The question of responsibility and technology is both smaller and larger than the question of ethics and technology. On the one hand, an examination of moral responsibility in the making and using of artifacts and artifact systems is only one aspect — though, on certain interpretations, it can be a very large aspect — of the ethics of technology. On the other, responsibility need not be restricted to the moral sphere, but can include reference to parental, legal, psychological, political, economic, educational, or aesthetic responsibilities. Indeed, one issue in the philosophy of technology concerns the proper relationship between these various kinds of responsibility and the diverse aspects of technology manifest in their respective domains. The truth is that responsibility has become a general normative category in a culture which is at once shot through with technology, and there exists as yet no consensus for interpreting the relative weights in the resulting multifaceted engagements. (It is also true that this is not the only term used in otherwise similar analyses; “obligation,” “duty,” “accountability,” “answerability,” etc., are sometimes preferred words with some authors, which overlap in meaning.) In light of this, the present bibliography cannot so much survey an existing field as indicate materials that ought to be considered by any systematic discussion. It is necessarily more propaedeutic than retrospective or comprehensive.

As a specialized contribution to an ongoing bibliography in the philosophy of technology — a field interpreted as broadly interdisciplinary — the following bibliography thus records, with brief annotation, articles and books, mostly in English, of primary significance to reflection on the relationship between responsibility and technology. Eclectically and impressionistically it further mentions a number of secondary or supplementary works.

Although this bibliography provides supplemental annotation for primary works analyzed in “Responsibility and Technology: An Expanding Relationship” (Chapter 1, above) — and covers the scope of interactions outlined there: from technology and legal liability to science and social responsibility, professional responsibility of engineers,

responsibility in the religious ethics of technology, and the professional philosophical analysis of responsibility and technology — it is not limited to those perspectives. Specifically added, for instance, are references to technology and corporate responsibility, responsibility as a category in bioethics, and responsibility in environmental ethics. Although comments sometimes call attention to the ways these other references confirm the thesis of the survey article, the bibliography as a whole is meant to stand as an independent introductory guide to the literature.

Because of the volume of materials on the subject of responsibility in general — especially theological and philosophical discussions — selection in these areas has concentrated on standard works, on works not listed (or improperly listed) by The Philosopher's Index, and on those which include good references to other works. More references to works on responsibility in relation to biomedical technologies (where, as elsewhere, mention of the term has become somewhat de rigueur) can be found in the Bibliography of Bioethics. For a more thorough survey of engineering ethics, see Carl Mitcham, "Industrial and Engineering Ethics: Introductory Notes and Annotated Bibliography," Research in Philosophy & Technology, vol. 8 (Greenwich, CT: JAI Press, 1985), pp. 251—265.

Barral, Mary Rose. "Responsibility and Commitment Today," in Proceedings of the XIVth International Congress of Philosophy, Vienna, September 2—9, 1968 (Vienna: Herder, 1968), vol. 4, pp. 8—13. Responsibility and commitment arise out of human versatility which greatly exceeds that of machines. Because human beings can choose alternative courses of action they are and must be responsible for their own actions and to the rest of humanity, in a world in which scientific and technological change engenders a multitude of conflicting interests.

Bayles, Michael D. Professional Ethics. Belmont, CA: Wadsworth 1981. Pp. xi, 158. Perhaps the best general discussion. "Much literature on professional ethics adopts the viewpoint of practicing professionals. This book instead adopts the perspective of clients and other members of society" (p. ix). Helpful background to any more specific analysis of the ethics of scientists, engineers, etc. Good bibliography and index. See also Alan H. Goldman, The Moral Foundations of Professional Ethics (Totowa, NJ: Rowman & Allanheld, 1980), which, however, limits itself to politics, law, medicine, and business, and fails to deal explicitly with science or engineering. For a general critique of professionalism as found in technological societies, see Ivan Illich, Irving Kenneth Zola, John McKnight, Jonathan Caplan, and Harley Shaiken, Disabling Professions (Salem, NH: Marion Boyars, 1977).