JEPPESEN
JeppView for Windows

List of pages in this Trip Kit

General Information

Location: KHANH HOA VNM
ICAO/IATA: VVCR / CXR
Lat/Long: N11° 59.73', E109° 13.10'
Elevation: 43 ft

Airport Use: Public
Daylight Savings: Not Observed
UTC Conversion: -7:00 = UTC
Magnetic Variation: 0.0° E

Fuel Types: Jet A-1
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 2308 Z
Sunset: 1046 Z

Runway Information

Runway: 02
Length x Width: 10000 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 18 ft
Lighting: Edge, ALS
Stopway: 984 ft

Runway: 20
Length x Width: 10000 ft x 148 ft
Surface Type: concrete
TDZ-Elev: 43 ft
Lighting: Edge, ALS
Stopway: 984 ft

Communication Information

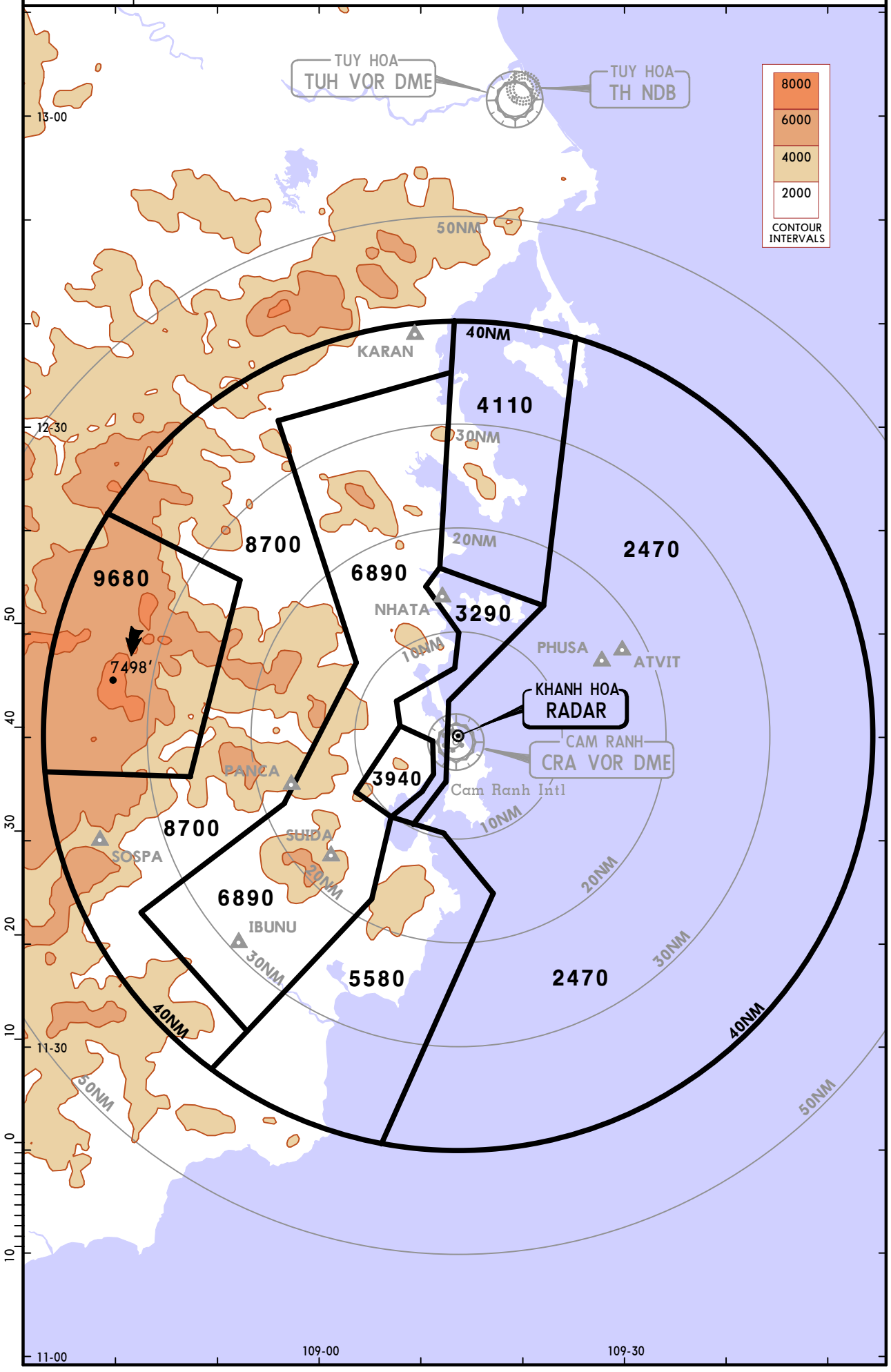
Cam Ranh Intl Tower: 124.350 Secondary
Cam Ranh Intl Tower: 118.200
Cam Ranh Intl Approach: 127.900
Ho Chi Minh Control: 120.100 RCO

VVCR/CXR
CAM RANH INTL

JEPPESEN
17 NOV 17 (10-1R)

KHANH HOA, VIETNAM
RADAR MINIMUM ALTITUDES

Apt Elev	Alt Set: hPa	Trans level: FL100	Trans alt: 9030′
43′			



CHANGES: New chart.

Apt Elev	Alt Set: hPa	Trans level: FL100
43		

1. **RNP 1 (GNSS) required.**
2. These procedures are only used when having agreement between ATC unit and related military unit.
3. These procedures used for ILS Z and RNP approach Rwy 02.

ANKIN 1A [ANKI1A], BANKE 1A [BANK1A]
COTUN 2A [COTU2A], HUNTA 2A [HUNT2A]
SOTEN 1A [SOTE1A]
RNP ARRIVALS
(RWY 02)

VVCR/CXR
CAM RANH INTL

CHANGES: Procedures revised, renumbered, notes.

KAMGO
VEPAM
NOT TO SCALE
L642
W2
163°
208°
PHU YEN
Tuy Hoa
VVTH
38.6
KAMGO 1A
87.9
VEPAM 1A
175°
MHA FL120
355°
SIMME
175°
19.7

CAUTION:
Vertical restrictions are designed to provide obstacle clearance and establish separation between departing aircraft and arriving aircraft. Pilots shall comply with all those restrictions unless they are specifically cancelled by ATC.

8000
6000
4000
2000
CONTOUR INTERVALS

NITOM
NITOM 1C
Q15
54.2
242°
NOT TO SCALE
LIGUN
MHA FL140
062°
18.8

COTUN
FL120
168°
COTUN 2A
18.0
ARP
7600
180°
HUNTA
FL120
11.8
HUNTA 2A
232°
110-00

W27
MHA 8040
302°
122°
BIDAM
8040
7.0
122°
SOTEN
127°
SOTEN 1A
22.7
7498

CRØ26
9030
200°
8.4
CRØ27
6070
110°
7.5
CRØ25
5500
8.3
(IAF)
CRØ21
4930
116°
296°
MHA 4930
360°

MHA FL110
260°
080°
BANKE 1A
21.0
080°
W15
13.7
SOSPA
BANKE
FL130
FL110
ANKIN 1A
20.0
051°
ANKIN
FL130
9030
051°
6.8
231°
IBUNU
MHA 9030
W2

13-30
13-00
12-30
12-00
11-30
109-00
109-30

ANKIN 1A [ANKI1A], BANKE 1A [BANK1A]
COTUN 2A [COTU2A], HUNTA 2A [HUNT2A]
SOTEN 1A [SOTE1A]
RNP ARRIVALS
(RWY 02)

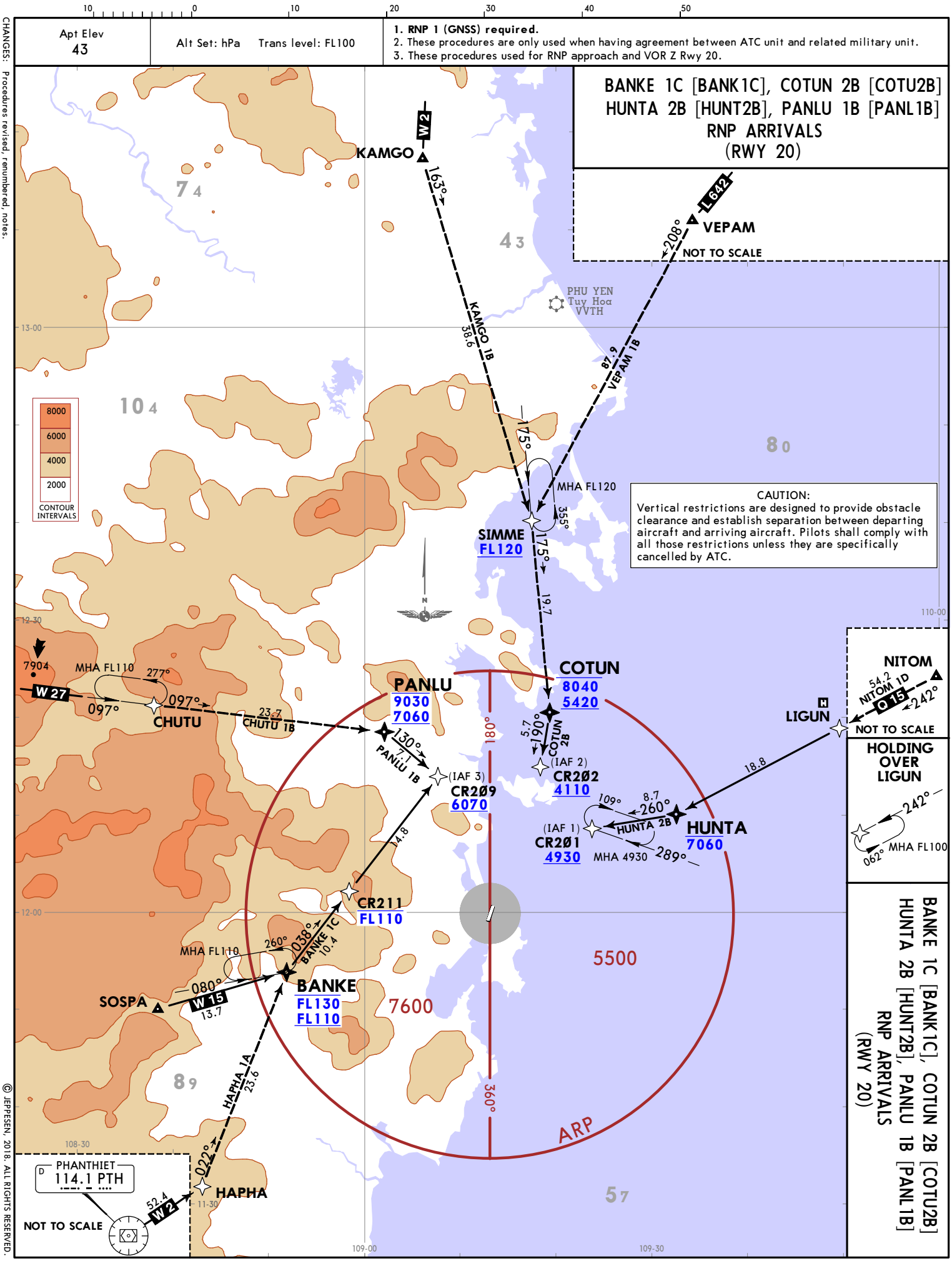
JEPPESEN
20 APR 18
10-2
Eff 26 Apr
KHANH HOA, VIETNAM
RNAV STAR

CHANGES: Procedures revised, renumbered, notes.

Apt Elev	Alt Set: hPa	Trans level: FL100
43		

1. RNP 1 (GNSS) required.
2. These procedures are only used when having agreement between ATC unit and related military unit.
3. These procedures used for RNP approach and VOR Z Rwy 20.

BANKE 1C [BANK1C], COTUN 2B [COTU2B] HUNTA 2B [HUNT2B], PANLU 1B [PANL1B] RNP ARRIVALS (RWY 20)



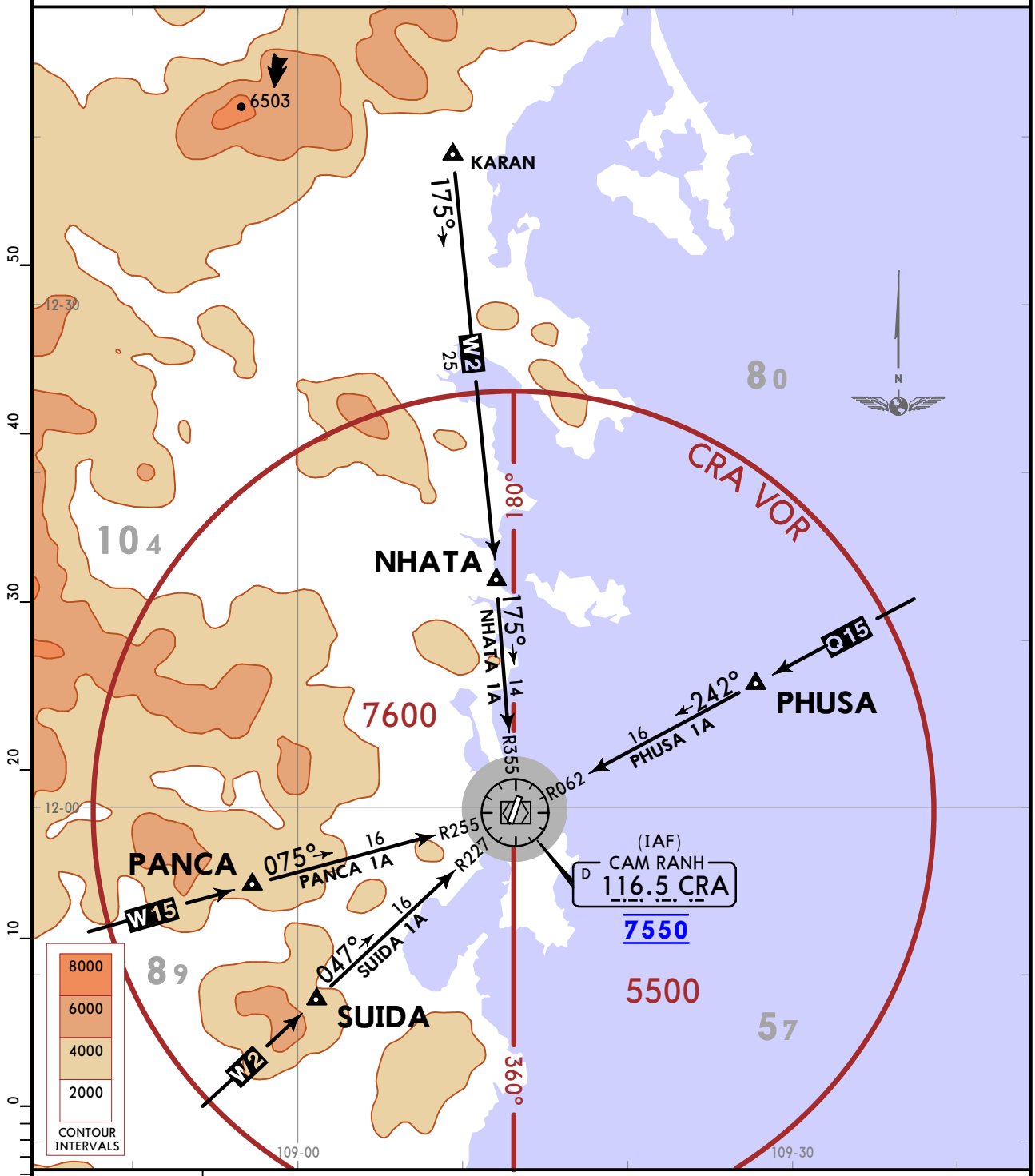
VVCR/CXR
CAM RANH INTL

KHANH HOA, VIETNAM
RNAV STAR
Eff 25 Apr
JEPPESEN
20 APR 18
10-2A

BANKE 1C [BANK1C], COTUN 2B [COTU2B]
HUNTA 2B [HUNT2B], PANLU 1B [PANL1B]
RNP ARRIVALS
(RWY 20)

Apt Elev	Alt Set: hPa Trans level: FL100
43	

NHATA 1A (NHA 1A), PANCA 1A (PAN 1A) PHUSA 1A (PHU 1A), SUIDA 1A (SUI 1A) ARRIVALS (RWY 20)

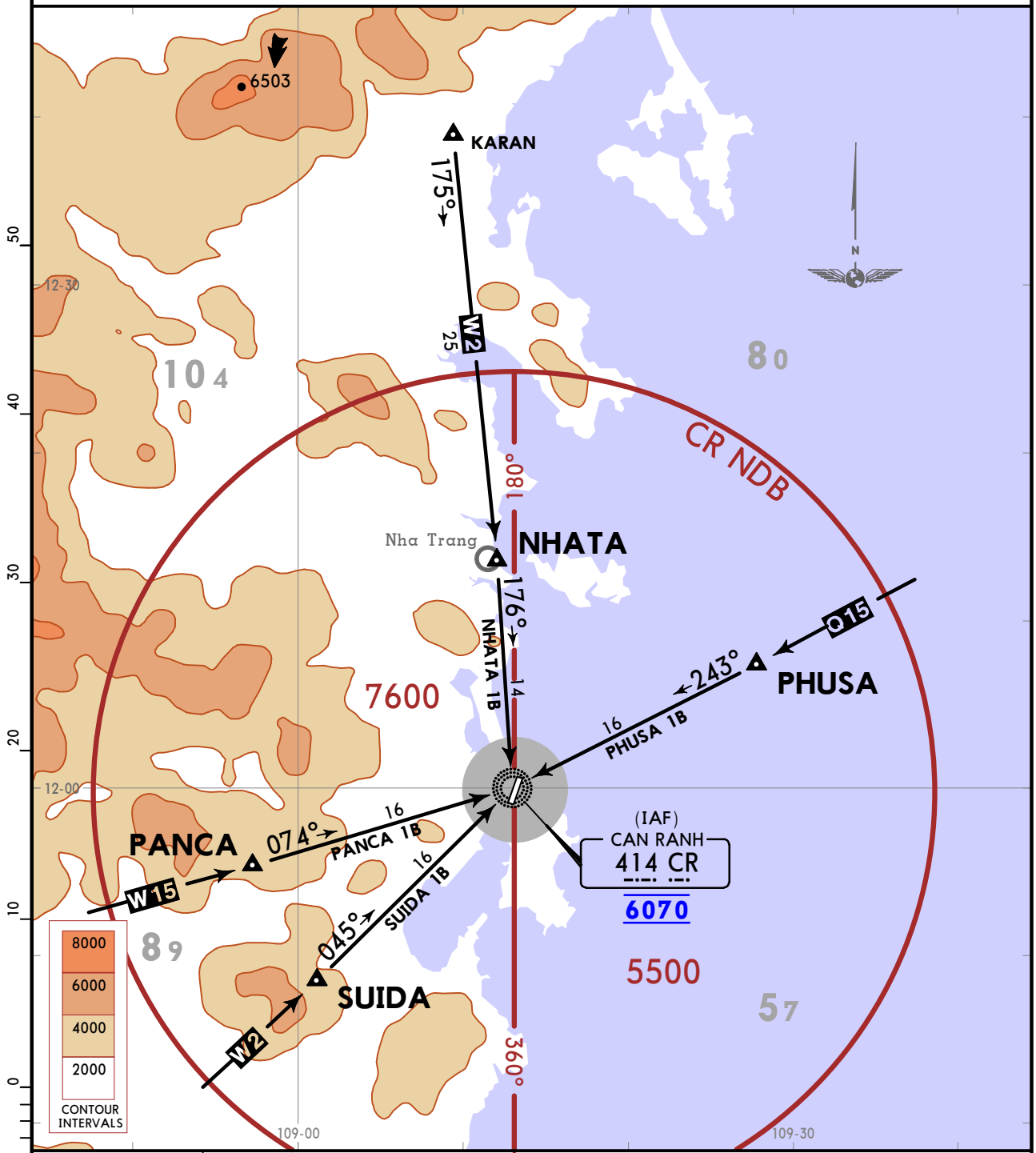


STAR	ROUTING
NHATA 1A	From NHATA, MAINTAIN CRA R355 and descend to 7550 at CRA (IAF). Use VOR/DME RWY 20 procedure.
PANCA 1A	From PANCA, MAINTAIN CRA R255 and descend to 7550 at CRA (IAF). Use VOR/DME RWY 20 procedure.
PHUSA 1A	From PHUSA, MAINTAIN CRA R062 and descend to 7550 at CRA (IAF). Use VOR/DME RWY 20 procedure.
SUIDA 1A	From SUIDA, MAINTAIN CRA R227 and descend to 7550 at CRA (IAF). Use VOR/DME RWY 20 procedure.

CHANGES: New format.

Apt Elev	Alt Set: hPa Trans level: FL100
43	In case of military operations at Nha Trang Airport, arrival aircraft using NHATA 1B have to MAINTAIN 7550, proceed to CR NDB to join holding pattern, then descend to 6070 to fly the NDB approach RWY 20.

NHATA 1B (NHA 1B), PANCA 1B (PAN 1B)
PHUSA 1B (PHU 1B), SUIDA 1B (SUI 1B)
ARRIVALS
(RWY 20)

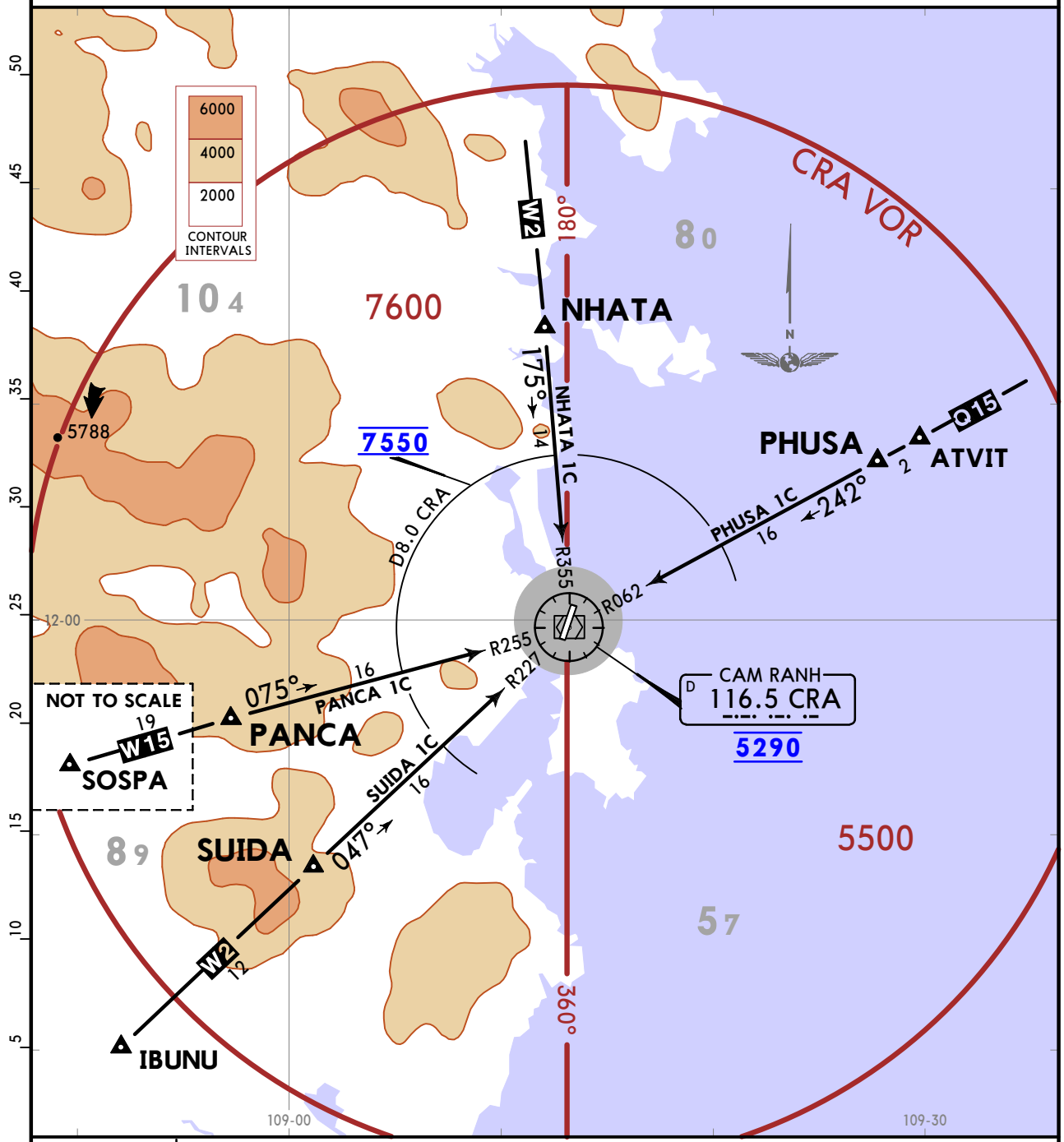


STAR	ROUTING
NHATA 1B	From NHATA, MAINTAIN track 176° and descend to 6070 at CR NDB (IAF). Use NDB RWY 20 procedure.
PANCA 1B	From PANCA, MAINTAIN track 074° and descend to 6070 at CR NDB (IAF). Use NDB RWY 20 procedure.
PHUSA 1B	From PHUSA, MAINTAIN track 243° and descend to 6070 at CR NDB (IAF). Use NDB RWY 20 procedure.
SUIDA 1B	From SUIDA, MAINTAIN track 045° and descend to 6070 at CR NDB (IAF). Use NDB RWY 20 procedure.

CHANGES: New format.

Apt Elev 43	Alt Set: hPa Trans level: FL100 1. Air operators ensure that pilot shall be trained in simulator (SIM) and report result to CAAV before operating flight. 2. CAAV will check SIM training (for the first time) for each aircraft type. 3. ATC shall confirm pilot to be qualified with this procedure on radio frequency. 4. In cases of bad weather or other reasons, aircraft deviation more than 5 NM from the intended arrival routes, must remain at or above MSA, proceed to CRA VOR then descend in the holding pattern to carry out VOR/DME RWY 02 approach.

NHATA 1C (NHA 1C), PANCA 1C (PAN 1C) PHUSA 1C (PHU 1C), SUIDA 1C (SUI 1C) ARRIVALS (RWY 02)



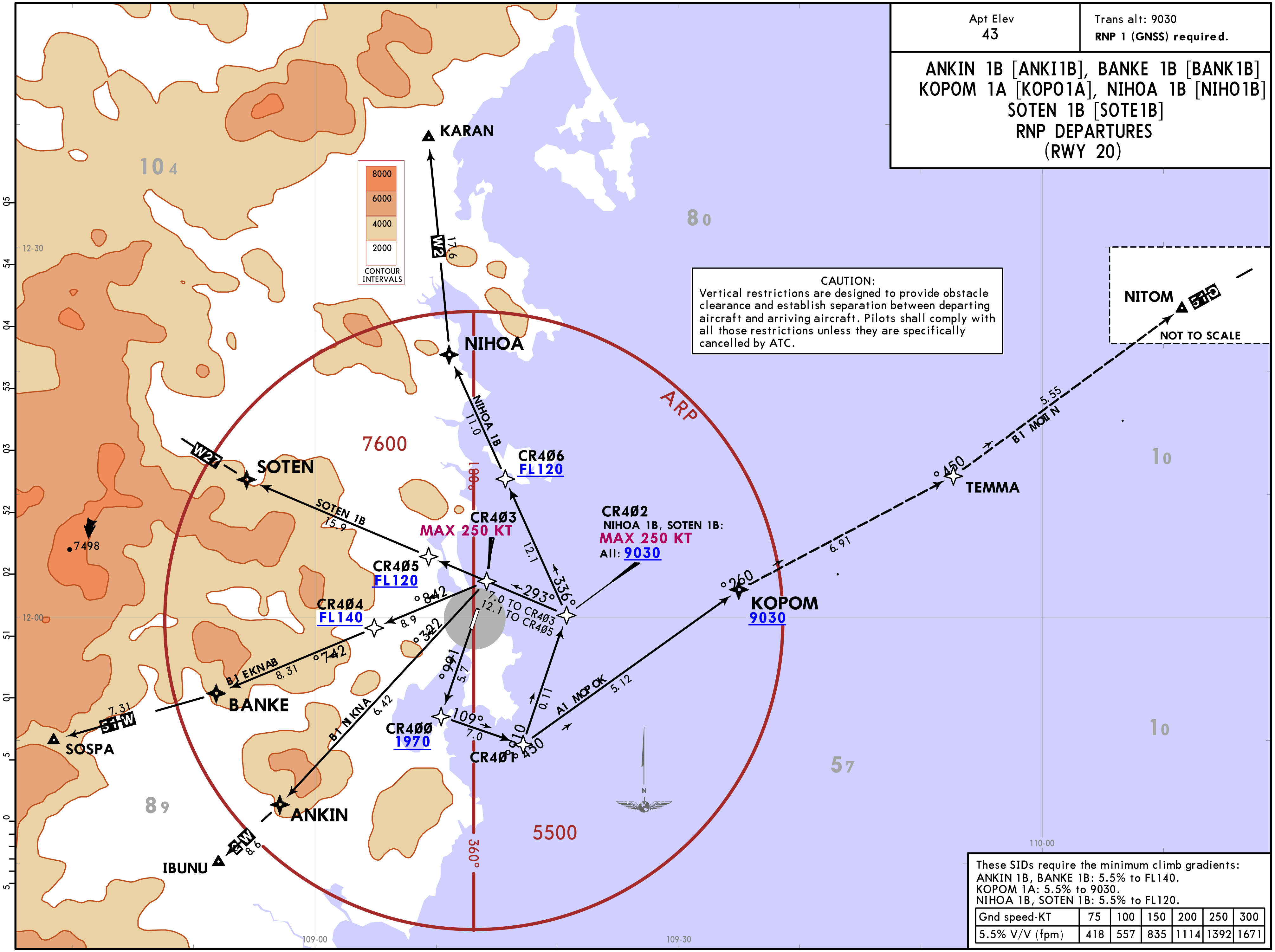
STAR	ROUTING
NHATA 1C	From NHATA, MAINTAIN on CRA R355 descend to 7550 until D8.0 CRA continue descending to 5290 at CRA VOR to carry out VOR/DME RWY 02 approach.
PANCA 1C	From PANCA, MAINTAIN on CRA R255 descend to 7550 until D8.0 CRA continue descending to 5290 at CRA VOR to carry out VOR/DME RWY 02 approach.
PHUSA 1C	From PHUSA, MAINTAIN on CRA R062 descend to 7550 until D8.0 CRA continue descending to 5290 at CRA VOR to carry out VOR/DME RWY 02 approach.
SUIDA 1C	From SUIDA, MAINTAIN on CRA R227 descend to 7550 until D8.0 CRA continue descending to 5290 at CRA VOR to carry out VOR/DME RWY 02 approach.

CHANGES: Chart format.

Apt Elev 43	Trans alt: 9030 **RNP 1 (GNSS) required.**

ANKIN 1B [ANKI1B], BANKE 1B [BANK1B] KOPOM 1A [KOPO1A], NIHOA 1B [NIHO1B] SOTEN 1B [SOTE1B] RNP DEPARTURES (RWY 20)

CAUTION:
Vertical restrictions are designed to provide obstacle clearance and establish separation between departing aircraft and arriving aircraft. Pilots shall comply with all those restrictions unless they are specifically cancelled by ATC.



These SIDs require the minimum climb gradients:
ANKIN 1B, BANKE 1B: 5.5% to FL140.
KOPOM 1A: 5.5% to 9030.
NIHOA 1B, SOTEN 1B: 5.5% to FL120.

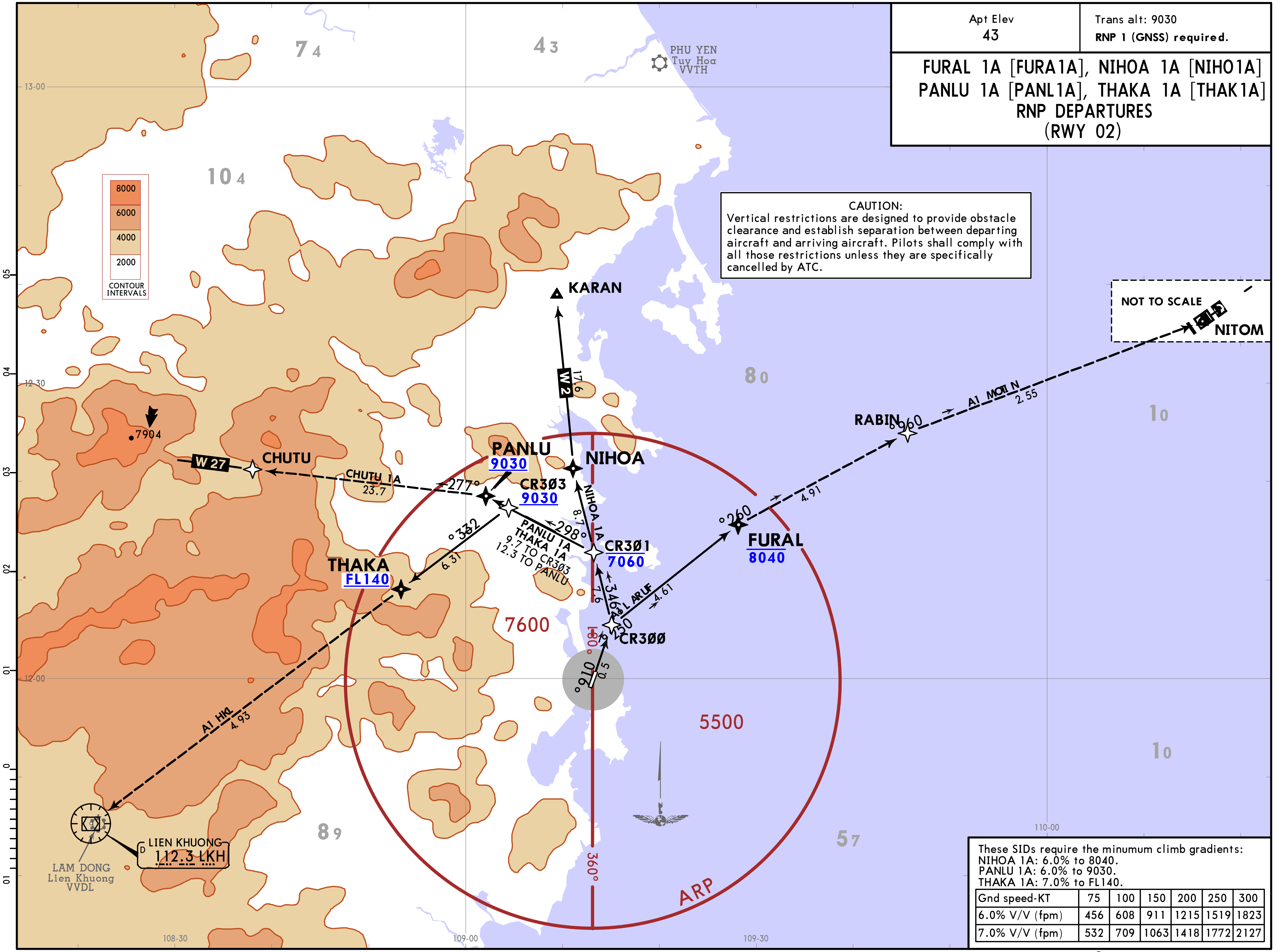
Gnd speed-KT	75	100	150	200	250	300
5.5% V/V (fpm)	418	557	835	1114	1392	1671

CHANGES: New format.

Apt Elev	Trans alt: 9030
43	**RNP 1 (GNSS) required.**

FURAL 1A [FURA1A], NIHOA 1A [NIHO1A] PANLU 1A [PANL1A], THAKA 1A [THAK1A] RNP DEPARTURES (RWY 02)

CAUTION:
Vertical restrictions are designed to provide obstacle clearance and establish separation between departing aircraft and arriving aircraft. Pilots shall comply with all those restrictions unless they are specifically cancelled by ATC.



These SIDs require the minumum climb gradients:
NIHOA 1A: 6.0% to 8040.
PANLU 1A: 6.0% to 9030.
THAKA 1A: 7.0% to FL140.

Gnd speed-KT	75	100	150	200	250	300
6.0% V/V (fpm)	456	608	911	1215	1519	1823
7.0% V/V (fpm)	532	709	1063	1418	1772	2127

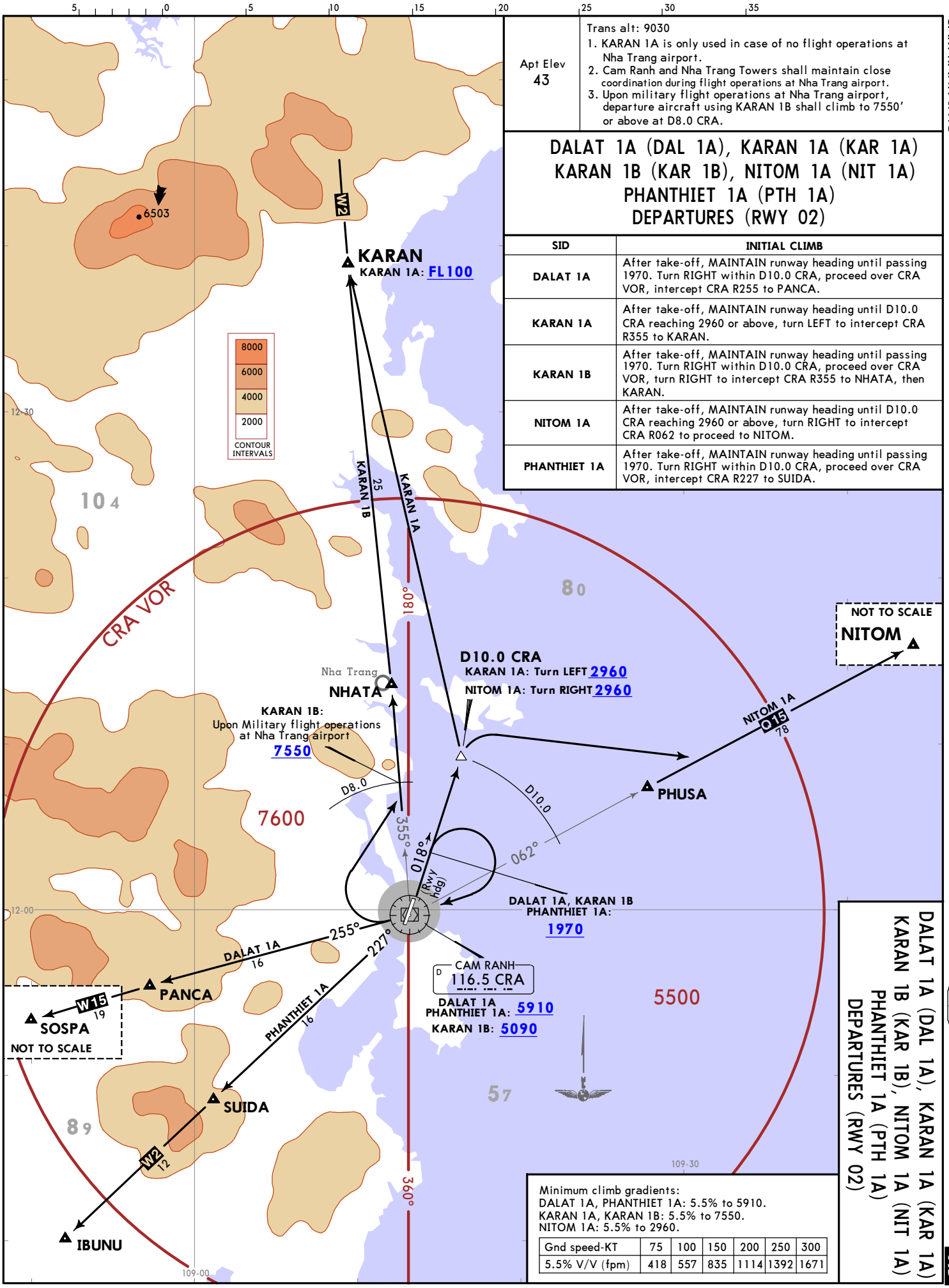
CHANGES: New format.

CHANGES: New format.

Apt Elev	
43	Trans alt: 9030 1. KARAN 1A is only used in case of no flight operations at Nha Trang airport. 2. Cam Ranh and Nha Trang Towers shall maintain close coordination during flight operations at Nha Trang airport. 3. Upon military flight operations at Nha Trang airport, departure aircraft using KARAN 1B shall climb to 7550' or above at D8.0 CRA.

DALAT 1A (DAL 1A), KARAN 1A (KAR 1A) KARAN 1B (KAR 1B), NITOM 1A (NIT 1A) PHANTHIET 1A (PTH 1A) DEPARTURES (RWY 02)

SID	INITIAL CLIMB
DALAT 1A	After take-off, MAINTAIN runway heading until passing 1970. Turn RIGHT within D10.0 CRA, proceed over CRA VOR, intercept CRA R255 to PANCA.
KARAN 1A	After take-off, MAINTAIN runway heading until D10.0 CRA reaching 2960 or above, turn LEFT to intercept CRA R355 to KARAN.
KARAN 1B	After take-off, MAINTAIN runway heading until passing 1970. Turn RIGHT within D10.0 CRA, proceed over CRA VOR, turn RIGHT to intercept CRA R355 to NHATA, then KARAN.
NITOM 1A	After take-off, MAINTAIN runway heading until D10.0 CRA reaching 2960 or above, turn RIGHT to intercept CRA R062 to proceed to NITOM.
PHANTHIET 1A	After take-off, MAINTAIN runway heading until passing 1970. Turn RIGHT within D10.0 CRA, proceed over CRA VOR, intercept CRA R227 to SUIDA.



Minimum climb gradients:
DALAT 1A, PHANTHIET 1A: 5.5% to 5910.
KARAN 1A, KARAN 1B: 5.5% to 7550.
NITOM 1A: 5.5% to 2960.

Gnd speed-KT	75	100	150	200	250	300
5.5% V/V (fpm)	418	557	835	1114	1392	1671

DALAT 1A (DAL 1A), KARAN 1A (KAR 1A)
KARAN 1B (KAR 1B), NITOM 1A (NIT 1A)
PHANTHIET 1A (PTH 1A)
DEPARTURES (RWY 02)

JEPPESEN
23 FEB 18 (10-3B)
KHANH HOA, VIETNAM
SID

CHANGES: New format.

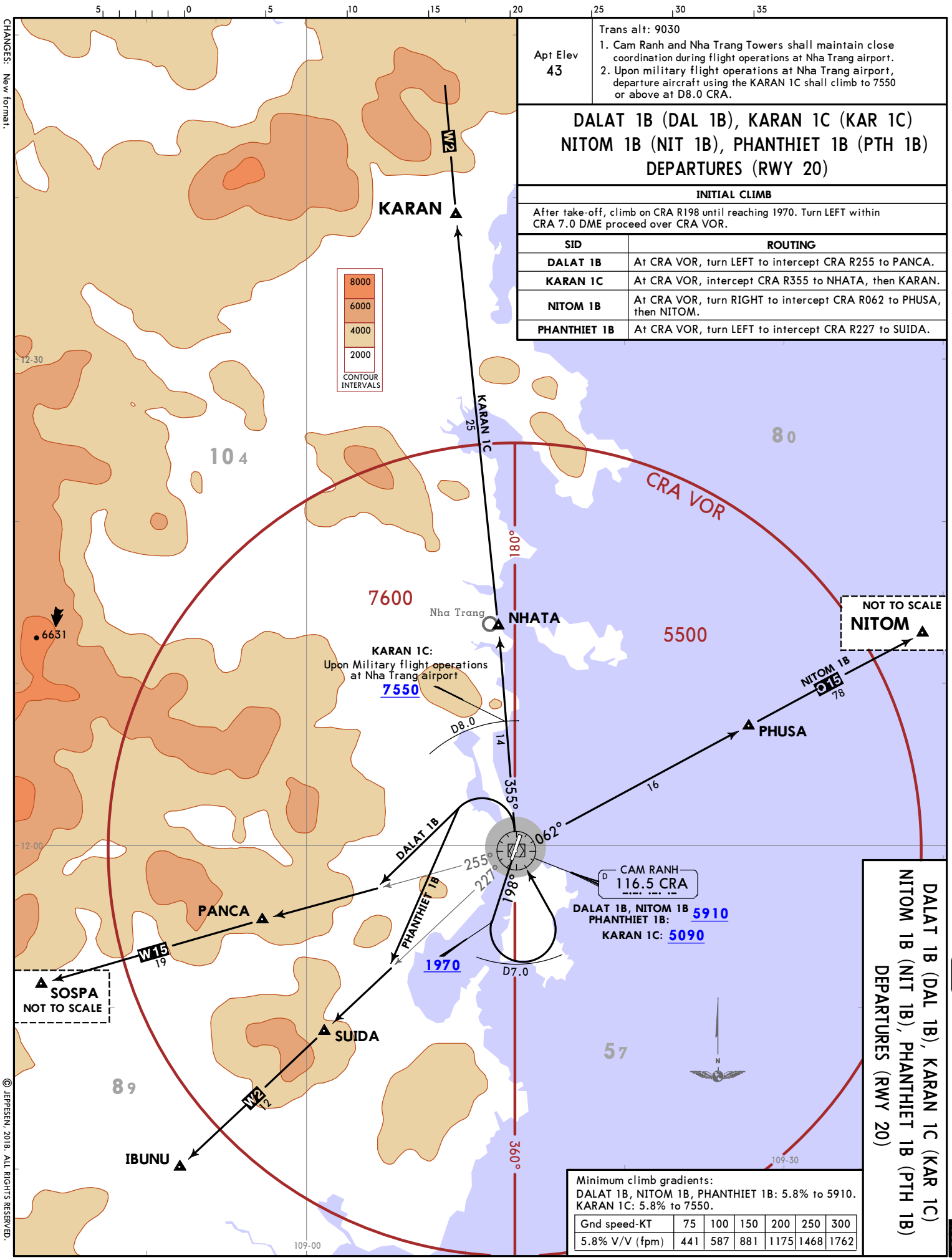
Apt Elev	
43	Trans alt: 9030 1. Cam Ranh and Nha Trang Towers shall maintain close coordination during flight operations at Nha Trang airport. 2. Upon military flight operations at Nha Trang airport, departure aircraft using the KARAN 1C shall climb to 7550 or above at D8.0 CRA.

DALAT 1B (DAL 1B), KARAN 1C (KAR 1C) NITOM 1B (NIT 1B), PHANTHIET 1B (PTH 1B) DEPARTURES (RWY 20)

INITIAL CLIMB

After take-off, climb on CRA R198 until reaching 1970. Turn LEFT within CRA 7.0 DME proceed over CRA VOR.

SID	ROUTING
DALAT 1B	At CRA VOR, turn LEFT to intercept CRA R255 to PANCA.
KARAN 1C	At CRA VOR, intercept CRA R355 to NHATA, then KARAN.
NITOM 1B	At CRA VOR, turn RIGHT to intercept CRA R062 to PHUSA, then NITOM.
PHANTHIET 1B	At CRA VOR, turn LEFT to intercept CRA R227 to SUIDA.



Minimum climb gradients:
DALAT 1B, NITOM 1B, PHANTHIET 1B: 5.8% to 5910.
KARAN 1C: 5.8% to 7550.

Gnd speed-KT	75	100	150	200	250	300
5.8% V/V (fpm)	441	587	881	1175	1468	1762

VVCR/CXR
CAM RANH INTL

JEPPESEN
23 FEB 18
10-3C

KHANH HOA, VIETNAM

DALAT 1B (DAL 1B), KARAN 1C (KAR 1C)
NITOM 1B (NIT 1B), PHANTHIET 1B (PTH 1B)
DEPARTURES (RWY 20)

SID

CHANGES: New format.

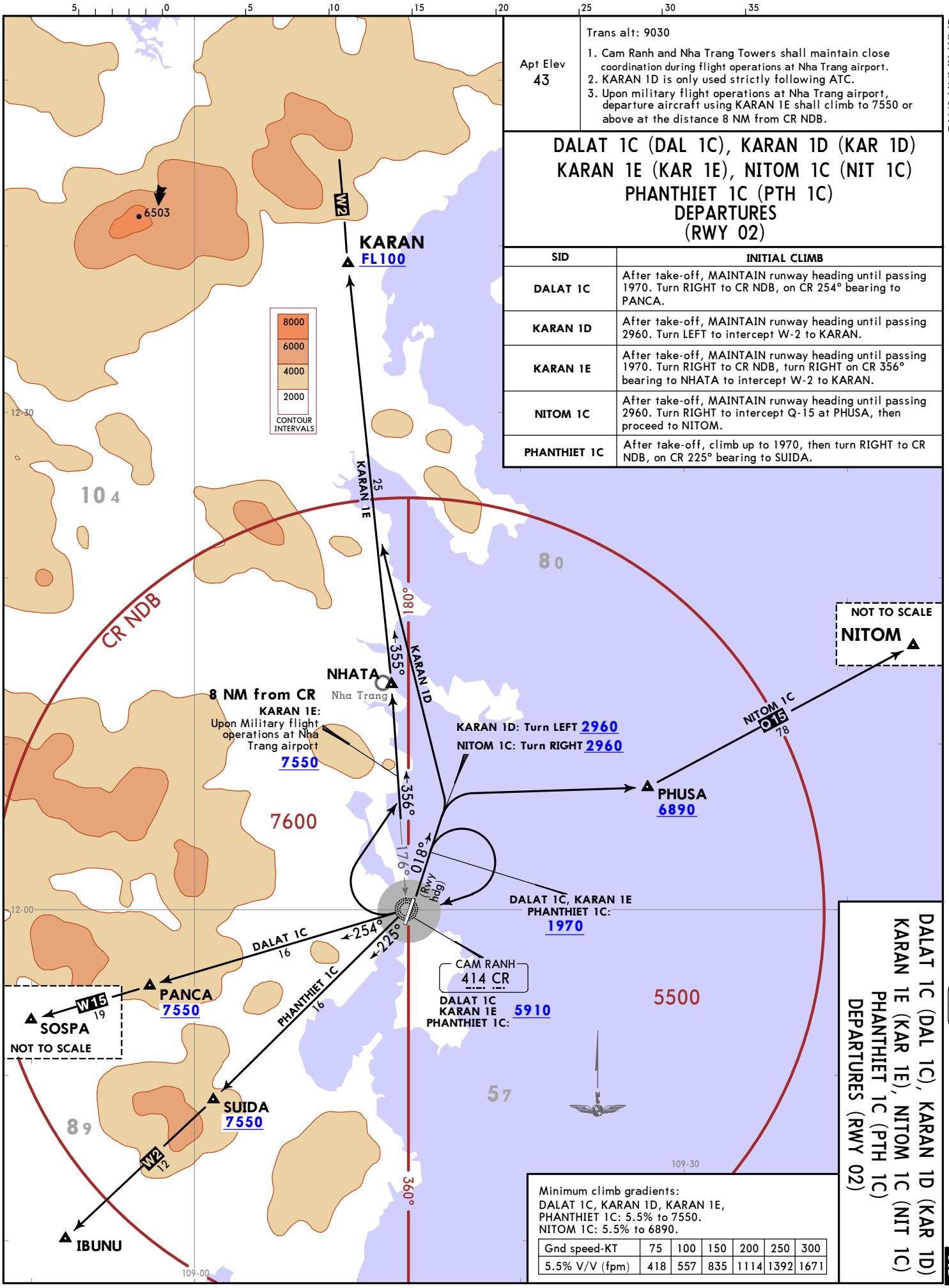
Apt Elev
43

Trans alt: 9030

1. Cam Ranh and Nha Trang Towers shall maintain close coordination during flight operations at Nha Trang airport.
2. KARAN 1D is only used strictly following ATC.
3. Upon military flight operations at Nha Trang airport, departure aircraft using KARAN 1E shall climb to 7550 or above at the distance 8 NM from CR NDB.

DALAT 1C (DAL 1C), KARAN 1D (KAR 1D) KARAN 1E (KAR 1E), NITOM 1C (NIT 1C) PHANTHIET 1C (PTH 1C) DEPARTURES (RWY 02)

SID	INITIAL CLIMB
DALAT 1C	After take-off, MAINTAIN runway heading until passing 1970. Turn RIGHT to CR NDB, on CR 254° bearing to PANCA.
KARAN 1D	After take-off, MAINTAIN runway heading until passing 2960. Turn LEFT to intercept W-2 to KARAN.
KARAN 1E	After take-off, MAINTAIN runway heading until passing 1970. Turn RIGHT to CR NDB, turn RIGHT on CR 356° bearing to NHATA to intercept W-2 to KARAN.
NITOM 1C	After take-off, MAINTAIN runway heading until passing 2960. Turn RIGHT to intercept Q-15 at PHUSA, then proceed to NITOM.
PHANTHIET 1C	After take-off, climb up to 1970, then turn RIGHT to CR NDB, on CR 225° bearing to SUIDA.



Minimum climb gradients:
DALAT 1C, KARAN 1D, KARAN 1E, PHANTHIET 1C: 5.5% to 7550.
NITOM 1C: 5.5% to 6890.

Gnd speed-KT	75	100	150	200	250	300
5.5% V/V (fpm)	418	557	835	1114	1392	1671

DALAT 1C (DAL 1C), KARAN 1D (KAR 1D)
KARAN 1E (KAR 1E), NITOM 1C (NIT 1C)
PHANTHIET 1C (PTH 1C)
DEPARTURES (RWY 02)

CHANGES: New format.

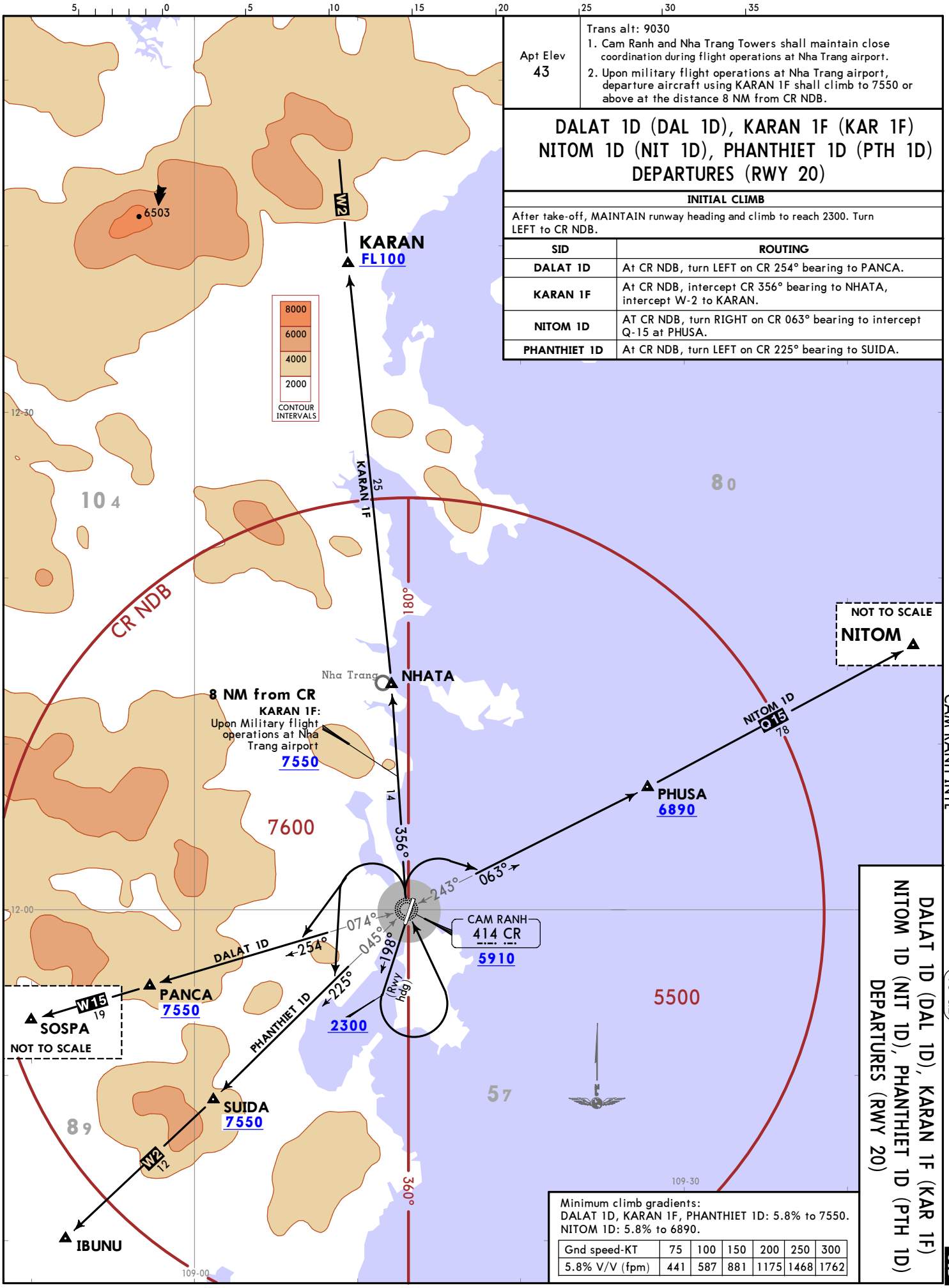
Apt Elev	
43	Trans alt: 9030 1. Cam Ranh and Nha Trang Towers shall maintain close coordination during flight operations at Nha Trang airport. 2. Upon military flight operations at Nha Trang airport, departure aircraft using KARAN 1F shall climb to 7550 or above at the distance 8 NM from CR NDB.

DALAT 1D (DAL 1D), KARAN 1F (KAR 1F) NITOM 1D (NIT 1D), PHANTHIET 1D (PTH 1D) DEPARTURES (RWY 20)

INITIAL CLIMB

After take-off, MAINTAIN runway heading and climb to reach 2300. Turn LEFT to CR NDB.

SID	ROUTING
DALAT 1D	At CR NDB, turn LEFT on CR 254° bearing to PANCA.
KARAN 1F	At CR NDB, intercept CR 356° bearing to NHATA, intercept W-2 to KARAN.
NITOM 1D	AT CR NDB, turn RIGHT on CR 063° bearing to intercept Q-15 at PHUSA.
PHANTHIET 1D	At CR NDB, turn LEFT on CR 225° bearing to SUIDA.



Minimum climb gradients:
DALAT 1D, KARAN 1F, PHANTHIET 1D: 5.8% to 7550.
NITOM 1D: 5.8% to 6890.

Gnd speed-KT	75	100	150	200	250	300
5.8% V/V (fpm)	441	587	881	1175	1468	1762

VVCR/CXR
CAM RANH INTL

JEPPESEN
23 FEB 18 (10-3E)

KHANH HOA, VIETNAM

DALAT 1D (DAL 1D), KARAN 1F (KAR 1F)
NITOM 1D (NIT 1D), PHANTHIET 1D (PTH 1D)
DEPARTURES (RWY 20)

SID

CONTINUOUS CONSTRUCTION OF RWY NR2, TWYS AND APRON AT CAM RANH INTERNATIONAL AIRPORT

1. Introduction

This chart aims at notification of continuous construction of Phases 1 and 2A for Rwy NR 2 (construction Rwy) at Cam Rahn Intl Airport. NOTAM A1056/18 has been issued to notify the above mentioned content.

This chart also aims at notification of continuous construction of current Twy AC5 and Apron at Cam Rahn Intl Airport.

2. Details

2.1. Construction Area

2.1.1 Phase 1

Construction time: Phase 1 is continued until JUL 31 2018 (1659 UTC).
Construction area: Rwy NR 2 (construction of Rwy parallel to current Rwy 02/20, 984′ (300m) East of Rwy 02/20 centerline) and related taxiways.

Note: New Twys C2, E3 and a portion of construction Rwy NR 2 (984′ (300m) from H8 to H11) are used for military aircraft to taxi only.
Civil aircraft are not allowed to use.

2.1.2 Phase 2A

Construction time: Phase 2A is continued until JUL 31 2018 (1659 UTC).
Construction area:

- Upgrade of current apron (square: 46,799.91m squared);
- Construction of current Twy AC5 (The distance from the nearest construction point to the parallel Twy P2 is 173′ (52.7m) and to the current Rwy centerline is 961′ (293m);
- Construction of a portion of new Twy C4 (The distance from the nearest construction point to current Rwy is 558′ (170m).

See VVCR 10-8A for details.

2.2 Temporarily closed area and adjusted aircraft operational procedure during construction period

2.2.1 Temporarily closed area

- Aircraft stand NR 1, NR 2, NR 3 and NR 6A are estimated to be temporarily closed until JUN 15 2018 1659 (UTC);
- Twy AC5 is estimated to be temporarily closed until JUL 31 2018 1659 (UTC).

NOTAMs A1067/18, A1073/18 and A1074/18 have been issued to notify about the above mentioned content.

2.2.2 Adjusted aircraft operational procedures during construction period

Aircraft stand NR 4, NR 5 and NR 6 shall be used for aircraft up to A321 and equivalent (maximum wing-span 36m) only.

Aircraft are towed/pushed back during taxiing in/out. Aircraft are pushed back to parallel taxi lane on the apron to start-up for departure.

NOTAM A1069/18 has been issued to notify the above mentioned content.

2.3. Taxiing operational procedure during construction period

2.3.1 Taxiing procedure for departure

Rwy 02: Aircraft stands → Twy AC3/AC4 → parallel Twy P2 → Twy W1 → Rwy 02 for departure.
Rwy 20: Aircraft stands → Twy AC3/AC4 → parallel Twy P2 → Twy W6 → Rwy 20 for departure.

2.3.2 Taxiing procedure for arrival

Rwy 02: After landing Rwy 02 → Twy W6 → parallel Twy P2 → Twy AC3/AC4 → Aircraft stands
Rwy 20: After landing Rwy 20 → Twy W1 → parallel Twy P2 → Twy AC3/AC4 → Aircraft stands

Note:

Pilots are requested to follow ATC instructions strictly.
The construction area is surrounded by fences, signs/marks and lighted at night.

3. Cancellation

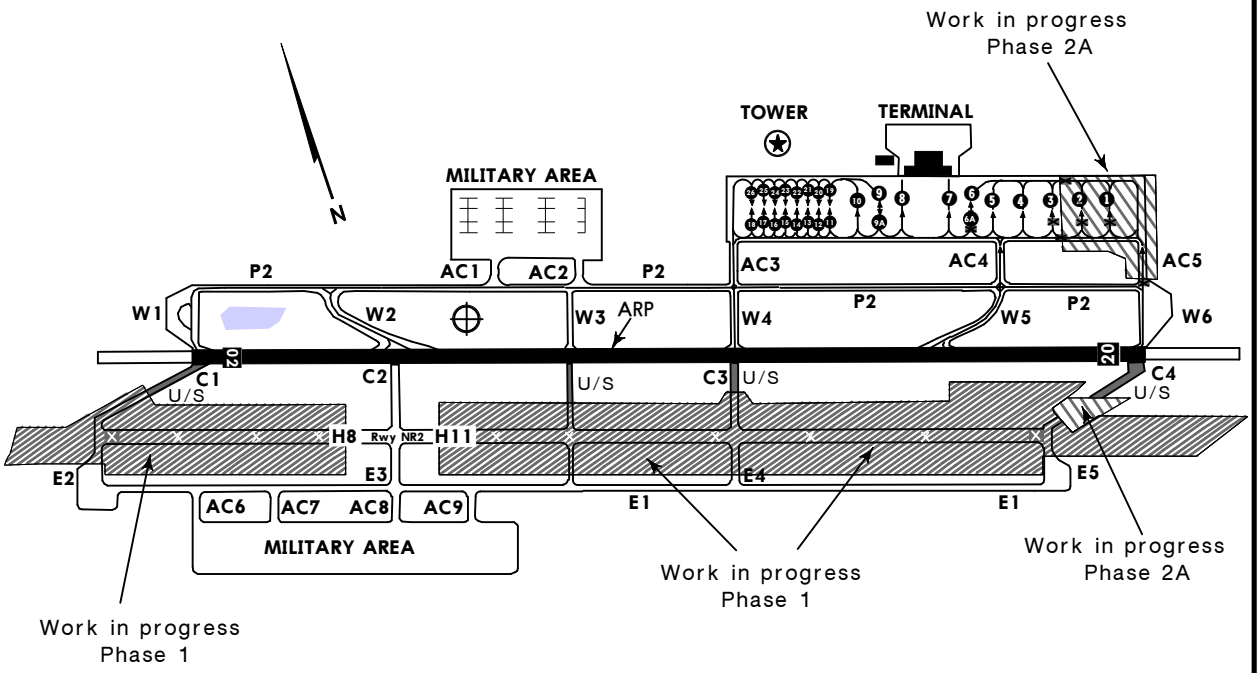
This chart shall supersede NOTAMs A1056/18, A1067/18, A1069/18, A1073/18 and A1074/18.

4 Effect

Any change relating to this shall be notified by NOTAM.

CHANGES: New temporary chart.

LAYOUT OF AERODROME GROUND MOVEMENT CHART DURING THE CONSTRUCTION OF PHASE 1 AND PHASE 2A.



NOTE:

A Portion of construction Rwy NR2 (984′ (300m) from H8 to H11);
Twy W3, Twy C2 and Twy E3 are used for Military Aircraft Only.

LEGEND

- Number of Stand Position
- Taxi Lane
- Work in progress phase 1
- Work in progress phase 2A
- UNSERVICEABLE (U/S)
- Closed

CHANGES: New temporary chart.

RE-NAME AND MARKINGS OF TWY, TAXI-LANE, AIRCRAFT STANDS AT CAM RANH INTERNATIONAL AIRPORT

1. Introduction

This chart aims at notifying the plan of:

- Re-arrangement of aircraft stands: Estimated to complete and put into operation from 0000 December 21st, 2018 (UTC).
- Renaming of TWYs, naming of new taxi-lanes: Estimated to complete and put into operation from 0000 January 1st, 2019 (UTC).
- Markings of taxi-lanes and aircraft stands: Constructing period from 0000 December 21st, 2018 (UTC).

2. Details

2.1. Re-arrangement of aircraft stands

Apron	Current aircraft stands	Aircraft stands after adjustment
Area adjacent to the building of Cam Ranh International Airport (The North of TWY Y7 after being re-named)		From NR 01 to NR 30 (not available yet)
Area in front of Terminal T2 (from TWY Y7 to TWY Y6 after being re-named)	From NR 01 to NR 05	From NR 31 to NR 42 Completely changed and renamed
Area in front of Terminal T1 to the South (The South of TWY Y6 after being re-named)	From NR 06 to NR 26	From NR 51 to NR 71, in which: 3 stands position shall be adjusted and renamed as follows: - Stand NR 6 is renamed as NR 51 - Stand NR 9 is renamed as NR 54 - Stand NR 10 is renamed as NR 55 The following 18 stands shall be re-named: - Stand NR 7 is renamed as 52 - Stand NR 8 is renamed as 53 - Stand NR 11 is renamed as 56 - Stand NR 12 is renamed as 57 - Stand NR 13 is renamed as 58 - Stand NR 14 is renamed as 59 - Stand NR 15 is renamed as 60 - Stand NR 16 is renamed as 61 - Stand NR 17 is renamed as 62 - Stand NR 18 is renamed as 63 - Stand NR 19 is renamed as 64 - Stand NR 20 is renamed as 65 - Stand NR 21 is renamed as 66 - Stand NR 22 is renamed as 67 - Stand NR 23 is renamed as 68 - Stand NR 24 is renamed as 69 - Stand NR 25 is renamed as 70 - Stand NR 26 is renamed as 71

2.2. Renaming of TWYs

2.2.1. TWYs using for both civil and military flight operations

Old name of TWYs	New name of TWYs
P2	W
AC3	Y5
AC4	Y6
AC5	Y7
W2	W3
W3	W4
W4	W5
W5	W6
W6	W7
C1	G1
C2	G3
C3	G5
C4	G7

Note: Name of TWY W1 remains unchanged

2.2.2. TWYs using for military flight operations

Old name of TWYs	New name of TWYs
E1	E
E2	E1
E4	E5
E5	E7
AC1	Y3
AC2	Y4

RE-NAME AND MARKINGS OF TWY, TAXI-LANE, AIRCRAFT STANDS AT CAM RANH INTERNATIONAL AIRPORT (CONTD)

2.2.2. TWYs using for military flight operations (CONTD)

Old name of TWYs	New name of TWYs
AC6	D2
AC7	D3
AC8	D4
AC9	D5

Note: Name of TWY E3 remains unchanged

2.3. Naming of taxi-lane and TWY

2.3.1. New taxi-lanes using for both civil and military flght operations.

Taxi-lane on apron NR 1 shall be named as taxi-lane Y and taxi-lane Z.

2.3.2. New TWY using military flight operations

TWY connecting from TWY E1 via TWY E into military apron shall be named as TWY D1.

2.4. Construction of taxi-lane and aircraft stand markings

Note:

- Follow-me car service shall be used during constructing period (free of charge);
- The construction area shall be surrounded by fence, marked and lighted.

This construction is divided into 5 areas as follows:

2.4.1. Area 1:

2.4.1.1. Constructing areas:

- Stands NR 1, 2, 3 and 4;
- Markings of taxi-lane Y.

2.4.1.2. Constructing period: From 0000 December 21st, 2018 to 0000 January 3rd, 2019 (UTC).

2.4.1.3. Operational procedures of aircraft stands during construction of Area 1

Closure of stands NR 1, 2, 3 and 4;

Aircraft stands	Aircraft operational procedure
5, 7, 8 and 10	- Used for aircraft Code D, E and equivalent (wingspan from 118' (36m) up to but not including 213' (65m). - For arrival aircraft: Aircraft self taxi-in - For departure aircraft: Aircraft are towed/pushed back to taxi-lane (facing East) before taxiing to TWY AC4 for departure.
6, 6A, 9, 9A and from 11 to 26	Applied as current procedure.

2.4.2. Area 2:

2.4.2.1. Constructing areas: Stands NR 5, 6 and 6A.

2.4.2.2. Constructing period: From 0600 January 3rd, 2019 to 0100 January 8th, 2019 (UTC).

2.4.2.3. Operational procedures of aircraft stands during construction of Area 2

- Closure of stands NR 5, 6 and 6A;
- Stop operations of stand NR 1, 2, 3 and 4;
- Operation of stands from NR 31 to NR 36 and from NR 38 to NR 42 (after completion of constructing area 1) from 0600 January 3rd, 2019 (UTC);
- Operation of taxi-lane Y.

Aircraft stands	Aircraft operational procedure
7, 8 and 10	- Used for aircraft Code D, E and equivalent (wingspan from 118' (36m) up to but not including 213' (65m). - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
31	- Used for aircraft Code D and equivalent (wingspan up to but not including 171' (52m); - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y, its nose-wheel facing to the North for departure.
From 32 to 36	- Used for aircraft Code E and equivalent (wingspan up to but not including 213' (65m); - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
From 38 to 40	- Used for aircraft Code C and equivalent (wingspan up to but not including 118' (36m); - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure. Note: Aircraft is at stand NR 38 when taxiing its nose-wheel facing to the East.

RE-NAME AND MARKINGS OF TWY, TAXI-LANE, AIRCRAFT STANDS AT CAM RANH INTERNATIONAL AIRPORT (CONTD)

Aircraft stands	Aircraft operational procedure
41, 42	- Used for aircraft A320 and equivalent; - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
9, 9A, 10 and from 11 to 26	Applied as current procedure.

2.4.3. Area 3

2.4.3.1. Constructing areas: Stands NR 9, 9A and 10.

2.4.3.2. Constructing period: From 0600 January 8th, 2019 to 0100 January 13th, 2019 (UTC).

2.4.3.3. Operational procedures of aircraft stands during construction of Area 3

- Closure of stands NR 9, 9A and 10.
- Stop operation of stands NR 5, 6 and 6A;
- Operation of stands NR 37, 51 (after completion of constructing area 2) From 0600 January 13th, 2019 (UTC).

Aircraft stands	Aircraft operational procedure
37	- Used for aircraft Code D and equivalent (wingspan up to but not including 171' (52m); - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
51	- Used for aircraft Code E and equivalent (wingspan up to but not including 213' (65m); - For arrival aircraft: Aircraft self taxi-in via TWY AC4; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
From 11 to 26, from 31 to 36, and from 38 to 42	Applied as current procedures

2.4.4. Area 4

2.4.4.1. Constructing areas: Stands NR 7 and 8.

2.4.4.2. Constructing period: From 0600 January 13th, 2019 to 0100 January 15th, 2019 (UTC).

2.4.4.3. Operational procedures of aircraft stands during construction of Area 4

- Closure of stands NR 7 and 8;
- Stop operations of stand NR 9, 9A and 10;
- Operation of stands from NR 54 to NR 55 (after the completion of construction area 3) from 0600 January 15th, 2019 (UTC).

Aircraft stands	Aircraft operational procedure
54	- Used for aircraft Code E and equivalent (wingspan up to but not including 213' (65m); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
55	- Used for aircraft Code C and equivalent (wingspan up to but not including 118' (36m); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
From 11 to 26, and from 31 to 42, 51	Applied as current procedures

2.4.5. Area 5

Constructing areas:

- Taxi-lane Z;
- Stands from NR 11 to NR 26.

The construction of area 5 is divided into 5 stages, details are as follows:

2.4.5.1. Stage 1

A. Constructing areas:

- Taxi-lane Z;
- Stands 11, 12, 13 and 14.

B. Constructing period: From 0600 January 15th, 2019 to 0200 January 16th, 2019 (UTC).

C. Operational procedures of aircraft stands during construction of Stage 1

- Closure of stands NR 11, 12, 13 and 14;
- Stop operation of stands NR 7 and NR 8;
- Operation of stands NR 52 and NR 53 (after the completion of construction area 4) from 0200 January 16th, 2019 (UTC).

RE-NAME AND MARKINGS OF TWY, TAXI-LANE, AIRCRAFT STANDS AT CAM RANH INTERNATIONAL AIRPORT (CONTD)

Aircraft stands	Aircraft operational procedure
52 and 53	- Used for aircraft Code E and equivalent (wingspan up to but not including 213' (65m); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
From 15 to 26, from 31 to 42 and 51, 54, 55	Applied as current procedures

2.4.5.2. Stage 2

A. Constructing areas: Stands NR 15, 16, 17 and 18.

B. Constructing period: From 0600 January 16th, 2019 to 0200 January 17th, 2019 (UTC).

C. Operational procedures of aircraft stands during construction of Stage 2

- Closure of stands NR 15, 16, 17 and 18;
- Stop operation of stands NR 11, 12, 13 and 14;
- Operation of taxi-lane Z and stands NR 56, 57, 58, 59 from 0600 January 16th, 2019 (UTC).

Aircraft stands	Aircraft operational procedure
56, 57, 58, 59	- Used for aircraft Code C and equivalent (wingspan up to but not including 118' (36m)); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
From 19 to 26, from 31 to 42, fom 51 to 55	Applied as current procedure.

2.4.5.3. Stage 3

A. Constructing areas: Stands NR 19, 20, 21 and 22;

B. Constructing period: From 0600 January 17th, 2019 to 0200 January 18th, 2019 (UTC).

C. Operational procedures of aircraft stands during construction of Stage 3

- Closure of stands NR 19, 20, 21 and 22;
- Stop operation of stands NR 15, 16, 17 and 18;
- Operation of stands NR 60, 61, 62, 63 from 0600 January 17th, 2019 (UTC).

Aircraft stands	Aircraft operational procedure
60, 61, 62, 63	- Used for aircraft Code C and equivalent (wingspan up to but not including 118' (36m)); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Y for departure.
From 23 to 26, from 31 to 42, from 51 to 59	Applied as current procedure.

2.4.5.4. Stage 4

A. Constructing areas: Stands NR 23, 24, 25 and 26.

B. Constructing period: From 0600 January 18th, 2019 to 0200 January 19th, 2019 (UTC).

C. Operational procedures of aircraft stands during construction of Stage 4

- Closure of stands NR 23, 24, 25 and 26;
- Stop operation of stands NR 19, 20, 21 and 22;
- Operation of stands NR 64, 65, 66, 67 from 0600 January 18th, 2019 (UTC).

Aircraft stands	Aircraft operational procedure
64, 65, 66, 67	- Used for aircraft Code C and equivalent (wingspan up to but not including 118' (36m)); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Z for departure.
From 31 to 42, and from 51 to 63	Applied as current procedure.

D. Operational procedures of aircraft stands when construction of Stage 4 is completed:

- Stop operation of stands NR 23, 24, 25 and 26;
- Operation of stands NR 68, 69, 70 and 71 from 0600 January 19th, 2019 (UTC).

Aircraft stands	Aircraft operational procedure
68, 69, 70, 71	- Used for aircraft Code C and equivalent (wingspan up to but not including 118' (36m)); - For arrival aircraft: Aircraft self taxi-in; - For departure aircraft: Aircraft are towed/pushed back to taxi-lane Z for departure.
From 31 to 42, and from 51 to 67	Applied as current procedure.

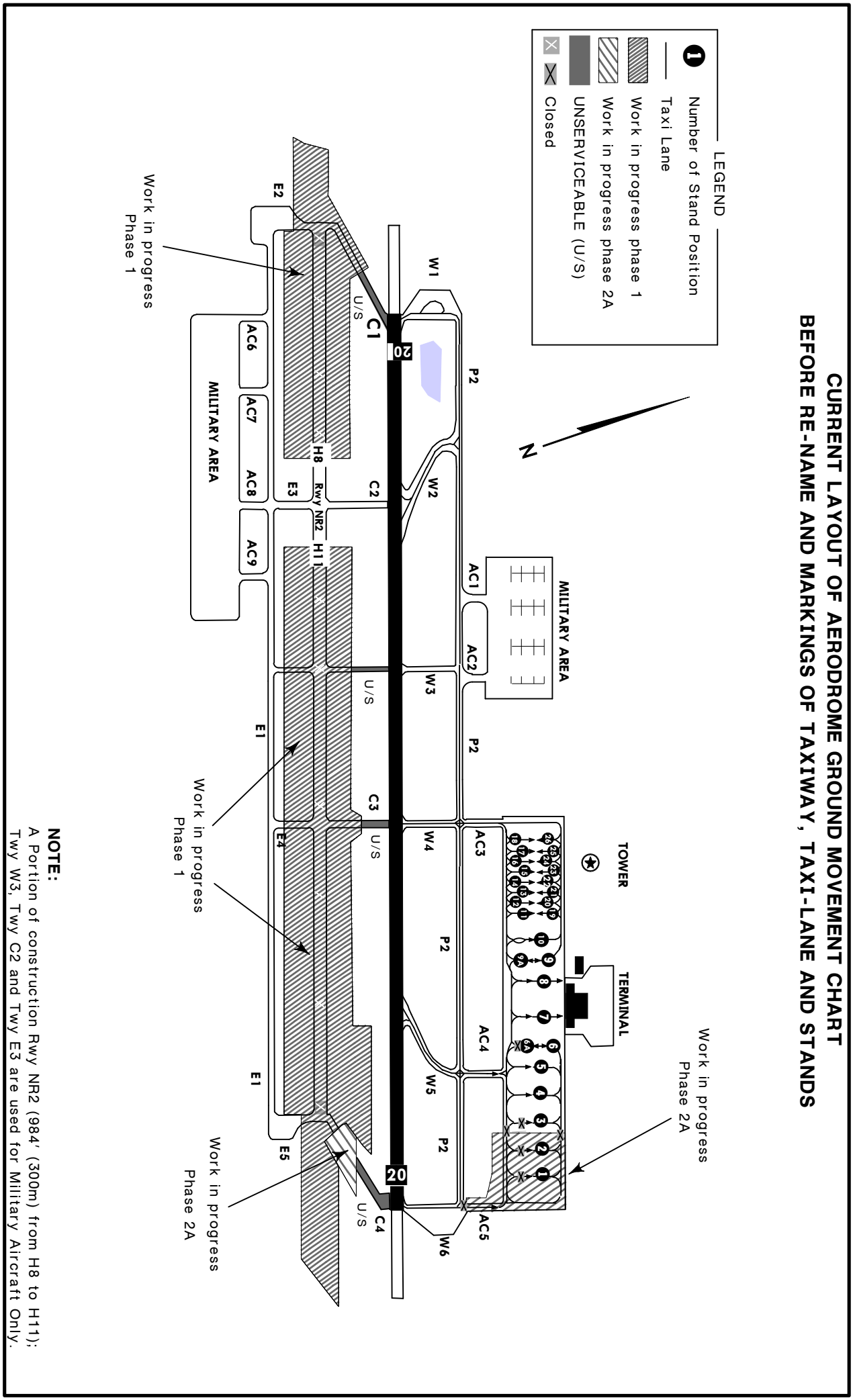
2.4.5.5. Stage 5

A. Constructing area: Making road (behind stands from NR 65 to NR 71);

B. Constructing period: From 0600 January 19th, 2019 to 0200 January 24th, 2019 (UTC).

C. After completion of construction: Road (behind stands from NR 65 to NR 71) shall be operated from 0201 January 24th, 2019 (UTC).

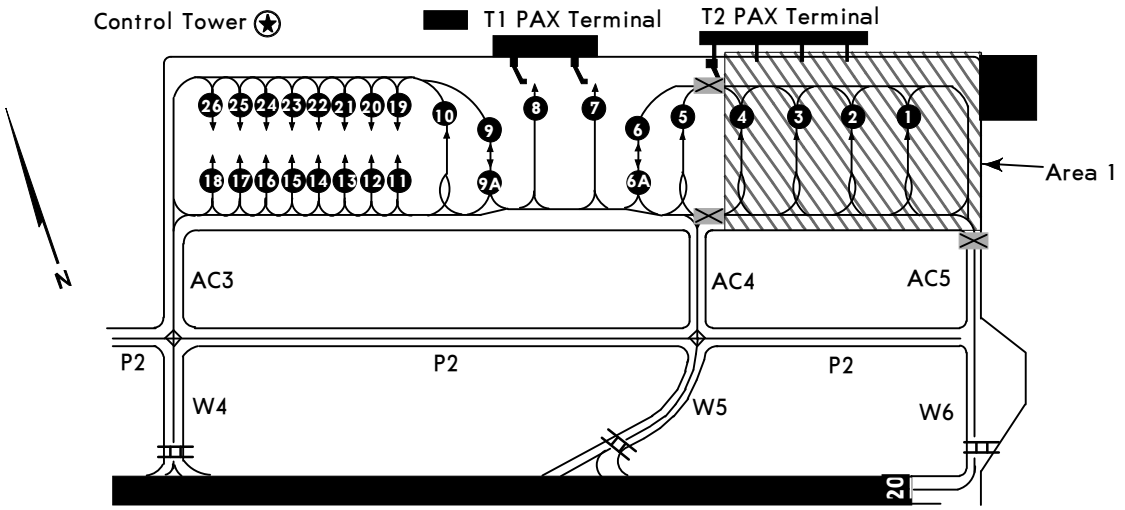
CURRENT LAYOUT OF AERODROME GROUND MOVEMENT CHART
BEFORE RE-NAME AND MARKINGS OF TAXIWAY, TAXI-LANE AND STANDS



NOTE:
A Portion of construction Rwy NR2 (984' (300m) from H8 to H11); Twy W3, Twy C2 and Twy E3 are used for Military Aircraft Only.

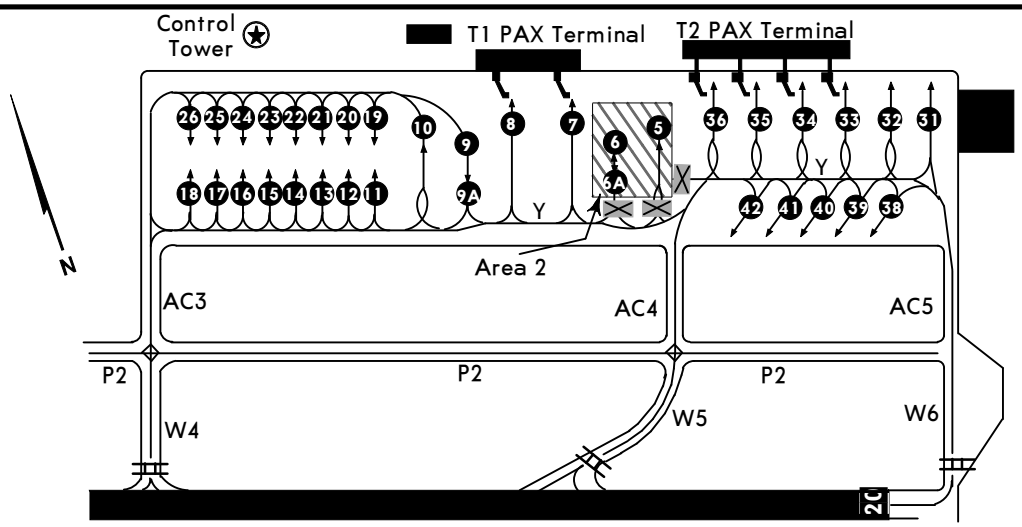
CHANGES: New chart.

APRON LAYOUT CHART - DURING CONSTRUCTING AREA 1, 2 AND 3



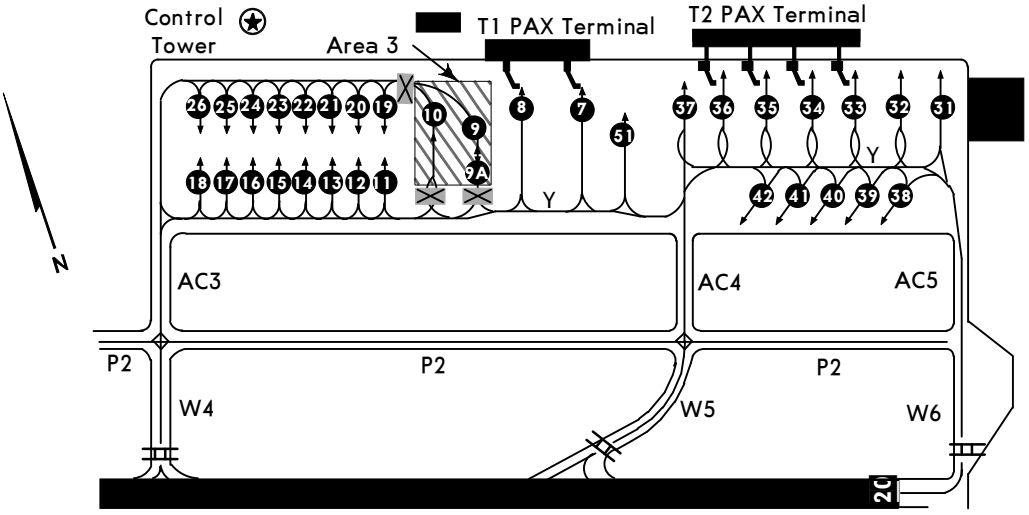
From 0000 December 21st, 2018 to 0000 January 3rd, 2019 (UTC).

NOTE: Closure of stands NR 1, 2, 3 and 4.



From 0600 January 3rd, 2019 to 0100 January 8th, 2019 (UTC).

NOTE: - Closure of stands NR 5, 6 and 6A. - Stop operation of stand NR 1, 2, 3 and 4.
- Operation of stands from NR 31 to 36 and from NR 38 to NR 42 (after completion of constructing area 1) from 0600 January 3rd, 2019.
-Operation of taxi-lane Y.



From 0600 January 8th, 2019 to 0100 January 13th, 2019 (UTC).

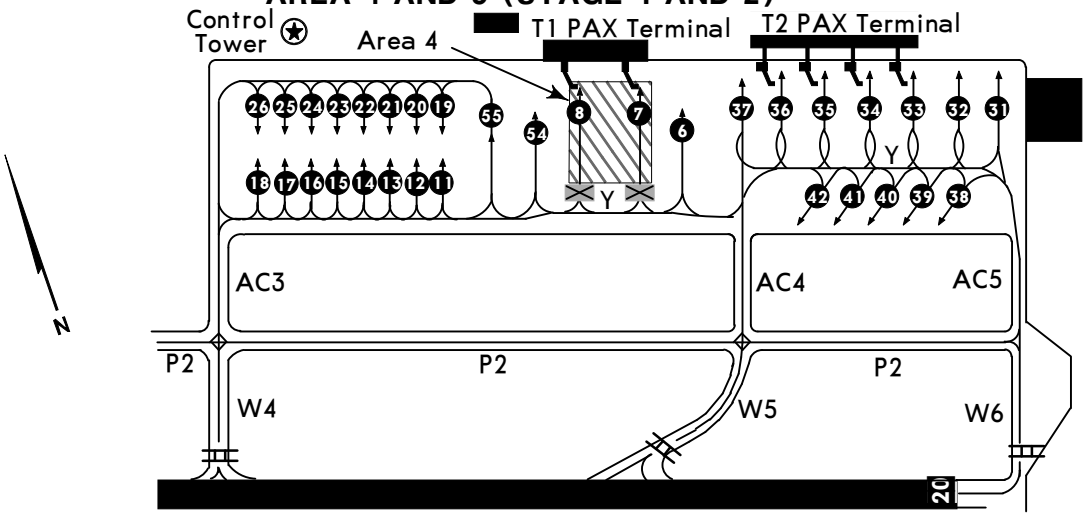
NOTE: - Closure of stands NR 9, 9A and 10.
- Stop operation of stand NR 5, 6 and 6A.
- Operation of stands from NR 37 and 51 (after completion of constructing area 2) from 0600 January 13th, 2019 (UTC).

LEGEND

1 Number of Stand Position	Work in progress	Holding Position
Taxi Lane	Closed	

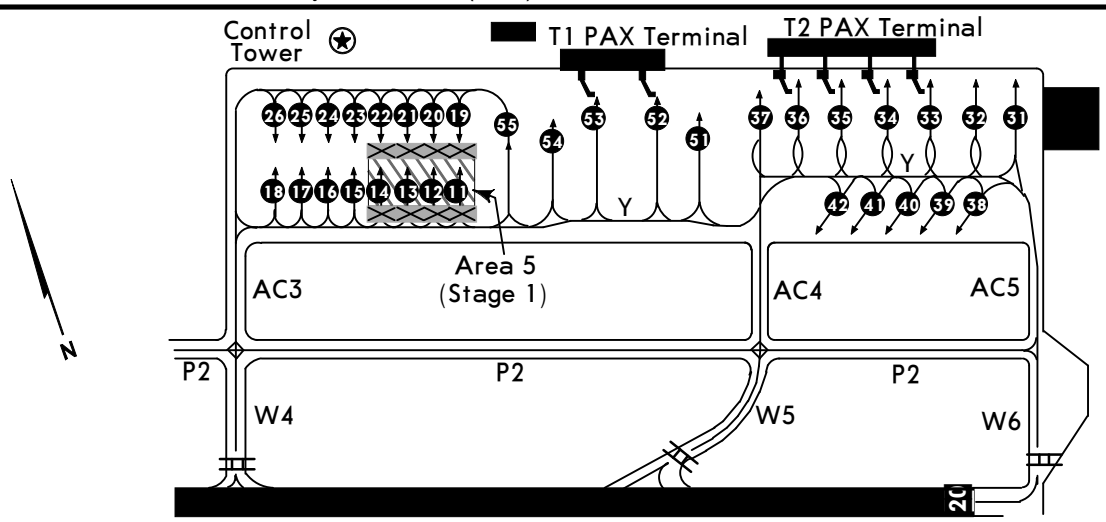
CHANGES: New chart.

APRON LAYOUT CHART - DURING CONSTRUCTING AREA 4 AND 5 (STAGE 1 AND 2)



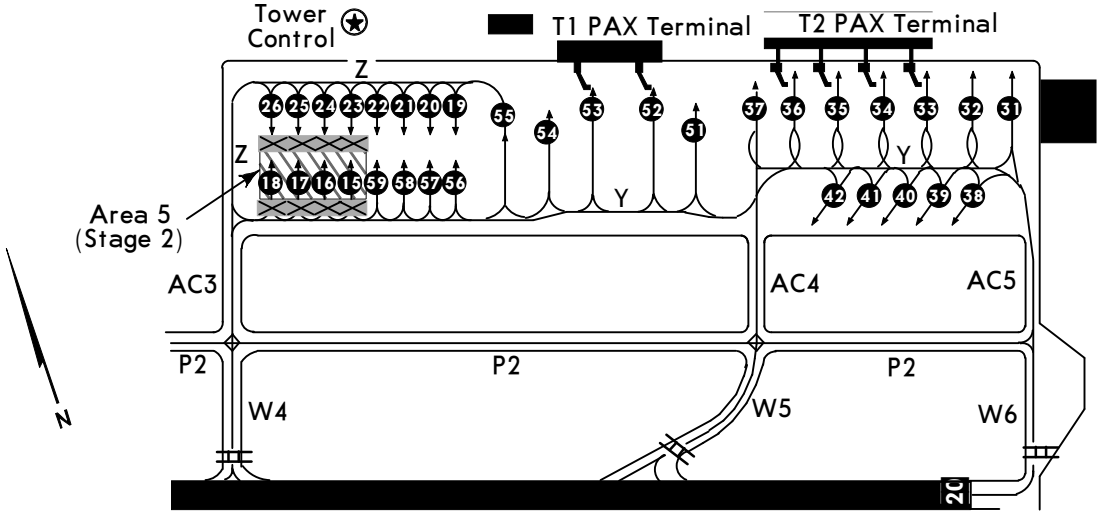
From 0600 January 13th, 2019 to 0100 January 15th, 2019 (UTC).

NOTE: - Closure of stands NR 7 and 8.
- Stop operation of stand NR 9, 9A and 10.
- Operation of stands NR 54 and 55 (after completion of constructing area 3) from 0600 January 15th, 2019 (UTC).



From 0600 January 15th, 2019 to 0200 January 16th, 2019 (UTC).

NOTE: - Closure of stands NR 11, 12, 13 and 14.
- Stop operation of stand NR 7 and 8.
- Operation of stands from NR 52 to NR 53 (after completion of constructing area 4) from 0200 January 16th, 2019.



From 0600 January 16th, 2019 to 0200 January 17th, 2019 (UTC).

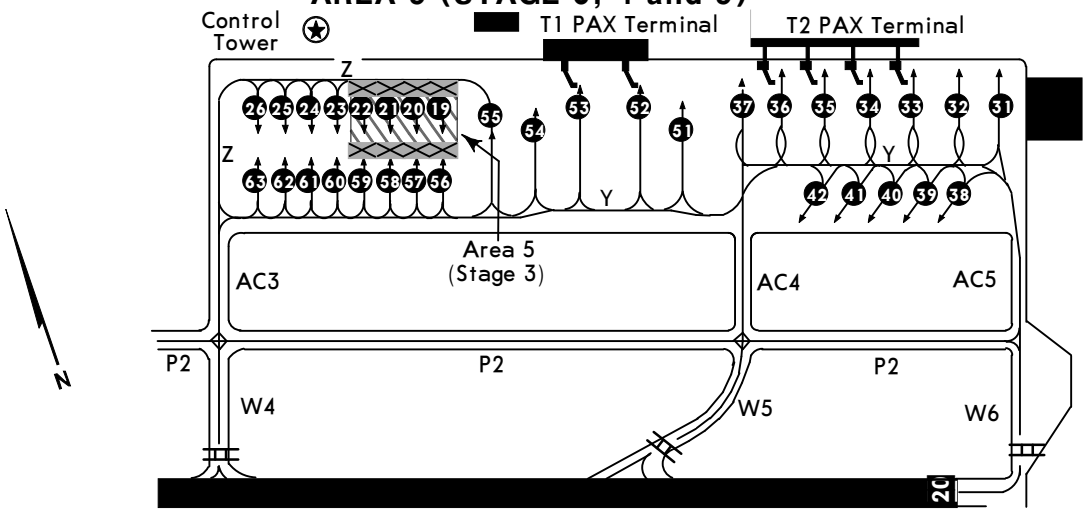
NOTE: - Closure of stands NR 15, 16, 17 and 18.
- Stop operations of stand NR 11, 12, 13 and 14.
- Operation of taxi-lane Z and stands NR 56, 57, 58, 59 from 0600 January 16th, 2019 (UTC).

LEGEND

- Number of Stand Position
- Taxi Lane
- Work in progress
- Closed
- Holding Position

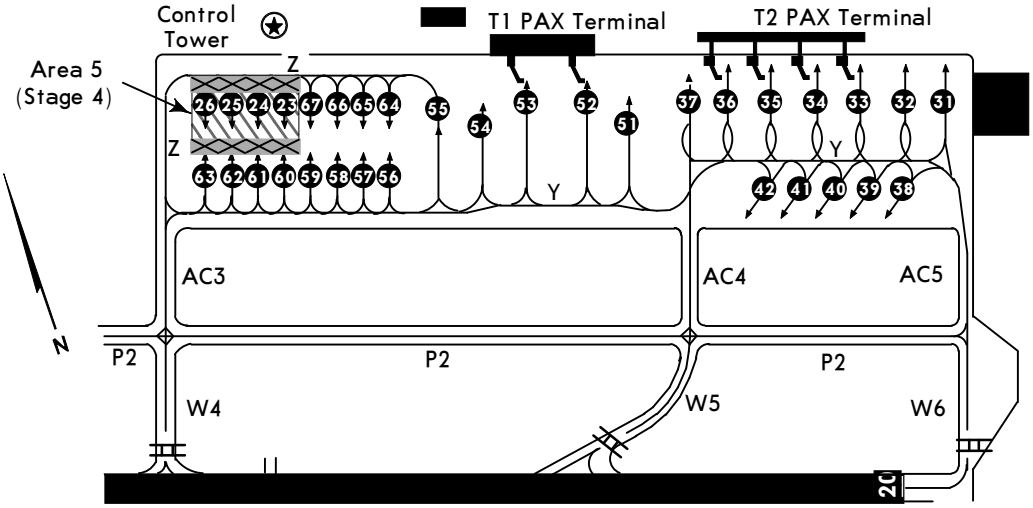
CHANGES: New chart.

APRON LAYOUT CHART - DURING CONSTRUCTING AREA 5 (STAGE 3, 4 and 5)



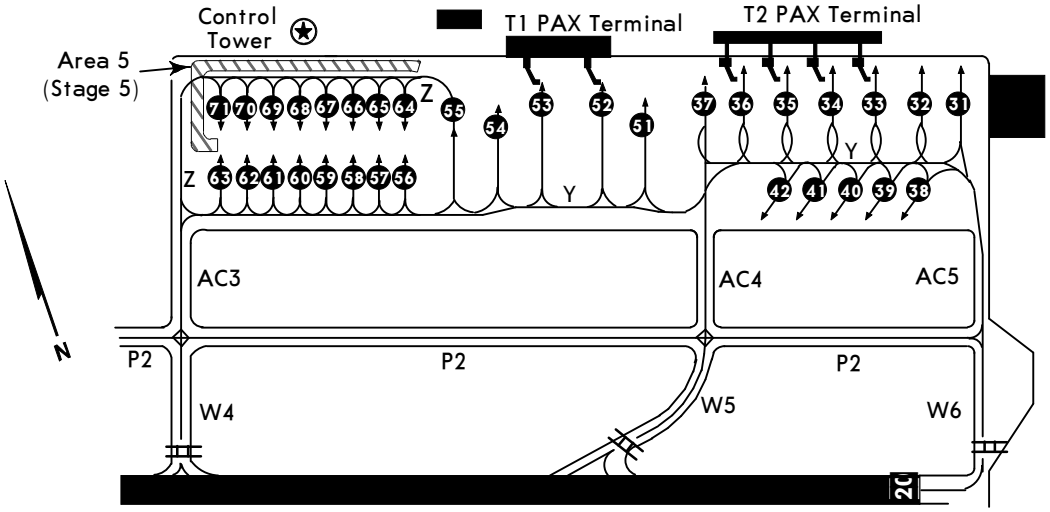
From 0600 January 17th, 2019 to 0200 January 18th, 2019 (UTC).

NOTE: - Closure of stands NR 19, 20, 21 and 22.
- Stop operation of stand NR 15, 16, 17 and 18.
- Operation of stands 60, 61, 62 and 63 from 0600 January 17th, 2019 (UTC).



From 0600 January 18th, 2019 to 0200 January 19th, 2019 (UTC).

NOTE: - Closure of stands NR 23, 24, 25 and 26.
- Stop operation of stand NR 19, 20, 21 and 22.
- Operation of stands from NR 64, 65, 66 and 67 from 0600 January 18th, 2019 (UTC).
18th, 2019 (UTC).



From 0600 January 19th, 2019 to 0200 January 24th, 2019 (UTC).

NOTE: - Operation of road (behind stands from NR 65 to NR 71 from 0201 January 24th, 2019 (UTC).

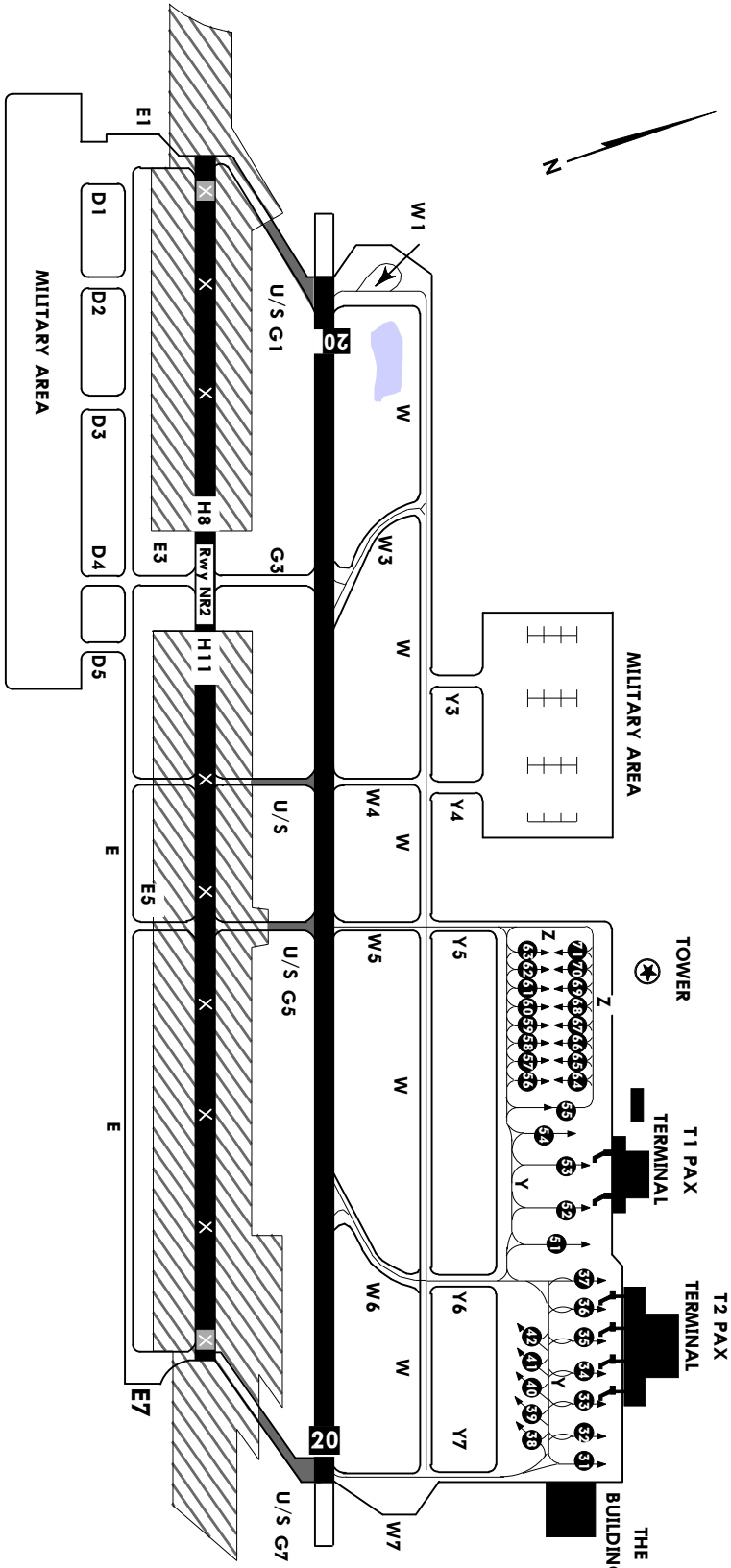
LEGEND

1 Number of Stand Position	Work in progress	Holding Position
Taxi Lane	Closed	

CHANGES: New chart.

LAYOUT OF AERODROME GROUND MOVEMENT CHART AFTER COMPLETION OF RE-NAME AND MARKINGS OF TAXIWAY, LAXI-LANE AND STANDS

(from 0201 January 24th, 2019 (UTC)).



NOTE:

- A Portion of construction Rwy NR2 (984' (300m) from H8 to H11); Twys: E, E1, E3, E5, E7, D1, D2, D3, D4, D5, Y3 and Y4 only used for Military operations.

CHANGES: New chart.

VVCR/CXR

Apt Elev 43′
N11 59.7 E109 13.1

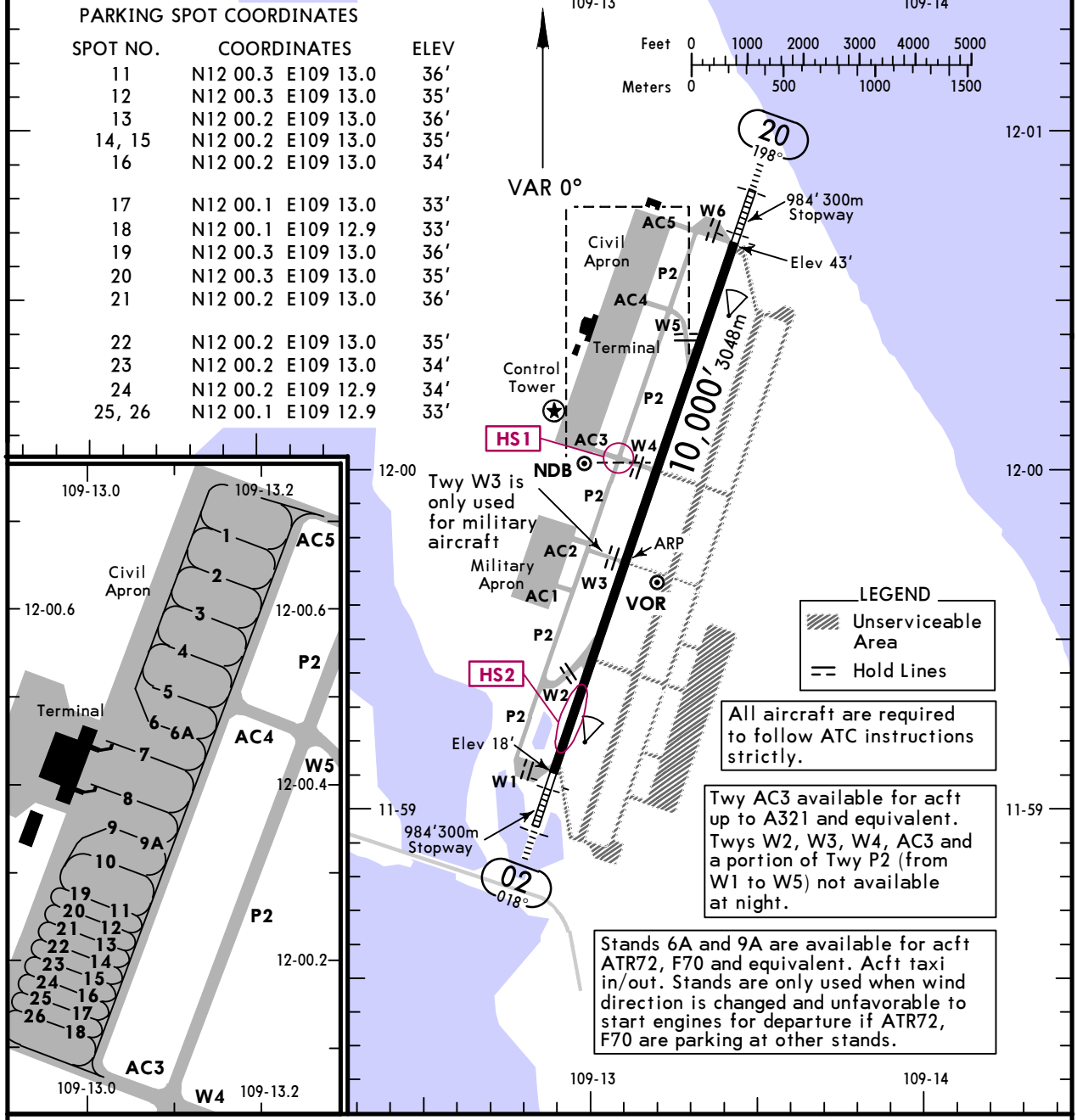
JEPPESEN
29 JUN 18 (10-9)

KHANH HOA, ~~VIETNAM~~
CAM RANH INTL

CAM RANH Tower 118.2

PARKING SPOT COORDINATES

SPOT NO.	COORDINATES	ELEV
11	N12 00.3 E109 13.0	36′
12	N12 00.3 E109 13.0	35′
13	N12 00.2 E109 13.0	36′
14, 15	N12 00.2 E109 13.0	35′
16	N12 00.2 E109 13.0	34′
17	N12 00.1 E109 13.0	33′
18	N12 00.1 E109 12.9	33′
19	N12 00.3 E109 13.0	36′
20	N12 00.3 E109 13.0	35′
21	N12 00.2 E109 13.0	36′
22	N12 00.2 E109 13.0	35′
23	N12 00.2 E109 13.0	34′
24	N12 00.2 E109 12.9	34′
25, 26	N12 00.1 E109 12.9	33′



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS LANDING BEYOND Threshold	Glide Slope	TAKE-OFF	WIDTH
02 20	RL SALS PAPI-L RVR		9114′ 2778m		148′ 45m

HOT SPOTS

HS

For information only, not to be construed as ATC instructions.

HS1 Aircraft with wingspan more than 118′(36m) when landing on Rwy 20: taxi to Twy W2/W1, then Twy P2, AC4 and apron. Do not taxi to Twy AC3 due to safe distance reason.

HS2 Aircraft landing on Rwy 02 (portion from intersection of Twy W2 to Rwy 02): Be careful with slippery Rwy due to sagged Rwy with stagnant water.

	TAKE-OFF	
	All Rwys	
	1 Take-Off Alternate Apt. Filed	Take-Off Alternate Apt. not Filed
A B C D	800m	Available Landing Minimums

1 Take-off alternate aerodromes: Tan Son Nhat, Da Nang, Noi Bai and other appropriate aerodromes.

CHANGES: Hot spots.

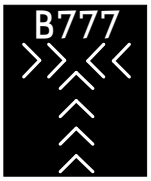
SAFEDOCK VISUAL DOCKING GUIDANCE SYSTEM (VDGS) AT CAM RANH INTL AIRPORT

1. INTRODUCTION

Operational procedure of the Visual Docking Guidance System (VDGS) at Cam Ranh Intl Airport.

2. DESCRIPTION OF SYSTEM

VDGS provides both pilots with guidance for maneuvering the aircraft into the gate to the correct centerline and stop-position under all operational conditions.



A single cabinet houses a number of units: display (including LEDs), a laser scanner, control and power units and it is installed at the fixed gates in terminals of the airport.

VDGS at Cam Ranh Intl airport is Safedock type T3-9 (T-types).

The unit is mounted 4-8m above ground and provides multiple functionality. For example, clear pilot instructions, accurate aircraft identification and tracking, as well as quick and easy access to this low maintenance unit.

3. SAFETY PROCEDURE

The Safedock has a built-in error detection program to inform the aircraft pilot of impending dangers during the docking procedure.

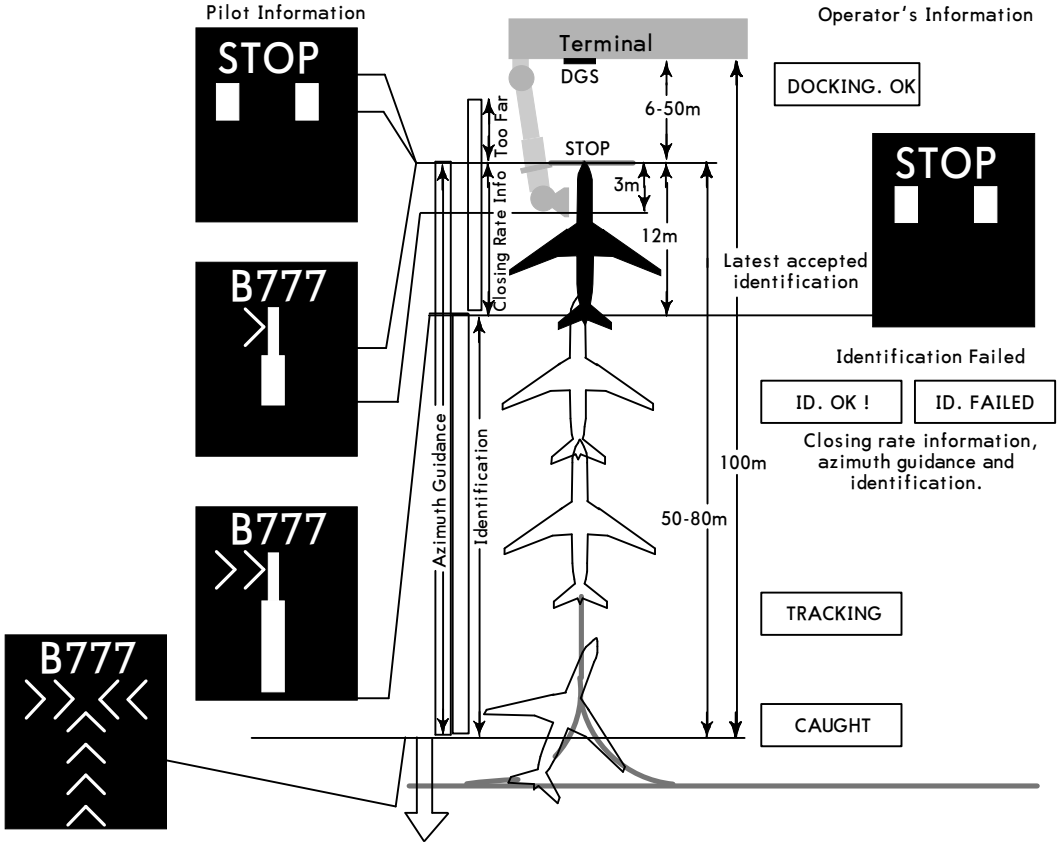
WARNING: If the pilot is unsure of the information being shown on the Safedock Display Unit, he must immediately stop the aircraft and obtain further information for clearance.

WARNING: The pilot shall not enter the stand area, unless the docking system first is showing the vertical running arrows. The pilot must not proceed beyond the bridge, unless these arrows have been superseded by the closing rate bar.

WARNING: The pilot shall not enter the stand area, unless the aircraft type displayed is equal to the approaching aircraft. The accuracy of other information, such as "DOOR 2" shall also be checked.

The message "STOP SBU" means that docking has been interrupted and has to be resumed only by manual guidance.

4. DOCKING PROCEDURES



CHANGES: None.

4.1 START OF DOCKING

The system is started by pressing one of the aircraft type buttons on the operator panel. When the button has been pressed, "WAIT" will be displayed.

4.2 CAPTURE

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. It shall be checked that the correct aircraft type is displayed. The lead-in line shall be followed.
THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.

4.3 TRACKING

When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow centerline indicator.

A flashing red arrow indicates the direction to turn.

The vertical yellow arrow shows position in relation to the centerline. This indicator gives correct position and azimuth guidance.

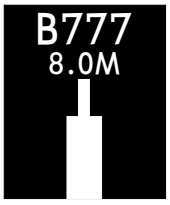
4.4 CLOSING RATE

When the aircraft is less than 12m from the stop position, the closing rate is indicated by turning off one row of the centerline symbol per half a meter of the distance, covered by the aircraft toward the stop position of the stand.

The picture illustrates the aircraft 10m from stop position, slightly left of the center line. The red arrow indicates the direction to steer.

4.5 ALIGNED TO CENTER

The aircraft is 8m from the stop position.
The absence of any direction arrow indicates an aircraft on the centerline.



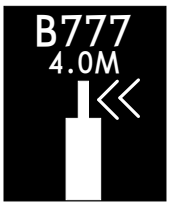
4.6 SLOW DOWN (DECREASE SPEED)

If the aircraft is approaching faster than the accepted speed, the system will show "SLOW DOWN" as a warning to the pilot.

CHANGES: New chart.

4.7 AZIMUTH GUIDANCE

The aircraft is 4m from the stop position.
The yellow arrow indicates an aircraft to the right of the centerline, and the red flashing arrow indicates the direction to turn.



4.8 STOP POSITION REACHED

When the correct stop-position is reached, the display will show "STOP" with red lights.

4.9 DOCKING COMPLETE

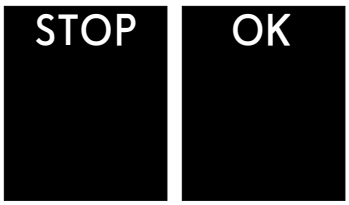
When the aircraft has parked, "OK" will be displayed.

4.10 OVERSHOOT

If the aircraft overshoots the stop-position, "TOO FAR" will be displayed.

4.11 STOP SHORT

If the aircraft is found standing still but has not reached the intended stop-position, the message "STOP OK" will be shown after a pre-configured time.



4.12 WAIT

If there is an object blocking the view toward the approaching aircraft or the detected aircraft is lost during docking, close to STOP, before 12 meters to STOP, the display will show WAIT. The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.

4.13 BAD WEATHER CONDTION

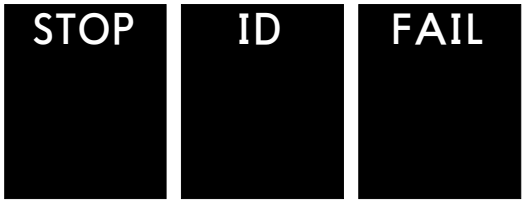
During heavy fog, rain, the visibility for the docking system can be reduced. When the system is activated and in capture mode, the display will disable the floating arrows and display SLOW and the aircraft type.
As soon as the system detects the approaching aircraft, the vertical closing-rate bar will appear.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE CLOSING RATE BAR IS SHOWN.

CHANGES: New chart.

4.14 AIRCRAFT VERIFICATION FAILURE

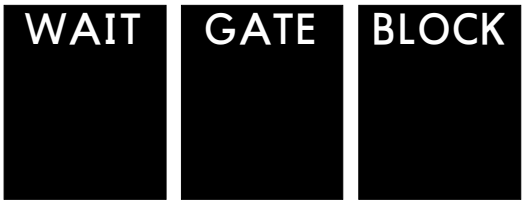
During entry into the stand, the aircraft geometry is being checked. If, for any reason, aircraft verification is not made 12 meters before the stop-position, the display will first show WAIT and make a second verification check. If this fails "STOP" and "ID FAIL" will be displayed. The text will be alternating on the upper two rows of the display.



THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.

4.15 GATE BLOCKED

If an object is found blocking the approach to gate/apron view from the Safedock to the planned stop position for the aircraft, the docking procedure will be halted with a "WAIT" and "GATE BLOCK" message. The docking procedure will resume as soon as the blocking object has been removed.

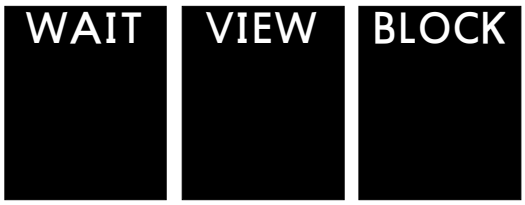


THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.

4.16 VIEW BLOCKED

If the view towards the approaching aircraft is hindered, for instance dirt on the window, the Safedock will report a view blocked condition.

Once the system is able to see the aircraft, the message will be replaced with a closing rate display.

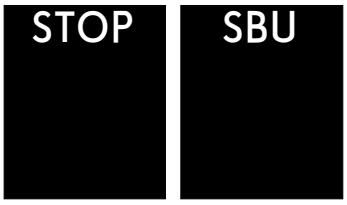


THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE WITHOUT MANUAL GUIDANCE, UNLESS THE WAIT MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.

4.17 SBU-STOP

Any unrecoverable error during the docking procedure will generate an SBU (safety back-up) condition. The display will show the text STOP SBU.

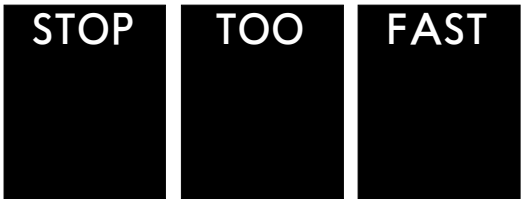
A manual backup procedure must be used for docking guidance.



4.18 TOO FAST

If the aircraft approaches with a speed higher than the docking system can handle, the message "STOP TOO FAST" will be displayed.

The docking system must be re-started or docking procedure completed by manual guidance.



4.19 EMERGENCY STOP

When the emergency stop button is pressed, "STOP" is displayed.

CHANGES: New chart.

4.20 CHOCKS ON

CHOCKS ON will be displayed, when the ground staff has put the chocks in front of the nose wheel and pressed the "CHOCKS ON" button on the operator panel.

4.21 ERROR

If a system error occurs, the message "ERROR" is displayed with an error code. The code is used for maintenance purposes and explained elsewhere.

4.22 SYSTEM BREAKDOWN

In case of a severe system failure, the display will go black, except for a red stop indicator. A manual backup procedure must be used for docking guidance.

4.23 POWER FAILURE

In case of a power failure, the display will be completely black. A manual backup procedure must be used for docking guidance.

CHANGES: New chart.

VVCR/CXR
CAM RANH INTL

JEPPESEN
28 DEC 18 (11-1)

KHANH HOA, VIETNAM
ILS Z Rwy 02

CAM RANH Approach 127.9 | CAM RANH Tower 118.2

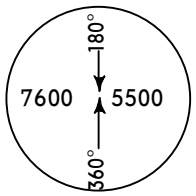
BRIEFING STRIP™

ILS ICR	Final Apch Crs	GS	ILS DA(H)	Apt Elev 43′
110.7	018°	D5.9 ICR 2220′ (2202′)	Refer to Minimums	Rwy 18′

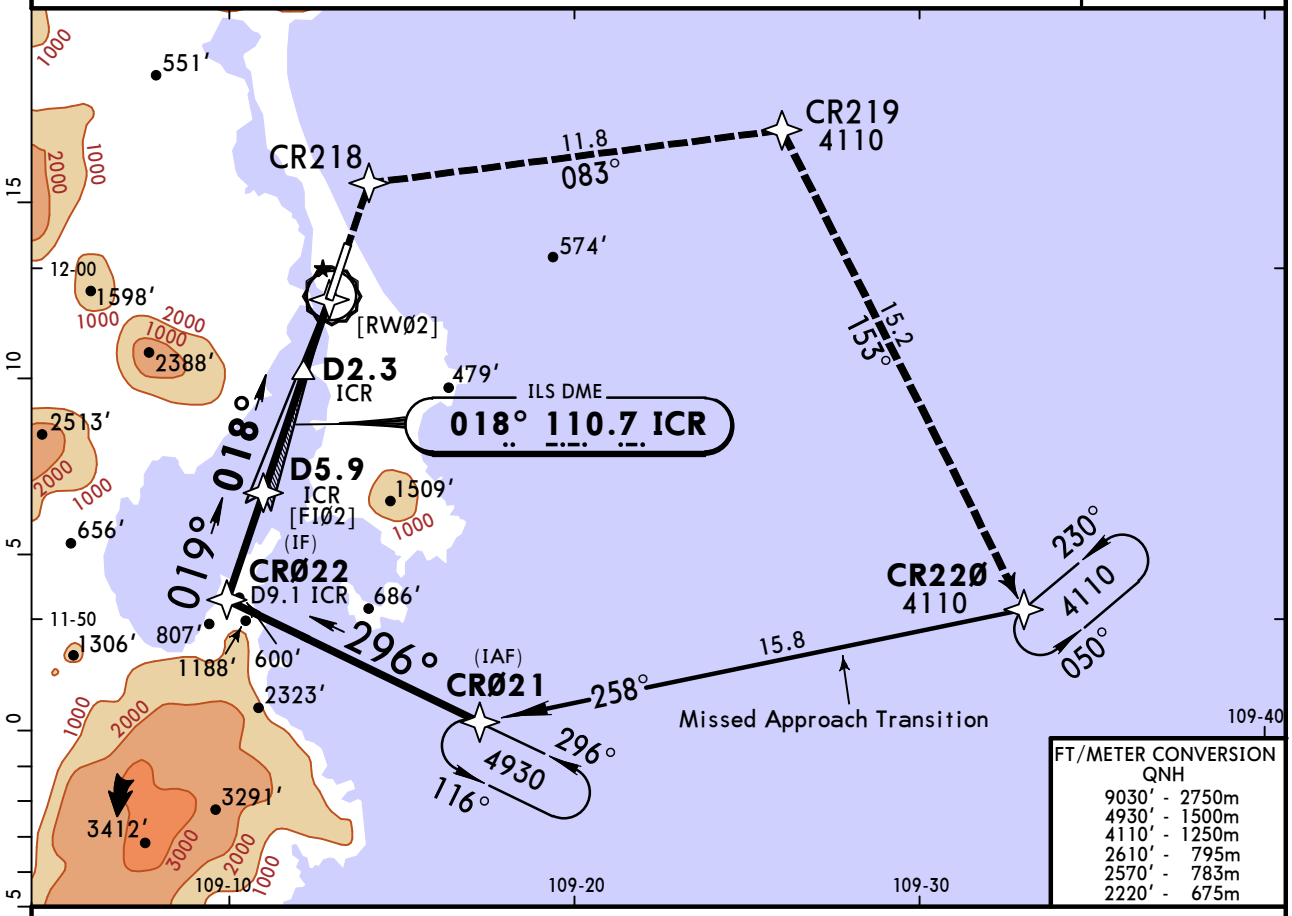
MISSED APCH: Direct to CR218, CR219, CR22Ø at 4110′ to join holding pattern at CR22Ø or follow ATC instructions.

Alt Set: hPa | Rwy Elev: 1 hPa | Trans level: FL 100 | Trans alt: 9030′

1. RNP1 (GNSS) required: For initial approach segment, missed approach segment and missed approach transition.

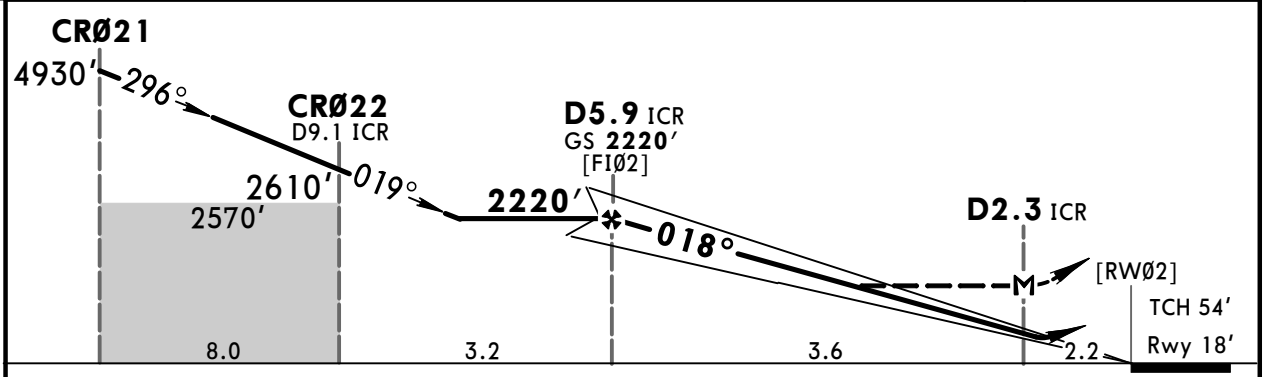


MSA ARP



FT/METER CONVERSION QNH

9030′	2750m
4930′	1500m
4110′	1250m
2610′	795m
2570′	783m
2220′	675m



Gnd speed-Kts		70	90	100	120	140	160
GS	3.50°	434	557	619	743	867	991
MAP at D2.3 or FAF to MAP	3.6	3:05	2:24	2:10	1:48	1:33	1:21

SALS
PAPI

CR218	CR219	CR22Ø 4110′

STRAIGHT-IN LANDING RWY 02

CEILING REQUIRED

CIRCLE-TO-LAND

ILS
DA(H) A: 317′ (299′) C: 336′ (318′)
B: 326′ (308′) D: 346′ (328′)

FULL CEIL-VIS | ALS out CEIL-VIS

LOC (GS out)
MDA(H) 860′ (842′)

ALS out CEIL-VIS

Not Authorized West of Rwy

PANS OPS

	FULL CEIL-VIS	ALS out CEIL-VIS
A	330′-1400m	860′-3800m
B		
C	350′-1600m	
D	370′-1600m	

Max Kts	MDA(H) CEIL-VIS
100	1320′ (1277′) 1320′-4000m
135	
180	1810′ (1767′) 1810′-5000m
205	

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN
28 DEC 18 (11-2)

KHANH HOA, VIETNAM
ILS Y Rwy 02

CAM RANH Approach 127.9 | CAM RANH Tower 118.2

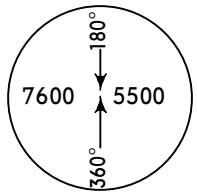
BRIEFING STRIP™

ILS ICR	Final Apch Crs	GS	ILS DA(H)	Apt Elev 43'
110.7	018°	D5.9 ICR 2220' (2202')	Refer to Minimums	Rwy 18'

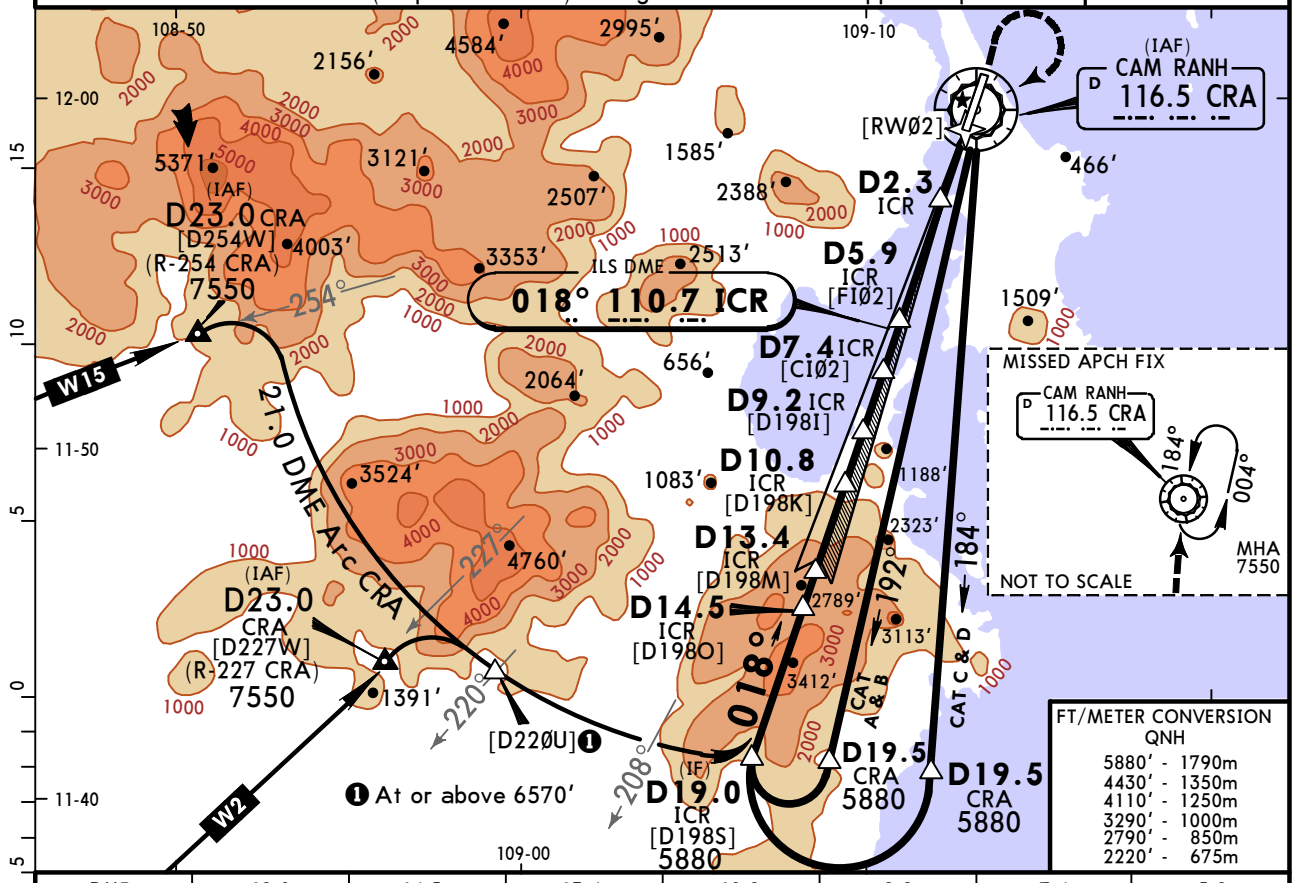
MISSED APCH: Maintain track 018° to 7550', when ABEAM CRA VOR intercept R-018 CRA VOR, after passing 3940' turn RIGHT to join holding pattern at CRA or follow ATC instructions.

Alt Set: hPa | Rwy Elev: 1 hPa | Trans level: FL 100 | Trans alt: 9030'

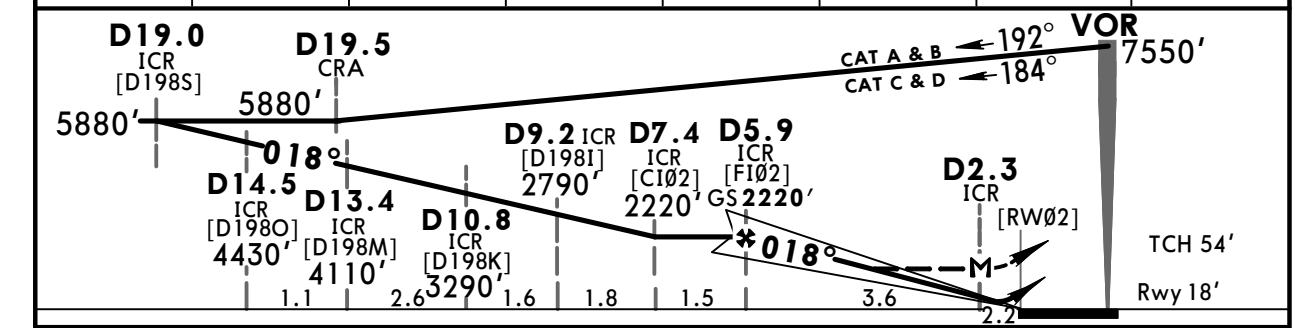
1. VOR/DME, FMS are required. 2. Air operators ensure that pilot shall be trained in simulator (SIM) and report result to CAAV before operating flight. 3. CAAV will check SIM training (for the first time) for each aircraft type. 4. ATC shall confirm pilot to be qualified with this procedure on radio frequency. 5. Do not descend below the altitudes that are indicated at the SDF (Step Down Fixes) during the intermediate approach phase.



MSA CRA VOR



DME	19.0	14.5	13.4	10.8	9.2	7.4	5.9
ALTITUDE	5880	4430	4110	3290	2790	2220	2220



Gnd speed-Kts		70	90	100	120	140	160
GS	3.50°	434	557	619	743	867	991
MAP at D2.3 ICR or FAF to MAP	3.6	3:05	2:24	2:10	1:48	1:33	1:21

SALS | PAPI | 7550' | CRA on 116.5 R-018 | RT | CRA 116.5

STRAIGHT-IN LANDING RWY 02 — **CEILING REQUIRED** — CIRCLE-TO-LAND

ILS DA(H) A: 317' (299') B: 326' (308') C: 336' (318') D: 346' (328')

LOC (GS out) MDA(H) 860' (842')

Not Authorized West of Rwy

PANS OPS

	ILS FULL CEIL-VIS	ILS ALS out CEIL-VIS	LOC (GS out) CEIL-VIS	Max Kts	CIRCLE-TO-LAND MDA(H)	CIRCLE-TO-LAND CEIL-VIS
A	330'-1400m		860'-3800m	100	1320' (1277')	1320'-4000m
B				135		
C	350'-1600m			180	1810' (1767')	1810'-5000m
D	370'-1600m			205		

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN

28 DEC 18 (12-1)

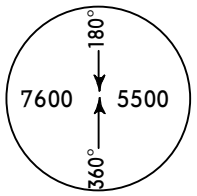
KHANH HOA, VIETNAM
RNAV (GNSS) Rwy 02

CAM RANH Approach 127.9			CAM RANH Tower 118.2	
RNAV	Final Apch Crs **019°**	Procedure Alt **CRØ23** **2140′** (2122′)	LNAV MDA(H) **600′** (582′)	Apt Elev 43′ Rwy 18′

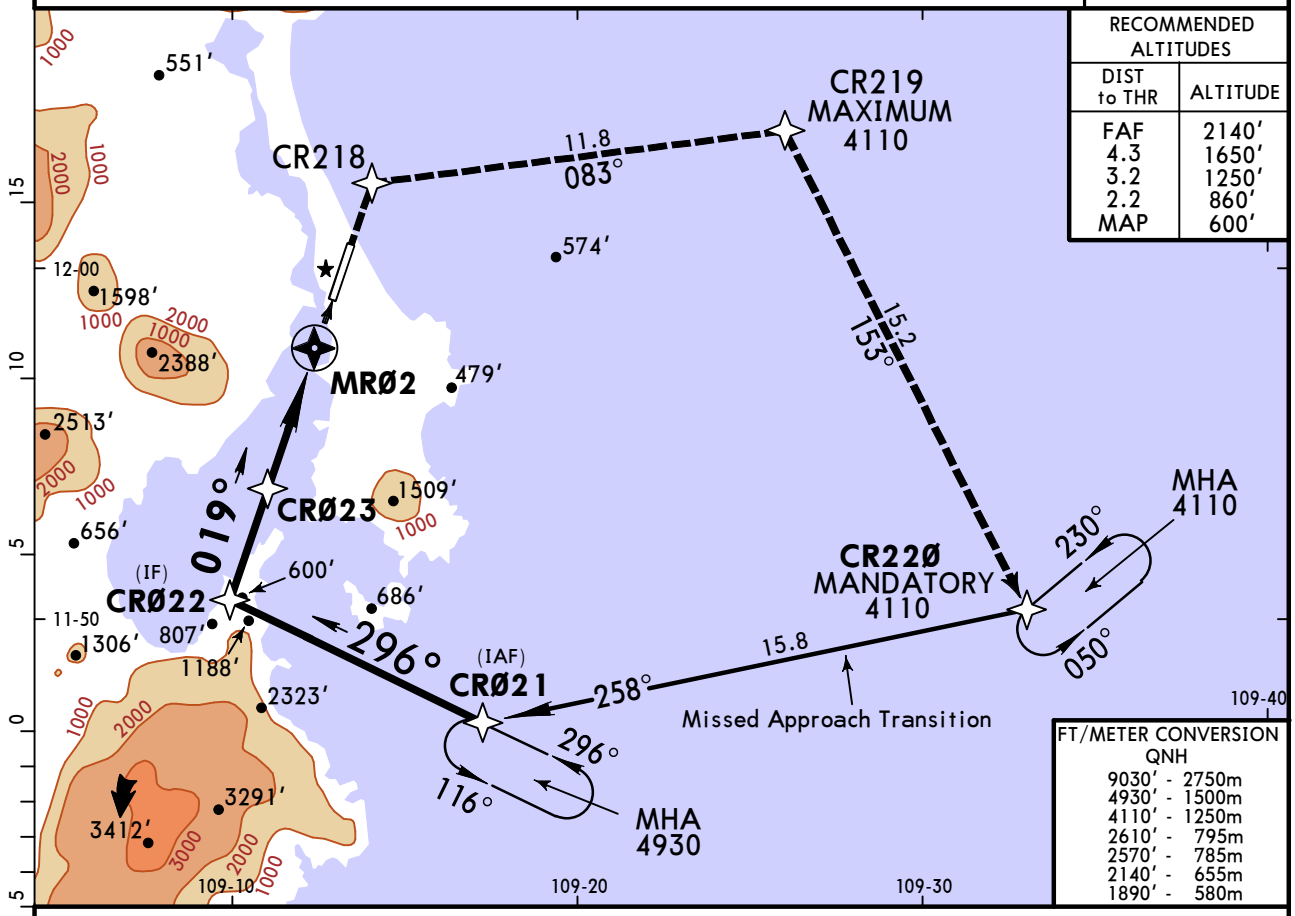
MISSED APCH: Direct to CR218, CR219, CR22Ø at 4110′ to join holding pattern at CR22Ø or follow ATC instructions.

Alt Set: hPa	Rwy Elev: 1 hPa	Trans level: FL 100	Trans alt: 9030′

BRIEFING STRIP™

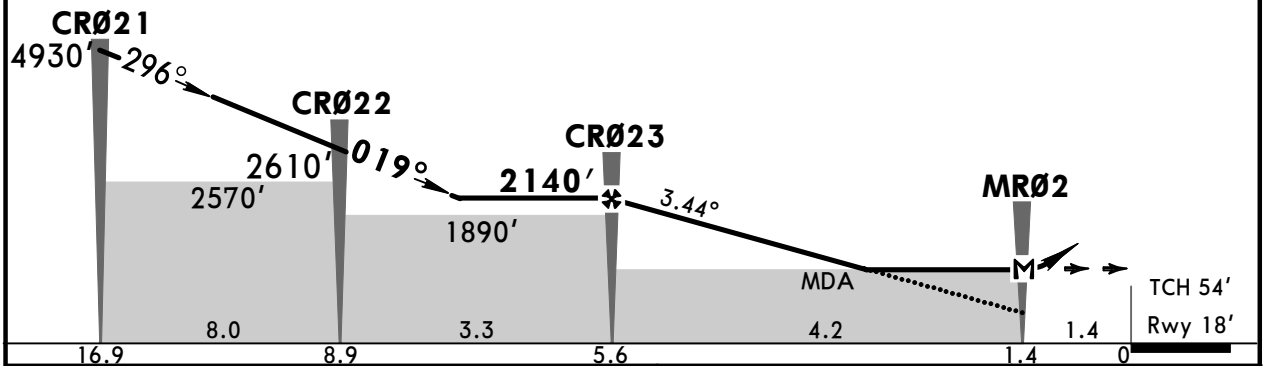


MSA ARP



RECOMMENDED ALTITUDES	
DIST to THR	ALTITUDE
FAF	2140′
4.3	1650′
3.2	1250′
2.2	860′
MAP	600′

FT/METER CONVERSION QNH	
9030′	2750m
4930′	1500m
4110′	1250m
2610′	795m
2570′	785m
2140′	655m
1890′	580m



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.44°	426	548	609	730	852	974
MAP at MRØ2							
CRØ23 to MRØ2	4.2	3:36	2:48	2:31	2:06	1:48	1:35

SALS
PAPI

CR218

STRAIGHT-IN LANDING RWY 02 **CEILING REQUIRED** CIRCLE-TO-LAND

LNAV

MDA(H) **600′** (582′)

	CEIL-VIS	ALS out
A	600′ - 2400m	NOT AUTHORIZED
B		
C	600′ - 3400m	
D	600′ - 4000m	

PANS OPS

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

MISSED APCH CLIMB GRADIENT MIM 4.5%

JEPPESEN

28 DEC 18 (12-2)

KHANH HOA, VIETNAM
RNAV (GNSS) Rwy 20

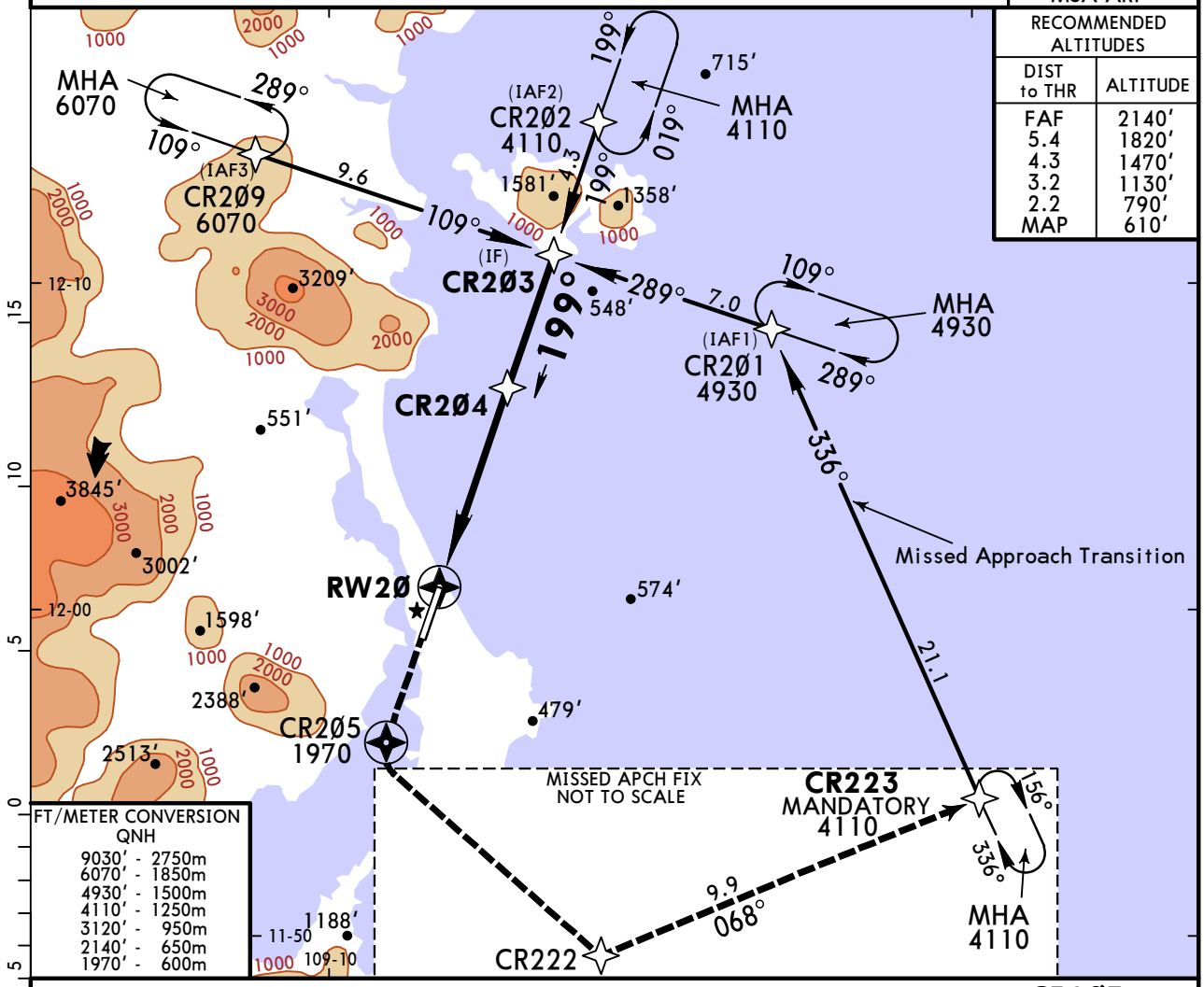
CAM RANH Approach 127.9				CAM RANH Tower 118.2
RNAV	Final Apch Crs **199°**	Procedure Alt **CR2Ø4** **2140′** (2097′)	LNAV MDA(H) **610′** (567′)	Apt Elev 43′ Rwy 43′

MISSED APCH: Direct to CR2Ø5, CR222, CR223 at 4110′ to join holding pattern or follow ATC instructions.

Alt Set: hPa | Rwy Elev: 2 hPa | Trans level: FL 100 | Trans alt: 9030′

MSA ARP: 180° 7600 5500 360°

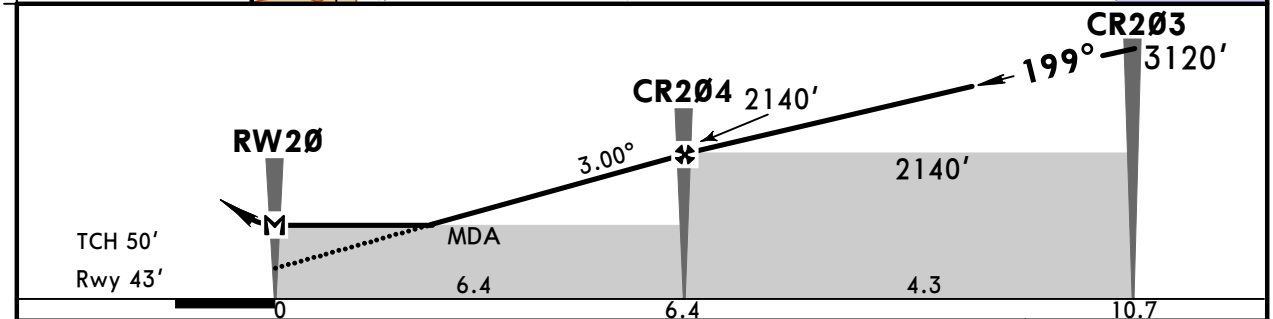
BRIEFING STRIP™



RECOMMENDED ALTITUDES	
DIST to THR	ALTITUDE
FAF	2140′
5.4	1820′
4.3	1470′
3.2	1130′
2.2	790′
MAP	610′

FT/METER CONVERSION QNH

9030′	2750m
6070′	1850m
4930′	1500m
4110′	1250m
3120′	950m
2140′	650m
1970′	600m



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at RW2Ø							
CR2Ø4 to RW2Ø	6.4	5:29	4:16	3:50	3:12	2:45	2:24

SALS PAPI CR2Ø5

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

Missed apch climb gradient mim 4.5%

LNAV

MDA(H) **610′** (567′)

PANS OPS

	CEIL-VIS (ALS out)	
A	610′ - 2400m	NOT AUTHORIZED
B		
C	610′ - 3400m	
D	610′ - 4000m	

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN

28 DEC 18 (13-1)

KHANH HOA, VIETNAM
CAT A & B

VOR Rwy 02

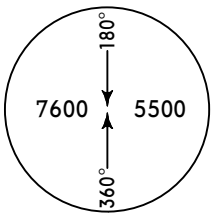
CAM RANH Approach	CAM RANH Tower
127.9	118.2

VOR CRA	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev 43′
116.5	022°	D8.0 2960′ (2942′)	830′ (812′)	Rwy 18′

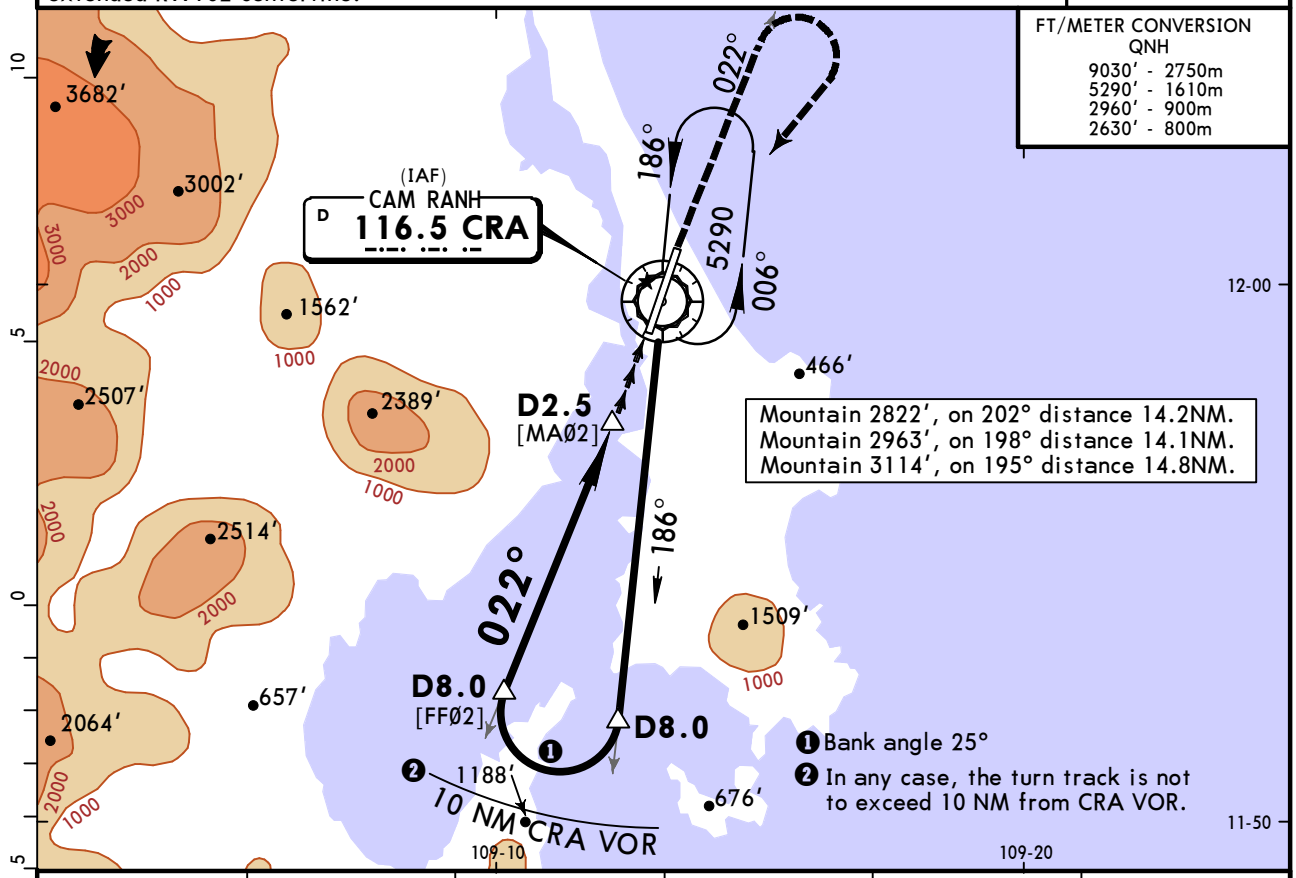
MISSED APCH: Maintain present heading, climb to 5290′, after passing CRA VOR, intercept R-022 CRA VOR, after passing 2630′ turn RIGHT to CRA VOR to join holding pattern or follow ATC instructions.

Alt Set: hPa	Rwy Elev: 1 hPa	Trans level: FL 100	Trans alt: 9030′

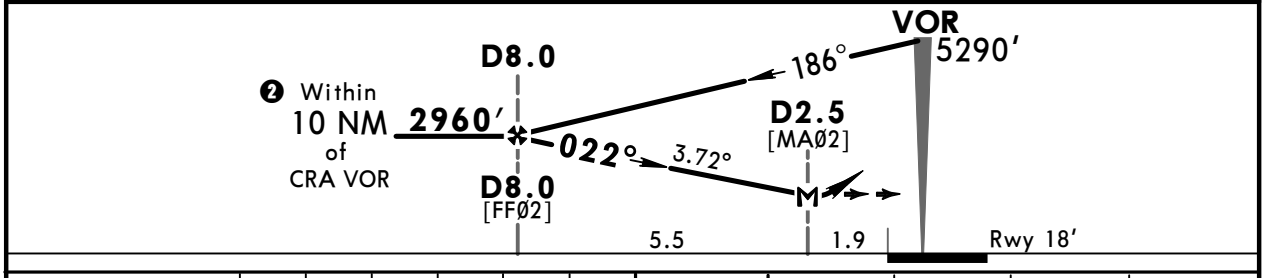
1. Air operators ensure that pilot shall be trained in simulator and report result to CAAV before operating flight. 2. CAAV will check simulator training (for the first time) for each aircraft type. 3. ATC shall confirm pilot to be qualified with this procedure on radio frequency. 4. Final approach track is 4° offset from the West of extended RWY02 centerline.



MSA CRA VOR



DME	7.0	6.0	5.0	4.0	3.0
ALTITUDE	2560′	2170′	1780′	1380′	990′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.72°	461	593	658	790	922	1053
MAP at D2.5 or FAF to MAP	5.5	4:43	3:40	3:18	2:45	2:21	2:04

SALS
REIL
PAPI

Present Hdg

5290′

CRA 116.5

PANS OPS

STRAIGHT-IN LANDING RWY 02 **CEILING REQUIRED** CIRCLE-TO-LAND

	MDA(H) 830′ (812′) CEIL-VIS	ALS out	Max Kts	Not Authorized West of Rwy MDA(H) CEIL-VIS
A	990′- 3000m		100	860′(817′) 1320′- 4000m
B			135	
C	NA		C	NA
D			D	

CHANGES: Communications, CNF's.

VVCR/CXR
CAM RANH INTL

JEPPESEN
28 DEC 18 (13-2)

KHANH HOA, VIETNAM
CAT C
VOR Rwy 02

CAM RANH Approach	CAM RANH Tower
127.9	118.2

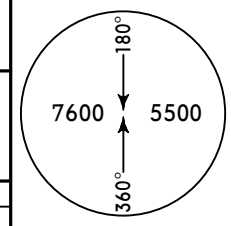
BRIEFING STRIP ™

VOR CRA	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev 43′
116.5	**022°**	**D8.0** **2790′** (2772′)	**830′** (812′)	Rwy 18′

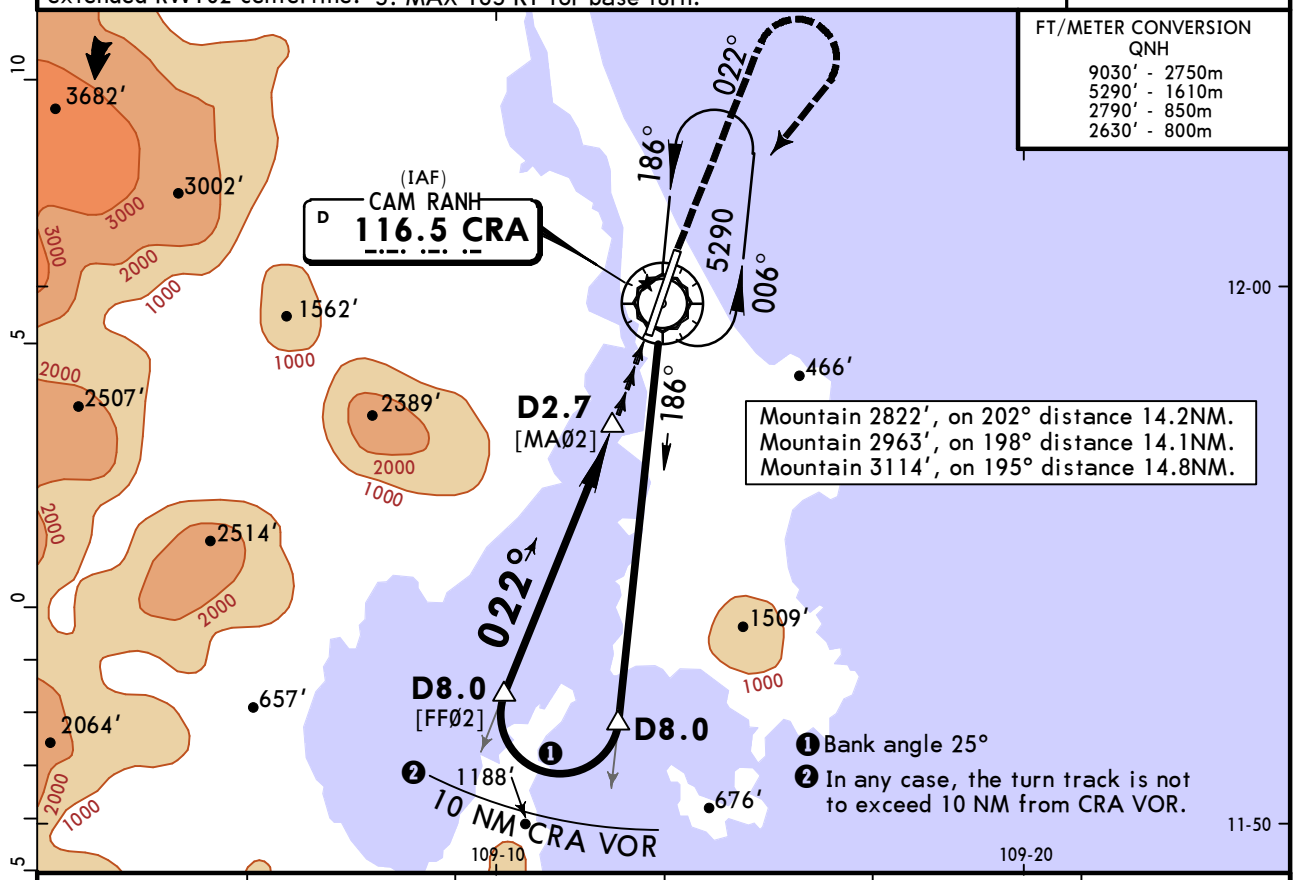
MISSED APCH: Maintain present heading, climb to 5290′, after passing CRA VOR, intercept R-022 CRA VOR, after passing 2630′ turn RIGHT to CRA VOR to join holding pattern or follow ATC instructions.

Alt Set: hPa	Rwy Elev: 1 hPa	Trans level: FL 100	Trans alt: 9030′

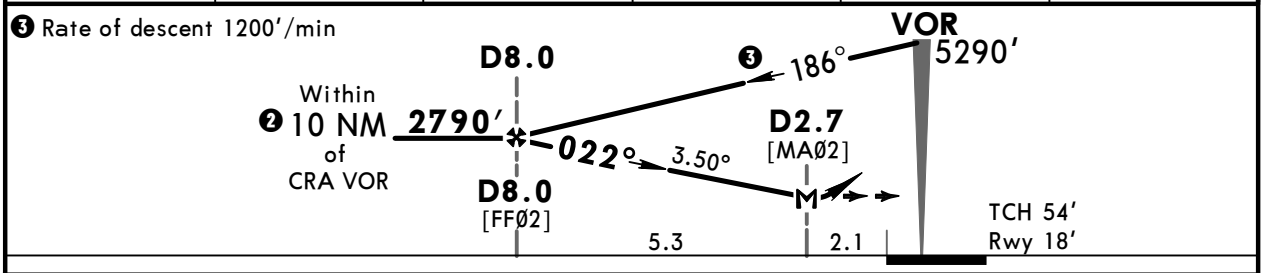
1. Air operators ensure that pilot shall be trained in simulator and report result to CAAV before operating flight. 2. CAAV will check simulator training (for the first time) for each aircraft type. 3. ATC shall confirm pilot to be qualified with this procedure on radio frequency. 4. Final approach track is 4° offset from the West of extended RWY02 centerline. 5. MAX 165 KT for base turn.



MSA CRA VOR



DME	7.0	6.0	5.0	4.0	3.0
ALTITUDE	2560′	2170′	1780′	1380′	990′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.50°	434	557	619	743	867	991
MAP at D2.7 or FAF to MAP	5.3	4:33	3:32	3:11	2:39	2:16	1:59

SALS
PAPI
REIL

Present Hdg

5290′

CRA 116.5

PANS OPS

STRAIGHT-IN LANDING RWY 02 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) **830′** (812′)

	CEIL-VIS	ALS out
A	NA	
B		
C	1320′ - 4500m	
D	NA	

Not Authorized West of Rwy

Max Kts	MDA(H)	CEIL-VIS
A	NA	
B		
180	960′ (917′)	1810′ - 5000m
D	NA	

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN

28 DEC 18 (13-3)

KHANH HOA, VIETNAM
VOR Z Rwy 20

CAM RANH Approach 127.9 | CAM RANH Tower 118.2

VOR CRA	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev 43′
116.5	195°	D7.8 2240′ (2197′)	660′ (617′)	Rwy 43′

MISSED APCH: Maintain present track, climb to 3940′ passing 1970′ turn LEFT to intercept CRA VOR R-119 to D21.6/R-119 CRA VOR join holding pattern at CR223 or follow ATC instructions.

Alt Set: hPa | Rwy Elev: 2 hPa | Trans level: FL 100 | Trans alt: 9030′

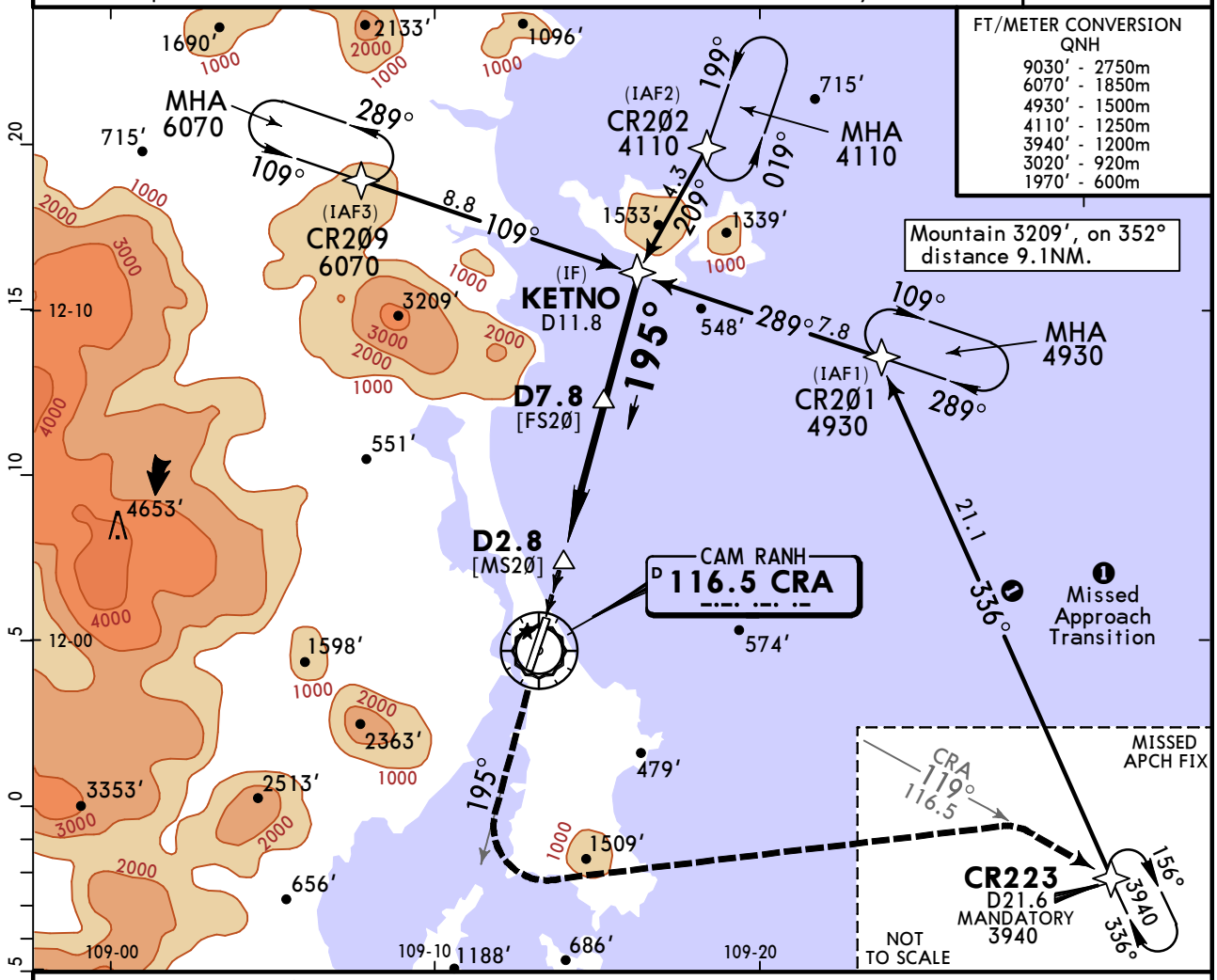
RNP 1 for initial approach and missed approach segments

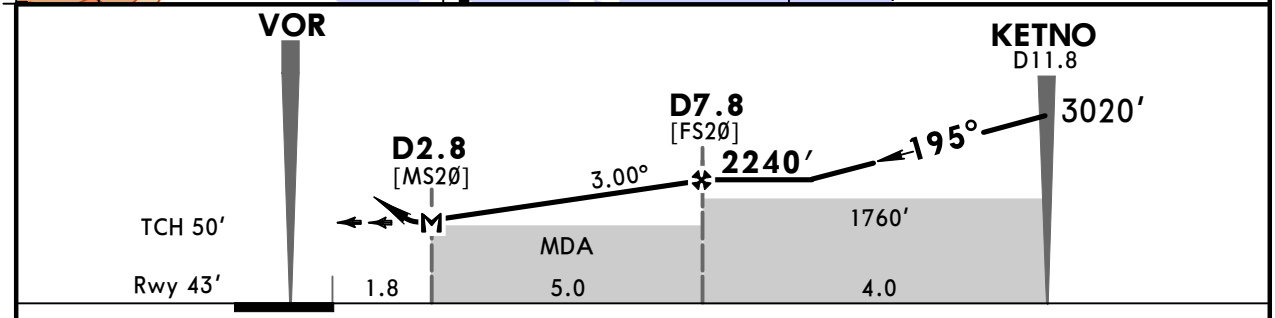
1. DME required. 2. Final track is 3° offset from the west of centerline of Rwy 20.

BRIEFING STRIP™

MSA CRA VOR: 180° 7600 5500 360°

FT/METER CONVERSION QNH
9030′ - 2750m
6070′ - 1850m
4930′ - 1500m
4110′ - 1250m
3940′ - 1200m
3020′ - 920m
1970′ - 600m





Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at D2.8 or FAF to MAP	5.0	4:17	3:20	3:00	2:30	2:09	1:53

SALS / PAPI

maintain present track | 3940′ | 1970′ LT

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) 660′ (617′)

Not Authorized West of Airport

	CEILING-VISIBILITY (ALS out)	Max Kts	MDA(H)	CEIL-VIS
A	660′- 2400m	100	920′ (877′)	1320′- 4000m
B		135		
C	660′- 3400m	180	1250′ (1207′)	1810′- 5000m
D	660′- 4000m	205	2630′ (2587′)	2630′- 5000m

PANS-OPS

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN
28 DEC 18 (13-4)

KHANH HOA, VIETNAM
VOR Y Rwy 20

CAM RANH Approach	CAM RANH Tower
127.9	118.2

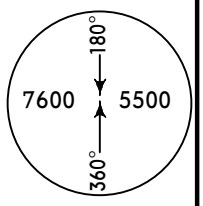
BRIEFING STRIP

VOR CRA	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev 43'
116.5	195°	D7.8 2240' (2197')	660' (617')	Rwy 43'

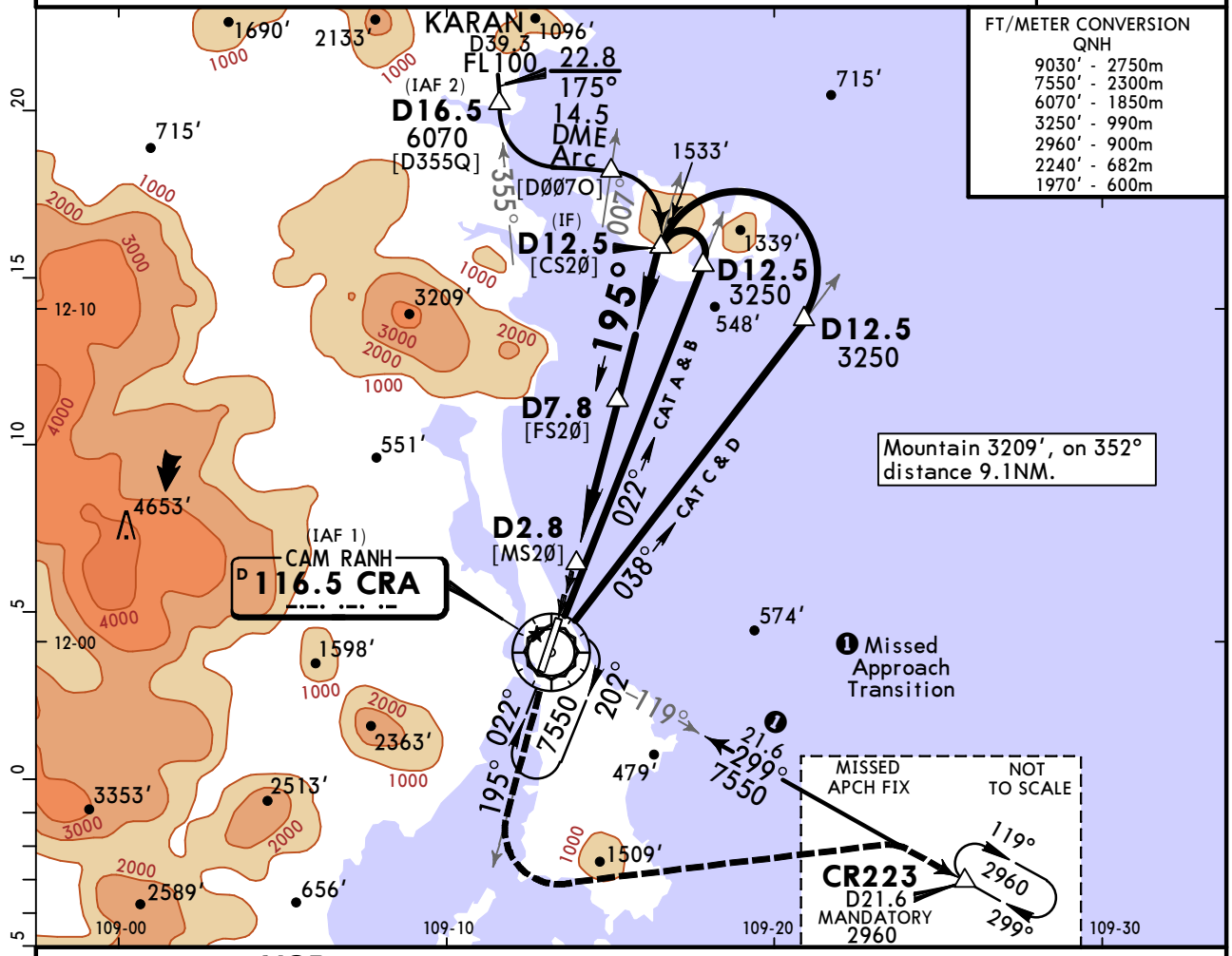
MISSED APCH: Maintain present track, climb to 2960' passing 1970' turn LEFT to intercept CRA VOR R-119 to D21.6/R-119 CRA VOR join holding pattern at CR223 or follow ATC instructions.

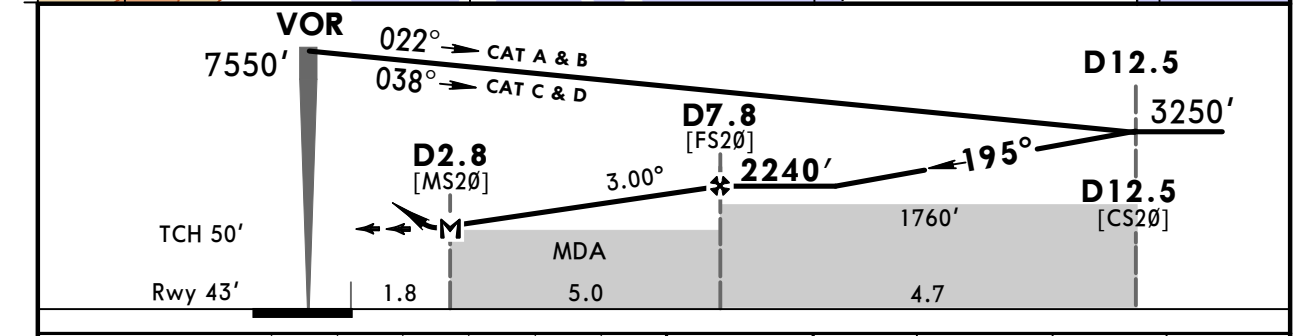
Alt Set: hPa	Rwy Elev: 2 hPa	Trans level: FL 100	Trans alt: 9030'

1. DME required. 2. Final track is 3° offset from the west of centerline of Rwy 20.



MSA CRA VOR





Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	3.00°	372	478	531	637	743	849
MAP at D2.8 or FAF to MAP	5.0	4:17	3:20	3:00	2:30	2:09	1:53

SALS
PAPI

maintain present track

2960'

1970' LT

PANS-OPS

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) 660' (617')

ALS out

	CEILING-VISIBILITY
A	660' - 2400m
B	660' - 3400m
C	660' - 3400m
D	660' - 4000m

Not Authorized West of Airport

Max Kts	MDA(H)	CEIL-VIS
100	920' (877')	1320' - 4000m
135	920' (877')	1320' - 4000m
180	1250' (1207')	1810' - 5000m
205	2630' (2587')	2630' - 5000m

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN

28 DEC 18 (13-5)

KHANH HOA, VIETNAM
VOR X Rwy 20

CAM RANH Approach 127.9	CAM RANH Tower 118.2

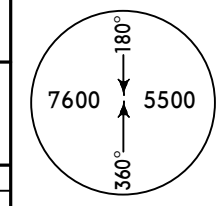
VOR CRA	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev 43′
116.5	195°	D7.0 1880′ (1837′)	660′ (617′)	Rwy 43′

MISSED APCH: Turn LEFT immediately to intercept CRA VOR R-090 outbound climbing to 1970′, then turn LEFT to CRA VOR to join holding pattern or follow ATC instructions.

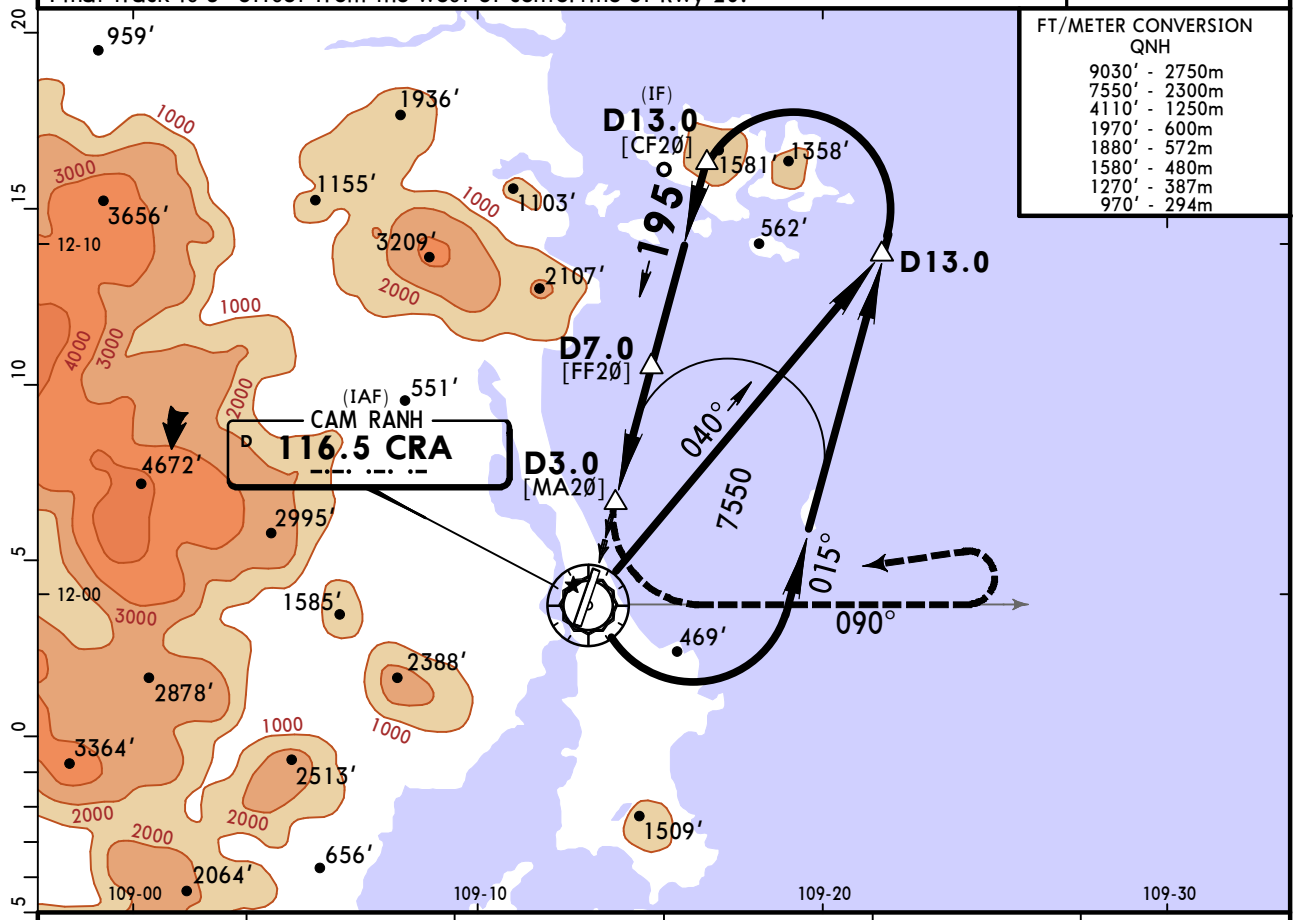
Alt Set: hPa	Rwy Elev: 2 hPa	Trans level: FL 100	Trans alt: 9030′

DME required

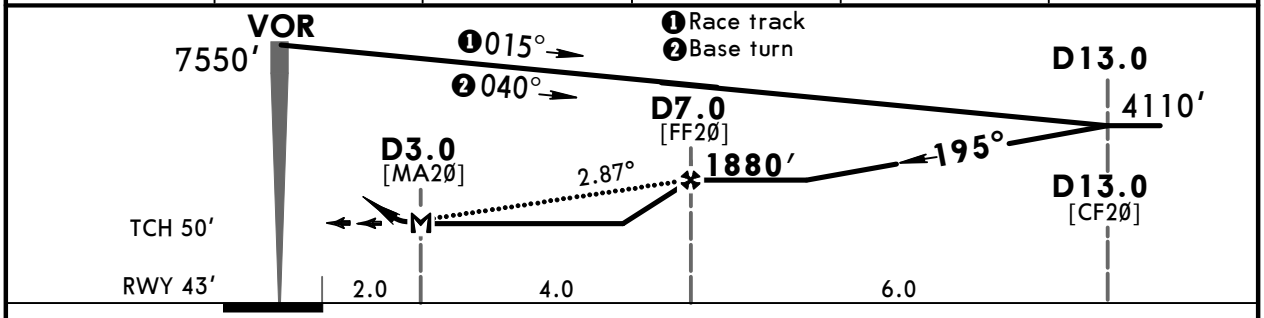
Final track is 3° offset from the west of centerline of Rwy 20.



MSA CRA VOR



DME	3.0	4.0	5.0	6.0	7.0
ALTITUDE	660′	970′	1270′	1580′	1880′



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	2.87°	355	457	508	609	711	812
MAP at D3.0 or FAF to MAP	4.0	3:26	2:40	2:24	2:00	1:43	1:30

SALS
PAPI

1970′ LT on CRA 116.5 R-090

LT CRA 116.5

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) 660′ (617′)

Not Authorized West of Airport

	CEILING-VISIBILITY (ALS out)
A	660′ - 2400m
B	660′ - 3400m
C	660′ - 3400m
D	660′ - 4000m

Max Kts	MDA(H)	CEIL-VIS
100	920′ (877′)	1320′-4000m
135		
180	1250′ (1207′)	1810′- 5000m
205	2630′ (2587′)	2630′- 5000m

PANS-OPS

CHANGES: Communications.

JEPPESEN

VVCR/CXR
CAM RANH INTL

28 DEC 18 (13-6)

KHANH HOA, VIETNAM
VOR W Rwy 20
(Approach From North)

CAM RANH Approach 127.9	CAM RANH Tower 118.2

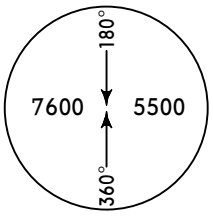
VOR CRA	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev 43'
116.5	**195°**	**D7.0** **1880'** (1837')	**660'** (617')	Rwy 43'

MISSED APCH: Turn LEFT immediately to intercept CRA VOR R-090 outbound climbing to 1970', then turn LEFT to CRA VOR to join holding pattern or follow ATC instructions.

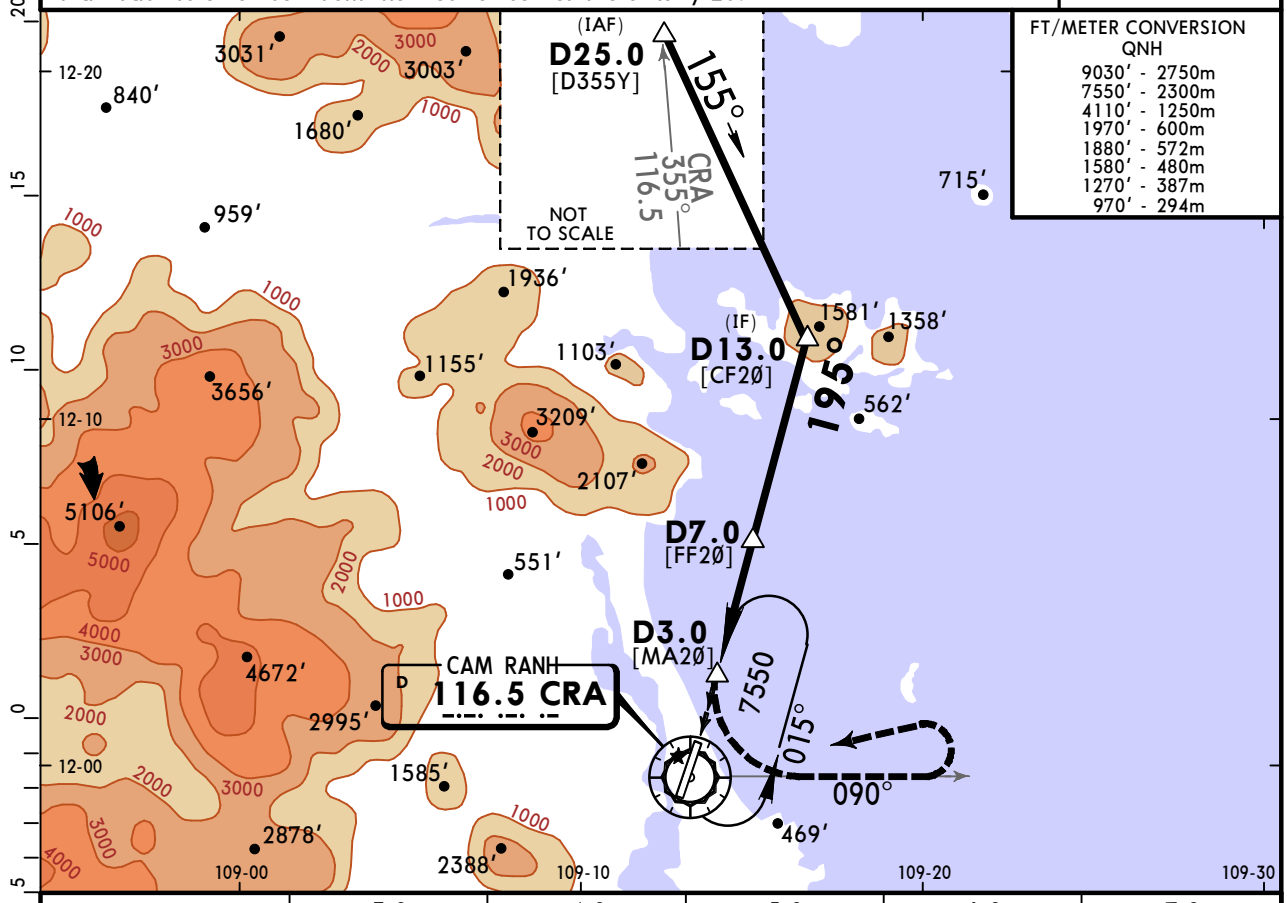
Alt Set: hPa	Rwy Elev: 2 hPa	Trans level: FL 100	Trans alt: 9030'
DME required			

Final track is 3° offset from the west of centerline of Rwy 20.

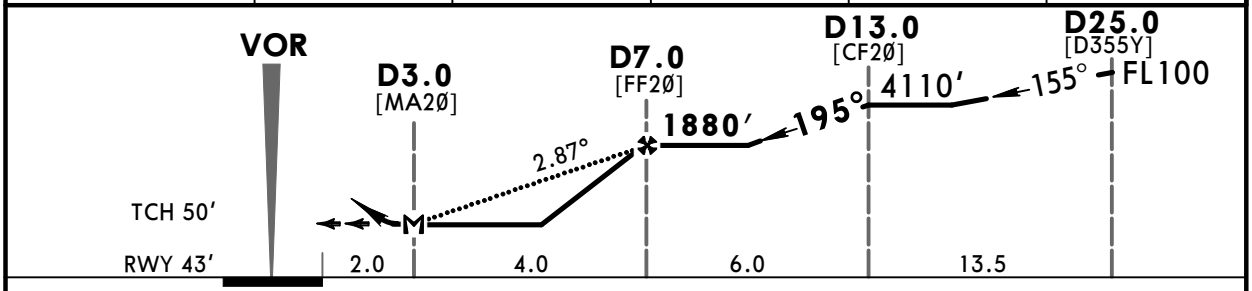
BRIEFING STRIP™



MSA CRA VOR



DME	3.0	4.0	5.0	6.0	7.0
ALTITUDE	660'	970'	1270'	1580'	1880'



Gnd speed-Kts		70	90	100	120	140	160
Descent Angle	2.87°	355	457	508	609	711	812
MAP at D3.0 or FAF to MAP	4.0	3:26	2:40	2:24	2:00	1:43	1:30

SALS
PAPI

1970' LT on CRA 116.5 R-090 LT

CRA 116.5

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) **660'** (617')

Not Authorized West of Airport

	CEILING-VISIBILITY	ALS out	Max Kts	MDA(H)	CEIL-VIS
A	660' - 2400m		100	920' (877')	1320' - 4000m
B			135		
C	660' - 3400m		180	1250' (1207')	1810' - 5000m
D	660' - 4000m		205	2630' (2587')	2630' - 5000m

PANS-OPS

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN
28 DEC 18 (16-1)

KHANH HOA, VIETNAM
CAT A & B
NDB Rwy 20

BRIEFING STRIP™

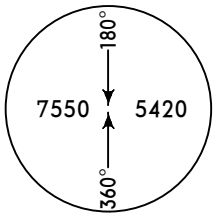
CAM RANH Approach	CAM RANH Tower
127.9	118.2

NDB CR	Final Apch Crs	No FAF	MDA(H)	Apt Elev 43′
414	205°		1970′ (1927′)	Rwy 43′

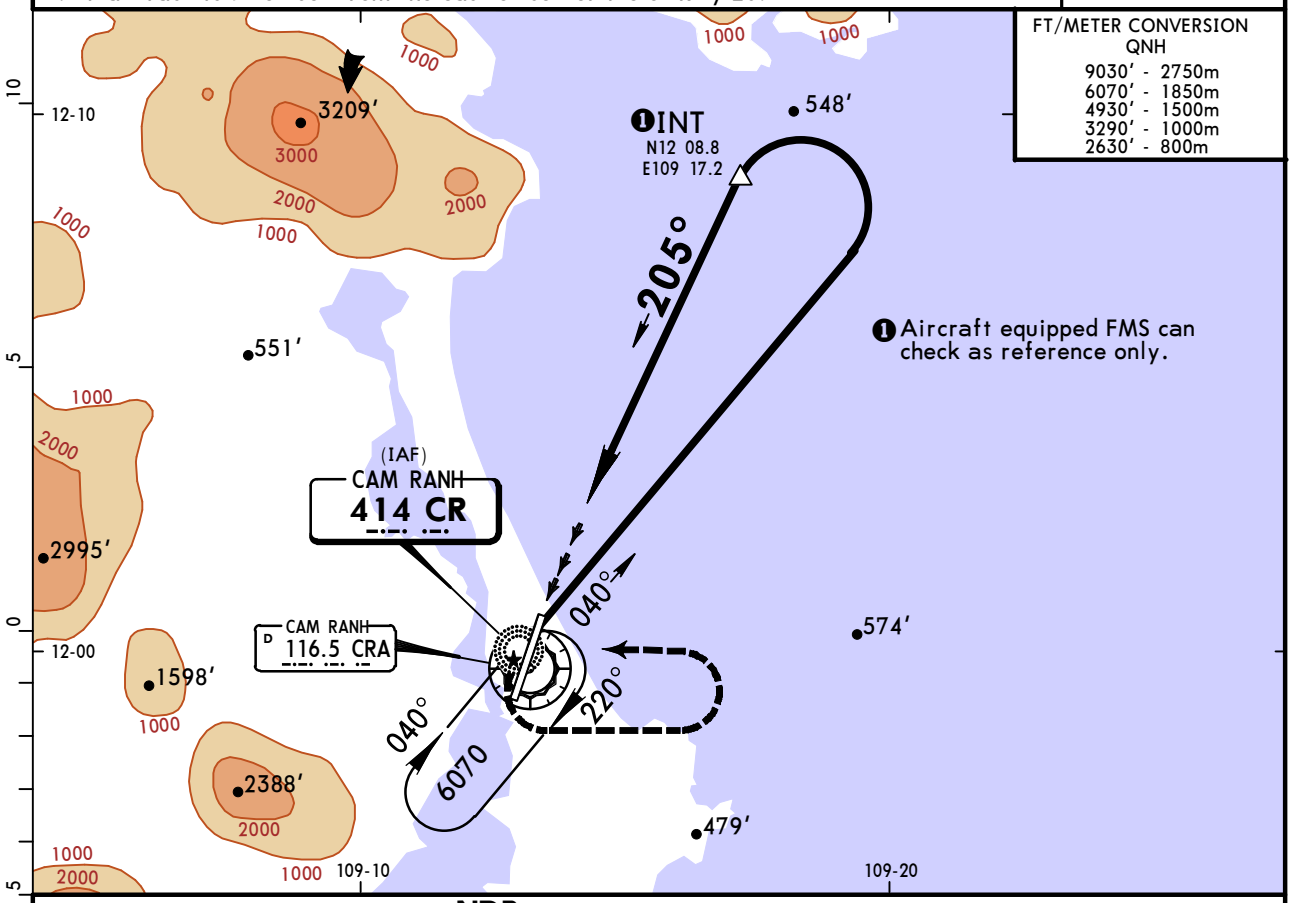
MISSED APCH: Climb to 3290′ or above at CR NDB, then turn LEFT proceed to the east for climbing to 4930′ then turn LEFT proceed to CR NDB at 6070′ to join holding pattern or follow ATC instructions.

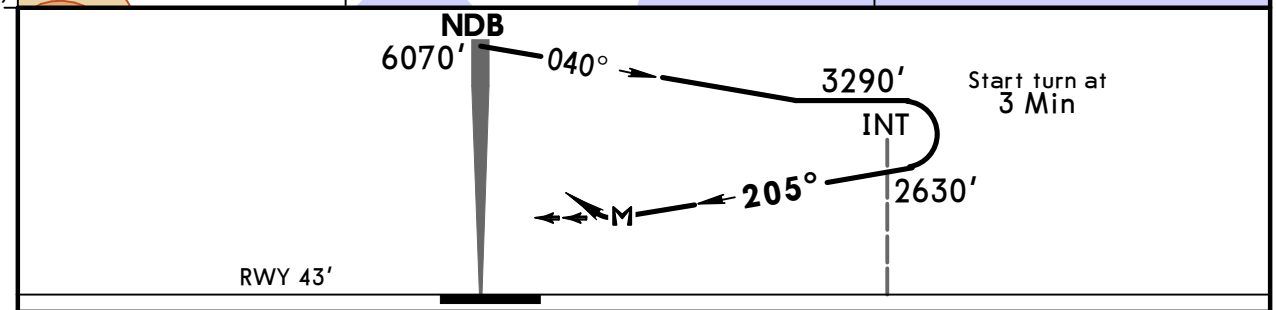
Alt Set: hPa	Rwy Elev: 1 hPa	Trans level: FL 100	Trans alt: 9030′

1. Final track is 7° offset from the east of centerline of Rwy 20.



MSA CR NDB





MAP at MDA								SALS PAPI	3290′ or above	CR 414

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) **1970′** (1927′)

	CEILING-VISIBILITY ALS out	Max Kts	MDA(H)	CEIL-VIS
A	1970′-6000m	100	2300′ (2257′)	2300′-6000m
B		135		
C	NA	C	NA	
D		D		

Not Authorized West of Airport

CHANGES: Communications.

VVCR/CXR
CAM RANH INTL

JEPPESEN
28 DEC 18 (16-2)

KHANH HOA, VIETNAM
CAT C & D
NDB Rwy 20

BRIEFING STRIP™

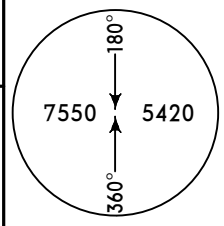
CAM RANH Approach	CAM RANH Tower
127.9	118.2

NDB CR	Final Apch Crs	No FAF	MDA(H)	Apt Elev 43′
414	205°		1970′ (1927′)	Rwy 43′

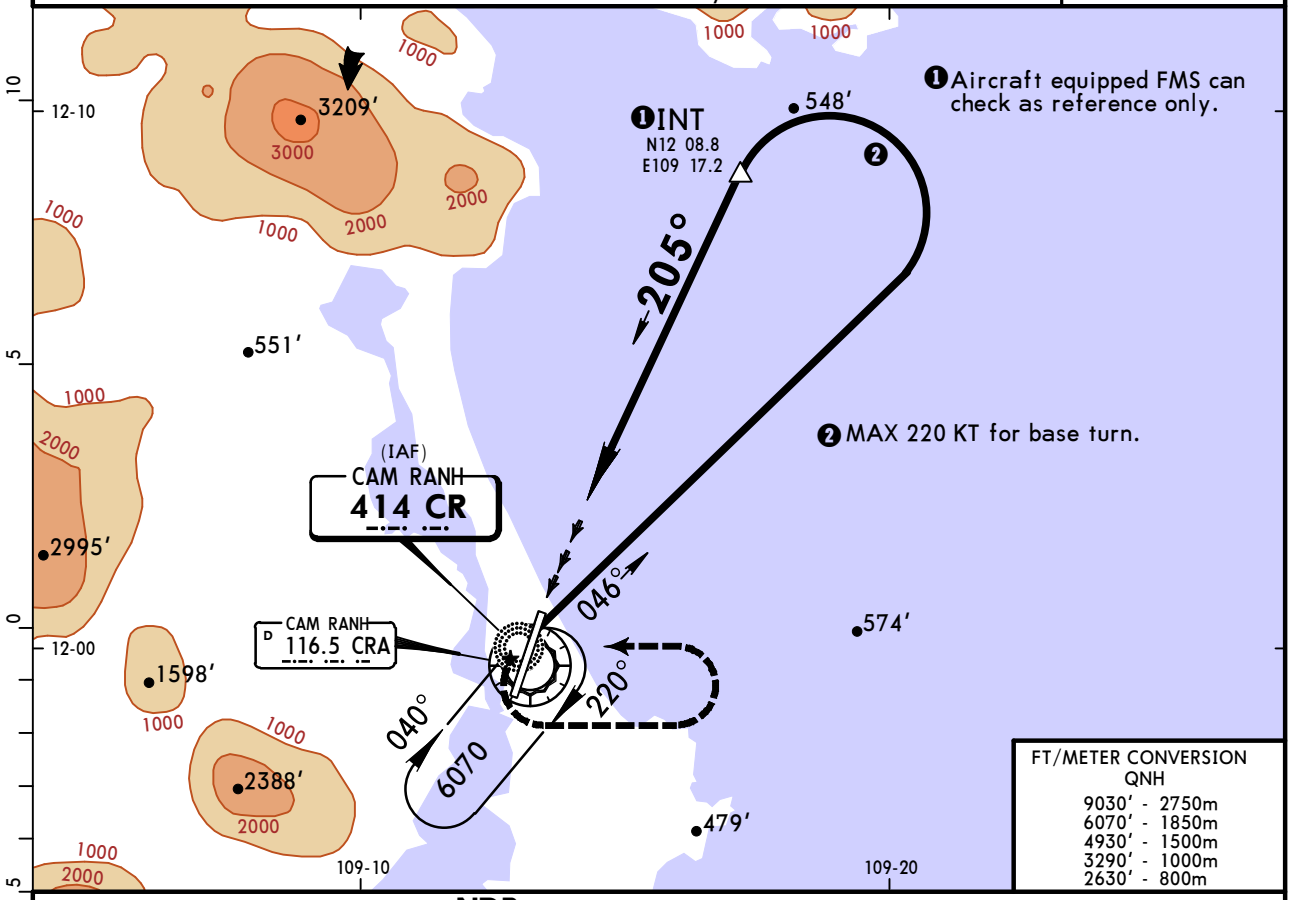
MISSED APCH: Climb to 3290′ or above at CR NDB, then turn LEFT proceed to the east for climbing to 4930′ then turn LEFT proceed to CR NDB at 6070′ to join holding pattern or follow ATC instructions.

Alt Set: hPa	Rwy Elev: 1 hPa	Trans level: FL 100	Trans alt: 9030′

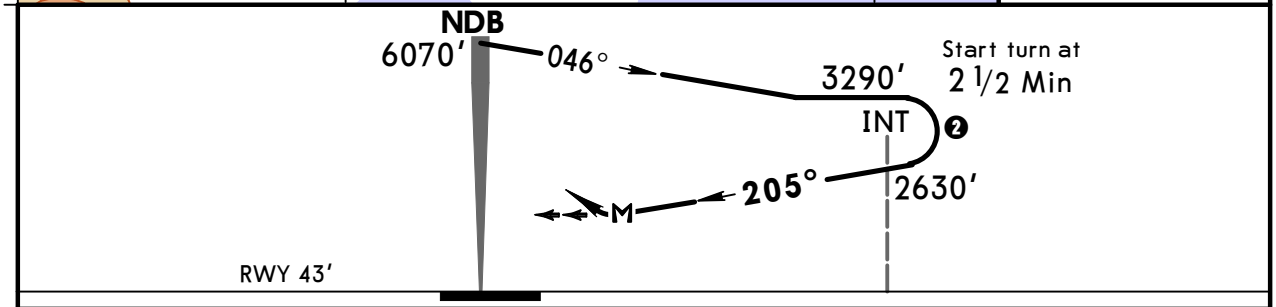
1. Final track is 7° offset from the east of centerline of Rwy 20.



MSA CR NDB



FT/METER CONVERSION
QNH
9030′ - 2750m
6070′ - 1850m
4930′ - 1500m
3290′ - 1000m
2630′ - 800m



							SALS PAPI	3290′ or above
MAP at MDA								

CR 414

STRAIGHT-IN LANDING RWY 20 **CEILING REQUIRED** CIRCLE-TO-LAND

MDA(H) **1970′** (1927′)

	CEILING-VISIBILITY ALS out	Max Kts	MDA(H) CEIL-VIS
A	NA	A	NA
B		B	
C	1970′-6000m	180	2960′ (2917′) 2960′-6000m
D		205	

Not Authorized West of Airport

CHANGES: Communications.

Chart changes since cycle 01-2019

ADD = added chart, REV = revised chart, DEL = deleted chart.

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE

KHANH HOA, (CAM RANH INTL - VVCR)

TERMINAL CHART CHANGE NOTICES

No Chart Change Notices for Airport VVCR