

Risultati sondaggio VDP

Considerazioni risposta F

FIGURA 1

Sondaggio Visual Descent Point

® Gianni Guiducci

Questo Sondaggio, assolutamente ANONIMO, ha lo scopo di approfondire l'argomento VDP. Si compone di sole 2 domande: 1-durante un volo sull'aereo dove lavorate; 2-se foste da soli a bordo di un aereo a noleggio, dove potete scegliere come comportarvi.

Se avete colleghi che possano dare il loro contributo, vi saremo grati se invierete loro il link. Molte grazie per la collaborazione!

SCENARIO: Vi trovate a bordo del vostro aereo e state effettuando un avvicinamento Not Precision Approach.

DATI DI VOLO: Vapp 140Kts, MDA 700ft, FAF 1500ft, FAF>THR/MAP 4,71NM, FAF>MAP time 02'02", Slope 3°

METAR: Wind calm, 2000m, Mist, Scattered 800ft, 15°/12°, 1013, Nosig

INSTRUMENTAL MISSED APPROACH: Start a Left turn of 90° climbing 2500ft then . . .

FIGURA 2

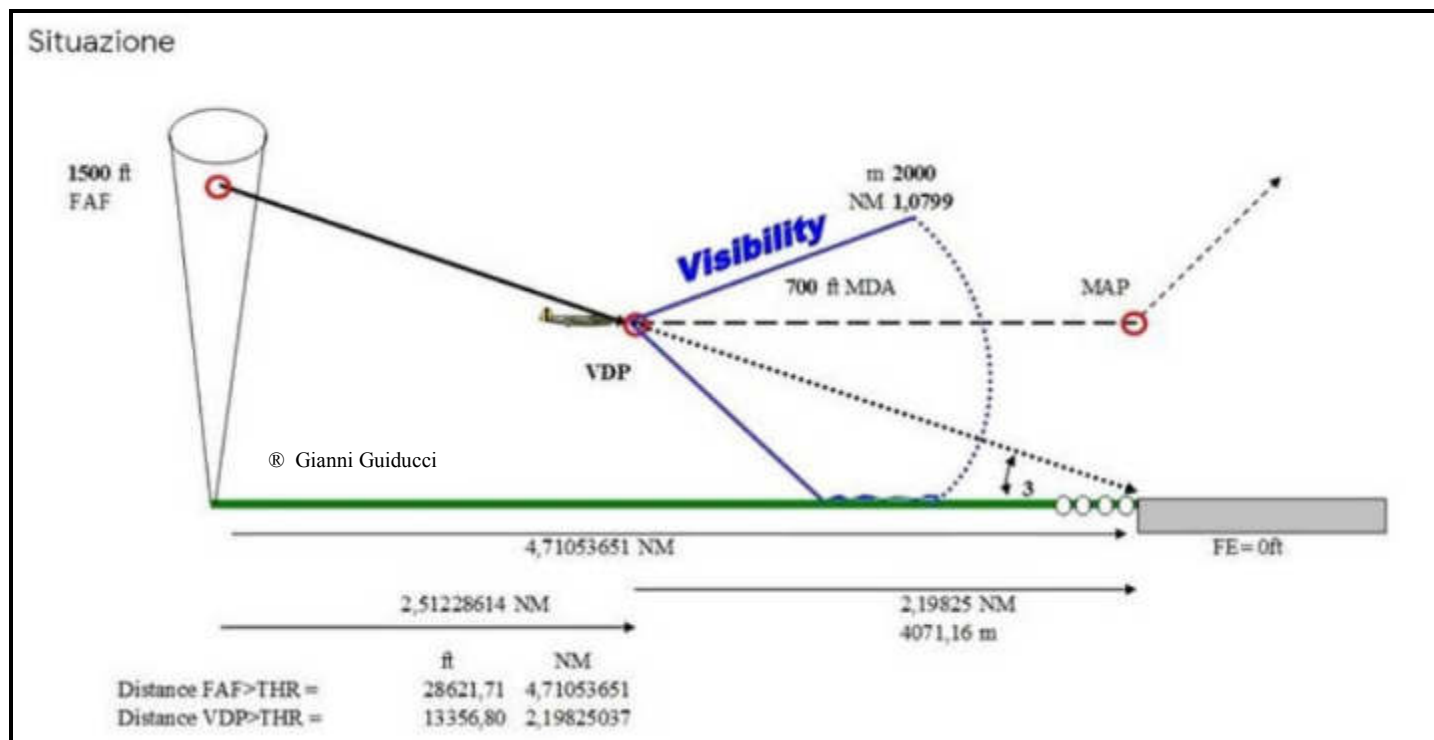


FIGURA 3

TABELLA RISULTATI al 13-Dic-2021			
RISPOSTA	TESTO	LAVORO	PRIVATO
		%	%
A	Riattaccate al raggiungimento del VDP, virando a sinistra di 90° e salendo a 2500ft, quindi.	19	17
B	Riattaccate al raggiungimento del VDP; salendo a 2500ft e, allo scadere dei 02'02" sorvolando il MAP, iniziate la virata a sinistra di 90°, quindi.	47	27
C	Livellate e mantenete 700ft, allo scadere del tempo di 02'02", raggiunto il MAP, iniziate il Missed Approach Strumentale	21	24
D	Livellate mantenendo 700ft, e, quando in vista della Pista o delle ALS, riprendete la discesa fino all'atterraggio	5	20
E	Continuate la discesa per l'atterraggio mantenendo lo Slope perché siete in grado di mantenere il contatto visivo con il terreno; la pista/ALS sarà in vista dopo pochi secondi	2	6
F	Non ho idea di cosa sia il VDP	5	7

FIGURA 4

F	Non ho idea di cosa sia il VDP	5	7
----------	--------------------------------	----------	----------

FIGURA 5 - 6

JEPPESEN – Introduction – Abbreviations Used In Airway Manual

PRECISION APPROACH PROCEDURE — A standard instrument approach procedure in which an electronic glideslope/glidepath is provided; e.g., ILS, MLS, PAR.

NON-PRECISION APPROACH PROCEDURE — A standard instrument approach procedure in which no electronic glideslope is provided; e.g., VOR, TACAN, NDB, LOC, ASR, LDA, or SDF approaches.

FIGURA 7

EASA – Jar Ops 1.430 – 2.2

Approaches with a nominal vertical profile are considered to be:

- (i) NDB, NDB/DME;
- (ii) VOR, VOR/DME;
- (iii) LLZ, LLZ/DME;
- (iv) VDF, SRA or
- (v) RNAV/LNAV.

FIGURA 8

JEPPESEN – Glossary

DECISION ALTITUDE (DA) or DECISION HEIGHT (DH) (ICAO) — A specified altitude or height in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

NOTE:

- a. *Decision altitude (DA) is referenced to mean sea level (MSL) and decision height (DH) is referenced to the threshold elevation.*
- b. *The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.*
- c. *For convenience where both expressions are used they may be written in the form "decision altitude/height" and abbreviated "DA/H."*

FIGURA 9

JEPPESEN – Glossary

DECISION ALTITUDE/HEIGHT (DA/H) (FAA) — Is a specified altitude/height in an instrument approach procedure at which the pilot must decide whether to initiate an immediate missed approach if the pilot does not see the required visual reference, or to continue the approach. Decision altitude/height is expressed in feet above mean sea level/ground level. <i>NOTE: Jeppesen approach charts use the abbreviation DA(H). The decision altitude “DA” is referenced to mean sea level (MSL) and the parenthetical decision height (DH) is referenced to the TDZE or threshold elevation. A DA(H) of 1440ft (200ft is a Decision Altitude of 1440ft and a Decision Height of 200ft.</i>

FIGURA 10

JEPPESEN - Glossary

MINIMUM DESCENT ALTITUDE/HEIGHT (MDA/H) (ICAO) — A specified altitude or height in a non-precision approach or circling approach below which descent may not be made without visual reference.
MINIMUM DESCENT ALTITUDE (MDA) (USA) — The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is provided.

FIGURA 11

JEPPESEN – Introduction – Abbreviations Used In Airway Manual

VASI	Visual Approach Slope Indicator
VDP	Visual Descent Point
VE	Visual Exempted

FIGURA 12

JEPPESEN - Glossary

VISUAL DESCENT POINT (VDP) — A defined point on the final approach course of a non-precision straight-in approach procedure from which normal descent from the MDA to the runway touchdown point may be commenced, provided the approach threshold of that runway, or approach lights, or other markings identifiable with the approach end of that runway are clearly visible to the pilot.

FIGURA 13

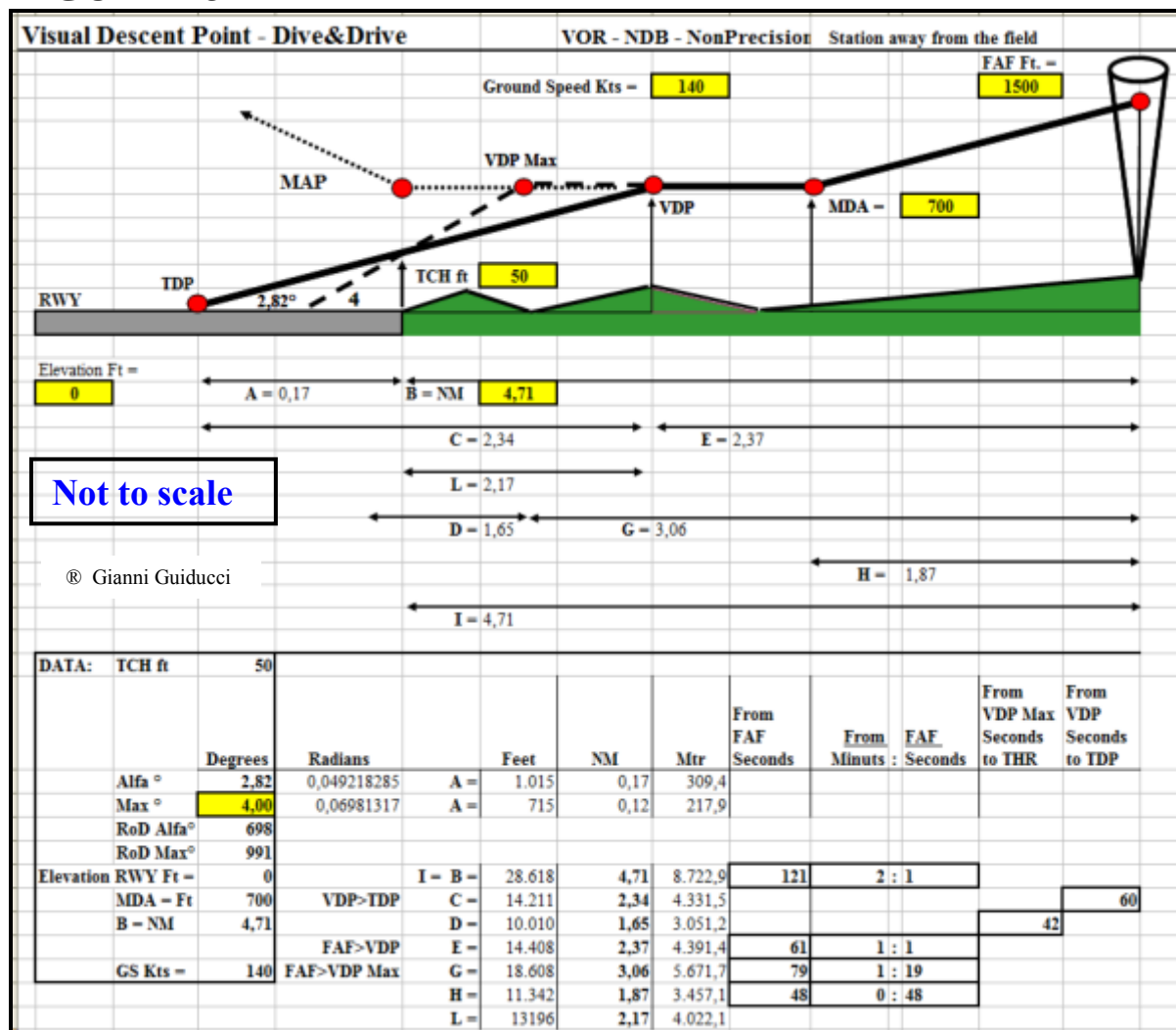


FIGURA 14

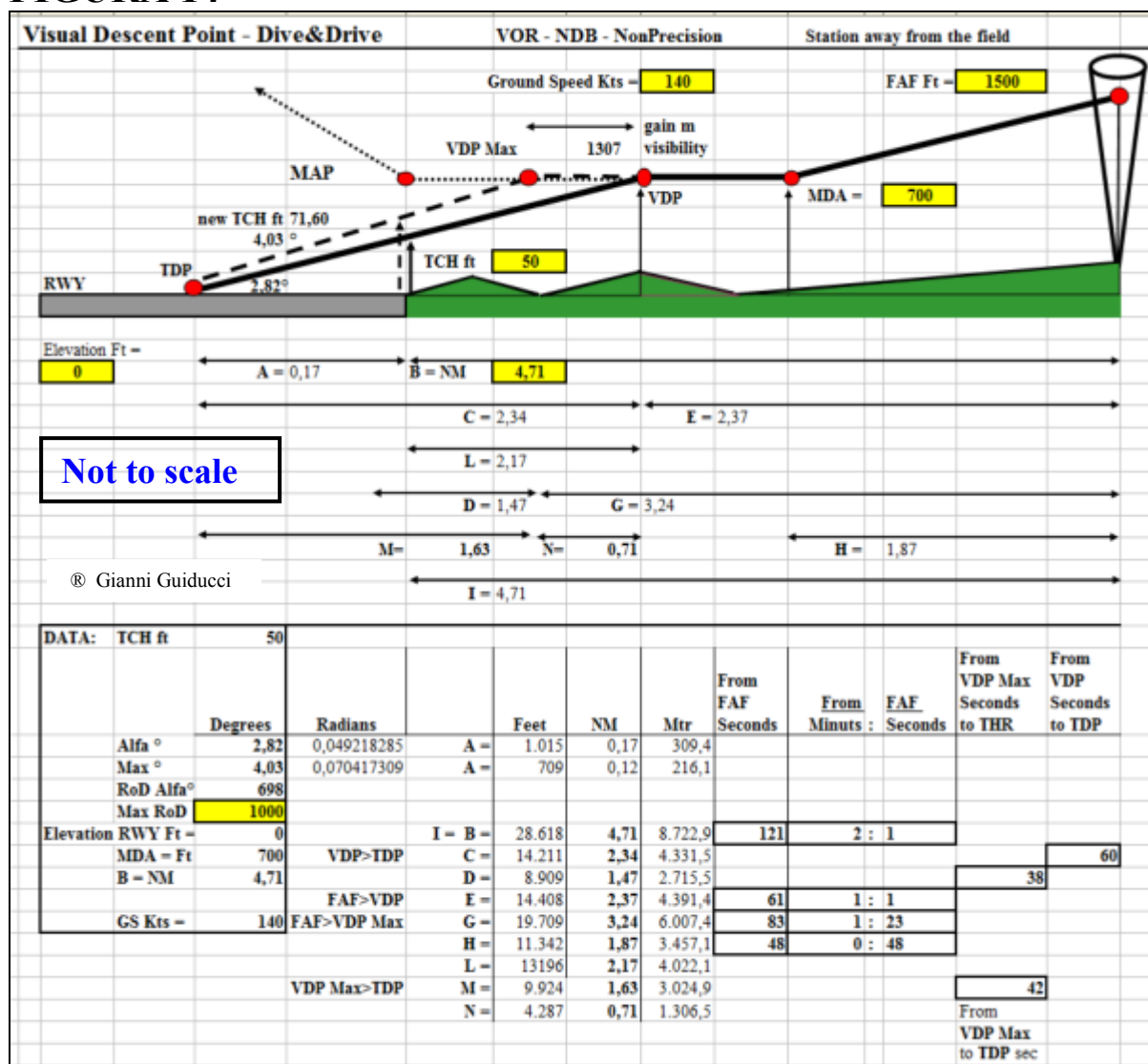


FIGURA 15

$$VDP_{NM} = \left(\frac{MDA_{ft} - TDZE_{ft}}{300} \right) \quad \text{distanza VDP} > \text{TDP}$$

$$300\text{ft}/\text{NM} = 2,82^\circ$$

$$3^\circ = 318\text{ft/NM}$$

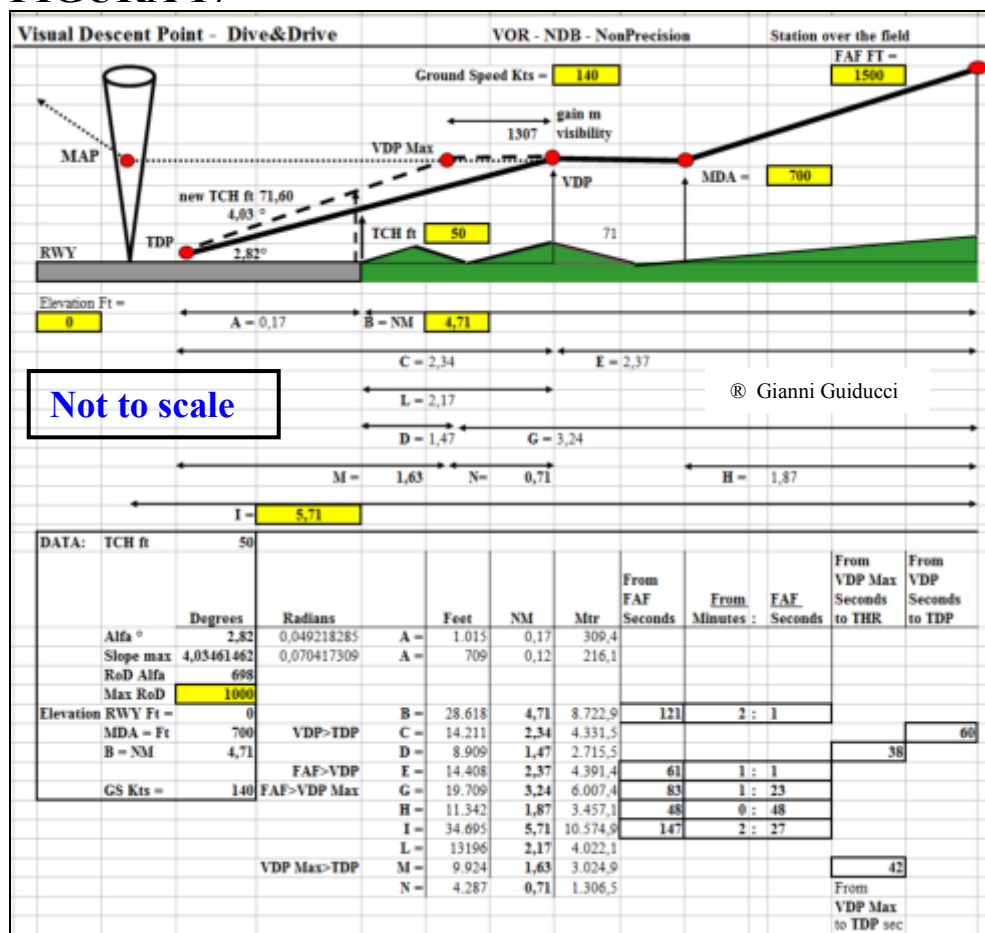


FIGURA 18

EASA – Jar Ops 1.430

1.2 The elimination of level flight segments at Minimum Descent Altitude (MDA) close to the ground during approaches, and the avoidance of major changes in attitude and power / thrust close to the runway which can destabilise approaches, are seen as ways to reduce operational risks significantly.

FIGURA 19

JEPPESEN Chart

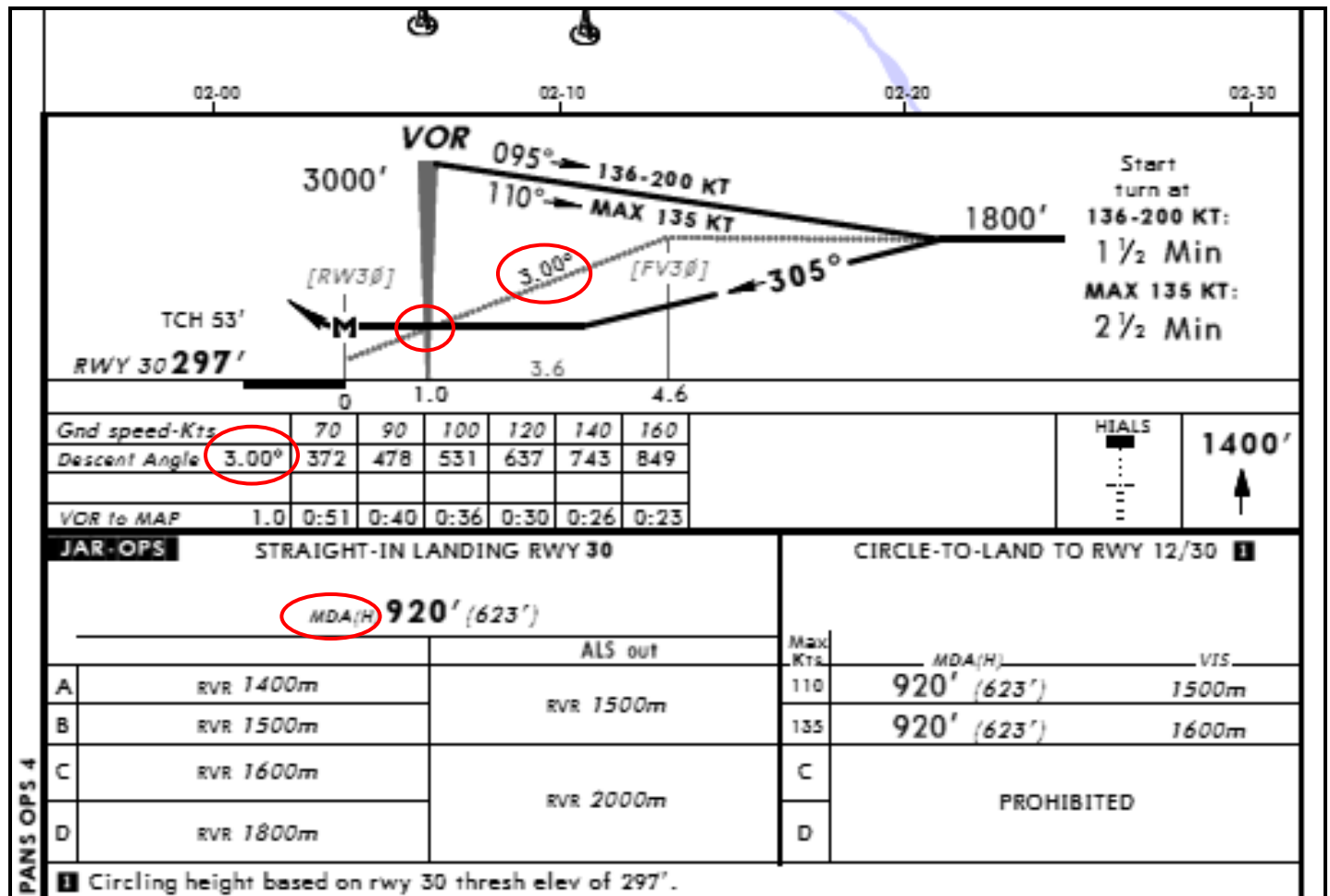


FIGURA 20
JEPPESEN Chart

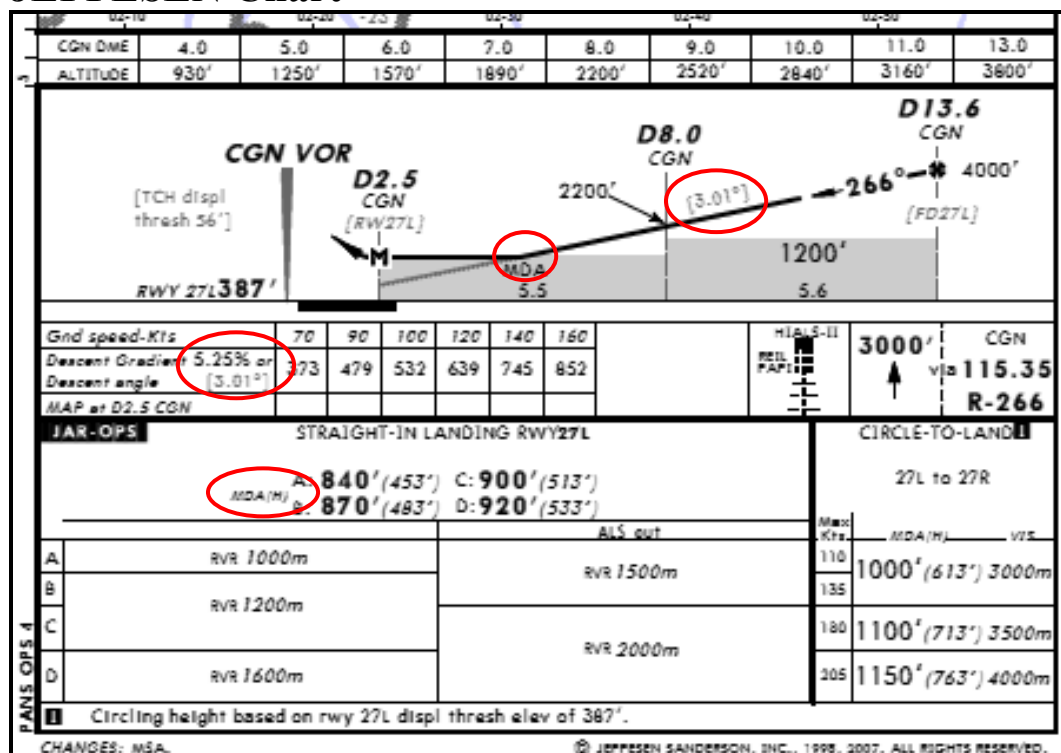


FIGURA 21
JEPPESEN - Introduction

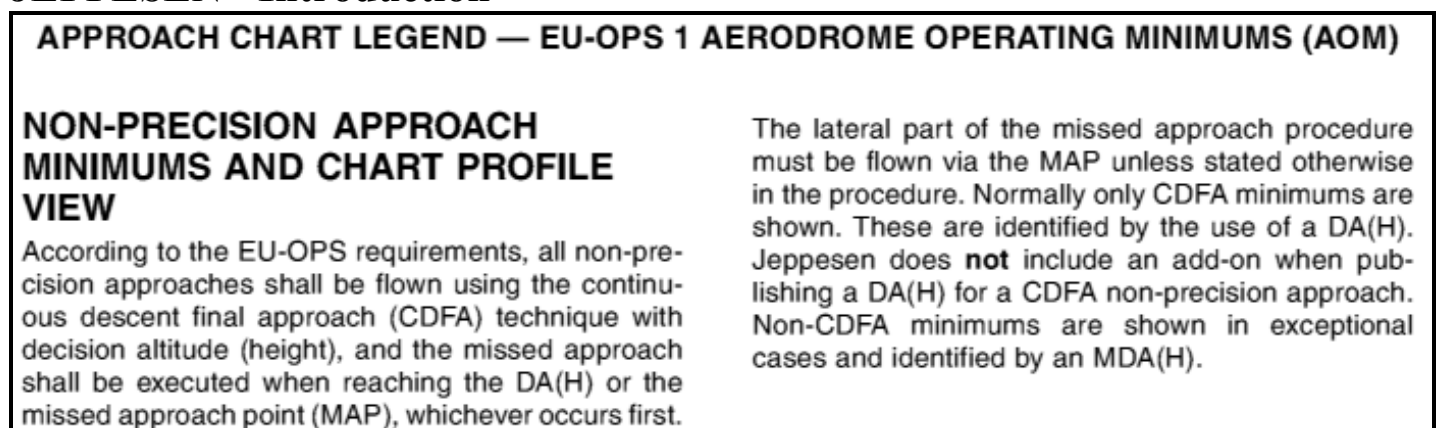


FIGURA 22

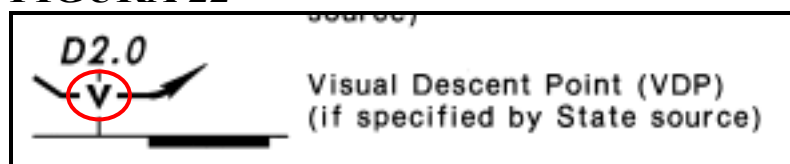


FIGURA 23 – 24 - 25
JEPPESEN Chart

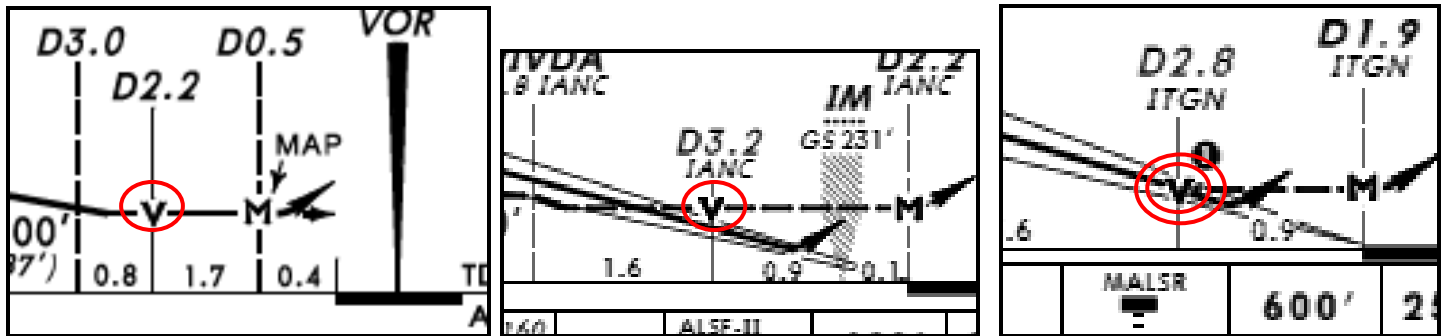


FIGURA 26 – 27
JEPPESEN Chart

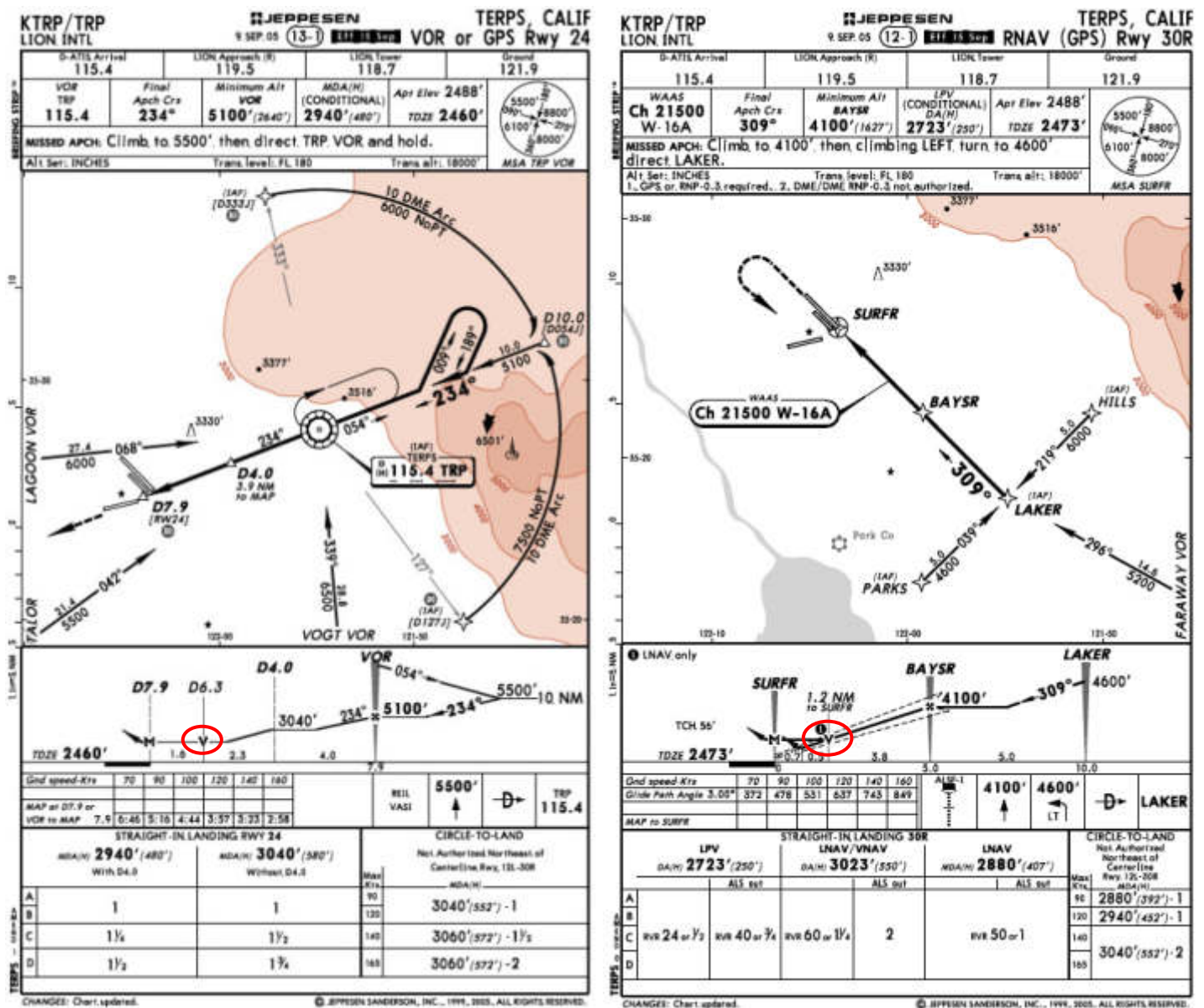


FIGURA 28

EASA – Jar Ops 1.430

2.5 Approach with a nominal vertical profile using the CDFA technique:

(a) The optimum angle for the approach slope is 3 degrees, and the gradient should preferably not exceed 6.5 percent which equates to a slope of 3.77 degrees, (400 ft/NM) for procedures intended for conventional aeroplane types / class and / or operations. In any case, conventional approaches should be limited to 4.5 degrees for Category A and B aeroplanes and 3.77 degrees for Category C and D aeroplanes, which are the upper limits for applying CDFA technique. A 4.5 degree approach slope is the upper limit for certification of conventional aeroplanes.

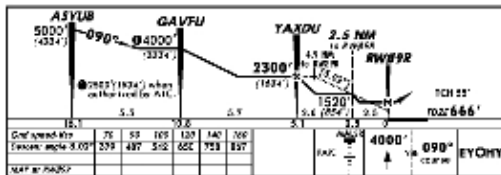
(b) The approach should meet at least the following facility requirements and associated conditions. NDB, NDB/DME, VOR, VOR/DME, LLZ, LLZ/DME, VDF, SRA, RNAV(LNAV) with a procedure which fulfils the following criteria:

FIGURA 29

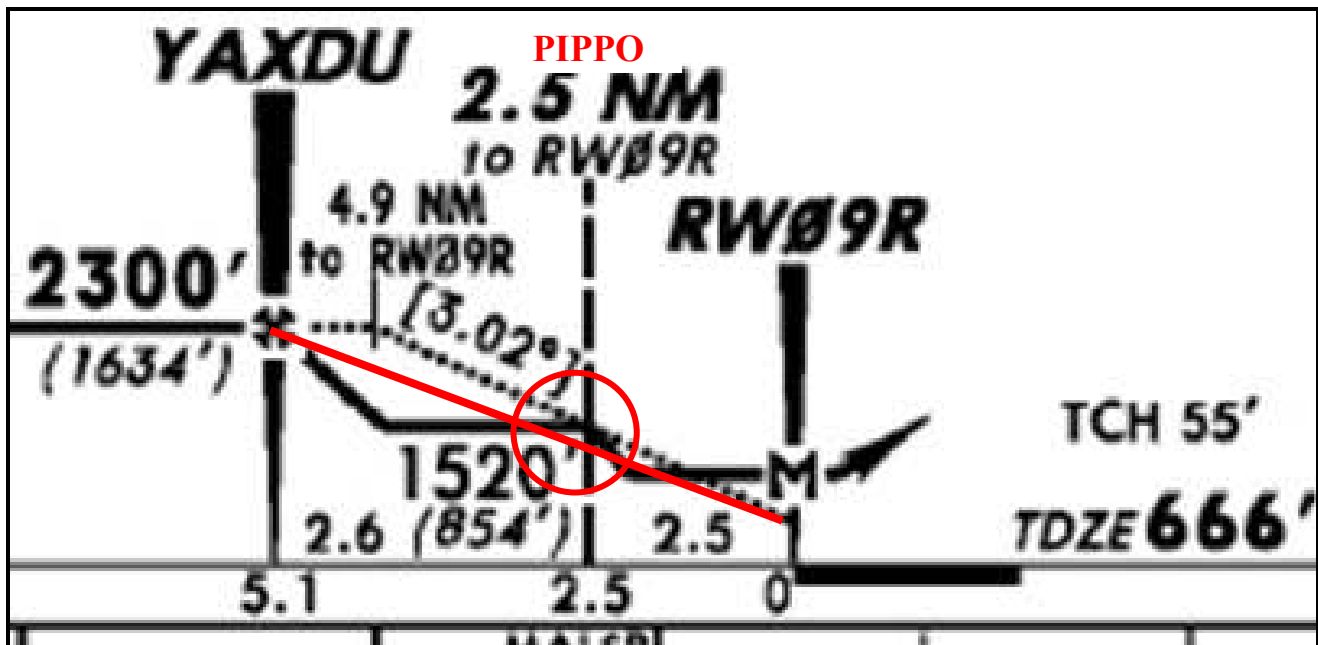
FAA AC 120-108

min 2,75°; Max cat ABC 3,77°; cat DE 3,50°

FIGURA 30



Jeppesen chart



Inizio discesa 0,2NM dopo FAF

Altezza su PIPPO = $(2,5\text{NM} \times 6076,103) \times \tan 3,02^\circ = 801,40\text{ft}$

$1520 - 666 = 854\text{ft}$ altezza su PIPPO | cateto PIPPO = $854 - 55 = 799\text{ft}$

Slope da TCH a PIPPO = $\arctan(799 / (2,5 \times 6076,103)) \times 180 / \pi \text{ (gradi)} = 3,01^\circ$

Differenza altezza su PIPPO = $801,4 - 799 = 2,4\text{ft}$

FIGURA 31

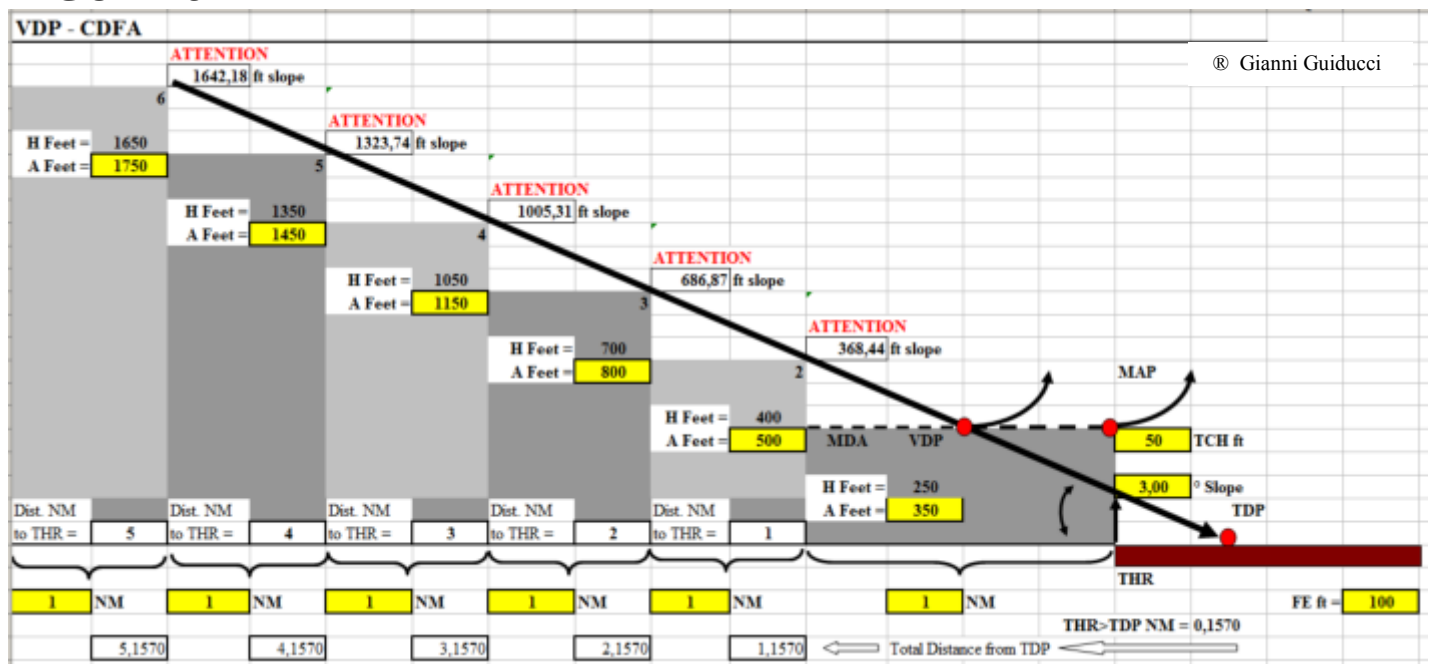


FIGURA 32

ICAO DOC 9365 - All Weather Operations

Continuous descent final approach (CDFA)

2.1.21 Use of a CDFA flight technique is recommended to reduce the risk of controlled flight into terrain (CFIT). Where a CDFA technique is not applied, e.g. if a step-down approach technique has been used, there may be a need for additional visibility/RVR. If the approach is not stable at a critical point, the pilot may need additional reaction time for the vertical manoeuvre. When executing an NPA procedure without using a CDFA technique, some States recommend the visibility/RVR minima be increased by 200 m for Cat A and B aircraft and by 400 m in the case of Cat C and D aircraft to aid the visual transition to landing and to establish the aircraft's final descent to land.

FIGURA 33

flightsafety - From nonprecision approach to precision - like approaches Methods and Operational Procedures

Dive&Drive - Diving and Driving - Step-Down procedure

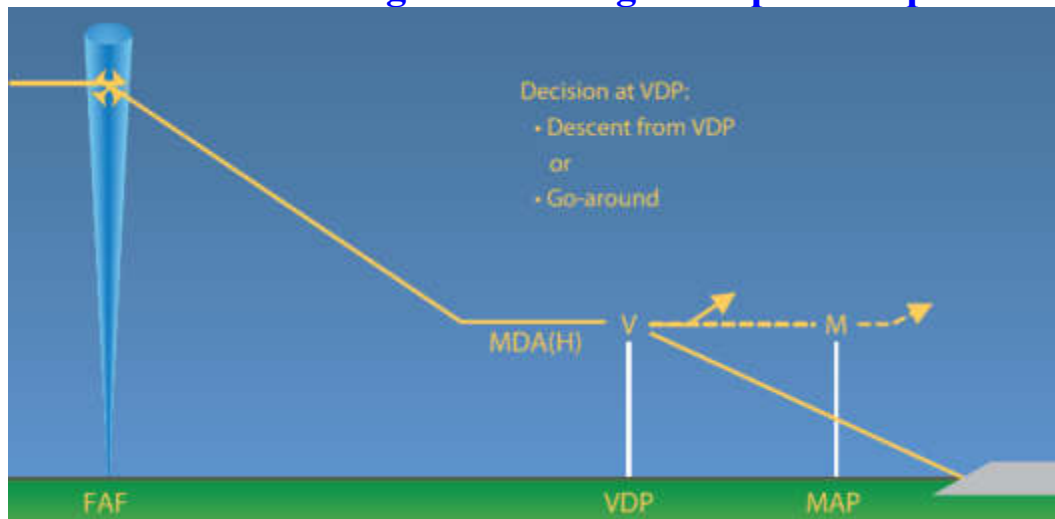
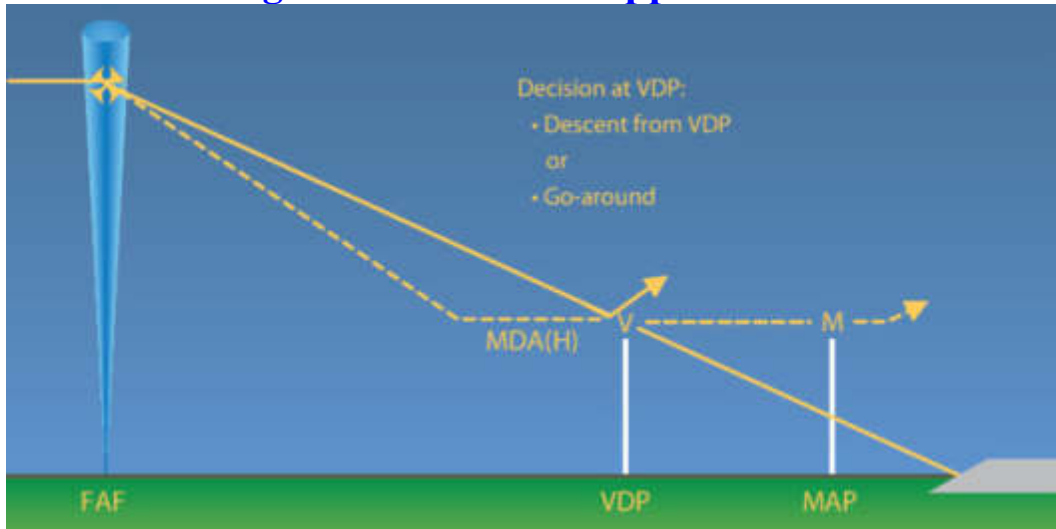


FIGURA 34

flightsafety - Cpt E. Tarnowski - From nonprecision approach to precision-like approaches - Methods and Operational Procedures

- **Continuous Descent Final Approach - CDFA**
- **Constant Descent from Final Approach Fix - CDFAF**
- **Constant Angle Non-Precision Approach - CANPA**



DDA continua in:

Considerazioni risposta A, Pagina 5, FIGURA 10 e successive

Gianni Guiducci

Segrate, 05/01/2022