The Impact of CEPPO's No-Charge Distribution of CAMEO Software: 1998 Recipient Survey

William C. Adams Carolyn M. Griffith Karen E. Strick

Public Administration Department The George Washington University Washington, D.C. 20052

Funding for this research study was provided by the Chemical Emergency Preparedness and Prevention Office of the U.S. Environmental Protection Agency
OMB #2090-0019

Acknowledgments

This research was made possible by the funding provided by the Chemical Emergency Preparedness and Prevention Office (CEPPO) of the US Environmental Protection Agency, and by the assistance of CEPPO's Daniel Waldeck, Sherry Fielding, and Kathy Jones. Richard Hylton and Kathryn Newcomer of The George Washington University also had key roles in helping to facilitate this project. The methods, implementation, and judgments in this study are the full responsibility of the researchers.

William C. Adams Carolyn M. Griffith Karen E. Strick Washington, D.C. September 1, 1998

Executive Summary

During June-July 1998, a team of researchers from the George Washington University's Public Administration Department surveyed 911 recipients of CAMEO software that had been distributed (at no-charge to the recipients) by EPA's Chemical Emergency Preparedness and Prevention Office in 1997.

- Most recipients (70%) are using the software and are overwhelmingly pleased with it.
- Nearly half (48%) of the users have had training on running the new CAMEO and almost all found the instruction to be quite valuable; the chief suggestion was for training sessions to be longer.
- Most users (64%) consider CAMEO "moderately easy" to use, although some think it is "very easy" (18%) or difficult (18%).
- One out of four (26%) users have called the National Safety Council (NSC) hotline in the past year. Large majorities like the caliber of technical support they receive.
- One out of five (21%) surfed the Web for CAMEO help during the past year, and most were at least "moderately satisfied" with the results. Most went to the NSC site.
- Many recipients who have not yet used CAMEO are awaiting new or repaired computers, training, or personnel that they had anticipated receiving sooner.

Overall, the CAMEO distribution program has successfully equipped many hundreds of emergency preparedness personnel around the country with a key software program to strengthen their efforts. By consistently large majorities, those personnel are engaged in using the software and find it decidedly worthwhile. Most do not find CAMEO too complex to use — but they still appreciate training and like having NSC hotline and Internet resources for obtaining help.

Table of Contents and Charts

Acknowledgments	i
Executive Summary	ii
Table of Contents	1
Methodology and Background	2
Survey Findings	3

Methodology

A random sample of 1,190 recipients of CEPPO's no-charge CAMEO were mailed letters inviting them to evaluate the software at a Web site or by a telephone interview. Completed interviews were ultimately obtained with over three-fourths of the sample (76%). A total of 299 took the initiative to take the Internet survey, and the rest were interviewed by telephone.

At the customary 95% level of probability adjusted by the finite population multiplier, the completed sample of 911 yields confidence intervals of $\pm 3\%$. However, the text does not dwell on confidence intervals because the important findings do not hinge on minor 3% margins.

Background

CAMEO stands for Computer-Aided Management of Emergency Operations. The software was developed by the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA). The National Safety Council distributes CAMEO and provides technical support for its users. CAMEO includes an extensive database with specific emergency response information for over 4,000 chemicals.

CAMEO also includes an air dispersion and modeling feature called ALOHA that can plot a gas plume's geographical spread on a map. Another CAMEO feature (MARPLOT) incorporates digitized mapping data from the Census Bureau and can incorporate displays of topographical information.

CEPPO's name itself – Chemical Emergency Preparedness and Prevention Office – immediately explains why CAMEO is a highly relevant software package for this EPA office to promote. Thus, during 1997, CEPPO distributed over 2,200 copies of CAMEO at no-charge to people around the country engaged in emergency preparedness and prevention activities. This research was designed to measure the extent to which this effort resulted in the actual use of the software, and the effectiveness of various available training and problem-solving resources for CAMEO.

Survey Findings

Usage and Popularity

- An overwhelming majority of recipients (70%) are using the new CAMEO software.
- These CAMEO users give the software high marks for being useful.
 - A large majority of the users (92%) find CAMEO to be "very useful" (53%) or "moderately useful" (39%).
 - A majority find each of eight key CAMEO modules or features to be at least "moderately useful." The most popular are the Response Information Data Sheets (RIDS) and chemical information module, MARPLOT, and the facilities database feature.

Suggested Improvements

Users of the no-charge CAMEO were asked what single improvement they would most recommend for the software. Over half took advantage of the opportunity to make recommendations. Their suggestions were widely varied. "Better importing and exporting" was the most widely cited specific request (9%).

Training

- About half of the users (48%) say they participated in formal training on the no-charge CAMEO from their state (29%), EPA regional offices (20%), or the National Safety Council (NSC, 4%). Others learned entirely on their own, with and without the manual.
- Participants praised the training offered by all the various sponsors, with 79% overall calling their training "very useful."
- Training was considered so valuable that the chief suggestions for ways to improve training were calls for longer/more training (34%) and for refresher training (12%). Some participants (10%) wanted changes in the format, particularly to separate out beginners (including those who are new to Windows) from more experienced computer users. Other comments focused on improving the quality of instructors (7%) and on making the classes more "hands on."

Problem-Solving

- Most (82%) consider CAMEO to be "very easy" (18%) or "moderately easy" (64%) to use.
- What or who do users turn to when they encounter problems? Nearly three out of four (72%) say they go to the printed manual. Only 24% rely on the software's own "help button." Local colleagues are a common resource for 41% as are state-level CAMEO experts for 33%. About one out of four (23%) call the NSC hotline. Another 16% turn to *Cameo Today*. No other single resource was cited by more then 10% of CAMEO users.

NSC Hotline

The NSC hotline was called during the past year by 26% of the CAMEO users.

Most NSC callers were pleased with the results of their calls. Large majorities found NSC's technical support to be satisfactory (59% "very" and 27% "moderately"), speedy (50% "very" and 36% "moderately"), friendly (87% "very" and 11% "somewhat) – and to "always" (38%) or "usually" (52%) solve their problem.

Internet

During the past year, over one-fifth (21%) employed the Internet to obtain help with CAMEO. Most were "very satisfied" (49%) or "moderately satisfied" (37%) with the help that was available over the Internet.

Non-Users

Why are 30% of the recipients who received CAMEO at no charge not using it? According to non-users who offered some kind of explanation (about half of all non-users), there are a wide variety of reasons for non-use. Various hardware problems (such as crashed hard drives, inadequate memory, antiquated processors, awaiting new computers) were cited by 14%. Some (8%) claimed that they never received the new CAMEO. Some (8%) said it was too difficult to use. Others (5%) have stayed with their previous version of CAMEO (mainly the old DOS version).

In addition to the 14% who presumably want to use CAMEO once their hardware problems are solved, another 4% assert that they do intend to use CAMEO sooner or later and another 3% are awaiting training classes.

Miscellaneous other reasons were mentioned as well.