EO M431.02 – DESCRIBE FLIGHT INSTRUMENTS

1. **Performance**: Describe Flight Instruments

2. **Conditions**:

   a. Given:

      (1) Supervision, and

      (2) Assistance as required.

   b. Denied: Nil.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard**: The cadet shall describe flight instruments, to include:

   a. reviewing pitot static systems and instruments;

   b. describing the gyroscope and gyroscopic instruments;

   c. describing angle of attack indicator; and

   d. describing Mach indicator.

4. **Teaching Points**:

TP	Description	Method	Time	Refs
TP1	Review the pitot static system and pitot static instruments: a. airspeed indicator (ASI), b. altimeter, and c. vertical speed indicator (VSI).	Interactive Lecture	25 min	C3-116 (pp. 39–45)
TP2	Describe the gyroscope and gyroscopic instruments: a. heading indicator, b. attitude indicator, c. turn and slip indicator, and d. turn co-ordinator.	Interactive Lecture	15 min	C3-116 (pp. 45–49)
TP3	Describe the angle of attack (AOA) indicator.	Interactive Lecture	5 min	C3-116 (p. 49)
TP4	Describe the Mach indicator.	Interactive Lecture	5 min	C3-116 (p. 50)

5. **Time**:

a.	Introduction / Conclusion:	10 min
b.	Interactive Lecture:	50 min
c.	Total:	60 min

Unofficial convenience copy of A-CR-CCP-804/PG-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-804-PG-001/A-CR-CCP-804-PG-001.pdf.
Verify against the official publication.

6. **Substantiation**: An interactive lecture was chosen for this lesson to clarify, emphasize, and summarize flight instruments.

7. **References**: C3-116 ISBN 0-9680390-5-7 MacDonald, A. F., & Peppler, I. L. (2000). *From the ground up: Millennium edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids**:

   a. Presentation aids (eg, whiteboard / flip chart / OHP / multimedia projector) appropriate for the classroom / training area,

   b. Large mock-up of an ASI,

   c. Large mock-up of an altimeter,

   d. Large mock-up of a VSI, and

   e. Gyroscope.

9. **Learning Aids**: Nil.

10. **Test Details**: This EO is assessed IAW Chapter 3, Annex B, Aviation Subjects-Combined Assessment PC.

11. **Remarks**: Cadets who are qualified Advanced Aviation may assist with this instruction.

Unofficial convenience copy of A-CR-CCP-804/PG-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-804-PG-001/A-CR-CCP-804-PG-001.pdf.
Verify against the official publication.