUNWAY	
	03	21
2 white lights and 2 red lights (MEHT)*	21.24m	17.720m
3 white lights and 1 red light	22.27m	19.286m
4 white lights	24.75m	20.871m

*MEHT : Minimum Eye Height Over the Threshold.

Note : Aircraft with eye-to-wheel height greater than 6.3 metres are advised to fly with 2 white and 2 red lights visible so as to achieve sufficient wheel clearance.

CHANGES : Runway 03 PAPI Glide slope and MEHT revised.

PAGE INTENTIONALLY LEFT BLANK

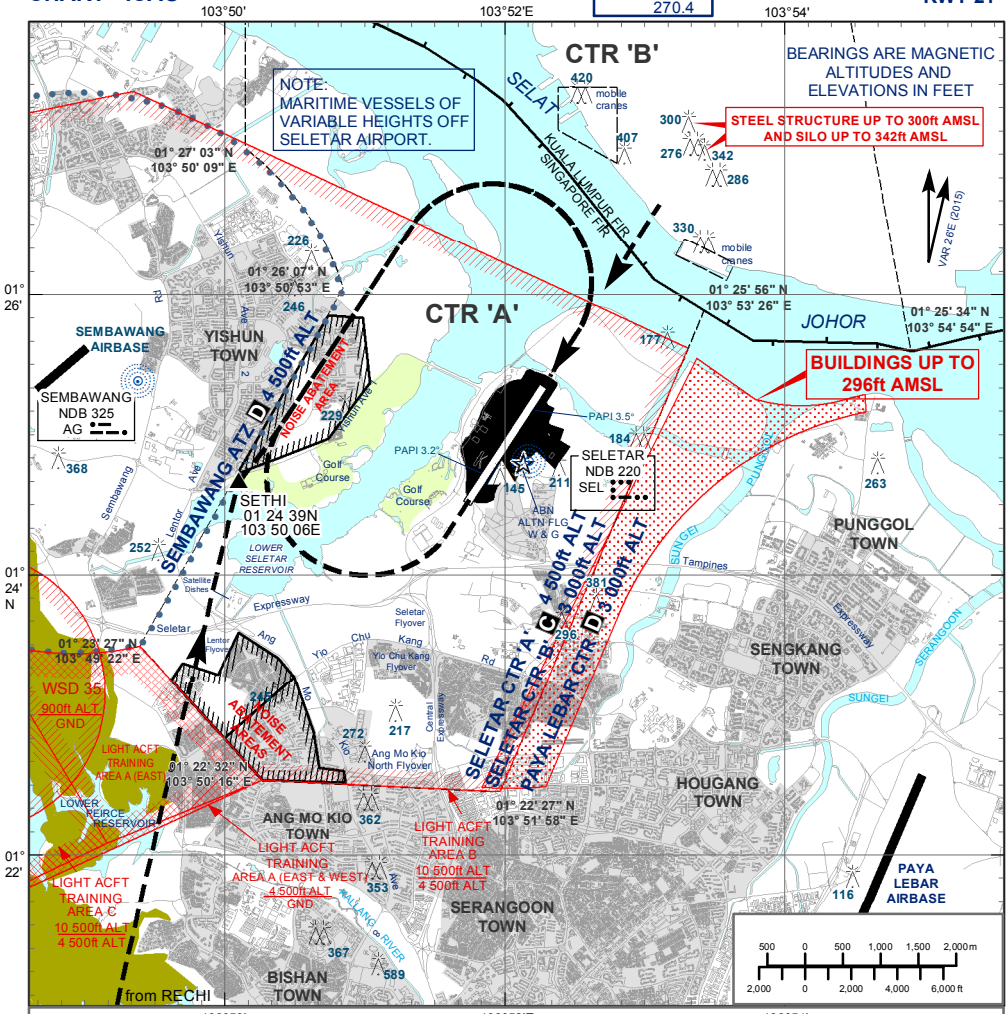
VISUAL APPROACH CHART - ICAO

AD ELEV 46 ft

APP	120.3
	126.025
TWR	118.45
	270.4

SINGAPORE/SELETAR

RWY 21



ADVISORY JOINING PROCEDURES - RWY 21

Straight-in Approach

1) From JB or KK, join direct for a visual approach RWY 21, descending from 2 000ft at a speed of not more than 170kt, or as cleared by ATC. Pilots should have runway in sight.
2) From SJ-PONJO-RECHI-SETHI, join downwind RWY 21 via SETHI at 2 000ft at a speed of not more than 170kt, When downwind, descend from 2 000ft for a visual approach or as cleared by ATC. Pilots should have runway in sight.
3) Joining aircraft shall give way to circuit traffic already on downwind.

Circling Approach

1) From JB or KK, overfly the runway at 2 000ft at a speed of not more than 160kt. When passing over south-end of the runway (THR RWY 03), descend from 2 000ft to 1 500ft and turn right for downwind RWY 21. At downwind, descend for a visual approach or as cleared by ATC. Pilots should have the runway in sight.
2) From SJ-PONJO-RECHI-SETHI, join downwind RWY 21 via SETHI at 2 000ft at a speed of not more than160kt. At end of downwind, turn right and overfly the runway. When passing over south-end of the runway (THR RWY 03), descend from 2 000ft to 1 500ft and turn right for downwind RWY 21. At downwind, descend for a visual approach or as cleared by ATC. Pilots should have runway in sight.
3) Joining aircraft shall give way to circuit traffic already on downwind.

PAPI 3.5°		
Pilot's eye height over the threshold when the following PAPI lights come into view	RUNWAY	
	03	21
2 white lights and 2 red lights (MEHT)*	21.24m	17.720m
3 white lights and 1 red light	22.27m	19.286m
4 white lights	24.75m	20.871m

*MEHT : Minimum Eye Height Over the Threshold.

Note : Aircraft with eye-to-wheel height greater than 6.3 metres are advised to fly with 2 white and 2 red lights visible so as to achieve sufficient wheel clearance.

CAUTION

a) Pilots are required to keep clear of Sembawang ATZ. Turns should therefore be kept within Seletar CTR.
b) Pilots should not fly to the east of the runway. This is to keep clear of tall buildings up to 296ft AMSL there. Pilots should have all relevant obstructions in sight, including the steel structure 300ft AMSL and the Silo 342ft AMSL 2nm north of the airfield.
c) Minimum altitudes apply over noise abatement areas (WSSL AD 2.21) Aircraft types which are unable to safely manoeuvre clear of the noise abatement areas are not allowed to operate at Seletar Airport.

CHANGES : Runway 03 PAPI Glide slope and MEHT revised.

PAGE INTENTIONALLY LEFT BLANK

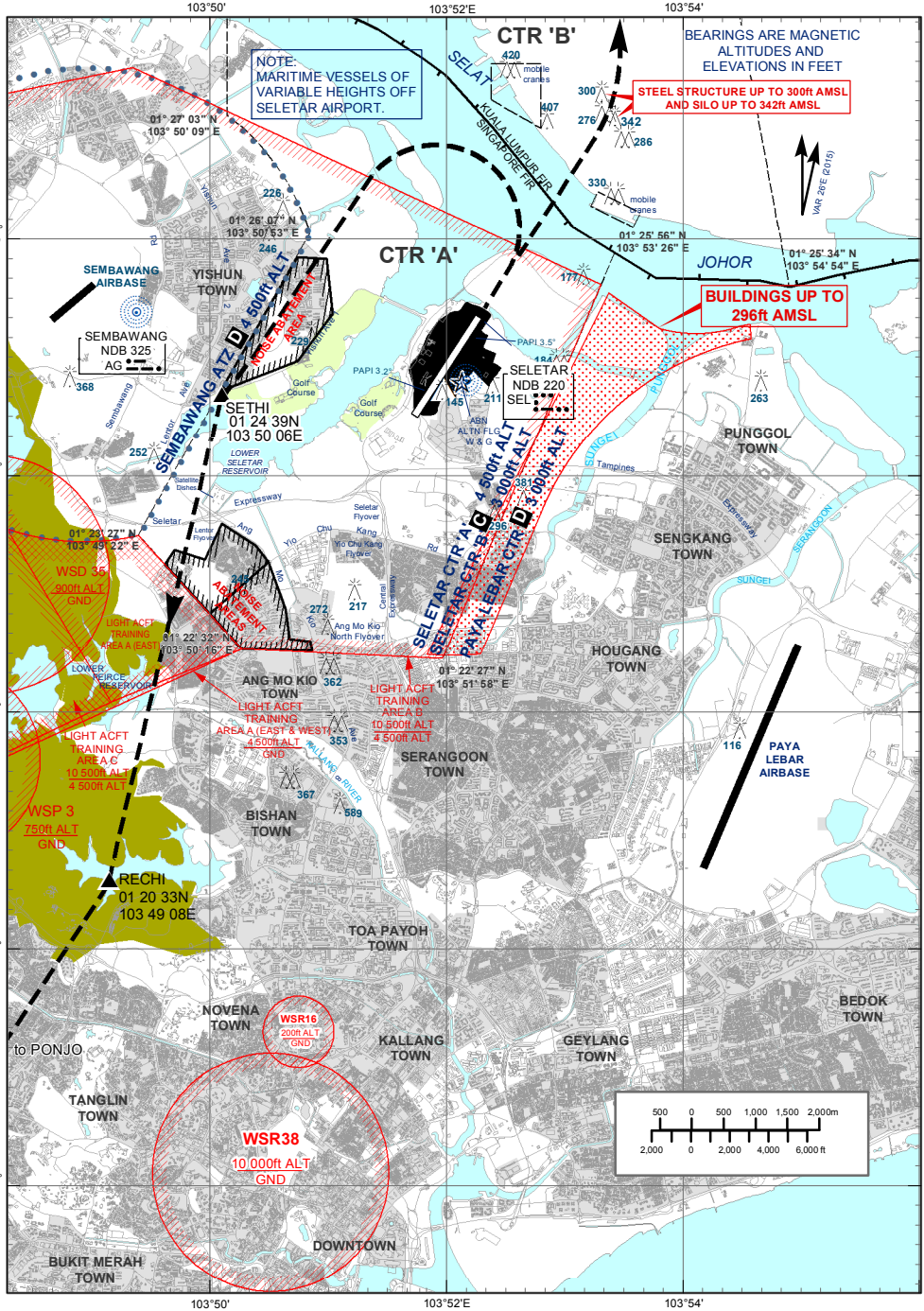
VISUAL DEPARTURE CHART

AD ELEV 46 ft

APP	120.3
	126.025
TWR	118.45
	270.4

SINGAPORE/SELETAR

RWY 03



CHANGES : Runway 03 PAPI Glide slope revised.

ADVISORY DEPARTURE PROCEDURES FOR RUNWAY 03

On departure, pilots of both fixed-wing and rotary-wing aircraft should climb ahead to an altitude cleared by ATC. Pilots can expect a radar heading to leave Seletar CTR. Where a radar heading is not given, pilots shall navigate to SETHI-RECHI-PONJO-SJ, or navigate to KK in accordance with their ATC clearance.

CAUTION

a) Pilots are required to keep clear of Sembawang ATZ. Turns should therefore be kept within Seletar CTR.

b) Pilots should not fly to the east of the runway. This is to keep clear of tall buildings up to 296ft AMSL there. Pilots should have all relevant obstructions in sight, including the steel structure 300ft AMSL and the Silo 342ft AMSL 2nm north of the airfield.

c) When cleared via SETHI-RECHI-PONJO-SJ, pilots shall not deviate from the clearance unless approved by ATC. This is due to the proximity of WSR38 which is Permanently active from Ground to 10,000ft.

d)  Minimum altitudes apply over noise abatement areas (WSSL AD 2.21)
Aircraft types which are unable to safely manoeuvre clear of the noise abatement areas are not allowed to operate at Seletar Airport

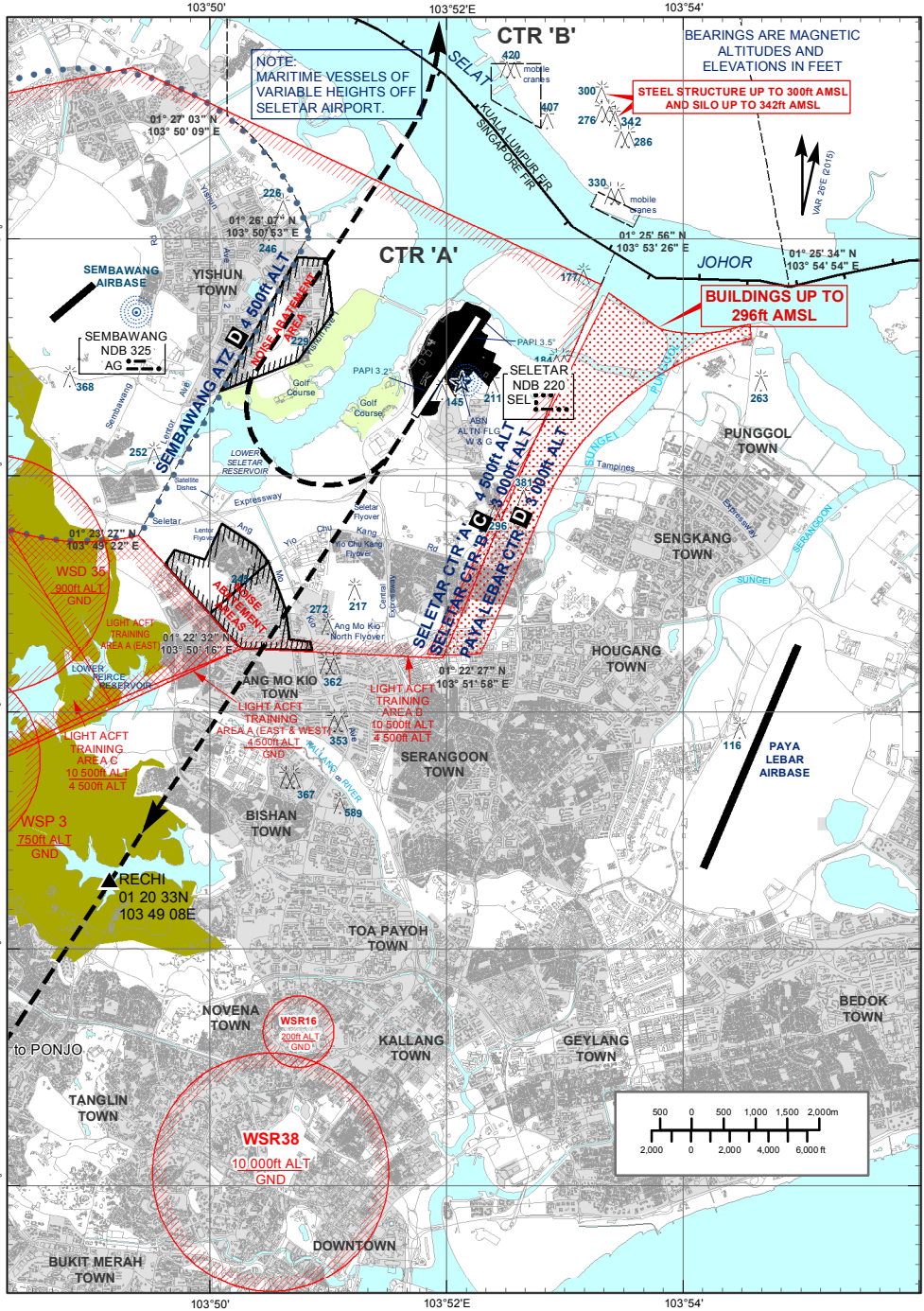
VISUAL DEPARTURE CHART

AD ELEV 46 ft

APP	120.3
	126.025
TWR	118.45
	270.4

SINGAPORE/SELETAR

RWY 21



CHANGES : Runway 03 PAPI Glide slope revised.

ADVISORY DEPARTURE PROCEDURES FOR RUNWAY 21

On departure, pilots can expect climb to an initial altitude cleared by ATC. Pilots of fixed-wing aircraft navigating to KK can expect to turn right to join the circuit till end of downwind and then expect a radar heading to leave Seletar CTR. Where a radar heading is not given, pilots shall navigate to RECHI-PONJO-SJ, or navigate to KK in accordance with their ATC clearance.

Pilots of rotary-wing aircraft can expect to turn left after departure to join the helicopter circuit pattern till end of downwind. Thereafter, they can expect further en-route clearance.

CAUTION

a) Pilots are required to keep clear of Sembawang ATZ. Turns should therefore be kept within Seletar CTR.

b) Pilots should not fly to the east of the runway. This is to keep clear of tall buildings up to 296ft AMSL there. Pilots should have all relevant obstructions in sight, including the steel structure 300ft AMSL and the Silo 342ft AMSL 2nm north of the airfield.

c) When cleared via RECHI-PONJO-SJ, pilots shall not deviate from the clearance unless approved by ATC. This is due to the proximity of WSR38 which is Permanently active from Ground to 10,000ft.

d)  Minimum altitudes apply over noise abatement areas (WSSL AD 2.21)
Aircraft types which are unable to safely manoeuvre clear of the noise abatement areas are not allowed to operate at Seletar Airport