Background:
In the Brazil HG Worlds 2017, the following penalty was successfully implemented and enforced:
‘Between 70 and zero metres outside the prohibited airspace: Linear from zero to ten percent of pilots’ points. Between zero to 30 metres inside the prohibited airspace: Linear from ten to 100 percent of pilots’ points.’

Discussion:
The above gradual penalty approach was developed to address safety issues seen in the test event where pilots approaching the zero to 100% penalty line flew in unsafe manner (i.e. wildly diving their gliders without regard to local traffic to avoid the 100% penalty). While effective at eliminating the problem (there were several cases of moderate penalties being awarded but no unsafe flying to avoid the penalty), this approach does slightly reduce the amount of vertical airspace the pilots have to use without penalty.

Proposal:
In Section 7A 6.3, Violation of restricted airspace, replace current text by:
‘Airspace Penalties: Between XX and zero metres outside the prohibited airspace: linear penalty from zero to YY percent of pilots’ points. Between zero to 30 metres inside the prohibited airspace: linear penalty from YY to 100 percent of pilots’ points. The values of XX and YY can be set for the particular airspace and default values of XX=70 and YY=10 are suggested.’

Add to S7 Class O Guidelines and Templates 8 Local Regulations for Cross Country Events (Template) 22 Penalties:
‘Airspace Penalties: Between XX and zero metres outside the prohibited airspace: Linear penalty from zero to YY percent of pilots’ points. Between zero to 30 metres inside the prohibited airspace: Linear penalty from YY to 100 percent of pilots’ points. The values of XX and YY can be set for the particular airspace and default values of XX=70 and YY=10 are suggested.’