From the Editor-In-Chief:

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Are We Making Progress?

After nine years of success with the International Conferences on Information Fusion (ICIF) and a year of the Journal of Advances in Information Fusion (JAIF), the question arises: Are we, the community of researchers in the area of information fusion, making progress?

With all of the focus of today's corporate management on performance metrics, knowledge points, balanced scorecards, etc., I am surprised that this question has not been raised earlier. However, a natural question does follow. How does one define progress in information fusion? For an individual researcher, progress can be defined as movement toward the goal of an ideal solution to the problem under study. Defining progress with respect to the community of researchers in information fusion presents a challenge.

One measure of the progress in information fusion is the developmental activity with reference to the commercial opportunities created thereby or to the promotion of the material well-being of the public through the goods, techniques, or facilities created. In other words, progress in information fusion can be measured by the number of products that include information fusion and their impact on society.

A second measure of the progress in information fusion is the maturity of solutions for problems in information fusion. Mature solutions involve well established and accepted approaches for which the cost and benefits of the implemented solution are well understood. Documented design methods are also part of a mature solution. An example of a problem with a mature solution is the tracking of maneuvering targets. The Interacting Multiple Model (IMM) estimator is well-accepted as the best approach to tracking of maneuvering targets when the computational cost of the algorithm is considered [1, 2], and design methods for application of the IMM estimator are emerging [3, 4].

I am sure that the research community has knowledge of other successful examples of progress in information fusion. I encourage researchers to consider progress in information fusion and document the prog-

ress through papers and special sessions at the annual International Conference on Information Fusion. This might include a series of papers documenting the relative performances of competing solutions or a paper documenting the application of information fusion in a commercial product. Such examples might be appropriate for a special issue of the *Journal of Advances in Information Fusion*.

William Dale Blair Editor In Chief

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Introduction.

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[2] Blair, W. D. and Bar-Shalom, Y.

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[3] Kirubarajan, T. and Bar-Shalom, Y.

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