THE CIVIL AVIATION ACT
(CAP. 80)

REGULATIONS
(Made under Section 4)

THE CIVIL AVIATION (INSTRUMENTS AND EQUIPMENTS)
(AMENDMENT) REGULATIONS, 2014

1. These Regulations may be cited as the Civil Aviation (Instruments and Equipments) (Amendment) Regulations, 2014 and shall be read as one with the Civil Aviation (Instruments and Equipments) Regulations, as amended, hereinafter referred to as the “principal Regulations”.

2. The principal Regulations are amended by deleting regulation 6 and substituting for it with the following:

6. An operator shall not operate an aeroplane by day in accordance with VFR unless it is equipped with the following flight and navigational instruments and associated equipment are applicable-

(a) a magnetic compass;

(b) an accurate timepiece indicating the time in hours, minutes and seconds;

(c) a sensitive pressure altimeter;

(d) an airspeed indicator; and

(e) such additional instruments or equipment as may be prescribed by the appropriate authority.
3. The principal Regulations are amended in regulation 6A by deleting side note and substituting for it with the following new side note-
“Minimum flight and navigational instruments: VFR operations: Helicopters”

4. The principal Regulations are amended by deleting regulation 8 and substituting for it with the following:

8. A person shall not fly an aircraft under IFR, or where the aircraft cannot be maintained in a desired attitude without reference to one or more flight instruments, unless it is equipped with:

(a) a magnetic compass;
(b) an accurate timepiece indicating the time in hours, minutes and seconds;
(c) two sensitive pressure altimeters with counter drum-pointer or equivalent presentation;
(d) an airspeed indicating system with means of preventing malfunctioning due to either condensation or icing;
(e) a turn and slip indicator;
(f) an attitude indicator (artificial horizon);
(g) a heading indicator (directional gyroscope);
(h) a means of indicating whether the power supply to the gyroscopic instrument is adequate;
(i) a means of indicating in the flight crew compartment the outside air temperature;
(j) a rate-of-climb and descent indicator; and
(k) such additional instruments or equipment as may be prescribed by the appropriate Authority.

5. The principal Regulations are amended by adding the following new regulations immediately after regulation 8:

8A.-(1) A person shall not fly a helicopter under IFR, or where the helicopter cannot be maintained in a desired attitude
IFR operations: Helicopters

without reference to one or more flight instruments, unless it is equipped with:

(a) a magnetic compass;
(b) an accurate timepiece indicating the time in hours, minutes and seconds;
(c) two sensitive pressure altimeters;
(d) an airspeed indicating system with means of preventing malfunctioning due to either condensation or icing;
(e) a slip indicator;
(f) an attitude indicator (artificial horizon) for each required pilot and one additional attitude indicator;
(g) a heading indicator (directional gyroscope);
(h) a means of indicating whether the power supply to the gyroscope instrument is adequate;
(i) a means of indicating in the flight crew compartment the outside air temperature;
(j) a rate of climb and descent indicator;
(k) a stabilization system, unless it has been demonstrated to the satisfaction of the certificating Authority that the helicopter possesses, by nature of its design, adequate stability without such a system;
(l) such additional instruments or equipment as may be prescribed by the appropriate Authority; and
(m) if operated at night, the lights specified in Regulation 8 (g) to (k) and 4.4.2.1.
(2) Any person when operating a helicopter in accordance with IFR shall ensure that the helicopter is fitted with an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude indicating instrument (artificial horizon), clearly visible to the pilot-in-command.

(3) The emergency power supply under sub regulation (2) shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument panel that the attitude indicator(s) is being operated by emergency power.

6. The principal Regulations are amended by deleting regulation 30 and substituting for it with the following:

30-(1) An AOC holder shall not operate turbine-engined aeroplanes of a maximum certificated take-off mass of over 2 250 kg, up to and including 5 700 kg, for which the application for type certification is submitted to the Authority on or after 1 January 2016 and required to be operated by more than one pilot unless the aeroplane is equipped with either a CVR or a CARS.

(2) An AOC holder shall not operate an aeroplane of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2003 unless the aeroplane is equipped with a CVR capable of retaining the information recorded during at least the last two hours of its operation.

(3) An AOC holder shall not operate an aeroplane of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 1987 unless the aeroplane is equipped with a CVR.

(4) An AOC holder shall not operate an a turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued before 1 January 1987, with a maximum certificated take-off mass of over 27 000 kg that are of types of which the prototype was certificated by the appropriate national authority after 30 September 1969 unless the aeroplane is equipped with a CVR.

7. The principal Regulations are amended in regulation 31 by substituting “1 January 2003” with “1 January 2016”
8. The principal Regulations are amended by adding the following new regulation immediately after regulation 31-

“Cockpit voice recorder alternate power

31A.- (1) An AOC holder shall ensure that, the alternate power source shall automatically engage and provide ten minutes, plus or minus one minute, of operation whenever aeroplane power to the recorder ceases, either by normal shutdown or by any other loss of power.

(2) The alternate power source shall power the CVR and its associated cockpit area microphone components and shall be located as close as practicable to the alternate power source.

(3) An AOC holder shall not operate an aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the application for type certification is submitted to the Authority on or after 1 January 2018 unless the aeroplane is provided with an alternate power source, as defined in sub regulation 1, that powers the forward CVR in the case of combination recorders.

9. The principal Regulations are amended by deleting regulation 33 and substituting for it with the following:

33. (1) An AOC holder shall not operate a helicopters of a maximum certificated take-off mass of over 7 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 1987 unless the helicopter is equipped with a CVR.

(2) An AOC holder shall not operate a helicopters of a maximum certificated take-off mass of over 7 000 kg for which the individual certificate of airworthiness was first issued before 1 January 1987 unless the helicopter is equipped with a CVR.

(3) For helicopters not equipped with an FDR, at least main rotor speed shall be recorded on the CVR.
10. The principal Regulations are amended in regulation 34 by substituting “1 January 2003” with “1 January 2016”

11. The principal Regulations are amended by deleting regulation 38 and substituting for it with the following:

Flight Data recorders: Aircraft

38(1)- An AOC holder shall not operate a turbine-engined aeroplanes of a maximum certificated take-off mass of 5 700 kg or less for which the application for type certification is submitted to the Authority on or after 1 January 2016 unless the aeroplane equipped with-

(a) a Type II FDR; or

(b) a Class C AIR capable of recording flight path and speed parameters displayed to the pilot(s); or

(c) an ADRS capable of recording the essential parameters defined in Table A8-3 of Appendix 8.

(2) An AOC holder shall not operate an aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 1989 unless the aeroplane is equipped with a Type I FDR.

(3) An AOC holder shall not operate an aeroplanes of a maximum certificated take-off mass of over 5 700 kg, up to and including 27 000 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1989, unless the aeroplane is equipped with a Type II FDR.

(4) An AOC holder shall not operate a turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued on or after 1 January 1987 but before 1 January 1989, with a maximum certificated take-off mass of over 5 700 kg, except those in sub regulation (5), unless the aeroplane is equipped with an FDR which shall record time,
altitude, airspeed, normal acceleration and heading.

(5) An AOC holder shall not operate a turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued on or after 1 January 1987 but before 1 January 1989, with a maximum certificated take-off mass of over 27 000 kg that are of types of which the prototype was certificated by the appropriate national authority after 30 September 1969 unless the aeroplane is equipped with a Type II FDR.

(6) An AOC holder shall not operate a turbine-engined aeroplanes, for which the individual certificate of airworthiness was first issued before 1 January 1987, with a maximum certificated take-off mass of over 5 700 kg unless the aeroplane is equipped with an FDR which shall record time, altitude, airspeed, normal acceleration and heading.

(7) An AOC holder shall not operate aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued after 1 January 2005 unless the aeroplane is equipped with a Type IA FDR.

(8) An AOC holder shall ensure that all aeroplanes which are required to record normal acceleration, lateral acceleration and longitudinal acceleration for which the application for type certification is submitted to the Authority on or after 1 January 2016 and which are required to be fitted with an FDR shall record those parameters at a maximum sampling and recording interval of 0.0625 seconds.

(9) An AOC holder shall ensure that all aeroplanes which are required to record pilot input and/or control surface position of primary controls (pitch, roll, yaw) for which the application for type certification is submitted to the Authority on or after 1 January 2016 and
which are required to be fitted with an FDR shall record those parameters at a maximum sampling and recording interval of 0.125 seconds.

12. The principal Regulations are amended by deleting regulation 39 and substituting for it with the following:

39(1):-An AOC holder shall not operate a helicopters of a maximum certificated take-off mass of over 3 180 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2016 unless the helicopter is equipped with a Type IVA FDR.

(2) An AOC holder shall not operate a helicopters of a maximum certificated take-off mass of over 7 000 kg, or having a passenger seating configuration of more than nineteen, for which the individual certificate of airworthiness is first issued on or after 1 January 1989 unless the helicopter is equipped with a Type IV FDR.

(3) An AOC holder shall not operate a turbine-engined helicopters of a maximum certificated take-off mass of over 2 250 kg, up to and including 3 180 kg for which the application for type certification was submitted to a Contracting State on or after 1 January 2018 unless the helicopter is equipped with-

(a) a Type IV A FDR; or

(b) a Class C AIR capable of recording flight path and speed parameters displayed to the pilot(s); or

(c) an ADRS capable of recording the essential parameters defined in Table A4-3 of Appendix 4.

13. The principal Regulations are amended in regulation 40 by-

(a) substitution the word “aircraft” with “aeroplanes”;
(b) designating it as sub regulation (1); and
(c) adding the following new sub-regulation;

“(2) Types IV, IVA and V FDRs shall be capable of retaining the information recorded during at least the last ten hours of
their operation.”

14. The principal Regulations are amended in regulation 41 of by inserting ‘which’ between record and shall;

15. The principal Regulations are amended in regulation 42 by substituting “1 January 2005” with “1 January 2016”

16. The principal Regulations are amended in regulation 41 of by inserting ‘which’ between record and shall;

17. The principal Regulations are amended in regulation 56 by deleting sub regulation (2) and substituting for it with the following -

“(2) The medical supplies referred to in sub-regulation (1) shall comprise of:

(a) one or more first aid kits for use by the cabin crew members in managing incidents of ill health; and

(b) in the case of an aeroplane,

(i) authorized to carry less than two hundred and fifty passengers, one universal precaution kit; or

(ii) authorised to carry two hundred and fifty passengers or more, two universal precaution kits,

for use of cabin crew members in managing incidents of health associated with the case of suspected communicable disease, or illness involving body fluids, and,

(c) in the case of aeroplanes authorised to carry more than one hundred passengers on a sector length of more than two hours, a medical kit, for the use of medical doctors or other qualified persons in treating in-flight medical emergencies.”

18. The principal Regulations are amended by deleting the first schedule and substituting for it the following-

FIRST SCHEDULE

Table 8A be inserted Parameter Guidance for Aircraft Data Recording Systems.