

List of pages in this Trip Kit

- Trip Kit Index
- Airport Information For YMML
- Terminal Charts For YMML
- Revision Letter For Cycle 01-2015
- Change Notices
- Notebook

General Information

Location: Melbourne VI Aus
IATA Code: MEL
Lat/Long: S37° 40.4' E144° 50.6'
Elevation: 434 ft

Airport Use: Public
Magnetic Variation: 11.4°E

Fuel Types: 100-130 Octane, Jet A-1
Repair Types: Major Airframe, Major Engine
Customs: Yes
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 1906 Z
Sunset: 0946 Z,

Runway Information

Runway: 09
Length x Width: 7500 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 395 ft
Lighting: Edge
Stopway: 197 ft

Runway: 16
Length x Width: 11998 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 432 ft
Lighting: Edge, ALS, Centerline, TDZ
Stopway: 197 ft

Runway: 27
Length x Width: 7500 ft x 148 ft
Surface Type: asphalt
TDZ-Elev: 407 ft
Lighting: Edge, ALS, Centerline, TDZ
Stopway: 197 ft

Runway: 34
Length x Width: 11998 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 330 ft

Lighting: Edge, ALS, Centerline
Stopway: 197 ft

Communication Information

ATIS 118.0
ATIS 114.1
Melbourne Tower 120.5
Melbourne Ground Control 121.7
Melbourne Intl Clearance Delivery 127.2
Melbourne Approach Control 132.0
Melbourne Departure Control 129.4 (263°-93°)
Melbourne Departure Control 118.9 (264°-92°)
Fire Rescue Operations 131.0

AIR TRAFFIC FLOW MANAGEMENT PROCEDURES

Ground Delay Program (GDP)

Melbourne GDPs are applicable to all fixed wing, non priority flights departing from all Australian domestic airports, and arriving at Melbourne daily between the hours of 2000-1300 UTC, as adjusted by daylight saving variations.

Except as specified in Note 1 below, flights from all Australian airports are required to operate in accordance with the Calculated Off Blocks Time (COBT). The COBT can be obtained through their company or the National Operations Center on 1800 020 626.

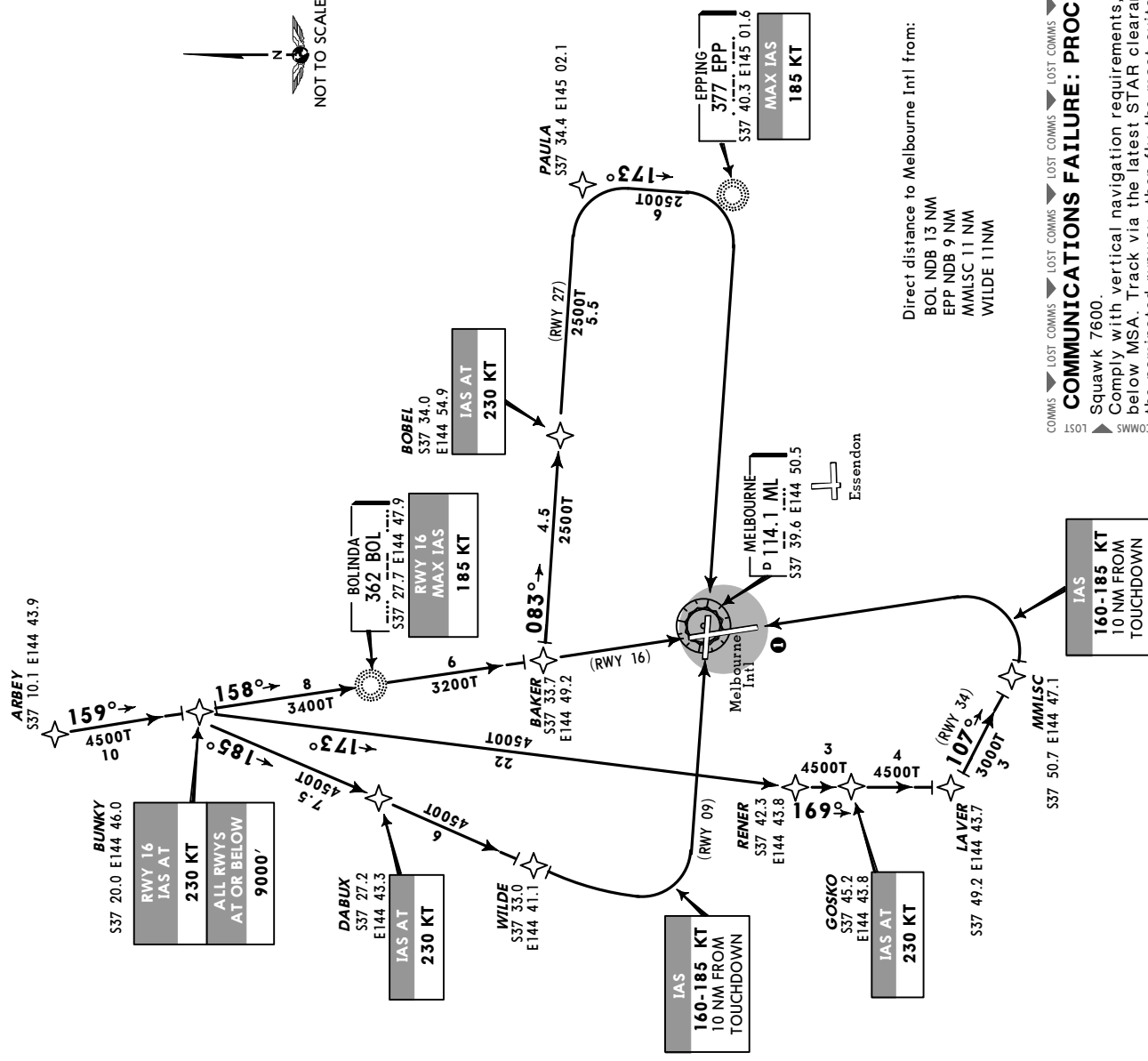
Note 1: COBTs generated by Perth Departure Management Program will take precedence over COBTs generated by the Melbourne Arrivals GDP.

Flights departing within a 60NM radius of Melbourne must also obtain a start clearance from the departure airport tower when active or from Melbourne ATC 03 9235 7337

For full information regarding the Ground Delay Program see AIR TRAFFIC FLOW MANAGEMENT in Airway Manual - Air Traffic Control - Australia - Flight Planning.

TRANS LEVEL: FL 110
TRANS ALT: 10000'

ARB EY FIVE ZULU ARRIVAL
[ARB E5Z]



Direct distance to Melbourne Intl from:

BOL NDB	13 NM
EPP NDB	9 NM
MMLSC	11 NM
WILDE	11NM

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

► Squawk 7600.
Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ARRIVAL

From ARBEY track 159° to BUNKY.
Cross BUNKY at or below 900', then:

RWY 09 ZULU: Turn RIGHT, track 185° to DABUX. IAS at 230 KT from DABUX. Track 185° to WILDE. Track via RNAV-Z (GNSS) RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.

RWY 16 ZULU: IAS at 230 KT from BUNKY. Track 158° to BOL NDB. MAX IAS 185 KT from BOL NDB. Track via RNAV-Z (GNSS) RWY 16.

RWY 27 ZULU: Track 158° to BAKER. Turn LEFT, track 083° to BOBEL. IAS at 230 KT from BOBEL. Track 083° to PAULA. Turn RIGHT, track 173° to EPP NDB. MAX IAS 185 KT from EPP NDB. Track via RNAV-Z (GNSS) RWY 27.

RWY 34 ZULU: Turn RIGHT, track 173° to RENER. Turn LEFT, track 169° to GOSKO. IAS at 230 KT from GOSKO. Track 169° to LAVER. Turn LEFT, track 107° to MMLSC. Track via RNAV-Z (GNSS) RWY 34. IAS 160-185 KT from 10 NM to TOUCHDOWN.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

YMML MELBOURNE INTL

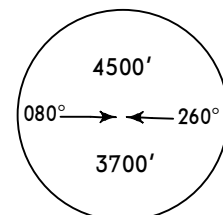
TRANS LEVEL: FL 110
TRANS ALT: 10000'

BADGR TWO PAPA ARRIVAL [BADG2P]

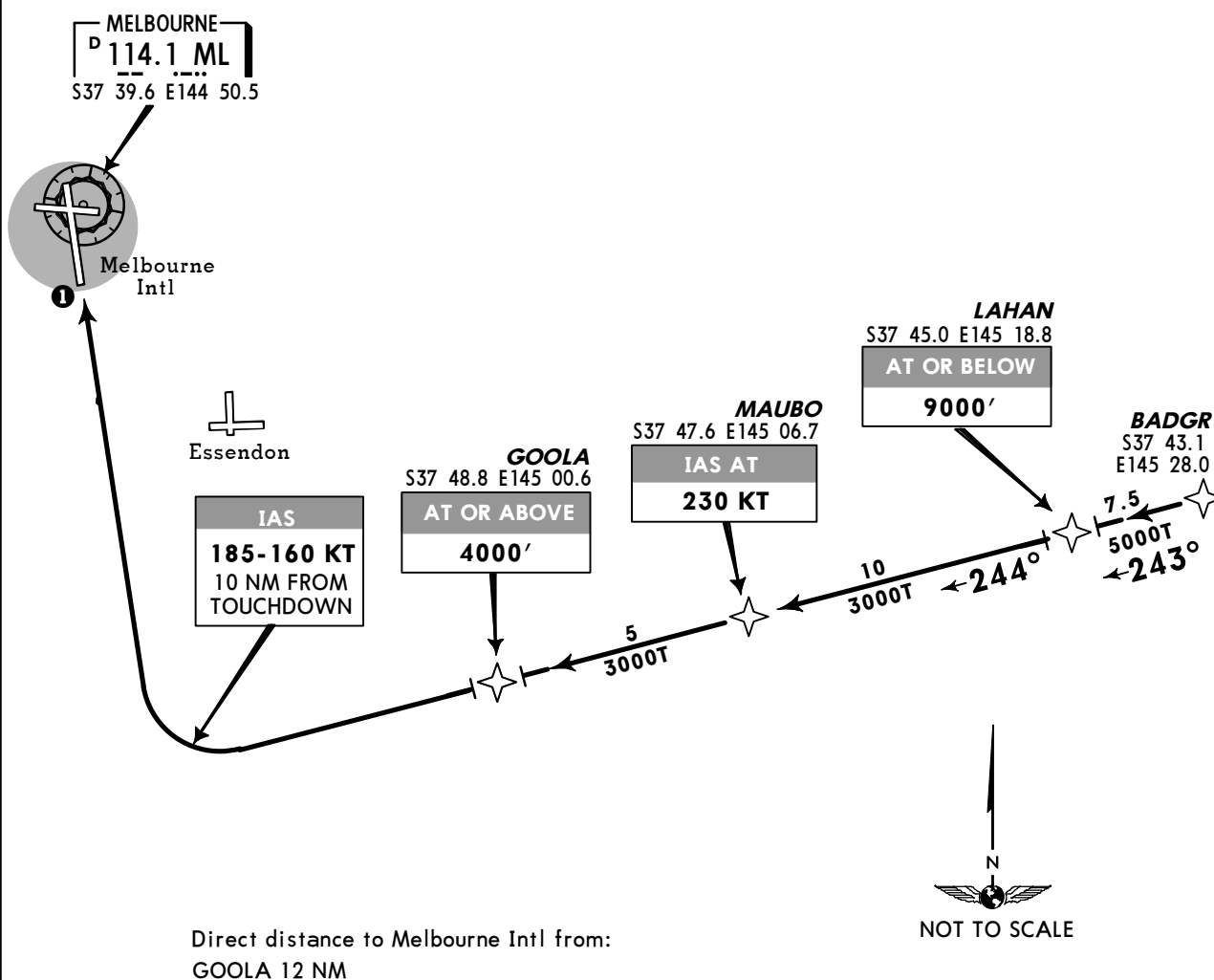
RWY 34 PAPA: From BADGR track 243° to LAHAN. Cross LAHAN at or below 9000'. Track 244° to MAUBO. IAS at 230 KT from MAUBO. Track 244° to GOOLA. Cross GOOLA at or above 4000'. Track via RNAV-P (RNP) RWY 34. IAS 185-160 KT 10 NM from TOUCHDOWN.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MSA ML VOR
3300' within 10 NM



Direct distance to Melbourne Intl from:
GOOLA 12 NM

LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

YMML MELBOURNE INTL

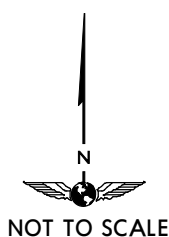
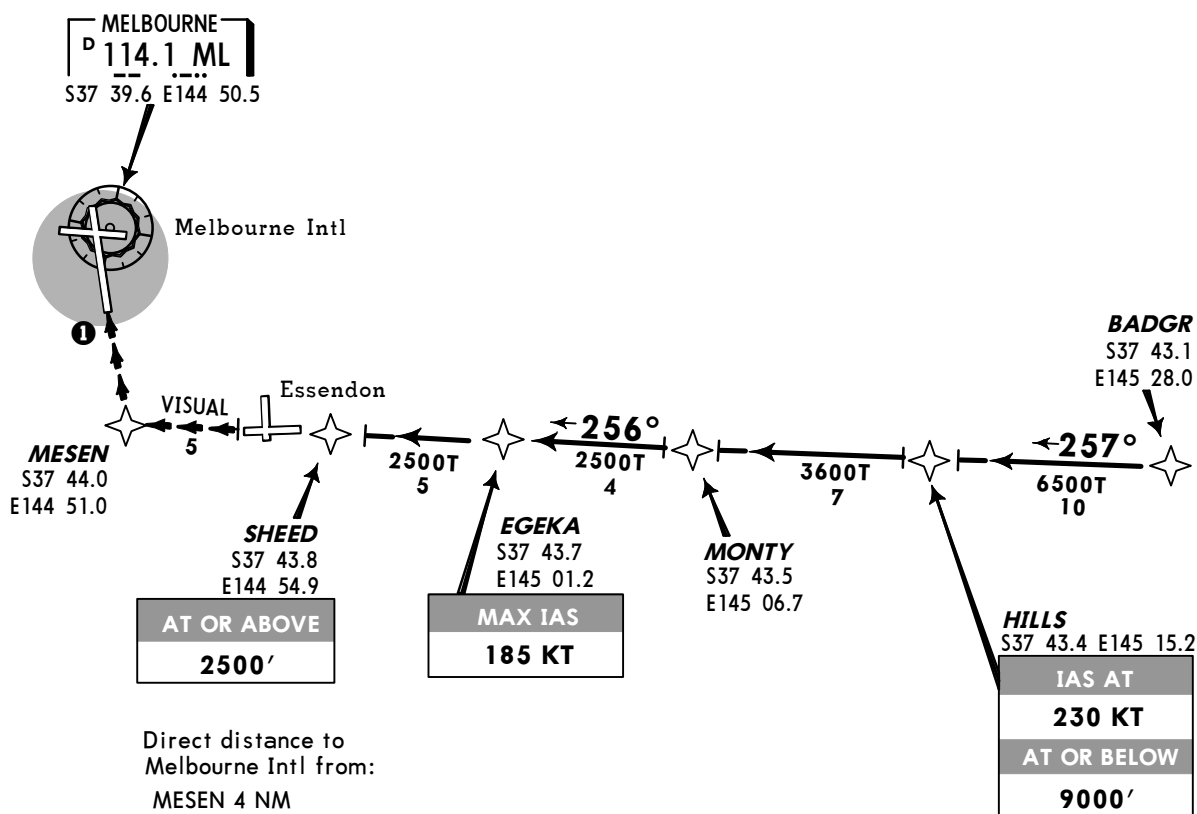
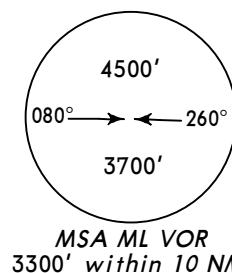
TRANS LEVEL: FL 110
TRANS ALT: 10000'

BADGR TWO VICTOR ARRIVAL [BADG2V]

RWY 34 VICTOR: From BADGR track 257° to HILLS. Cross HILLS at or below 9000'. IAS at 230 KT from HILLS. Track 257° to MONTY. Track 256° to EGEKA. MAX IAS 185 KT from EGEKA. Track 256° to SHEED. Cross SHEED at or above 2500'. Track 256° VISUAL to MESEN. Turn RIGHT for VISUAL intercept of final RWY 34.

GNSS permitted in lieu of DME
Reference waypoint ML VOR

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

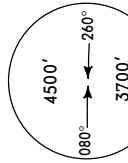
Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

LOST COMMS ▼

ATIS 114.1 118.0
MELBOURNE Approach (R) 132.0

TRANS LEVEL: FL 110
TRANS ALT: 10000'

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MSA ML VOR
3300' within 10 NM

ARRIVAL

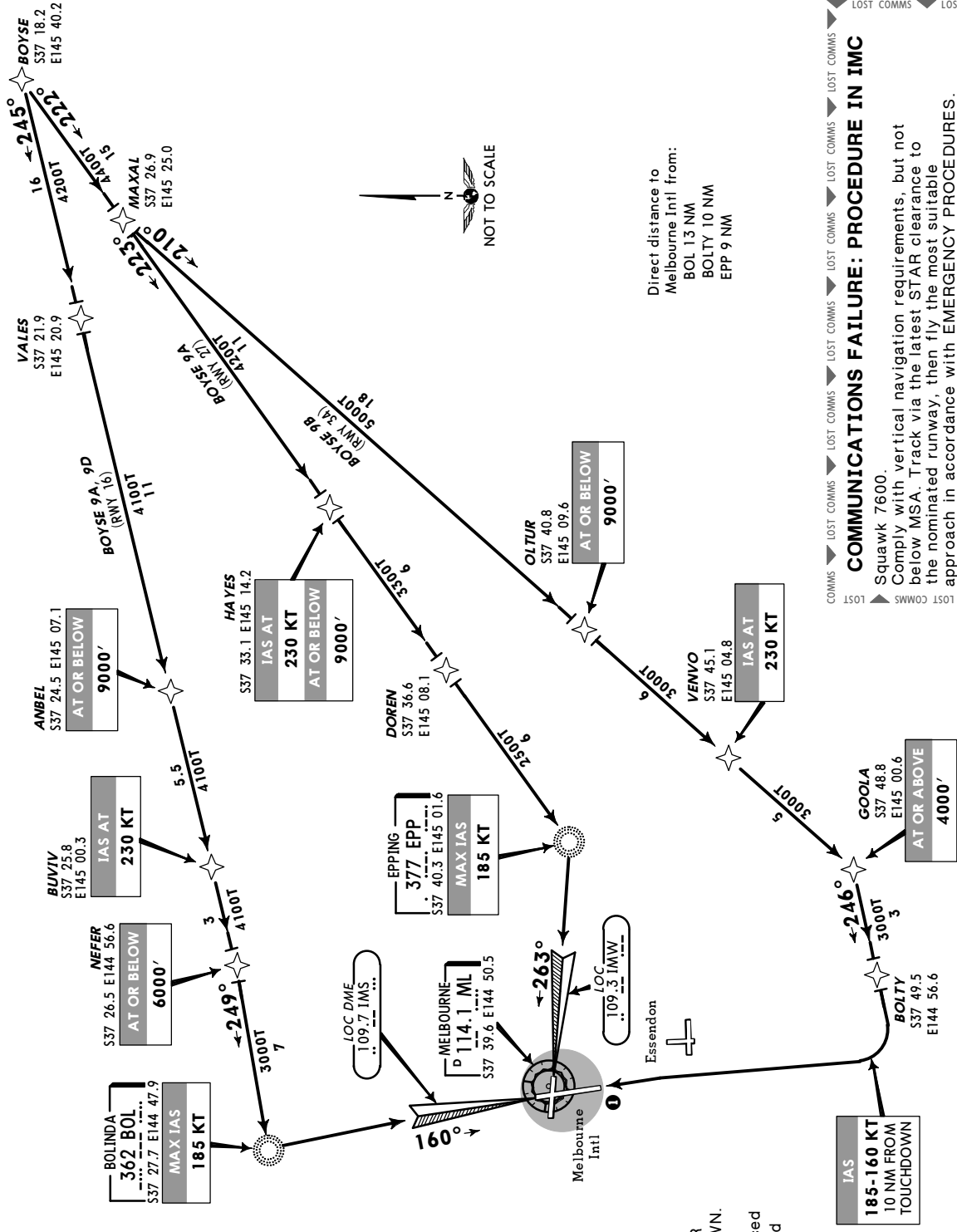
RWY 16 ALPHA: From BOYSE track 245° to VALES. Track 245° to ANBEL. Cross ANBEL at or below 9000'. Track 245° to BUVIV. IAS at 230 KT from BUVIV. Track 245° to NEFER. Cross NEFER at or below 6000'. Turn RIGHT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Intercept LOC RWY 16.

RWY 16 DELTA: From BOYSE track 245° to VALES. Track 245° to ANBEL. Cross ANBEL at or below 9000'. Track 245° to BUVIV. IAS at 230 KT from BUVIV. Track 245° to NEFER. Cross NEFER at or below 6000'. Turn RIGHT, track 249° to BOL NDB. MAX IAS 185 KT from NDB. Track via NDB RWY 16

RWY 27 ALPHA: From BOYSE track 222° to MAXAL. Track 223° to HAYES. Cross HAYES at or below 9000'. IAS at 230 KT from HAYES. Track 223° to DOREN. Track 223° to EPP NDB. Intercept LOC RWY 27. MAX IAS 185 KT from EPP NDB.

RWY 34 BRAVO: From BOYSE track 222° to MAXAL. Turn LEFT, track 210° to OLTUR. Cross OLTUR at or below 9000'. Track 210° to VENVO. IAS at 230 KT from VENVO. Track 210° to GOOLA. Cross GOOLA at or above 4000'. Turn RIGHT, track 246° to BOLTLY. Track via VOR RWY 34. IAS 185-160 KT 10 NM from TOUCHDOWN.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



COMMUNICATIONS FAILURE: PROCEDURE IN IMC
Squawk 7600.
Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

RNAV STAR
MELBOURNE, VIC, AUSTRALIA
YMMML MELBOURNE INTL
NON-JETS ONLY
BOYSE NINE ALPHA [BOYS9A],
BOYSE NINE BRAVO [BOYS9B],
BOYSE NINE DELTA [BOYS9D]
ARRIVALS

JEPPESEN
7 NOV 14 (20-2G) EFF 13 NOV

ATIS 114.1 118.0

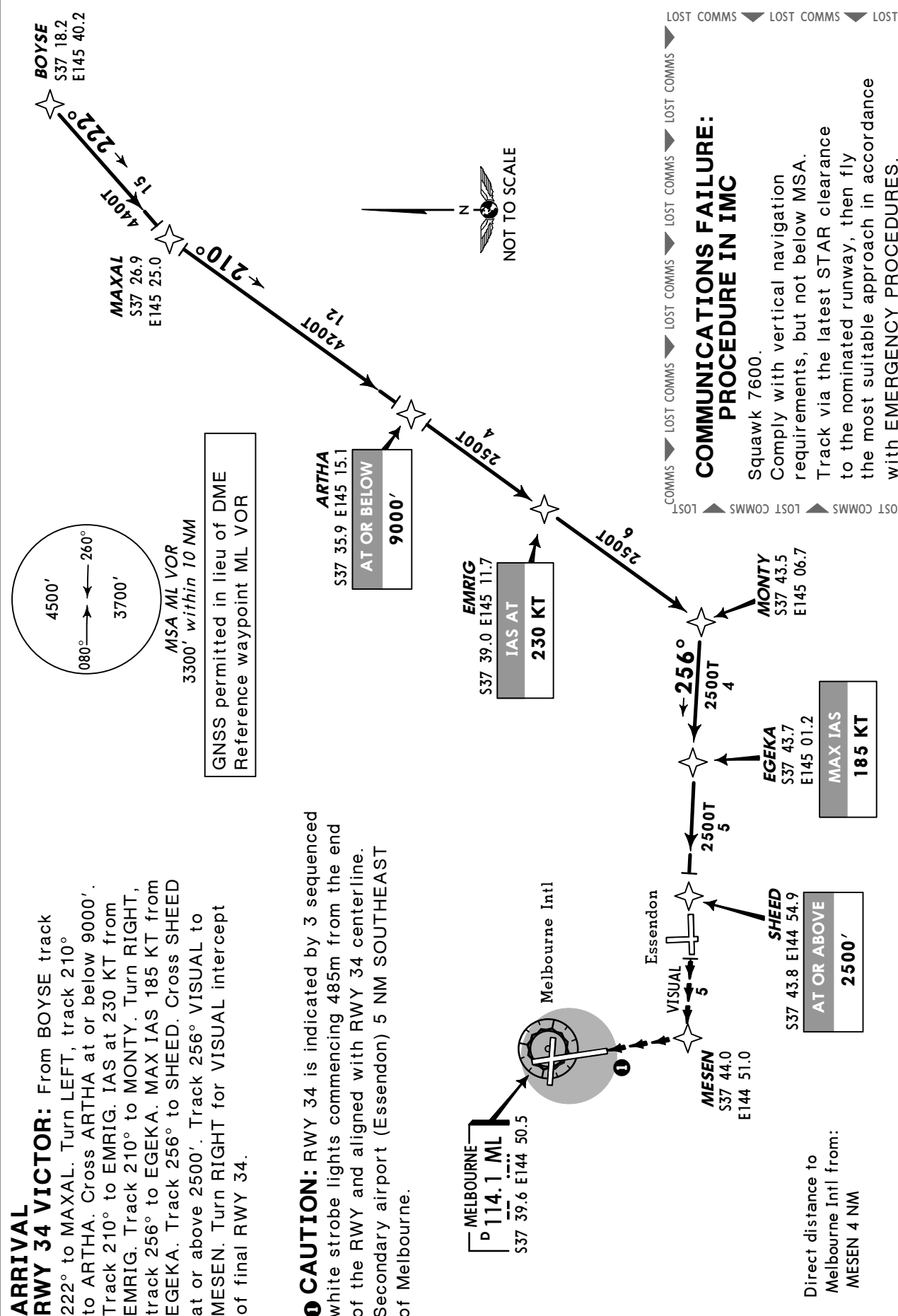
MELBOURNE Approach (R) 132.0

YMML MELBOURNE INTL

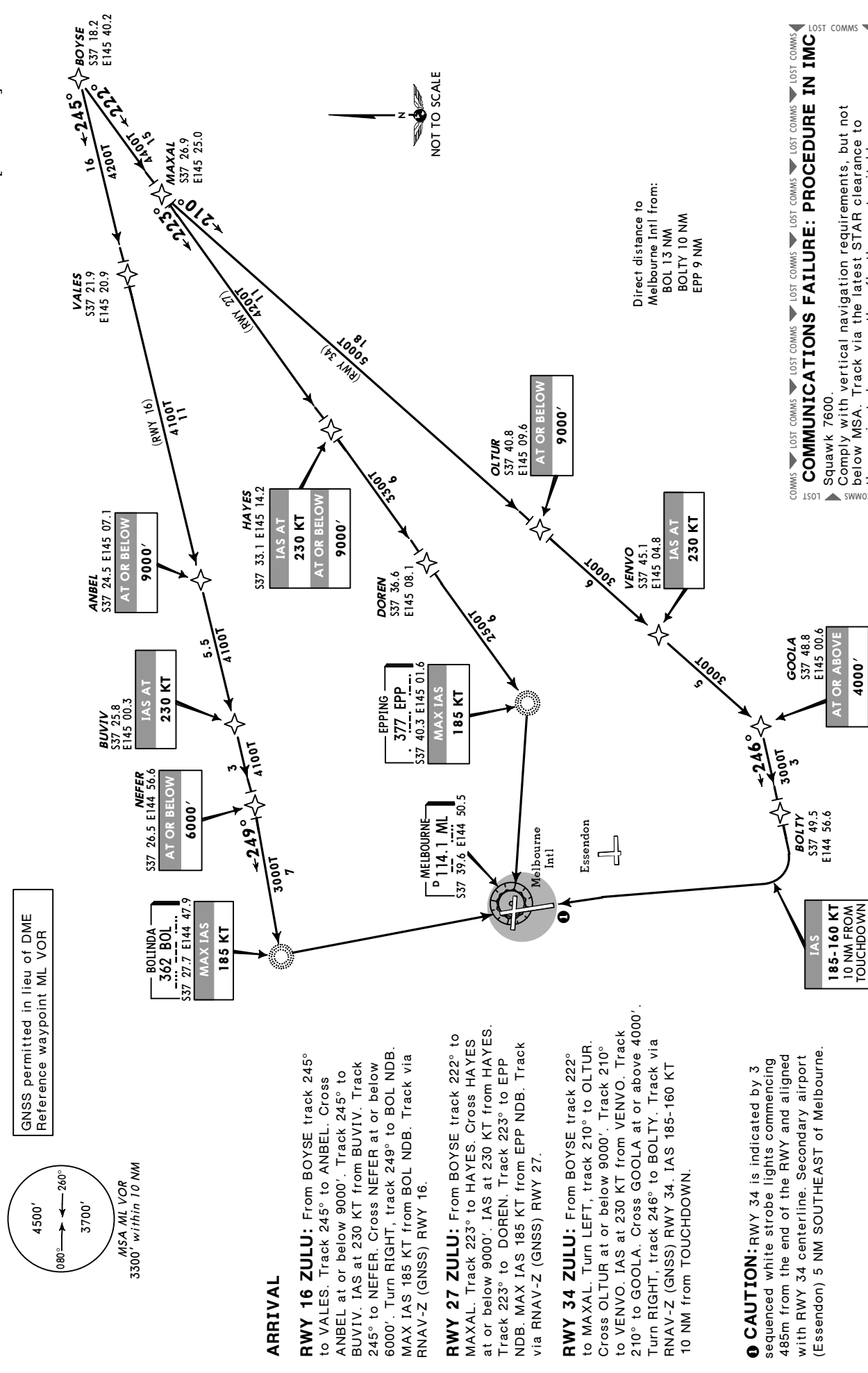
TRANS LEVEL: FL 110
TRANS ALT: 10000'

NON-JETS ONLY

BOYSE NINE VICTOR ARRIVAL [BOYS9V]



BOYSE NINE ZULU ARRIVAL
[BOYS9Z]



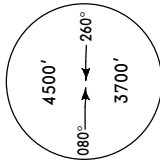
CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne

[illegible]

▲ Squawk 7600. Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES

ATIS 114.1 118.0
MELBOURNE Approach (R) 132.0

TRANS LEVEL: FL 110
TRANS ALT: 10000'



MSA ML VOR
3300' within 10 NM

GNSS permitted in lieu of DME
Reference waypoint ML VOR

ARRIVAL

RWY 16 ALPHA: From LIZZI track 259° to HORUS. Cross HORUS at or below 9000'. Track 260° to ENSEG. IAS at 230 KT from ENSEG. Track 260° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Intercept LOC RWY 16.

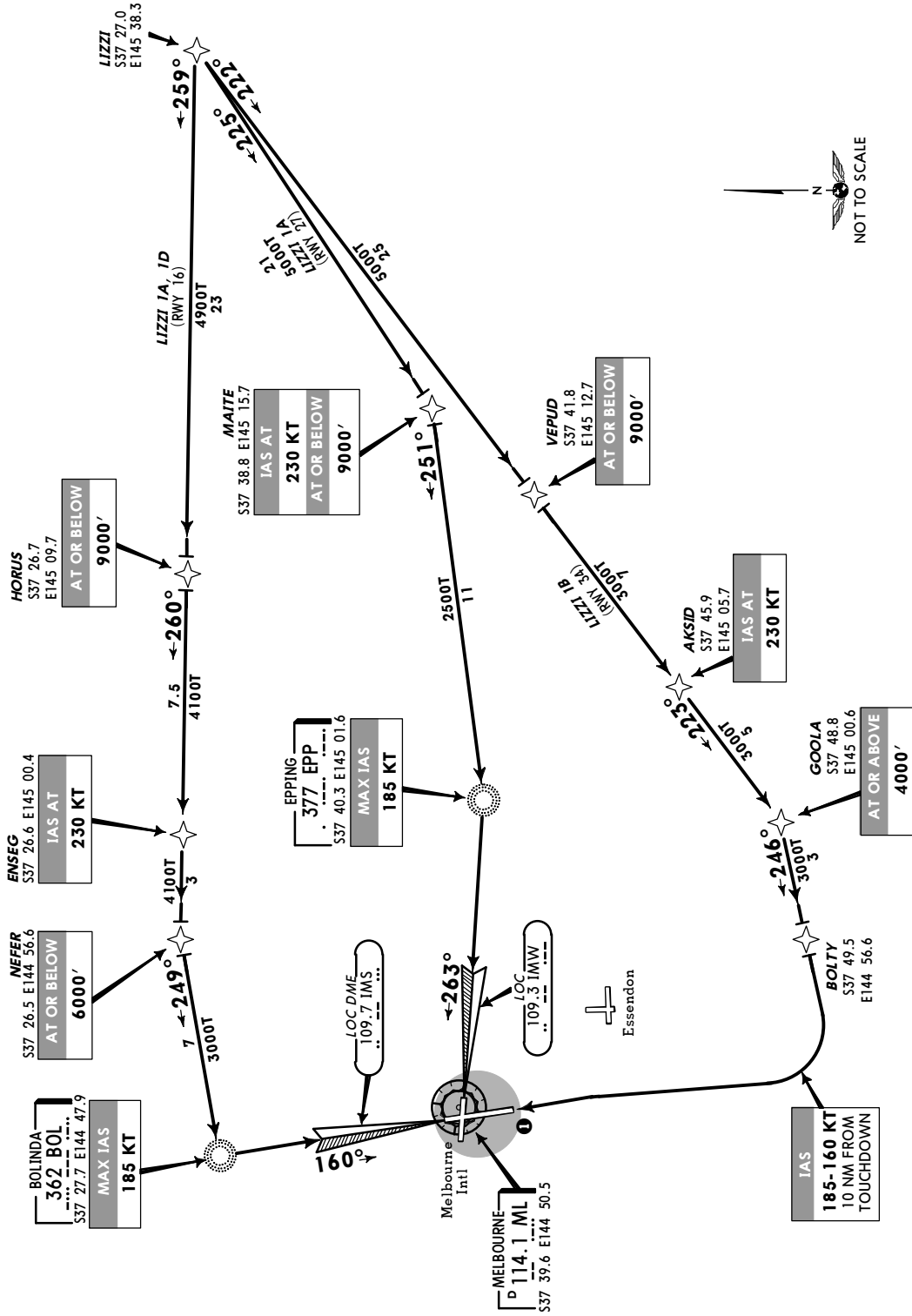
RWY 16 DELTA: From LIZZI track 259° to HORUS. Cross HORUS at or below 9000'. Track 260° to ENSEG. IAS at 230 KT from ENSEG. Track 260° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Track via NDB RWY 16.

RWY 27 ALPHA: From LIZZI track 225° to MAITE. Cross MAITE at or below 9000'. IAS at 230 KT from MAITE. Turn RIGHT, track 251° to EPP NDB. MAX IAS 185 KT from EPP NDB. Intercept LOC RWY 27.

RWY 34 BRAVO: From LIZZI track 222° to VEPUD at or below 9000'. Track 222° to AKSID. IAS at 230 KT from AKSID. Track 223° to GOOLA. Cross GOOLA at or above 4000'. Turn RIGHT, track 246° to BOLTLY. Track via VOR RWY 34. IAS 185-160 KT 10 NM from TOUCHDOWN.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.

LIZZI ONE ALPHA [LIZZI1A],
LIZZI ONE BRAVO [LIZZI1B],
LIZZI ONE DELTA [LIZZI1D]
ARRIVALS



Direct distance to Melbourne Intl from:
BOL NDB 13 NM
BOLTLY 10 NM
EPP NDB 9 NM

COMMUNICATIONS FAILURE: PROCEDURE IN IMC
Squawk 7600.
Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

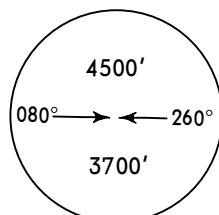
YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'

LIZZI ONE PAPA ARRIVAL [LIZI1P]

RWY 34 PAPA: From LIZZI track 222° to VEPUD. Cross VEPUD at or below 9000'. Track 222° to AKSID. IAS at 230 KT from AKSID. Track 223° to GOOLA. Cross GOOLA at or above 4000'. Track via RNAV-P (RNP) RWY 34. IAS 185-160 KT 10 NM from TOUCHDOWN.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



MSA ML VOR
3300' within 10 NM

GNSS permitted in lieu of DME
Reference waypoint ML VOR

MELBOURNE
D 114.1 ML
S37 39.6 E144 50.5



Melbourne Intl



Essendon

Direct distance to Melbourne Intl from:
GOOLA 12 NM

LIZZI
S37 27.0
E145 38.3

222°

5000T 25

VEPUD
S37 41.8
E145 12.7

AT OR BELOW
9000'

3000T 7

AKSID
S37 45.9
E145 05.7

IAS AT
230 KT

223°

3000T 5

GOOLA
S37 48.8
E145 00.6

AT OR ABOVE
4000'

IAS
185-160 KT
10 NM FROM
TOUCHDOWN



NOT TO SCALE

LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

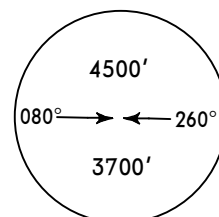
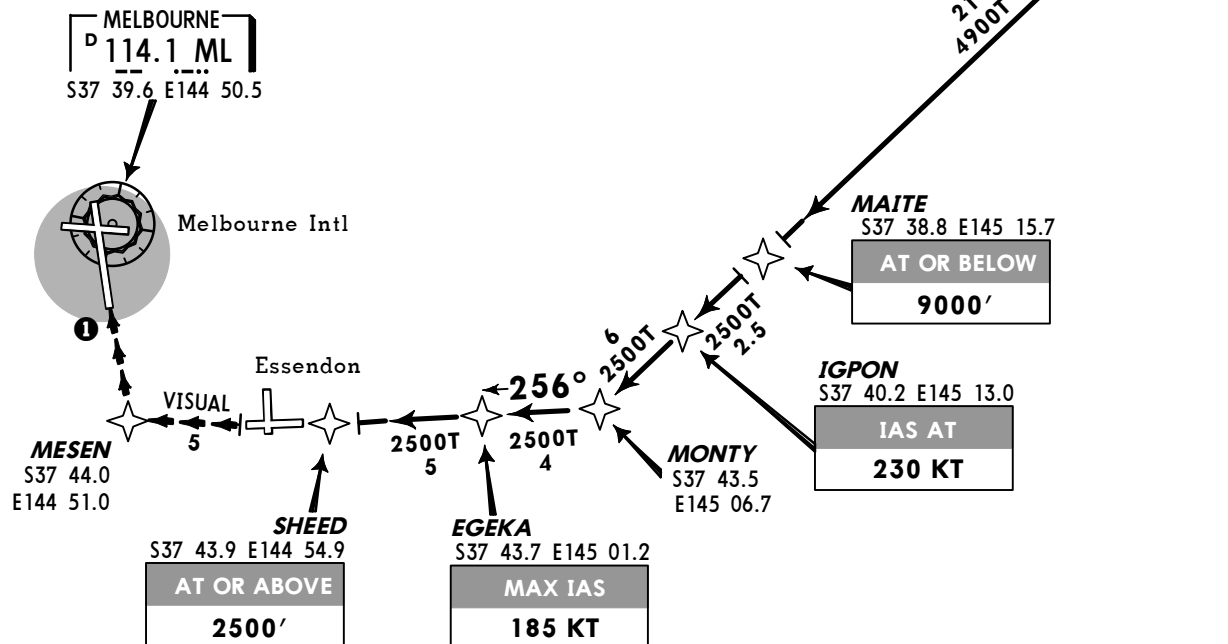
YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'

LIZZI ONE VICTOR ARRIVAL [LIZZI1V]

RWY 34 VICTOR: From LIZZI track 225° to MAITE. Cross MAITE at or below 9000'. Track 225° to IGPON. IAS at 230 KT from IGPON. Track 225° to MONTY. Turn RIGHT, track 256° to EGEKA. MAX IAS 185 KT from EGEKA. Track 256° to SHEED. Cross SHEED at or above 2500'. Track 256° VISUAL to MESEN. Turn RIGHT for VISUAL intercept of final RWY 34.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.

MSA ML VOR
3300' within 10 NMGNSS permitted in lieu of DME
Reference waypoint ML VOR

Direct distance to Melbourne Intl from:
MESEN 4 NM

LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

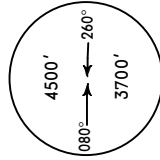
Comply with vertical navigation requirements, but not below MSA.

Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

TRANS LEVEL: FL 110
TRANS ALT: 10000'



MSA ML VOR
3300' within 10 NM

GNSS permitted in lieu of DN
Reference waypoint ML VOR

ARRIVAL

RWY 16 ZULU: From LIZZI track 259° to HORUS. Cross HORUS at or below 9000'. Track 260° to ENSEG. IAS at 230 KT from ENSEG. Track 260° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Track via RNAV-Z (GNSS) RWY 16.

RWY 27 ZULU: From LIZZI track

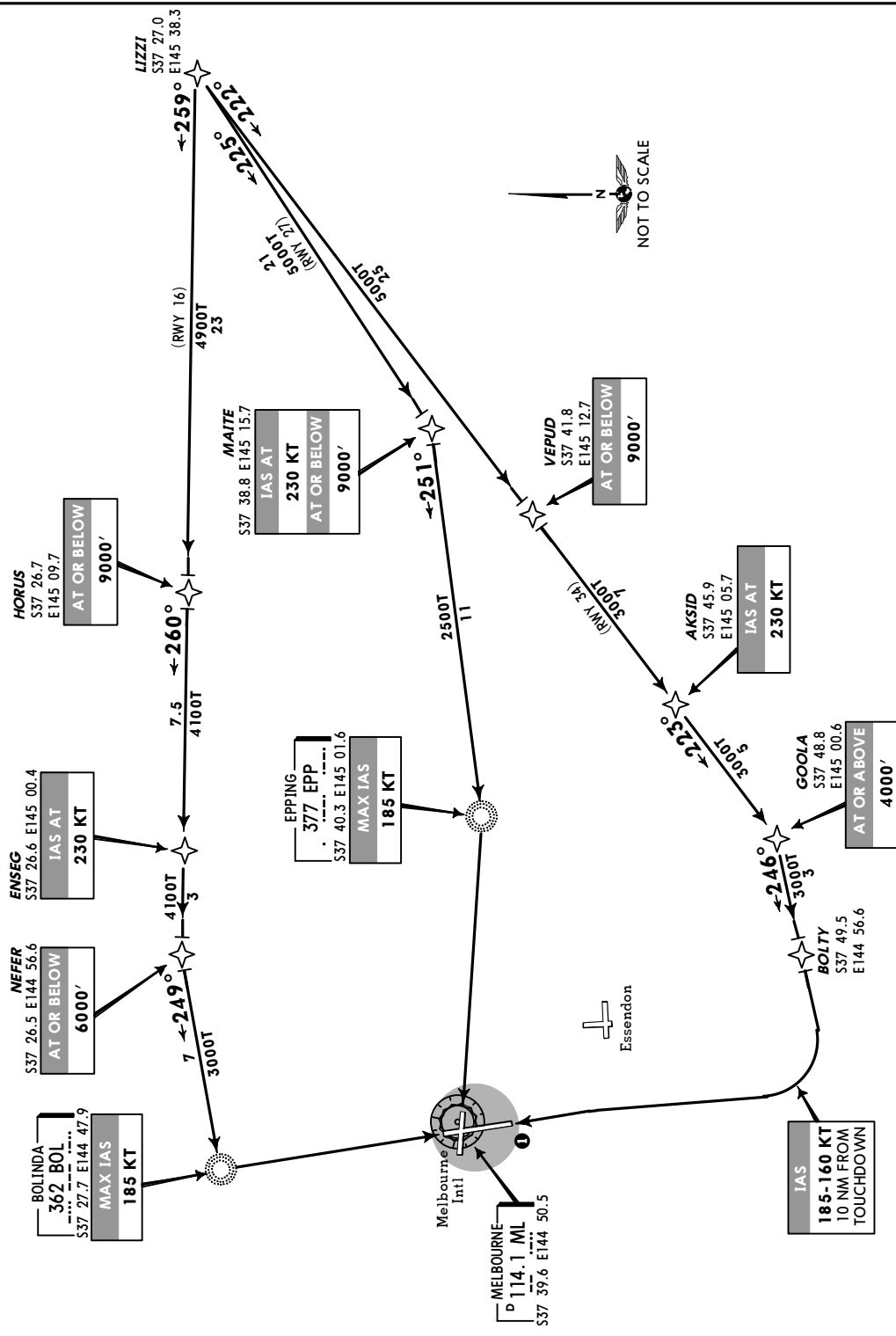
225° to MAITE. Cross MAITE at or below 9000'. IAS at 230 KT from MAITE. Turn RIGHT, track 251° to EPP NDB. MAX IAS 185 KT from EPP NDB. Track via RNAV-Z (GNSS) RWY 27.

RWY 34 ZULU: From LIZZI track

22° to VEPUD. Cross VEPUD at or below 9000'. Track 22° to AKSID. IAS at 230 KT from AKSID. Track 223° to GOOLA. Cross GOOLA at or above 4000'. Turn RIGHT, track 246° to BOLTLY. Track via RNAV-Z (GNSS) RWY 34. IAS 185-160 KT 10 NM from TOUCHDOWN.

⚠ CAUTION: RWY 34 is indicated by

3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



Direct distance to Melbourne Intl from:

BOL 13 NM

BOLTY 10 NM

EPP 9 NM

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

► Squawk 7600.

Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'

MONTY NINE BRAVO [MONT9B], MONTY NINE ZULU [MONT9Z] ARRIVALS

TRANSITIONS

BADGR: From BADGR to MONTY:

Track 257° to MONTY. Then follow arrival instructions.

BOYSE (NON-JET): From BOYSE to MONTY:

Track 222° to MAXAL. Turn LEFT, track 210° to MONTY. Then follow arrival instructions.

LIZZI: From LIZZI to MONTY:

Track 225° to MONTY. Then follow arrival instructions.

WAREN: From WAREN to MONTY:

Track 320° to MONTY. Then follow arrival instructions.

ARRIVAL

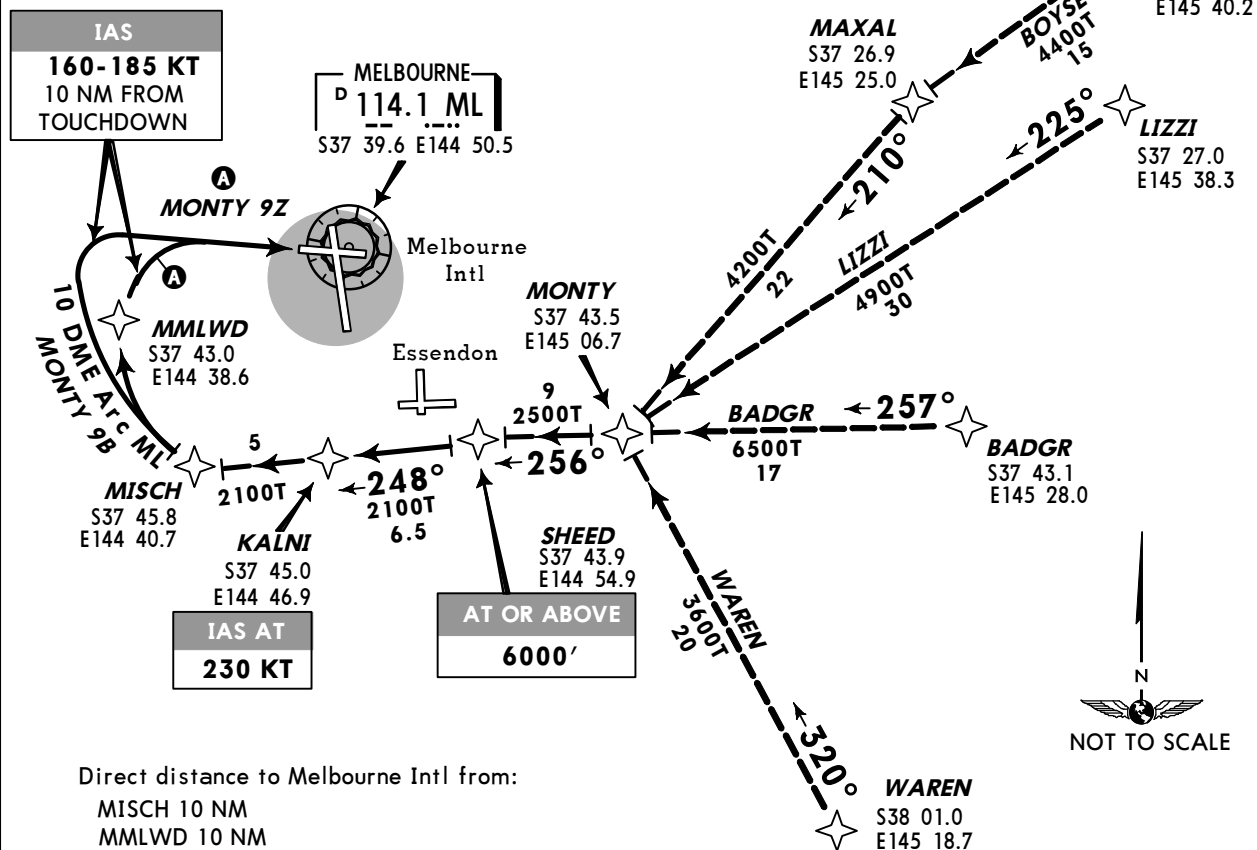
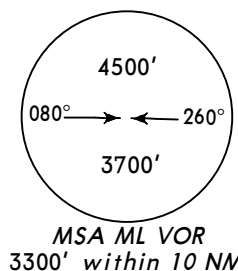
RWY 09 BRAVO: Track 256° to SHEED.

Cross SHEED at or above 6000'. Turn LEFT, track 248° to KALNI. IAS at 230 KT from KALNI. Track 248° to MISCH. Track via ML 10 DME Arc for VOR RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.

RWY 09 ZULU: Track 256° to SHEED.

Cross SHEED at or above 6000'. Turn LEFT, track 248° to KALNI. IAS at 230 KT from KALNI. Track 248° to MISCH. Track via RNAV-Z (GNSS) RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.

GNSS permitted in lieu of DME
Reference waypoint ML VOR



Direct distance to Melbourne Intl from:

MISCH 10 NM
MMLWD 10 NM

LOST COMMS

LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

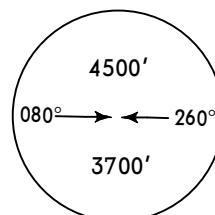
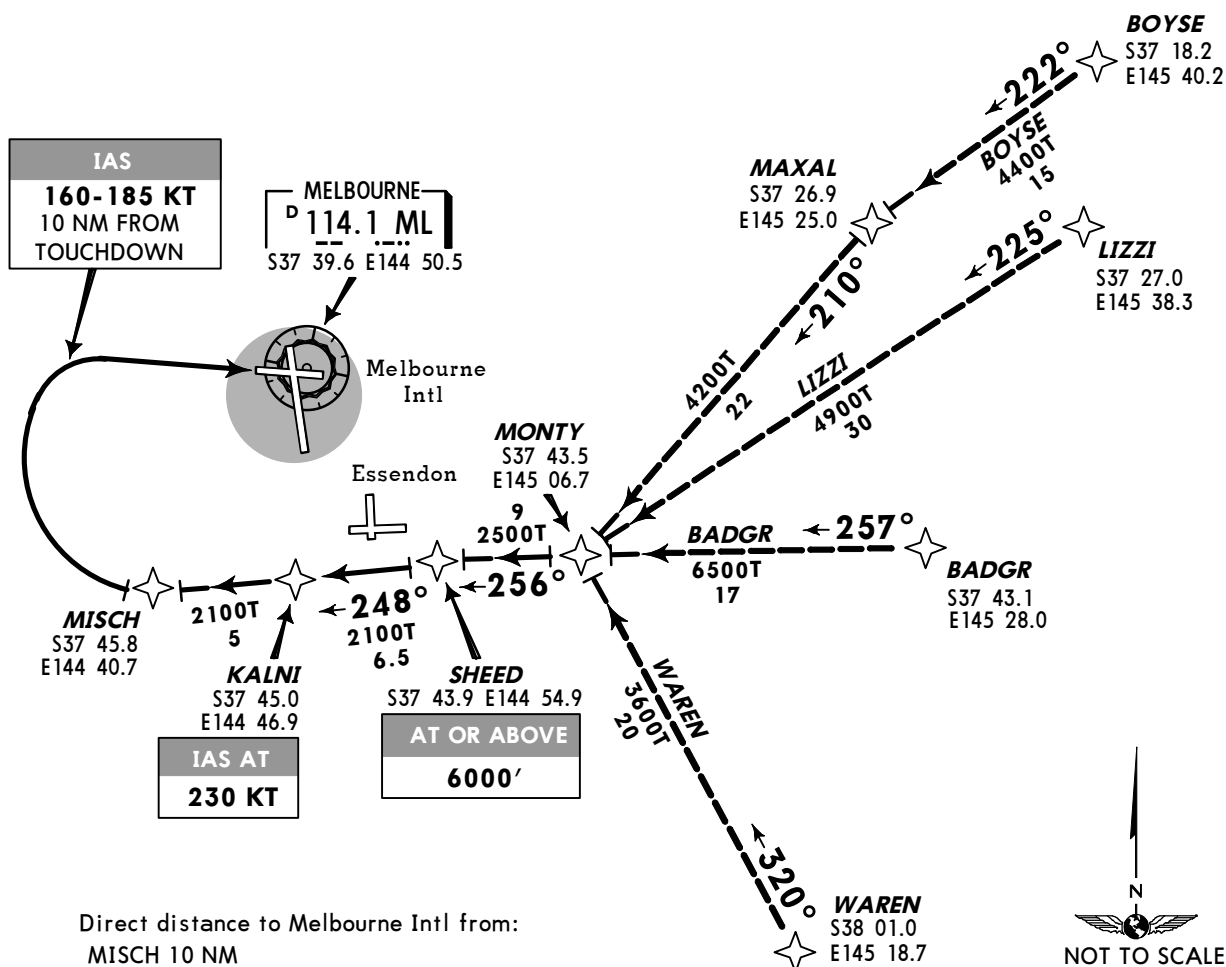
Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

LOST COMMS

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'**MONTY NINE PAPA ARRIVAL**
[MONT9P]**TRANSITIONS****BADGR: From BADGR to MONTY:**
Track 257° to MONTY. Then follow arrival instructions.**BOYSE (NON-JET): From BOYSE to MONTY:** Track 222° to MAXAL. Turn LEFT, track 210° to MONTY. Then follow arrival instructions.**LIZZI: From LIZZI to MONTY:**
Track 225° to MONTY. Then follow arrival instructions.**WAREN: From WARREN to MONTY:**
Track 320° to MONTY. Then follow arrival instructions.**ARRIVAL****RWY 09 PAPA:** Track 256° to SHEED. Cross SHEED at or above 6000'. Turn LEFT, track 248° to KALNI. IAS at 230 KT from KALNI. Track 248° to MISCH. Track via RNAV-P (RNP) RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.MSA ML VOR
3300' within 10 NMGNSS permitted in lieu of DME
Reference waypoint ML VOR

LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS LOST COMMS

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 129.4

YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'PORTS EIGHT BRAVO[PORT8B],
PORTS EIGHT ZULU[PORT8Z] ARRIVALS

TRANSITIONS

MILLA: From MILLA to PORTS:

Track 272° to EKKAS. Track 272° to PORTS. Cross PORTS at or below 9000'. Then follow arrival instruction.

WONTHAGGI (WON): From WON VOR

to PORTS: Track 296° to LATTA. Track 297° to PORTS. Cross PORTS at or below 9000'. Then follow arrival instruction.

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST

**COMMUNICATIONS FAILURE:
PROCEDURE IN IMC**

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

ARRIVAL

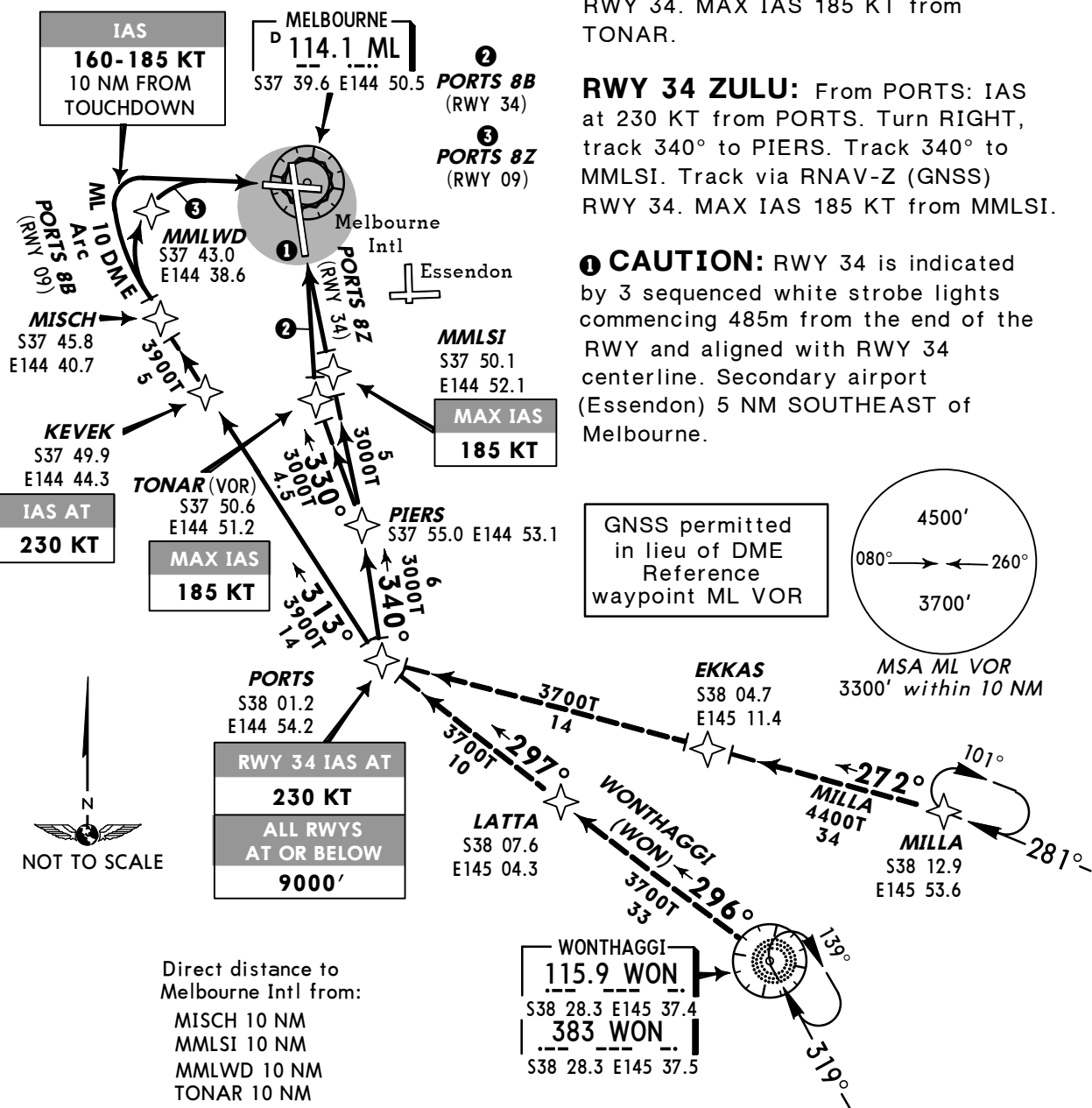
RWY 09 BRAVO: From PORTS: Turn RIGHT, track 313° to KEVEK. IAS at 230 KT from KEVEK. Track 313° to MISCH. Track via ML 10 DME Arc for VOR RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.

RWY 09 ZULU: ③ From PORTS: Turn RIGHT, track 313° to KEVEK. IAS at 230 KT from KEVEK. Track 313° to MISCH. Track via RNAV-Z (GNSS) RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.

RWY 34 BRAVO: ② From PORTS: IAS at 230 KT from PORTS. Turn RIGHT, track 340° to PIERS. Turn LEFT, track 330° to TONAR for VOR RWY 34. MAX IAS 185 KT from TONAR.

RWY 34 ZULU: From PORTS: IAS at 230 KT from PORTS. Turn RIGHT, track 340° to PIERS. Track 340° to MMLSI. Track via RNAV-Z (GNSS) RWY 34. MAX IAS 185 KT from MMLSI.

① CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



ATIS 114.1 118.0

MELBOURNE Approach (R) 129.4

YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'PORTS EIGHT PAPA ARRIVAL
[PORT8P]

TRANSITIONS

MILLA: From MILLA to PORTS:

Track 272° to EKKAS. Track 272° to PORTS. Cross PORTS at or below 9000'. Then follow arrival instruction.

WONTHAGGI (WON): From WON VOR to PORTS:

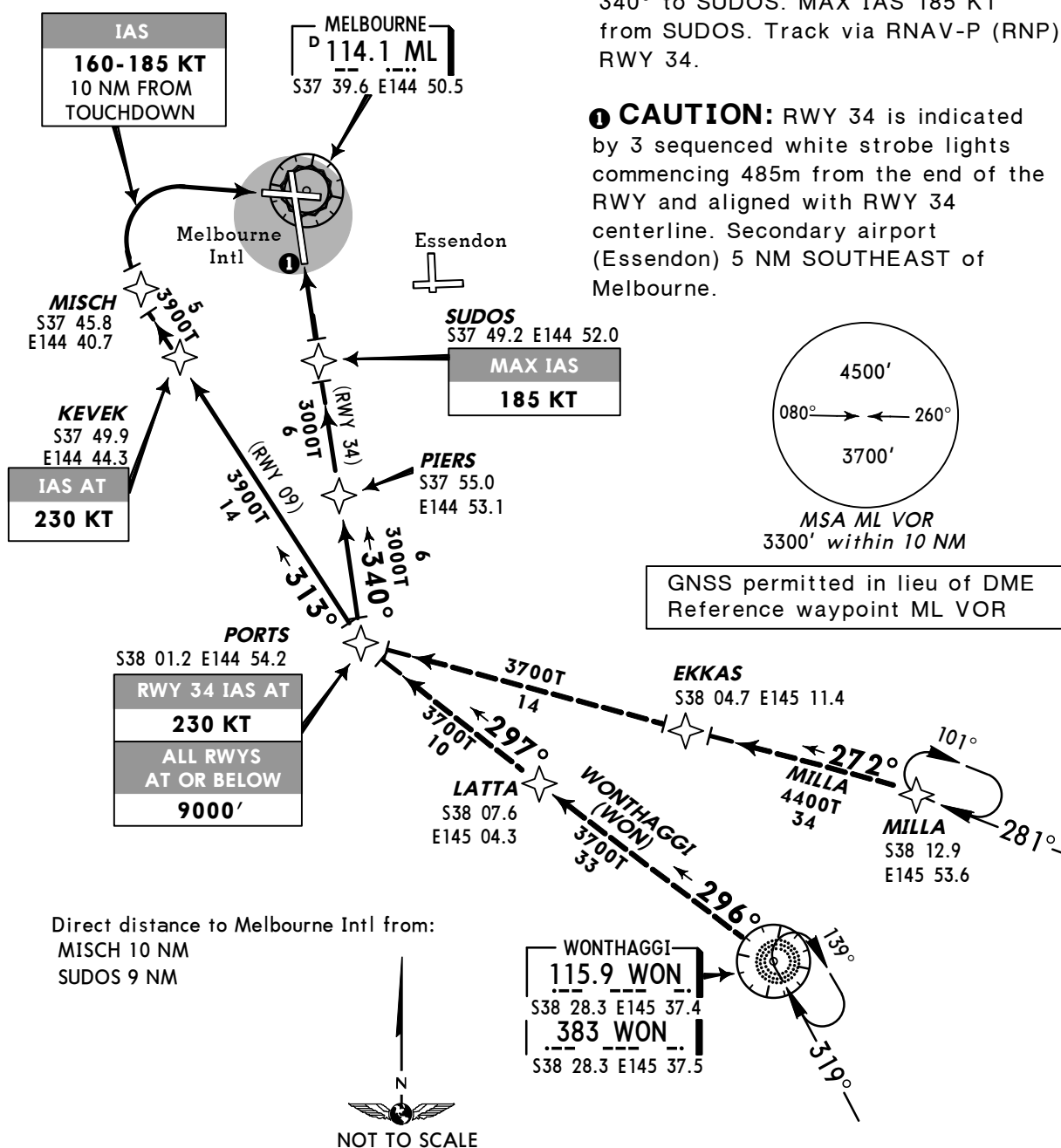
Track 296° to LATTI. Track 297° to PORTS. Cross PORTS at or below 9000'. Then follow arrival instruction.

ARRIVAL

RWY 09 PAPA: From PORTS: Turn RIGHT, track 313° to KEVEK. IAS at 230 KT from KEVEK. Track 313° to MISCH. Track via RNAV-P (RNP) RWY 09. IAS 160-185 KT from 10 NM to TOUCHDOWN.

RWY 34 PAPA: From PORTS: IAS at 230 KT from PORTS. Turn RIGHT, track 340° to PIERS. Track 340° to SUDOS. MAX IAS 185 KT from SUDOS. Track via RNAV-P (RNP) RWY 34.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



COMMUNICATIONS FAILURE: PROCEDURE IN IMC

Squawk 7600.

Comply with vertical navigation requirements, but not below MSA.

Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

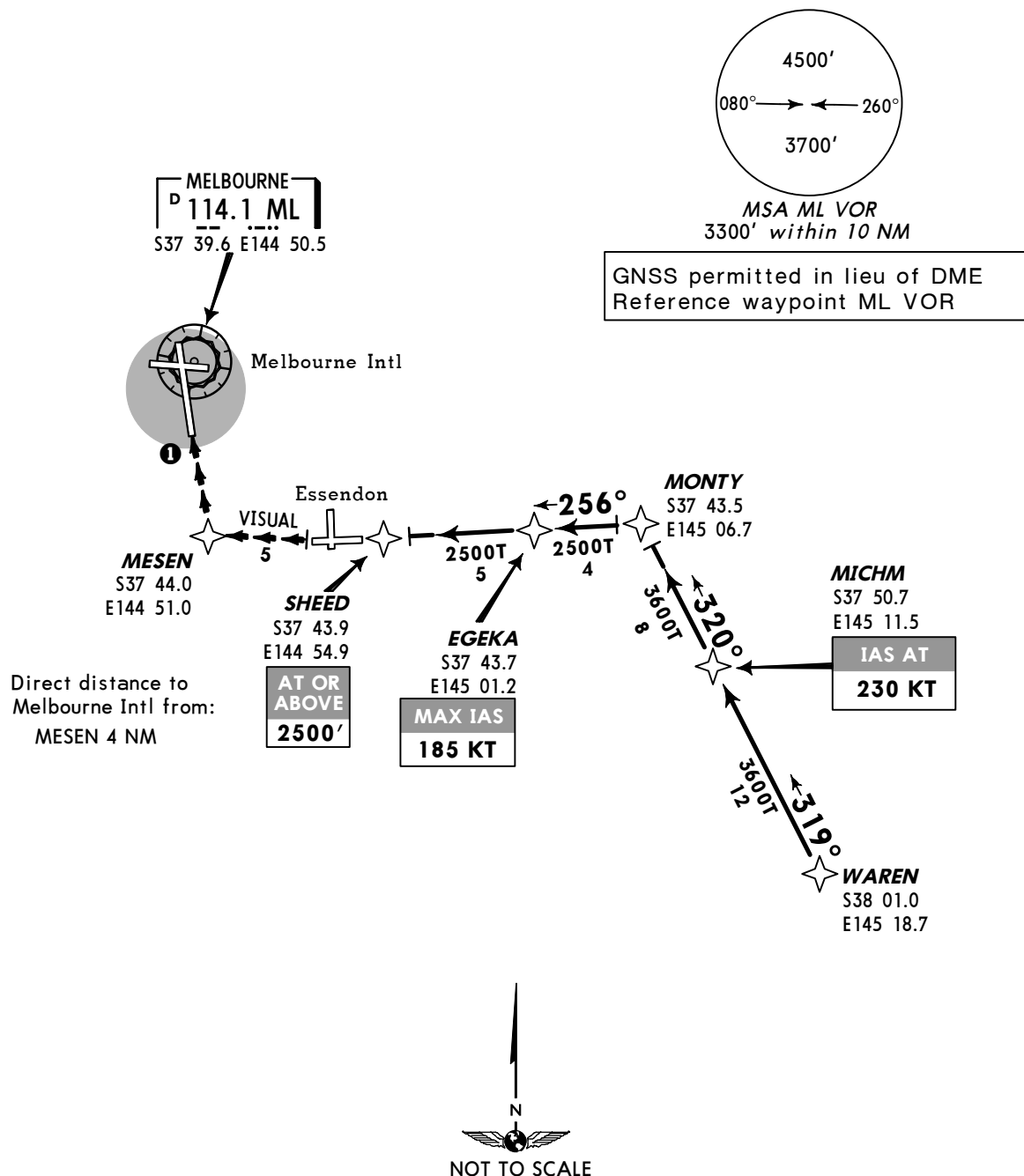
YMML MELBOURNE INTL

TRANS LEVEL: FL 110
TRANS ALT: 10000'

WAREN EIGHT VICTOR ARRIVAL [WARE8V]

RWY 34 VICTOR: From WAREN track 319° to MICHM. IAS at 230 KT from MICHM. Track 320° to MONTY. Turn LEFT, track 256° to EGEKA. MAX IAS 185 KT from EGEKA. Track 256° to SHEED. Cross SHEED at or above 2500'. Track 256° VISUAL to MESEN. Turn RIGHT for VISUAL intercept of final RWY 34.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

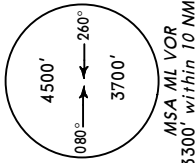
Squawk 7600.

Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ATIS 114.1 118.0

MELBOURNE Approach (R) 132.0

TRANS LEVEL: FL 110
TRANS ALT: 10000'



MSA ML VOR
3300' within 10 NM

GNSS permitted in lieu of DME
Reference waypoint ML VOR

Direct distance to Melbourne Intl from:
BOL 13 NM
BOLTY 10 NM
EPP 9 NM

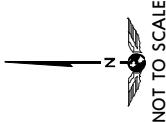
ARRIVAL

RWY 16 ZULU: From WARREN track 319° to MICHM. Track 320° to MONTY. Track 323° to SANDR. Cross SANDR at or below 8000'. Track 323° to LAGUG. IAS at 230 KT from LAGUG. Track 323° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Track via RNAV-Z (GNSS) RWY 16.

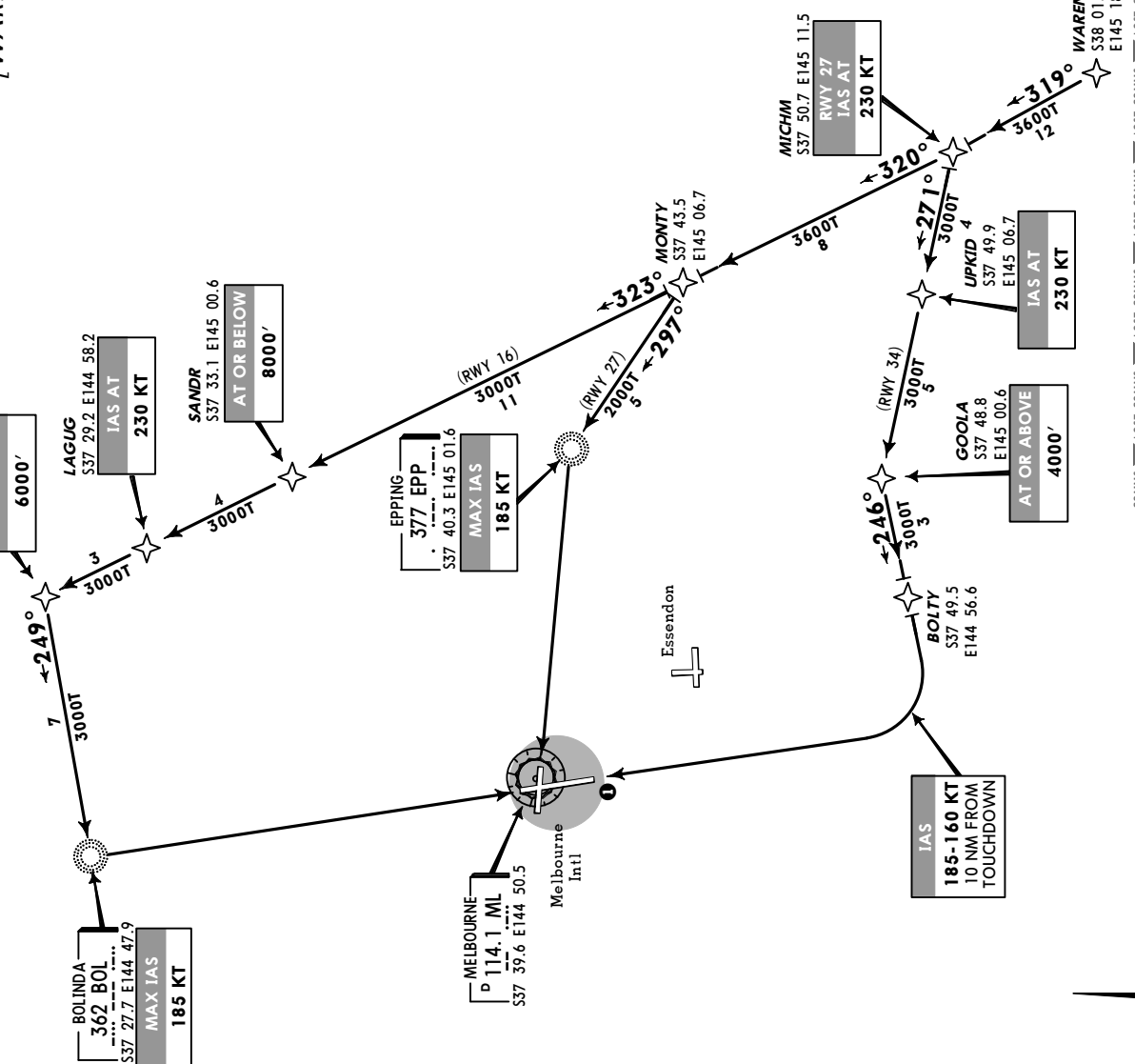
RWY 27 ZULU: From WARREN track 319° to MICHM. IAS at 230 KT from MICHM. Track 320° to MONTY. Turn LEFT, track 297° to EPP NDB. MAX IAS 185 KT from EPP NDB. Track via RNAV-Z (GNSS) RWY 27.

RWY 34 ZULU: From WARREN track 319° to MICHM. Turn LEFT, track 271° to UPKID. IAS at 230 KT from UPKID. Track 271° to GOOLA. Cross GOOLA at or above 4000'. Turn LEFT, track 246° to BOLTY. Track via RNAV-Z (GNSS) RWY 34.

CAUTION: RWY 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.



WARREN EIGHT ZULU ARRIVAL
[WARE8Z]



COMMUNICATIONS FAILURE: PROCEDURE IN IMC
Squawk 7600.
Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

ARRIVAL

From WENDY track 071° to TEENA, then:

RWY 09 BRAVO: IAS at 230 KT from TEENA. From TEENA turn LEFT, track 037° to NAOMI. MAX IAS 185 KT from NAOMI. Track via VOR RWY 09.

RWY 16 ALPHA: From TEENA track 070° to KEELA. Cross KEELA at or above 6000'. Track 070° to PASCO. Turn LEFT, track 345° to JADEL. Cross JADEL at or below 8000'. Track 345° to KIKEX. IAS at 230 KT from KIKEX. Track 345° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Intercept LOC RWY 16.

RWY 27 ALPHA: From TEENA track 070° to KEELA. Cross KEELA at or above 6000'. Turn RIGHT, track 083° to NOMID. IAS at 230 KT from NOMID. Track 083° to ROCEL. Turn LEFT, track 352° to EPP NDB. MAX IAS 185 KT from EPP NDB. Intercept LOC RWY 27.

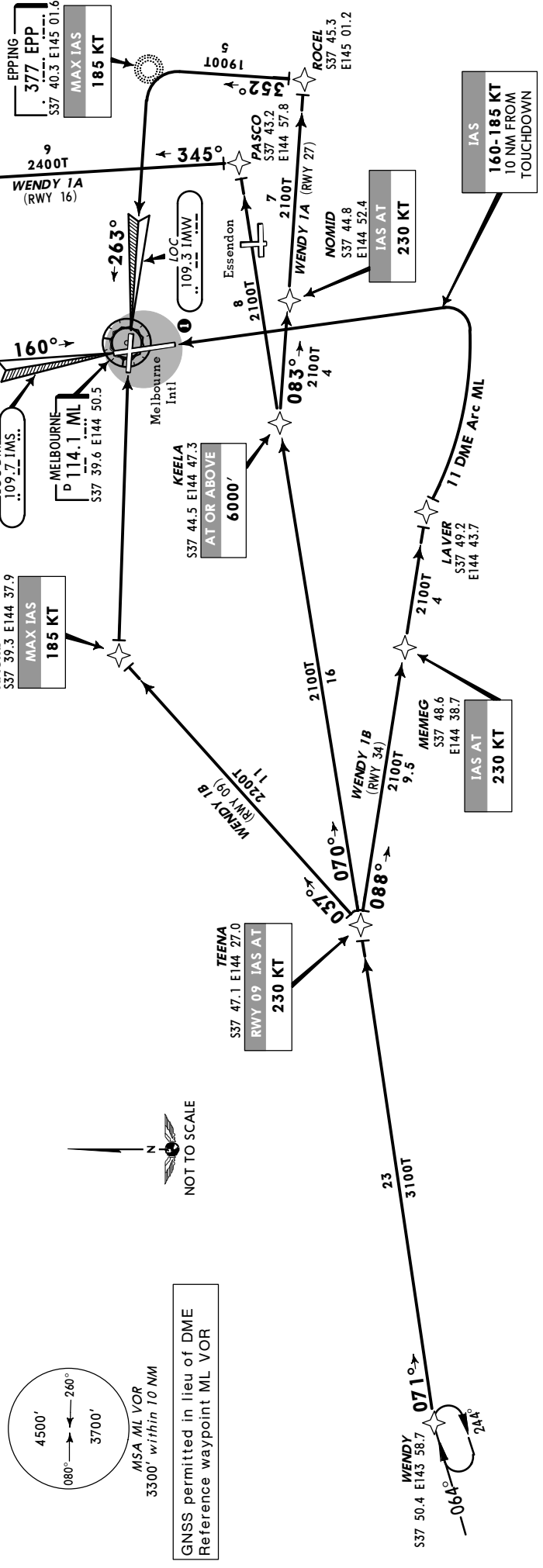
RWY 34 BRAVO: From TEENA turn RIGHT, track 088° to MEMEG. IAS at 230 KT from MEMEG. Track 088° to LAVER. IAS 160-185 KT 10 NM to TOUCHDOWN. Track via ML 11 DME Arc for VOR RWY 34.

CAUTION: Rwy 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the RWY and aligned with RWY 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.

COMMUNICATIONS FAILURE: PROCEDURE IN IMC
Squawk 7600.
Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.

Direct distance to Melbourne Intl from:

BOL	13 NM
EPP	9 NM
LAVER	10 NM
NAOMI	10 NM



ATIS 114.1 118.0

MELBOURNE Approach (R) 129.4 132.0

TRANS LEVEL: FL 110
TRANS ALT: 10000'

ARRIVAL

From WENDY track 071° to TEENA, then:

RWY 09 ZULU: IAS at 230 KT from TEENA.

From TEENA turn LEFT, track 037° to MELSO.
Track via RNAV-Z (GNSS) RWY 09. IAS 160-185 KT
from 10 NM to TOUCHDOWN.

RWY 16 DELTA: From TEENA track 070° to KEELA. Cross KEELA at or above 6000'. Track 070° to PASCO Turn LEFT, track 345° to JADEL. Cross JADEL at or below 8000'. Track 345° to KIKEX. IAS at 230 KT from KIKEX. Track 345° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Track via NDB RWY 16.

RWY 16 ZULU: From TEENA track 070° to KEELA. Cross KEELA at or above 6000'. Track 070° to PASCO. Turn LEFT, track 345° to JADEL. Cross JADEL at or below 8000'. Track 345° to KIKEX. IAS at 230 KT from KIKEX. Track 345° to NEFER. Cross NEFER at or below 6000'. Turn LEFT, track 249° to BOL NDB. MAX IAS 185 KT from BOL NDB. Track via RNAV-Z (GNSS) RWY 16.

RWY 27 ZULU: From TEENA track 070° to KEELA. Cross KEELA at or above 6000'. Turn RIGHT, track 083° to NOMID. IAS at 230 KT from NOMID. Track 083° to ROCEL. Turn LEFT, track 352° to EPP NDB. MAX IAS 185 KT from EPP NDB. Track via RNAV-Z (GNSS) RWY 27.

RWY 34 ZULU: From TEENA turn RIGHT, track 088° to MEMEG. IAS at 230 KT from MEMEG. Track 088° to LAVER. Turn RIGHT, track 107° to MMLSC. IAS 160-185 KT from 10 NM to TOUCHDOWN. Track via RNAV-Z (GNSS) RWY 34.

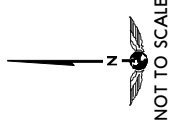
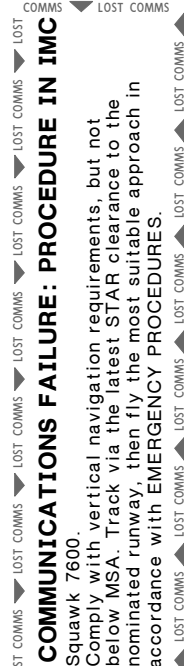
CAUTION: Rwy 34 is indicated by 3 sequenced white strobe lights commencing 485m from the end of the Rwy and aligned with Rwy 34 centerline. Secondary airport (Essendon) 5 NM SOUTHEAST of Melbourne.

Direct distance to Melbourne Intl from:

BOL NDB 13 NM
EPP NDB 9 NM
MELSO 13 NM
MMLSC 11 NM

COMMUNICATIONS FAILURE: PROCEDURE IN IMC

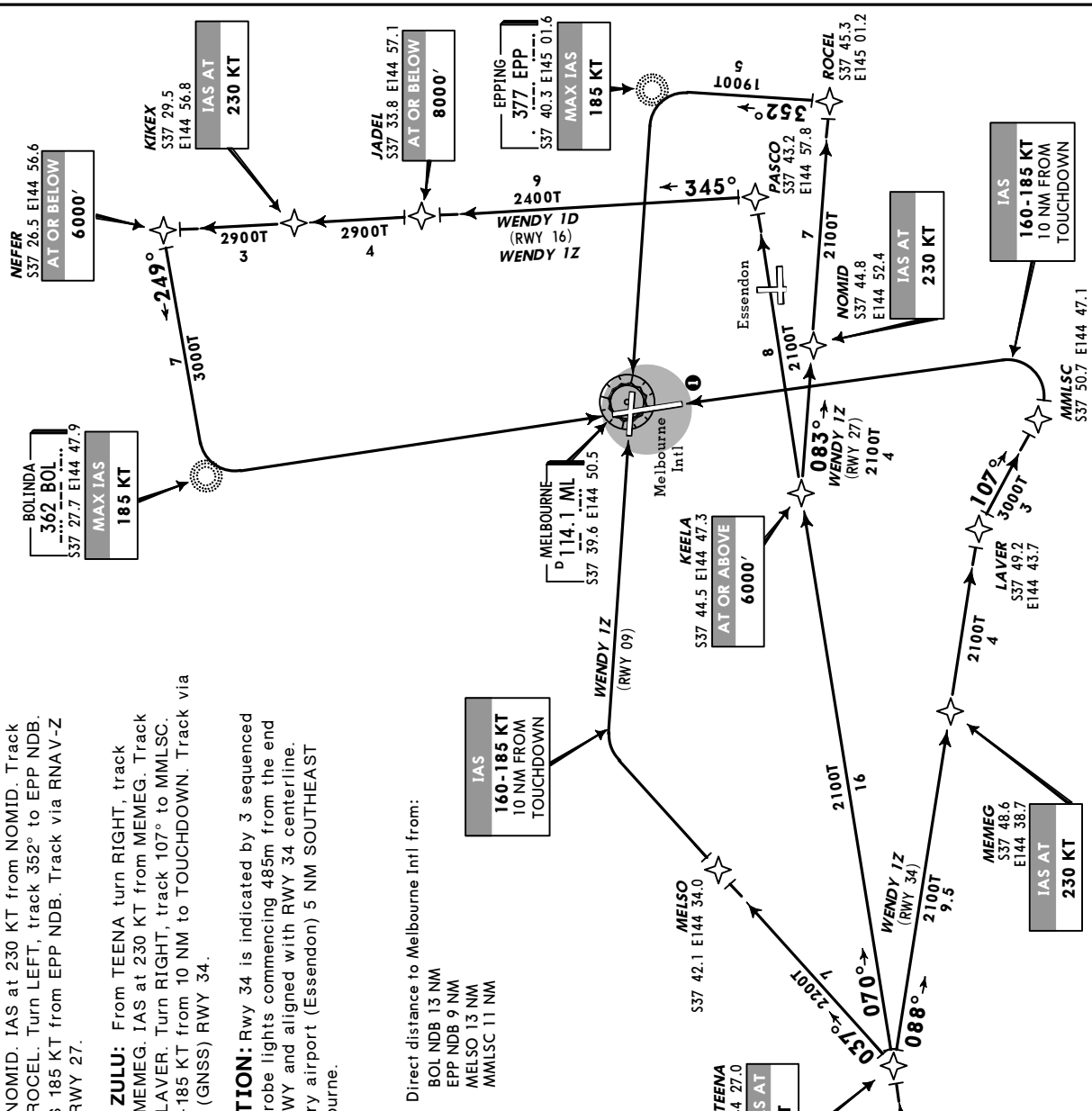
Squawk 7600.
Comply with vertical navigation requirements, but not below MSA. Track via the latest STAR clearance to the nominated runway, then fly the most suitable approach in accordance with EMERGENCY PROCEDURES.



NOT TO SCALE

MSA ML VOR
00' within 10 NM

GNSS permitted in lieu of DME



MELBOURNE Clearance 127.2

Departure (R) 129.4

YMML MELBOURNE INTL

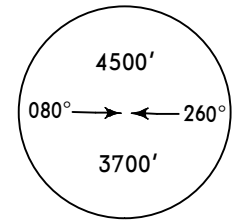
TRANS LEVEL: FL110
TRANS ALT: 10000'

BISON FOUR DEPARTURE [BISON4]

RUNWAY 16

Minimum required climb gradient
4.6% to 2900' thence 3.3%

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
4.6% V/V (fpm)	349	466	699	932	1165	1398



MSA ML VOR
3300' within 10 NM

RWY 16: Track 160°. At HORSH turn RIGHT.
Track direct to BISON (approx 270°).
Then follow transition instruction.

TRANSITION:

RADAR: At BISON continue tracking 270°,
EXPECT RADAR vectors to cleared route.

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MELBOURNE Clearance 127.2

Departure (R) 129.4 RWY 16 and 27

118.9 RWY 34

MELBOURNE, VIC, AUSTRALIA

YMML MELBOURNE INTL

TRANS LEVEL: FL110
TRANS ALT: 10000'

CORRS SIX DEPARTURE [CORRS6]

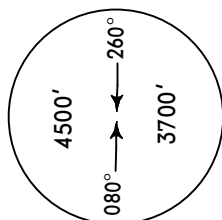
Minimum required climb gradients:
Rwy 16: 4.6% to 2900', thence 3.3%.
Rwy 27: 3.3%.
Rwy 34: 4.6% to 1500', thence 3.3%.

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
4.6% V/V (fpm)	349	466	699	932	1165	1398

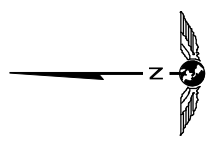
RWY 16: Track 160° to YARRA. Cross YARRA at or above 4000'. Turn LEFT, track 087° to CORRS, thence as cleared.

RWY 27: Track 263° to HOPLA. Cross HOPLA at or above 4000'. Turn LEFT, track 200° to DARLY. Turn LEFT, track 105° to STEVO. Cross STEVO at or above 8000'. Turn LEFT, track 090° to CORRS, thence as cleared.

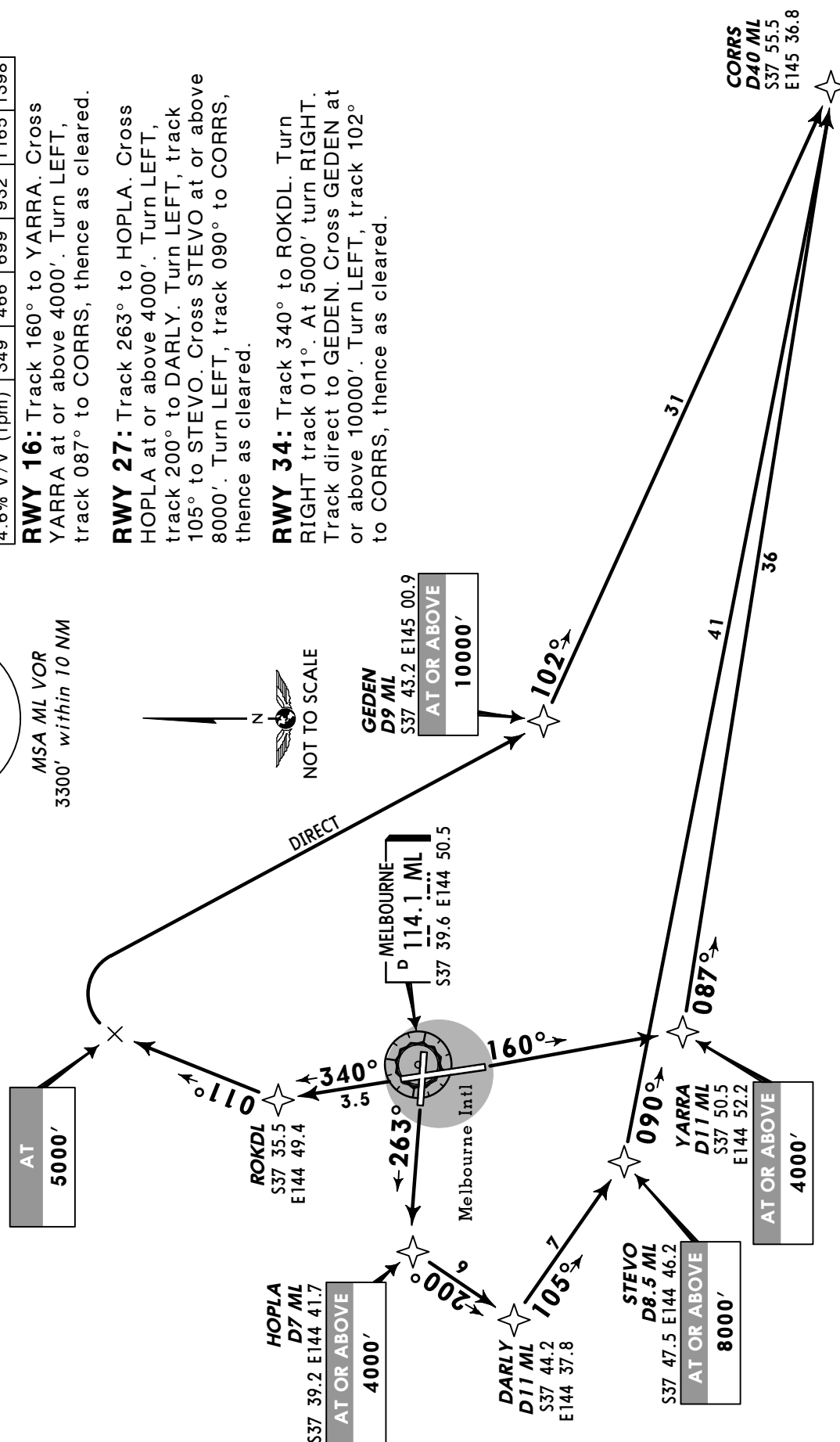
RWY 34: Track 340° to ROKDL. Turn RIGHT track 011°. At 5000' turn RIGHT. Track direct to GEDEN. Cross GEDEN at or above 10000'. Turn LEFT, track 102° to CORRS, thence as cleared.



MSA ML VOR
3300' within 10 NM



GNSS permitted in lieu of DME
Reference waypoint ML VOR



MELBOURNE Clearance 127.2
Departure (R) 129.4
118.9 RWY 34 CWS

MELBOURNE, VIC, AUSTRALIA

YMML MELBOURNE INTL

TRANS LEVEL: FL110 TRANS ALT: 10000'

RUNWAYS SOUTH

COWES (CWS) FIVE [CWS5], POINT TWO[POINT2] DEPARTURES

Minimum required climb gradients:

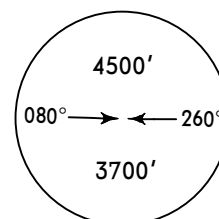
Rwy 16: 4.6% to 2900', thence 3.3%.

Rwy 27: 3.3%.

Rwy 34 (COWES FIVE): 4.6% to 1500', thence 3.3%.

Rwy 34 (POINT TWO): 3.5% to 1200', thence 3.3%

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398



MSA ML VOR
3300' within 10 NM

COWES (CWS) FIVE DEPARTURE

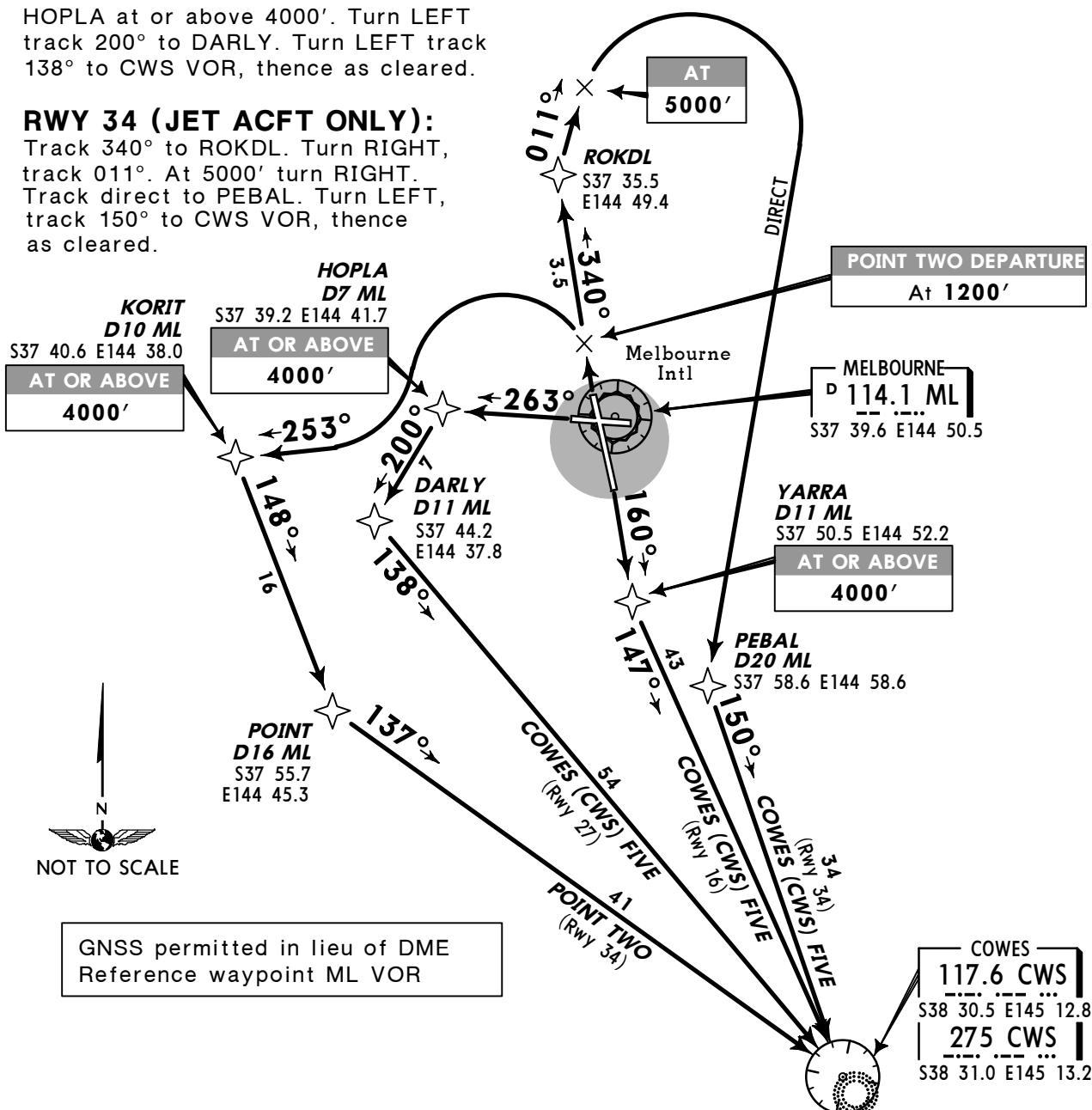
RWY 16: Track 160° to YARRA. Cross YARRA at or above 4000'. Turn LEFT, track 147° to CWS VOR, thence as cleared.

RWY 27: Track 263° to HOPLA. Cross HOPLA at or above 4000'. Turn LEFT track 200° to DARLY. Turn LEFT track 138° to CWS VOR, thence as cleared.

RWY 34 (JET ACFT ONLY):
Track 340° to ROKDL. Turn RIGHT, track 011°. At 5000' turn RIGHT. Track direct to PEBAL. Turn LEFT, track 150° to CWS VOR, thence as cleared.

POINT TWO DEPARTURE

RWY 34 (NON-JET): Track 340°. At 1200' turn LEFT to intercept track 253° to KORIT. Cross KORIT at or above 4000'. Turn LEFT, track 148° to POINT. Turn LEFT, track 137° to CWS VOR, thence as cleared.



MELBOURNE Clearance 127.2
Departure (R) NEVIS 118.9
CRENA/YWE 129.4

YMML MELBOURNE INTL

TRANS LEVEL: FL110 TRANS ALT: 10000'

RUNWAYS WEST

CRENA EIGHT DEPARTURE (RNAV)[CRENA8]

NON-JET ONLY MARSH FIVE DEPARTURE [MARSH5]

NEVIS FIVE DEPARTURE (RNAV)[NEVIS5]

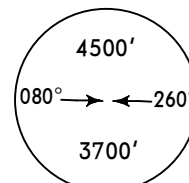
YARROWEE (YWE) SIX DEPARTURE (RNAV)[YWE6]

Minimum required climb gradients:

Rwy 16: 4.6% to 2900'.

Rwy 34: 3.5% to 1200'.

Gnd speed-Kts	75	100	150	200	250	300
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398



MSA ML VOR
3300' within 10 NM

RWY 16: Track 160°. At HORSH turn RIGHT. Track direct to ALBAK (approx 272°).

For CRENA: From ALBAK track 264° to MARSH. Track 265° to CRENA, thence as cleared.

For NEVIS: From ALBAK track 284° to NEVIS, thence as cleared.

For YWE: From ALBAK track 264° to MARSH. From MARSH turn LEFT, track 253° to YWE NDB, thence as cleared.

RWY 27: Track 263° to HOPLA.

For CRENA: From HOPLA track 263° to CRENA, thence as cleared.

For NEVIS: From HOPLA turn RIGHT. Track 280° to NEVIS, thence as cleared.

For YWE: From HOPLA turn LEFT. Track 252° to YWE NDB, thence as cleared.

RWY 34: Track 340°.

For CRENA: After passing 1500' AND after passing ML 1 DME turn LEFT track direct to HOPLA. From HOPLA turn RIGHT track 263° to CRENA, thence as cleared.

For MARSH (NON-JET ONLY):

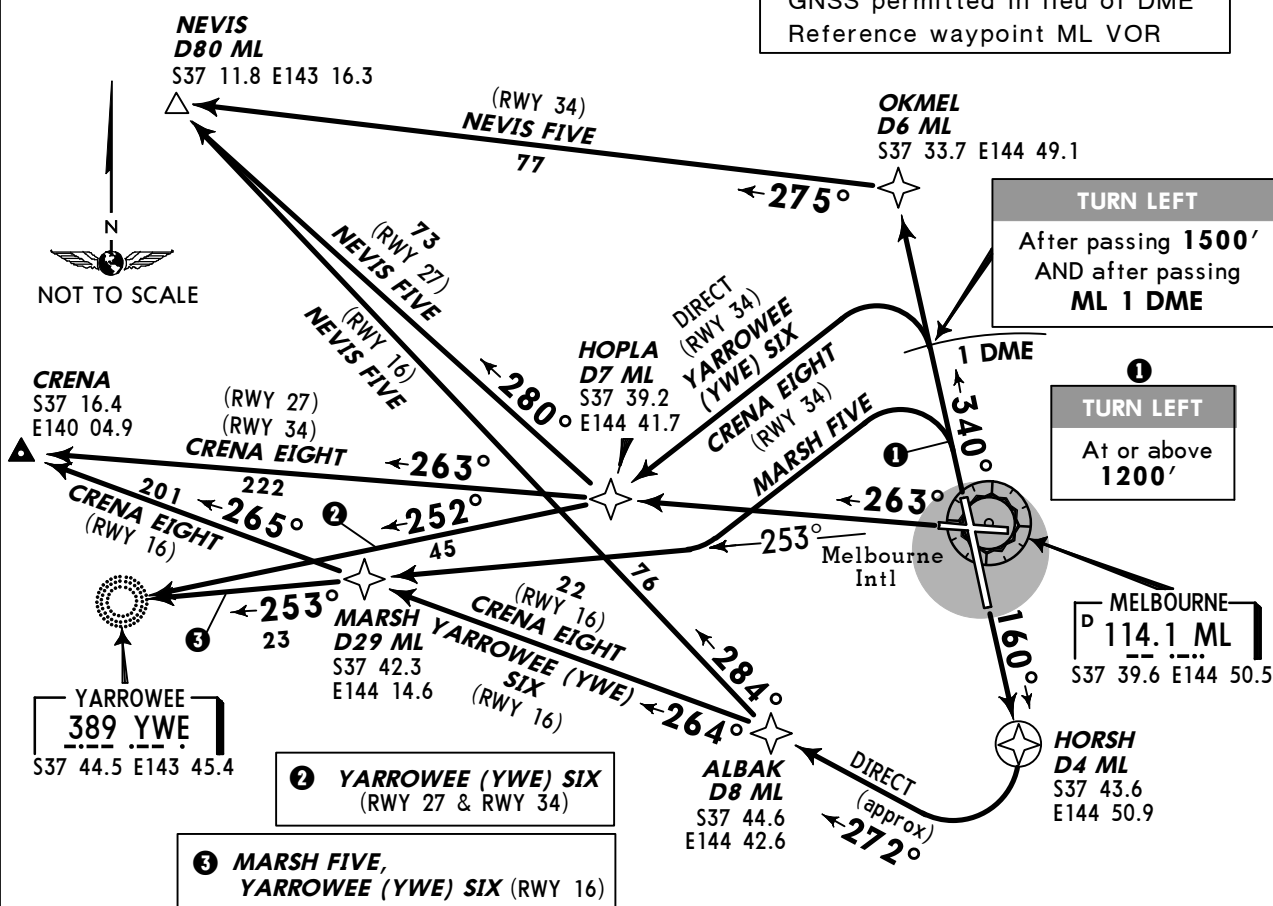
At 1200' turn LEFT to intercept ML R-253. Track 253° to MARSH then YWE NDB, thence as cleared.

For NEVIS: From OKMEL turn LEFT, track 275° to NEVIS, thence as cleared.

For YWE (JETS ONLY):

After passing 1500' AND after passing ML 1 DME turn LEFT track direct to HOPLA. From HOPLA track 252° to YWE NDB, thence as cleared.

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MELBOURNE Clearance **127.2**

Departure (R) **118.9**

YMML MELBOURNE INTL

TRANS LEVEL: FL110
TRANS ALT: 10000'

JETS ONLY

RUNWAYS NORTH EAST

**DOSEL EIGHT [DOSEL8],
MANGALORE (MNG) ONE [MNG1], NONIX ONE [NONIX1]
DEPARTURES**

Minimum required climb gradients:

Rwy 16: 4.6% to 2900', thence 3.3%.

Rwy 27: 3.3%.

Rwy 34: 4.6% to 1500', thence 3.3%.

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
4.6% V/V (fpm)	349	466	699	932	1165	1398

RWY 16: Track 160°. At HORSH turn RIGHT, track direct to ALBAK. Turn RIGHT, track 010° to CHIMU. Cross CHIMU at or above 10000'. Turn RIGHT, track 025° to SALLY.

For DOSEL: Turn RIGHT, track 043° to DOSEL, thence as cleared.

For MNG: Turn LEFT, track 011° to MNG VOR, thence as cleared.

For NONIX: Track 025° to NONIX, thence as cleared.

RWY 34: Track 340° to ROKDL.

Turn RIGHT, track 014° to SALLY.

For DOSEL: Track 043° to DOSEL, thence as cleared.

For MNG: Track 011° to MNG VOR, thence as cleared.

For NONIX: Track 025° to NONIX, thence as cleared.

RWY 27: Track 263° to HOPLA. Turn RIGHT, track 330° to BEATO.

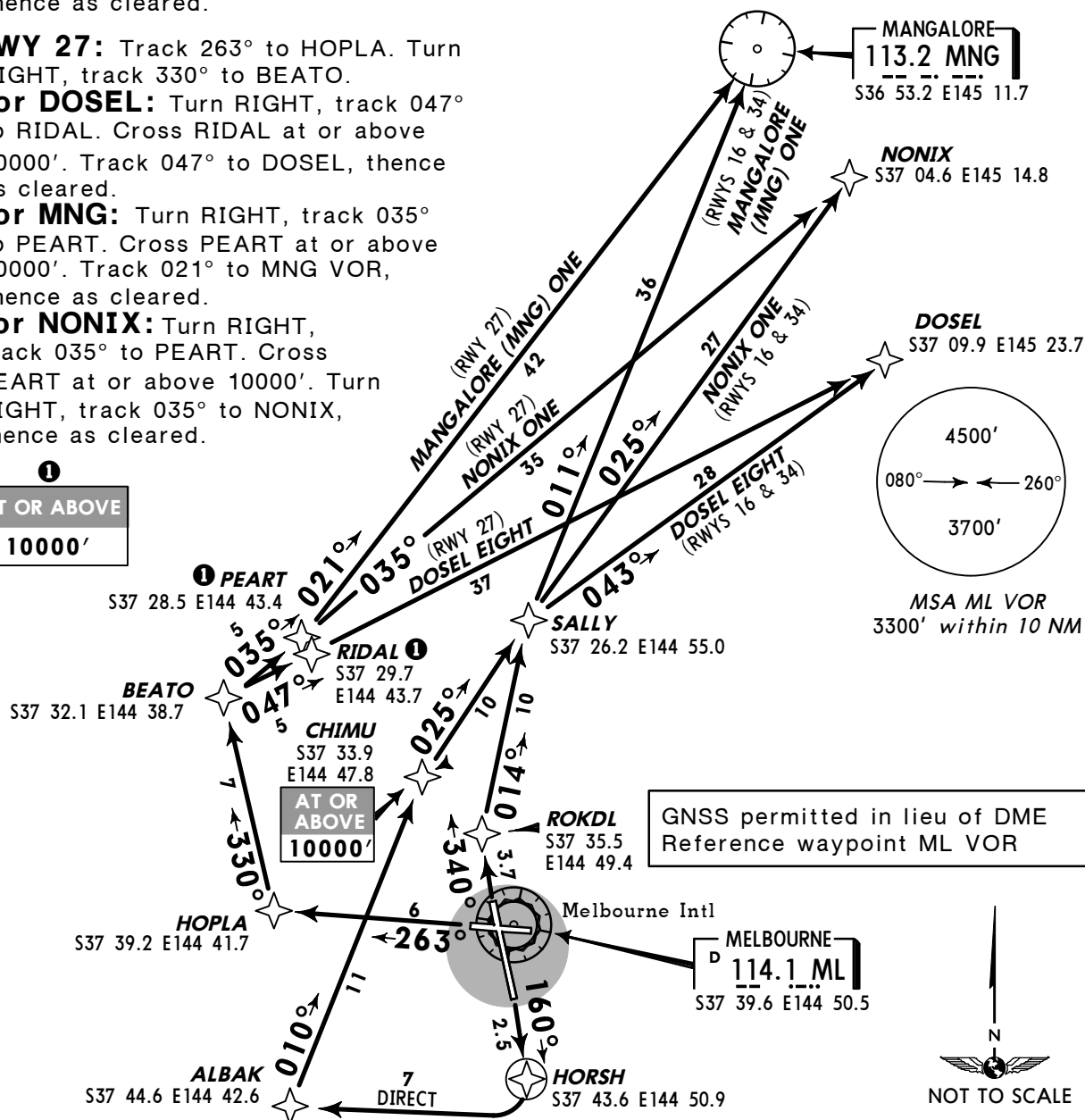
For DOSEL: Turn RIGHT, track 047° to RIDAL. Cross RIDAL at or above 10000'. Track 047° to DOSEL, thence as cleared.

For MNG: Turn RIGHT, track 035° to PEART. Cross PEART at or above 10000'. Track 021° to MNG VOR, thence as cleared.

For NONIX: Turn RIGHT, track 035° to PEART. Cross PEART at or above 10000'. Turn RIGHT, track 035° to NONIX, thence as cleared.

1

**AT OR ABOVE
10000'**



MELBOURNE Clearance **127.2**

Departure (R) **118.9**

TRANS LEVEL: FL110
TRANS ALT: 10000'

YMML MELBOURNE INTL

RUNWAYS NORTH WEST

JETS ONLY

KEPPA EIGHT DEPARTURE [KEPPA8]

Minimum required climb gradients:

Rwy 16: 4.6% to 2900', then 3.3%.

Rwy 27: 3.3%.

Rwy 34: 3.5% to 1200', then 3.3%.

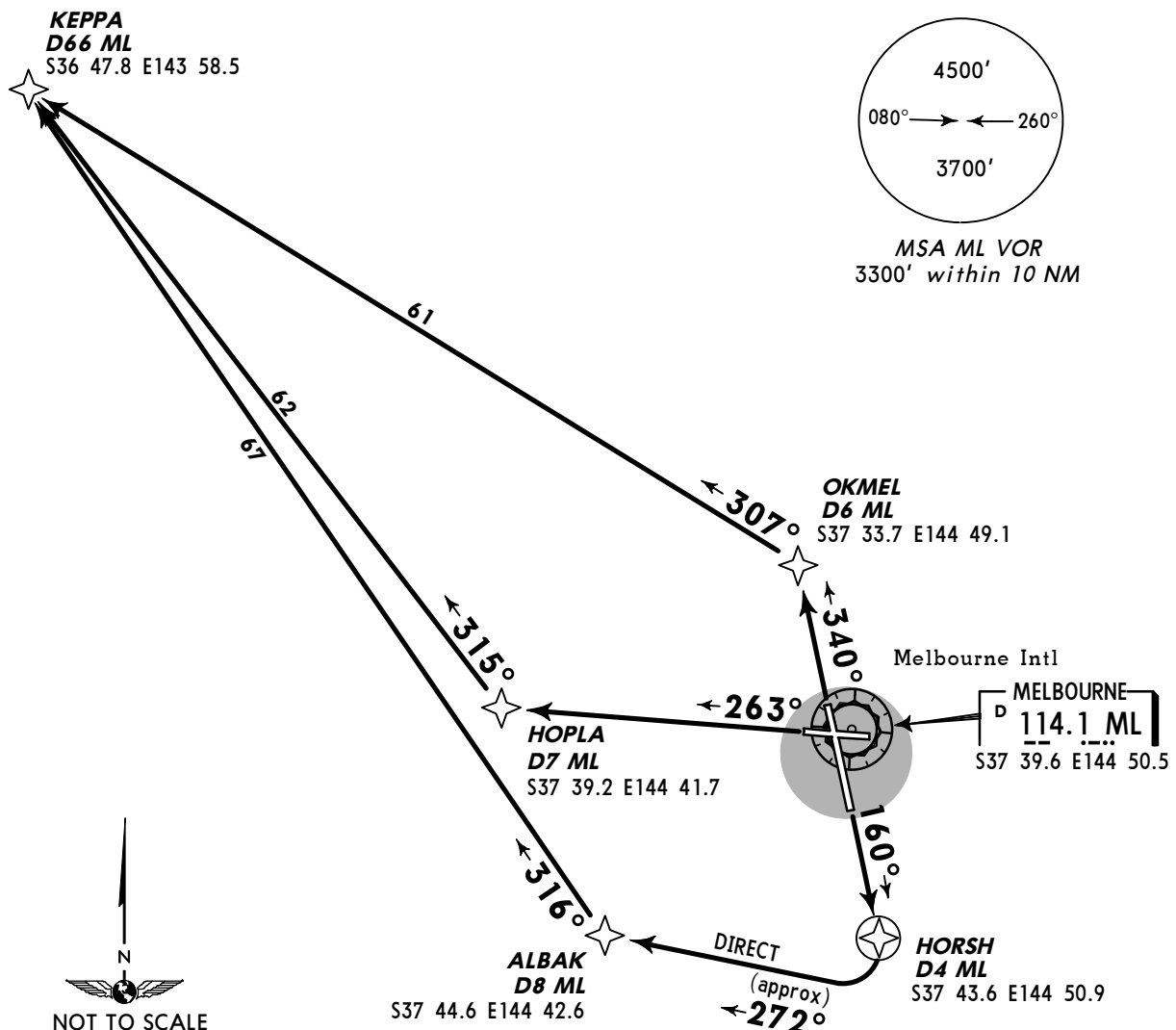
Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398

RWY 16: Track 160°. At HORSH turn RIGHT. Track direct to ALBAK (approx 272°). From ALBAK turn RIGHT, track 316° to KEPPA, thence as cleared.

RWY 27: Track 263°. From HOPLA turn RIGHT. Track 315° to KEPPA, thence as cleared.

RWY 34: Track 340°. From OKMEL turn LEFT. Track 307° to KEPPA, thence as cleared.

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MELBOURNE Clearance 127.2

Departure (R)

Tracks Northwest, North, Northeast 118.9

Tracks Southwest, South, Southeast 129.4

MELBOURNE, VIC, AUSTRALIA

YMMML MELBOURNE INTL

TRANS LEVEL: FL110
TRANS ALT: 10000'

MELBOURNE THREE DEPARTURE [ML3] ALL RUNWAYS

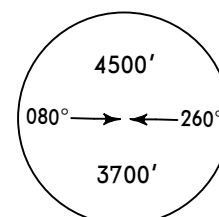
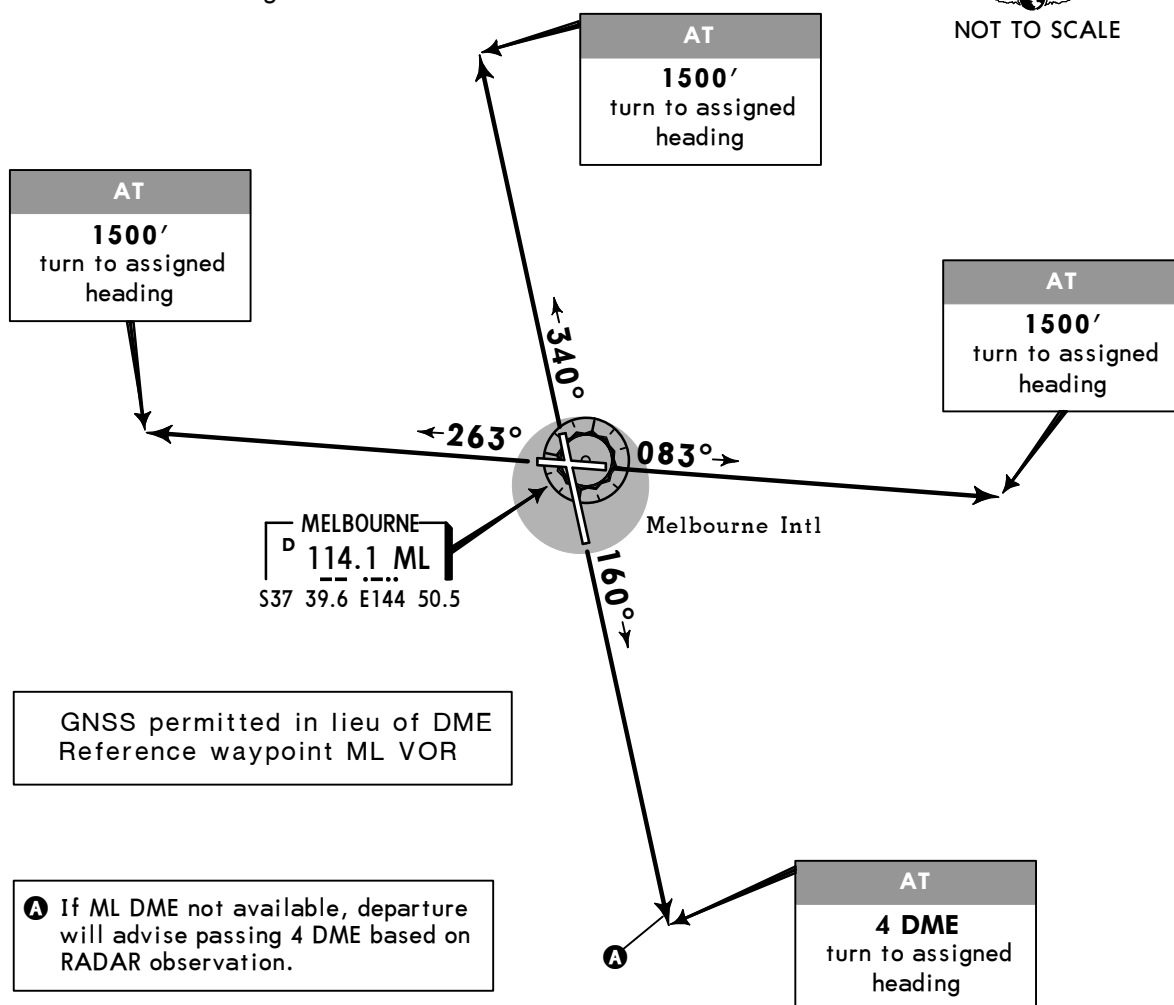
Minimum required climb gradients

Rwys 09, 27: 3.3%.

Rwy 16: 4.6% to 2900', then 3.3%.

Rwy 34: 3.5% to 1200', then 3.3%.

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398

MSA ML VOR
3300' within 10 NM**RWY 09:** Track 083°. At 1500' turn to assigned heading.**RWY 16:** Track 160°. At ML 4 DME turn to assigned heading.**RWY 27:** Track 263°. At 1500' turn to assigned heading.**RWY 34:** Track 340°. At 1500' turn to assigned heading.

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

LOST COMMS ▼

On recognition of communication failure:

Squawk 7600

MAINTAIN last assigned vector for two minutes and, if necessary, climb to minimum safe altitude to **MAINTAIN** terrain clearance, then proceed in accordance with the latest ATC route clearance acknowledged.

LOST COMMS ▼

MELBOURNE Clearance 127.2

Departure (R) 118.9

YMML MELBOURNE INTL

TRANS LEVEL: FL110
TRANS ALT: 10000'

RUNWAYS NORTH WEST

NON-JETS ONLY

OWENS THREE DEPARTURE [OWENS3]

SPEED: RWY 16: MAX IAS 230 KT BELOW 2900'

Minimum required climb gradients

Rwys 16: 4.6% to 2900', then 3.3%.

Rwy 27: 3.3%

Rwy 34: 3.5% to 1200', then 3.3%.

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398

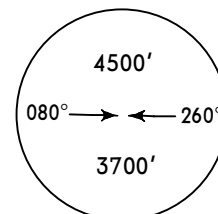
RWY 16: Track 160°. At 1300' turn RIGHT, track 295°. At ML 5 DME turn RIGHT, track 340°. Intercept ML R-314, track to OWENS, thence as cleared.

RWY 27: Track 263°. At ML 7 DME turn RIGHT, track direct to OWENS (approx 331°), thence as cleared.

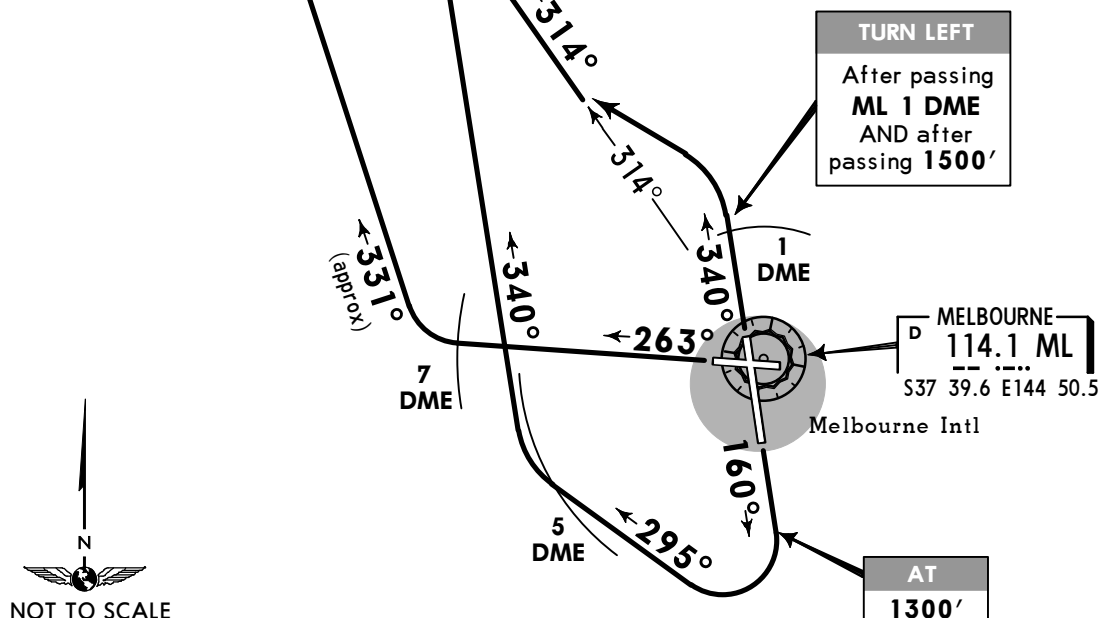
RWY 34: Track 340°. After passing ML 1 DME AND after passing 1500' turn LEFT. Intercept ML R-314, track to OWENS, thence as cleared.

**OWENS
D30 ML**
S37 14.8 E144 29.4

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MSA ML VOR
3300' within 10 NM



MELBOURNE Clearance **127.2**

Departure (R) **129.4**

YMML MELBOURNE INTL

TRANS LEVEL: FL110
TRANS ALT: 10000'

NON-JETS ONLY

SIMON THREE DEPARTURE [SIMON3]

Minimum required climb gradients:

Rwy 16: 4.6% to 2900' then 3.3%.

Rwy 27: 3.3%.

Rwy 34: 3.5% to 1200', then 3.3%.

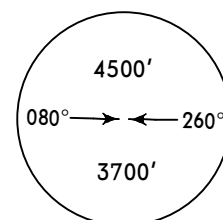
Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398

RWY 16: Track 160°. At HORSH turn RIGHT. Track 192° to SIMON, thence as cleared. Cross ML 10 DME at or above 4000'.

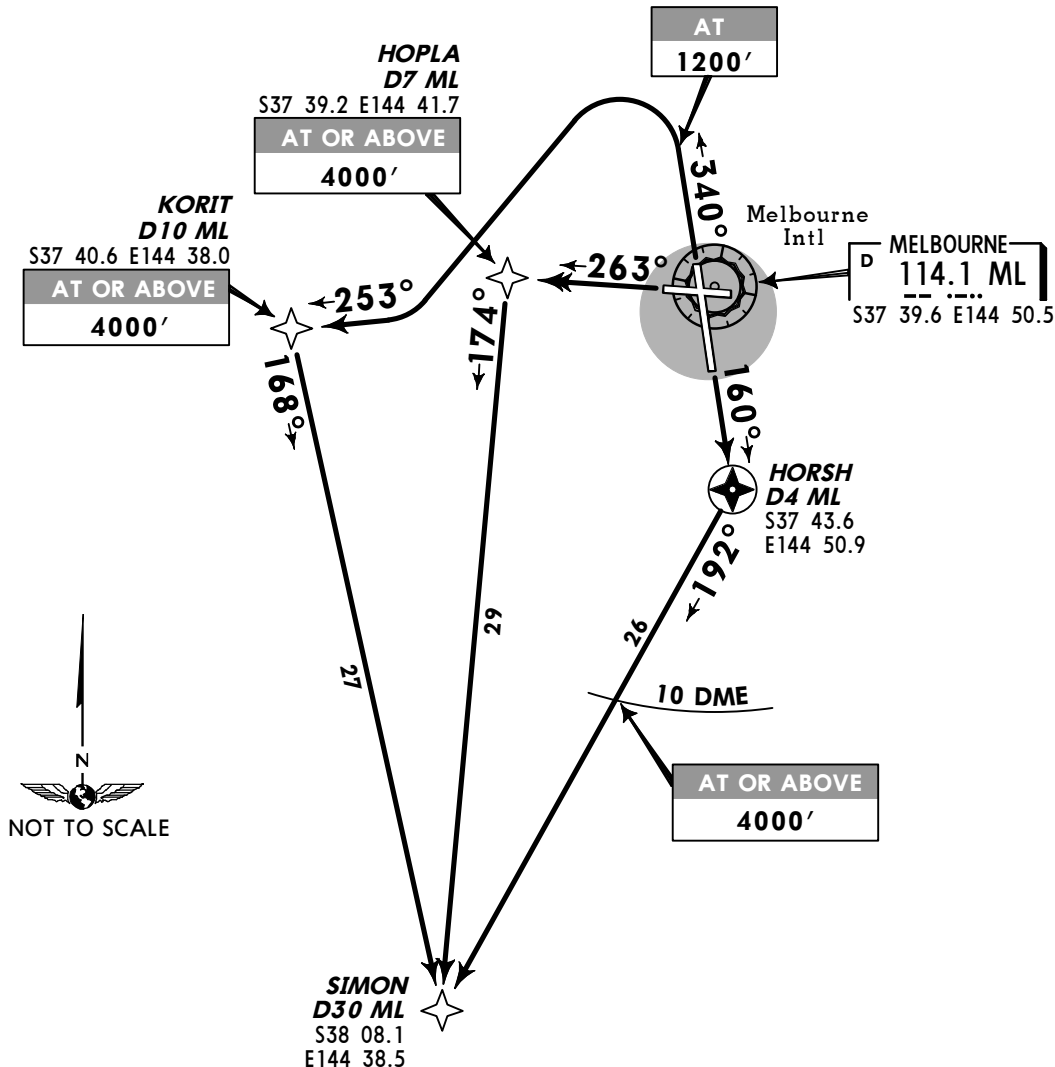
RWY 27: Track 263° to HOPLA. Cross HOPLA at or above 4000'. From HOPLA turn LEFT. Track 174° to SIMON, thence as cleared.

RWY 34: Track 340°. At 1200' turn LEFT to intercept track 253° to KORIT. Cross KORIT at or above 4000'. From KORIT turn LEFT. Track 168° to SIMON, thence as cleared.

GNSS permitted in lieu of DME
Reference waypoint ML VOR



MSA ML VOR
3300' within 10 NM



MELBOURNE Clearance **127.2**
Departure (R) **118.9**

YMML MELBOURNE INTL

TRANS LEVEL: FL110
TRANS ALT: 10000'

NON-JETS ONLY

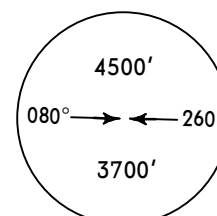
STRATHBOGIE (SBG) SIX DEPARTURE[SBG6]

SPEED: RWY 16: MAX IAS 230 KT BELOW 2900'

Minimum required climb gradients
Rwy 16: 4.6% to 2900', then 3.3%.
Rwy 27: 3.3%.
Rwy 34: 3.5% to 1200', then 3.3%.

Gnd speed-Kts	75	100	150	200	250	300
3.3% V/V (fpm)	251	334	501	668	835	1003
3.5% V/V (fpm)	266	354	532	709	886	1063
4.6% V/V (fpm)	349	466	699	932	1165	1398

GNSS permitted in lieu of DME
Reference waypoint ML VOR

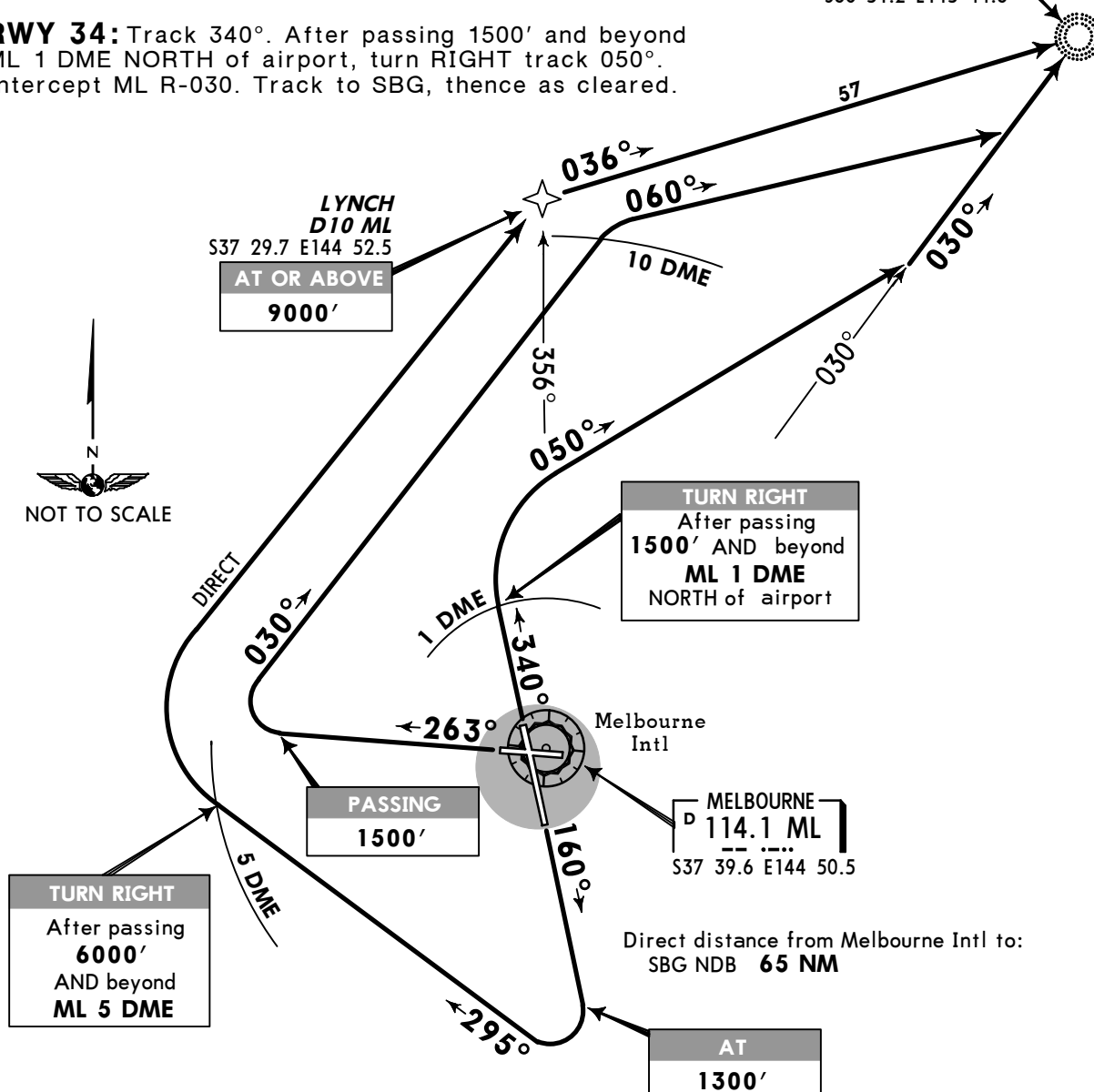


MSA ML VOR
3300' within 10 NM

RWY 16: Track 160°. At 1300' turn RIGHT. Track 295°. Passing 6000' and beyond ML 5 DME turn RIGHT, track direct to LYNCH. Cross LYNCH at or above 9000'. Track 036° to SBG NDB, thence as cleared.

RWY 27: Track 263°. Passing 1500' turn RIGHT. Track 030°. At ML 10 DME turn RIGHT. Track 060°. Intercept ML R-030. Track to SBG, thence as cleared.

RWY 34: Track 340°. After passing 1500' and beyond ML 1 DME NORTH of airport, turn RIGHT track 050°. Intercept ML R-030. Track to SBG, thence as cleared.



NOISE ABATEMENT PROCEDURES

1 - PREFERRED RUNWAY MODES (applicable to all aircraft)

1.1 (a) 0600 - 2300 HR local time

RUNWAY MODE

PRIORITY	LANDING	TAKE-OFF	NOTES
1 (equal)	Runway 16	Runway 27	See Note 1
1 (equal)	Runway 27	Runway 27 & 34	See Note 2
2	Runway 27	Runway 27	
3	Runway 34 or 16	Runway 34 or 16	
4	Runway 09	Runway 09	See Note 3

(b) 0600 - 2300 HR local time (high capacity landing modes)

RUNWAY MODE

PRIORITY	LANDING	TAKE-OFF	NOTES
1 (equal)	Runway 27 & 34 (LAHSO)	Runway 27	See Note 4
1 (equal)	Runway 34 & 09 (LAHSO)	Runway 34	See Note 4

(c) 2300 - 0600 HR local time

RUNWAY MODE

PRIORITY	LANDING	TAKE-OFF	NOTES
1	Runway 16	Runway 27	Except as per Note 5 See also Note 6
2	Runway 27	Runway 27 & 34	See Note 2 & 5
3	Runway 27	Runway 27	
4	Runway 34 or 16	Runway 34 or 16	
5	Runway 09	Runway 09	See Note 3

Notes:

- Runway 16 take-off permitted for south and east bound routes, subject to traffic by:
 - propeller-driven aircraft, the noise emissions from which do not exceed 90EPNdB (eg: DHC8, SF34); or
 - jet aircraft up to B737/A320 size, but only when there is a significant ground delay for a departure from RWY 27.
 - Runway 34 landing is permitted, subject to traffic, for arrivals via the PORTS STAR through south-west to the WENDY STAR.
 - Runway 09 is equal first priority for landing but lowest priority for take-off. Ad-hoc landings on runway 09 may be available when suitable with overall traffic management.
 - High capacity modes may be used during peak arrival periods when significant airborne delays would otherwise occur.
 - Night jet departures: When there are jet departures requiring the longer runway for take-off, priority 2 mode may be nominated by ATC instead of priority 1.
 - Runway 34 landing is permitted, subject to traffic, for arrivals via the WENDY STAR.
- 1.2 - Between the hours of 2300 and 0600 local, jet aircraft departing runway 16 must use the full runway length.
- 1.3 - Jet Noise abatement climb procedures apply for runways 16 and 09.

NOISE ABATEMENT PROCEDURES**2 - PREFERRED FLIGHT PATHS**

2.1 - The minimum height over densely populated areas is:

- Jet aircraft 5000FT AGL;
- Non-jet aircraft 3000FT AGL;

except where impractical in the normal course of operation to and from the airport runways.

2.2 - ATC shall normally process IFR departing aircraft via Standard Instrument Departures. When a departing aircraft is not following a procedural SID, ATC shall process the aircraft via flight paths that approximate relevant SID tracks, where possible, and in compliance with paragraph 2.1.

2.3 - IFR arriving aircraft must be processed via STAR tracks (where available), although aircraft may be radar vectored from STAR down-wind or base leg to final approach. Otherwise, STAR tracking may only be varied if essential for sequencing or separation. Non-STAR tracking must comply with paragraph 2.1.

2.4 - When Rwy 16 is in use:

Aircraft for left base will be tracked via:

- i. STAR track via BOL NDB; or
- ii. Visual track for left base to ROC NDB; provided that
 - (a) Aircraft must not be track shortened prior to HORUS waypoint (20 ML) from the LIZZI STAR or VALES waypoint (30 ML) from the BOYSE STAR; or
 - (b) If separation requires aircraft to be positioned north of the STAR base leg, ATC should route aircraft clear of Wallan Township. If avoidance of Wallan is not possible, then overflight by jet aircraft should be at or above 6000FT MSL whenever practicable.

2.5 - When Rwy 34 is in use:

- (1) Aircraft for right base:
 - i. Must follow STAR track via Essendon Airport; or
 - ii. If separation requires, may be RADAR VECTORED south of Essendon Airport to intercept runway centerline.
- (2) Aircraft for straight-in approach or left base:
 - i. Must follow the applicable STAR; or
 - ii. Between 0600 and 2300 local only, may be RADAR VECTORED to be established on runway centerline not closer than 5 DME ML (3.5 NM from touchdown).

2.6 - Between the hours of 2300 and 0600 local, aircraft from the south-east must not proceed west of the Wonthaggi - MONTY track until MONTY, except that aircraft requiring to land on Runway 34 may proceed via the PORTS STAR for straight-in approach.

3 - TRAINING FLIGHTS

- a. All aircraft planning practice instrument approaches, available 2000-1300 UTC, or airwork within the Melbourne Terminal Airspace require prior ATC approval. Pilots must contact the Melbourne Traffic Manager on 03 9235 7337 to book a time slot. For arriving aircraft, a request must be made to Melbourne Center by 120 NM from Melbourne or on first contact for aircraft entering CTA within 120 NM.
- b. Training circuits are not permitted.

Pilots will be notified by ATIS broadcast or directed transmission if RVR is not available when the visibility is less than 2625' (800m).

AIRPORT EFFICIENCY PROCEDURES

1. DEPARTING AIRCRAFT

- 1.1 Whenever possible, complete cockpit checks prior to line-up and keep any checks requiring completion on the runway to a minimum.
- 1.2 On receipt of line up clearance, taxi into position as soon as possible. Do not backtrack.
- 1.3 Pilots and ATC should endeavor to keep aircraft moving and avoid a standing start.
- 1.4 Commence the take off roll as soon as take off clearance is issued.

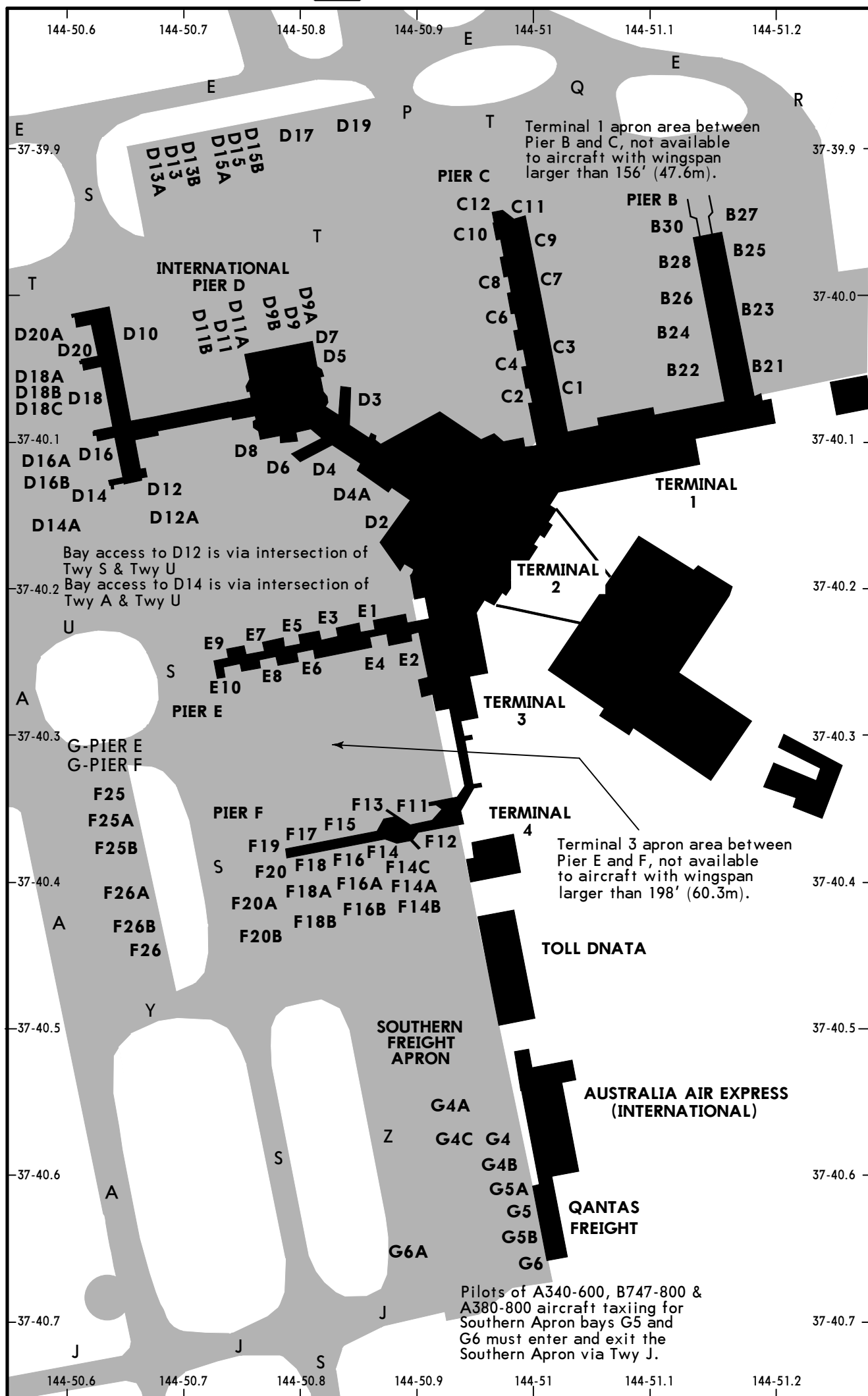
2. ARRIVING AIRCRAFT

- 2.1 To ensure minimum runway occupancy time and support optimum spacing on final, whenever operational conditions permit, expect to vacate the runway via the exit taxiways specified in the table below.
- 2.2 Plan a predictable and efficient exit from the runway and if an exit other than the preferred is required, advise tower on first contact.
- 2.3 Landing Exit Distance (LED), the distance from the threshold to the furthest edge of the exit taxiway, are provided to assist planning.

RWY	AIRCRAFT TYPE	TWY Exits	LED
09	Turboprop	❶ A	5440' 1658m
	Other aircraft	❶ P	7500' 2286m
		Q	7500' 2286m
16	All aircraft	E	4442' 1354m
		❶❷ G	6381' 1945m
		J	9531' 2905m
27	All aircraft Heavy	❶❷ N	5348' 1630m
		M	7500' 2286m
34	All aircraft	❶❷ F	5938' 1810m
		E	7700' 2347m
		C	11,027' 3361m

❶ Preferred exits.

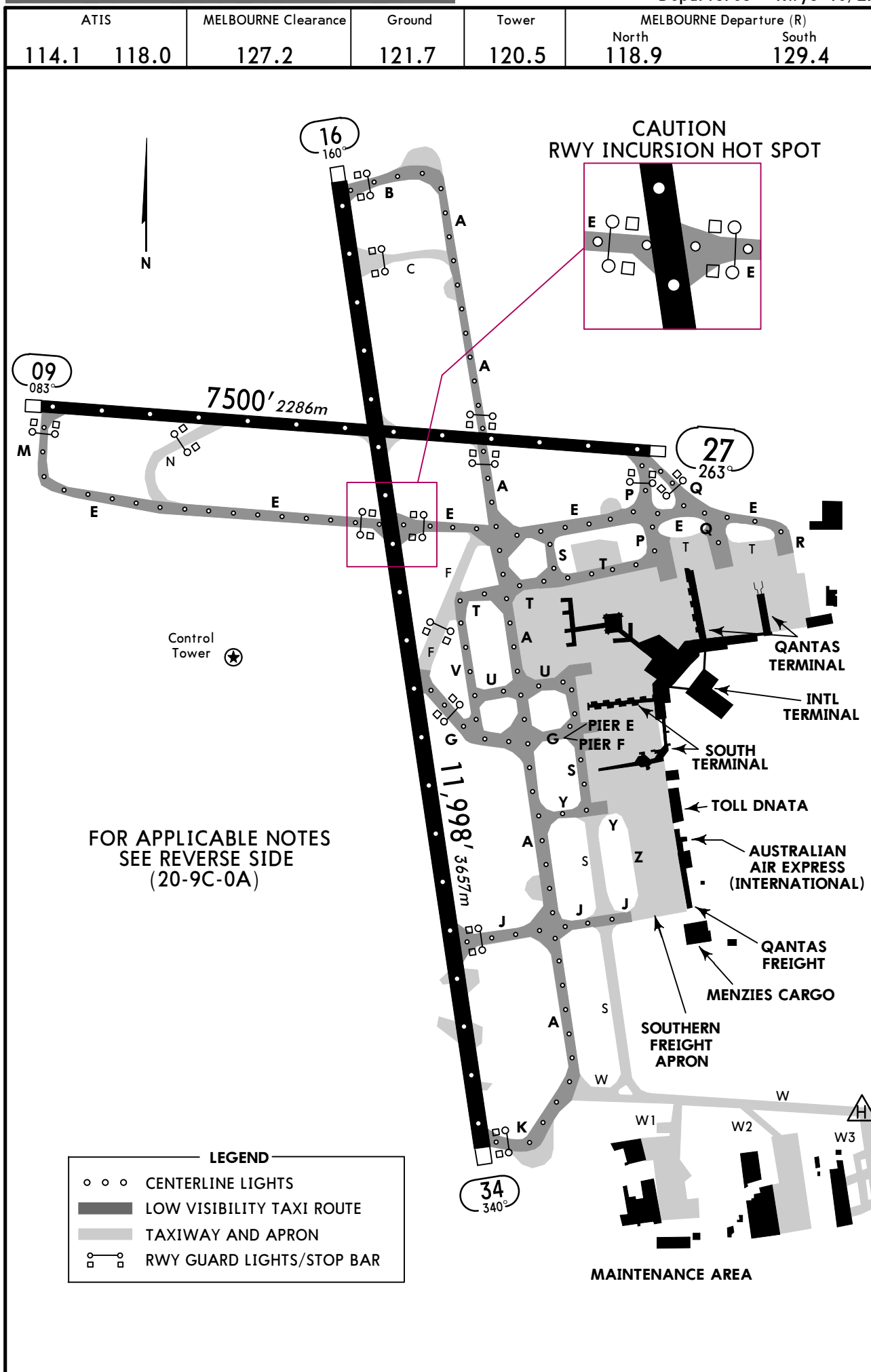
❷ Indicates Rapid Exit Taxiway (RET) and maximum design ground speeds are 53 KT (50 KT WET).



PARKING BAY COORDINATES

BAY No.	COORDINATES	ELEV	BAY No.	COORDINATES	ELEV
PIER B			PIER E		
B21	S37 40.1 E144 51.2		E1, E2	S37 40.2 E144 50.9	
B22	S37 40.0 E144 51.1		E3 thru E8	S37 40.2 E144 50.8	
B23	S37 40.0 E144 51.2		E9	S37 40.2 E144 50.7	
B24	S37 40.0 E144 51.1		E10	S37 40.3 E144 50.7	
B25	S37 40.0 E144 51.2				
B26	S37 40.0 E144 51.1		PIER F		
B27	S37 40.0 E144 51.2		F11 thru F13	S37 40.4 E144 50.9	
B28, B30	S37 40.0 E144 51.1		F14 thru F14C	S37 40.4 E144 50.9	
			F15	S37 40.4 E144 50.8	
PIER C			F16 thru F16B	S37 40.4 E144 50.8	
C1 thru C4	S37 40.1 E144 51.0		F17	S37 40.4 E144 50.8	
C6 thru C9	S37 40.0 E144 51.0				
C10	S37 40.0 E144 50.9		F18 thru F18B	S37 40.4 E144 50.8	
C11	S37 40.0 E144 51.0		F19	S37 40.4 E144 50.8	
C12	S37 40.0 E144 50.9		F20 thru F20B	S37 40.4 E144 50.8	
INTERNATIONAL PIER D			F25	S37 40.4 E144 50.6	372'
D2	S37 40.2 E144 50.9	387'	F25A	S37 40.4 E144 50.6	373'
D3	S37 40.1 E144 50.8	388'			
D4 thru D4A	S37 40.1 E144 50.8	387'	F25B	S37 40.4 E144 50.6	372'
D5	S37 40.1 E144 50.8	390'	F26 thru F26B	S37 40.4 E144 50.7	371'
D6	S37 40.2 E144 50.7	386'			
D7	S37 40.0 E144 50.8	391'	SOUTHERN FREIGHT APRON		
D8	S37 40.1 E144 50.7	386'	G4	S37 40.6 E144 50.9	372'
D9 thru D9B	S37 40.1 E144 50.8	390'	G4A	S37 40.5 E144 50.9	372'
D10	S37 40.1 E144 50.7	386'	G4B	S37 40.6 E144 50.9	371'
D11 thru D11B	S37 40.1 E144 50.7	388'	G4C	S37 40.6 E144 50.9	372'
			G5, G5A	S37 40.6 E144 50.9	370'
D12, D12A	S37 40.2 E144 50.7	383'			
D13 thru D13B	S37 39.9 E144 50.7	396'	G5B	S37 40.6 E144 50.9	369'
D14, D14A	S37 40.2 E144 50.6	382'	G6	S37 40.7 E144 50.9	367'
D15 thru D15B	S37 39.9 E144 50.7	393'	G6A	S37 40.7 E144 50.8	364'
D16 thru D16B	S37 40.1 E144 50.6	382'			
D17	S37 39.9 E144 50.8	394'			
D18 thru D18C	S37 40.1 E144 50.6	383'			
D19	S37 39.9 E144 50.8	395'			
D20, D20A	S37 40.1 E144 50.6	383'			

LESS THAN RVR 550m TO 75m



Preparations for the activation of Low Visibility Procedures (LVP) are commenced when visibility has reduced to 2000m and is further reducing.

When visibility deteriorates below 550m RVR and/or when the cloud base reduces below 200', the ILS critical and sensitive areas are protected and "Low Visibility Procedures in Force" is declared.

LVP measures are progressively lifted when cloud base reaches 300' and the visibility reaches 850m and is increasing.

ATC uses Advanced Surface Movement Guidance Control System (A-SMGCS) to monitor ACFT and vehicles on the Maneuvering Area.

If A-SMGCS is Unserviceable during LVP:

- a. ATC will further restrict operations on the Maneuvering Area.
- b. Position reporting procedures may be implemented.

"FOLLOW-ME" SERVICE: Flight Crew must notify ATC if a "Follow Me" service is required.

For CASA APV operators, all RWYs are capable of supporting low visibility take-offs without limit, however only:

- a. RWY 16 and 27 are normally used for low visibility departures.
- b. RWY 16 is capable of supporting localizer guided take-offs.

Note: Flight crew must inform ATC at start up about an intention to conduct a take-off that requires localizer guidance.

Access to Rwy 27 is via Twy Papa or Twy Quebec. Access to Rwy 16 is via Twy Bravo. Intersection departures are not permitted.

Rwy 16 is the arrival runway for low visibility operations and is capable of supporting Category II and III approaches.

No arrivals will be allowed when RVR is less than RVR 75m.

Approved taxiway exits are Twy Golf, Twy Juliet and Twy Kilo.

During LVP, the following Twys are not available:

- a. Twy Charlie, Twy Foxtrot, Twy Tango between Twy Papa and Twy Romeo
- b. Twy November
- c. Twy Sierra between Twy Yankee and Twy Whiskey
- d. Twy Whiskey between Twy Alpha and Twy Whiskey Four

Instrumented RVR is provided for each Rwy. In event of failure of RVR, Runway Visibility assessments will be provided on request.

VISUAL DOCKING GUIDANCE SYSTEMS

Visual Docking Guidance Systems used in Australia are Nose-In-Guidance (NIG) systems which provide both azimuth and stopping information for specific aircraft types.

The first NIG system contains five elements whose location is shown in Figure 1.

- Position Identification Light
- Aerobridge Retracted Indicator
- Centerline Guidance Light
- Side Marker Board
- Side Marker Light

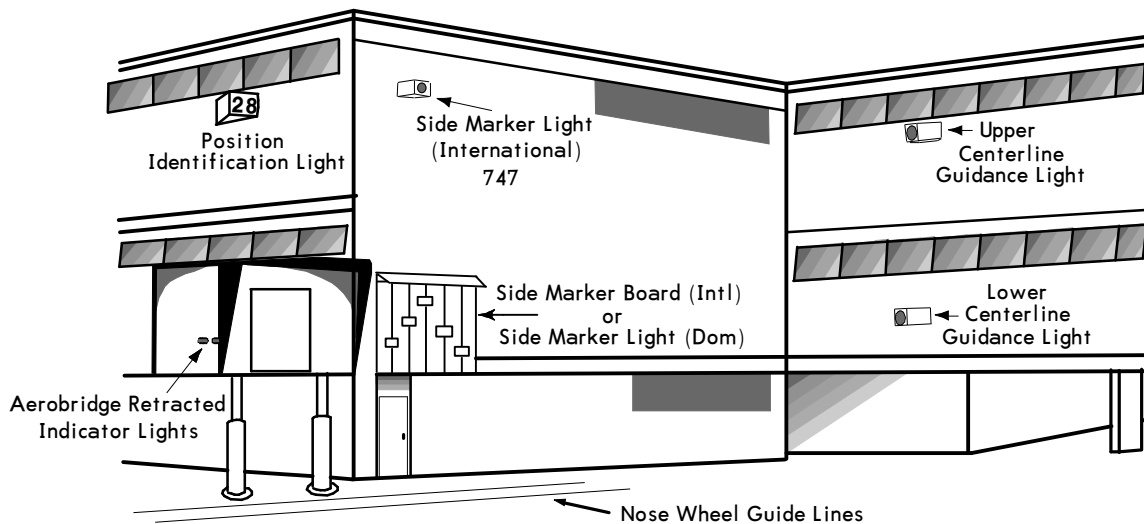


Figure 1 - Visual Docking Guidance System

Aircraft should use the following elements for docking:

AIRCRAFT TYPES	CENTERLINE LIGHT	STOP
DOMESTIC All types	Centerline Guidance Light	Side Marker Light
INTERNATIONAL All types except wide body	Lower Centerline Guidance Light	Side Marker Board
INTERNATIONAL DC-10, B-767, L-1011, A300B	Intermediate Centerline Guidance Light	Side Marker Board
INTERNATIONAL B-747	Upper Centerline Guidance Light	Side Marker Light

NOTES:

1. Some International docking positions are not equipped for wide body aircraft and hence only the Lower Centerline Guidance light is provided.
2. Heights of the Centerline Guidance Lights are:
 - a. Lower: up to 5m
 - b. Intermediate: 5 to 7.5m
 - c. Upper: above 7.5m

VISUAL DOCKING GUIDANCE SYSTEMS

The following is a brief description of the system:

- c. The Position Identification Light indicates the number of the docking position and is white numerals on a black background outlined in green neon tubing at night.
- d. The Aerobridge Retracted Indicator consists of two lights. The green light indicates the Aerobridge is in the fully retracted position. The red light indicates that the Aerobridge is not fully retracted or that an element of the visual guidance docking system is unserviceable.
- e. The Centerline Guidance Light provides azimuth information and is aligned with the left pilot position. The unit emits RED/GREEN light beams and the signals are interpreted as follows:
RED/GREEN: Aircraft is to the left of the centerline
GREEN/GREEN: Aircraft is on the centerline
GREEN/RED: Aircraft is to the right of the centerline
- f. The slats on the side Marker Board indicate the stopping position for each type of aircraft. Approaching the position the slat will show GREEN, at the stopping position the slat will show BLACK and beyond that position RED.
- g. There are two Side Marker Light systems that indicate the stopping position.

DOMESTIC (ALL TYPES)

- a. Approaching the position a preliminary dull GREEN light will show through the arrow-shaped aperture which also exhibits a cross bar.
- b. As the aircraft moves forward the intensity of the green light increases until it becomes a bright "arrow-head T" shape which is the DC9 stopping point.
- c. As the aircraft continues the bar of the stop signal disappears and the arrow-head starts to reduce in size.
- d. When the arrow-head disappears two white bars appear one above the other indicating the stopping position. In some installations two sets of bars are provided one for the B727 the other for the B737.
- e. If the stopping position is passed then a single RED bar appears.

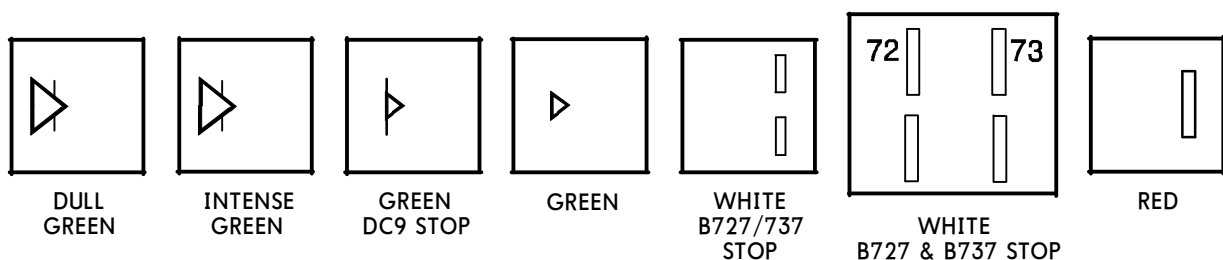


Figure 2 - Side Marker Lights (Domestic)

International (For B747 Aircraft only) This is the same as the domestic system described above except that there is only one set of white bars and no bar around the arrow-head.

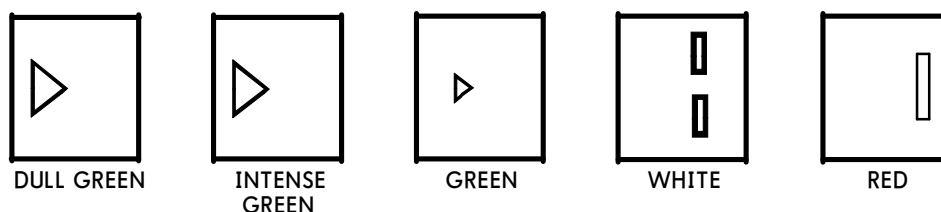


Figure 3 - Side Marker Light (International) (B747 only)

VISUAL DOCKING GUIDANCE SYSTEMS

AIRCRAFT POSITIONING AND INFORMATION SYSTEM (APIS)

The third system operating in Australia is installed on International Terminal bays at Melbourne Airport. The APIS is based on a centerline guidance sub-display. The steering and stop indication is provided from a display unit mounted on a pole in front of the cockpit in line with the left hand pilot seat. The parking bay position identification is mounted on top of the guidance pole.

On approach to the parking position, the pilot will see the display box face showing two rows of yellow alpha-numeric characters on a black background across the top, an illuminated closing rate 'thermometer' at lower left, and an illuminated azimuth guidance display at lower right. The alpha-numeric characters on the top row should be flashing.

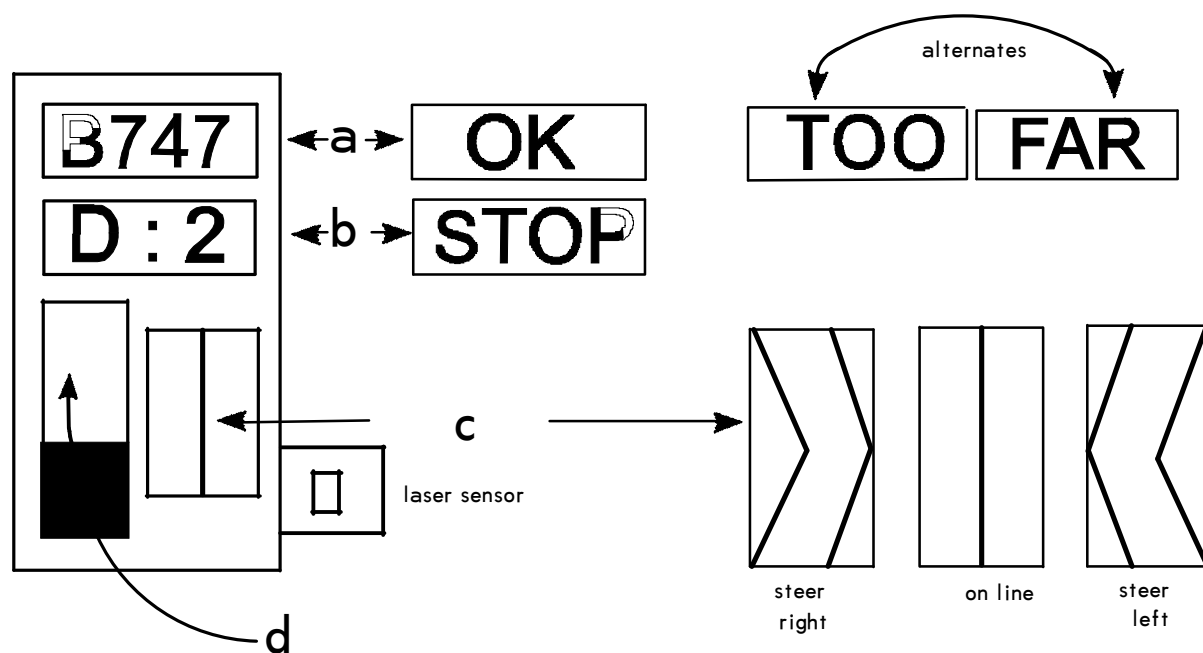
The following is the sequence of APIS operation from initial approach to STOP:

- a. Identify the correct aircraft parking bay position.
- b. Ensure that the aerobridge retraction light indicates green.
- c. Follow the taxi-in line and watch the centerline beacon.
- d. Check that the correct aircraft type is flashing and that the door number is shown (where applicable).
- e. About 20m before STOP, the aircraft type display goes steady and the door number disappears.
- f. Follow the azimuth guidance display. The black arrow heads indicate which direction to steer for the centerline. When the aircraft is properly aligned in azimuth, the black vertical bar will be displayed.
- g. The full closing rate 'thermometer' indicates at least 13m to STOP.
- h. When the aircraft reaches 13m to STOP, the 'thermometer' bar lights begin to move from the bottom to the top.
- i. The deletion of each 'thermometer' bar indicates about one-half meter progression.
- j. When the STOP position is reached, all the closing rate 'thermometer' lights extinguish and the lower display indicates STOP. If the aircraft is correctly parked, the top display indicates OK.
- k. If the aircraft overshoots the limit for correct parking, the top display indicates TOO FAR (alternating TOO then FAR).
- l. The entire display automatically shuts down after some seconds.

NOTE: When the last row of lights of the closing rate 'thermometer' is extinguished and the word STOP is displayed, the aircraft should be at a standstill.

VISUAL DOCKING GUIDANCE SYSTEMS

Figure 4 - APIS Diagram



- a. Display: ACFT type, OK or TOO/FAR.
- b. Display: Door Number or STOP.
- c. Centerline Beacon: Steering guidance.
- d. 'Thermometer': Closing rate indication - stopping guidance.

NOTE: The lettering is yellow on a black background. The 'thermometer' is yellow and goes black from bottom to top. The centerline beacon is a central black band surrounded by yellow.

VISUAL DOCKING GUIDANCE SYSTEMS**SAFEGATE DOCKING GUIDANCE SYSTEM (DGS)**

The Safegate Docking Guidance System is used at Melbourne International Terminal (Bays D2, D3, D4, D5, D6 and D8). Its operation is based on laser scanning of the incoming aircraft. The complete system consists of the following three elements:

1. Position Identification Unit (Bay Marker);
2. Aerobridge Retracted Indicator Light; and
3. DGS NIG Unit.

System Description

The Position Identification Unit gives clear indication of the parking bay for the aircraft. It consists of large white numerals on a dark background (illuminated at night by green neon lights).

The Aerobridge Retraction Indicator Light, mounted on the aerobridge, gives an early warning of the state of aerobridge location. Green indicates a fully retracted aerobridge position or a safe pre-parked position; red indicates that the aerobridge is out of position and the pilot should not proceed with parking the aircraft.

The NIG unit, mounted on the Terminal wall, consists of two components which supply the following information to the pilot:

1. The top alphanumeric information display which shows aircraft type designation, and other message information as necessary in yellow.
2. The azimuth and centerline guidance displays in red and yellow and the Closing Rate Bar in yellow.

Aircraft Types

The aircraft types which can utilize the system are displayed as follows:

Type	Display
Boeing	777-300, 777-200, 767, 747, 737-800, 737-700, 737-400, 737-300
McDonnell Douglas	MD11, DC10
Airbus Industries	340-500, 340-300, 340-200, 330, 320, 310, 300

VISUAL DOCKING GUIDANCE SYSTEMS

System Operation

The following is the sequence of system operation from initial approach to STOP:

- a. The pilot identifies the correct parking bay position.
- b. The pilot ensures that the aerobridge retraction light is green.
- c. The pilot observes that the rising vertical yellow arrows are indicating the system is activated and searching for the approaching aircraft.
NOTE: The pilot must not enter the stand area unless the rising vertical arrows are displayed.
- d. The pilot follows the taxi-in line and checks that the correct aircraft type is displayed in yellow.
NOTE: The pilot must not enter the stand area unless the correct aircraft type is displayed.
- e. On successful capture of the aircraft, the vertical arrows are replaced by the yellow T-shaped Closing Rate Bar.
NOTE: The pilot must not proceed to the bridge unless the arrows have been superseded by the Closing Rate Bar.
- f. A vertical yellow arrow shows the aircraft position in relation to the centerline.
- g. A flashing red arrow indicates the direction to turn to return to the centerline.
NOTE: If the aircraft is approaching faster than the accepted speed, the system will show SLOW DOWN as a warning.
- h. The display of the yellow digital closing rate countdown will start when the aircraft is 20 meters from the STOP position.
NOTE: If the detected aircraft is lost prior to 12 meters to STOP, the display will show WAIT. The docking will continue as soon as the system detects the aircraft again.
- i. When the aircraft is 12 meters from the STOP position, the Closing Rate Bar will decrease in size from the bottom by one row of lights per 0.5 meters closing rate.
NOTE: If the detected aircraft is lost after 12 meters to STOP, the display will show STOP and ID FAIL. Assistance must then be sought from the ground engineers.
- j. When the correct STOP position is reached, the display shows STOP and red lights will be lit.
- k. When the aircraft has parked, OK will be displayed.
- l. If the aircraft has overshoot the position, TOO FAR will be displayed.
- m. When ground engineers have placed the chocks at the nosewheel, they will manually change the display to CHOCK ON.

VISUAL DOCKING GUIDANCE SYSTEMS

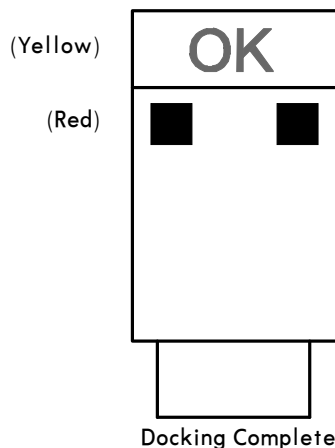
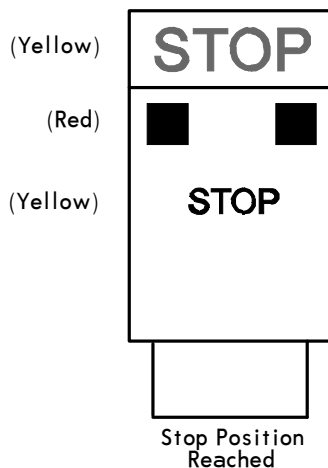
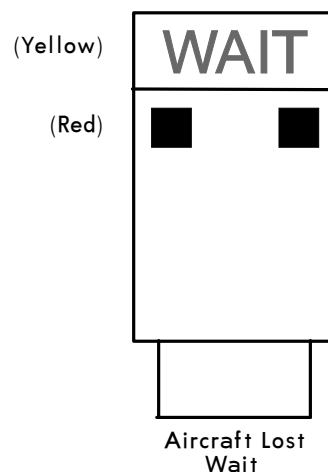
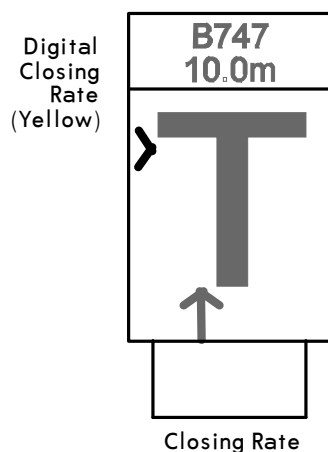
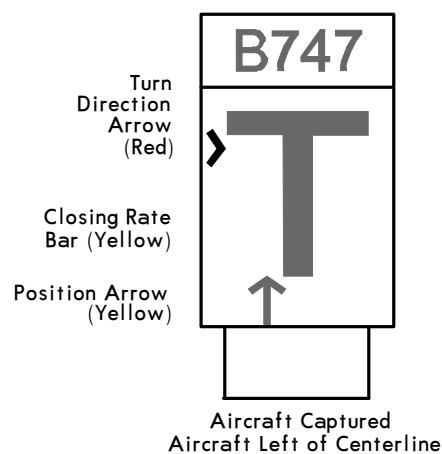
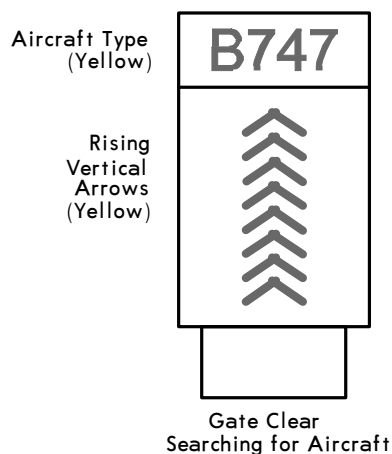
- n. During heavy rain or fog, the visibility for the docking system might be reduced. When the system is activated and in capture mode, the display will deactivate the rising vertical arrows and show DOWN GRADE. This text will be superseded by the Closing Rate Bar once the aircraft is detected.

NOTE: The pilot must not continue the approach to the bridge unless the DOWN GRADE text has been superseded by the Closing Rate Bar.

Ground engineers have access to emergency push-buttons to deactivate the system. When an emergency stop is activated, the display will show STOP. The ground engineers will then be required to complete the docking manually once the emergency situation is cleared.

VISUAL DOCKING GUIDANCE SYSTEMS

SAFEGATE DOCKING GUIDANCE SYSTEM



BRIEFING STRIP™

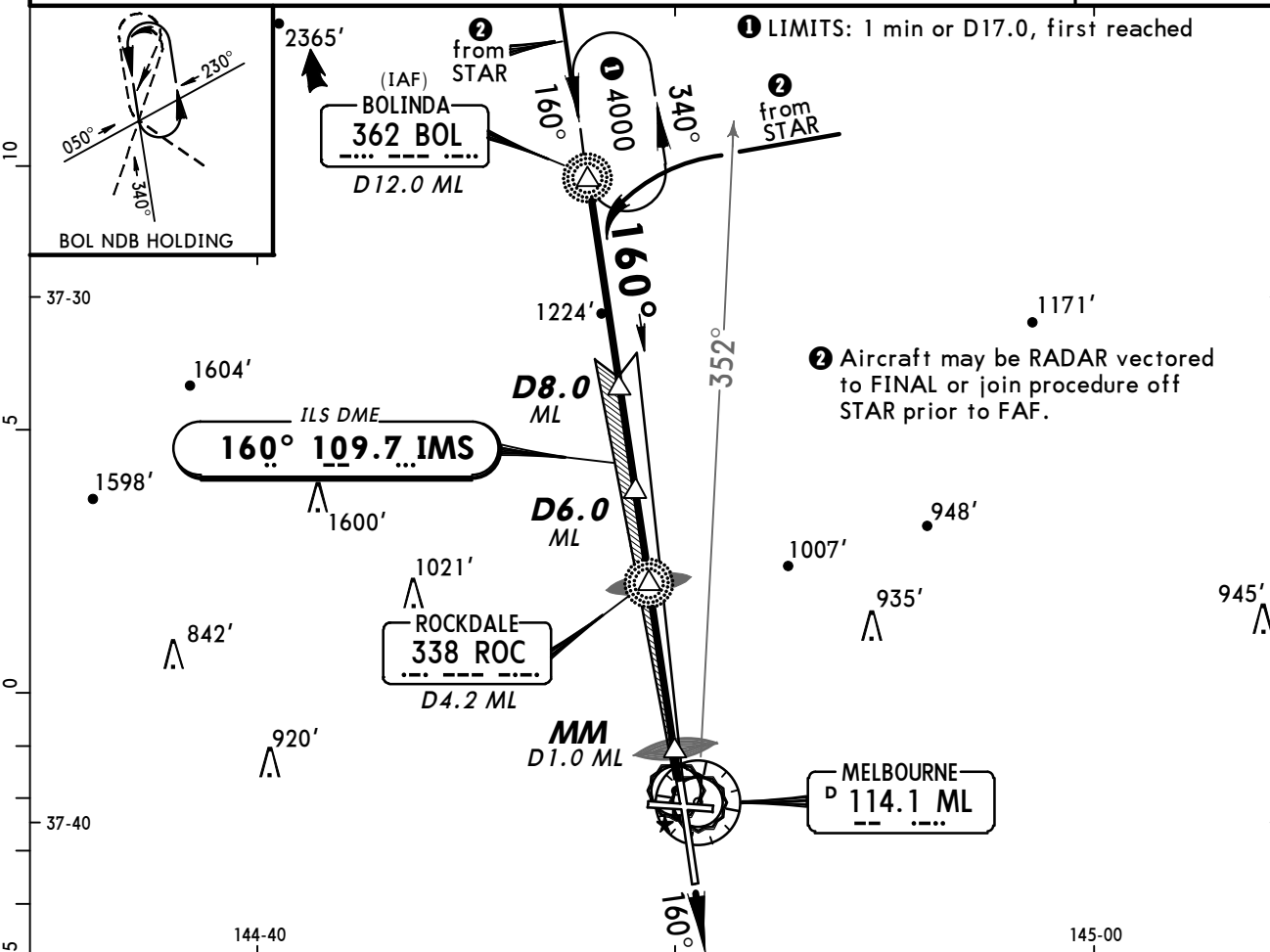


PANS OPS

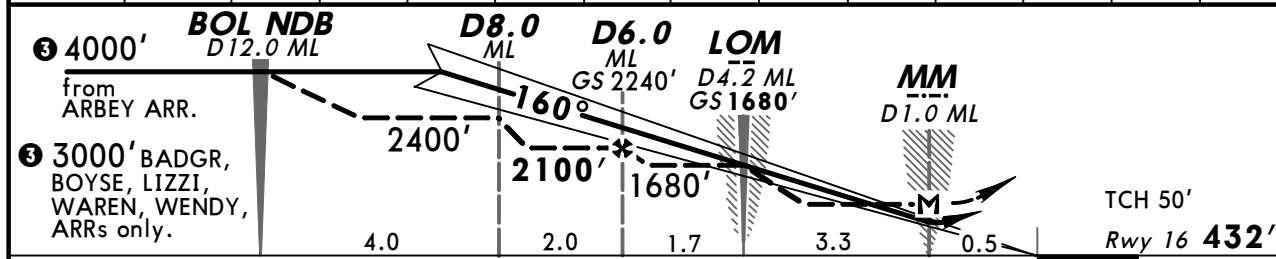
© JEPPESEN, 2009, 2014. ALL RIGHTS RESERVED.

BRIEFING STRIP™

ATIS 114.1 118.0		MELBOURNE Approach (R) 132.0		MELBOURNE Tower 120.5		Ground 121.7
LOC IMS 109.7	Final Apch Crs 160°	GS LOM 1680' (1248')	ILS DA(H) 640' (208')	Apt Elev 434' Rwy 16 432'		
MISSED APCH: Track 160°. Climb to 4000' or as directed by ATC.						4500' 080° → ← 260° 3700' MSA ML VOR 3300' within 10 NM
Alt Set: hPa Rwy Elev: 16 hPa Trans level: FL 110 Trans alt: 10000' 1. ML DME Required (LOC only). 2. GNSS permitted in lieu of DME. Reference waypoint ML VOR. 3. ATC Approach Speeds: At BOL NDB 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.						



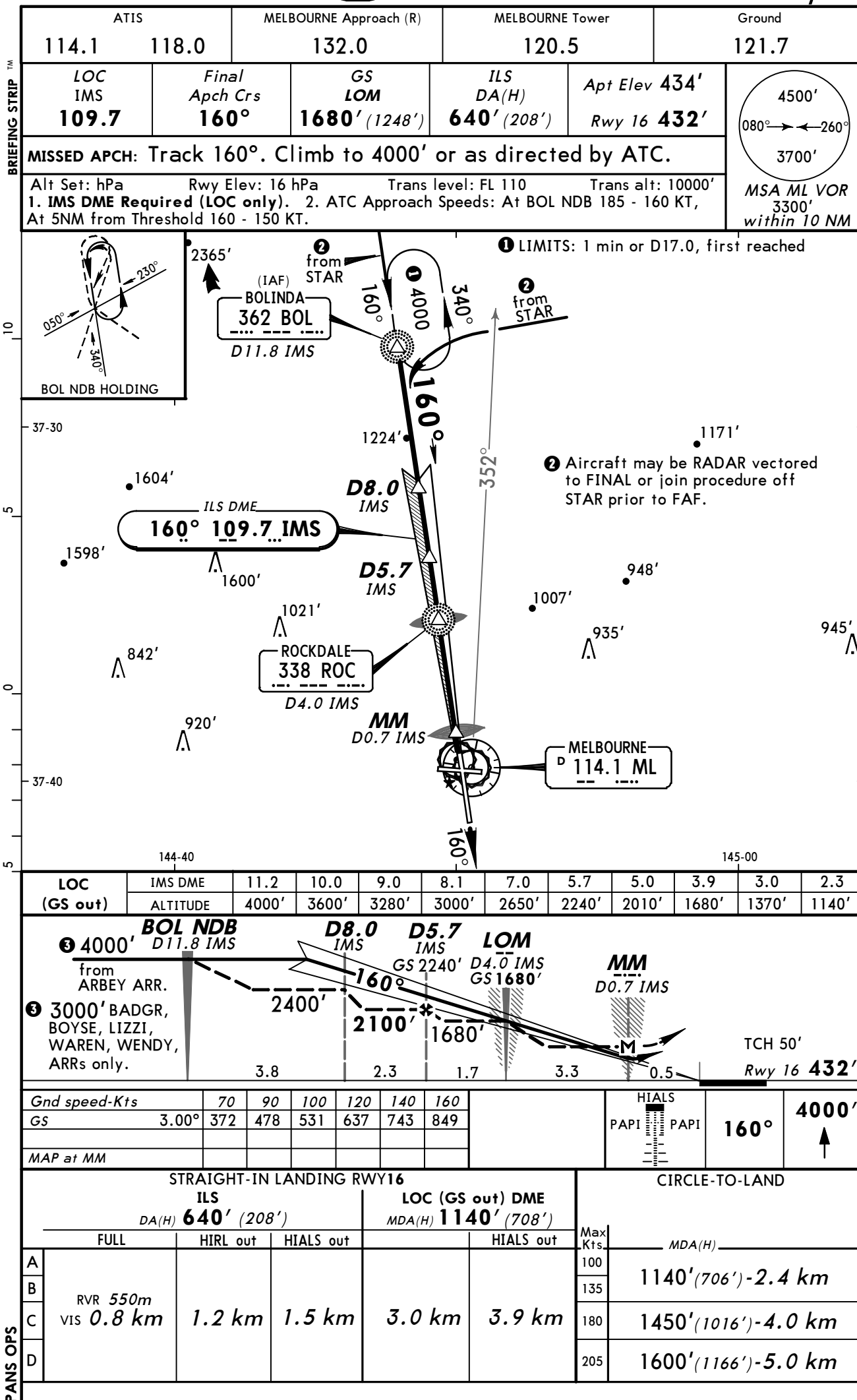
LOC	ML DME	11.5	11.0	10.0	9.0	8.4	8.0	7.0	6.0	5.0	4.2	3.0	2.5
(GS out)	ALTITUDE	4000'	3840'	3520'	3200'	3000'	2880'	2560'	2240'	1920'	1680'	1290'	1140'

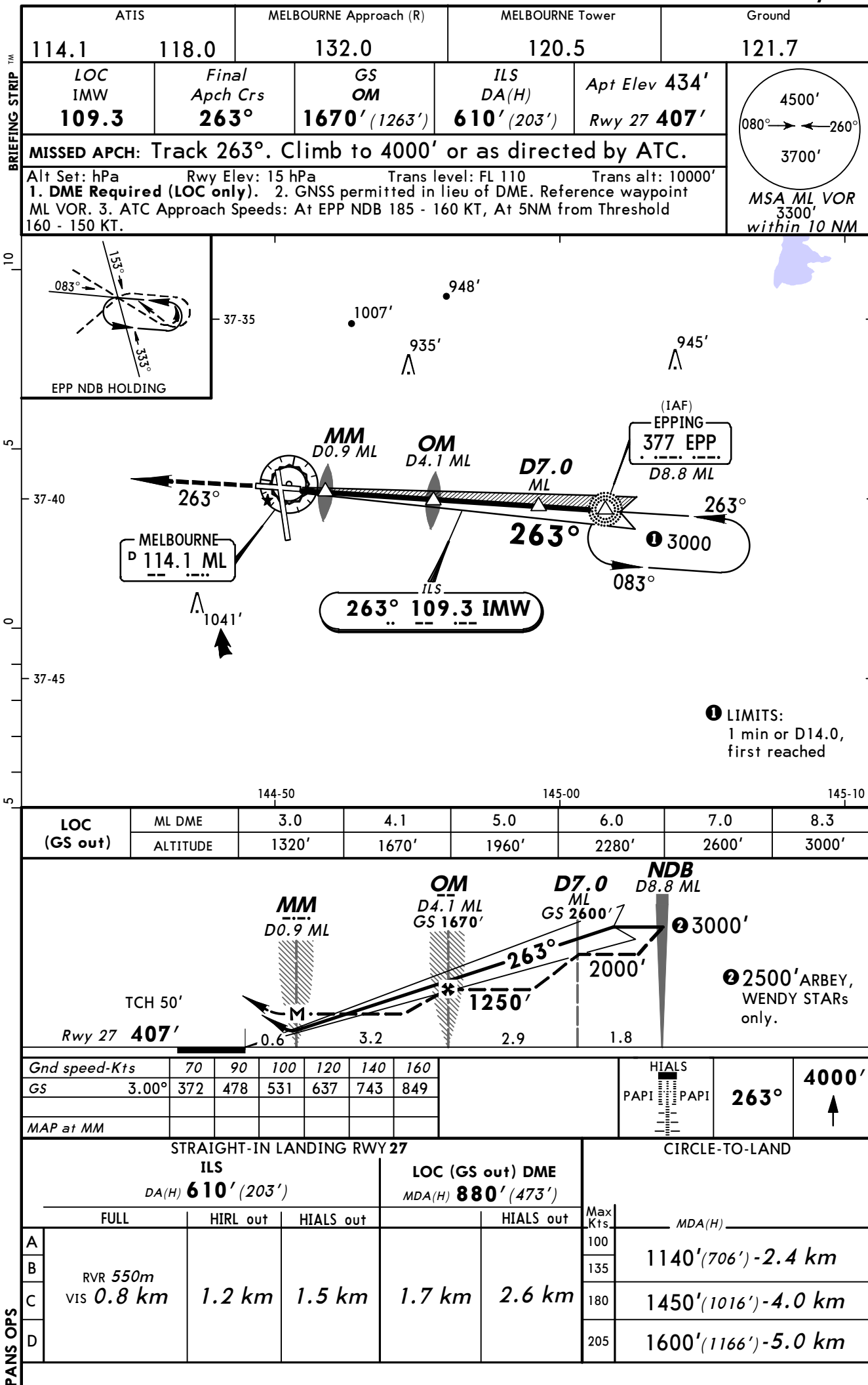


Gnd speed-Kts	70	90	100	120	140	160	HIALS		4000'	
GS	3.00°	372	478	531	637	849	PAPI PAPI		160°	
MAP at MM										

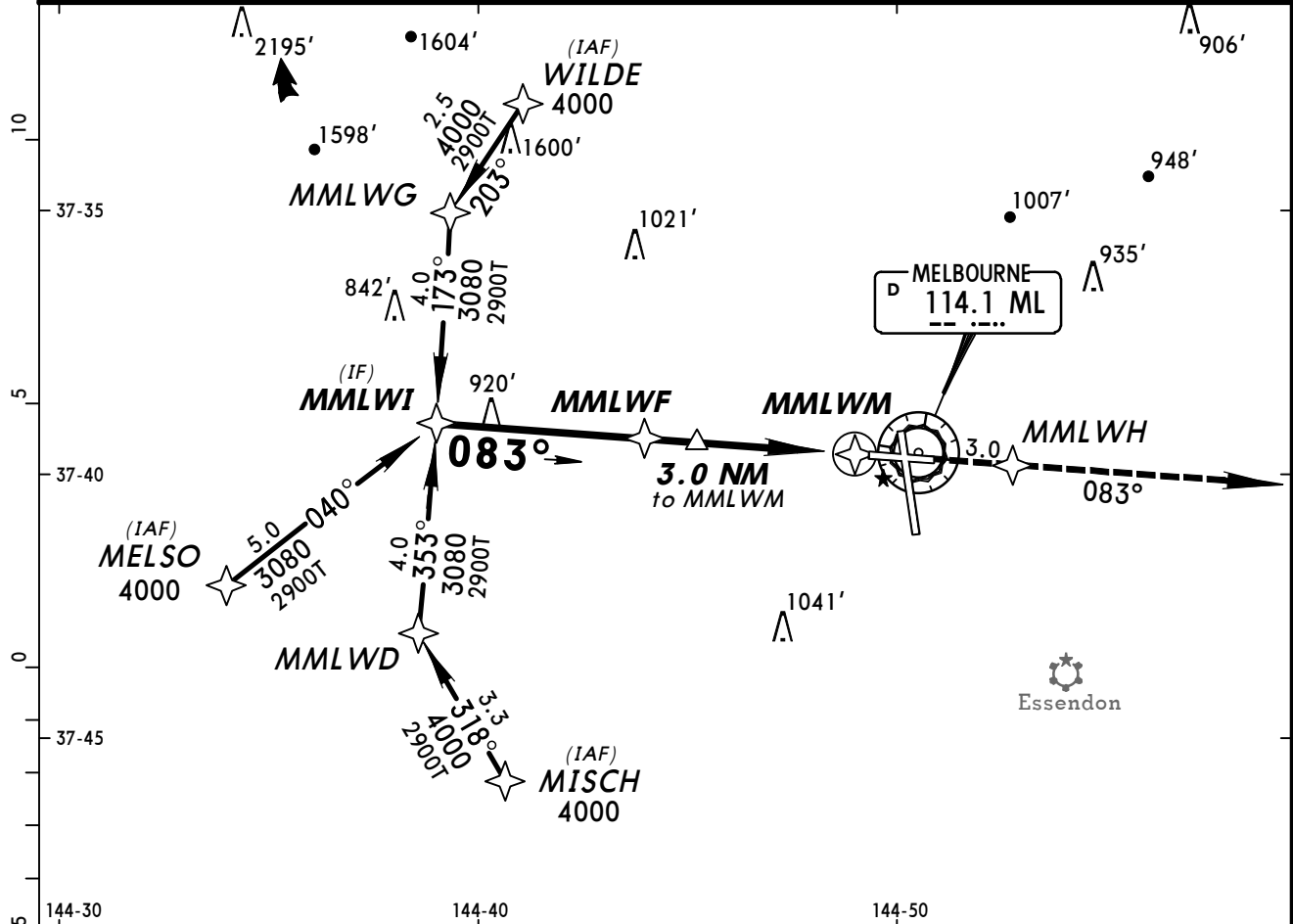
STRAIGHT-IN LANDING RWY16					CIRCLE-TO-LAND			
ILS DA(H) 640' (208')		LOC (GS out) DME MDA(H) 1140' (708')						
FULL	HIRL out	HIALS out	HIALS out		Max Kts	MDA(H)		
A					100	1140'(706')-2.4 km		
B	RVR 550m				135			
C	VIS 0.8 km	1.2 km	1.5 km	3.0 km	180	1450'(1016')-4.0 km		
D				3.9 km	205	1600'(1166')-5.0 km		

PANS OPS

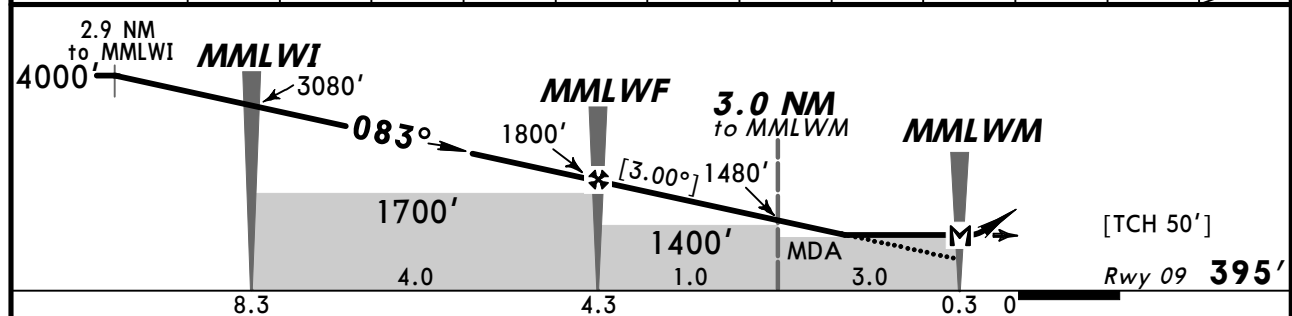




ATIS 114.1	118.0	MELBOURNE Approach (R) 132.0	MELBOURNE Tower 120.5	Ground 121.7
RNAV	Final Apch Crs 083°	Procedure Alt MMLWF 1800' (1405')	MDA(H) 890' (495')	Apt Elev 434' Rwy 09 395'
MISSED APCH: Track direct to MMLWH, thence 083°. Climb to 4000' or as directed by ATC.				
Alt Set: hPa Rwy Elev: 14 hPa Trans level FL 110 Trans alt: 10000' 1. Max IAS for initial: 200 Kts. 2. Holding as directed by ATC. 3. ATC Approach Speeds: At 10NM from Threshold 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.				MSA ML VOR 3300' within 10 NM



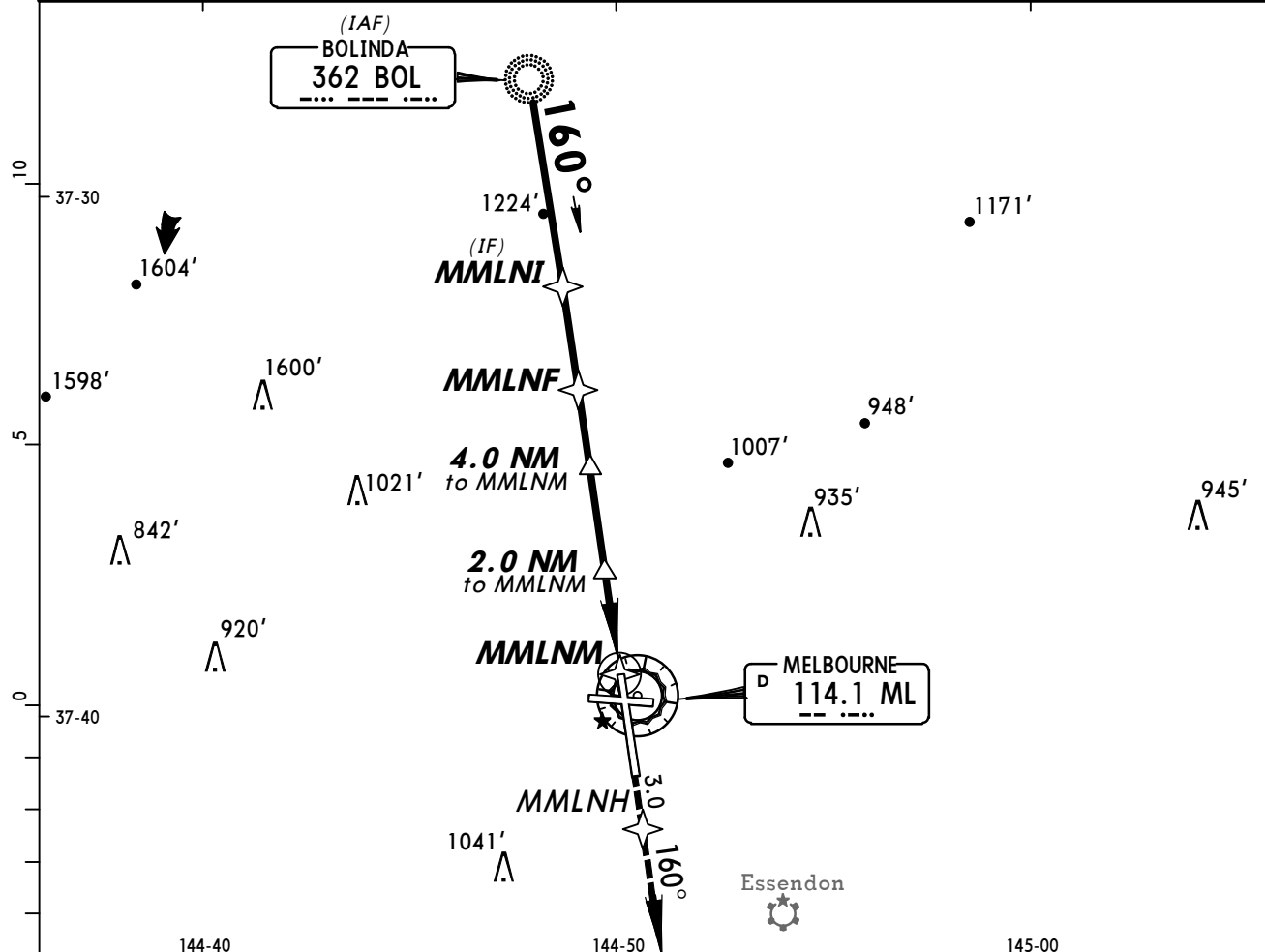
NM to NEXT WPT	2.9	2.0	1.0	MMLWI	3.0	2.0	1.0	MMLWF	3.0	2.0	1.1	MMLWM
ALTITUDE	4000'	3710'	3390'	3080'	2760'	2440'	2120'	1800'	1480'	1160'	890'	



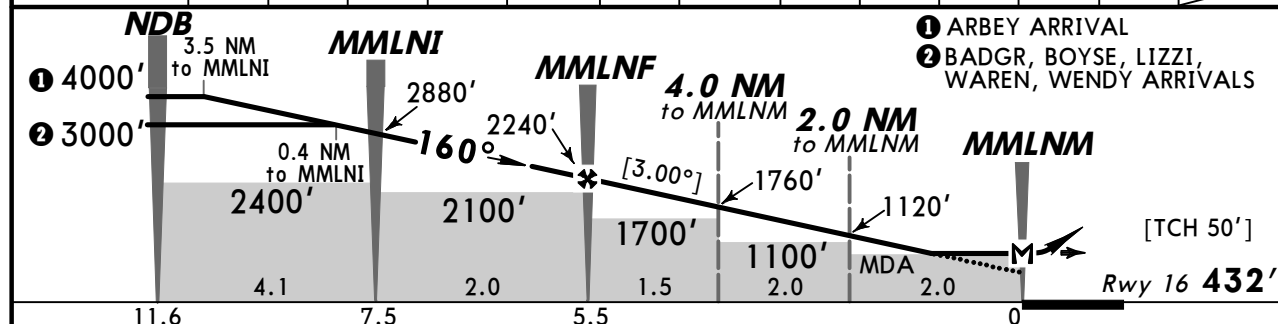
Gnd speed-Kts	70	90	100	120	140	160					
Descent Angle [3.00°]	372	478	531	637	743	849					
MAP at MMLWM											

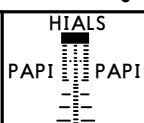
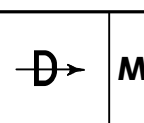
STRAIGHT-IN LANDING RWY 09						CIRCLE-TO-LAND					
MDA(H) 890' (495')						MDA(H)					
A	2.8 km					Max Kts	1140' (706')-2.4 km				
B						100					
C						135	1450' (1016')-4.0 km				
D						180	1600' (1166')-5.0 km				

ATIS 114.1 118.0		MELBOURNE Approach (R) 132.0		MELBOURNE Tower 120.5		Ground 121.7	
RNAV	Final Apch Crs 160°	Procedure Alt MMLNF 2240' (1808')	MDA(H) 890' (458')	Apt Elev Rwy 16	434' 432'	4500' 080° → ← 260° 3700' MSA ML VOR 3300' within 10 NM	
MISSED APCH: Track direct to MMLNH, thence 160°, climb to 4000' or as directed by ATC.							
Alt Set: hPa Rwy Elev: 16 hPa Trans level FL 110 Trans alt: 10000' 1. Max IAS for initial: 210 Kts. 2. Holding as directed by ATC. 3. ATC Approach Speeds: At BOL NDB 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.							



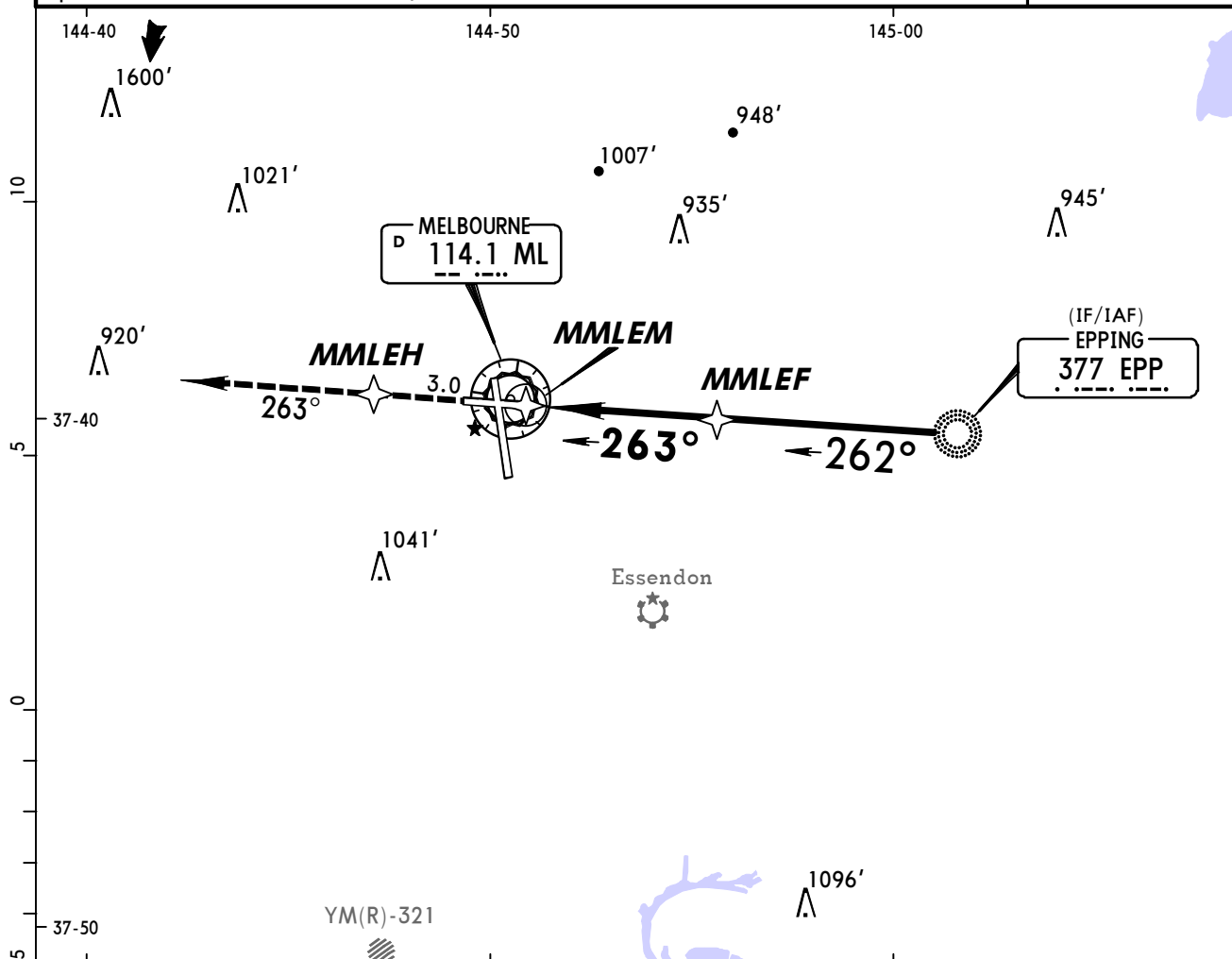
NM to NEXT WPT	3.5	3.0	2.0	0.4	MMLNI	1.0	MMLNF	5.0	4.0	3.0	2.0	1.3	MMLNM
ALTITUDE	4000'	3840'	3520'	3000'	2880'	2560'	2240'	2070'	1760'	1440'	1120'	890'	



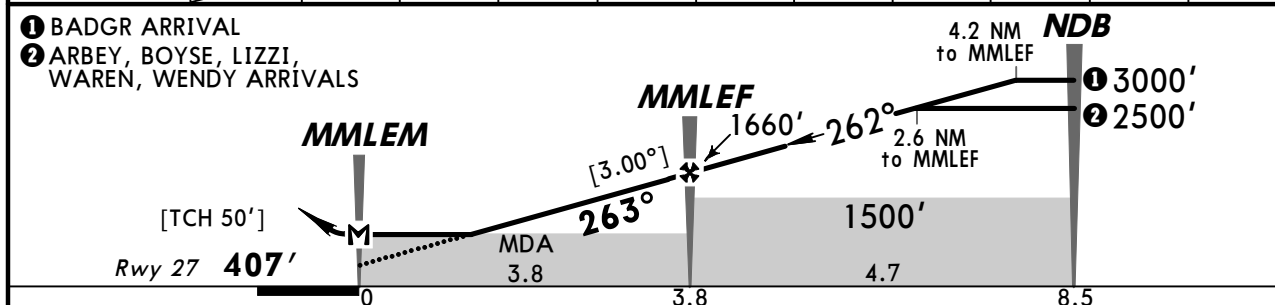
Gnd speed-Kts	70	90	100	120	140	160				
Descent Angle [3.00°]	372	478	531	637	743	849				
MAP at MMLNM										

STRAIGHT-IN LANDING RWY 16				CIRCLE-TO-LAND			
MDA(H) 890' (458')				MDA(H)			
HIALS out							
A	2.5 km			Max Kts			
B				100	1140' (706') - 2.4 km		
C				135	1450' (1016') - 4.0 km		
D				205	1600' (1166') - 5.0 km		

ATIS 114.1	118.0	MELBOURNE Approach (R) 132.0	MELBOURNE Tower 120.5	Ground 121.7
RNAV	Final Apch Crs 263°	Procedure Alt MMLEF 1660' (1253')	MDA(H) 950' (543')	Apt Elev 434' Rwy 27 407'
MISSED APCH: Track direct to MMLEH, thence 263°, climb to 4000' or as directed by ATC.				
Alt Set: hPa Rwy Elev: 15 hPa Trans level FL 110 Trans alt: 10000' 1. Max IAS for initial: 210 Kts. 2. Holding as directed by ATC. 3. ATC Approach Speeds: At EPP NDB 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.				4500' 080° → ← 260° 3700' MSA ML VOR 3300' within 10 NM



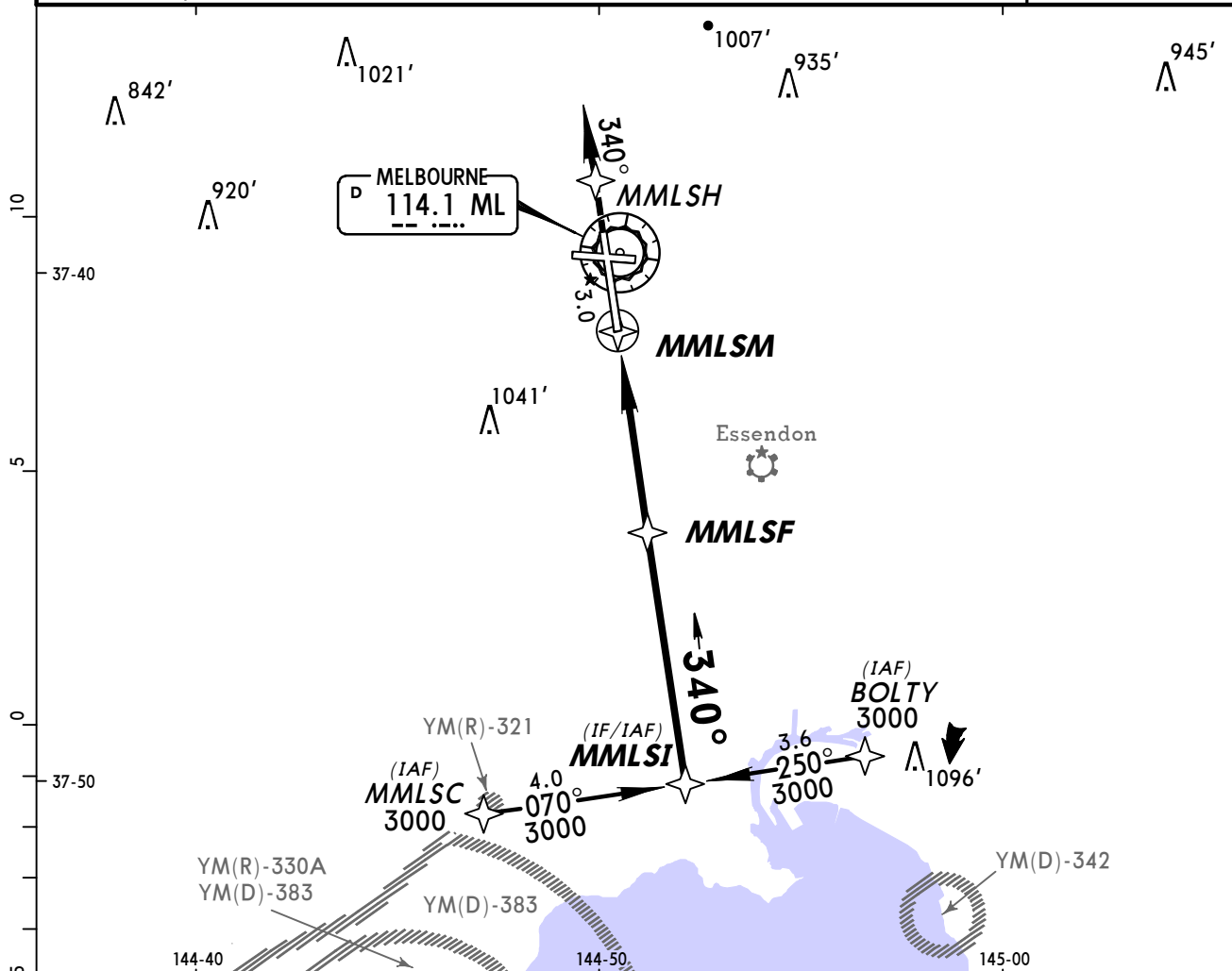
NM to NEXT WPT	MMLEM	1.5	2.0	3.0	MMLEF	1.0	2.0	2.6	3.0	4.0	4.2
ALTITUDE		950'	1090'	1410'	1660'	1980'	2300'	2500'	2610'	2930'	3000'



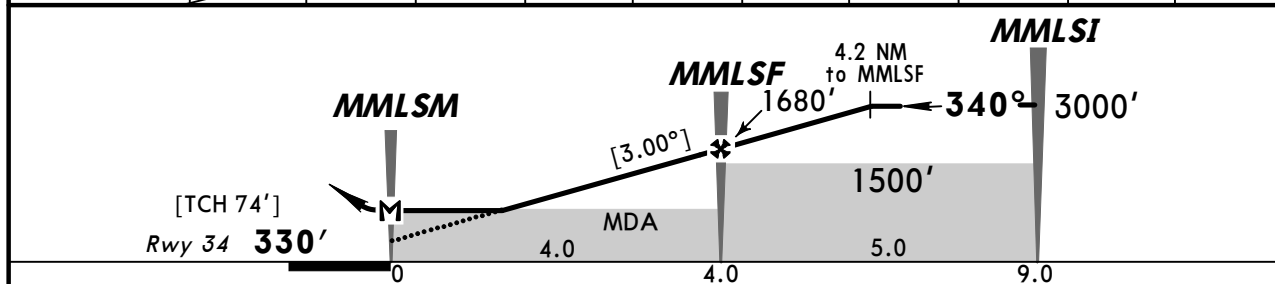
Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI PAPI → MMLEH				
Descent Angle [3.00°]	372	478	531	637	743	849					
MAP at MMLEM											

STRAIGHT-IN LANDING RWY 27						CIRCLE-TO-LAND					
MDA(H) 950' (543')						MDA(H)					
3.0 km HIALS out						Max Kts					
						100	1140' (706') - 2.4 km				
						135	1450' (1016') - 4.0 km				
						180	1600' (1166') - 5.0 km				

ATIS		MELBOURNE Approach (R)		MELBOURNE Tower		Ground	
114.1 118.0		132.0		120.5		121.7	
RNAV	Final Apch Crs 340°	Procedure Alt MMLSF 1680' (1350')	MDA(H) 780' (450')	Apt Elev 434' Rwy 34 330'	4500' 080°→←260° 3700' MSA ML VOR 3300' within 10 NM		
MISSED APCH: Track direct to MMLSH, thence 340°, climb to 4000' or as directed by ATC.							
Alt Set: hPa		Rwy Elev: 12 hPa		Trans level FL 110		Trans alt: 10000'	
1. Max IAS for initial: 200 Kts. 2. ATC Approach Speeds: At 10 NM from Threshold 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.							



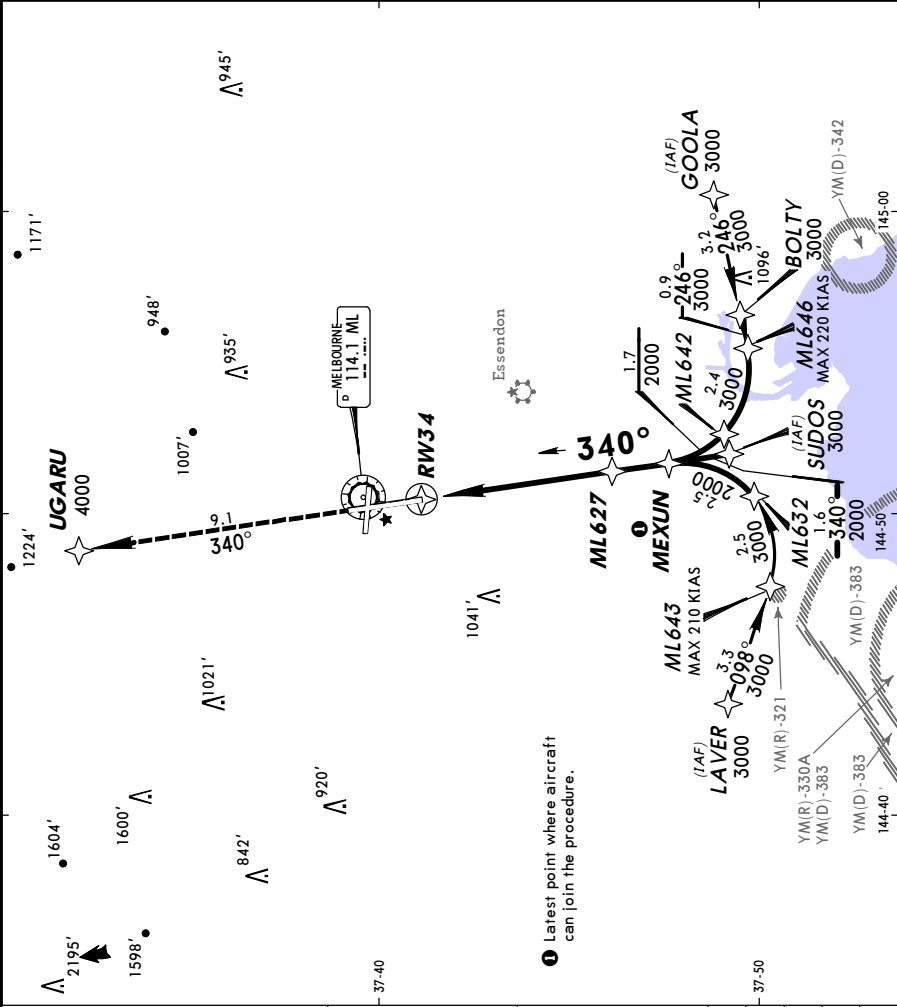
NM to NEXT WPT	MMLSM	1.2	2.0	3.0	MMLSF	1.0	2.0	3.0	4.0	4.2
ALTITUDE		780'	1040'	1360'	1680'	2000'	2310'	2630'	2950'	3000'



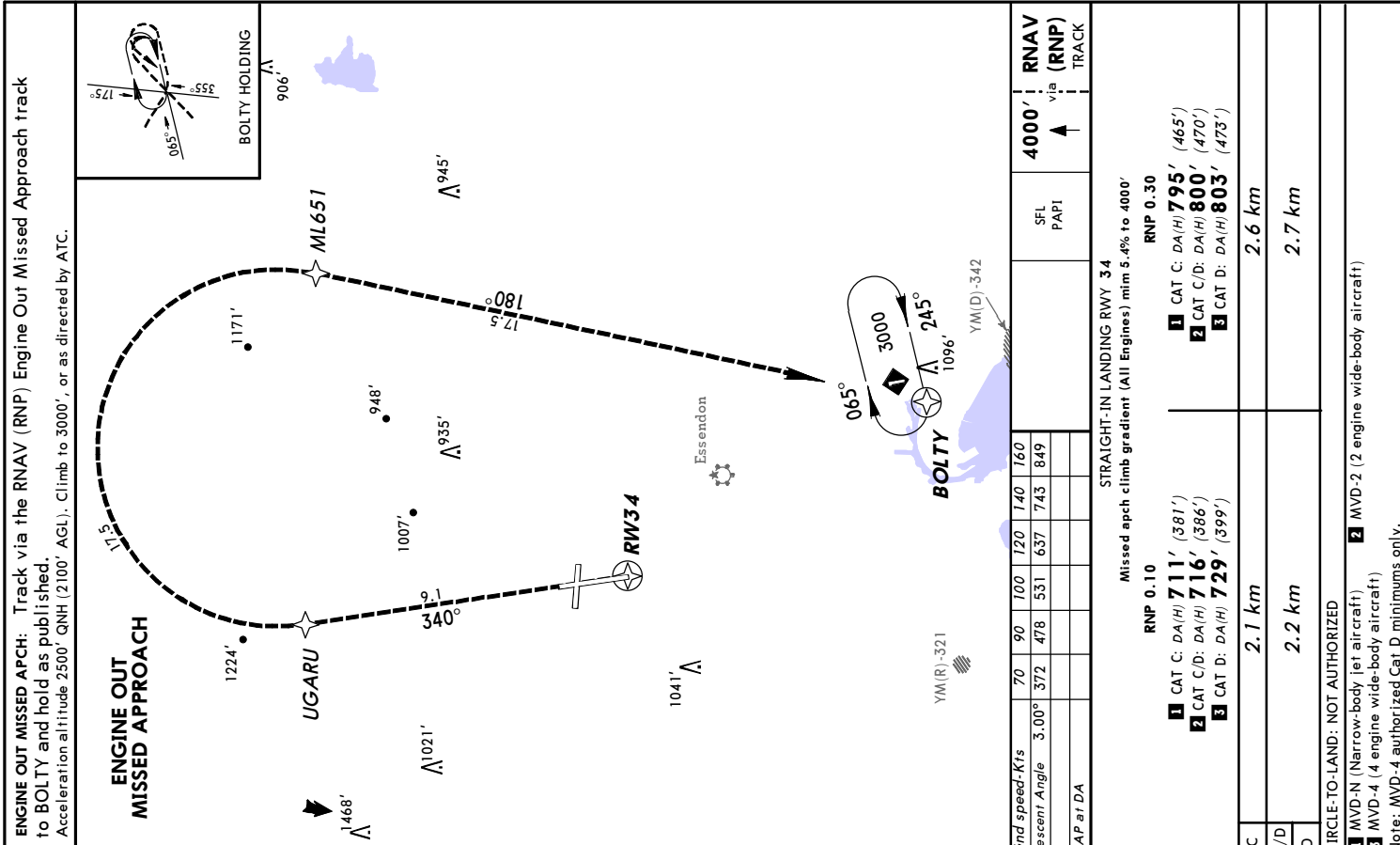
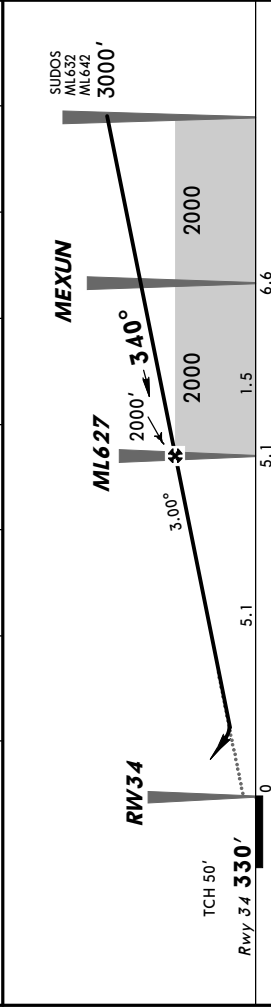
Gnd speed-Kts	70	90	100	120	140	160	SFL PAPI		→ MMLSH
Descent Angle [3.00°]	372	478	531	637	743	849			
MAP at MMLSM									

STRAIGHT-IN LANDING RWY 34				CIRCLE-TO-LAND			
MDA(H) 780' (450')				Max Kts	MDA(H)		
2.5 km				100	1140' (706') - 2.4 km		
				135	1450' (1016') - 4.0 km		
				180	1600' (1166') - 5.0 km		
				205			

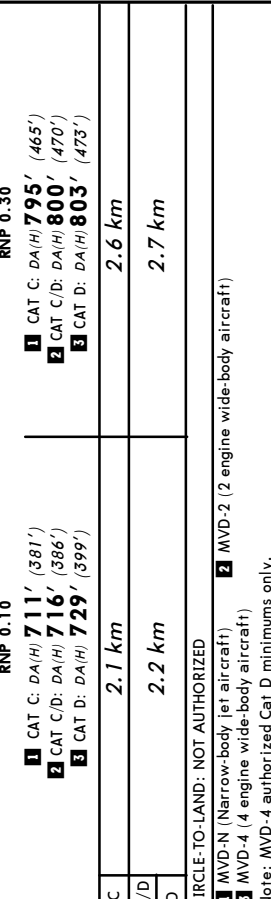
114.1	ATIS	118.0	MELBOURNE Approach (R)	120.5	MELBOURNE Tower	121.7	Ground
RNAV		Final	Procedure Alt	RNP DA(H)	Apt Elev		
RNV P 34		Apch Crs	ML627	RNP DA(H)	Rwy 34		
			340°	Refer to Minimums	330'		
MISSD APCH: Climb to 4000' or as directed by ATC via the RNAV (RNP) Missed Approach track. Expect vectors.							
Alt Set: hPa Rwy Elev: 12 hPa Trans level: FL 110 Trans alt: 10000'							
1. FOR CASA APPROVED OPERATORS ONLY. 2. RF REQUIRED. 3. Local QNH REQUIRED. 4. Local temperature REQUIRED. 5. Procedure temperature range -1°C (30°F) to 38°C (100°F). 6. Lateral transition to missed approach must not be initiated prior to DA(H) position. 7. Procedure available up to maximum landing weight.							
MISSD APCH: Climb to 4000' or as directed by ATC via the RNAV (RNP) Missed Approach track. Expect vectors.							
Acceleration altitude 2500' QNH.							



Distance to Threshold	1.0	1.3	ML627	MEXUN	SUDOS	ML642	ML632
ALTITUDE	691'	800'	2000'	2480'	3000'	3000'	3270'



Distance to Threshold	1.0	1.3	ML627	MEXUN	SUDOS	ML642	ML632
ALTITUDE	691'	800'	2000'	2480'	3000'	3000'	3270'



ATIS

114.1118.0

MELBOURNE Approach (R)

132.0

MELBOURNE Tower

120.5

Ground

121.7

VOR ML

114.1

Final Apch Crs

080°

Procedure Alt D6.0

2050' (1655')

MDA(H)

950' (555')

Apt Elev 434'

Rwy 09 395'

4500'

080°→←260°

3700'

MISSED APCH: Track 080°, climb to 4000' or as directed by ATC.

Alt Set: hPa

Rwy Elev: 14 hPa

Trans level: FL 110

Trans alt: 10000'

1. DME Required.

2. Aircraft may be RADAR vectored to IAF.

3. Holding as advised by ATC.

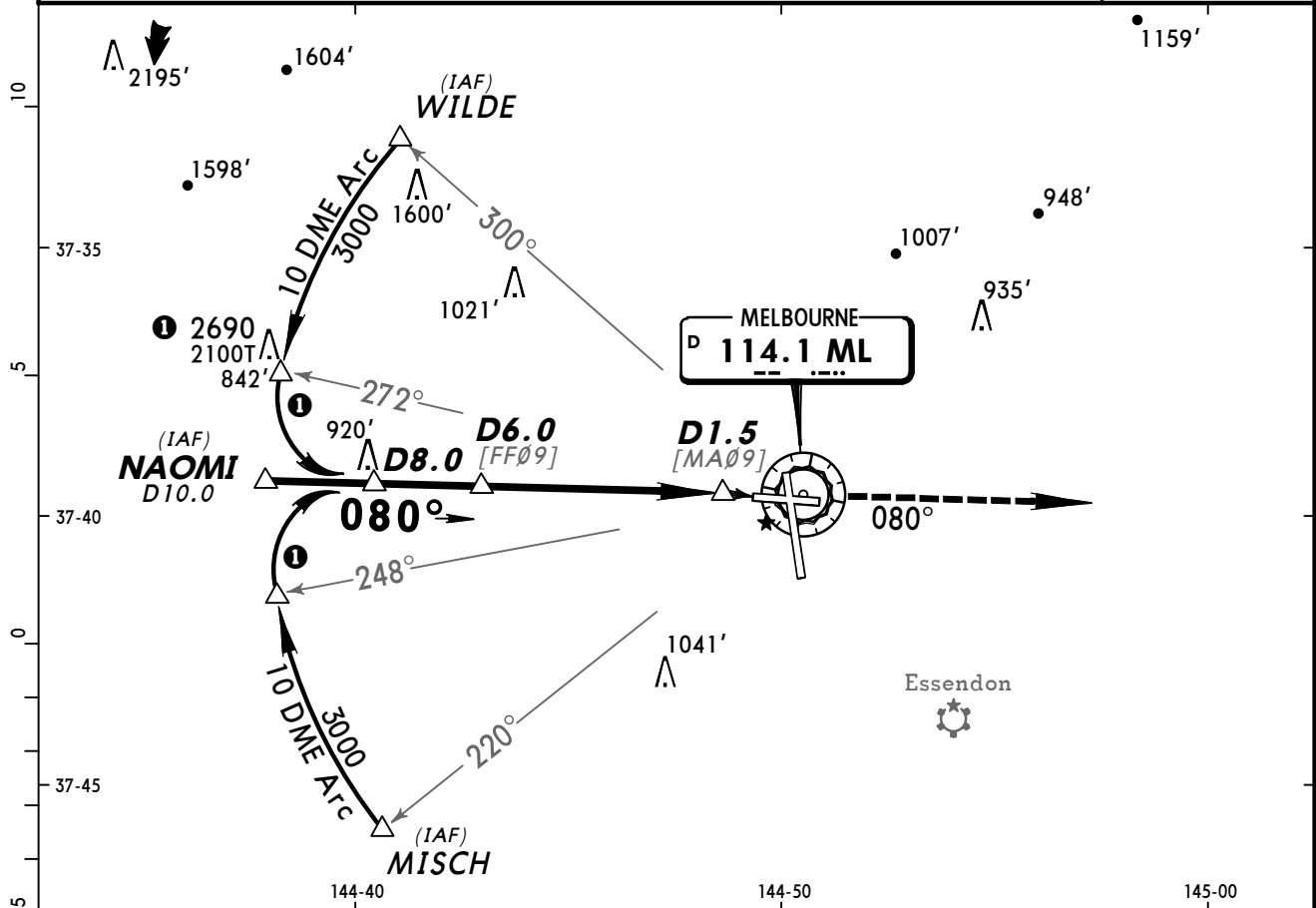
4. GNSS permitted in lieu of DME. Reference waypoint ML VOR.

5. ATC Approach Speeds: At NAOMI 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.

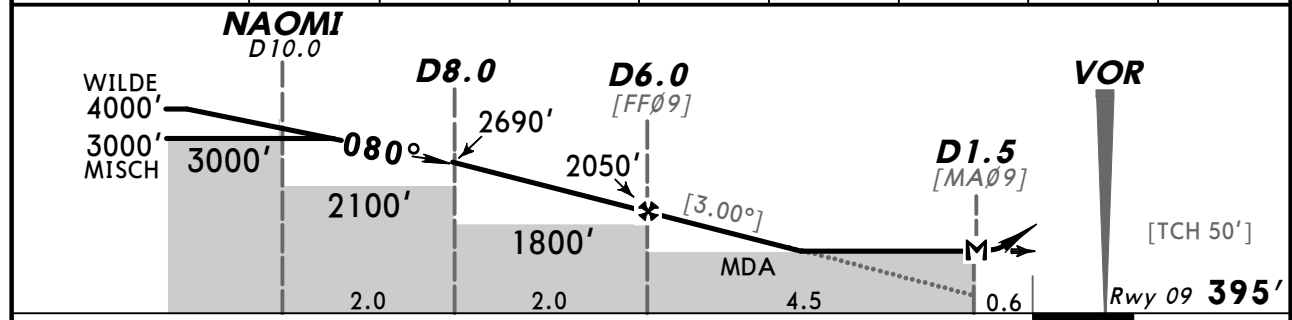
MSA ML VOR

3300'

within 10 NM



ML DME	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.5
ALTITUDE	3000'	2690'	2370'	2050'	1730'	1420'	1100'	950'



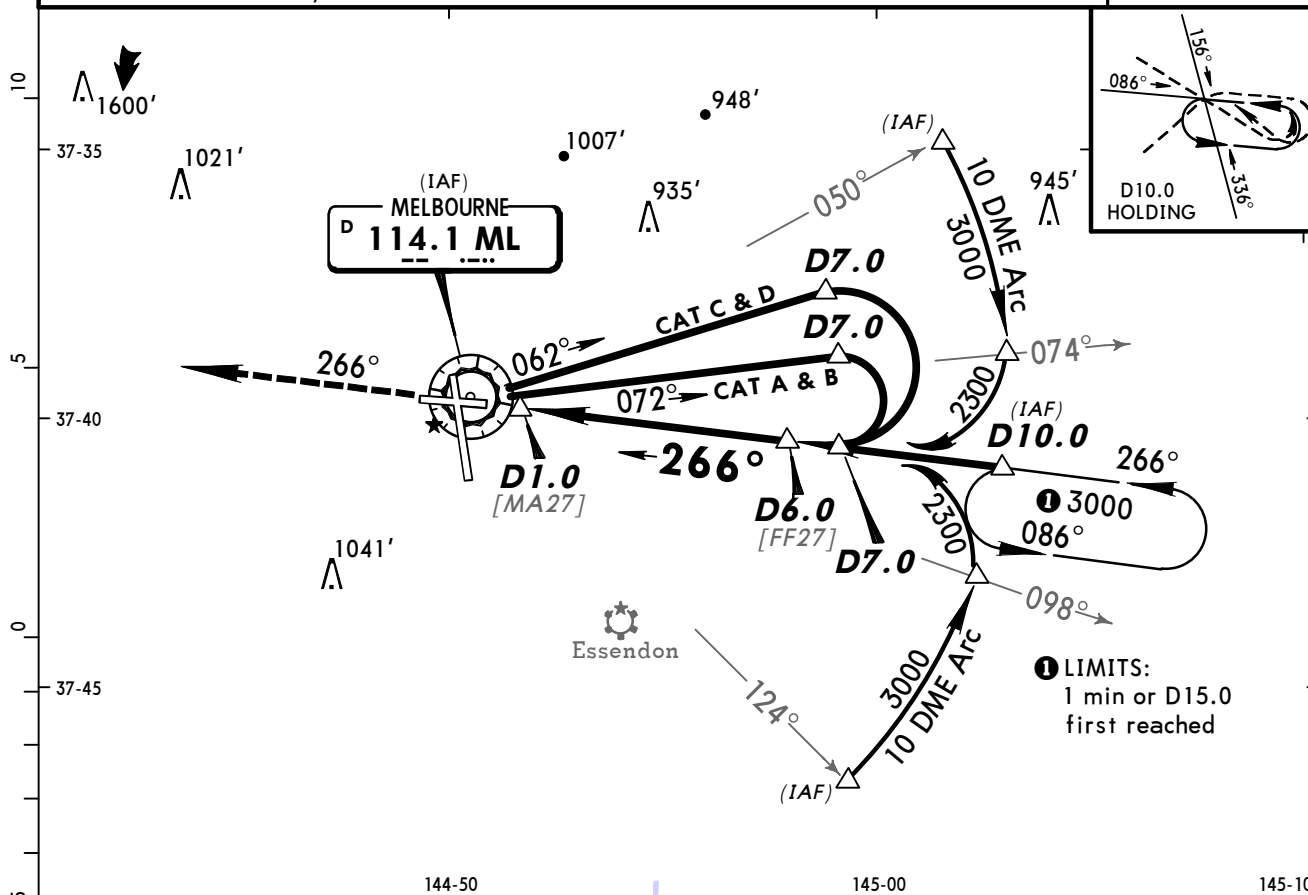
Gnd speed-Kts	70	90	100	120	140	160	PAPI		080° ↑ 4000'
Descent Angle [3.00°]	372	478	531	637	743	849			
MAP at D1.5									

STRAIGHT-IN LANDING RWY09						CIRCLE-TO-LAND			
MDA(H) 950' (555')						Max Kts			
3.2 km						100	1140' (706') - 2.4 km		
						135	1450' (1016') - 4.0 km		
						180	1600' (1166') - 5.0 km		
						205			

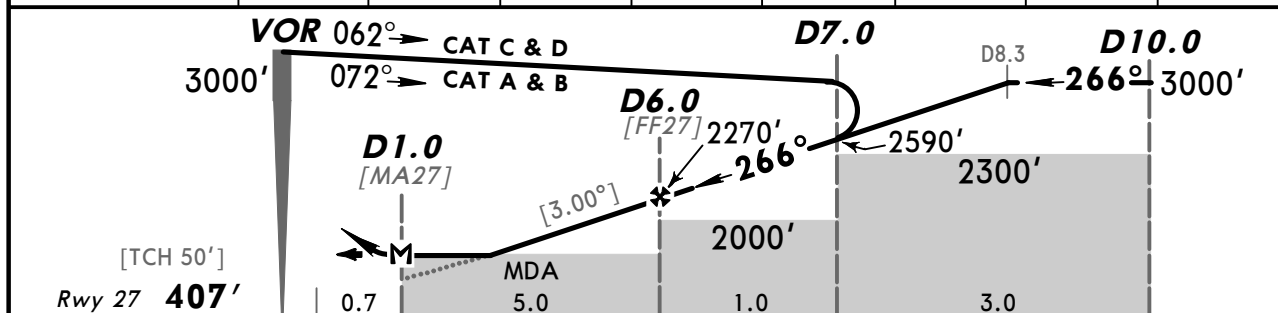
BRIEFING STRIP

TM

ATIS		MELBOURNE Approach (R)		MELBOURNE Tower		Ground			
114.1 118.0		132.0		120.5		121.7			
VOR ML 114.1		Final Apch Crs 266°		Procedure Alt D6.0 2270' (1863')		MDA(H) 1040' (633')		Apt Elev 434' Rwy 27 407'	
MISSED APCH: Track 266°, climb to 4000' or as directed by ATC.								4500' 080° → ← 260° 3700'	
Alt Set: hPa Rwy Elev: 15 hPa Trans level: FL 110 Trans alt: 10000' 1. DME Required. 2. Aircraft may be RADAR vectored to IAF. 3. GNSS permitted in lieu of DME. Reference waypoint ML VOR. 4. ATC Approach Speeds: At 10NM from Threshold 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.									
								MSA ML VOR 3300' within 10 NM	



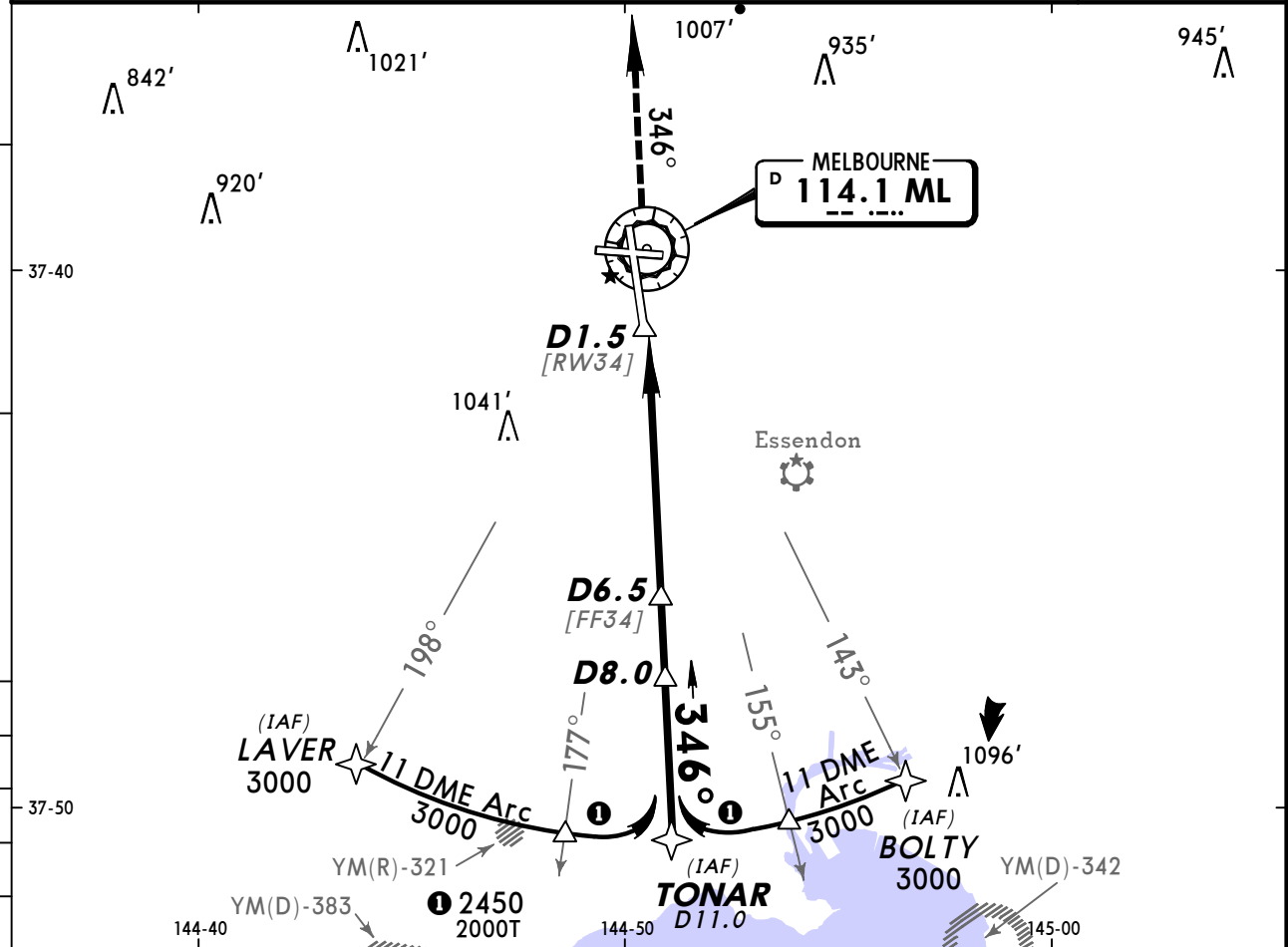
ML DME	2.1	3.0	4.0	5.0	6.0	7.0	8.0	8.3
ALTITUDE	1040'	1310'	1630'	1950'	2270'	2590'	2910'	3000'



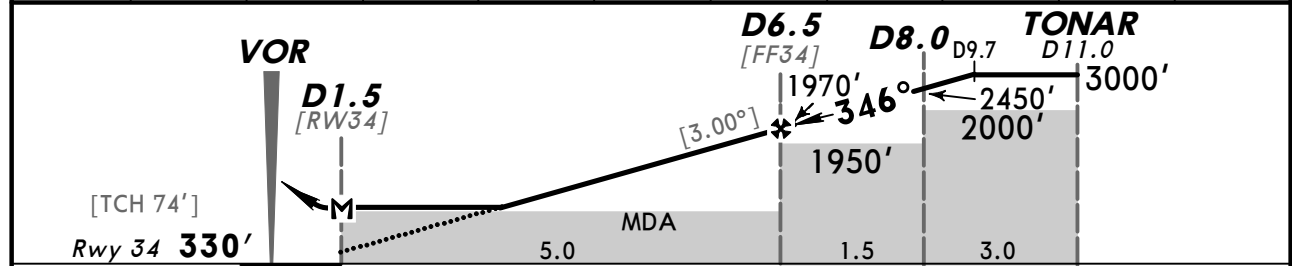
Gnd speed-Kts	70	90	100	120	140	160	HIALS		4000'	
Descent Angle [3.00°]	372	478	531	637	743	849	PAPI		266°	
MAP at D1.0										

STRAIGHT-IN LANDING RWY 27						CIRCLE-TO-LAND				
MDA(H) 1040' (633')										
						Max Kts	MDA(H)			
A	3.6 km					100	1140' (706') - 2.4 km			
B						135				
C						180	1450' (1016') - 4.0 km			
D						205	1600' (1166') - 5.0 km			

ATIS		MELBOURNE Approach (R)		MELBOURNE Tower		Ground			
114.1 118.0		132.0		120.5		121.7			
VOR ML 114.1	Final Apch Crs 346°	Procedure Alt D6.5 1970' (1640')	MDA(H) 760' (430')	Apt Elev 434' Rwy 34 330'		4500' 080°→←260° 3700' MSA ML VOR 3300' within 10 NM			
MISSED APCH: Track 346°. Climb to 4000' or as directed by ATC.									
Alt Set: hPa		Rwy Elev: 12 hPa		Trans level: FL 110				Trans alt: 10000'	
1. DME Required. 2. Aircraft may be RADAR vectored to IAF. 3. Holding as advised by ATC. 4. GNSS permitted in lieu of DME. Reference waypoint ML VOR. 5. ATC Approach Speeds: At TONAR 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.									



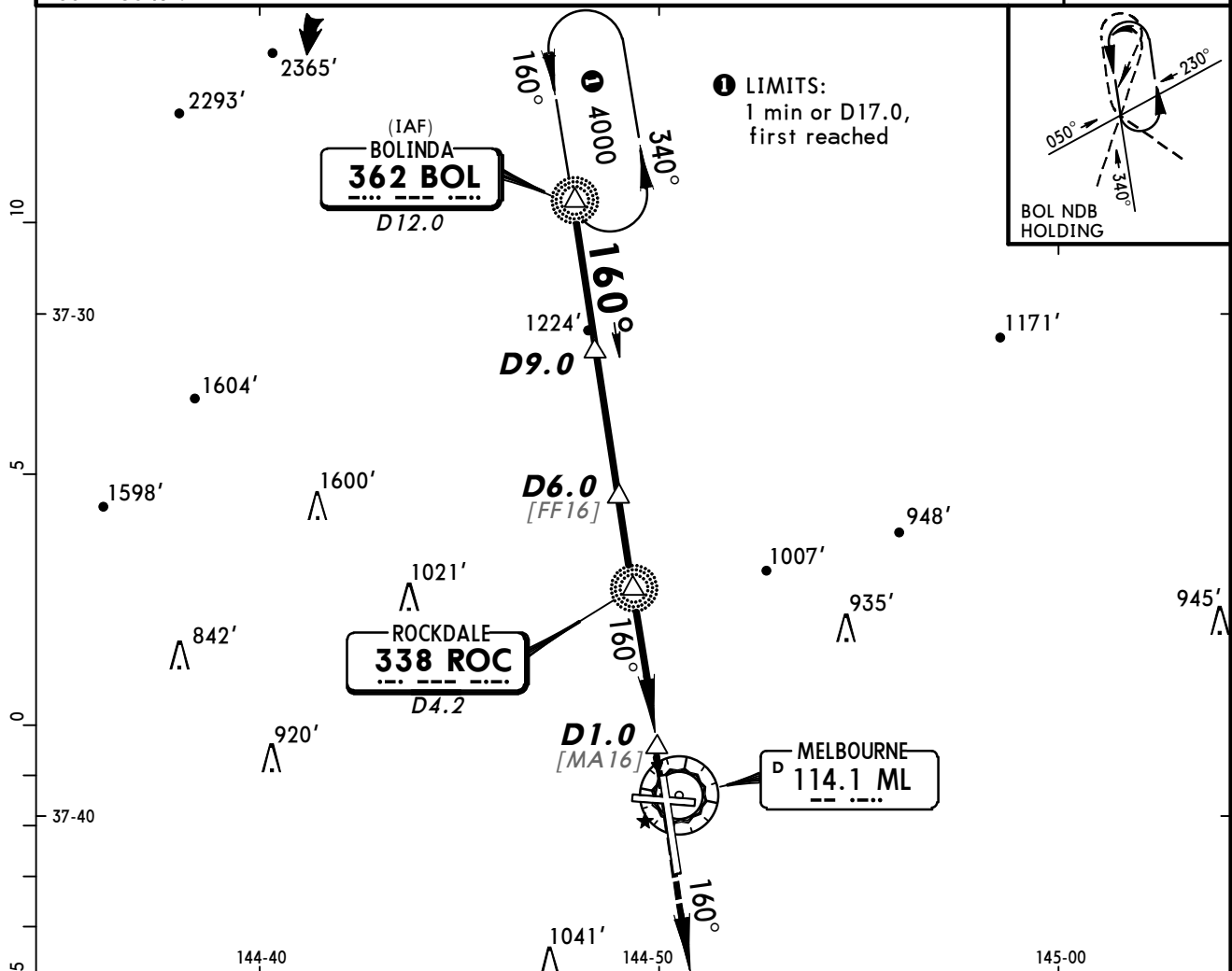
ML DME	2.7	3.0	4.0	5.0	6.0	6.5	7.0	8.0	9.0	9.7
ALTITUDE	760'	860'	1180'	1490'	1810'	1970'	2130'	2450'	2770'	2990'



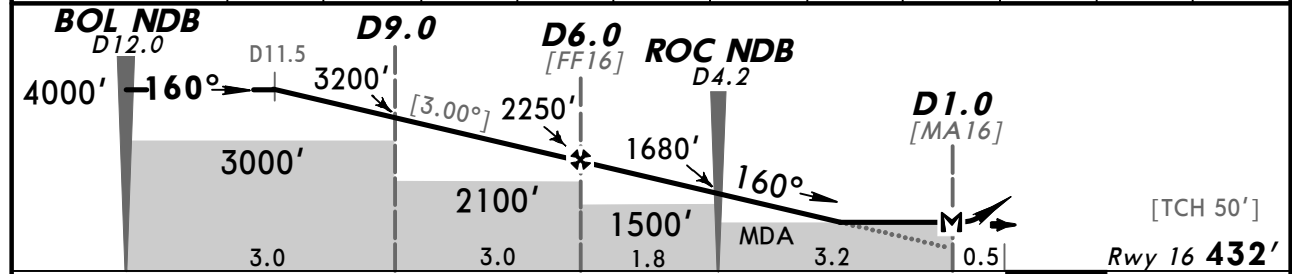
Gnd speed-Kts	70	90	100	120	140	160			SFL	346°	4000' ↑
Descent Angle [3.00°]	372	478	531	637	743	849			PAPI		
MAP at D1.5											

STRAIGHT-IN LANDING RWY34						CIRCLE-TO-LAND					
MDA(H) 760' (430')											
2.4 km						Max Kts	MDA(H)				
						100	1140' (706') - 2.4 km				
						135	1450' (1016') - 4.0 km				
						180	1600' (1166') - 5.0 km				

ATIS 114.1 118.0		MELBOURNE Approach (R) 132.0		MELBOURNE Tower 120.5		Ground 121.7
NDB BOL 362	NDB ROC 338	Final Apch Crs 160°	Procedure Alt D6.0 2250' (1818')	MDA(H) 1140' (708')	Apt Elev 434' Rwy 16 432'	4500' 080° → ← 260° 3700'
MISSED APCH: Track 160°. Climb to 4000' or as directed by ATC. Alt Set: hPa Rwy Elev: 16 hPa Trans level: FL 110 Trans alt: 10000' 1. DME & BOTH NDB Required. 2. GNSS permitted in lieu of DME. Reference waypoint ML VOR. 3. ATC Approach Speeds: At BOL NDB 185 - 160 KT, At 5NM from Threshold 160 - 150 KT.						
						MSA ML VOR 3300' within 10 NM



ML DME	11.5	10.0	9.0	8.0	7.0	6.0	5.0	4.2	4.0	3.0	2.5
ALTITUDE	4000'	3520'	3200'	2890'	2570'	2250'	1930'	1680'	1610'	1290'	1140'



Gnd speed-Kts	70	90	100	120	140	160	HIALS		4000'	
Descent Angle [3.00°]	372	478	531	637	743	849	PAPI PAPI		160°	
MAP at D1.0										

STRAIGHT-IN LANDING RWY 16				CIRCLE-TO-LAND			
MDA(H) 1140' (708')							
HIALS out				Max Kts	MDA(H)		
A				100	1140' (706') - 2.4 km		
B				135			
C	4.0 km			180	1450' (1016') - 4.0 km		
D				205	1600' (1166') - 5.0 km		

Chart changes since cycle 26-2014

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

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
MELBOURNE, VI (MELBOURNE INTL - YMML)				
REV	BADGR 2P ARR	20-2D	05 Dec 2014	
REV	BADGR 2V ARR	20-2E	05 Dec 2014	
REV	BOYSE 9V ARR	20-2H	05 Dec 2014	
REV	LIZZI 1P ARR	20-2L	05 Dec 2014	
REV	LIZZI 1V ARR	20-2M	05 Dec 2014	
REV	WAREN 8V ARR	20-2W	05 Dec 2014	
REV	COWES 5, POINT 2 DEPS	20-3B	05 Dec 2014	
REV	CRENA 8, MARSH 5, NEVIS 5...	20-3C	05 Dec 2014	

TERMINAL CHART CHANGE NOTICES

Chart Change Notices for Airport YMML

Type: Terminal

Effectivity: Temporary

Begin Date: Immediately

End Date: 20141203

(20-3C) NEVIS 5 DEP database identifier should read NEVIS5.