(3 decimal places in the case of $\int_0^t H(u)\,du$) for a unit scale parameter and the following ranges of the shape parameters:

Gamma, Weibull	.55(.05)1(.25)7
Inverse Gaussian	.5(.05)1(.2)2(.5)9, 10, 12, 15, 20
Lognormal	.1, .2(.05).3(.1).7(.05).8, 1.0(.2)1.4(.1)1.6 (.2)2.4(.1)2.6(.2)3.4(.1)3.6(.2)4.0
Truncated normal	−2(.25)4.

The algorithm yields values of $F^{(n)}(t)$, and hence the variance and renewal functions were computed directly from (1) and (2); values of $\int_0^t H(u)\,du$ were obtained by integration of the spline representation.

AUTHOR'S SUMMARY

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In order to encourage interaction between researchers in academe and scientists in industry, and to draw attention to the widespread use of numerical techniques in most diverse application areas, the Department of Numerical Mathematics of the Centre for Mathematics and Computer Science in Amsterdam held a colloquium on "Topics in Applied Numerical Analysis" during the academic year 1983/84. The two volumes under review contain the 24 lectures presented during this colloquium. Most of them describe the use of existing, or improved, numerical methods in one particular application area. In line with the objectives of the colloquium, the applications are drawn from a wide variety of research activities in science and engineering. Two contributions also deal with vectorizing algorithms for use on a parallel computer.

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