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Rejoinder

Andrew L. Rukhin and H. K. Hsieh

We would like to thank all the discussants for their encouraging comments. Their additional accounts on Soviet research in reliability are informative and certainly will be welcomed by readers.

Professors Barlow and Khalil's firsthand historic review of the activities at Gnedenko's School of Reliability at Moscow University should give readers a fresh look at Gnedenko's contribution to reliability research. Professor Singpurwalla's and Professor Gertsbakh's additional explanations of the "Sedyakin Principle" give readers more insight about the principle. Other remarks and additional references mentioned by the discussants are also valuable for those who are interested in reliability studies.

Professor Gertsbakh mentioned in his discussion that he had sent a note for publication on the equivalence between Ushakov's (1980) and Kaplan-Meier's (1958) nonparametric reliability estimators. This remark relieves us from pondering further about this problem. We are looking forward to seeing his paper.

Professors Barlow and Khalil indicated that the references to Soviet and non-Soviet authors given in the survey is very limited. Professor Basu also wished that we had a more exhaustive survey of the area. We share their concerns. Due to the broad scope of reliability theory and diversified resources, some important work of Soviet authors was indeed omitted or overlooked. As to the work of non-Soviet authors, we included only those directly related to the work of Soviet authors as we emphasized the latter. An excellent review of statistical methods in reliability, based mainly on English language publications, has been given by Lawless (1983) and discussants.

As a link between the comments of Professors Singpurwalla and Basu we would like to note that the best unbiased estimator of the reliability function for many models (exponential, normal) has a Bayes nature. However, the corresponding (generalized) priors are rather peculiar (cf. Rukhin and Ananda, 1987).

We agree with Professor Basu on the theoretical importance of the translated journal *Theory of Prob-*

ability and Its Applications (Teoriya Veroyatnostei i ee Primeneniya). In fact there are some other journals translated from Russian that also contain reliability related papers, for example, *Theory of Probability and Mathematical Statistics (Teoriya Veroyatnostei i Matematicheskaya Statistika)* and *Automatic Control and Computer Sciences (Automatika i Vychislitel'naya Tekhnika)*. There are at least fifty Soviet scientific and technical journals that have been translated into English. Readers who are interested in journals in translation may refer to the following three resources:

1. *Guide to Soviet Scientific-Technical Research Journals*, the 1984 issue, published by Allerton Press, Inc., New York.

2. *Journals in Translation*, 1982, published jointly by British Library Lending Division, United Kingdom, and International Translations Centre, The Netherlands.

3. *A Guide to Scientific and Technical Journals in Translation*, 2nd ed., 1972, compiled by C. J. Himmelsbach and G. E. Brociner and published by Special Libraries Association, New York.

We feel encouraged after reading Dr. Weinberg's discussion on the need for obtaining knowledge published in non-English languages to benefit American society. We believe that our efforts in writing the survey are worthwhile, and that the survey, although limited, can stimulate Western scholars to pay more attention to Soviet research work as well as work published in non-English languages. Finally, we hope, as does Professor Basu, that additional Soviet books and papers on reliability will be translated into English.

ADDITIONAL REFERENCES

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