



PREFACE



In this issue, we celebrate the contributions which Phil Doak has made to scientific publishing. He was the founding Editor of the *Journal of Sound and Vibration* and from the beginning set and insisted on maintaining a very high standard in the papers which were accepted for publication. He personally read every manuscript and corrected the finer points of English. This vision of a new style of journal for an emerging discipline has fully paid off and resulted in one of today's premier scientific journals. The original idea came from Professor Elfyn Richards as he set about founding a research institute which could develop into an international leader in Sound and Vibration research. In those days there

was growing public concern about the environment and in particular a demand for something "to be done about noise—particularly aircraft noise." However, there was no clearly identified subject discipline of Sound and Vibration—just subsets of many other main stream subjects such as Physics, Mathematics, Electrical Engineering, Electronics, Mechanical Engineering, etc. The establishment of a highly regarded journal did much to provide a focus for the infant discipline. Elfyn was always conscious of the possible accusation that the JSV, as it affectionately became known, would be regarded as little more than a house journal for the new Institute of Sound and Vibration Research emerging at Southampton University. That it rapidly rose above such a parochial epitaph is largely the result of Phil's efforts to cultivate the highest scientific standards and at the same time fill a gap in the coverage of emerging sciences. Today, in this issue, we present to him on his 80th birthday a series of papers by authors who have worked on fields close to his own heart as a tribute to his work and achievements with the journal over the past 37 years.

Phil Doak grew up in the Mid-West as the son of parents who were both lecturers at the University of North Dakota (UND) at Grand Forks. This precocious boy enrolled himself as a special student at his parents' University at the tender age of 15. When he had finished his studies at UND he went on to become a piano student at the prestigious Juilliard School of Music in New York. Whilst in New York he edited the Institute's student magazine and through his publications helped the campus to earn the sobriquet of a "hot-bed of Communism" in the city's leading right-wing tabloid newspaper. After graduation in May 1942 he enlisted in the U.S. Army Signal Corps. A year later he made his first visit to England before following General "Blood and Guts" Patton (at a safe distance he tells us!) through France, Belgium and Germany.

On returning to New York at the end of hostilities in Europe he fully intended to take up doctorate studies in Musicology but problems with supervision led to a change of plans and he enrolled at Oklahoma University to study Physics. On the completion of this Bachelor's and Master's degrees in 1948, he returned to the East Coast to begin research in room acoustics at the Acoustics Laboratory of MIT. Unfortunately, two years later, as a recipient of an assistantship paid by the U.S. Navy, he fell foul of Senator Joe McCarthy's investigators who dug up the *New York Daily News* items on his articles in the student

Magazine some 10 years earlier. Rather than go through the demeaning procedure required by the infamous McCarthy to clear himself he took the remaining year of his Service Scholarship to Manchester University. America's loss was the U.K.'s gain.

Phil settled in Manchester first with a three year Research Fellowship in the Department of Mathematics and then with a three year research appointment in the Fluid Motion Laboratory. This was an exciting time under the influence of James Lighthill and Louis Rosenhead as the first ideas on mechanisms of noise creation in turbulent flows were being debated and tested experimentally. His first faculty appointment was also in the North West with a move to Liverpool University for five years as a lecturer in Applied Mathematics. It was during this time that he decided to throw in his lot with the U.K. and take out U.K. citizenship in 1959.

In the early 1960s Professor Elfyn Richards was setting up a post-graduate institute in Southampton to concentrate on the newly emerging problem of noise, its creation, propagation and effect on humans. Phil was recruited as a founder member of the ISVR under sponsorship from the aircraft company, Hawker Siddeley. The relationship with HS and its later incarnation, British Aerospace continued for the remainder of his full-time academic career. First as Lecturer and then, on the resignation of Newby Curle, Phil took up the HS Readership. In 1974 I was able to re-negotiate the support from Hawker Siddeley with my old aircraft industry colleagues who had moved into the merged group from de Havillands and Phil became the first Hawker Siddeley Professor of Aeroacoustics. As part of the deal with the company Phil and John Wimpenny, the Research Director of HS, jointly chaired a HS-ISVR research committee. This pioneered a new form of close collaboration between University and Industry. Other senior staff such as myself, Maurice Petyt and Bob White joined with Phil and appropriate HS staff to review regularly the relevant parts of each side's research programme. Phil was also involved in a similar arrangement set up at Rolls Royce by Stephen Bragg who was then their Director of Research. He thus became deeply involved in research into Aerodynamic Noise and can claim a part in setting up the new subject area of Aeroacoustics.

Throughout, those heady early days of ISVR, when the national and joint international research programmes were being driven forward with great vigour, Phil kept up his old interests in musical acoustics and the interaction of the performer with the space around. He is particularly proud of his work as a member of Westminster Abbey Sound Advisory Panel where he was able to make a valuable contribution to the design of the sound reinforcement system. He also enjoyed his work on architectural acoustics begun with his association with Professor Harold Marshall of Auckland University in the mid sixties.

He was much in demand as a member of committees looking into noise sources, noise propagation and its various forms of nuisance. He was made a Fellow of the Acoustical Society of America and the British Institute of Acoustics awarded him its highest Honour, The Rayleigh Gold Medal, in 1980. Five years later, he was awarded the Silver Medal of le Groupement des Acousticiens de Langue Française. This was followed in 1990 by the Aeroacoustics Medal and Citation of the American Institute of Aeronautics and Astronautics.

The very many postgraduate students who have attended his lectures and more informal tutorials and the many visitors to ISVR will have many tales to tell of this humble man who inspired in them a curiosity about all aspects of acoustics. His very wide knowledge often enabled him to point them towards new and fruitful avenues to search—"dig around in textbooks for nuggets of gold" was one of his favourite injunctions to new students. His method of working tutorially typified the man—to everyone's amazement he could hold a conversation with you whilst at the same time correcting one of the many thousands of manuscripts that passed through his hands and also cleaning his pipe.

Phil's vision, great care and hard work made the journal what it is today. Who would have believed in those early days of 1963 that a tentative start as a quarterly specialist journal would grow in size to the phenomenal 50 issues per year and more importantly become the premier journal for this newly emerged interdisciplinary field between Science and Engineering.

Philip Doak, your many friends and colleagues join together in presenting to you this issue in celebration of your 80th birthday. Congratulations on your great achievements and many Happy Returns of the Day.

B. L. CLARKSON