Survey of the Use of Flammable Anesthetics

To the Editor:—The continued use of flammable anesthetic agents is a controversial issue. The extent to which these agents are employed in anesthesia training programs will have a significant effect on their future role in the practice of anesthesia. This was recognized by the current members of the American Society of Anesthesiologists Committee on Flammable Hazards and Electrical Equipment. Accordingly, the committee attempted to determine the current status of flammable anesthetic agents by means of a questionnaire that was mailed to 202 directors of anesthesia residency training programs. One hundred and seventeen questionnaires were returned.

Eighty-one of the respondents had not used any flammable agent in 1976. Table 1 shows the years in which flammable anesthetics were discontinued by non-user respondents. The major reasons for discontinuing the use of flammable anesthetics were the risks of a fire or explosion; expense to maintain an explosion-proof environment; the widespread use of the electrosurgical unit; and the belief that the flammable agents have no pharmacologic advantage over nonflammable drugs currently available.

Of the 37 respondents who used flammable anesthetic agents in 1976, 29 used diethyl ether and 34 used cyclopropane. These programs averaged 13,449 anesthetics/institution, of which 395 anesthetics/institution were with flammable anesthetic agents. The range was 0.3 to 8 per cent of the anesthetics being flammable. Six of the 37 users have now discontinued the use of flammable agents. Their reasons for doing so are similar to those for the non-users.

It is evident from this survey that a declining