

Letters to the Editor

HANSEN'S IMPROVED EX-MERIDIAN TABLES

SIR,—Captain G. A. A. Grant's review of *Hansen's Improved Ex-Meridian Tables* in Volume VII, No. 3, p. 315, of the *Journal* seems rather unfair to Hansen, who is no longer able to defend himself.

The book is not a new one—to my knowledge it has been in use for at least forty years—and the only major alteration in the revised form is the substitution of distance from the meridian (L.H.A.) in terms of arc instead of in terms of time, which is, of course, in accordance with modern practice. In all other respects the book is exactly as Captain Hansen compiled it.

The purpose of the 'Explanation of the Tables' is to explain and illustrate the use of the tables: it is in Hansen's own words, and up to the present has been quite understandable to the average user. Examples are given of the different cases in which interpolation may be desirable or necessary, and examples of the appropriate steps to be taken are incorporated. The statement that the tables 'may be worked for half or fractional degrees without any interpolation whatever' is Hansen's own, as is the statement that 'it is never necessary to interpolate between two consecutive tables when they are equally accurate'. When they are not equally accurate, the more accurate table is used.

The type of navigator that your reviewer knows well may not find that these tables will improve his navigation, but that is not Hansen's fault. In any case, it would not appear to be a valid reason why other navigators should be deprived of these very simple and helpful tables.

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Yours faithfully,
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Captain Grant writes:

The claim that the tables may be used 'without any interpolation whatsoever' is made in the original preface and cannot be accepted. The explanation contains a number of examples on how to interpolate to find the correct table number, but all the examples given have either latitude or declination as a whole degree, or very nearly. There is no example given where *both* latitude and declination have fractional values. If any instruction in interpolation is thought necessary, then that is the example which ought to be used.

It is not necessary to give more than one example of how to find the correction, but unfortunately in the example given the original figures have not been altered. The instructions still read 'opposite 40° and under $6'$ ' whereas they should have been revised to read 'opposite 11° and under $30'$ '. This can be put right by a small correction slip.

I still feel that the tables cannot be recommended to any qualified navigator, even though they may have had a period of usefulness when they were first published.