

## PART 61 CHANGES FOR IREX.

The main changes to the Instrument Rating are in the terminology.

What used to be called a 'non-precision approach' is now called a **2D approach**. A 2D approach leaves it to the pilot to manage the height limitations.

What used to be called a 'precision approach' is now called a **3D approach**. A 3D approach provides the pilot with electronic guidance for the descent profile.

Instrument approaches are also classed as '**azimuth guidance procedure**' and '**course deviation indicator procedure**'.

In an azimuth guidance procedure, the pilot orientates by referring to a needle moving over an azimuth dial. The ADF is an example of an azimuth guidance procedure as is the VOR when it is displayed on an RMI as a needle indication. The indications are relative to the particular location of the ground based aid.

In a course deviation indicator procedure, the pilot is given command indications to fly right or left or up or down to maintain a particular flight path. The VOR indications are usually presented as a course deviation indicator display as are the LOC and GPS. These indications are relative to a particular pre-set flight path.

Part 61 makes reference to '**a valid instrument proficiency check**'. Your instrument rating proficiency check is considered valid from the date of the last successful instrument rating test or check until the end of the same month in the following year. For example, if you passed the test on the 3<sup>rd</sup> of February, you would hold a valid instrument rating proficiency check until **the end** of February the following year.

You should bring a copy of the CASR to the exam. Remember that you don't have to have the whole publication. It is permissible to copy just the section that applies, CASR 61.855 to 61.905. That extract can be brought into the exam room providing it is not in the form of loose pages i.e. it must be bound in some way.

Here are some of the sections that may be the subject of examination questions-

### **Describe the privileges of and instrument rating.**

*The holder of an instrument rating is authorised to pilot an aircraft under the IFR and also at night under the VFR. 61.855 (a) & (b)*

### **Limitations exercising the privileges of an instrument rating .**

*The aircraft must be equipped for the proposed IFR procedure. 61.860 (1).*

*For single pilot IFR the pilot must have passed a flight test in a single pilot aircraft.*

61.860 (2) (a).

*You must not conduct a circling approach unless, within the past 12 months you have passed a flight test that included a circling approach or your most recent instrument proficiency check included a circling approach. (Note: A circling approach is conducted visually after becoming visual in the circling area during an instrument approach in IMC).*

61.860 (3) (a) (b).

*You must not conduct an instrument approach unless, within the past 12 months you have passed a flight test that included an instrument approach **or** your most recent instrument proficiency check included an instrument approach.*

61.860 (3) (a) (b).

**Limitations exercising the privileges of an endorsement on an instrument rating.**

*You cannot fly an aircraft under the IFR or NGT VFR unless you hold the applicable endorsement on that aircraft. (Single engine or multi engine).*

61.865 (1) and table 61.890 on Page 170.

*You cannot fly a particular type of instrument approach unless you hold an endorsement on that type of aid. (2D or 3D).*

61.865 (2) and table 61.890 on Page 173 and 174.

**Recent experience requirements.**

*You cannot fly IFR unless you have conducted at least 3 instrument approaches in the last 90 days – either in flight or in an approved flight simulation training device. This requirement applies to aeroplanes and helicopters separately.*

61.870 (2) and (3).

*You must not fly a 2D approach unless you have flown a 2D approach in the last 90 days – either in flight or in an approved flight simulation training device.*

61.870 (4)

*You must not fly a 3D approach unless you have flown a 3D approach in the last 90 days – either in flight or in an approved flight simulation training device.*

61.870 (5).

*You must not fly an approach using an azimuth guidance procedure unless you have flown an approach using an azimuth guidance procedure in the last 90 days – either in flight or in an approved flight simulation training device.*

**Note:** azimuth guidance means an instrument that points a needle towards a ground based navigation aid such as an NDB or some VORs when combined with an RMI. That is, they do not give command indications.

61.870 (6).

*You must not fly an approach using a course deviation procedure unless you have flown an approach using a course deviation procedure in the last 90 days – either in flight or in an approved flight simulation training device.*

**Note:** a course deviation procedure means an instrument that indicates your position relative to a set track by displaying an indicator that gives command indications to fly left or right to maintain that track. That is, VOR, HSI or GPS displays.

61.870 (7).

**Recent experience requirements – single pilot.**

You must not fly single pilot IFR unless you have flown 1 hour including 1 instrument approach as a single pilot either in actual flight or in simulated flight under IFR in the last 6 months.

61.875 (1) & (2).

**61.870 Limitations on exercise of privileges of instrument ratings—recent experience: general**

- (2) The holder is authorised to pilot an aircraft under the IFR only if the holder has conducted at least 3 instrument approach operations within the previous 90 days in an aircraft or an approved flight simulation training device for the purpose.
- (3) The holder is authorised to pilot an aircraft of a particular category under the IFR only if the holder has conducted at least one instrument approach operation within the previous 90 days in an aircraft of the same category or an approved flight simulation training device for the purpose.
- (4) The holder is authorised to conduct a 2D instrument approach operation only if the holder has conducted a 2D instrument approach operation within the previous 90 days in an aircraft or an approved flight simulation training device for the purpose.
- (5) The holder is authorised to conduct a 3D instrument approach operation only if the holder has conducted a 3D instrument approach operation within the previous 90 days in an aircraft or an approved flight simulation training device for the purpose.
- (6) The holder is authorised to conduct an azimuth guidance operation only if the holder has conducted an azimuth guidance operation within the previous 90 days in an aircraft or an approved flight simulation training device for the purpose.
- (7) The holder is authorised to conduct a course deviation indicator operation only if the holder has conducted a course deviation indicator operation within the previous 90 days in an aircraft or an approved flight simulation training device for the purpose.

Note: Azimuth guidance operations and course deviation indicator operations are instrument approach operations: see the definitions of those terms in regulation 61.010.



**Azimuth guidance procedure means an instrument approach operation using azimuth bearings for lateral navigation guidance.**



**Course deviation indicator procedure means an instrument approach operation using a course deviation indicator for lateral navigation guidance.**

Yes it is quite different to what we have been used to over many years.

It doesn't matter what ground based navigation aid you are using, pilot currency on the old compass rose and needle (azimuth) is required every 90 days if you wish to do such an approach, and the same for the CDI indicator. You can choose any source, NDB or VOR for the azimuth or LLZ, ILS, VOR, GNSS for the CDI.

3D – Flying the ILS, RNP Approach with barometric vertical navigation (Baro VNAV)\* which requires both lateral navigation (LNAV) and vertical navigation (VNAV) satisfies the 3D approach recent experience requirement for 90 days.

*\* That's just a conventional pressure altimeter.*

2D – Flying the VOR or NDB using the azimuth will satisfy the 2D approach recent experience requirement for 90 days.