

Federal Aviation Administration, DOT

Pt. 36, App. A

where

$\eta(\delta)$ is listed in Table A36-4 and f_0 in Table A36-5;

$\alpha(i)$ is the attenuation coefficient in dB/1000 ft;

θ is the temperature in °F; and

H is the relative humidity, expressed as a percentage.

A36.7.2(b) For calculations using the International System of Units (SI):

$$\alpha(i) = 10 \left[2.05 \log(f_0/1000) + 1.1394 \times 10^{-3} \theta - 1.916984 \right] \\ + \eta(\delta) \times 10 \left[\log(f_0) + 8.42994 \times 10^{-3} \theta - 2.755624 \right]$$

and

$$\delta = \sqrt{\frac{1010}{f_0}} 10^{(\log H - 1.328924 + 3.179768 \times 10^{-2} \theta)} \\ \times 10^{(-2.173716 \times 10^{-4} \theta^2 + 1.7496 \times 10^{-6} \theta^3)}$$

where

$\eta(\delta)$ is listed in Table A36-4 and f_0 in Table A36-5;

$\alpha(i)$ is the attenuation coefficient in dB/100 m;

θ is the temperature in °C; and

H is the relative humidity, expressed as a percentage.

A36.7.3 The values listed in table A36-4 are to be used when calculating the equations listed in section A36.7.2. A term of quadratic interpolation is to be used where necessary.

Section A36.8 [Reserved]