Indefinite Integrals of the Exponential Integral Function

In a recent letter,¹ Gunther presented a short table of certain indefinite integrals of the exponential integral function. For those readers who may find such integrals useful, I would like to point out that LeCaine has prepared a much more extensive listing of such integrals.² The 19 results given by Gunther (he lists 20, but Nos. 5 and 19 in his list are identical), as well as several hundred others, are given by LeCaine.

LeCaine's report was originally issued in 1945 as a classified Canadian document. It was subsequently declassified and made available by the National Research Council of Canada to the U.S. Atomic Energy Commission (AEC). It was then reproduced for distribution by the Technical Information Division of the Oak Ridge Operations of the AEC. The declassified copy I have bears a 1949 date.

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REFERENCES

- 1. N. G. GUNTHER, Nucl. Sci. Eng., 94, 426 (1986).
- 2. J. LeCAINE, "A Table of Integrals Involving the Functions $E_n(x)$," Report No. MT-131, National Research Council of Canada, Division of Atomic Energy (Apr. 24, 1945).

Response to "Indefinite Integrals of the Exponential Integral Function"

I want to thank Pomraning¹ and also Richard Cohen of Rockwell International for calling my attention to the LeCaine report.² It deserves to be better known.

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- 1. G. C. POMRANING, Nucl. Sci. Eng, 95, 316 (1987).
- 2. J. LeCAINE, "A Table of Integrals Involving the Functions En(x)," Report No. MT-131, National Research Council of Canada, Division of Atomic Energy (Apr. 24, 1945).