

## BAK Assessment Module 12.

### INTRODUCTION to NAVIGATION - WORKING FILE



#### Q7.

The track from the aerodrome to the training area is  $270^{\circ}\text{T}$ . If the variation at the aerodrome is quoted as  $10^{\circ}\text{E}$ , then the magnetic heading to get there in nil wind is ?

WORKING:

“Variation EAST = Magnetic LEAST”

True	$270^{\circ}\text{T}$
Less variation	$-10^{\circ}$
Magnetic	$260^{\circ}\text{M}$

#### Q8.

The track from the centre of the training area to the aerodrome is  $090^{\circ}\text{T}$ . If the variation at the aerodrome is quoted as  $2^{\circ}\text{W}$ , then the magnetic heading to get there in nil wind is ?

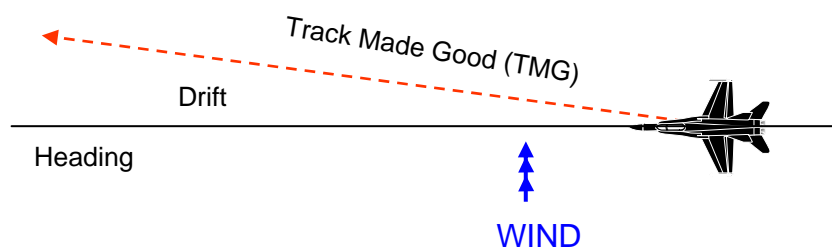
WORKING:

“Variation WEST = Magnetic BEST”

True	$090^{\circ}\text{T}$
Less variation	$+2^{\circ}$
Magnetic	$092^{\circ}\text{M}$

#### Q9.

The wind is from the right of the aircraft. The drift will be ?



**Q12.****WORKING:**

If the magnetic variation at a point on earth is "EAST", then the ?  
 "Variation EAST = Magnetic LEAST".

**Q14.**

The aerodrome is at latitude S35. A position 60 nm south of the aerodrome will be on which latitude.

**WORKING:**

60 nm = 1 degree of latitude. So  $S35 + 1 = S36$ .

**Q20.**

The difference in time between Western Standard Time (WST) and Eastern Standard Time (EST) is ?

**WORKING:**

Eastern Standard time is Zulu + 10.

Western Standard Time is Zulu +8

Difference 2 hours.

**Q28.**

The wind is described on an area forecast (ARFOR) as 080°T. The magnetic equivalent if the variation is 7°E is ?

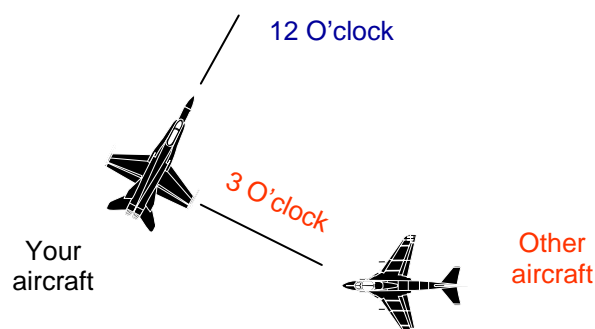
**WORKING:**

1. ARFOR winds are TRUE.
2. "Variation EAST = Magnetic LEAST".

ARFOR (True)	080°T
Less variation	-7°
Magnetic	073°M

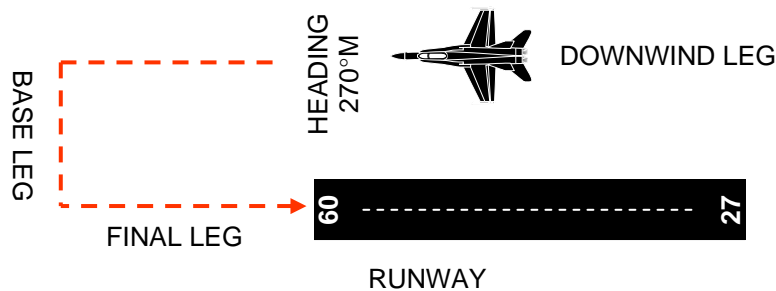
**Q30.**

The tower reports another aircraft in your 3 o'clock position. This aircraft is ?



**Q32.**

You are on downwind for runway 09. The approximate heading assuming nil wind is ?

**Q34.**

Western Standard Time is quoted as Zulu + 8 hours, and EST is Zulu + 10 hours. This means that ?

**WORKING:**

Points further WEST are earlier, so Western Australia Earlier the Eastern Standard Time.

**Q35.**

It is 1100 hours in Greenwich , England. If Tasmania standard time is quoted as Greenwich + 10 hours, then the equivalent Standard time in Tasmania LST is ?

**WORKING:**

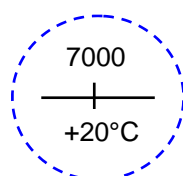
Greenwich (UTC)	1100
ADD	1000
Tasmania Time	2100

**Q43.**

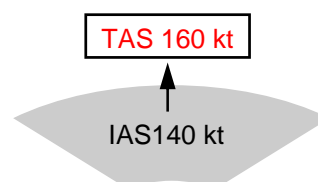
IAS is 140 kt. Temperature is +20°C. Cruise altitude 7000 ft. The TAS is ?

**WORKING:**

Step 1. Set 7000 ft opposite temperature of +20°C.



Step 2. Read opposite 140 kt IAS the TAS of 160 kt.



**BAK Assessment Module 12.**  
**END of INTRODUCTION to NAVIGATION - WORKING FILE**