

AGK

218. A turbofan engine with an inlet air mass flow of 1000 kg/s and a bypass mass flow of 889 kg/s has a bypass ratio of:

- A) 17.02
- B) 2.12
- C) 8.01
- D) 1.12

219. A twin spool engine with an inlet air mass flow of 500 kg/s and a bypass mass flow of 250 kg/s has a bypass ratio BPR of:

- A) 3
- B) 1
- C) 2
- D) 0

220. A twin spool engine with an inlet air mass flow of 220 kg/s and a HP compressor mass flow of 220 kg/s has a bypass ratio of:

- A) 1
- B) 10
- C) 0
- D) 1.1

221. "The bypass ratio: I. is the ratio of inlet air mass flow to HP compressor mass flow. II. can be determined from the inlet air volume flow and the HP compressor volume flow."

- A) I is correct, II is correct.
- B) I is correct, II is incorrect.
- C) I is incorrect, II is incorrect.
- D) I is incorrect, II is correct.

222. "The bypass ratio: I. is the ratio of bypass air mass flow to HP compressor mass flow. II. can be determined from the inlet air volume flow and the HP compressor volume flow."

- A) I is correct, II is correct.
- B) I is incorrect, II is incorrect.
- C) I is correct, II is incorrect.
- D) I is incorrect, II is correct.

OPERATIONAL PROCEDURES

193. According to OPS regulations, in an aeroplane with a maximum configuration of more than 19 passengers, the door between the passenger compartment and the flight deck compartment shall have locking means...

- A) to prevent passengers from opening it without permission of a member of the flight crew.
- B) capable of being locked only from outside the flight deck compartment.
- C) capable of being remotely locked from either inside or outside the flight deck compartment.
- D) capable of being remotely locked by cabin crew from outside the flight deck compartment.

194. On a pressurised aeroplane, supplemental oxygen is used to:

- A) assist a passenger with breathing disorders
- B) provide selected passengers with oxygen
- C) protect the aircrew fighting fires
- D) provide passengers on board with oxygen following a cabin depressurisation

195. According to OPS regulations, a public address system is required to operate an aeroplane with a maximum approved passenger seating configuration of more than:

- A) 61
- B) 9
- C) 30
- D) 19

196. In accordance with OPS regulations, in an aeroplane in which fuses are used, the number of spare fuses available for use in flight must be at least:

- A) 10 of the number of fuses of each rating or 3 of each rating, whichever is the greater
- B) 10 of the number of fuses of each rating or 1 of each rating, whichever is the greater
- C) 5 of the number fuses of each rating or 1 of each rating, whichever is the greater
- D) 20 of the number of fuses of each rating or 2 of each rating, whichever is the greater

RNAV

413. **What is the effect of FM broadcast stations that transmit on frequencies just below 108 MHz on the performance of ILS.**

- A) These transmissions may activate the FM immune filter which results in the appearance of the localizer failure flag.
- B) These transmissions may interfere with the ILS localizer and glide path signals which may lead to erroneous deviation indications.
- C) These transmissions may activate the FM immune filter which results in the appearance of the localizer and glide path failure flag.
- D) **These transmissions may interfere with the ILS localizer signal which may lead to erroneous localizer deviation indication.**

414. **FM broadcast stations transmitting just below 108 MHz are**

- A) unlikely to cause any interference to ILS receivers.
- B) **likely to cause interference to ILS receivers not equipped with an immunity filter.**
- C) causing interference only in extreme cases, affecting exclusively the glide path.
- D) likely to cause interference to all ILS receivers.

415. **The reason why pre take off holding areas are sometimes further from the active runway when ILS Category 2 and 3 landing procedures are in progress than during good weather operations is...**

- A) to increase aircraft separation in very reduced visibility conditions.
- B) to increase distance from the runway during offset approach operations.
- C) **aircraft manoeuvring near the runway may disturb guidance signals.**
- D) heavy precipitation may disturb guidance signals.

416. **In which frequency band does the Microwave Landing System MLS operate?**

- A) UHF
- B) **SHF**
- C) VHF
- D) EHF