



TM-07-97 MOBILE PORTABLE PC PROTOTYPE PROJECT

By: Régis-Martin Simard

TECHNICAL MEMORANDUM

Submitted by Régis-Martin Simard information Technology Division Engineering Section Montreal Urban Community Police Department

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NOTE: Further information about this report can be obtained by calling the CPRC information number (613) 998-6343

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MONTREAL URBAN COMMUNITY

MPPCP PROJECT

Mobile Portable PC Prototype Project

Final Report on Mobile Portable PC Prototype Project MPPCP

Prepared by Régis-Martin Simard, eng Information Technology Division Engineering Section Montreal Urban Community Police Department

Summary of Technical Report

As described in document TM-05-96 "MOBILE PORTABLE PC PROTOTYPE PROJECT", in 1994, the MUCPD initiated a research and development project aimed at replacing its 500 mobile terminals with portable PCs. This document sums up the findings of phase I of said project.

By using operational prototypes emulating, on the one hand, the existing functional capabilities on mobile terminals and, on the other hand, incorporating occurrence report input applications, the MUCPD experimented for ten months or so with the vehicular and extra-vehicular micro computing approach in order to determine its technical, practical and operational specifications.

The MUCPD is pleased to share the fruits of its research with the police community and is urging anyone, who is interested in receiving additional information or in exchanging ideas on the topic, to contact Mr. Alain Tonthat, Eng., Assistant/Commanding Officer, Information Technology Division at the following numbers: (Tel.: 280-6922, Fax: 280-3527).

Régis-Martin Simard, Eng. Engineering Coordinator Information Technology Division Montreal Urban Community Police Department

MONTREAL URBAN COMMUNITY

Final Report on the Mobile Portable PC Prototype Project MPPC

RECOMMENDATIONS

In light of the information picked up during the tests on vehicles, we can now make the following recommendations:

- The use of a PC inside a vehicle instead of a mobile terminal is beneficial because it makes it possible, among other things, because of its open architecture and the aggregate of its physical specifications, to make use of software that facilitates the patrolling officer's job, based on an operational support system concept. However, the fact remains that a vehicle environment is not the same as that of a work station in a police station and, for this reason, it is important to bear this in mind when selecting, designing and implementing software packages; hardware and peripherals.
- In order to alleviate discomfort as much as possible in using a PC in a vehicle, it would be advisable to:
 - 1. to carry on further with the ergonomics study initiated during the tests;
 - 2. take advantage of other user interfaces such as voice recognition, detachable keyboard, etc.;
 - 3. make different uses of graphics user interfaces;
 - 4. adapt all software packages to a vehicle environment;
 - 5. use a hand support to support the latter's weight.