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REPUBLIC OF SINGAPORE

AERONAUTICAL INFORMATION SERVICES CIVIL AVIATION AUTHORITY OF SINGAPORE SINGAPORE CHANGI AIRPORT P.O. BOX 1, SINGAPORE 918141

AIP

AMENDMENT NR 7/15 10 DECEMBER 2015

1. SIGNIFICANT INFORMATION AND CHANGES

2-6.3, 2-6.4 2-6.5
2-7.6
) 2-12
) 2-15) 2-31 / Chart
) 2-31 / Chart
) 2-101 / Chart) 2-103 / Chart) 2-105 / Chart) 2-107 / Chart) 2-109 / Chart) 2-119 / Chart) 2-113 / Chart) 2-115 / Chart

2. INSERT THE ATTACHED REPLACEMENT PAGES WHICH ARE MARKED WITH ASTERISKS IN THE CHECKLIST OF PAGES - GEN 0.4-1 TO GEN 0.4-4.

3. NEW OR REVISED INFORMATION IS INDICATED EITHER BY A HORIZONTAL ARROW OR A VERTICAL LINE.

4. RECORD ENTRY OF AMENDMENT ON PAGE GEN 0.2-1.

5. THIS AMENDMENT INCORPORATES INFORMATION CONTAINED IN THE FOLLOWING WHICH ARE HEREBY SUPERSEDED:

AIP SUPPLEMENTS: 164/15 dated 22/9/15 165/15 dated 1/10/15

NOTAMs: A2094/15 dated 22/9/15 A2095/15 dated 22/9/15 A2237/15 dated 30/9/15 A2383/15 dated 30/9/15 A2402/15 dated 21/10/15 A2403/15 dated 21/10/15 A2406/15 dated 21/10/15 A2416/15 dated 23/10/15 A2550/15 dated 6/11/15 A2654/15 dated 27/11/15

	GEN 0.3 RECORD OF CURREN	T AIP SUPPL	EMENTS	
NR/	Subject	AIP section	Period of validity	Cancellation
Year		affected	(from / to)	record
1/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 16	
2/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 16	
3/14	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 16	
4/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
5/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
13/14	Paya Lebar AP - Luffer Crane	AD	WIE / 27 DEC 15	
14/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 15	
15/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 15	
51/14	Paya Lebar AP - Cranes	AD	WIE / 31 DEC 15	
52/14	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15	
53/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 15	
54/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 15	
55/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 15	
61/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 15	
62/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 15	
62/14 63/14	Paya Lebar AP - Topless Granes	AD	WIE / 31 DEC 15	
63/14 64/14	Paya Lebar AP - Granes Paya Lebar AP - Topless Cranes		WIE / 31 DEC 15	
		AD	WIE / 31 DEC 15	
65/14 66/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 15	
	Paya Lebar AP - Saddle Cranes	AD		
67/14	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15	
68/14	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15	
69/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 15	
70/14	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 31 DEC 15	
213/14	Paya Lebar AP - Cranes	AD	WIE / 1 MAR 16	
214/14	Paya Lebar AP - Cranes	AD	WIE / 1 MAR 16	
	Paya Lebar AP - Cranes	AD	WIE / 30 MAR 16	
	Paya Lebar AP - Hammerhead and Luffer Cranes	AD	WIE / 31 MAR 16	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 MAR 16	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 DEC 17	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 17	
	Paya Lebar AP - Hammerhead and Luffer Cranes	AD	WIE / 31 DEC 17	
	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 17	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 17	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 1 JUN 16	
	Paya Lebar AP - Mobile Crane	AD	WIE / 1 JUN 16	
	Paya Lebar AP - Crane	AD	WIE / 14 JUN 16	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 JUN 16	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 JUN 16	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 1 DEC 16	
239/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
240/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
241/14	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 16	
242/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 20 DEC 15	
	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 15	1
	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15	ł
	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 1 JAN 16	
370/14	-	AD	WIE / 1 JAN 16	+
	Trava Lepar Ar - nammerneau Granes			1
371/14	Paya Lebar AP - Hammerhead Cranes Paya Lebar AP - Tower Cranes		WIF / 25 JAN 16	
371/14 372/14	Paya Lebar AP - Tower Cranes	AD	WIE / 25 JAN 16	
371/14 372/14 373/14	-		WIE / 25 JAN 16 WIE / 31 JAN 16 WIE / 31 JAN 16	

	GEN 0.3 RECORD OF CURRENT	AIP SUPPL	EMENTS	
NR/	Subject	AIP section	Period of validity	Cancellation
Year		affected	(from / to)	record
381/14	Paya Lebar AP - Topless Cranes / A Frames	AD	WIE / 31 DEC 16	
382/14	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
383/14	Paya Lebar AP - Luffer and Hammerhead Canes	AD	WIE / 31 DEC 16	
384/14	Paya Lebar AP - Topless and Hammerhead Cranes	AD	WIE / 31 DEC 16	
11/15	Paya Lebar AP - Tower Cranes	AD	WIE / 30 DEC 15	
12/15	Paya Lebar AP - Luffer Crane	AD	WIE / 30 DEC 15	
13/15	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15	
14/15	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 15	
15/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 15	
16/15	Paya Lebar AP - Luffer Crane and Saddle Crane	AD	WIE / 31 DEC 15	
17/15	Paya Lebar AP - Tower Crane	AD	WIE / 31 DEC 15	
18/15	Paya Lebar AP - Hammerhead and Luffer Cranes	AD	WIE / 31 DEC 15	
19/15	Paya Lebar AP - Topless Cranes and Luffer Cranes	AD	WIE / 31 DEC 15	
21/15	Paya Lebar AP - Saddle Crane	AD	WIE / 4 DEC 17	
22/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 9 DEC 17	
23/15	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 17	
24/15	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 17	
25/15	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 31 DEC 17	
27/15	Singapore Changi AP - Work activities due to	AD	WIE / 31 MAR 17	
	construction of new aircraft stands and modification			
	of engine run-up bays at East Cargo Area			
29/15	Paya Lebar AP - Mobile Cranes	AD	WIE / 1 JAN 17	
30/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 2 JAN 17	
31/15	Paya Lebar AP - Topless Cranes	AD	WIE / 3 JAN 17	
32/15	Paya Lebar AP - Luffer Crane	AD	WIE / 31 JAN 17	
33/15	Paya Lebar AP - Luffer Crane and Topless Cranes	AD	WIE / 31 JAN 17	
39/15	Paya Lebar AP - Luffer Crane	AD	WIE / 22 JUN 16	
40/15	Paya Lebar AP - Mobile Crane	AD	WIE / 29 JUN 16	
41/15	Paya Lebar AP - Luffer Crane	AD	WIE / 30 JUN 16	
42/15	Paya Lebar AP - Tower Crane	AD	WIE / 30 JUN 16	
43/15	Paya Lebar AP - Luffer Crane	AD	WIE / 1 JUL 16	
51/15	Paya Lebar AP - Crawler Crane	AD	WIE / 31 DEC 15	
52/15	Paya Lebar AP - Crawler Tower Crane	AD	WIE / 31 DEC 15	
53/15	Paya Lebar AP - Luffer Crane	AD	WIE / 1 FEB 16	
54/15	Sembawang AD - Luffer Cranes	AD	WIE / 28 FEB 16	
55/15	Paya Lebar AD - Crawler Cranes	AD	WIE / 23 MAR 16	
56/15	Paya Lebar AP - Topless Cranes	AD	WIE / 31 MAR 16	
57/15	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 1 APR 16	
58/15	Paya Lebar AP - Luffer Crane	AD	WIE / 30 MAY 16	
59/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 10 SEP 16	
60/15	Paya Lebar AP - Luffer Crane	AD	WIE / 30 SEP 16	
61/15	Paya Lebar AP - Topless Cranes	AD	WIE / 30 SEP 16	
62/15	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 16	
63/15	Paya Lebar AP - Luffer Crane	AD	WIE / 1 AUG 16	
64/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 AUG 16	
65/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 AUG 16	
66/15	Paya Lebar AP - Saddle Cranes and Luffer Crane	AD	WIE / 31 AUG 16	
67/15	Paya Lebar AP - Saddle Cranes	AD	WIE / 1 SEP 16	
68/15	Paya Lebar AP - Luffer Crane	AD	WIE / 7 JUL 17	
69/15	Paya Lebar AP - Tower Cranes	AD	WIE / 31 JUL 17	
70/15	Paya Lebar AP - Luffer Cranes and Saddle Cranes	AD	WIE / 19 AUG 17	

	GEN 0.3 RECORD OF CURRENT	AIP SUPPL	EMENTS	
NR/	Subject	AIP section	Period of validity	Cancellation
Year	Subject	affected	(from / to)	record
71/15	Paya Lebar AP - Tower Cranes	AD	WIE / 10 SEP 17	
72/15	Paya Lebar AP - Tower Cranes	AD	WIE / 10 SEP 17	
73/15	Paya Lebar AP - Saddle Cranes	AD	WIE / 9 OCT 17	
74/15	Paya Lebar AP -Topless Cranes and Luffer Crane	AD	WIE / 31 DEC 17	
75/15	Paya Lebar AP - Hydraulic Crawler Cranes	AD	WIE / 7 JAN 18	
76/15	Paya Lebar AP - Tower Cranes	AD	WIE / 31 MAR 18	
77/15	Paya Lebar AP - Saddle Cranes	AD	WIE / 1 MAY 18	
78/15	Paya Lebar AP - Tower Cranes	AD	WIE / 1 MAR 17	
79/15	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 4 MAR 17	
80/15	Paya Lebar AP - Topless Cranes	AD	WIE / 1 APR 17	
81/15	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 29 APR 17	
82/15	Paya Lebar AP - Topless Cranes	AD	WIE / 10 MAY 17	
83/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 1 FEB 17	
84/15	Paya Lebar AP - Hammerhead Cranes	AD	WIE / 28 FEB 17	
85/15	Paya Lebar AP - Crane	AD	WIE / 28 FEB 17	
86/15	Paya Lebar AP - Luffer Crane	AD	WIE / 28 FEB 17	
87/15	Sembawang AD - Hammerhead Cranes	AD	WIE / 1 FEB 17	
108/15	Singapore Changi AP - Revised work activities area	AD	WIE / 2 AUG 16	
	due to construction of new aircraft stands and new taxiways at West Cargo Area			
109/15	Singapore Changi AP - Shortening of Runway 20C approach lighting to 720m to facilitate the construction of the northern end-around-taxiway	AD	2 OCT 15 / 31 OCT 18	
113/15	Paya Lebar AP - Cranes	AD	WIE / 31 MAY 16	
	Paya Lebar AP - Luffer Crane	AD	WIE / 14 NOV 16	
	Paya Lebar AP - Crane	AD	WIE / 30 NOV 16	
	Paya Lebar AP - Tower Cranes	AD	WIE / 31 DEC 16	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 DEC 16	
	Paya Lebar AP - Topless Tower Cranes	AD	WIE / 1 APR 17	
	Paya Lebar AP - Luffer Crane	AD	WIE / 1 JUN 17	
	Paya Lebar AP - Topless Cranes	AD	WIE / 30 JUN 17	
	Paya Lebar AP - Topless Cranes	AD	WIE / 30 JUN 17	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 JUN 17	
		AD	WIE / 1 JUL 17	
126/15	Paya Lebar AP - Luffer Crane	AD	WIE / 30 DEC 17	
127/15	Tengah AD - Topless Cranes and Luffer Crane	AD	1 SEP 15 / 31 AUG 17	
128/15	Tengah AD - Topless Cranes	AD	1 SEP 15 / 31 AUG 17	
129/15	Tengah AD - Luffer Crane	AD	WIE / 31 DEC 17	
	Sembawang AD - Luffer Cranes	AD	WIE / 31 DEC 17	
	Paya Lebar AP - Topless Cranes	AD	WIE / 31 DEC 17	
	Paya Lebar AP - Cranes	AD	WIE / 12 APR 18	
	Paya Lebar AP - Luffer Crane and Topless Crane	AD	WIE / 30 JUN 18	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 JUN 18	
	Tengah AD - Luffer Cranes	AD	WIE / 30 JUN 18	
	Paya Lebar AP- Luffer Crane	AD	WIE / 30 JUN 17	
	Paya Lebar AP- Topless Cranes and Luffer Crane	AD	WIE / 30 JUN 17	
	Paya Lebar AP - Luffer Cranes	AD	WIE / 30 DEC 17	
	Paya Lebar AP - Saddle Crane	AD	WIE / 30 DEC 17	
	Paya Lebar AP - Topless Cranes	AD	WIE / 31 AUG 18	
143/15	Paya Lebar AP - Topless Cranes and Luffer Crane	AD	WIE / 31 DEC 15	┨
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GEN 0.3-4 10 DEC 15

	GEN 0.3 RECORD OF CURRENT AIP SUPPLEMENTS								
NR/	Subject	AIP section	Period of validity	Cancellation					
Year	-	affected	(from / to)	record					
	Paya Lebar AP - Saddle Cranes	AD	WIE / 31 JAN 16						
	Paya Lebar AP - Topless Crane	AD	WIE / 31 DEC 16						
	Paya Lebar AP - Topless Cranes	AD	WIE / 31 JAN 17						
	Paya Lebar AP - Luffer Crane	AD	WIE / 1 AUG 17						
148/15	Paya Lebar AP - Luffer Crane	AD	WIE / 31 DEC 15						
149/15	Paya Lebar AP - Crawler Crane and Mobile Crane	AD	WIE / 31 JAN 16						
150/15	Paya Lebar AP - Crawler Crane	AD	WIE / 31 JAN 16						
151/15	Paya Lebar AP - Topless Cranes	AD	WIE / 6 MAY 16						
152/15	Paya Lebar AP - Topless Cranes	AD	WIE / 31 MAY 16						
153/15	Paya Lebar AP - Topless Crane	AD	WIE / 30 SEP 16						
154/15	Paya Lebar AP - Crawler Crane and Mobile Crane	AD	WIE / 13 OCT 16						
155/15	Paya Lebar AP - Luffer Crane	AD	WIE / 31 MAY 17						
156/15	Paya Lebar AP - Topless Cranes	AD	WIE / 1 JUN 17						
157/15	Paya Lebar AP- Luffer Crane	AD	WIE / 14 AUG 17						
158/15	Paya Lebar AP - Hammerhead and Luffer Cranes	AD	WIE / 30 JUN 17						
159/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 31 JUL 17						
160/15	Paya Lebar AP - Luffer Cranes	AD	WIE / 15 AUG 18						
	Paya Lebar AP - Luffer Cranes	AD	WIE / 1 SEP 18						
162/15	Sembawang AD - Topless Cranes	AD	31 OCT 15 / 31 OCT 18						
163/15	Singapore Changi AP - Works schedule and movement area restrictions pertaining to runway resurfacing works, diversion of airside services and soil improvement works	AD	24 OCT 15 / 26 MAR 16						
166/15	Singapore FIR - Flying Display in conjunction with the Singapore Airshow 2016 Exhibition from Wednesay 10 February to Sunday 21 February 2016	ENR	10 FEB 16 / 21 FEB 16						

AIP SINGAPORE

PART 1 - GENERAL (GEN) 2.2-6 13 NOV 14 PART 2 - EN-ROUTE (ENR GEN 0 0.1-1 15 OCT 15 2.2-7 13 NOV 14 0.6-1 10 MAR 1 0.1-2 15 OCT 15 2.3-1 18 JAN 07 0.6-3 10 MAR 1 0.1-3 13 NOV 14 2.3-2 18 JAN 07 0.6-3 13 NOV 14 0.2-1 18 SEP 14 2.4-1 3 JUN 10 0.6-4 13 NOV 10 0.3-1 10 DEC 15 2.5-1 20 AUG 15 ENR 1 1.3-3 0.3-4 10 DEC 15 2.6-2 28 SEP 06 1.1-1 1.5-8 JUNO 10 0.3-4 10 DEC 15 GEN 3 1.1-4 29 MAY 1 1.1-6 8 JUN 00 0.4-1 10 DEC 15 GEN 3 1.1-1 1.1-7 28 SEP 00 0.5-1 18 SEP 14 3.1-1 13 NOV 14 1.1-6 8 JUN 00 0.4-1 10 DEC 15 GEN 3 1.1-7 28 SEP 00 1.1-1 1.1-7 28 SEP 00 0.5-1 18 SMY 11 3.1-4 10 DEC 15 1.	PAGE	DATE	PAGE	DATE	PAGE	DATE
GEN 0 22.2 13 NOV 14 ENR 0 0.1-1 15 OCT 15 22.8 13 NOV 14 0.6-1 10 MAR 1 0.1-2 15 OCT 15 22.8 13 NOV 14 0.6-2 10 MAR 1 0.1-3 13 NOV 14 2.3-2 18 JAN 07 0.6-3 10 MAR 1 0.2-1 18 SEP 14 2.4-1 3 JUN 10 0.6-4 13 NOV 14 0.3-2 10 DEC 15 2.5-3(chart 20 AUG 15 ENR 1 1.5 0.3-4 10 DEC 15 2.6-1 28 SEP 06 1.1-1 1 SEP 0 0.4-1 10 DEC 15 2.6-2 28 SEP 06 1.1-2 1 SEP 0 0.4-2 10 DEC 15 3.1-1 13 NOV 14 1.1-6 8 JUN 0 0.4-3 10 DEC 15 3.1-1 13 NOV 14 1.1-17 28 SEP 0 0.5-1 18 SEP 14 * 3.1-3 10 DEC 15 1.1-19 28 SEP 0 0.6-2 5 MAY 11 * 3.1-4 10 DEC 15 1.1-10 27 AUG 0 0.6-3 20 AUG 15 3.2-1 <th></th> <th>DATE</th> <th></th> <th>BAIL</th> <th></th> <th>DATE</th>		DATE		BAIL		DATE
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1.12-3	18 JAN 07	3.6-5/chart	20 AUG 15	WSSS AD 2-5.3	6 FEB 14		
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* 1.14-1	10 DEC 15	ENR 4		* WSSS AD 2-6.3	10 DEC 15		
* 1.14-2	10 DEC 15	4.1-1	20 AUG 15	* WSSS AD 2-6.4	10 DEC 15		
1.14-3	3 JUN 10	4.1-2	20 AUG 15	* WSSS AD 2-6.5	10 DEC 15		
1.14-4	3 JUN 10	4.2-1	10 MAR 11	* WSSS AD 2-6.6	10 DEC 15		
1.14-5	3 JUN 10	4.3-1	10 MAR 11	* WSSS AD 2-6.7	10 DEC 15		
1.14-6	3 JUN 10	4.4-1	30 APR 15	* WSSS AD 2-6.8	10 DEC 15		
1.15-1	10 JAN 13	4.4-2	30 APR 15 30 APR 15	WSSS AD 2-7.1	7 MAY 09		
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2.1-1	18 NOV 10	4.4-5	10 MAR 11	WSSS AD 2-7.4	7 MAY 09		
2.1-2	18 NOV 10	ENR 5		* WSSS AD 2-7.5	10 DEC 15		
2.1-3	18 NOV 10	5.1-1	8 APR 10	* WSSS AD 2-7.6	10 DEC 15		
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*	WSSS AD 2-16	10 DEC 15		WSSS AD 2-80-1	20 AUG 15	* WSSS AD 2-115/chart	10 DEC 15
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*	WSSS AD 2-19	10 DEC 15		WSSS AD 2-79-3/chart	20 AUG 15	WSSS AD 2-119/chart	20 AUG 15
*	WSSS AD 2-20	10 DEC 15		WSSS AD 2-80-3	20 AUG 15	WSSS AD 2-120/chart	20 AUG 15
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	WSSS AD 2-26	8 JAN 15		WSSS AD 2-84	20 AUG 15	WSSL AD 2-3-2	30 APR 15
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	WSSS AD 2-28	20 AUG 15		WSSS AD 2-84-1	20 AUG 15	WSSL AD 2-4-2	13 NOV 14
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	WSSS AD 2-33/chart WSSS AD 2-37/chart	15 OCT 15		WSSS AD 2-86-1	20 AUG 15	WSSL AD 2-6	30 APR 15
*	WSSS AD 2-37/chart	20 AUG 15 10 DEC 15	-	WSSS AD 2-87/chart	10 DEC 15	WSSL AD 2-7	5 MAR 15 5 MAR 15
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	WSSS AD 2-52	20 AUG 15		WSSS AD 2-92-1	20 AUG 15	WSSL AD 2-19/chart	30 APR 15
	WSSS AD 2-53/chart	20 AUG 15				WSSL AD 2-21/chart	5 MAR 15
	WSSS AD 2-54	20 AUG 15		WSSS AD 2-93/chart	20 AUG 15	WSSL AD 2-23/chart	5 MAR 15
	WSSS AD 2-55/chart	20 AUG 15		WSSS AD 2-94	20 AUG 15	WSSL AD 2-25/chart	5 MAR 15
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	WSSS AD 2-69/chait WSSS AD 2-70	20 AUG 15 20 AUG 15		WSSS AD 2-90-1 WSSS AD 2-99/chart	20 AUG 15 20 AUG 15	WSAP AD 2-4	10 DEC 15
1	WSSS AD 2-70 WSSS AD 2-71/chart	15 OCT 15		WSSS AD 2-99/chart WSSS AD 2-100	20 AUG 15 20 AUG 15	* WSAP AD 2-5	10 DEC 15
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	WSSS AD 2-71-1/chart			WSSS AD 2-100-1	10 DEC 15	WSAP AD 2-7 WSAP AD 2-8	20 OCT 11
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NOTAM are published as and when necessary to disseminate information of direct operational significance which:

- a) is of an ephemeral nature;
- b) requires advance distribution; or
- c) is appropriate to the AIP but needs immediate dissemination.

Each NOTAM is assigned a 4-digit serial number preceded by the letter 'A' indicating the series, followed by a stroke and 2 digits indicating the year of issue. The serial numbers begin with 0001 every year. A checklist of current NOTAM is issued every month via the AFS. Additionally, a printed plain-language NOTAM List is sent by airmail to those who had originally received the NOTAM via the AFS, as well as to others on request. The NOTAM list is also retrievable online at http://www.caas.gov.sg.

	NOF	NOTAM Series		NOF	NOTAM Series		NOF	NOTA Serie	
		Received	Sent		Received	Sent		Received	Sent
I	Abu Dhabi	А	А	Ho Chi-Minh	А	А	Ottawa	AB	А
	Addis Ababa	-	Α	Hong Kong	А	А	Paris	AFRW	-
	Almaty	K	-	Jakarta	AB	А	Phnom-Penh	А	-
	Amman	А	-	Jeddah	AW	Α	Plaisance	А	Α
	Amsterdam	AM	Α	Johannesburg	ABC	А	Port Moresby	А	Α
	Ankara	ABC	Α	Kabul	Α	А	Praha	-	Α
	Antananarivo	А	Α	Karachi	Α	А	Pyongyang	А	-
	Athinai	А	Α	Kathmandu	А	А	Riga	А	-
1				Khartoum	А	-	Rio de Janeiro	-	А
	Baghdad	А	Α	Kiev	А	-	Roma	AW	А
	Bahrain	А	А	Kobenhavn	AB	-	Sanaa	-	А
	Baku	А	-	Kolkata	А	А	Seoul	AG	А
	Bangkok	AGHJ	А	Kuala Lumpur	AD	А	Shannon	ABD-	
	Beijing	AEF-	Α	Kuwait	Α	А		HJNV	Α
•	, 0	GLUWY	Α	Lisboa	А	-	Sofia	А	А
	Beograd	AK	А	Ljubljana	Α	-	Stockholm	ABC	Α
	Brisbane	DEF-		London	ABDF-		Taipei	А	А
		GHJLN	Α		GHJMV	А	Tallinn	А	-
	Brunei	В	Α	Luga	А	-	Tbilisi	G	-
	Bruxelles	А	Α	Macao	А	А	Tehran	А	Α
-	Bucuresti	ABDM	Α	Madrid	ABDEFG	А	Tel Aviv	А	А
	Budapest	AK	Α	Mahé	А	А	Tirana	А	-
Í	Cairo	-	Α	Male'	Α	А	Tokyo	ABCEFJ	Α
	Casablanca	В	-	Manila	В	А	Tripoli	А	Α
	Chennai	А	Α	Minsk	0	А	Vientiane	-	Α
	Christchurch	В	Α	Moskva	AEG-	-	Vilnius	А	-
	Colombo	А	Α		KOPV	А	Washington	А	Α
	Congo	ABU	-	Mumbai	А	А	Wien	А	Α
	Damascus	А	-	Muscat	А	А	Windhoek	А	-
	Dar es-Salaam	А	-	Nadi	AD	А	Yangon	AB	А
	Dhaka	А	А	Nairobi	А	-	Yerevan	-	А
	Frankfurt	А	А	New Delhi	AG	А	Zurich	А	А
	Harare	-	А	Nicosia	А	-			
	Helsinki	А	А	Niew Milligen	М	-			
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NOTAM are exchanged with other International NOTAM Offices (NOF) as foll	ows:
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Pre-flight Information Bulletin (PIB) which contains a recapitulation of current NOTAM and other information of urgent character for the operator / flight crews can be retrieved from the following:

a) CAAS website: http://www.caas.gov.sg

b) AIM-SG URL: https://fpl-1.caasaim.gov.sg/

3.6 Aeronautical Information Circular (AIC)

Aeronautical Information Circular (AIC) contains information on the long-term forecast of major change in legislation, regulations, procedures or facilities; information of a purely explanatory or advisory nature liable to affect flight safety; and information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters which is inappropriate to the AIP or NOTAM, and is published as required.

Each AIC is numbered consecutively on a calendar year basis. The year, indicated by 2 digits, is a part of the serial number of the AIC. A checklist of current AIC is issued in the form of an AIC once a year.

3.7 Checklist and NOTAM List

A checklist of current NOTAM is issued monthly via the AFS. Subsequently, a printed NOTAM List is prepared and distributed by mail to all recipients of the Integrated Aeronautical Information Package. It contains the plain language presentation of current NOTAM, information on the serial numbers of the latest AIP AMDT, AIP SUP and AIC issued and also includes the checklist for AIP SUP.

3.8 Sale of publications

AIP Singapore may be purchased from the Aeronautical Information Services, Civil Aviation Authority of Singapore, Singapore Changi Airport at S\$435.00 per copy of the AIP (excluding postage).

The fee for the AIP AMDT service is S\$130.00 per year per copy of the AIP (excluding postage which is to be paid in advance).

Additional AIP covers may be purchased at \$12.00 each.

4. AIRAC SYSTEM

- 4.1 In order to control and regulate operationally significant changes requiring amendments to charts, route manuals, etc., such changes, whenever possible, will be issued on predetermined dates according to the AIRAC SYSTEM. This type of information will be published in an AIRAC AIP SUP. If an AIRAC AIP SUP cannot be issued due to lack of time, an AIRAC NOTAM will be issued. Such NOTAM will immediately be followed by an AIP SUP.
- 4.2 AIRAC information will be issued so that the information will be received by the user not later than 28 days, and for major changes not later than 56 days, before the effective date. The table below indicates AIRAC effective dates for Years 2015 to 2018:

AIRAC Effective Dates								
Year 2015	Year 2016	Year 2017	Year 2018					
8 January	7 January	5 January	4 January					
5 February	4 February	2 February	1 February					
5 March	3 March	2 March	1 March					
2 April	31 March	30 March	29 March					
30 April	28 April	27 April	26 April					
28 May	26 May	25 May	24 May					
25 June	23 June	22 June	21June					
23 July	21 July	20 July	19 July					
20 August	18 August	17 August	16 August					
17 September	15 September	14 September	13 September					
15 October	13 October	12 October	11 October					
12 November	10 November	9 November	8 November					
10 December	8 December	7 December	6 December					

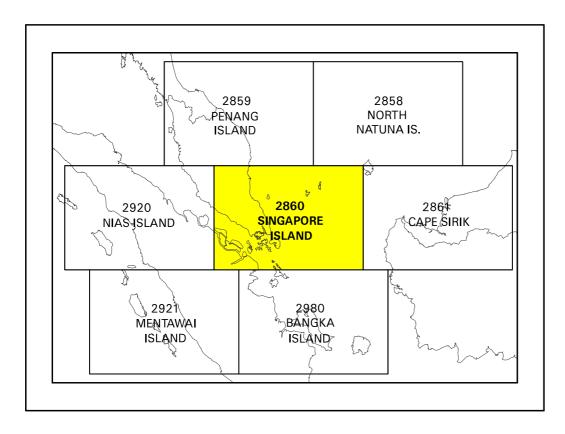
- 4.3 A TRIGGER NOTAM will be issued 10 days before the effective date of the AIRAC AIP Supplement giving a brief description of the contents of the AIP SUP, the effective date and the reference number of the AIRAC AIP SUP. This trigger NOTAM will come into force on the same effective date as the AIRAC AIP SUP and will remain in force until 14 days after the effective date.
- 4.4 A NIL AIRAC NOTAM will be issued one cycle before the AIRAC effective date if no information is submitted for publication of an AIRAC AIP Supplement for an AIRAC effective date. The NIL AIRAC NOTAM will remain current until the next AIRAC effective date.

5. PRE-FLIGHT INFORMATION SERVICE AT AERODROMES

	Aerodrome	Briefing Coverage	Availability of Bulletins
	SINGAPORE CHANGI	All route stages emanating from	Pre-flight Information Bulletin (PIB) can be retrieved from:
_►	SELETAR	Singapore.	a) CAAS website - http://www.caas.gov.sg b) AIM-SG URL - https://fpl-1.caasaim.gov.sg/

Title of Chart Series	Scale	Name and/or n	umber	Price (\$)	Date
World Aeronautical Chart ICAO (WAC)	1:1 000 000	WAC 2860		In AIP	15 JUL
Enroute Chart ICAO (ENRC)		ENR 6-1		In AIP	15 OCT
Instrument Approach Chart ICAO (IAC)	1:400 000 1:400 000	Singapore Changi RWY 02L - ICW ILS/DME RWY 02C - ICE ILS/DME RWY 02C - VTK DVOR/DME RWY 02R - ICX ILS/DME RWY 20R - ICH ILS/DME RWY 20C - ICC ILS/DME RWY 20C - VTK DVOR/DME RWY 20L - ICZ ILS/DME RWY 02L - RNAV(GNSS) RWY 02C - RNAV(GNSS) RWY 20R - RNAV(GNSS) RWY 20C - RNAV(GNSS)	WSSS AD 2-107 WSSS AD 2-109 WSSS AD 2-111	In AIP In AIP	10 DEC 10 DEC 10 DEC 10 DEC 10 DEC 10 DEC 10 DEC 20 AUG 20 AUG 20 AUG 20 AUG
	1:400 000 1:400 000 1:400 000 1:400 000	<i>Paya Lebar</i> RWY 20 - PU DVOR/DME RWY 02 - PU DVOR/DME RWY 20 - IPS ILS/DME RWY 02 - IPN ILS/DME	WSAP AD 2-17 WSAP AD 2-19 WSAP AD 2-21 WSAP AD 2-23	in Aip In Aip In Aip In Aip	5 MAR 5 MAR 5 MAR 5 MAR
Visual Approach Chart ICAO (VAC)	1:400 000	Singapore Changi	WSSS AD 2-121	In AIP	20 AUG
	1:100 000 1:100 000 1:100 000 1:100 000	Seletar RWY 03 RWY 21 RWY 03 RWY 21	WSSL AD 2-21 WSSL AD 2-23 WSSL AD 2-25 WSSL AD 2-27	In AIP In AIP In AIP In AIP	5 MAR 5 MAR 5 MAR 5 MAR
Visual Departure Chart	1:100 000 1:100 000	Seletar RWY 03 RWY 21	WSSL AD 2-29 WSSL AD 2-31	In AIP In AIP	5 MAF 5 MAF
Aerodrome Chart ICAO (AC)		Singapore Changi Seletar Paya Lebar	WSSS AD 2-31 WSSL AD 2-13 WSAP AD 2-11	In AIP In AIP In AIP	10 DEC 25 JUN 5 MAR
Aerodrome Obstacle Chart ICAO TYPE A (AOC)	1:10 000 1:10 000	Singapore Changi RWY 20R/02L RWY 20C/02C	WSSS AD 2-37 WSSS AD 2-39	In AIP In AIP	20 AUG 10 DEC
	1:10 000	Seletar RWY 03/21	WSSL AD 2 -17	In AIP	5 MAR
	1:20 000	Paya Lebar RWY 20/02	WSAP AD 2-15	In AIP	5 MAR
Aerodrome Obstacle Chart ICAO TYPE B (AOC)	1:25 000	<i>Singapore Changi</i> RWY 02L/20R and 02C/20C	WSSS AD 2-41	In AIP	15 OCT
	1:12 500	Seletar RWY 03/21	WSSL AD 2-19	In AIP	30 APR
Precision Approach Terrain Chart - ICAO (PATC)	1:2 500	Singapore Changi RWY 02L	WSSS AD 2-43	In AIP	25 APR

GEN 3.2.6 INDEX TO THE WORLD AERONAUTICAL CHART (WAC) - ICAO 1:1 000 000



ENR 1.14 AIR TRAFFIC INCIDENTS

1. DEFINITION OF AIR TRAFFIC INCIDENTS

- 1.1 An incident is an occurrence other than an accident associated with the operation of an aircraft which affect or could affect the safety of operation.
- 1.2 An incident may be caused by any of the following:
 - a) Ground Organisation:
 - i) abnormal function or operation of radio communication or navigational aids, faulty organisation or procedure;
 - ii) personal negligence, incompetence, error or misapplication of procedures or instructions.
 - b) Aircrew negligence, incompetence, error of judgement, misapplication of procedures or failure to comply with procedures or instructions.
 - c) Aircraft defects in the aircraft or its equipment.
 - d) Severe meteorological conditions.

2. USE OF AIR TRAFFIC INCIDENT REPORTING FORMS

2.1 Pilots shall file all incident reports on the "Air Traffic Incident Report Form" (see pages ENR 1.14-3 to ENR 1.14-6) in order to speed up the process of investigation of the various categories of incidents.

3. AIR TRAFFIC INCIDENT REPORTING PROCEDURES

- 3.1 A pilot should proceed as follows regarding an incident in which he is or has been involved:
 - a) during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately;
 - b) as promptly as possible after landing submit a completed "Air Traffic Incident Report Form":
 - i) for confirming a report of an incident made initially as in 3.1 a) above, or for making the initial report on such an incident if it had not been possible to report it by radio;
 - ii) for reporting an incident which did not require immediate notification at the time of occurrence.
- 3.2 An initial report made by radio should contain the following information:
 - A Type of incident, e.g. near collision.
 - F Radio call sign of aircraft making report.
 - J Position, heading or route, true airspeed.
 - K FL, altitude or height, and aircraft altitude.
 - L IMC or VMC.
 - M Time of incident, in UTC.
 - N Description of other aircraft, if relevant.
 - O Brief details of incident, including when appropriate, sighting distance and miss distance.
- 3.3 The confirmatory report on an incident of major significance initially reported by radio or the initial report on any other incident should be submitted to Aeronautical Information Service (AIS) located at Passenger Terminal 1, East, 4th Storey, Room 041-52 using the "Air Traffic Incident Report Form." A copy of the incident report form should also be forwarded to the Co-ordination/Investigation Authority as shown in page ENR 1.14-2 para 5 and the operating company or agency concerned.
- 3.4 The Duty Air Traffic Control Officer will complete the "Air Traffic Incident Report Form" on receipt of the initial report and forward it as soon as possible to the Chief Air Traffic Control Officer as well as to the operating agency concerned, unless it is apparent that the reporting pilot has already done so.

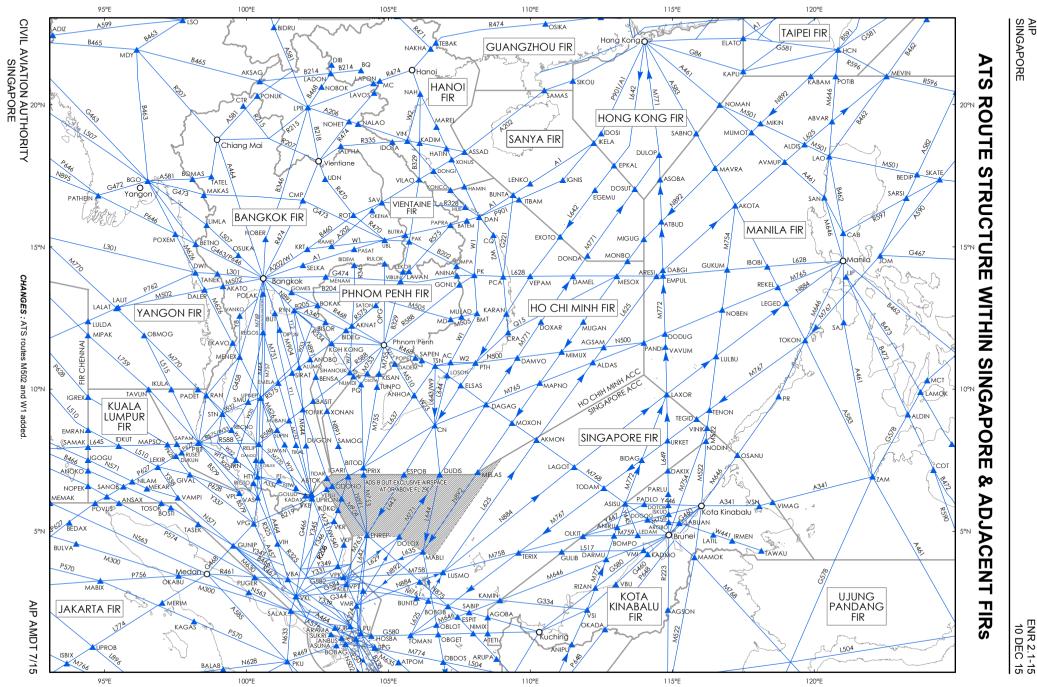
4. INVESTIGATION

4.1 All Incident Reports filed will be thoroughly investigated and the complainant will be notified of the results of the investigation as soon as possible.

5. CO-ORDINATION/INVESTIGATION AUTHORITY

5.1 Co-ordination/Investigation Authority responsible for the Co-ordination/Investigation of Near Collision/ Infringements, ATC Complaints, Fault Reporting and Post-Flight Information Service:

Co-ordination/Investigation Authority	Area Of Responsibility
Director-General of Civil Aviation	Within Singapore FIR, the airspace within Kuala
Civil Aviation Authority of Singapore	Lumpur FIR for which Singapore ACC is responsible
Singapore Changi Airport	for providing ATS and the airspace above the South
P O Box 1	China Sea Corridor.
Singapore 918141	(Refer to pages ENR 2.1-1 to ENR 2.1-4)



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Stands	E1	E2	E3	E4	E5	E6	E7	E8	at can E10	E11	E12	E20	E22	E24	E26	E27	E28
A300		 >	 +	 →				 +		<u>→</u>	 >	<u>→</u>	 >	<u>→</u>	•	<u>→</u>	 >
A310	→	<i>•</i>	→ →	<i>•</i>	<i>•</i>	· ·	→	<i>•</i>		· ·	· ·	→ →	<i>•</i>	<i>•</i>	<i>•</i>	→ →	→ →
A319	→ →	<i>•</i>	· ·	<i>•</i>	→ →	· ·	<i>•</i>	→ →	→	<i>•</i>	· ·	<i>•</i>	→ →		<i>•</i>	→ →	→ →
A320	· ·	<i>•</i>	→ →	<i>•</i>	<i>•</i>	· ·	<i>•</i>	→ →		<i>•</i>	· ·	→ →	→ →		→ →	→ →	→ →
A321	,	,	<i>,</i>	,	<i>,</i>	,	,	,		,	,	,	<i>•</i>		<i>, ,</i>	<i>•</i>	→ →
A332			· ·	→	<i>•</i>			→		→	→	→	<i>•</i>	→	<i>•</i>	→ →	→ →
A333			<i>•</i>	<i>•</i>	<i>•</i>			→ →		→ →	· ·	→ →	<i>•</i>	<i>•</i>	<i>•</i>	→ →	→ →
A342			· ·	<i>•</i>	→ →			<i>•</i>		· ·	· ·		<i>•</i>	<i>•</i>	<i>•</i>	→ →	→ →
A343			→ →	*	→ →			→ →		→ →	→ →		→ →	→	}	→	→
A345			→ →	*	→ →			→ →		→	→ →		→	*	*	*	→
A346				→	→			→									
A380				-	→ →			→ →		→							
B707															→	→	→
B727	→	→	→	→	→	→		→		→	→	→	→	→	→ →	<i>•</i>	→ ,
B737	→	→	→	→	→	+	→	→		→	→	→	→		→	→	→
B747			→	→	→			→		→	→	→	→	→	→	→	+
B748					→			→		→							
B74S			→	→	→			→		→	→		→	→	→	→	→
B757	→	→	→	→	→	→		→		→	→	→	→	+	→	→	→
B762	→	→	→	→	→	→		→		→	→	→	+	+	→	→	→
B763	→	→	→	→	→	→		→		→	→	→	+	+	→	→	→
B772			→	→	→			→		→	→	→	+	+	→	→	→
B772LR			→														
B773				→	→	→		→		→			→	→	→	→	·)
B773ER				→	→			→		→			→	→	→	→	→
B788												→	→		→	→	→
B789												+	→		→	→	→
DC10				→	→	→		→		→	→				→	→	→
DC9												→					
F70	→	→	→	→	+	→											
F100															→	→	→
IL62															→	→	+
IL86															→	→	+
IL96															→	→	+
L101				→	→	→		→		→	→				→	→	→
MD11				→	→	+		→		→	→				→	→	→
MD80															→	→	+
MD82															→	→	+
MD83																→	
MD87												→					
MD88															→	→	→
					E24		24R								1	1	<u> </u>

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4.	TERMINAL 2 AIRCRAFT STANDS - Aircraft types that can be parked at stands (+) are as follows:	
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Stands	F30	F31	F32	F33	F34	F35	F36	F37	F40	F41	F42	F50	F52	F54	F56	F58	F59	F60
A300		→	→		→	→			→	→	→	→	→	→	→	→	→	→
A310		→	→	→	→	+			→	→	→	→	→	→	→	→	→	+
A319	→	→	→	→	→	+	→	→	→	→	→	→		→		→		→
A320	→	→	→	→	→	→	→	→	→	→	→	→		→		→		→
A332		→			+				→	+	+	+	+	+	→	<i>→</i>	+	→
A333		→			→				<i>→</i>	→	→	`	+	`	→	→	→	`
A342		→			→				→	+	→		+	→	→	→	→	`
A343		→			→				→	→	→		→	→	→	→	→	→
A345		→			→				<i>→</i>	→	→		→	→	→	→	→	`
A346											→							+
A359																→	→	→
A380		→									→							→
B707												→		→			<i></i>	→
B727	→	→	→	→	→	<i></i>		+	→	→	<i></i>	→		→	→	<i></i>	→	→
B737	→	→	→	→	→		→	→	→	→	→	→		→		→		→
B747		→			→	→			→	→	→	→	→	→	→	→	→	→
B748		→									→							→
B74S		→			→				→	→	→			→	→	→	→	→
B757		→	→	→	→	→			→	→	→	→	→	→	→	→	→	→
B762		→			→	→			→	→	→	→	→	→	→	→	→	→
B763		→	→		→	→			→	→		→						
B772		→		→	→				→	→	→	→	→	→	→	→	→	→
B772LR														→		→		→
B773										→	→			→	→	→	+	→
B773er										→	→			→	→	→	→	→
B788		→										→						
B789		→										→						
DC10					→	+				→	→			→	→	→	→	→
DC9												→		→	→	→		
F70	→	→	→	→	→	+		→	→	→	→	→		→	→	→	→	→
L101					→					→	→			→	→	→	→	→
MD11					→					→	→			→	→	→	→	→
MD87												→		→				
Stands	F	52L	F5	2R	F56		F56R	E	59L	F59	R							
A319	+-	→		∠ix ≻	+ +		→)3∟ →	+ +								
A319 A320	+	≁ →		/ ≻	→ →		≁ →	_	→	→ →								
A320 A321	_	7 7		≁ ≻	7 7		≁ →	_	≁ →	7 +								
B737(100-500)	7 7		≁ ≻	- - ት		7 ナ	_	≁ →	イ ・								
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5. TERMINAL 3 AIRCRAFT STANDS - Aircraft types that can be parked at stands (+) are as follows:

Stands	A1	A2	A3	A4	A5	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21
A300		+	→	→	+	+	→	→	+	+	`	+	+	+	+	→		
A310		→	`	`	→	+	→	→	→		<i></i>		`	`	`	<i></i>		
A319		→	`	`	→		→		`	→	<i></i>			`	`	<i></i>		
A320		→	→	→	+	→	→	<i>•</i>	+	+	`	+	+	+	+	`		
A321		→	→	→	→	+	+	→	+	+	+	+	+	+	+	*		
A332	→	→	→	→	+	→	→	→	→	→	→	→	→	→	→	→		→
A333	→	→	→	→	→	+	→	→	+	→	*	→	→	`	`	`	→	→
A343	→	→	→	→	→	+	+	→	→	→	*	+	+	→	→	→	→	+
A345	+	→	+	+	→		+	+	+	+	+	+	+	+				
A346		→		→	→		→	→	+	→	`							
A359		→	→	→	→		→				<i></i>	+		→				
A380		→		→	+		→											
B737			→			→		→	→	+	*		→	→	→	→		
B744	→	→	→	→	→		→	→	→	→		+	→	→				
B788		→		→			→									→	→	→
B789		→		`	→		→	→	+	→	`	+		`				
B757		→	→	→	→	+	→	→	→	+	→	+	→	+	+	→		
B767		→	→	→	→	+	→	→	→	+	→	+	→	+	+	→		
B772	<i></i>	→	→	→	→	→	→	→	+	+	+	→	<i></i>	→	→	→	<i></i>	→
B773		→		→	+		→	→	+	→	+							
B773ER		+		→	→		→	→	→	→	→							
Stands	B	1 1	B2	B3	B4	B5	в	6	B7	B8	B9	B10]					
A300			→	*		+			``	→	*	+						
A310							.,	►	``	→								
A319)	`	+	+	,	≻	→	→	→		-					
A320					+	+	,											
A321)					≻	+		`		-					
A332				→	+	<i></i>			+ +	→→	→ →	≁ ≁	-					
A333		•	`	7 7	→ →	→ →	Ż						-					
	7					_	+ +	≻ ≻	→	→	→	+	-					
A343	7 }				+	<i>→</i>	+ + +	≻ ≻	*	↔ →	→	+ +						
A343 A345			+ +	* *	+ +	+ +		+ + +	> > >	ナ ナ ナ	+ + + +	+ + +	- - - -					
			+ + +	→→→	+ + +	+ + +	+ + + + +	> > > >	+ + + +	+ + + +	+ + + +	* * * *	-					
A345	+ +	· · · · · · · · · · · · · · · · · · ·	+ + + +	+ + + +	+ + + +	+ + + +	+ + + + + +	+ + + + + +	+ + + + + + + +	+ + + + + +	> > + + + + + + + +	+ + + + + +	-					
A345 A359	+ +	· · · · · · · · · · · · · · · · · · ·	+ + + + + + +	+ + + +	+ + + + +	+ + + + +		+ + + + + +	+ + + + + + + + + + +	+ + + + + +	> > + + + + + + + +	+ + + + + +	-					
A345 A359 A346	+ +	· · · · · · · · · · · · · · · · · · ·	+ + + + + + + + +	+ + + +	+ + + + + + + +	+ + + + + + + +		+ + + + + +	+ + + + + + + + + + + +	+ + + + + +	> > + + + + + + + +	+ + + + + +						
A345 A359 A346 A380	+ +	· · · · · · · · · · · · · · · · · · ·	+ + + + + + + + +	+ + + +	+ + + + + + + +	+ + + + + + + +	+ + + + + + +	+ + + + + +	+ + + + + + + + + + + +	+ + + + + +	+ + + + + + + + + +	+ + + + + + + + + +						
A345 A359 A346 A380 B707	+ +		+ + + + + + + + +	* * * * * *	+ + + + + + + +	+ + + + + + + +			+ + + + + + + + + + + +	+ + + + + +	+ + + + + + + + + +	+ + + + + + + + + +						
A345 A359 A346 A380 B707 B737	> > > >		+ · · · · · · · · · · · · · · · · · · ·	* * * * * * * * *	+ +	+ + + + + + + + + + + +			+ - + -	> > <t< td=""><td>+ + + + + + + + + +</td><td>+ + + + + + + + + + + + + + + + + + +</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	+ + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +						
A345 A359 A346 A380 B707 B737 B744	> > > >		+ · · · · · · · · · · · · · · · · · · ·	* * * * * * * * *	+ +	+ + + + + + + + + + + +			+ - + -	+ + + + + + + + + + + + + + + + + +	+ + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +						
A345 A359 A346 A380 B707 B737 B744 B788	+ + + + + + + + + + + +		+ + + + + + + + + + + + + +	+ + + + + + + +	+ + + + + + + +	+ + + + + + + + + + +			+ - + -	+ + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +						
A345 A359 A346 A380 B707 B737 B744 B788 B789	+ + + + + + + + + + + +		+ + + + + + + + + + + + + + + + + + +	+ + + + + + + +	+ + + + + + + + + + + + + + + + + + +	+ +			+ - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + -	+ +	+ + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +						
A345 A359 A346 A380 B707 B737 B744 B788 B788 B789 B757	+ + + + + + + + + + + + + +		・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・	+ + + + + + + + + +	+ +	+ +			+ - + -	+ + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +						
A345 A359 A346 A380 B707 B737 B744 B788 B788 B789 B757 B767	+ + <t< td=""><td></td><td>+ - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + -</td><td>+ +</td></t<> <td>+ +</td> <td>+ +</td> <td></td> <td></td> <td>+ - + -</td> <td>+ +</td> <td>+ + + + + + + + + + + + + + + + + + + +</td> <td>+ + + + + + + + + + + + + + + + + + +</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		+ - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + - + -	+ +	+ +	+ +			+ - + -	+ +	+ + + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +						

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6. REMOTE S	IAND		-	-												
Stands		103	104	200	200L	200R	201	202	202L	202R	203	205	206	207	208	209
A300, A310			→	→			→	→			→	→	→	→	→	→
A319, A320			→		`	`	→		ب	→	→	→	→	→	→	<i></i>
A321					→	+			→	+						
A330, A342		→	+	→			→	→			→	→	→			
A343, A345		+	→	+			→	→			→	→	→			
A359							,	→			→	→	+			
A380			Ý													
AT72				\rightarrow			→	→			→	→	→	→	→	<i></i>
B707, B727				\rightarrow			→	→			→	→	→	→	→	→
B737			`		`	<i>`</i>	→		→	`	→	→	→	→	→	→
B747, B74S, B7	88	→	→	→			→	→			→	→	≁			
B748		`	`													
B757		`	`					+			`	→	→	→	→	→
B767, B772, B7	73										→	→	→			
B773ER		`	+	`			→	→			→	→	→			
B789				`							→	→	→			
DC8																
DC10		→	→	→			→	→			→	→	→			
DHC7														→	→	→
F70		→	→	→			→	→			→	→	→	→ →	· ·	→ →
IL62		,	,	, +			, ,	, ,			, ,	<i>,</i>	<i>,</i>	ŕ	,	ŕ
L101		→	+	, ,			, ,	, ,			, ,	, ,	, ,			
MD11		, ,	, ,	, ,			, ,	, ,			, ,	, ,	, ,			
		1		1			1	1				.,				
Stands	300	301	302	303	304	305	306	307	308	309	310	400	401	402	403	404
A300, A310	+	+	+	+	+	+	+			+	+	+	+	+		
A319, A320	+	+	+	+	*	+	*			+	→	+	+	+	→	
A330, A342	+		+								+	+	+			
A343, A345	+		+								→	+	+			
A359	→		+								→					
AT72				+	+	+	+									
B707	+	+	+	+	+	+	<i></i>			→	→	+	+	+		
B727	+	+	*	+	→	→				→	→	→	+		→	
B737 (100-500)	<i></i>	<i></i>	<i></i>	→	→	→	<i></i>	→	→	→	→	→			→	
B737 (600-900)		+	+	+	+	+	<i></i>			→	→	→	+	`	→	
B747	<i></i>		<i></i>								→	→	`			
B74S, B788			+								→	→	+			
B757, B767	<i></i>	+	+	+	+	+	`			→	→	→	`	+		
B772, B773											→	+				
B773ER			+								→	+	+			
B789	+		+								+	+	+			
DC10			+				+				→	+	+			
DC8		→		→	→	→				→	→					
F70		+		+	+	→		→	→	→	→	→	→		→	
L101			+				+				→	+				
MD11	→		+				→				→	+	·)			
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CIVIL AVIATION AUTHORITY SINGAPORE

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7. CARGO	STAN	DS - A	ircraft	types t	hat ca	n be p	arked	at star	nds (ຯ) are	as foll	ows:			
Stands	502	503	504	505	506	507	508	509	515	601	602	603	604	611	612
A300	+	→	→	→	→	→	→	→	→	→	→	+	→		
A306														→	+
A310	+	→	+	→	→	+	→	→	→	+	→	+	→	→	+
A330										→	→	→	→	→	→
A332	→	→	→	→	→	→	+	+	→	→	→	→	→		
A333	+	+	+	+	+	+	→	†	→	+	+	+	+		
A342	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
A343	+	+	+	+	+	+	→	+	→	+	+	+	+	+	+
A345	+							→	→						
A346	+							+	→						
A359									→						
A380	→							→							
B707	+	→	→	→	→	→	→	→		→	+	+	→		
B727	\rightarrow	+	+	+	+	+	+	\rightarrow	+						
B737	+	→	→	→	→	→	→	→	→	→	→	+	→	→	+
B744	+	→	→	→	→	→	→	→		→	→				
B747	+	→	→	→	+	→	→	→	→	→	+	→	→		
B748						→	→	→				→	→		
B74S	→	→	→	→	→	→	→	→		→	→	→	→		
B752														→	→
B753														→	→
B757	→	→	→	→	→	→	→	→	→	→	→	→	→		
B762	→	→	→	→	→	→	→	→	→	→	→	+	→	→	+
B763	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
B764	→	→	→					+	→			→	→		
B772	→	→ →	+	→ →	→	→	→ →	+	→	+	→	+	→	→	+
B772LR	→	→	+	→	→	+	→	+	→						
B773	+	→	+	→	→	→	→	+	→	+	+	+	→		
B773ER	→	→	→	→	→	→	→	→	→	→	→	→	→		
B777F														→	→
B788									→						
B789									→						
DC8	+	+	+	→	→	+	→	→		→	→	→	→	→	→

8. **REMOTE STANDS** - Aircraft types that can be parked at stands (+) are as follows:

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Stands	1	2	3	4	5	6	7	8	9	10	11	12	13	14
AT72	+	→	+	→										
A319	→	+	+	→	+	→	+	+						
A320	→	+	+	→	→	→	+	→	→	→	+	→	+	+
A321											→	+	+	+
B737	+	+	→	+	+	→								
DHC7	→													

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DC10

IL62

IL86

L101

MD11

WSSS AD 2-6.8 10 DEC 15

8. **REMOTE STANDS** - Aircraft types that can be parked at stands (↔) are as follows:

Stands	15	16	17	701	702
A318	→	→	→	→	→
A319	→	→	→	→	+
A320	→	+	+	+	→
A321	→	+	+	+	→
ATR72-500	→	+	+	+	→
B733	+	+	+	+	→
B734	→	+	+	+	→
B735	→	+	+	+	→
B736	→	+	+	+	→
B737	→	+	→	+	→
B738	→	+	+	+	→
B739	→	+	→	+	→
DHC7	→	→	→	→	→

9. MARS STANDS - Aircraft types that can be parked at stands (\Rightarrow) are as follows:

Stands	101	101L	101R	102	102L	102R	516	516L	516R	517	517L	517R
A300	→						+			+		
A310	→						→			+		
A319		→	→			→		→	→		→	→
A320			→		→	→		→	→		→	
A321			→		→	→		→	→		→	
A332	→			+			→			→		
A333	→			\rightarrow			→			+		
A342	→			+			→			+		
A343	→			+			→			+		
A345	→			→			→			+		
A346							+			+		
A359							→			+		
A388	+			+			+			+		
AN124							+			+		
B727							+			+		
B737		→	+		+	+		→	+		+	→
B747	→			→			+			+		
B748	+			+			+			+		
B757	+			+			+			+		
B762	+			+			†			+		
B763	+			+			→			+		
B764							→			+		
B772	+			\rightarrow			→			+		
B772LR							→			+		
B773	→			+			→			+		
B773ER	→			+			†			+		
B788	→			→			→			+		
B789							+			+		
DC10							+			+		
L101							+			+		
MD11							+			+		

APRON / ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
B8	The aircraft (on idle thrust) shall be pushed back: • onto TWY U1 to face South until its nosewheel is at the intersection of the aircraft stand lead-in line and TWY U1 centreline. The aircraft may breakaway from there. <u>OR</u> • onto TWY U1 to face North until its nosewheel is at the intersection of the lead-in line and TWY U1 centreline. The aircraft shall then be towed forward until its nosewheel is at the intersection of the aircraft stand B9 lead-in line and TWY U1 centreline. The aircraft may breakaway from there.	Pushback approved, to face South. Pushback approved, to face North.
B9, B10	The aircraft (on idle thrust) shall be pushed back onto TWY U1 until its nosewheel is at the intersection of the aircraft stand lead-in line and TWY U1 centreline. The aircraft may breakaway from there.	Pushback approved, to face North (or South).
MARS REMOTE		I
101, 101R	The aircraft (on idle thrust) shall be pushed back to face East until its nosewheel is at the "END OF PUSH" position. The aircraft shall then be towed forward until its nosewheel is at the "END OF TOW (EOT)" position on TWY L4 centreline. The aircraft may breakaway from there.	Standard pushback approved.
101L	The aircraft (on idle thrust) shall be pushed back onto TWY L4 centreline to face East. The aircraft shall then be towed forward along the centreline of TWY L4 until its nosewheel is at the "END OF TOW (EOT)" position. The aircraft may breakaway from there.	Standard pushback approved.
102, 102L, 102R	The aircraft (on idle thrust) shall be pushed back onto TWY L4 centreline to face East. The aircraft shall then be towed forward along the centreline of TWY L4 until the nose of the aircraft is behind the stopbar behind aircraft stand 102. The aircraft may breakaway from there.	Standard pushback approved.
EAST REMOTE		I
200, 201, 202, 203	The aircraft (on idle thrust) shall be pushed back onto TWY C6 to face North (or South).	Pushback approved, to face North (or South).
200L	 The aircraft (on idle thrust) shall be pushed back: onto Taxilane C6 centreline to face North until its nosewheel is on the end of push behind aircraft stand 200L. The aircraft may breakaway from there. <u>OR</u> onto Taxilane C6 centreline to face South. 	Pushback approved, to face North. Pushback approved, to face South.
200R, 202L, 202R	The aircraft (on idle thrust) shall be pushed back onto Taxilane C6 centreline to face North (or South).	Pushback approved, to face North (or South).
SOUTH-EAST RE	EMOTE	1
103, 104	The aircraft (on idle thrust) shall be pushed back onto Taxilane L4 centreline to face East until the nose of the aircraft is behind the stopbar behind aircraft stand 102. The aircraft may breakaway from there.	Standard pushback approved.
205, 206, 207, 208	The aircraft (on idle thrust) shall be pushed back onto TWY C7 to face North (or South).	Pushback approved, to face North (or South).
209	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its nosewheel is at the intersection of the lead-in line and TWY C7 centreline.	Pushback approved, to face North (or South).

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND					
NORTH REMO	NORTH REMOTE						
300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310	 The aircraft (on idle thrust) shall be pushed back: facing West until its nosewheel is at the intersection of the lead-in line and taxiway NC2 centreline. <u>OR</u> 	Pushback approved, to face West.					
	• facing East until its nosewheel is at the intersection of the lead-in line and taxiway NC2 centreline.	Pushback approved, to face East.					
NORTH-EAST	REMOTE						
400, 401, 402, 403, 404	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its nosewheel is at the intersection of the lead-in line and TWY A6 centreline.	Pushback approved, to face North (or South).					
WEST CARGO							
502	The aircraft (on idle thrust) shall be pushed back to face North (or South). The aircraft may breakaway from here. There shall be no simultaneous pushback of aircraft unless with two aircraft stands separation.	Pushback approved, to face North (or South).					
503, 504, 505, 506	The aircraft (on idle thrust) shall be pushed back to face North (or South).	Pushback approved, to face North (or South).					
507, 508, 509	The aircraft (on idle thrust) shall be pushed back to face North (or South). The aircraft may breakaway from there. There shall be no simultaneous pushback of aircraft unless with two aircraft stands separation.	Pushback approved, to face North (or South)					
515	The aircraft (on idle thrust) shall be pushed back onto Taxilane WD to face South until the nose of the aircraft is behind the stop bar. The aircraft may breakaway from there.	Standard pushback approved.					
516, 517	The aircraft (on idle thrust) shall be pushed back onto Taxilane WD to face South until the nose of the aircraft is at the intersection of the aircraft stand lead-in line and Taxilane WD centreline. The aircraft shall then be towed forward until the nose of the aircraft is behind the stop bar behind aircraft stand 515. The aircraft may breakaway from there.	Standard pushback approved.					
516L, 516R, 517L, 517R	The aircraft (on idle thrust) shall be pushed back to face South until its body is aligned with Taxilane WD centreline. The aircraft shall then be towed forward until the nose of the aircraft is behind the stop bar behind aircraft stand 515. The aircraft may breakaway from there.	Standard pushback approved.					

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APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND				
EAST CARGO	AST CARGO					
601, 602	The aircraft (on idle thrust) shall be pushed back to face South until its nosewheel is at the intersection of the lead-in line and taxilane EA centreline.	Standard pushback approved				
603	The aircraft (on idle thrust) shall be pushed back to face South until its nosewheel is at the intersection of the lead-in line and taxilane EA centreline. The aircraft shall then be towed forward along the centreline of taxilane EA till its nosewheel is on the "END OF TOW" marking behind aircraft stand 602.	Standard pushback approved				
604	The aircraft (on idle thrust) shall be pushed back to face South until its nosewheel is at the position of "END OF PUSH". The aircraft shall then be towed forward along the centreline of taxilane EA till its nosewheel is on the "END OF TOW" marking behind aircraft stand 602.					
611, 612	The aircraft shall be pushed back to face North until its nosewheel is at the "END OF PUSH" position. The aircraft shall then be towed forward along the centreline of taxilane EC and turn left onto the centreline of taxilane EA until its nosewheel is at the "END OF TOW" marking behind aircraft stand 602. The aircraft may breakaway from there. Engine start-up is not permitted during standard pushback. Alternate Pushback Procedure					
	The aircraft (on idle thrust) shall be pushed back to face North until its nosewheel is at the "END OF PUSH" position. Engine start-up is permitted only on the port engine. The aircraft shall then be towed forward along the centreline of taxilane EC and turn left onto the centreline of taxilane EA until its nosewheel is at the "END OF TOW" position (marking behind aircraft stand 602). The aircraft may breakaway from there. This alternate pushback procedure can only be exercised if the auxiliary power unit of the aircraft is unserviceable.	Alternate pushback approved				

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
T1 WEST		
C1, C20, C22 C23, C24, C25	The aircraft (on idle thrust) shall be pushed back onto TWY U1 to face North (or South).	Pushback approved, to face North (or South).
C26	 The aircraft (on idle thrust) shall be pushed back: onto TWY WA to face North. The aircraft may breakaway from there. <u>OR</u> 	Pushback approved, to face North.
	• onto TWY WA to face South until its nosewheel is at the intersection of the aircraft stand lead-in line and TWY WA centreline. The aircraft shall then be towed forward until its nosewheel is on the "END OF TOW" position. This is marked as "EOT" on the ground. The aircraft may breakaway from there.	
T1 CENTRAL		
C11	The aircraft (on idle thrust) shall be pushed back such that the pushback line is always kept midway between the aircraft main gear until the nosewheel of aircraft is at the "EOP 21" position. The aircraft shall then be towed forward until its nosewheel is at the "EOT 22A" position.	Standard pushback approved
C13	The aircraft (on idle thrust) shall push back to face North such that the pushback line is always kept midway between the aircraft main gear until its nosewheel is at the "EOP 22" position. The aircraft shall be towed forward until its nosewheel is at the "EOT 22A" position. Alternate Pushback Procedure	Standard pushback approved
	The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N3 until the nose of the aircraft is behind the stopbar line behind aircraft stand D35. The aircraft may breakaway from there. <u>Alternate Pushback Procedure</u> The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N1 until the nose of the aircraft is behind the stopbar line behind aircraft stand C16. The aircraft	N3 to face South. Pushback approved, onto TWY N1 to face South.
	may breakaway from there.	
C15	The aircraft (on idle thrust) shall push back facing North until its nosewheel is at the intersection of the lead-in line and TWY N2 centreline. <u>Alternate Pushback Procedure</u>	Standard pushback approved
	The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N3 until the nose of the aircraft is behind the stopbar line behind aircraft stand D35. The aircraft may breakaway from there. Alternate Pushback Procedure	N3 to face South.
	The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N1 until the nose of the aircraft is behind the stopbar line behind aircraft stand C16. The aircraft may breakaway from there.	Pushback approved, onto TWY N1 to face South.
C16	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its nosewheel is at the intersection of the lead- in line and TWY N1 centreline.	Pushback approved, to face North (or South).
C17	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its nosewheel is at the intersection of the lead- in line and TWY N1 centreline.	Pushback approved, to face North (or South).

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
C18	The aircraft (on idle thrust) shall be pushed back to face North until its nosewheel is at the intersection of the lead-in line and TWY N1 centreline.	Standard pushback approved
C19	The aircraft (on idle thrust) shall be pushed back to face North along TWY N1 until the "END OF PUSH" position.	Standard pushback approved
D30	The aircraft (on idle thrust) shall be pushed back such that the pushback line is always kept midway between the aircraft main gear until the nosewheel of the aircraft is at the "EOP 20" position. The aircraft shall then be towed forward until its nosewheel is at the "EOT" 22A" position.	Standard pushback approved
D32	The aircraft (on idle thrust) shall push back to face North such that the pushback line is always kept midway between the aircraft main gear until its nosewheel is at the "EOP 22" position. The aircraft shall then be towed forward until its nosewheel is at the "EOT 22A" position. <u>Alternate Pushback Procedure</u> The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N3 until the nose of the aircraft is	
	behind the stoppar line behind aircraft stand D35. The aircraft may breakaway from there. <u>Alternate Pushback Procedure</u> The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N1 until the nose of the aircraft is behind the stoppar line behind aircraft stand C16. The aircraft may breakaway from there.	Pushback approved, onto TWY N1 to face South.
D34	The aircraft (on idle thrust) shall push back to face North until its nosewheel is at the intersection of the lead-in line and TWY N2 centreline. <u>Alternate Pushback Procedure</u> The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N3 until the nose of the aircraft is behind the stopbar line behind aircraft stand D35. The aircraft may breakaway from there. <u>Alternate Pushback Procedure</u>	Standard pushback approved Pushback approved, onto TWY N3 to face South.
	The aircraft (on idle thrust) shall push back onto TWY N2 to face South followed by TWY N1 until the nose of the aircraft is behind the stopbar line behind aircraft stand C16. The aircraft may breakaway from there.	Pushback approved, onto TWY N1 to face South.
D35, D36	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its nosewheel is at the intersection of the lead-in line and TWY N3 centreline.	Pushback approved, to face North (or South).
D37	The aircraft (on idle thrust) shall be pushed back to face North until its nosewheel is at the intersection of the lead-in line and TWY N3 centreline.	Standard pushback approved
D38	The aircraft (on idle thrust) shall be pushed back to face North along TWY N3 until the "END OF PUSH" position.	Standard pushback approved
T1 EAST		
D40 D41 D42 D44 D46 D47 D48 D49	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its nosewheel is at the intersection of the lead-in line and TWY A6 centreline.	Pushback approved, to face North (or South).
T2 CENTRAL		
E1	The aircraft (on idle thrust) shall be pushed back such that the pushback line is always kept midway between the aircraft main gear until its nosewheel is at Stopbar 12. This is marked as "END OF PUSH" on the ground. The aircraft shall then be towed forward to Stopbar 9. This is marked as "END OF TOW" on the ground.	Standard pushback approved

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
E2	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at the intersection of the lead-in line and TWY B2 centreline. The aircraft shall then be towed forward to Stopbar 9. This is marked as "END OF TOW" on the ground.	Standard pushback approved
E3	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 9. This is marked as "END OF TOW" on the ground.	Standard pushback approved
E4	 The aircraft (on idle thrust) shall be pushed back: until its nosewheel is at the "END OF PUSH" 8 position <u>OR</u> onto TWY B1 until its nosewheel is at the "END OF PUSH" 13A position <u>OR</u> onto TWY B3 until its nosewheel is at the "END OF 	Standard pushback approved Pushback approved, to pushback onto TWY B1 Pushback approved, to
E5, E6	PUSH" 7A position. The aircraft (on idle thrust) shall be pushed back until its nosewheel is at the intersection of the lead-in line and TWY B1 centreline. The aircraft shall then be towed forward to Stopbar 13. This is marked as "END OF TOW" on the ground.	pushback onto TWY B3. Standard pushback approved
E7	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 13. This is marked as "END OF TOW" on the ground.	Standard pushback approved
F30	The aircraft (on idle thrust) shall be pushed back such that the pushback line is always kept midway between the air- craft main gear until its nosewheel is at Stopbar 11. This is marked as "END OF PUSH" on the ground. The aircraft shall then be towed forward to Stopbar 9. This is marked as "END OF TOW" on the ground.	Standard pushback approved
F31	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 10. This is marked as "END OF PUSH" on the ground. The aircraft shall then be towed for- ward to Stopbar 9. This is marked as "END OF TOW" on the ground.	Standard pushback approved
F32	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 9. This is marked as "END OF TOW" on the ground.	Standard pushback approved
F33	 The aircraft (on idle thrust) shall be pushed back: until its nosewheel is at "END OF PUSH" 8 position. OR onto TWY B1 until its nosewheel is at the "END OF PUSH" 13A position. OR OR 	Standard pushback approved Pushback approved, to pushback onto TWY B1
	 onto TWY B3 until its nosewheel is at the "END OF PUSH" 7A position. 	Pushback approved, to pushback onto TWY B3.
F34, F35	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at the intersection of the lead-in line and TWY B3 centreline. The aircraft shall then be towed forward to Stopbar 7. This is marked as "END OF TOW" on the ground.	Standard pushback approved
F36	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 7. This is marked as "END OF TOW" on the ground.	Standard pushback approved

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APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
T2 NORTH		
E8	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 14. This is marked as "END OF PUSH" on the ground. The aircraft shall then be towed forward to Stopbar 15. This is marked as "END OF TOW" on the ground.	Standard pushback approved
E10	The aircraft (on idle thrust) shall be pushed back with the main gear mid-point following the pushback line until its nosewheel is at position EOP 19.	Standard pushback approved
E11	Main pushback procedure (for all aircraft wingspan) The aircraft (on idle thrust) shall be pushed back with the main gear mid-point following the main gear pushback line onto TWY A6 centreline. The aircraft shall then be towed forward to Stopbar 16 on TWY A5. This is marked as "END OF TOW" on the ground. <u>Alternate pushback procedure (for aircraft with wingspan of less</u> than 65m)	Standard pushback approved
	The aircraft (on idle thrust) shall be pushed back with the main gear mid-point following the main gear pushback line until its body is aligned with TWY A6 centreline. <u>Alternate pushback procedure (for aircraft with wingspan of</u> <u>more than 65m)</u>	
	The aircraft (on idle thrust) shall be pushed back with the main gear mid-point following the main gear pushback line until its nosewheel is at the 'EOP 19A' position behind aircraft stand E24. The aircraft shall then be towed forward to 'EOT 18B' behind aircraft stand E26.	
E12	 The aircraft (on idle thrust) shall be pushed back: until its nosewheel is at the intersection of the lead-in line and TWY A5 centreline. The aircraft shall then be towed forward to Stopbar 16. This is marked as "END OF TOW" on the ground. OR onto TWY A6 until its nosewheel is at the intersection of TWY 	
	A5 and A6 centrelines.	Pushback approved, to pusback onto TWY A6.
E20	The aircraft (on idle thrust) shall be pushed back with the main gear mid-point following the main gear pushback line until its nosewheel is at Stopbar 17. The aircraft shall then be towed forward to "END OF TOW" Stopbar 18A. Aircraft may breakaway from there.	Standard pushback approved
E22	The aircraft (on idle thrust) shall be pushed back with the main gear mid-point following the main gear pushback line until its nosewheel is at Stopbar 19. This is marked as "END OF PUSH" on the ground. The aircraft shall then be towed forward to Stopbar 18. This is marked as "END OF TOW" on the ground.	Standard pushback approved
E24	The aircraft (on idle thrust) shall be pushed back facing North until its body is aligned with TWY A6 centreline. Aircraft may breakaway from there.	Standard pushback approved
E24L, E24R	The aircraft (on idle thrust) shall be pushed back facing North until its body is aligned with TWY A6 centreline. Aircraft may breakaway from there.	
E26	The aircraft (on idle thrust) shall be pushed back to face North until its body is aligned with TWY A6 centreline.	
E27, E28	The aircraft (on idle thrust) shall be pushed back to face North (or South) until its body is aligned with TWY A6 centreline.	Pushback approved, to face North (or South).

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
T2 SOUTH		
F37	The aircraft (on idle thrust) shall be pushed back: • with the main gear following the main gear pushback line, until its nosewheel is behind aircraft stand F42. The aircraft shall then be towed forward to Stopbar 4. This is marked as "EOT 4" on the ground. <u>OR</u>	Standard pushback approved
	• with the main gear following the main gear pushback line, until its nosewheel is on the "END OF PUSH (EOP)" Stopbar 5 on TWY C1.	Pushback approved, to face East on TWY C1.
F40, F52	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at Stopbar 2. This is marked as "END OF PUSH" on the ground. The aircraft shall then be towed forward to Stopbar 3. This is marked as "END OF TOW" on the ground.	Standard pushback approved
F41	 The aircraft (on idle thrust) shall be pushed back: until its nosewheel is at the intersection of the lead-in line and the TWY C2 centreline. The aircraft shall then be towed forward to Stopbar 4. This is marked as "EOT 4" on the ground. OR 	Standard pushback approved
	• onto TWY C6 until its nosewheel is at the intersection of TWY C2 and TWY C6 centreline.	Pushback approved, to pushback onto TWY C6.
F42	Main pushback procedure (for all aircraft wingspan) The aircraft (on idle thrust) shall be pushed back until its nose- wheel is at the intersection of the lead-in line and the TWY C2 centreline. The aircraft shall then be towed forward to Stopbar 4. This is marked as "EOT 4" on the ground. Alternate pushback procedure (for aircraft with wingspan of less than 65m)	Standard pushback approved
	than 65m) The aircraft (on idle thrust) shall be pushed onto TWY C6 until its nosewheel is at the intersection of TWY C2 and TWY C6 centreline. <u>Alternate pushback procedure (for aircraft with wingspan of</u>	Pushback approved, to pushback onto TWY C6.
	<u>more than 65m</u>) The aircraft (on idle thrust) shall be pushed back until its nosewheel is at the 'EOP 4A' position. The aircraft shall then be towed forward with its nosewheel following the towed forward line until its nosewheel is on the 'EOT 4B' position, behind aircraft stand F59.	Pushback approved, to pushback onto TWY C6.
F50	The aircraft (on idle thrust) shall be pushed back with the main gear following the main gear pushback line, facing south until its nosewheel is on the "END OF PUSH" Stopbar 1 marking painted on the ground behind aircraft stand F50. The aircraft shall then be towed forward with the nosewheel following the tow-forward line until its nosewheel is on the "END OF TOW" Stopbar 3 marking painted on the ground behind aircraft stand F52.	Standard pushback approved
F52L	The aircraft (on idle thrust) shall be pushed back to face south until its nosewheel is at the intersection of the aircraft pushback line and taxilane C6.	Standard pushback approved
F52R	The aircraft (on idle thrust) shall be pushed back to face south until its nosewheel is at the intersection of the aircraft pushback line and taxilane C6. The aircraft shall then be towed forward until its nosewheel is on the "END OF TOW" position.	Standard pushback approved
F54	The aircraft (on idle thrust) shall be pushed back until its nosewheel is at a point on TWY C6 in line with the mid-point of aircraft stands F52 and F54. It shall breakaway from this position.	Standard pushback approved
AIP AMDT 7/15		CIVIL AVIATION AUTHORITY

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
T2 SOUTH		
F56	The aircraft (on idle thrust) shall be pushed back to face South until its nosewheel is at the intersection of the aircraft pushback line and taxilane C6.The aircraft shall then be towed forward until its nosewheel is abeam aircraft stand F56.	
F56L, F56R	The aircraft (on idle thrust) shall be pushed back to face South until its nosewheel is at the intersection of the aircraft pushback line and taxilane C6.The aircraft shall then be towed forward until its nosewheel is abeam aircraft stand F56.	Standard pushback approved
F58	The aircraft (on idle thrust) shall be pushed back to face North (or South), on TWY C6 centreline.	Pushback approved, to face North (or South).
F59	The aircraft (on idle thrust) shall be pushed back to face North on TWY C6 centreline until its nosewheel is abeam aircraft stand F60. <u>OR</u> The aircraft (on idle thrust) shall be pushed back to face South on TWY C6.	Pushback approved, to face North. Pushback approved, to face South.
F59L, F59R	The aircraft (on idle thrust) shall be pushed back to face North on taxilane C6 centreline until its nosewheel is abeam aircraft stand F60. <u>OR</u> The aircraft (on idle thrust) shall be pushed back to face South on taxilane C6 centreline.	face North.
F60	The aircraft (on idle thrust) shall be pushed back to face North (or South), on TWY C6 centreline.	Pushback approved, to face North (or South).

APRON/ACFT STANDS	PUSHBACK PROCEDURES	PHRASEOLOGY USED BY SINGAPORE GROUND
1, 2	 The aircraft (on idle thrust) shall be pushed back: to face West onto TWY L7 until its nosewheel is at the stopbar marked "END OF PUSH" behind aircraft stand 2. The aircraft may breakaway from there. Simultaneous pushback is not permitted for aircraft stands 1, 2 and 3. OR 	
	 onto TWY L5 to face North until its nosewheel is behind the stopbar behind aircraft stand 3. The aircraft may breakaway from there. Simultaneous pushback is not permitted for aircraft stands 1, 2 and 3. Pushback from aircraft stands 1 and 2 to face South is not permitted. 	North.
3, 4, 5, 6, 7, 8, 9, 10	The aircraft (on idle thrust) shall be pushed back onto TWY L5 to face North or South until its nosewheel is at the intersection of the aircraft stand lead-in line and the centreline of TWY L5. The aircraft may breakaway from there. There shall be no simultaneous pushback of aircraft unless there is at least one aircraft stand separation. Simultaneous pushback is not permitted for aircraft stands 1, 2 and 3.	Pushback approved, to face North or South.
11, 12, 13	The aircraft (on idle thrust) shall be pushed back onto TWY L5 to face North or South until its nosewheel is at the "END OF PUSH (EOP)" position and the centreline of TWY L5. The aircraft may breakaway from there. There shall be no simultaneous pushback of aircraft unless there is at least one aircraft stand separation.	Pushback approved, to face North or South.
14	The aircraft (on idle thrust) shall be pushed back onto TWY L5 to face North until its nosewheel is at the "END OF PUSH (EOP)" position and the centreline of TWY L5. The aircraft may breakaway from there. There shall be no simultaneous pushback of aircraft unless there is at least one aircraft stand separation.	Pushback approved, to face North.
15, 16, 701, 702	The aircraft (on idle thrust) shall be pushed back onto TWY L5 centreline to face North. The aircraft shall then be towed forward until its nosewheel is at the position between aircraft stands 12 and 13. The aircraft may breakaway from there.	Pushback approved, to face North.
17	The aircraft (on idle thrust) shall be pushed back to face West until its nosewheel is at the "END OF PUSH (EOP)" position. The aircraft shall then be towed forward onto TWY L5 to face North until its nosewheel is at the position between aircraft stands 12 and 13. The aircraft may breakaway from there.	Standard pushback approved.

	WSSS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED						
1	Associated MET Office	Singapore Changi (WSSS)					
2	Hours of service	H24					
3	Office responsible for TAF preparation Periods of validity	Singapore Changi (WSSS) 12, 30					
4	Type of landing forecast, Interval of issuance	TREND					
5	Briefing/consultation provided	Р					
6	Flight documentation, Language used	Charts or Tabular forms, English					
7	Charts and other information available for briefing or consultation	S, U, P					
8	Supplementary equipment available for providing information	HRPT: High Resolution Picture Transmission APT: Automatic Picture Transmission MDWR: MET Doppler Weather Radar MAINT: Second WED of every month BTN 0200-0900 ALTN period: THU following the second WED.					
9	ATS units provided with information	Singapore ACC, Singapore RCC					
10	Additional information	TEL: 65422837 (MET Office)					

WSSS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS							
Designations RWY NR	TRUE BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR coordinates (THR Geoid Undulation)	THR elevation and highest elevation of TDZ of precision approach RWY		
1	2	3	4	5	6		
02L	023.02°	4 000 x 60	72/F/B/W/U Bituminous concrete	012056.26N 1035838.83E (10.29m)	6.66m 6.23m		
20R (Threshold displaced by 740m southwards)	203.02°	4 000 x 60	72/F/B/W/U Bituminous concrete	012233.95N 1035920.06E (10.29m)	4.01m 4.31m		
02C	023.03°	4 000 x 60	72/F/B/W/U Bituminous concrete	011943.51N 1035905.86E (10.28m)	4.32m 4.52m		
20C	203.03°	4 000 x 60	72/F/B/W/U Bituminous concrete	012143.37N 1035956.46E (10.28m)	4.58m 4.56m		
02R	023°	2 750 x 60	72/F/B/W/T Asphalt	011958.05N 1040015.26E	-		
20L	203°	2 750 x 60	72/F/B/W/T Asphalt	012120.45N 1040050.05E	-		
Note: RWY 02	R/20L is used	solely by the F	Republic of Singap	ore Air Force (RSA	F) aircraft.		

V	WSSS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS (continued)								
Slope of RWY-SWY Transverse / Longitudinal	SWY Dimensions (m)	CWY Dimensions (m)	STRIP Dimensions (m)	OFZ	Remarks				
7	8	9	10	11	12				
RWY 02L 0.76 / 0.24%	60 X 60	270 X 150	4 240 X 300						
RWY 20R 1.45 / 0.25%	60 X 60	270 X 150	4 240 X 300	Yes	Scheduled closure of runways (see below)				
RWY 02C 1.50 / 0.03%	60 X 60	60 X 150	4 240 X 300	163					
RWY 20C 1.38 / 0.07%	60 X 60	60 X 150	4 240 X 300						
RWY 02R	150 X 60	-	3 050 X 336	-	Hookwire cable installed 450m (1476ft) from the				
RWY 20L	150 X 60	-	3 050 X 336	-	southern THR and 457m (1500ft) from the northern THR.				

Rem	arks (continued from above)
Sch	eduled Closure of RWY 02L/20R
1a)	BTN 1630-2200 on every MON and THU of the month (<i>preventive maintenance work</i>). In the event of an emergency, RWY will be re-opened within 30 minutes.
1b)	BTN 0225-0240 0630-0635 1000-1005 2300-2305 daily (<i>inspection</i>). In the event of an emergency, RWY will be re-opened within 5 minutes.
Sch	eduled Closure of RWY 02C/20C
2a)	BTN 1630-2200 on every first, second and fourth WED of the month (<i>preventive maintenance work</i>). In the event of an emergency, RWY will be re-opened within 30 minutes.
2b)	BTN 0300-0315 0650-0655 1020-1025 2320-2325 daily (<i>inspection</i>). In the event of emergency, RWY will be re-opened within 5 minutes.

RWY	Apch Lgt Type, Len Intensity	THR Lgt colour WBAR	PAPI (MEHT)	TDZ Lgt Len	RWY Centreline Lgt Len, spacing, colour, INTST	RWY Edge Lgt, Len, spacing, colour, INTST	RWY End Lgt colour	SV Lg cold
1	2	3	4	5	6	7	8	ç
20C	CAT II High Intensity consisting of extended centreline and red row barrettes, 2 crossbars, 2 approach beacons and sequenced flashing lights.	Green supple- mented by green wing-bar and 2 THR ident lights.	PAPI 3° located left side of RWY, 418m fm THR. 2 white LGT and 2 red LGT (19.8m), 3 white LGT and 1 red LGT (23.7m), 4 white LGT (26.2m) Aircraft with eye-to- wheel hgt greater than 8m are adz to fly with 2 white and 2 red LGT visible so as to achieve suffi- cient wheel clr.	White	Inset High Intensity centreline lights as flw: From THR to 900m fm RWY end: White, 300m to 900m fm RWY end: Altn red/white, 300m to RWY end: Red.	Bi-direc- tional raised white/amber edge lights.	Red	El vat Re
02R	CAT I 1 centreline barricade showing white flashes, 5 crossbars and capacitor discharge strobe lights.	Green supple- mented by 10 green wing- bars.	PAPI 3° loc at 323m up the THR. 2 units on each side of the RWY at RWY 02R apch and only 1 unit on west side of the RWY at RWY 20L apch.	Nil	Nil	Bi-direc- tional elevated and inset high inten- sity edge white/amber lights.	Red	Re
20L	CAT I 1 centreline barricade showing white flashes, 5 crossbars and capacitor discharge strobe lights.	Green supple- mented by 10 green wing- bars.	PAPI 3° loc at 323m up the THR. 2 units on each side of the RWY at RWY 02R apch and only 1 unit on west side of the RWY at RWY 20L apch.	Nil	Nil	Bi-direc- tional elevated and inset high inten- sity edge white/amber lights.	Red	Re

	WSSS AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY					
1	ABN/IBN location, characteristics and hours of operation	ABN: 012209.22N 1035858.47E (western side of RWY 02L/20R) Altn FLG W G EV 2.3 SEC, Opr hours HN + IMC IBN: 012301.28N 1035959.52E (top of building N of SIA hangar) FLG G 'CH' EV 7 SEC, Opr hours HN + IMC				
2	LDI location and LGT Anemometer location and LGT	Pressure tube anemometer and wind vane situated 345m west of middle of RWY 02L/20R. Cup anemometers and wind vanes at ends and middle of both runways. Windsocks at ends of both runways. Transmissometers at both ends and in the middle of both runways				
3	TWY Edge and Centreline Lighting	RWY 02L/20R and RWY 02C/20C: blue lgts on twy curved edges and apron twy edges and green centreline lgts on all twy. RWY 02R/20L: Elevated and inset blue twy edge lgt.				
4	Secondary power supply/switch- over time	Automatic standby generator power supply available for airfield lighting with switchover time of 1 second during Category II low visibility operations.				
5	Remarks	Vehicles painted yellow or displaying chequered red/white or orange/white flag at highest point of vehicle				

WSSS AD 2.16 HELICOPTER LANDING AREA

Please see section ENR 3.4

	WSSS AD 2.17 ATS AIRSPACE				
1	Designation and Lateral Limits	CHANGI CTR 013300N 1040149E 013042N 1040654E 012542N 1040448E thence along Kuala Lumpur/Singapore FIR bdry to 012000N 1041218E 010018N 1035524E 011100N 1035134E 013300N 1040149E			
2	Vertical Limits	SFC to 3,000ft ALT			
3	Airspace Classification	С			
4	ATS Unit Callsign Language(s)	Singapore Tower English			
5	Transition Altitude	11,000ft (3,350m)			
6	Remarks	A helicopter shall not be operated within the Changi CTR unless prior per- mission has been obtained from the Director-General of Civil Aviation, CAAS. Email to caas_ats_ansp@caas.gov.sg			

	WSSS AD 2.19 RADIO NAVIGATION AND LANDING AIDS								
Type of aid and MAG Variation	IDENT	Frequency	OPR HR	Position of transmitting antenna Coordinates	DME transmitting antenna Elevation / Remarks				
1	2	3	4	5	6 & 7				
RWY 20R ILS LLZ	ICH	108.9MHz	H24	012045.23N 1035834.17E	Located 368m (1207ft) from THR RWY 02L, along centreline of the RWY. Course width 3.38°. EM: A0/A2. MAINT Period: MAY-OCT - First SAT of EV month BTN 0200-0900 NOV-APR - First FRI of EV month BTN 0200-0900				
RWY 20R ILS GP	_	329.3MHz	H24	012225.54N 1035912.29E	Located 330m (1083ft) from displaced THR RWY 20R on right side of the RWY, 120m (394ft) from RWY centreline. GP angle 3°. HGT of ILS REF datum: 17m (56ft) EM: A0/A2				
RWY 20R ILS DME	ICH	CH26X	H24	012225.54N 1035912.29E	DME co-located with GP. RWY 20R ILS DME not available beyond 15 degrees west of RWY 20R cen- treline below 2500ft. EM: P9				
RWY 20R ILS MM	-	75MHz	H24	012307.50N 1035934.23E	Located 1122m (3681ft) from displaced THR RWY 20R, along centreline of the RWY.				
RWY 02L ILS LLZ	ICW	110.9MHz	H24	012307.03N 1035934.03E	Located 1105m (3625ft) from displaced THR RWY 20R, along centreline of RWY. Course width 2.81° EM:A0/A2 MAINT Period: MAY-OCT - First FRI of EV month BTN 0200-0900 NOV-APR - First SAT of EV month BTN 0200-0900				
RWY 02L ILS GP	-	330.8MHz	H24	012108.34N 1035838.94E	Located 343m (1125ft) from THR RWY 02L on left side of RWY, 143m (469ft) from RWY centreline. GP angle 3° HGT of ILS REF datum: 18m (58ft) EM:A0/A2				
RWY 02L ILS DME	ICW	CH46X	H24	012108.34N 1035838.94E	DME co-located with GP EM:P9				
RWY 02L ILS MM	-	75MHz	H24	012027.53N 1035826.70E	Located 957m (3140ft) from THR RWY 02L along extended centreline of RWY. No back beam.				

WSSS AD 2.20 LOCAL TRAFFIC REGULATIONS

1. DESIGNATION OF PAYA LEBAR AIRPORT AS AN ALTERNATE AERODROME FOR SINGAPORE CHANGI AIRPORT

Please refer to pages WSAP AD 2-7 and WSAP AD 2-8 for details.

2. WRONG APPROACHES AND LANDINGS OF AIRCRAFT BOUND FOR SINGAPORE CHANGI AND PAYA LEBAR AIRPORTS

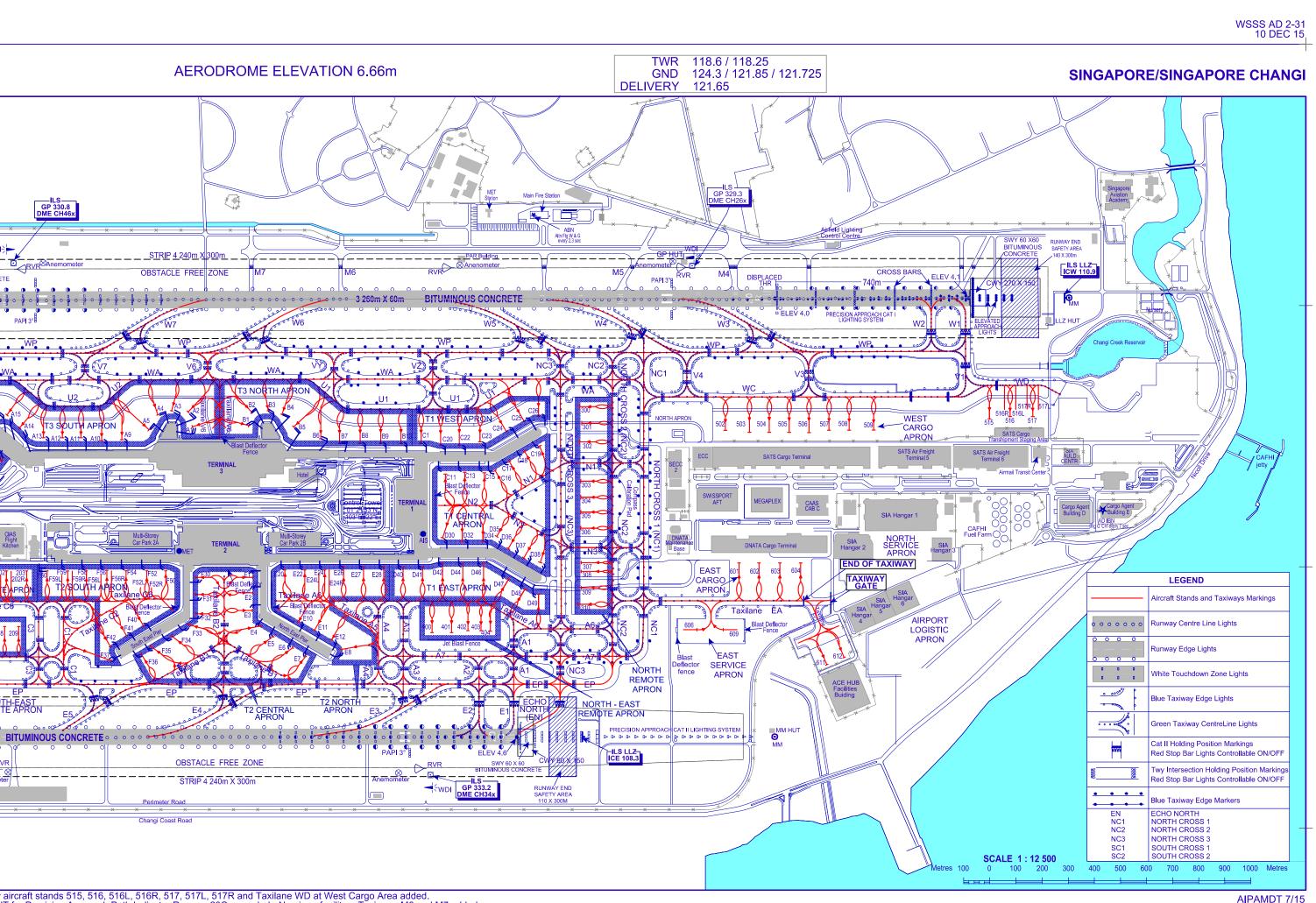
2.1 INTRODUCTION

- 2.1.1 The attention of all pilots is drawn to the existence of Paya Lebar Airport close to Singapore Changi Airport. The runway at Singapore Changi Airport is orientated in the same true bearing as the runway at Paya Lebar Airport i.e. 023°/203°. Due to the close proximity of these two runways, pilots are cautioned against mistaking Paya Lebar Airport for the runway of Singapore Changi Airport and thus making an inadvertent visual landing or approach to land at Paya Lebar.
- 2.1.2 Erroneous approaches or landings usually occurred during the hours of darkness. In almost every instance, the weather prevailing at the time of the incident was generally good or fair.
- 2.1.3 There is intensive local flying at Paya Lebar and Seletar during the day and night. Thus, the risk of collision is very great if a wrong approach is made to any of the above two airports. Likewise, wrong approaches into Singapore Changi Airport can also be disastrous.

2.2 POINTS TO BEAR IN MIND WHEN APPROACHING SINGAPORE CHANGI AIRPORT OR PAYA LEBAR

- 2.2.1 The following points are highlighted to serve as a guide to assist pilots in making a correct approach into Singapore Changi Airport or Paya Lebar Airport and should be remembered and followed:
 - a) The runways at Singapore Changi Airport and Paya Lebar Airport are identically aligned on 02/ 20. Therefore exercise extreme vigilance when leaving NYLON or SAMKO Holding Areas inbound and maintain correct tracks to the respective runways as listed below.
 - b) Adhere strictly to IFR procedures even in VMC which calls for a procedure turn over NYLON Holding Area or SAMKO Holding Area as prescribed.
 - c) Make full use of all available navigational and landing aids available and positively identify every aid used.
 - d) Switch to the correct ILS localizer frequency at Singapore Changi Airport under all conditions.

01° 21' 33"N **AERODROME CHART - ICAO** 103°59' 22"E PAPI 3° (MEHT)* Pilot's eye height over the RUNWAY threshold when the following 20R 02C 20C 02L PAPI lights come into view. 19.8m White lights and 2 red lights 20.6m 20.0m 20.4m White lights and 1 red light 23.1m 22.6m 23.1m 23.7m 25.6m 25.0m 25.5m 26.2m 4 White lights GP 330.8 DME CH46x * 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. SAFETY AREA WDE GEOID BEARING UNDULATION STRENGTH .110X 300m _ _ _ _ _ <u>STRIP 4 240m X</u>300m RWY DIRECTION THR SWX 60 X60 01 20 56.26N NCRETE 02L 023° 10.29m 103 58 38.83E IM 🖸 🖥 a a a a g 🔊 a a a a a a a a a a a a a a a g 20R 01 22 33.95N 203° 10.29m PCN DISP THR 03 59 20 06E 72/F/B/W/U 01 19 43 51N 02C 023° 10.28m 103 59 05.86E , sel South Pump House 01 21 43.37N 20C 10.28m 203° 103 59 56.46E BEARING STRENGTH PCN 85/R/B/W/U - Taxiways W1, W9, E1, E3, E11 TAXIWAYS and EP (between E10-E11) PCN 72/F/B/W/U - All other Taxiways **BEARING STRENGTH** APRONS PCN 85/R/B/W/U Y (ECD) Airport Boulevard ELEVATIONS AND DIMENSIONS IN METRES TAXIWAYS 30m WIDI NOTE SEE FLIP SIDE FOR DETAILS OF × × × i) INS COORDINATES FOR AIRCRAFT STANDS AND PRE-FLIGHT ALTIMETER CHECK LOCATIONS. ii) RESTRICTIONS ON TAXIWAYS. UDGET TERMIN APRON TANAH MERAH COUNTRY CLUB CLUB HOUSE *€__¥*∉____⊑___ _____ ----LS LLZ 4 000m X 60m PAPI 3 UMINOUS CONCRETE RUNWAY END SAFETY AREA 120 X 300m GP 334 1 DME CH20x



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

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
T3 SOUTH APRON	A1 A2 A3 A5 A9 A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21	$\begin{array}{c} 01 \ 21 \ 21.52 \\ 01 \ 21 \ 21.75 \\ 01 \ 21 \ 19.86 \\ 01 \ 21 \ 17.61 \\ 01 \ 21 \ 15.50 \\ 01 \ 21 \ 15.50 \\ 01 \ 21 \ 15.50 \\ 01 \ 21 \ 10.36 \\ 01 \ 21 \ 07.93 \\ 01 \ 21 \ 05.76 \\ 01 \ 21 \ 03.59 \\ 01 \ 21 \ 01.66 \\ 01 \ 21 \ 00.77 \\ 01 \ 20 \ 59.27 \\ 01 \ 20 \ 57.25 \\ 01 \ 20 \ 55.26 \\ 01 \ 55.26 \\ 01 \ 55.26 \\ 01 \ 55.26 \\ 01 \ 55.26 \\ 01 \ 55.26 \\ 01 \ 55.26 \\ 01 \ 55.26 \ 55.26 \\ 01 \ 55.26 \ 5$	$\begin{array}{c} 103 \ 59 \ 06.25 \\ 103 \ 59 \ 02.79 \\ 103 \ 59 \ 02.54 \\ 103 \ 59 \ 02.54 \\ 103 \ 59 \ 03.65 \\ 103 \ 59 \ 02.40 \\ 103 \ 59 \ 02.40 \\ 103 \ 59 \ 02.40 \\ 103 \ 59 \ 02.40 \\ 103 \ 59 \ 02.40 \\ 103 \ 58 \ 57.59 \\ 103 \ 58 \ 57.59 \\ 103 \ 58 \ 54.20 \\ 103 \ 58 \ 54.20 \\ 103 \ 58 \ 57.13 \\ 103 \ 58 \ 57.13 \\ 103 \ 58 \ 57.13 \\ 103 \ 58 \ 58.83 \\ 103 \ 59 \ 00.80 \end{array}$	4.75m (15.58ft) 4.65m (15.29ft) 4.79m (15.29ft) 4.86m (15.29ft) 5.02m (16.47ft) 5.02m (16.54ft) 5.25m (16.54ft) 5.25m (17.22ft) 5.38m (17.08ft) 5.57m (18.27ft) 5.48m (17.91ft) 5.51m (18.08ft) 5.23m (17.16ft) 5.37m (17.22ft) 5.45m (17.88ft) 5.49m (18.01ft)
T3 NORTH APRON	B1 B2 B3 B4 B5 B6 B7 B8 B9 B10	01 21 26.86 01 21 28.18 01 21 30.33 01 21 32.03 01 21 32.98 01 21 35.15 01 21 35.15 01 21 37.65 01 21 39.94 01 21 42.19 01 21 44.47	$\begin{array}{c} 103 \ 59 \ 08.37 \\ 103 \ 59 \ 06.82 \\ 103 \ 59 \ 07.30 \\ 103 \ 59 \ 08.60 \\ 103 \ 59 \ 10.89 \\ 103 \ 59 \ 13.16 \\ 103 \ 59 \ 13.93 \\ 103 \ 59 \ 13.93 \\ 103 \ 59 \ 15.20 \\ 103 \ 59 \ 16.16 \\ 103 \ 59 \ 17.12 \end{array}$	4.82m (15.81ft) 4.68m (15.35ft) 4.65m (15.26ft) 4.75m (15.58ft) 4.96m (16.27ft) 4.97m (16.31ft) 5.09m (16.70ft) 5.13m (16.83ft) 5.10m (16.73ft)
T1 WEST APRON	C1 C20 C22 C23 C24 C25 C26	01 21 46.75 01 21 48.83 01 21 51.00 01 21 53.56 01 21 56.54 01 21 59.12 01 22 01.48	$\begin{array}{c} 103 \ 59 \ 18.08 \\ 103 \ 59 \ 19.23 \\ 103 \ 59 \ 20.13 \\ 103 \ 59 \ 20.77 \\ 103 \ 59 \ 20.97 \\ 103 \ 59 \ 20.59 \\ 103 \ 59 \ 20.76 \end{array}$	5.09m (16.70ft) 5.08m (16.67ft) 5.15m (16.90ft) 5.08m (16.67ft) 4.89m (16.04ft) 4.99m (16.37ft) 5.01m (16.44ft)
T1 CENTRAL APRON	C11 C13 C15 C16 C17 C18 C19	01 21 47.42 01 21 49.64 01 21 51.90 01 21 53.63 01 21 55.63 01 21 57.86 01 21 59.79	103 59 23.82 103 59 24.75 103 59 25.71 103 59 26.42 103 59 26.07 103 59 25.75 103 59 25.63	5.07m (16.63ft) 5.05m (16.57ft) 5.05m (16.57ft) 4.91m (16.11ft) 5.03m (16.50ft) 4.99m (16.37ft) 4.95m (16.24ft)
	D30 D32 D34 D35 D36 D37 D38	01 21 44.54 01 21 46.73 01 21 49.03 01 21 50.87 01 21 51.98 01 21 53.37 01 21 54.58	103 59 30.14 103 59 31.07 103 59 32.04 103 59 32.82 103 59 34.52 103 59 36.28 103 59 37.77	5.09m (16.70ft) 5.08m (16.67ft) 5.07m (16.63ft) 5.02m (16.47ft) 5.06m (16.60ft) 4.97m (16.31ft) 4.99m (16.37ft)
T1 EAST APRON	D40 D41 D42 D44 D46 D47 D48 D49	01 21 38.02 01 21 40.30 01 21 42.70 01 21 44.97 01 21 44.97 01 21 49.19 01 21 50.60 01 21 52.23	$\begin{array}{c} 103 \ 59 \ 32.85 \\ 103 \ 59 \ 33.81 \\ 103 \ 59 \ 35.44 \\ 103 \ 59 \ 35.44 \\ 103 \ 59 \ 36.72 \\ 103 \ 59 \ 36.89 \\ 103 \ 59 \ 40.77 \\ 103 \ 59 \ 42.35 \end{array}$	5.07m (16.63ft) 5.07m (16.63ft) 5.11m (16.77ft) 5.14m (16.86ft) 5.08m (16.67ft) 4.93m (16.17ft) 4.97m (16.31ft) 4.98m (16.34ft)
T2 NORTH APRON	E8 E10 E11 E12	01 21 27.99 01 21 24.15 01 21 25.57 01 21 27.20	103 59 38.45 103 59 32.67 103 59 34.37 103 59 36.42	4.68m (15.35ft) 4.71m (15.45ft) 4.78m (15.68ft) 4.75m (15.58ft)
	E20 E22 E24 E24L E24R E26 E27 E28	01 21 24.36 01 21 26.64 01 21 29.01 01 21 28.32 01 21 29.53 01 21 31.19 01 21 33.46 01 21 35.74	$\begin{array}{c} 103 \ 59 \ 27.08 \\ 103 \ 59 \ 28.04 \\ 103 \ 59 \ 29.06 \\ 103 \ 59 \ 28.77 \\ 103 \ 59 \ 29.28 \\ 103 \ 59 \ 29.96 \\ 103 \ 59 \ 30.93 \\ 103 \ 59 \ 31.89 \end{array}$	5.04m (16.54ft) 5.07m (16.63ft) 5.09m (16.70ft) 5.10m (16.73ft) 5.08m (16.67ft) 5.08m (16.67ft) 5.03m (16.50ft) 5.08m (16.67ft)
T2 CENTRAL APRON	E1 E2 E3 E4 E5 E6 E7	01 21 20.02 01 21 19.28 01 21 18.44 01 21 18.10 01 21 19.56 01 21 21.22 01 21 22.48	$\begin{array}{c} 103 \ 59 \ 25.58 \\ 103 \ 59 \ 27.30 \\ 103 \ 59 \ 29.27 \\ 103 \ 59 \ 31.70 \\ 103 \ 59 \ 33.72 \\ 103 \ 59 \ 35.93 \\ 103 \ 59 \ 37.46 \end{array}$	4.91m (16.11ft) 4.90m (16.08ft) 4.82m (15.81ft) 4.80m (15.75ft) 4.90m (16.08ft) 4.84m (15.88ft) 4.73m (15.52ft)
	F30 F31 F32 F33 F34 F35 F36	01 21 14.71 01 21 13.87 01 21 13.03 01 21 13.03 01 21 11.30 01 21 08.98 01 21 06.28 01 21 04.34	$\begin{array}{c} 103 \ 59 \ 23.33 \\ 103 \ 59 \ 25.30 \\ 103 \ 59 \ 27.26 \\ 103 \ 59 \ 28.54 \\ 103 \ 59 \ 28.96 \\ 103 \ 59 \ 29.29 \\ 103 \ 59 \ 29.67 \end{array}$	4.92m (16.14ft) 4.91m(16.11ft) 4.85m (15.91ft) 4.91m (16.11ft) 4.92m (16.14ft) 4.90m (16.08ft) 4.82m (15.81ft)

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

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
T2 SOUTH APRON	F37	01 20 59.83	103 59 27.87	4.75m (15.58ft)
	F40 F41 F42	01 21 05.62 01 21 03.19 01 21 00.61	103 59 25.34 103 59 25.58 103 59 25.96	4.85m (15.91ft) 4.82m (15.81ft) 4.72m (15.49ft)
	F50 F52	01 21 10.69 01 21 08.51	103 59 21.32 103 59 20.40	5.03m (16.50ft) 5.11m (16.77ft)
	E521	01 21 07 82	102 50 20 11	5.16m (16.93ft) 5.08m (16.67ft)
	F54 F56	01 21 09.04 01 21 06.14 01 21 03.96	103 59 19.40 103 59 18.48	5.22m (17.13ft) 5.30m (17.39ft)
	F56L F56R F58	01 21 03.27 01 21 04.49 01 21 01.58	103 59 20.11 103 59 20.62 103 59 19.40 103 59 18.48 103 59 18.18 103 59 18.70 103 59 18.70	5.42m (17.78ft) 5.34m (17.52ft)
	F58 F59 F59L	01 20 59.41 01 20 58.72	103 59 17.47 103 59 16.55 103 59 16.26	5.49m (18.01ft) 5.64m (18.50ft) 5.67m (18.60ft)
	F59R F60	01 20 59.93 01 20 56.91	103 59 16.20 103 59 16.78 103 59 15.50	5.60m (18.37ft) 5.77m (18.93ft)
EAST REMOTE APRON	200 200L	01 20 47.83 01 20 46.91	103 59 11.67 103 59 11.92	6.23m (20.44ft) 6.29m (20.64ft)
	200R 201	01 20 48.35 01 20 49.99	103 59 11.89 103 59 12.62 103 59 13.57	6.18m (20.28ft) 5.96m (19.55ft)
	202 202L	01 20 52.34 01 20 51.65	103 59 13.57 103 59 13.28	5.94m (19.49ft)
	202R 203	01 20 52.87 01 20 54.52	103 59 13.28 103 59 13.79 103 59 14.47	5.73m (18.80ft) 5.92m (19.42ft)
SOUTH-EAST REMOTE APRON	101 101L		103 59 04.05 103 59 04.70	4.49m (14.73ft) 4.60m (15.09ft)
	101R 102 102L	01 20 35.11 01 20 33.76 01 20 33 53	103 59 03.50 103 59 06.65 103 59 07.33	4.53m (14.86ft) 4.49m (14.73ft) 4.62m (15.16ft)
	102R 103	01 20 34.00 01 20 32.88	103 59 06.10 103 59 09.35	4.60m (15.09ft) 4.67m (15.32ft)
	104 205	01 20 31.77 01 20 43.91	103 59 11.96 103 59 17.06	4.39m (14.40ft) 4.77m (15.65ft)
	206 207 208	01 20 46 08 01 20 47 91 01 20 49 48	103 59 17 98 103 59 18 88 103 59 19 54	4.76m (15.62ft) 4.74m (15.55ft) 4.74m (15.55ft)
	209		103 59 20.21	4.75m (15.58ft)
NORTH REMOTE APRON	300 301 302	01 22 06.95 01 22 06.41 01 22 05 21	103 59 22.67 103 59 24.69 103 59 26.75 103 59 31.40	4.53m (14.86ft) 4.93m (16.17ft) 4.97m (16.31ft)
	303 304	01 22 05.21 01 22 03.55 01 22 02.84 01 22 02.14	103 59 31.40 103 59 33.06 103 59 34.71	4.97m (16.31ft) 5.32m (17.45ft) 5.35m (17.55ft)
	305 306 307	01 22 01 41	103 59 34.71 103 59 36.42 103 59 40.36	5.30m (17.39ft) 5.16m (16.93ft)
	308 309	01 21 59.39 01 21 58.96 01 21 58.52	103 59 41,35	5.16m (16.93ft) 5.10m (16.73ft) 5.06m (16.60ft)
NORTH-EAST	310 400	01 21 58.52 01 21 57.42 01 21 38.71	103 59 43.17 103 59 44.96 103 59 40.14	4.74m (15.55ft) 4.31m (14.14ft)
REMOTE APRON	401 402	01 21 40.98 01 21 42.85	103 59 41.10 103 59 41.89	4.31m (14.14ft) 4.30m (14.11ft)
	403 404	01 21 44.37 01 21 45.45	103 59 42.53 103 59 42.98	4.29m (14.07ft) 4.20m (13.78ft)
WEST CARGO APRON	502 503	01 22 22.23 01 22 24.98	103 59 31.62 103 59 32.78	4.35m (14.27ft) 4.29m (14.07ft)
	504 505	01 22 27.26 01 22 29.54	103 59 33.74 103 59 34.70 103 59 35,66	4.29m (14.07ft) 4.32m (14.17ft)
	506 507 508	01 22 31 81 01 22 34 11 01 22 36 41	103 59 35.66 103 59 36.64 103 59 37.61	4.38m (14.37ft) 4.36m (14.30ft) 4.29m (14.07ft)
	509 ➡ 515	01 22 39.12 01 22 52.90	103 59 38.76 103 59 43.20	4.09m (13.42ft) 4.09m (13.43ft)
	→ 516 → 516L → 516R	01 22 55.39 01 22 56.24 01 22 54 02	103 59 43.97 103 59 43.80 103 59 43.25	4.04m (13.26ft) 3.96m (12.98ft)
	→ 516R → 517 → 517L	01 22 54.93 01 22 58.02 01 22 58.83	103 59 45.25 103 59 45.08 103 59 44.99	3.95m (12.97ft) 4.05m (13.27ft) 3.98m (13.05ft)
	→ 517R	01 22 57.55	103 59 44 35	3.96m (12.98ft)
EAST CARGO APRON	601 602 603	01 22 16.52 01 22 18.80 01 22 21.15 01 22 23.46	103 59 49.27 103 59 50.23 103 59 51.02	4.27m (14.01ft) 4.30m (14.11ft) 4.29m (14.07ft)
EAST SERVICE APRON	604 606	01 22 23.46 01 22 09.09	103 59 51.99 103 59 53.22	4.31m (14.14ft) 2.70m (8.86ft)
LAST SERVICE AFRON	609	01 22 09.09	103 59 53.22	3.01m (9.88ft)
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)

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

LOCATION	STAND NR	NORTH LAT	EAST LONG	ELEVATION
BUDGET TERMINAL APRON	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	$\begin{array}{c} 01\ 20\ 28\ 69\\ 01\ 20\ 27\ 39\\ 01\ 20\ 26\ 09\\ 01\ 20\ 24\ 80\\ 01\ 20\ 23\ 50\\ 01\ 20\ 23\ 50\\ 01\ 20\ 22\ 20\\ 01\ 20\ 20\ 90\\ 01\ 20\ 20\ 90\\ 01\ 20\ 18\ 31\\ 01\ 20\ 15\ 77\\ 01\ 20\ 15\ 77\\ 01\ 20\ 14\ 50\\ 01\ 20\ 15\ 77\\ 01\ 20\ 14\ 50\\ 01\ 20\ 12\ 78\\ 01\ 20\ 11\ 48\\ 01\ 20\ 10\ 33\\ 01\ 20\ 09\ 03\\ 01\ 20\ 07\ 74\\ \end{array}$	$\begin{array}{c} 103 \ 59 \ 10.05 \\ 103 \ 59 \ 09.51 \\ 103 \ 59 \ 08.96 \\ 103 \ 59 \ 08.41 \\ 103 \ 59 \ 07.86 \\ 103 \ 59 \ 07.32 \\ 103 \ 59 \ 06.77 \\ 103 \ 59 \ 06.27 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 05.67 \\ 103 \ 59 \ 01.77 \\ 103 \ 59 \ 01.17 \\ 103 \ 59 \ 01.62 \\ \end{array}$	3.97m (13.02ft) 4.04m (13.25ft) 3.90m (12.80ft) 3.86m (12.66ft) 3.85m (12.66ft) 3.85m (12.63ft) 3.86m (12.67ft) 3.83m (12.67ft) 3.83m (12.67ft) 3.85m (12.80ft) 3.90m (12.80ft) 3.99m (12.93ft) 3.99m (13.09ft) 4.01m (13.16ft) 4.60m (15.09ft)
	701 702	01 20 07.51 01 20 08.81	103 59 05.69 103 59 06.24	5.03m (16.50ft) 5.03m (16.50ft)

RESTRICTIONS ON TAXIWAYS

1) Pilots are advised to apply minimum thrust when

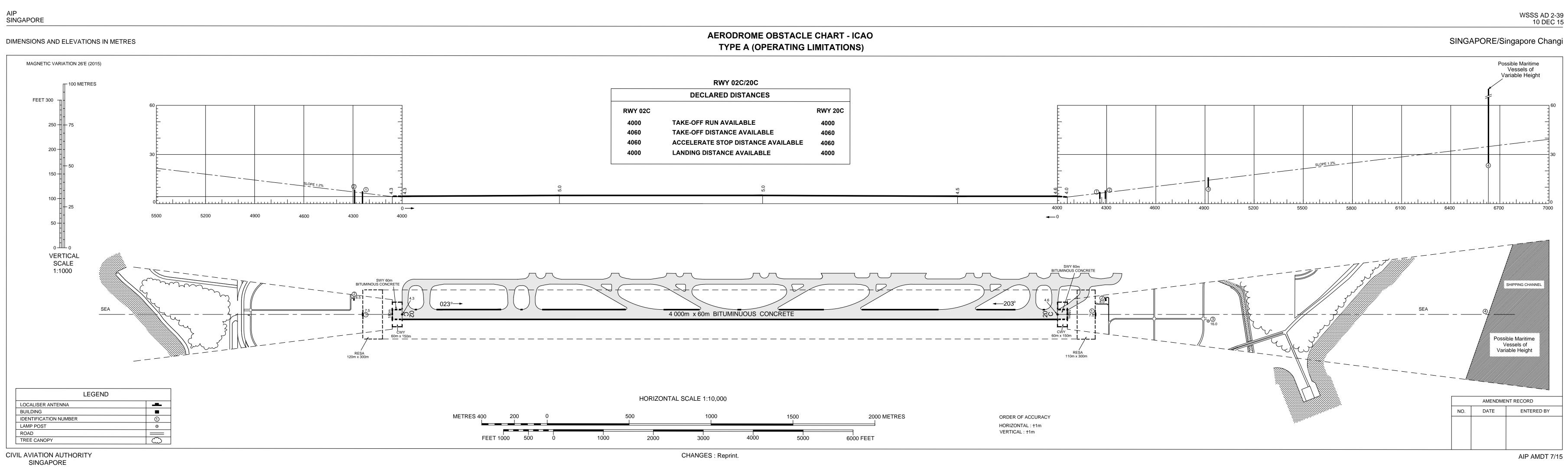
i) turning into TWY A1, A3, A4 and Taxilane A5 while taxiing either northwards or southwards on Taxilane A6, and ii) thereafter when taxiing along TWY A1 up to and including the TWY A7/A1 junction. This is in view of apron activities at aircraft stands D40, D41, D47, D48, D49, E22, E24, E27 and E28.

- 2) TWY SA can only be used by aircraft with maximum wingspan 65m. TWY SA is a one-way live TWY for aircraft taxiing into SASCO hangar via RWY 02L. Only tow-out operation is allowed from SASCO hangar into TWY SA and RWY 02L.
- 3) Pilots operating aircraft with wheelbase longer than B747 or 26m shall take note that judgemental oversteering may be required when manoeuvring round taxiway turns.
- 4) TWY NC3 (between TWY WA and TWY A6) is a TWY with reduced minimum separation distances between the TWY centreline and object. Due to the reduced minimum separation distances, pilots are advised to adhere strictly to the TWY centreline and to slow down the taxi speed accordingly. TWY NC3 (between TWY WA and TWY A6) can only be used by aircraft with maximum wingspan 65m.
- 5) Taxiway centreline along TWY EP between TWY B1 and B3 offset eastward by 2.5m away from aircraft stands E7 and F36.
- 6) Pilots are advised to apply minimum thrust when turning into taxiway WA from taxilane V6.
- 7) Taxilane U4 (behind aircraft stands A18 to A21) can only be used by aircraft with maximum wingspan 61m.
- 8) TWY N1 (behind aircraft stands C16 to C19 and between TWY NC2 and TWY NC3), TWY N2 and TWY N3 (behind aircraft stands D35 to D38 and between TWY NC2 and TWY NC3) can only be used by aircraft with maximum wingspan 65m.
- 9) Taxilane A6 (behind aircraft stands E20 to E24) and Taxilane C6 (behind aircraft stands F50 to F54) can only be used by aircraft with maximum wingspan 65m (towing and pushback exempted).
- 10) TWY L5 can only be used by aircraft with maximum wingspan 36m.
- 11) TWY L8, L9 and L10 can only be used by aircraft with maximum wingspan 65m.
- 12) Pilots are advised to exercise caution when taxiing near TWY L5, L8, L9 and L10.
- 13) Pilots are advised to apply speed limit of 20 knots when taxiing along TWY SOUTH CROSS 1 and SOUTH CROSS 2.
- 14) 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.
- 15) TWY M4, M5, M6 and M7 are solely for use by Republic of Singapore Air Force (RSAF) aircraft.

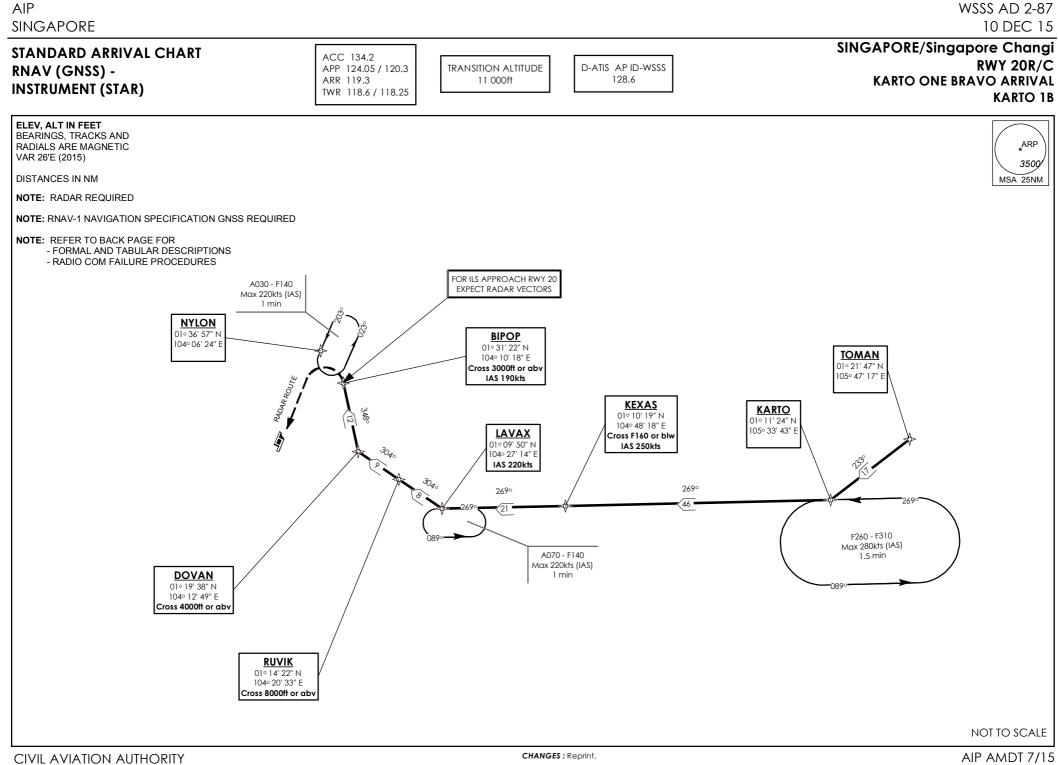
RADIO ALTIMETER OPERATIONS AREA

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.



DECLARED DISTANCES						
RWY 02C		RWY 20C				
4000	TAKE-OFF RUN AVAILABLE	4000				
4060	TAKE-OFF DISTANCE AVAILABLE	4060				
4060	ACCELERATE STOP DISTANCE AVAILABLE	4060				
4000	LANDING DISTANCE AVAILABLE	4000				



SINGAPORE

KARTO 1B (STAR) RNAV GNSS RWY 20R/20C - DESCRIPTIONS

Formal & Abbreviated Descriptions

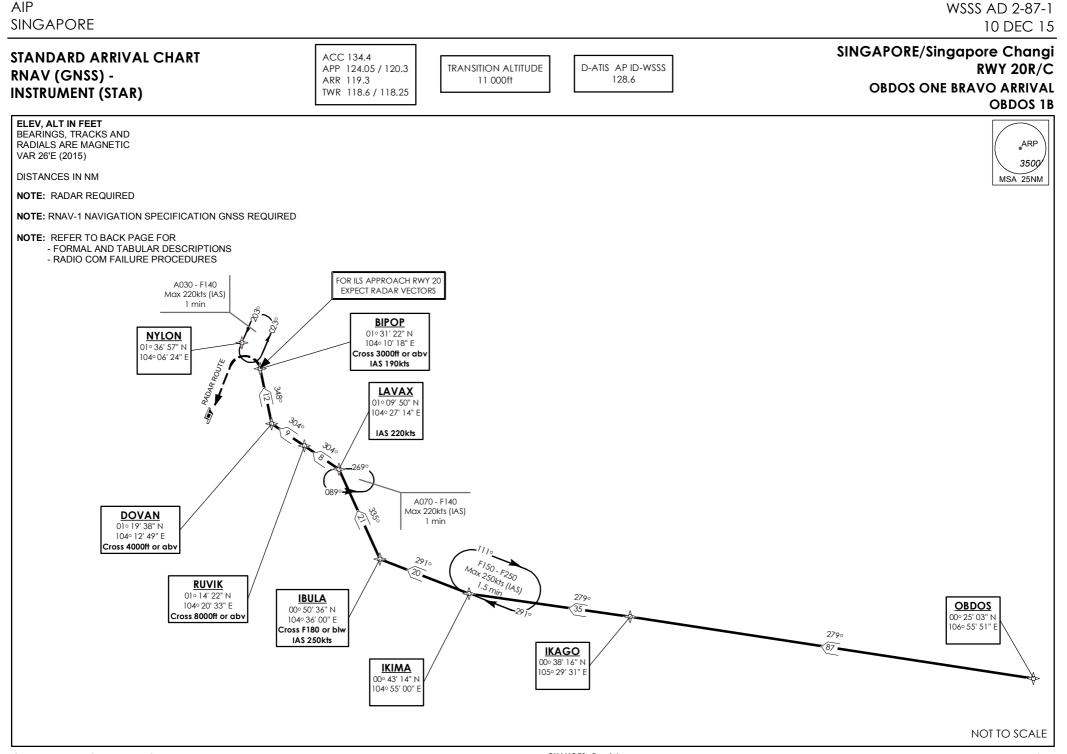
Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
From TOMAN. To KARTO, turn right. To KEXAS at or below FL160, speed 250kts. To LAVAX, speed 220kts, turn right. To RUVIK at or above 8000ft. To DOVAN at or above 4000ft, turn right. To BIPOP at or above 3000ft, speed 190kts.	TOMAN - KARTO [R] - KEXAS [FL160-; K250] - LAVAX [K220; R] - RUVIK [A080+] - DOVAN [A040+; R] - BIPOP [A030+; K190]	년 년 년 년 11 년 년 년 11 년	ヱヱヱヱヱヱ

Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
IF	TOMAN	-	-	-0.5	-	-	-	RNAV1
TF	KARTO	-	233(233.5)	-0.5	R	-	-	RNAV1
TF	KEXAS	-	269(269.5)	-0.5	-	FL160-	K250	RNAV1
TF	LAVAX	-	269(269.5)	-0.5	R	-	K220	RNAV1
TF	RUVIK	-	304(304.0)	-0.5	-	A080+	-	RNAV1
TF	DOVAN	-	304(304.1)	-0.5	R	A040+	-	RNAV1
TF	BIPOP	-	348(348.5)	-0.5	-	A030+	K190	RNAV1

RADIO COMMUNICATIONS FAILURE PROCEDURE

1	SET TRA	SET TRANSPONDER TO MODE A/C CODE 7600				
2	When cle	eared via KARTO 1B by Singapore ATC				
	(a)	(a) Maintain last assigned flight level or altitude and proceed on KARTO 1B to BIPOP,				
		then direct to NYLON				
	(b) From NYLON commence descent and carry out appropriate landing procedure for					
		RWY 20 as close as possible to EAT or ETA				
	(c)	If unable to effect a landing, refer to Singapore AIP for missed approach procedure				
3	No clear	No clearance or instruction received from Singapore ATC				
	-	Refer to Singapore AIP for radio communications failure procedure				



AIP

CHANGES : Reprint.

AIP AMDT 7/15

OBDOS 1B (STAR) RNAV GNSS RWY 20R/20C - DESCRIPTIONS

Formal & Abbreviated Descriptions

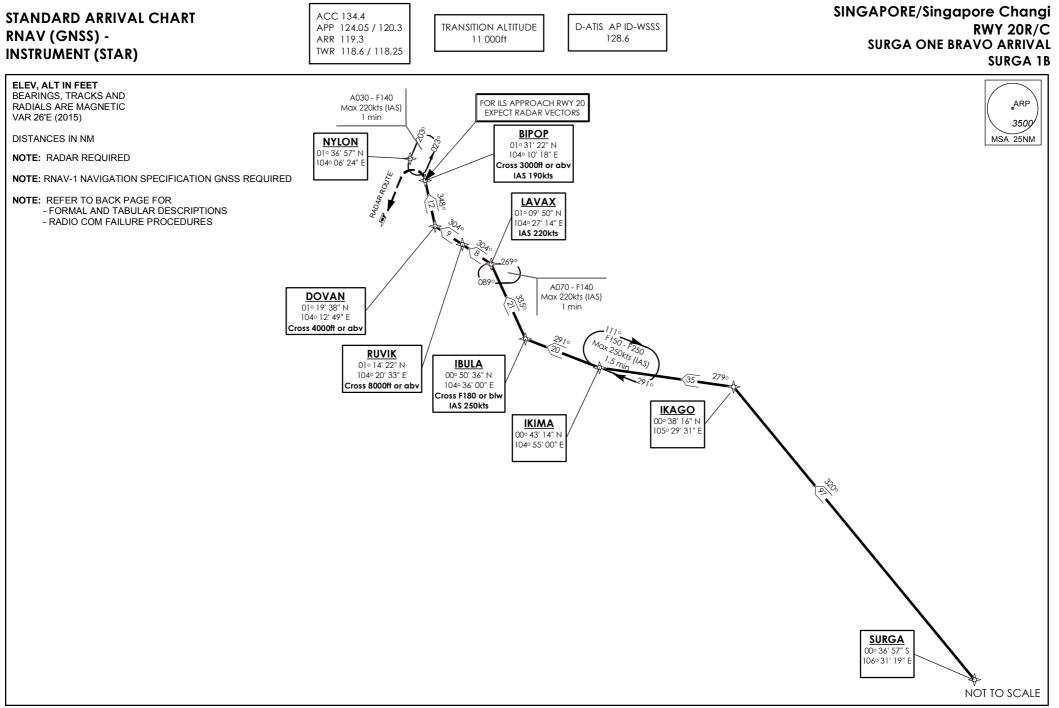
Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
	OBDOS -	IF	N
From OBDOS. To IKAGO. To IKIMA, turn	IKAGO -	TF	N
right. To IBULA at or below FL180, speed	IKIMA [R] -	TF	N
250kts, turn right. To LAVAX, speed 220kts,	IBULA [FL180-; K250; R] -	TF	N
turn left. To RUVIK at or above 8000ft. To	LAVAX [K220; L] -	TF	N
DOVAN at or above 4000ft, turn right. To	RUVIK [A080+] -	TF	N
BIPOP at or above 3000ft, speed 190kts.	DOVAN [A040+; R] -	TF	N
	BIPOP [A030+; K190]	TF	Ν

Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
IF	OBDOS	-	-	-0.5	-	-	-	RNAV1
TF	IKAGO	-	279(279.5)	-0.5	-	-	-	RNAV1
TF	IKIMA	-	279(279.5)	-0.5	R	-	-	RNAV1
TF	IBULA	-	291(291.1)	-0.5	R	FL180-	K250	RNAV1
TF	LAVAX	-	335(335.4)	-0.5	L	-	K220	RNAV1
TF	RUVIK	-	304(304.0)	-0.5	-	A080+	-	RNAV1
TF	DOVAN	-	304(304.1)	-0.5	R	A040+	-	RNAV1
TF	BIPOP	-	348(348.5)	-0.5	-	A030+	K190	RNAV1

RADIO COMMUNICATIONS FAILURE PROCEDURE

1	SET TRA	SET TRANSPONDER TO MODE A/C CODE 7600				
2	When cle	When cleared via OBDOS 1B by Singapore ATC				
	(a)	(a) Maintain last assigned flight level or altitude and proceed on OBDOS 1B to BIPOP,				
	then direct to NYLON					
	(b) From NYLON commence descent and carry out appropriate landing procedure for					
		RWY 20 as close as possible to EAT or ETA				
	(c)	If unable to effect a landing, refer to Singapore AIP for missed approach procedure				
3	No clearance or instruction received from Singapore ATC					
	-	Refer to Singapore AIP for radio communications failure procedure				



SURGA 1B (STAR) RNAV GNSS RWY 20R/20C - DESCRIPTIONS

Formal & Abbreviated Descriptions

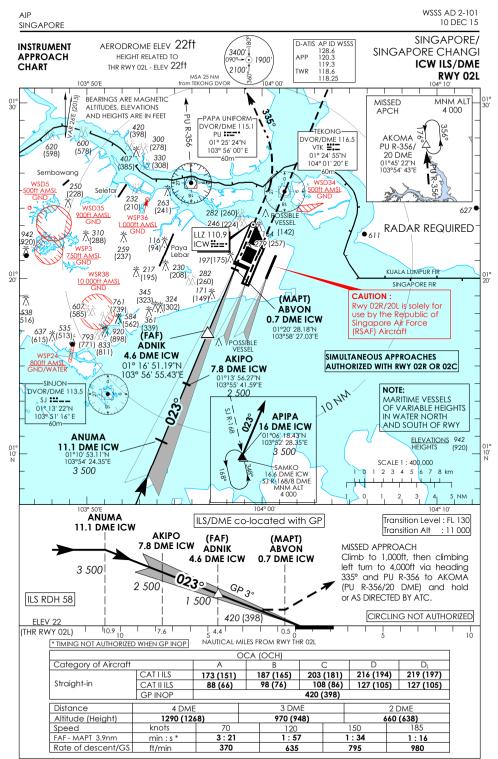
Formal Description	Abbreviated Description	Path Terminator	Fly-Over required
From SURGA. To IKAGO, turn left. To IKIMA,	SURGA -	IF	N
turn right. To IBULA at or below FL180,	IKAGO [L] -	TF	N
speed 250kts, turn right. To LAVAX, speed	IKIMA [R] -	TF	N
220kts, turn left. To RUVIK at or above	IBULA [FL180-; K250; R] -	TF	N
8000ft. To DOVAN at or above 4000ft, turn	LAVAX [K220; L] -	TF	N
right. To BIPOP at or above 3000ft, speed	RUVIK [A080+] -	TF	N
190kts.	DOVAN [A040+; R] -	TF	N
190615.	BIPOP [A030+; K190]	TF	N

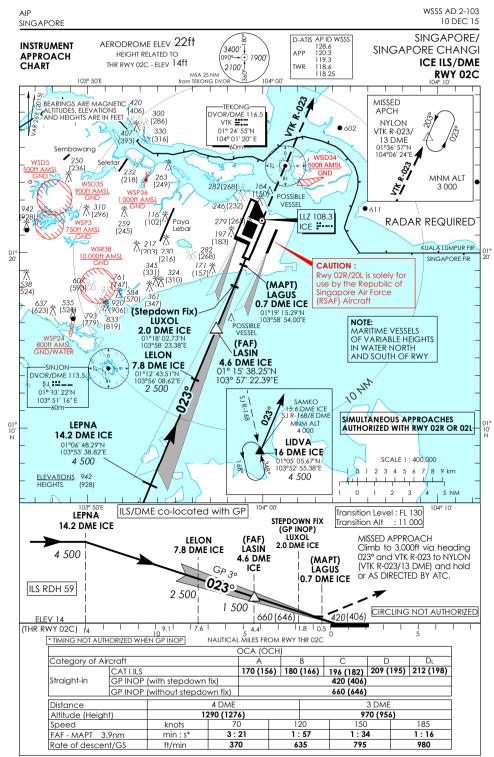
Tabular Descriptions

Path Term	Waypoint Name	Fly-Over	Course °M(°T)	Magnetic Variation	Turn Direction	Altitude	Speed Limit	Navigation Spec
IF	SURGA	-	-	-0.5	-	-	-	RNAV1
TF	IKAGO	-	320(320.4)	-0.5	L	-	-	RNAV1
TF	IKIMA	-	279(279.5)	-0.5	R	-	-	RNAV1
TF	IBULA	-	291(291.1)	-0.5	R	FL180-	K250	RNAV1
TF	LAVAX	-	335(335.4)	-0.5	L	-	K220	RNAV1
TF	RUVIK	-	304(304.0)	-0.5	-	A080+	-	RNAV1
TF	DOVAN	-	304(304.1)	-0.5	R	A040+	-	RNAV1
TF	BIPOP	-	348(348.5)	-0.5	-	A030+	K190	RNAV1

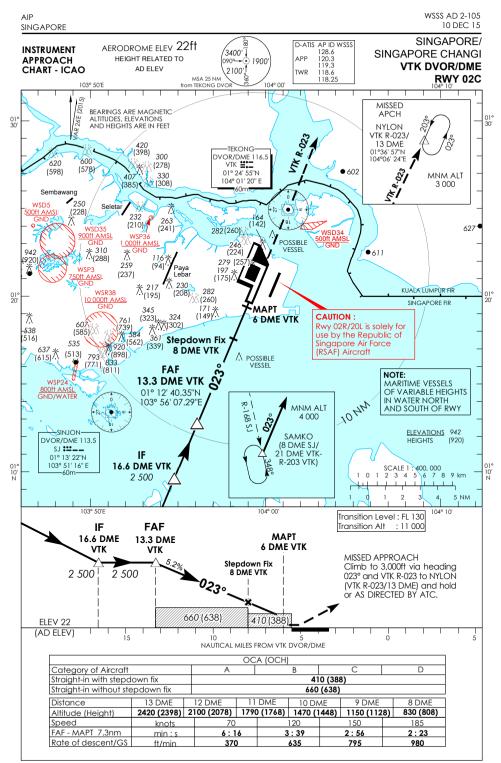
RADIO COMMUNICATIONS FAILURE PROCEDURE

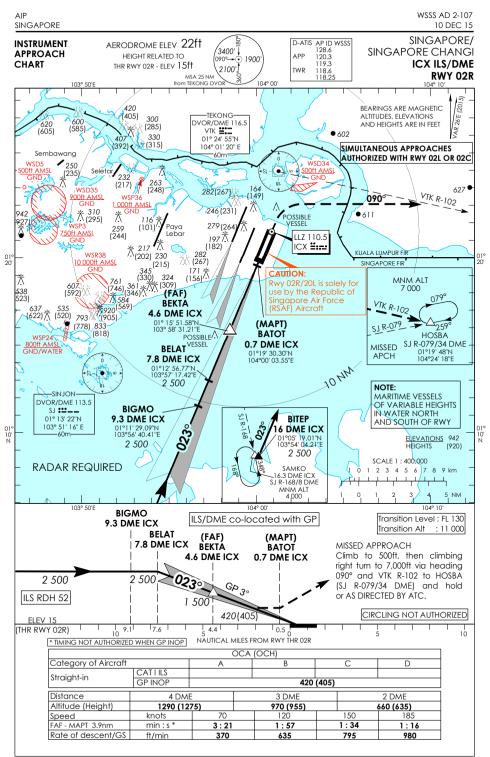
1	SET TRANSPONDER TO MODE A/C CODE 7600					
2	When cle	eared via SURGA 1B by Singapore ATC				
	(a)	(a) Maintain last assigned flight level or altitude and proceed on SURGA 1B to BIPOP,				
	then direct to NYLON					
	(b) From NYLON commence descent and carry out appropriate landing procedure for					
		RWY 20 as close as possible to EAT or ETA				
	(c)	If unable to effect a landing, refer to Singapore AIP for missed approach procedure				
3	No clearance or instruction received from Singapore ATC					
	-	Refer to Singapore AIP for radio communications failure procedure				

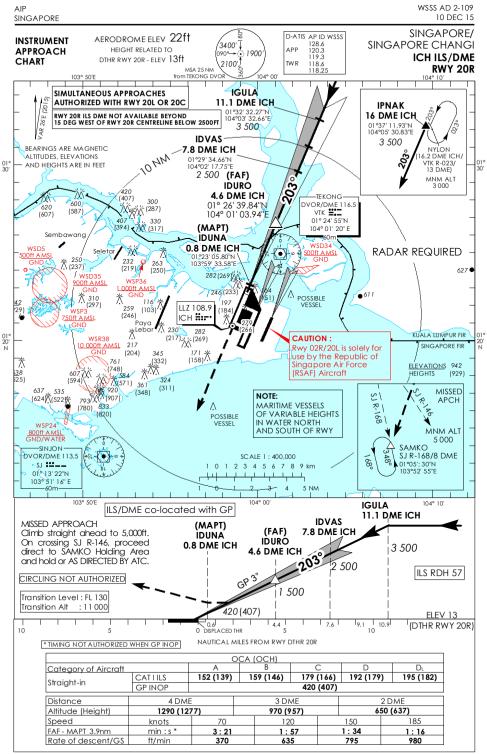




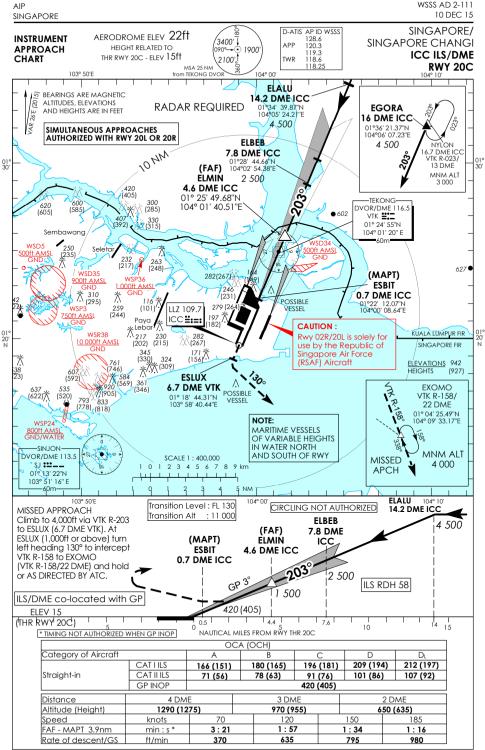
CHANGES : Distance-based holding revised to Time-based holding.



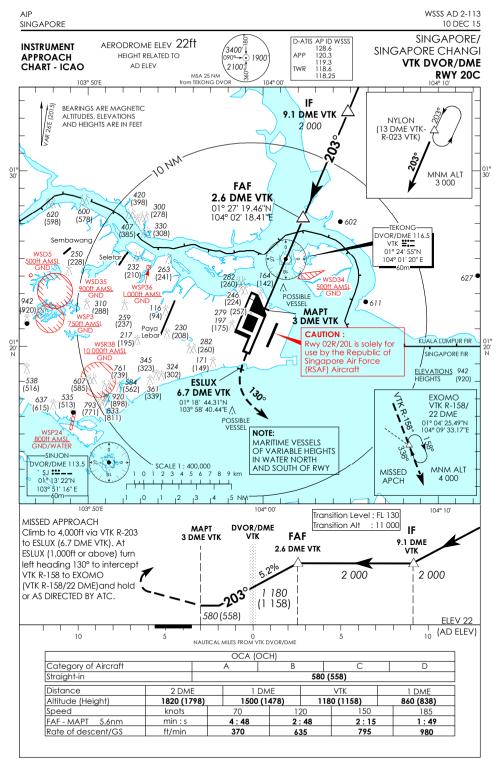


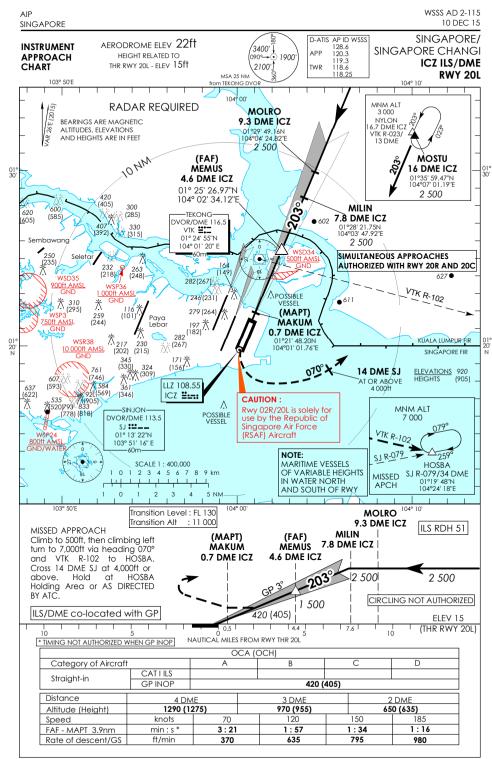


CHANGES : Distance-based holding revised to Time-based holding.



CHANGES : Distance-based holding revised to Time-based holding





CHANGES : Distance-based holding revised to Time-based holding

	WSAP AD 2.10 AERODROME OBSTACLES						
	IN APPROACH / TKOF AREAS						
F	RWY/Area affected OBST type, ELEV, Markings/LGT Location/Coordinates						
1 2		2	3				
a)	RWY 02 APCH RWY 20 TKOF	Industrial buildings, HGT 83ft AMSL. OBST LGTD	Located on either side of approach funnel 2300ft from RWY 02 THR.				
b)	RWY 02 APCH RWY 20 TKOF	Structure (water tower), HGT 229ft AMSL, marked and LGTD	012022N 1035436E (east of RWY)				
c)	RWY 02/20 APCH RWY 02/20 TKOF	LLS LLZ co-located with LLZ antennae, HGT 17ft AGL.	LLZ RWY 02 LOC1324ft from RWY 20 THR. LLZ RWY 20 LOC1525ft from RWY 02 THR.				

		AREA AND AT AERODROME
	OBST type, ELEV, Markings/LGT	Location/Coordinates
	1	2
a)	ILS GP huts co-located with GP antenna mast (HGT 53ft AGL).	GP RWY 02 located 296ft west of western edge of RWY ar 858ft from RWY 02 THR. GP RWY 20 located 296ft west o western edge of RWY and 984ft from RWY 20 THR.
b)	PAR hut, HGT 46.2ft AGL, marked and LGTD.	211ft E of eastern edge of RWY, 7089ft north of RWY 02 TI
c)	2 x Frangible PAR Moving Target Indicator (MTI) reflectors.	RWY 02 MTI reflectors, HGT 16ft AGL, located 213ft east of eastern edge of RWY, 4389ft from RWY 02 THR. RWY 20 MTI reflectors, HGT 16ft AGL, located 209ft east of eastern edge of RWY, 2911ft from RWY 20 THR.
d)	Arrestor hookwire installed 1200ft from RWY 02 THR, 1100ft from RWY 20 THR	Within the RWY strip. Retriever Unit located 52ft from both sides of the RWY edges, 4ft in HGT.
e)	Arrestor barrier installed 210ft south of RWY 02 THR, 118ft north of RWY 20 THR	Within the RWY strip.
f)	Surface wind direction sleeves (HGT 25ft AGL).	344ft west of western edge of RWY for both sides, 458ft fro RWY 02 THR and 307ft from RWY 20 THR.
g)	AWOS stanchions (HGT 23ft AGL).	296ft west of western edge of RWY on both sides, 658ft fro RWY 02 THR and 654ft from RWY 20 THR.
h)	One wheel structure (HGT 178m AMSL).	erected at 011726N 1035150E, BRG 216 DEG, DIST 5NM f WSAP ARP - within WSAP CTR). Structure marked/LGTD.
i)	One Building (HGT 245m AMSL).	erected at 011642N 1035105E, BRG 216 DEG, DIST 6.2NM from WSAP ARP - within WSAP CTR). Building marked/LG
j)	Mobile aircraft arrestor gear, HGT 2m AGL	12m from edge of western taxiway between TWY W1 and W 415m south of TWY W1. Lighted at night.
k)	Lightning protection system, HGT 218ft AMSL	erected at 012203.36N 1035509.39E.
I)	Portable aircraft arrestor gear, HGT 6.6ft AGL	300ft south of RWY 20 THR, 33ft fm RWY edge on both sid All RWY 20 inbound shall land 500ft up RWY 20 THR. LDA 11,900ft.

	WSAP AD 2.11 METEOROLOGICAL INFORMATION PROVIDED					
1	Associated MET Office	Paya Lebar (WSAP)				
2	Hours of service	H24				
3	Office responsible for TAF preparation and Periods of validity	Paya Lebar (WSAP), 9, 24				
4	Type of landing forecast and Interval of issuance	Nil				
5	Briefing/consultation provided	Р				
6	Flight documentation and Language(s) used	Charts or Tabular forms, English				
7	Charts and other information available for briefing or consultation	S, U, P				
8	Supplementary equipment available for providing information	APT, WXR				
9	ATS units provided with information	-				
10	Additional information	TEL: 63813156 (Met Office)				

WSAP AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS						
Designations RWY NR	TRUE & MAG BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY/SWY	THR Coordinates	THR ELEV and highest ELEV of TDZ of precision APP RWY	
1	2	3	4	5	6	
02	023° GEO 023° MAG	3 780 x 61	72/F/B/W/U Bituminous concrete	012041.08N 1035410.36E	13.2m (43ft)	
20	203° GEO 203° MAG	3 780 x 61	72/F/B/W/U Bituminous concrete	012234.41N 1035458.53E	19.3m (63ft)	
Designations RWY NR	Slope of (RWY - SWY)	Dimensions of SWY (m)	Dimensions of CWY (m)	Dimensions of Strip	OFZ	
1	7	8	9	10	11	
02	-	300 x 61	300 x 150	-	-	
20	-	300 x 61	300 x 150	-	-	

12 Remarks

a) Intensive fixed wing flying operation west of runway.

b) Helizone adjacent west of runway up to 800ft QNH.

c) Arrestor Barrier both ends of runway. Pilots are to land at least 500ft up the THR of RWY in use.

d) Hookwire cable installed 335m inwards from RWY 20 THR and 360m inwards from RWY 02 THR.

e) Intense bird activity after rain, and up to 2 hour after dusk and dawn.

f) Pilots making approaches for RWY 20 are to take note of the high ground, 32m AMSL, 1NM north of RWY 20 THR and to exercise caution.

g) Threshold markings consist of 16 stripes.

WSAP AD 2.13 DECLARED DISTANCES					
RWY Designator	TORA(m)	TODA(m)	ASDA(m)	LDA(m)	Remarks
1	2	3	4	5	6
02 20	3 780 3 780	4 080 4 080	4 080 4 080	3 780 3 780	Nil Nil

	WSAP AD 2.14 APPROACH AND RUNWAY LIGHTING							
RWY Desig- nator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN	RWY Centre Line LGT LEN, spacing, colour, INST	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
02/20	Sequenced FLG LGT. Modified Calvert High INTST White LGT with brilliancy control.	Green	PAPI on 3° glide slope	-	Nil	White with amber	Red	Red

WSAP AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY				
WDI/Taxiway/Stopway	Lighted			
IBN	012120.6N 1035410.0E; Flashing Red 'PL". Operating hours HN and IMC			