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Experience revising an advanced-undergraduate/beginninggraduate fluid mechanics textbook DAVID DOWLING, Dept. of Mech. Eng., University of Michigan — In the fall of 2009, Elsevier Inc. approached me about taking over as the lead author of the fluid mechanics textbook by P. K. Kundu and I. M. Cohen. I subsequently agreed and this presentation provides the story of the process and the approach taken to revising this fluid mechanics textbook which has been in print for approximately 15 years. The goal of the revision was to produce an excellent textbook for second courses in fluid mechanics taken by advanced undergraduate and beginning graduate students while maintaining the book's appeal to instructors who used prior editions. Thus, I sought to maintain or expand the text's fluid mechanics content, while adjusting the text's tone so that this content might be more readily reached by students who may have had only one prior course in fluid mechanics, or who may not specialize in fluid mechanics but do possess appropriate mathematical skills. The entire revision process involved seven steps: (i) formulating a revision plan that was independently reviewed, (ii) agreeing to a formal contract with deadlines, (iii) revising the text, figures, and front matter, (iv) proof reading and correcting copy-edited text, (v) correcting page proofs, (vi) generating the solutions manual, and (vii) tabulating errata. Formulating and executing the

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