CORRECTIONS TO
 "ON K -ORDER HARMONIC NEW BETTER THAN USED
 IN EXPECTATION DISTRIBUTIONS"

A. P. BASU AND NADER EBRAHIMI

(Annals of the Institute of Statistical Mathematics, A, (1984), Vol. 36, pp. 87-100)

1. Theorem 3 is not true in general. A counter example by Klefsjö [1] is as follows:

Let

$$F(x) = \begin{cases} 1, & x \leq a \\ 1-p, & a < x \leq b \\ 0, & x \geq b. \end{cases}$$

Then with $a=1$ and $b=6$, straight forward calculation shows that $\bar{F}$ is 2-HNBUE if $1-p < (3-\sqrt{5})/10$ or
 if $1-p > (3+\sqrt{5})/10$.

Proceeding along the same line one obtains conditions on $1-p$ such that $\bar{F}$ is 2-HNBUE for arbitrary a and b .

2. Page 94, line 5. K -HNBUE should be 2-HNBUE. Using the example in paragraph 1 above one can also show that K -HNBUE distributions are not closed under formation of coherent structure for $k=3$. The result for general k is not known.
3. In theorems 6-10 we have made the tacit assumption that

$$\int_0^t \left(\bar{F}(x) / \int_x^\infty \bar{F}(y) dy \right)^k dx \leq \int_0^t \left(\bar{F}(x) / \int_x^\infty \bar{F}(y) dy \right) dx.$$

An example where this is true is exponential distribution with mean >1 .

4. Theorems 11, 12 and 13 are not correct.

We like to thank Dr. Bengt Klefsjö of the University of Luleå for pointing out the errors and making some constructive comments.