Errata

"The Neutron Velocity Spectrum in a Heavy Moderator," E. Richard Cohen, *Nuclear Science and Engineering*, **2**, 227-245 (1957).

Equation (34) of this paper is in error. The correct expression should be

$$E_{eff} = 5.167 \, kT \, (1 + 0.358\Delta)^2.$$

The error was the result of an incorrect calculation of the coefficient K_2 of Appendix B. The proper expression is

$$K_2 = \frac{0.798873}{2} \left[\tfrac{1}{2}\gamma + \ln x_0 - \frac{1}{2s_0} \sum_{n=1}^{\infty} \frac{s_n}{n} \right],$$

and the final expression for the integral of the neutron flux (the last equation of Appendix B) should be

$$\int_0^{x_0} xN(x)dx = \frac{2}{\sqrt{\pi}} + C\ln x_0 + 0.4908775 \, \Delta - 0.184133 \, \Delta^2.$$

I wish to thank Captain Ernest P. Sims, Air Force Institute of Technology, who brought this error to my attention by pointing out the discrepancy between Eq. (34) as it appears in the paper and the results quoted by Weinberg and Wigner in *The Physical Basis of Neutron Chain Reactors* (University of Chicago Press), Fig. 11.6, p 345.

"Neutron-Exposure Correlation for Radiation-Damage Studies," R. E. Dahl and H. H. Yoshikawa, *Nucl. Sci. Eng.*, **21**, 312 (1965).

The values of the ordinates of the curves in Fig. 5 are expressed as $\Phi(u)$. The spectra were calculated in lethargy space in the multigroup codes, and the fission spectrum was presented in consistent terms.

For any method of correlating radiation-damage experiments, the crucial test of validity is application to actual data. In this test, the only spectra involved are those at the irradiation facilities. Thus the assumption of any particular fission spectrum would have no effect on the test of validity of the analysis.

Reference 8 should read:

[8]B. E. WATT, "Energy Spectrum in Neutrons from Fissions Induced by Thermal Neutrons," LA-718 (December 1958).

Reference 9 should read:

[9]R. E. DAHL and H. H. YOSHIKAWA, "Neutron Spectra Calculations for Radiation Damage Studies," *Nucl. Sci. Eng.*, **17**, 398 (November 1963).