

FORUM

P. V. H. Weems A Personal Tribute

D. H. Sadler

THE recent death of Philip Van Horn Weems, at the advanced age of 90, has removed from the field of navigation one of its most outstanding and colourful personalities. His contributions, made over a period of more than half a century, have ranged over almost every aspect of navigation: practising navigator, instrument inventor, pioneer of the GHA form of Nautical Almanac and of the first Air Almanac, introducer of the Star Altitude Curves, brilliant expositor (as his books so clearly demonstrate), successful business man who trained many thousand navigators through his training schools and correspondence courses – he devoted his whole life to navigation with boundless energy and contagious enthusiasm.

This is not the place to give the factual details of his life, or to put on record his many achievements, both inside and outside his professional career. Many of his most lasting and significant contributions to the practice of navigation, although so familiar to myself, can only be appreciated by a detailed study relative to the contemporary 'state of the art'; Weems was, above all else, an innovator of ideas many of which were developed by others and which deserve a fuller and more technical treatment.

A brief summary of his career follows. Weems, left an orphan at an early age, had a hard life on the family farm in Tennessee, with little formal education. But he succeeded in passing the entrance examination to the US Naval Academy, where his physical and mental toughness became evident in his distinguished athletic prowess (for example, he wrestled for the US in the Olympic Games); he retained his superb fitness almost to the end of his life. In the US Navy he specialized in engineering as well as navigation, but (perhaps because his ideas were too advanced) retired early in the 1930s to give himself an opportunity to develop those ideas through his own navigational business and school. That business and school have been outstandingly successful. During the 1939–45 war he was recalled to serve as a Convoy Commodore at Sea: G. Dale Dunlap¹ pays a previously unrecorded tribute to Weems, in that capacity – 'while in charge of large convoys to Africa and later to England, not one of the thousands of merchant vessels under his command was lost to enemy action'.

During this period Weems found time to acquire his Air Navigator's wings! Not surprisingly, at the end of the war, he was one of the founders of the (US) Institute of Navigation, in which he played a leading part in its early years. At the age of 72, in 1961, he was again recalled (to his intense gratification and pride) to the Navy to organize a special class of students in space navigation, and to prepare handbooks and tables.

Outside the service and his navigational business Weems participated in several exploits – including flights (with his son as pilot) of navigational interest, as well as underwater exploration with Ed. Link.

I first met Weems in 1937 and, in spite of a constant correspondence, only on seven subsequent occasions, on one of which I had the privilege of presenting him with the Gold Medal of the Institute. Each meeting left a lasting impression of a man bubbling over with ideas and impatient to put them into practice. He was a big man (in every sense) who seemed to know everyone – as a walk with him through the streets of Annapolis showed. I last met him when (after recall to the Navy in 1961) he visited me, with some of his students, at Herstmonceux. He wished to visit friends who had recently moved to a farm in Kent, but whose address he did not know. After locating them, they invited him to stay but explained that the only occupant at the time I could take Weems would be the 7-year-old son. On arrival he was the perfect host, and in due course showed us the farm and his favourite haunts. Weems, resplendent in his (new) Captain's uniform joined with exemplary seriousness and apparent enjoyment in climbing trees, sliding down haystacks and trampling through mud and muck. My regard for him, as a man, was so enhanced that it matches my admiration for his achievements and contributions to navigation! Perhaps for this, and for other reasons, it may well be that his most lasting contribution to the rapidly changing science of navigation will be the enthusiasm he has engendered in many generations of students.

REFERENCE

¹ Dunlap, G. D. (1978). The Grand Old Man of Navigation. *The Navigator*, AFRP 50-3, 25, no. 2. From which article I have taken the quotation and other information.

A Sun-compass for Swinging Ship

T. J. Nagel

A **TEDIOUS** problem which confronts many a yachtsman is determining the deviation of his magnetic compass. He can hardly justify the expensive services of a professional compass adjuster, so this necessary but difficult operation must be carried out by himself. Should he decide to use bearings of shore objects when swinging ship he is faced with the difficulty of observing these bearings on his compass. A small-boat compass is hardly likely to come equipped with azimuth mirror and sight vanes. The alternative equipment for taking the bearings is a pelorus, but the expense of this instrument could hardly be justified for such rare and intermittent use.

The favourite way out of the difficulty appears to be to use a hand bearing compass. This method suffers from two disadvantages in particular:

- (i) The hand bearing compass should be situated in precisely the same position as the main compass if it is to reproduce the latter's readings precisely. Not only is this impossible to achieve in practice – the nearest they can be brought together is side by side – but when brought close together their mutual magnetic reaction can produce errors of an unknown amount.