

Name: _____

NATOPS QUIZ - #2

Chapter 2 Systems (2.1 Power Plant)

1. The helicopter is powered by a ____-____ engine manufactured by ____-_____.
2. True / False: The engine is limited to 420 SHP because of drive train limitations.
3. Ambient air enters the compressor inlet section and is compressed approximately ____ times its original ambient pressure.
4. The compressor front support has ____ radial struts that direct the incoming air onto the compressor rotor.
5. Approximately ____% of the air going to the combustion chamber is used for cooling. The remainder of the air is mixed with _____ from the _____ for burning.
6. True / False: The two-stage gas-producer turbine (Ng) is not mechanically coupled to the two-stage free-power turbine (Nf).
7. Approximately ____ of the energy delivered to the gas-producer turbine is used to drive the compressor.
8. The gas-producer turbine (Ng) powers the:
 - _____
 - _____
 - _____
 - _____
 - _____
 - _____
9. The free-power turbine (Nf) gear train drives the:
 - _____
 - _____
 - _____
 - _____

10. The three positions of the twist grip are:
- _____
 - _____
 - _____
11. The GOV RPM switch is used to set a power turbine speed between ____ and ____ +/- ____ % rpm.
12. True / False: The gas producer fuel control and the power turbine governor serve to provide speed governing of the Free-power Turbine (Nf) and overspeed protection for the Gas-producer Turbine (Ng).
13. The fuel control system is _____ - _____ and senses ____ and ____ rpm, _____, and _____ position to maintain constant rotor rpm...
14. True / False : Following an over-torque the digital display will continue to flash for 30 seconds to ensure the pilot is aware of the over-torque condition.
15. The TOT gauge has two operational modes, _____ and _____ mode.