A History of the

Personal Computer

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Personal Computer

The People and the Technology

Roy A. Allan

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This book is dedicated to my dear wife Ann Louise for her constant care and support.

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Preface

This book has been compiled to fill a gap in personal computer literature. There are many biographical books about key individuals such as Bill Gates of Microsoft or John Sculley of Apple. Other books are also available providing details of certain companies and their products. These books quite naturally focus primarily on products associated with that particular individual or company.

The intent of this book is to provide a consolidated coverage of the significant developments in the evolution of the personal computer and related products. The book has some emphasis on the technical and commercial aspects of the developments as compared to the social details of the participants.

Part I of the book provides a historical background on the beginning of digital computer technology. It is a cursory overview of early developments in both hardware and software from the late 1930's to the late 1950's. It also describes the start of personal computing in the 1960's. Starting with time-sharing, then simpler programming languages, the first personal computer and finally significant improvements to the user interface.

Part II is devoted to the beginning of the microcomputer: This is "The Altair/Apple Era". It covers the period of the 1970's when the original microprocessors gave birth to microcomputers such as the Altair in 1975 and to the Apple II in 1977. This is the exciting period during which the *Byte* magazine started, the Homebrew Computer Club was founded, VisiCalc was created and many other entrepreneurs helped to create the microcomputer industry.

Part III is "The IBM/Macintosh Era" and describes the corporate commercialism of the industry. It is the period of the 1980's which began with the introduction of the IBM personal computer in 1981, followed by the release of the Apple Macintosh computer in 1984. This was another exciting period as the industry evolved from small entrepreneurial companies into participation by large corporations. The basis of the personal computer market had changed from the "hacker" of hardware and software, to the utilization by business and the non-technical home user.

Part IV is a brief overview of the hardware, software and corporate activities in the 1990's.

Part V of the book is called "Bit's and Bytes" and provides details of the peripherals, magazines, people, companies and other organizations associated with the personal computer. One chapter also discusses

such items as reference sources, standards and terminology origins.

An extensive bibliography and two appendixes have been provided. The bibliography has a section on books and another section on periodical articles that describe initial product releases and other items of significance. These two sources provide extensive reference material for those interested in further study of personal computer history.

There are limitations on the amount and diversity of historical information that can be included in a book of this size. The amount of detail on a particular subject has therefore been limited to items of historical and commercial significance. As regards hardware, this has intentionally resulted in more detail on the significant early developments from Apple and IBM. In software there is greater coverage of details on the Microsoft Corporation and its significant products. Also the focus has been on North America, where most of the development in microprocessor and microcomputer technology has occurred. The references cited in the bibliography will extend each subject area as required.

A few comments on qualification of dates and dollar figures for prices are appropriate. Dates are sometimes termed announced, introduced, launched, released and shipped. The dollar figures will vary depending on the manufacturer's list price, the price in advertising, the street price and the date of publication. There also tends to be some inconsistency in both dates and prices depending on the source. These variations in dates and prices tend to create some ambiguity. It is hoped that the reader will understand this and take the dates and prices in a relative sense within a historical context.

I have been involved with computers for close to thirty years. However, my modest start was an assignment by General Motors to do the critical path planning on a vehicle prototype using an IBM 1130 computer. That humble beginning initiated my education and fascination with the technology. I do hope that you find this book as interesting and informative to read as it was to write.

Roy A. Allan,
London, Ontario, Canada
June, 2001.

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