## **EDITORIAL**

## There is a Free Lunch!

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As a reader, regardless of your background (sound and/or vibration) or the length of time you have been subscribing to *Sound & Vibration* magazine (S&V), can you remember when you first learned about how an accelerometer (Jan/2007) or a microphone works (Mar/1978)? What about how to estimate frequency response functions (Nov/1975, Apr/1976)? Impact testing (Nov/ 1977, Jan/2011)? Modal parameter estimation (Jan/2004, Jan/2006, Mar/ 2008)? Operational modal analysis (Jan/2003)? Microphone orientation (Feb/1970)?

In almost every case, and there are hundreds of other examples of topics pertinent to sound and vibration practitioners, there is a good chance you learned about it, or your knowledge was significantly enhanced, from an article in S&V. What do you pay for this smorgasbord? Five minutes of your time to fill out a subscription application on paper or the S&V web site once every three years. Yes, it certainly has been a free lunch!

The variety of the articles in S&V since January 1967 has spanned the gamut from research to practice, theory to common sense and analytical to experimental. Several times, an article has been updated 10 or more years later to revisit and enhance a topic that has continued to evolve.

Along the way, survey articles and historical reviews have added to the impact, and in some cases, with great amusement and entertainment. These articles have frequently appeared in the significant anniversary issues (35th, 40th and 45th), which are available online at the S&V website www.SandV.com. Today, you can go to this website and immediately have available all of the articles that have appeared in S&V since July 2002. Several other articles that have been frequently requested from earlier years have also been added. Also, the reader-service site www.SandVinfo.com is an efficient mechanism for surfing the advertising in a specific issue and asking for additional information.

I can still remember reading some of the early issues of *Sound & Vibration* that my professors made available back in the late 1960s and early 1970s. I can also remember how pleased I was to receive my first subscription. I was sure that I had been admitted to some secret club and wondered how I had made the cut. S&V featured practical articles often concerned with experimental methods, which was quickly becoming my area of interest. Then as I continued my academic career, I was pleased to meet some

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It's no secret that the "graying" of technical America has eroded the ranks of our readership. When we lose readers, we lose appeal to our advertisers, those folks who bring you all the neat stuff to make you more valuable on the job. We need your help to reverse this unfortunate trend. If you teach, please introduce your students to our magazine (and its web site), and make certain they know they can (and should) each have their own free subscription. If you direct an engineering group charged with assignments to solve acoustic or vibration problems, please make sure all of your charges understand the value of reading Sound & Vibration magazine. If you make or market products supporting sonic or dynamic analysis or measurement, your key people should be reading S&V every month to follow your ads and those of your competitors as well as keeping abreast of the latest application developments. We want to continue bringing you the latest and best information in the field - we need to grow to do that.

of those very same authors that I had often first encountered in S&V.

It shouldn't get any better than this but it does! In 1983, I was asked to join  $Sound\ \mathcal{E}$  Vibration magazine as a contributing editor.

I think I am also like many of you who save every issue of S&V. While I have never checked, I believe I have a copy of every issue published (thanks to Professor Ivan Morse, Jr.). This has been very handy, since I frequently use articles from S&V as required reading in the structural dynamics and vibrations courses that I teach. Many of the articles are great at summarizing information and providing a reference list for inquisitive students, myself included.

How did this free lunch get its start? Jack Mowry. The first issue was January of 1967, and Jack was the editor and publisher, as he remains today. Jack had great vision for the emerging technology connected to the noise and vibration control community. Perhaps, it was serendipitous that the FFT algorithm also got its start in 1967 (maybe it was just Jack's vision), and it fostered a completely new approach to experimental work in dynamic signal analysis (maybe it was the right time and place). Over the years, Jack put together a concept of focused issues

that today range from buyer's guides in the areas of dynamic measurements, noise and vibration control, dynamic test/analysis to issues that focus on instrumentation, automotive NVH, machinery reliability, materials, computer-aided engineering, structural analysis, dynamic testing and acoustics.

Authors include researchers in government labs, universities and industry as well as practitioners from the same arenas. Authors are often well known but are also those who are yet to publish in many other venues.

How does Jack do it? Mostly by asking people to consider writing an article after he has heard or seen a presentation at a conference. Today, there are almost too many conferences to keep track of, but in 1967, the number of conferences that had significant content in noise and vibration control was much more limited. I do want to recognize that the advertisers have paid for our free lunch, but Jack is the one who convinces the advertisers that this is a good deal for all concerned. It hasn't always been easy, but one man is the reason it kept working, and that man is Jack Mowry.

Jack's impact on the noise and vibration control community goes beyond Sound & Vibration magazine. Peter Juhl and Dick DeMichele envisioned the International Modal Analysis Conference (IMAC) in the late 1970s as an outgrowth of their on-campus seminar work at Union College. Jack was a key person who provided contacts needed to implement the idea and to convince Union College that they should sponsor this gathering. (For those of you who only know of IMAC associated with the Society of Experimental Mechanics, this is the 1977-1978 time period.) In fact the model for IMAC that involves a mix of researchers, practitioners and vendors looks a lot like the model for Sound & Vibration magazine that has been so successful for the past 47 years.

Jack's impact is also seen in terms of the topics that have appeared in S&V and the clarity of their presentation. One example is the effect of nonlinearities on estimation of frequency response functions (Nov/1982). The topic is not remarkable today but in 1982, this is notable. Likewise, the topic of tracking filters was revisited (Jan/2002), 35 years after tracking filters were in common usage.

What is Jack's biggest impact or contribution to the noise and vibration control community? Certainly, providing a steady

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stream of timely informative articles germane to the acoustics, dynamics, measurement and analysis fields. To this end, Jack collected and evolved an excellent staff of editors and contributing authors, culling them from his contacts in industry, consulting, government laboratories, and universities. In turn, these editors brought in the fine writing of skilled practitioners from all corners of our arcane interests.

But Jack didn't stop at organizing this system to dispense needed information – he remains a researcher and writer and brings the history of our business to the fore in the recent biography *Journey to Greatness – The Story of Brüel & Kjær* that he coauthored with Ghita Borring. This is a great read for anyone who has grown up in the acoustics community.

It is hard to pick one impact, though, without noting that Jack's greatest gift to the noise and vibration control community is that we all consider Jack our friend . . . and that may be his greatest contribution after all. If you have met Jack and talked with him one time, I think you know what I mean. I know that I can say I am proud to be involved, in a very small way, with a magazine that provides such great service to our community and, specifically, with Jack Mowry.

As a way of showing appreciation to Jack Mowry for all that he has done for the structural dynamics community for all of these years, the Society of Experimental Mechanics has scheduled a Jack Mowry Honorary Session at this year's International Modal Analysis Conference (IMAC) at the Rosen

Plaza Hotel in Orlando, FL. The Session will be held Wednesday (February 5, 2014) morning (8:30-12) in Salon 14 for those of you who are able to attend. The past history of these honorary sessions is that they are normally somewhere between serious praise and uproarious roast, so who knows what to expect.

I normally close my editorials by asking that if you have comments, please feel free to contact me (randall.allemang@uc.edu). Certainly, you can do that but on this special occasion, I ask that you send a note to Jack Mowry (sv@mindspring.com) as a small token of payment for this free lunch you have enjoyed all of these many years. It doesn't have to be a long note . . . "Thanks Jack" says it all!

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