

Telephone: (65) 6595 6051
 AFS: WSSSYNYX
 Facsimile: (65) 6441 0221
 caas_singaporeais@caas.gov.sg
 www.caas.gov.sg

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

AIP SUPPLEMENT

165/15
 1ST OCTOBER

REVISIONS TO SINGAPORE CHANGI AIRPORT INSTRUMENT APPROACH CHARTS (IACs) FROM DISTANCE-BASED HOLDING TO TIME-BASED HOLDING

1 INTRODUCTION

- 1.1 This AIP Supplement provides details on the revisions to Singapore Changi Airport IACs from distance-based holding to time-based holding. The revised IACs shall be effective from **0000UTC, 12 November 2015**.

2 REVISED IACs

- 2.1 Reference to the list of Enroute Holdings detailed in AIP Singapore pages ENR 3.6-1 and ENR 3.6-2, the following IACs will be revised to indicate holding as time-based (see charts in the respective Appendices):

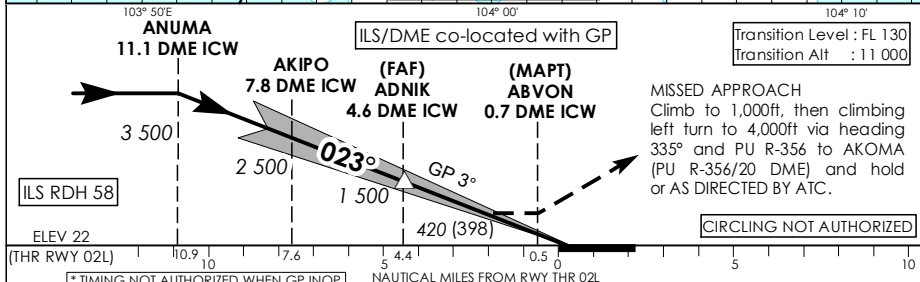
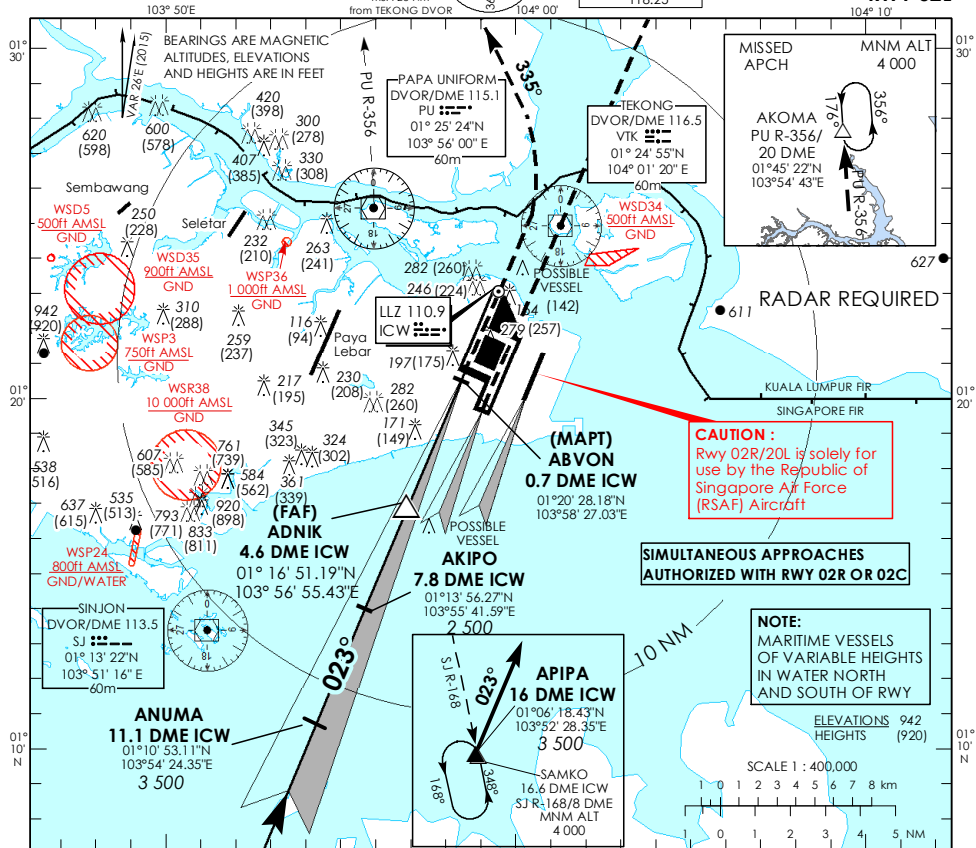
S/N	IACs to be revised	Appendices
i	ICW ILS – WSSS RWY 02L	Appendix A-1
ii	ICE ILS – WSSS RWY 02C	Appendix A-2
iii	ICX ILS – WSSS RWY 02R	Appendix A-3
iv	ICH ILS – WSSS RWY 20R	Appendix A-4
v	ICC ILS – WSSS RWY 20C	Appendix A-5
vi	ICZ ILS – WSSS RWY 20L	Appendix A-6
vii	VTK DVOR – WSSS RWY 02C	Appendix A-7
viii	VTK DVOR – WSSS RWY 20C	Appendix A-8

3 CANCELLATION

- 3.1 AIP Supplement 165/15 will remain current until the information is incorporated into AIP Singapore.

**INSTRUMENT
APPROACH
CHART**
AERODROME ELEV 22ft
 HEIGHT RELATED TO
 THR RWY 02L - ELEV 22ft

 D-ATIS AP ID WSSS
 APP 128.6
 120.3
 119.3
 TWR 118.6
 118.25

**SINGAPORE/
SINGAPORE CHANGI
ICW ILS/DME
RWY 02L**


*TIMING NOT AUTHORIZED WHEN GP INOP

OCA (OCH)					
Category of Aircraft	A	B	C	D	D _L
Straight-in	CAT I ILS	173 (151)	187 (165)	203 (181)	216 (194)
	CAT II ILS	88 (66)	98 (76)	108 (86)	127 (105)
	GP INOP	420 (398)			

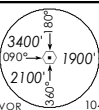
Distance	4 DME	3 DME	2 DME
Altitude (Height)	1290 (1268)	970 (948)	660 (638)
Speed	knots	70	120
FAF - MAPT 3.9nm	min : s *	3 : 21	1 : 57
Rate of descent/GS	ft/min	370	635

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

**INSTRUMENT
APPROACH
CHART**

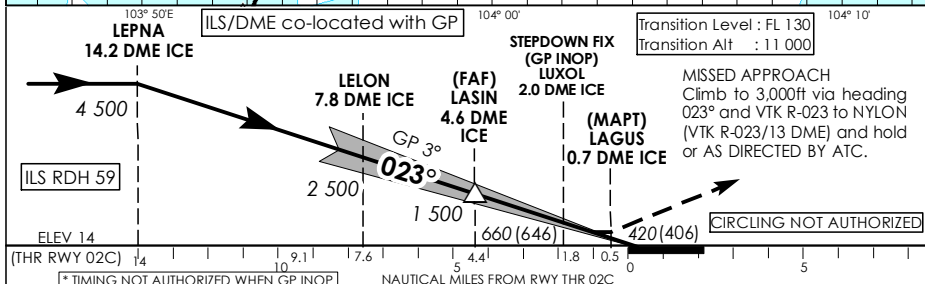
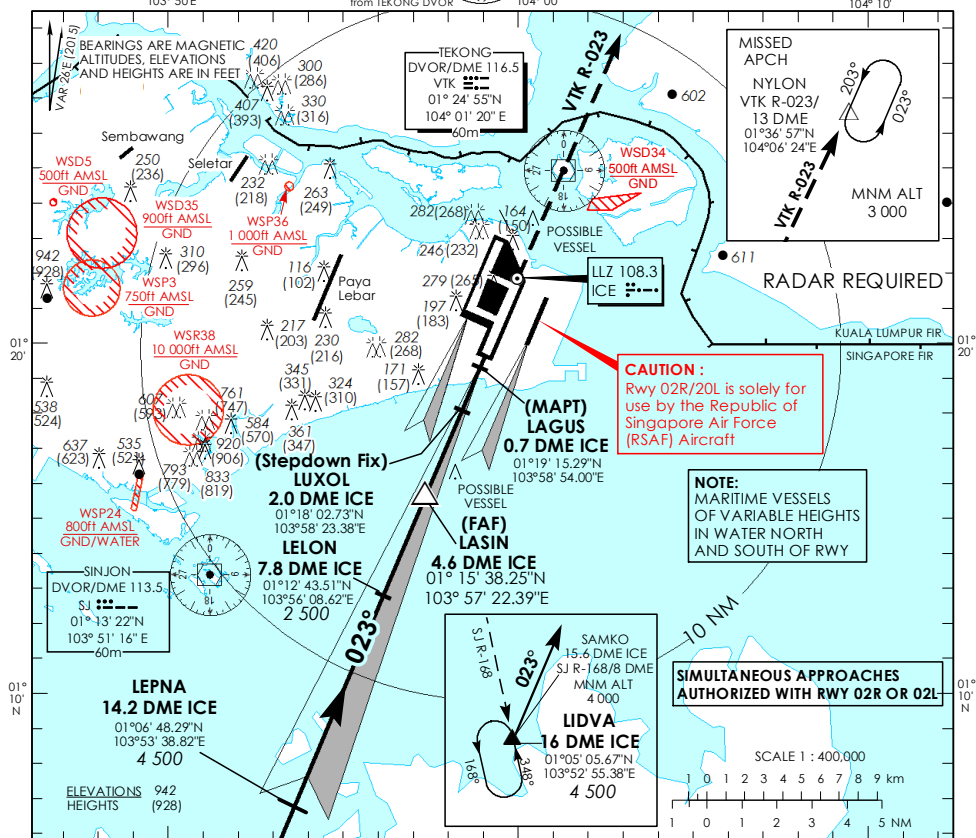
AERODROME ELEV 22ft
HEIGHT RELATED TO
THR RWY 02C - ELEV 14ft

MSA 25 NM
from TEKONG DVOR



D-ATIS AP ID WSSS
APP 128.6
120.3
119.3
TWR 118.6
118.25

SINGAPORE/
SINGAPORE CHANGI
**ICE ILS/DME
RWY 02C**



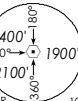
* TIMING NOT AUTHORIZED WHEN GP INOP

		OCA (OCH)				
Category of Aircraft		A	B	C	D	D _L
Straight-in	CAT I ILS	170 (156)	180 (166)	196 (182)	209 (195)	212 (198)
	GP INOP (with stepdown fix)	420 (406)				
	GP INOP (without stepdown fix)	660 (646)				
Distance		4 DME		3 DME		
Altitude (Height)		1290 (1276)		970 (956)		
Speed		knots	70	120	150	185
FAF - MAPT 3.9nm		min : s*	3 : 21	1 : 57	1 : 34	1 : 16
Rate of descent/GS		ft/min	370	635	795	980

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

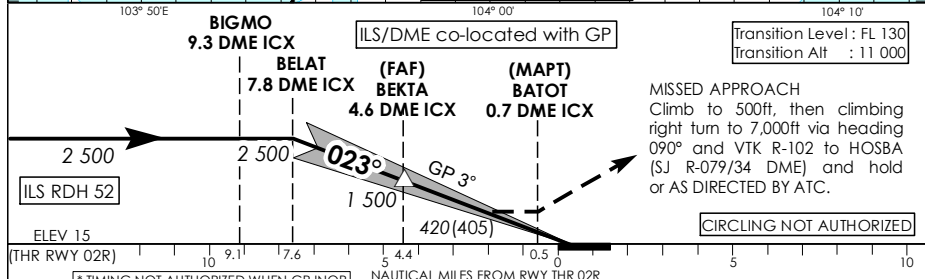
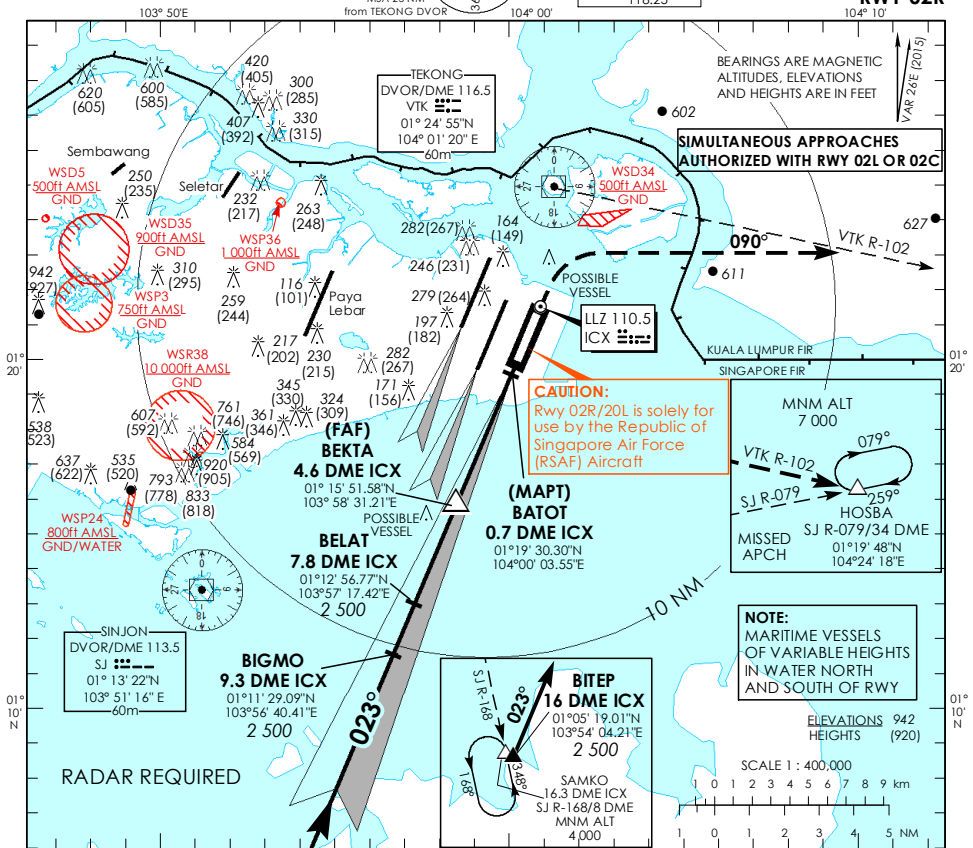
**INSTRUMENT
APPROACH
CHART**

AERODROME ELEV 22ft
HEIGHT RELATED TO
THR RWY 02R - ELEV 15ft



D-ATIS AP ID WSSS
APP 128.6
120.3
119.3
TWR 118.6
118.25

SINGAPORE/
SINGAPORE CHANGI
ICX ILS/DME
RWY 02R



* TIMING NOT AUTHORIZED WHEN GP INOP

NAUTICAL MILES FROM RWY THR 02R

Category of Aircraft		OCA (OCH)			
		A	B	C	D
Straight-in	CAT I ILS				
	GP INOP				
420 (405)					
Distance	4 DME	3 DME		2 DME	
Altitude (Height)	1290 (1275)	970 (955)		660 (635)	
Speed	knots	70	120	150	185
FAF - MAPT 3.9nm	min : s *	3 : 21	1 : 57	1 : 34	1 : 16
Rate of descent/GS	ft/min	370	635	795	980

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

**INSTRUMENT
APPROACH
CHART**

AERODROME ELEV 22ft

HEIGHT RELATED TO

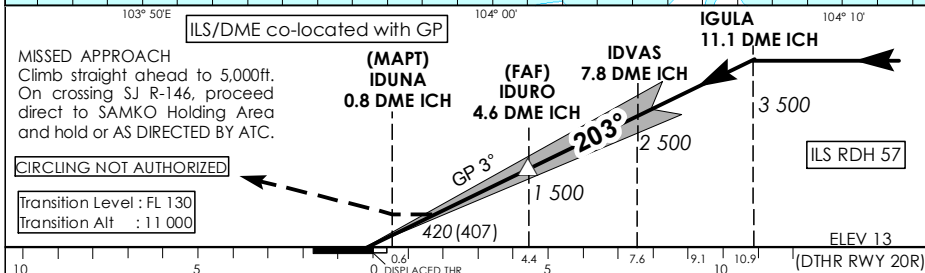
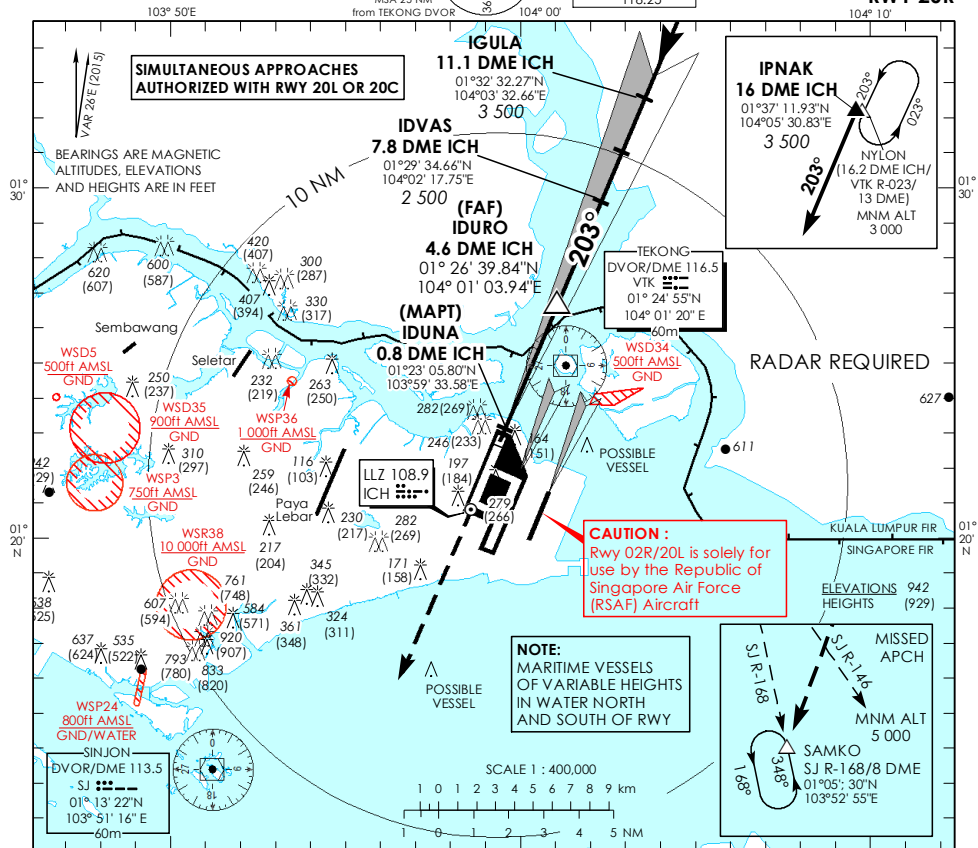
DTHR RWY 20R - ELEV 13ft

MSA 25 NM

from TEKONG DVOR



D-ATIS	AP ID	WSSS
APP	128.6	120.3
TWR	119.3	118.6
	118.25	

**SINGAPORE/
SINGAPORE CHANGI
ICH ILS/DME
RWY 20R**


* TIMING NOT AUTHORIZED WHEN GP INOP

NAUTICAL MILES FROM RWY DTHR 20R

		OCA (OCH)				
Category of Aircraft		A	B	C	D	D _L
Straight-in	CAT I ILS	152 (139)	159 (146)	179 (166)	192 (179)	195 (182)
	GP INOP	420 (407)				
Distance		4 DME		3 DME		2 DME
Altitude (Height)		1290 (1277)		970 (957)		650 (637)
Speed		knots	70	120	150	185
FAF - MAPT 3.9nm		min : s *	3 : 21	1 : 57	1 : 34	1 : 16
Rate of descent/GS		ft/min	370	635	795	980

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

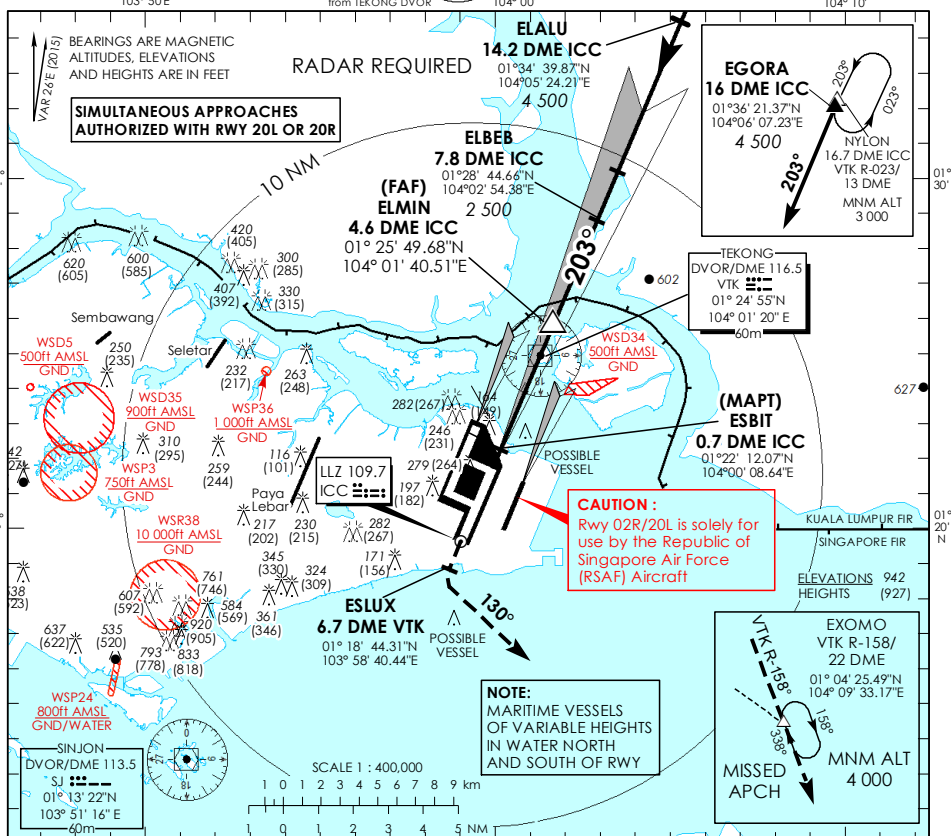
INSTRUMENT APPROACH CHART

AERODROME ELEV 22ft
HEIGHT RELATED TO
THR RWY 20C - ELEV 15ft



D-ATIS	AP ID	WSSS
APP	128.6	120.3
TWR	119.3	118.6
	118.25	

SINGAPORE/
SINGAPORE CHANGI
ICC ILS/DME
RWY 20C



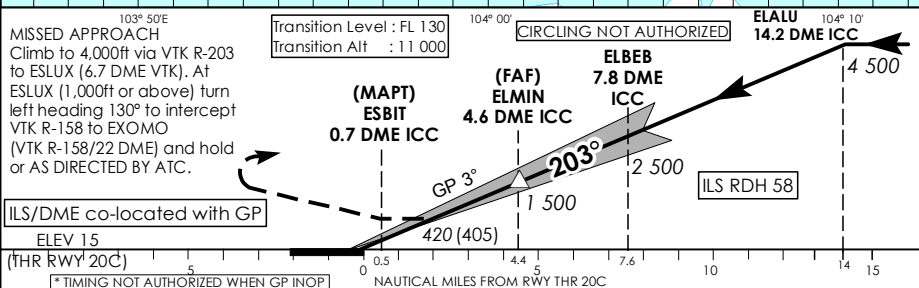
MISSED APPROACH
Climb to 4,000ft via VTK R-203
to ESLUX (6.7 DME VTK). At
ESLUX (1,000ft or above) turn
left heading 130° to intercept
VTK R-158 to EXOMO
(VTK R-158/22 DME) and hold
or AS DIRECTED by ATC.

ILS/DME co-located with GP

ELEV 15
(THR RWY 20C)

Transition Level : FL 130
Transition Alt : 11 000

CIRCLING NOT AUTHORIZED

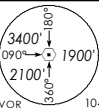


* TIMING NOT AUTHORIZED WHEN GP INOP

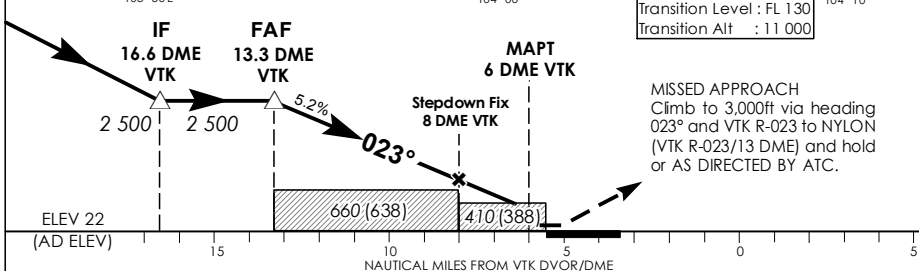
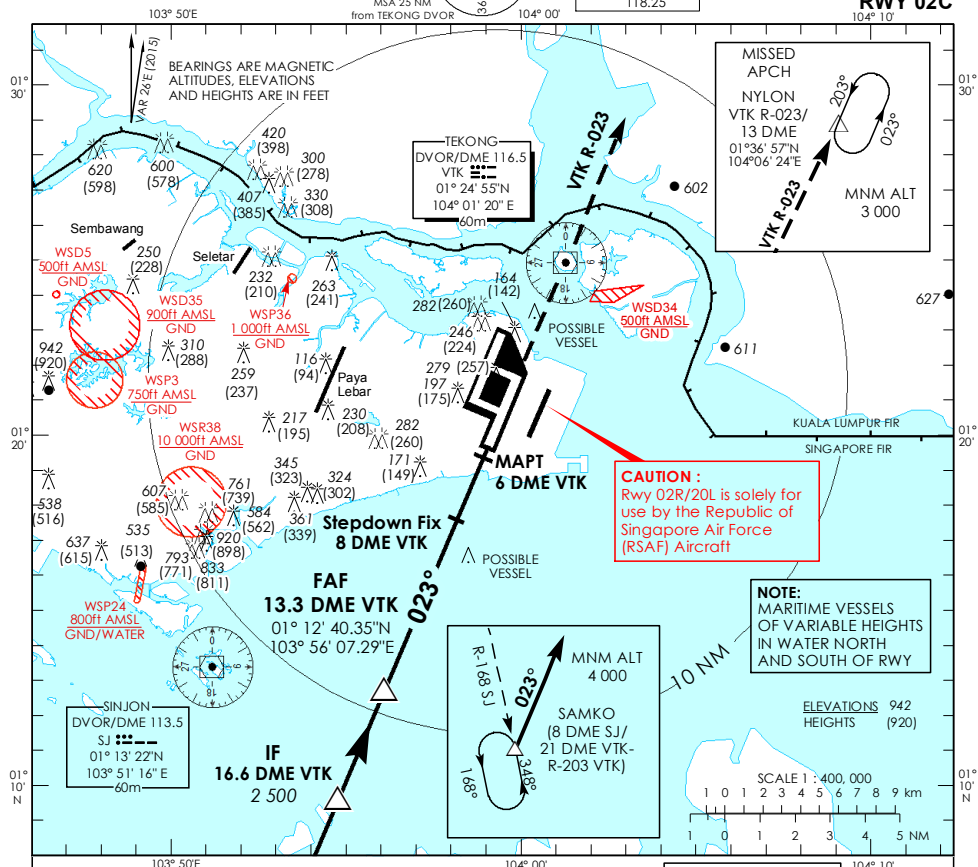
OCA (OCH)						
Category of Aircraft		A	B	C	D	D _L
Straight-in	CAT I ILS	166 (151)	180 (165)	196 (181)	209 (194)	212 (197)
	CAT II ILS	71 (56)	78 (63)	91 (76)	101 (86)	107 (92)
	GP INOP	420 (405)				
Distance	4 DME		3 DME		2 DME	
Altitude (Height)	1290 (1275)		970 (955)		650 (635)	
Speed	knots	70	120	150	185	
FAF - MAPT 3.9nm	min : s *	3 : 21	1 : 57	1 : 34	1 : 16	
Rate of descent/GS	ft/min	370	635	795	980	

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

**INSTRUMENT
APPROACH
CHART - ICAO**
AERODROME ELEV 22ft
 HEIGHT RELATED TO
 AD ELEV

 MSA 25 NM
 from TEKONG DVOR


D-ATIS	AP ID	WSSS
APP	128.6	120.3
TWR	119.3	118.6
	118.25	

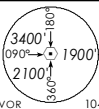
**SINGAPORE/
SINGAPORE CHANGI
VTK DVOR/DME
RWY 02C**


OCA (OCH)						
Category of Aircraft	A		B		C	D
Straight-in with stepdown fix	410 (388)					
Straight-in without stepdown fix	660 (638)					
Distance	13 DME	12 DME	11 DME	10 DME	9 DME	8 DME
Altitude (Height)	2420 (2398)	2100 (2078)	1790 (1768)	1470 (1448)	1150 (1128)	830 (808)
Speed	knots		70	120	150	185
FAF - MAPT 7.3nm	min : s		6 : 16	3 : 39	2 : 56	2 : 23
Rate of descent/GS	ft/min		370	635	795	980

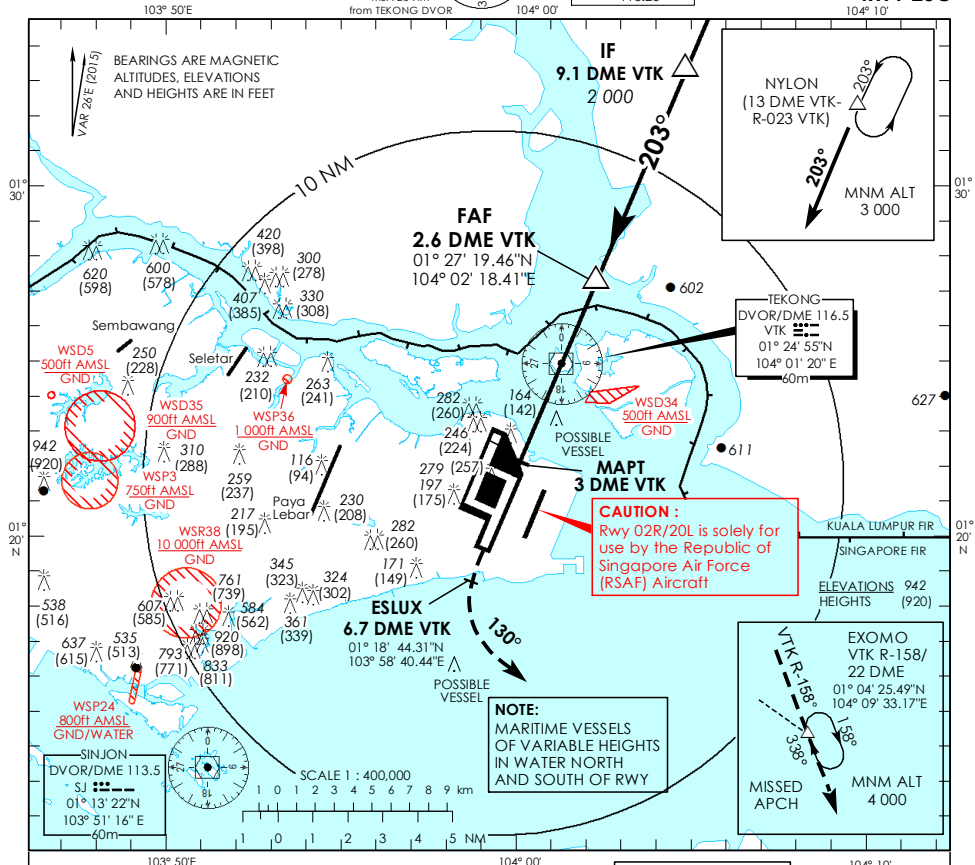
CHANGES : Distance-based holding revised to Time-based holding

**INSTRUMENT
APPROACH
CHART - ICAO**

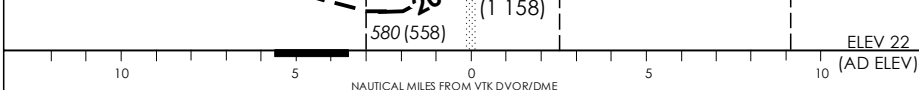
AERODROME ELEV 22ft

HEIGHT RELATED TO
AD ELEVMSA 25 NM
from TEKONG DVOR

D-ATIS	AP ID	WSSS
APP	128.6	120.3
TWR	119.3	118.6
	118.25	

**SINGAPORE/
SINGAPORE CHANGI
VTK DVOR/DME
RWY 20C**

MISSED APPROACH

Climb to 4,000ft via VTK R-203 to ESLUX (6.7 DME VTK). At ESLUX (1,000ft or above) turn left heading 130° to intercept VTK R-158 to EXOMO (VTK R-158/22 DME) and hold or AS DIRECTED BY ATC.



OCA (OCH)				
Category of Aircraft	A	B	C	D
Straight-in	580 (558)			
Distance	2 DME	1 DME	VTK	1 DME
Altitude (Height)	1820 (1798)	1500 (1478)	1180 (1158)	860 (838)
Speed	knots	70	120	150
FAF - MAPT 5.6nm	min : s	4 : 48	2 : 48	2 : 15
Rate of descent/GS	ft/min	370	635	795

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