

Information on Charting of VSS Penetrations

BACKGROUND:

The latest amendment to ICAO PANS-OPS Volume II will become applicable on 10 November 2016. In this amendment there is a provision for any obstacle penetration of the Visual Segment Surface (VSS) to be identified on the instrument approach chart.

WHAT IS THE VSS?

The VSS is designed to keep the area from where the aircraft reaches DA or MDA, to the landing threshold on a straight-in approach, clear of obstacles. If, during surveys, obstacles are identified in this area, the obstacles undergo a risk assessment via an Aeronautical Study and the State and aerodrome operator must provide risk mitigation. This mitigation may include lighting the obstacle, raising the minima and visibility for the approach so the obstacles become easier to identify, or charting the obstacle and informing the pilot.

Under most circumstances, where the VSS has been penetrated, the first two options have been enough.

However, given that charting is now going to become more prevalent since the changes to PANS OPS and as operating crew, you might see some changes on the approach charts.

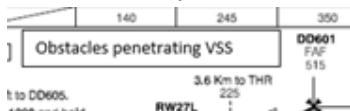
WHAT WILL I SEE?

There is currently no guidance from ICAO on exactly how the penetrations should, or may, be depicted.

Therefore, you might see a worded note like “VSS Penetrations 600m from threshold” or “Obstacles Penetrating VSS” with no specific guidance of where they are. You might also see an obstacle “icon” on your approach chart.

Some States already publish this, so in some cases, there will be no change.

EXAMPLE:



WHAT DO I DO?

The obstacles that penetrate the VSS have been risk assessed and the integrity of the approach is not compromised. Therefore, as operating crew, if you see a new chart with a note or icon depicting a VSS penetration, the key is- you don't need to change anything.

Fly the approach as normal and you will be protected.

ICAO is currently writing guidelines on recommended charting, with input from IFALPA and IATA, and this is expected to be out in the next ICAO cycle.

In the meantime, the penetrations are only there for situational awareness and guidance and no further action is required from flight crew.