
Frequently Asked Questions about the Computer History Association of California and the ANALYTICAL ENGINE

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What and where is the Computer History Association of California?

The Computer History Association of California, or CHAC, is an educational organization which studies, preserves, protects and popularizes the history of electronic computing in the State of California.

Its mailing address is: 3375 Alma Street, Suite 263, Palo Alto, CA 94306-3518 USA

Its e-mail address is: engine@chac.org

Its home page is: <http://www.chac.org/chac/index.html>

What does the CHAC do?

It publishes a quarterly journal called the ANALYTICAL ENGINE, devoted to the history which CHAC is mandated to preserve.

It collects and archives hardware, software and documents that are significant to that history.

It forms part of an informal network of institutions specializing in computer history, in California and throughout the United States.

Through the USENET newsgroup *alt.folklore.computers*, it corresponds electronically with computer historians, both professional and amateur, worldwide.

It plans strategically for the establishment of a major, comprehensive, public museum of computing, probably in the Silicon Valley area, by the turn of the century.

Is the CHAC a charity?

CHAC is an educational corporation in the public interest. It has received recognition as a tax-exempt charitable organization under California Revenue & Taxation Code Section 23701(d) and under Federal Internal Revenue Code Section 501(c)3. Its assets are the property of the people of California. Donations to it are tax-deductible.

What is the ANALYTICAL ENGINE?

The ANALYTICAL ENGINE is the quarterly journal of the CHAC, published in February, May, August and November.

What's in it?

Per issue, three or more articles on the history of computing in California; one book review; news of recent computer history and of developments at other historical organizations; a letters

column; a column of queries submitted by readers; details of any acquisitions by CHAC; and small standard features, such as a list of publications received in the last quarter. We don't guarantee that every one of these things will be in each issue, but that's a good sketch of what's typical.

Where can I get it?

There are six ways to get a copy of the ENGINE:

1: Subscribe to an Internet mailing list on computer history, such as the Smithsonian Institution's SHOTHC-L, and you'll be notified that the ENGINE in ASCII is available for download.

2: Subscribe to the USENET newsgroup *alt.folklore.computers*, and receive the table of contents, with downloading directions, as soon as each issue appears.

3: Browse the Web to:

<http://www.chac.org/chac/chengine.html>

and use the ftp links to download the ASCII files. The following issues are available:

Issue	Date	Available	Filename	File size
3.2	February 1996	November 1995	engine32.txt	TBA
3.1	November 1995	late October 1995	engine31.txt	208K
2.4	August 1995	Now	engine24.txt	165K
2.3	May 1995 *	Now	engine23.txt	175K
2.2	Oct-Dec 1994	Now	engine22.txt	150K
2.1	Jul-Sep 1994	Now	engine21.txt	195K
1.4	Apr-Jun 1994	Now	engine14.txt	170K
1.3	Jan-Mar 1994	Now	engine13.txt	205K
1.2	Oct-Dec 1993	Now	engine12.txt	155K
1.1	Jul-Sep 1993	Now	engine11.txt	30K

* With this issue we went over to newsstand dating.

4: Request the ENGINE by anon ftp from these servers:

[ftp.batnet.com](ftp://ftp.batnet.com) (in /pub/wombats/CHAC/ftp/pub) [our home server!]

[ftp.vortex.com](ftp://ftp.vortex.com) (in /comp-hist)

[ftp.apple.com](ftp://ftp.apple.com) (in /ftp/pub/CHAC)

5: Subscribe by mail and specify the paper edition. (See below.)

6: If you'd like one issue of the paper edition to look at, e-mail us for a list of bookstores where it's available — so far in northern California only; or we'll first-class-mail a copy of the latest issue to you for \$6.

So far you've published eight issues of the ENGINE electronically for "free." What do you propose to do in the future? Is 2.4 the last free one we will get?

No. As it says in V1#2, "The ANALYTICAL ENGINE is intellectual shareware. Distribution of *complete, verbatim* copies....is encouraged by the CHAC...." Our *primary* mandate is, and will remain, to collect, organize, disseminate and popularize the history of computing in California; and the downloadable version of the ENGINE is our most important tool for the job. Anybody can download the ENGINE, read it, and pass it along, providing they don't hack it. Guidelines for reprinting and excerpting are in every issue.

I understand that I don't have to pay for the ENGINE, but if I do, how much is it?

Individual subs are US\$25 per year for downloading or US\$35 per year for paper. Corporate, library or institutional subs are US\$75 per year for downloading or US\$85 per year for paper. Subs for seniors, students, the unemployed and the underemployed are US\$15 per year for downloading or US\$25 per year for paper.

Why are paper copies \$10 extra?

The premium covers our cost of printing, mail preparation and first-class postage, so that the donated amount remains the same for electronic and for paper subscribers.

If I send in my money, what will I get that I don't get now for free?

The satisfaction of making a donation to a cause you consider important; and the knowledge that, because of you and people like you, CHAC will survive and move forward.

Can I pay with my credit card?

No! VISA International thought we were too puny to bother with. Two consultants told us we could never afford it. Then Mitnick came along and spooked everybody about credit cards over the Net. We have an account with First Virtual, but are still setting up to use it.

What about overseas subs?

At the moment, we're asking subscribers outside North America to include an extra \$10 per year for surface mail or \$18 per year for airmail. These charges strictly pass along our cost, but we feel that they're inordinately high, and if we can find an appropriately quick method of delivery that's cheaper than U. S. Postal Service, we will use it and cut the surcharge.

What about submitting articles?

The ANALYTICAL ENGINE solicits manuscripts of 1000 to 2500 words on the general topic of the history of computing in, or with significant reference to, the State of California. Articles should focus on one interesting or illuminating episode and should be written for a technically literate general audience. Submissions are welcome from both members and non-members of the CHAC. Article deadlines are July 15 for the November issue, October 15 for the February issue, January 15 for the May issue, and April 15 for the August issue.

Each author may publish a maximum of one signed article per year. This restriction does not apply to letters, queries or interviews. Thank you for cooperating to protect diversity of voices and topics. Previously published material will be republished only in clearly attributed quotations or citations; or when its publication in the ANALYTICAL ENGINE will bring it to the attention of a significantly broader audience; or when the original publication is materially obsolete or inaccessible.

Decision of the editors is final but copyright of all published material will remain with the author.

The preferred document file format is Microsoft Word for DOS or Windows, but almost any DOS or Macintosh word processor file will be acceptable. Submit manuscripts on DOS 5.25" or 3.5", or Mac FDHD (1.4) diskettes. Alternatively, please send your article as ASCII or ISO Internet mail. Please avoid submitting on paper unless absolutely necessary.

Can I get back issues?

Back issues in plaintext will remain available from the ftp servers till further notice. Back paper copies of Volume 1, Number 2 (October 1993) and thereafter are available from the Palo Alto address for \$6 each. Volume 1, Number 1 (July 1993) is available for \$3. *Note:* Some issues in paper are now in short supply. At present we have no plans to reprint them!

III. INITIATIVE 1999

In Robert X. Cringely's thought-provoking book, *Accidental Empires* (Addison-Wesley, 1992,) he points out that the year 1999 will witness a mass die-off of older mainframes — not in terms of their being replaced by denser and quicker systems, which has been happening for years already, but because they abruptly lose their ability to process transactions.

The reasoning behind this is various, but the simple case is that many older mainframes (especially if they're running COBOL) store their dates in the format

YYMMDD

and, when YY returns as 00, will halt on error. "Hardly any programmer in 1959 expected his payroll application to be still cutting checks in 1999," says Cringely, "so nobody thought to teach many of these computer programs what to do when the calendar finally says it's the year 2000." They didn't reckon with the principle of cybernetic inertia, which says that hardware in place tends to remain in place.

Sure, there may be workarounds. But for lots of older computers, the programming overhead of dealing with this kink will be the last push over the cliff. Cringely's right; mainframes will be scrapped wholesale, and the oldest first. From the standpoint of function it only makes sense, since the oldest hardware is usually the slowest. But to the historian and preservationist, the oldest hardware is often the most significant.

If we intend to respond to this crisis, we have five years to make plans and marshal resources; five years to find and equip facilities; five years to nail down funding. And for a project of this size, five years is not a long time. Anyone seriously interested in preserving the history of computing — which certainly means any reader of this FAQ — is actually advised to figure that we're in a screaming hurry.

In the October 1993 issue of the ANALYTICAL ENGINE, the Computer History Association of California announced INITIATIVE 1999. What this is, and what it becomes, will be elaborated in future issues. For the moment, just plant two cardinal points in your mind:

- 1) On or before January 1, 1999, we would like to see chapters of this Computer History Association established in every state of the Union. To that end, we will advise, collaborate with, and give moral support to any responsible groups of historians and preservationists who express serious intention of founding such an Association.
- 2) On or before January 1, 1999, we intend to open a museum large enough to display a significant part of the history of computing in California, presenting the broadest available spectrum of appropriate artifacts, and using the (then) most contemporary technology for instruction by interactive and virtual means. To that end, we would appreciate the donation of (for example) a large disused factory or warehouse, convenient to freeways, and with loading docks; of pertinent hardware and software; of expert consultation, particularly with reference to accession, registration and curatorship; and of appropriate amounts of money.

We reiterate: Five years is not a long time. What we're trying to do here can only be done once, or given up for lost. If you're reading this FAQ, you *can* help, with a \$25 donation to the ENGINE or with that factory.

Save the mainframes!

(Update: This hit the mainstream press in March 1995 when Guy Gugliotta, in the "Capitol Notebook" column of the *Washington Post*, summarized it with a deliciously dire spin. "This is no joke," he opines; "...conversion to make federal computers read dates beyond Dec. 31, 1999, will cost an estimated \$75 billion in the United States....In the end....you have to get deep into your computer system and change every line of code that uses a two-digit date field to one that has four digits. Better get started early.... [Conversion expert Chuck] Ross estimates that the average federal agency will need to modify 75 to 100 applications, which should take 45,000 to 60,000 people-days.")

IV. ORPHAN MICROS

Do you have an old micro that's cluttering up your closet or garage? Look at the manufacturer's nameplate (probably where the serial number is) and see if it was made in California.

If it was, contact CHAC. You may have something we want....and we'll take it off your hands and pay the freight. We're also interested in old docs and software. You get a tax deduction for this, based on a valuation from an independent, published source.

V. THE CONQUEST OF SPACE

Put it this way: We can always use more money. We can always use more credibility. *But if we don't have more space we'll die.*

In its brief but incandescent career, the CHAC has been offered a dazzling array of significant hardware — from singleboards and chipsets to an SDS 930 mainframe with seven tape drives. Whatever we accept, we can save from destruction. But we can only accept it if we have someplace to put it!

Ten thousand square feet, intelligently configured, would store the hardware, software, docs and ephemera we're likely to be offered between now and the establishment of the Museum. Somewhere, on one of the South Bay's expressways, is a faintly forlorn tilt-up past its prime....ready for a *new lease on life* from the CHAC.

Can you offer us this building? (Read: Has your maturing, successful corporation outgrown its start-up space?) Step forward and be our Major Hero of the year. Adequate storage would give the Museum its biggest possible boost; and we can offer an equivalent tax deduction at fair market value, strictly by the book.