

**Prof. Ing. GIORGIO CUCCHI**

INGEGNERE NUCLEARE

-  
ESPERTO QUALIFICATO DI 3°

n. 59

SEGRETARIO GENERALE ONORARIO ANPEQ

-  
40135 BOLOGNA

via del Genio n. 5/10 – tel. e fax. 051.434736

Uff. – tel.. 051.2087716, fax 051.2087747

E-mail: [giorgio.cucchi@unibo.it](mailto:giorgio.cucchi@unibo.it)

Tel. Cell. 335.397539

## CALCULATIONS OF EFFECTIVE DOSE FOR EXPOSITION OF FLYING CREWS TO COSMIC RAYS

FAA is working on CARI-7

Giorgio CUCCHI

---

For many years and in most countries world-wide, the calculations of effective doses of flying crews are made using the computation code CARI-6, elaborated from the Civil Aerospace Medical Institute (CAMI) of USA Federal Aviation Administration (FAA).

The program calculates the effective dose-rate from galactic and solar radiations at any location in the atmosphere at altitudes up 60,000 feet (FL600) and with the limits of 25 en-route altitudes for every flight.

At present the effective dose is calculated using the outdated ICRP 60 recommendations but Mr Kyle Copeland of CARI mailed me a few days ago to say that he is working on CARI-7 that will have the advantage of using the newer specifications from ICRP 103 recommendations.

Currently Mr Copeland has an academic version of CARI-7 and before long he will release the general-use version that everyone is awaiting.

Giorgio Cucchi