

## notes

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### 20171212 YBAF-YGYM-[YWND]-YBAF

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#### TODR YBAF

- Type: C172N
- Aircraft: VH-KJR
- BEW: 670.3kg, 1477.7lb
- Fuel: 200L, 53 US gal, 144kg, 318lb
- PAX1: 80kg, 176lb
- PAX2: nil
- BagA: 10kg, 22lb
- BagB: nil
- Surface: Paved
- Slope: nil
- ZFW:  $\sum [670.3, 80, 10]$  = 760.3kg,  $\sum [1477.7, 176, 22]$  = \*\*1675.71b\*\*
- AUW:  $\sum [670.3, 144, 80, 10]$  = 904.3kg,  $\sum [1477.7, 318, 176, 22]$  = \*\*1993.71b\*\*
- QNH: 1017hPa
- ELE: 65ft
- TMP: 27C
- PA:  $65+30*(1017-1013)= 185\text{hPa}$
- *assume AUW 2000lb*
- GR PoH:  $((710-650)*0.185+650)-((665-605)*0.185+605))*0.7+((665-605)*0.185+605)=$   
(647.6ft, 198m)
- 50ft PoH:  $((1295-1185)*0.185+1185)-((1215-1110)*0.185+1110))*0.7+((1215-1110)*0.185+1110)=$   
(1182.6ft, 360m)

- GR CA020.7.4:  $647.6*1.15= (745\text{ft}, 227\text{m})$
  - 50ft CA020.7.4:  $1182.6*1.15= (1360\text{ft}, 415\text{m})$
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## LDR YWND

- Type: C172N
  - Aircraft: VH-KJR
  - BEW: 670.3kg, 1477.7lb
  - Fuel: 129L, 34 US gal, 93kg, 204lb
  - PAX1: 80kg, 176lb
  - PAX2: nil
  - BagA: 10kg, 22lb
  - BagB: nil
  - Surface: Grass
  - Slope: nil
  - ZFW:  $\sum [670.3, 80, 10] = 760.3\text{kg}, \sum [1477.7, 176, 22] = **1675.71\text{b}**$
  - AUW:  $\sum [670.3, 93, 80, 10] = 853.3\text{kg}, \sum [1477.7, 204, 176, 22] = **1879.71\text{b}**$
  - DD summer CA020.7.0: 2800ft
  - ELE: 1050ft
  - PA:  $2800+1050= 3850$
  - TMP (ISA):  $15-(1050/500)= 13\text{C}$
  - GR PoH:  $((((635-615)*0.85+615)-((615-590)*0.85+590))*0.3+((615-590)*0.85+590)= (617.5\text{ft}, 188.2\text{m})$
  - 50ft PoH:  $((((1430-1395)*0.85+1395)-((1400-1355)*0.85+1360))*0.3+((1400-1360)*0.85+1360)= (1402\text{ft}, 427.3\text{m})$
  - GR CA020.7.4:  $625.8*1.15= (719.7\text{ft}, 219.4\text{m})$
  - 50ft CA020.7.4:  $1402*1.15= (1612.3\text{ft}, 491.4\text{m})$
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## TODR YWND

- Type: C172N
- Aircraft: VH-KJR
- BEW: 670.3kg, 1477.7lb
- Fuel: 129L, 34 US gal, 93kg, 204lb
- PAX1: 80kg, 176lb
- PAX2: nil
- BagA: 10kg, 22lb
- BagB: nil
- Surface: Grass
- Slope: nil
- ZFW:  $\sum [670.3, 80, 10] = 760.3\text{kg}$ ,  $\sum [1477.7, 176, 22] = **1675.71\text{lb}**$
- AUW:  $\sum [670.3, 93, 80, 10] = 853.3\text{kg}$ ,  $\sum [1477.7, 204, 176, 22] = **1879.71\text{lb}**$
- DD summer CA020.7.0: 2800ft
- ELE: 1050ft
- PA:  $2800+1050= 3850$
- TMP (ISA):  $15-(1050/500)= 13\text{C}$
- *assume AUW 2000lb*
- GR PoH (paved):  $((880-800)*0.85+800)-((815-740)*0.85+740))*0.3+((815-740)*0.85+740)= (823\text{ft}, 250.9\text{m})$
- 50ft PoH (paved):  $((1615-1455)*0.85+1455)-((1500-1355)*0.85+1355))*0.3+((1500-1355)*0.85+1355)= (1512.1\text{ft}, 460.9\text{m})$
- *delta* 50ft/GR:  $(1512.1\text{ft}, 460.9\text{m})-(823\text{ft}, 250.9\text{m})= (689.1\text{ft}, 210\text{m})$
- GR PoH:  $(823\text{ft}, 250.9\text{m})*1.15= (946.4\text{ft}, 288.5\text{m})$
- 50ft PoH:  $(689.1\text{ft}, 210\text{m})+(946.4\text{ft}, 288.5\text{m})= (1635.5\text{ft}, 498.5\text{m})$
- GR CA020.7.4:  $(946.4\text{ft}, 288.5\text{m})*1.15= (1088.36\text{ft}, 331.8\text{m})$
- 50ft CA020.7.4:  $(1635.5\text{ft}, 498.5\text{m})*1.15= (1869.3\text{ft}, 573.3\text{m})$

## LDR YBAF

- Type: C172N
  - Aircraft: VH-KJR
  - BEW: 670.3kg, 1477.7lb
  - Fuel: 83L, 22 US gal, 60kg, 132lb
  - PAX1: 80kg, 176lb
  - PAX2: nil
  - BagA: 10kg, 22lb
  - BagB: nil
  - Surface: Grass
  - Slope: nil
  - ZFW:  $\sum [670.3, 80, 10] = 760.3\text{kg}$ ,  $\sum [1477.7, 176, 22] = **1675.71\text{b}**$
  - AUW:  $\sum [670.3, 60, 80, 10] = 820.3\text{kg}$ ,  $\sum [1477.7, 132, 176, 22] = **1807.71\text{b}**$
  - QNH: 1017hPa
  - ELE: 65ft
  - TMP: 27C
  - PA:  $65+30*(1017-1013) = 185\text{hPa}$
  - GR PoH:  $((590-570)*0.185+570)-((570-550)*0.185+550))*0.7+((570-550)*0.185+550) = (567.7\text{ft}, 173\text{m})$
  - 50ft PoH:  $((1360-1325)*0.185+1325)-((1325-1295)*0.185+1295))*0.7+((1325-1295)*0.185+1295) = (1322.2\text{ft}, 403\text{m})$
  - GR CA020.7.4:  $567.7*1.15 = (652.9\text{ft}, 199\text{m})$
  - 50ft CA020.7.4:  $1322.2*1.15 = (1520.5\text{ft}, 463.4\text{m})$
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