

COMPUTERWORLD

Our 1000th Issue

SPECIAL SECTION

Celebrating The Computer Age

Commentary from: Ronald Reagan • Isaac Asimov
William F. Buckley Jr. • Robert Noyce • Rod Clark
Dan Bricklin • Jay Forrester • William Casey
Nunn • Carl Hammer • Marvin Minsky • John Roach
David Kay • Walter Wriston • Gene Amdahl
Kearns • William Norris • Bob Frankston
Baldrige • Koji Kobayashi • Philippe Kahn
Osborne • Joshua Lederberg • Ed Esber • and many others

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Supercomputers on the way to the CIA

Computers have played an important part in the Central Intelligence Agency's activities since the early 1960s, when the first mainframe units were installed. At first, these computers were used primarily for administrative tasks such as payroll and inventory, but it was obvious from the outset that computer technology could assist the agency in its principal activity — collecting and processing intelligence information.

The computer has become an essential tool in our business. The vast amount of information pouring into the agency must be quickly distributed, stored and retrieved by numerous individuals. That information must then be analyzed, often with the support of computer-based methodologies.

Frequently, this analysis deals with crisis situations and must be

completed within a very short time. Most important, the results of this analysis must be delivered quickly to the responsible policy-makers to help them understand the implications of their policy initiatives and the response to those initiatives.

Computing power at fingertips

With the computer support now available, CIA officers have substantial computing power at their fingertips. For example:

■ Thousands of cabled messages are automatically screened every hour and routed to the appropriate officers. The recipients read, annotate, route, save and retrieve these messages in a totally electronic environment.

■ A large-scale office automation and electronic mail system permits nearly instantaneous commu-

nications among agency personnel.

■ Intelligence officers use special CIA-designed software to manage the agency's technical and human collection programs and to process the output of these programs.

■ Military affairs analysts and scientists use large mainframe computers to conduct sophisticated simulations of modern weapons systems.

■ Economists work with advanced models to forecast the economic performance of key nations.

■ Political analysts rely on data management systems to analyze patterns in terrorist activities, narcotics trafficking and the political stability of selected countries.

■ Cartographers and publication specialists have access to the latest computer systems for designing and producing maps and charts, as well as specialized graphics.

BY WILLIAM CASEY
Director, Central Intelligence Agency

HOW TO TAME THAT PAPER TIGER

In 1985, worldwide, computers generated 1 trillion pages* of paper that, as it comes out of your printer, makes a pile over 40,000 miles high! That's taller than seven thousand, five hundred Mount Everests one atop the other! Laid out flat it would spread out to over 175,000,000 miles which would wrap around the earth at the Equator 7,000 times!

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More important role

In the coming years, computers are likely to play an even more important role in the CIA, enabling intelligence officers to improve both the quality and efficiency of their work. Soon, every officer will have a multifunctional high-end workstation at his or her desk.

In the near future, CIA scientists will be able to call upon the power of supercomputers to conduct highly complex scientific analyses. The CIA is also exploring the applicability of artificial intelligence, optical-disk storage technology, robotics and other advanced techniques.

We are excited about the future of computer technology and the unique contribution it makes to national security and the intelligence profession. Our thanks go out to the talented and dedicated computer professionals who have made these marvelous advances possible.

“Humanity has developed a great many badly conditioned reflexes. One is the idea that technology is something new. [We've come to] think of technology only where we began to be the inventors — as machinery of war or to exploit humanity. I find this anti-technology ignorance very greatly troubling. I say our whole escape is through technology.”

R. BUCKMINSTER FULLER, 1981

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CIA: EXPANDING THE HORIZONS

The Information Age: Like the industrial revolution decades before, it has changed the way America thinks, works, and lives. If you would enjoy working with the most sophisticated, state-of-the-art communications equipment available... in a unique and challenging environment... while contributing to the strength of our national security... consider a career with the CIA.

We're looking for talented, dedicated computer professionals for the following positions:

Project Management Engineer

You will manage and direct multidisciplinary teams involved in the analysis, design, implementation, maintenance/enhancement, and hardware acquisition and installation of computer systems. You should have a Master's degree or equivalent experience in Computer Science, Information Management, or Engineering Science. Familiarity with project management principles through either formal training or work experience is required, as is knowledge of data processing methods, ADP equipment types, operating systems, and applications. Five to seven years related experience is desired.

Computer Systems Analyst/Programmer

You will provide technical support in the performance of project-oriented studies and hardware/software development, as well as contribute to the maintenance of computer systems. Three to seven years experience and a BS degree in Computer Science, Information Management, or Engineering Science is required. Broad knowledge of data processing methods, ADP equipment types, operating systems, applications, and project/task management principles is necessary.

Computer Systems Analyst

You will provide leadership and technical direction in project/task-oriented studies and hardware/software development activities for computer systems. A Master's degree or equivalent experience in Computer Science, Information Management, or Engineering Science is required. Five to seven years experience is highly desired, and familiarity with data processing methods, ADP equipment types, operating systems, applications, and project/task management principles is essential.

Systems Programmer

You will be involved in all phases of software engineering—developing requirements for proposals, monitoring the technical

of the Information Age

aspects of contracts for both hardware and software systems, and contributing to large-scale projects as a member of a project team. Four to ten years experience in the design, development, implementation, documentation, and maintenance of software systems for IBM or compatible equipment (including VM, MVS, JES3, CICS, or CMS systems) is required. Experience with Cray supercomputer is desired. A BS degree in Computer Science or a related discipline (or equivalent experience) is necessary.

Instructor—ADP

Your vital contribution will be in the design, development and conducting of courses for DP professionals, creating and evaluating computer-based education and other self-study programs, and managing contracted instruction efforts. A BS degree or equivalent experience in Education, Computer Science, Information Management, or Engineering Science is a prerequisite. Five years or more of directly applicable experience in data processing, as well as one year teaching experience is highly desirable.

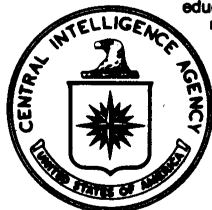
Electronic Engineer

Your responsibilities will include developing equipment specifications, evaluating and monitoring contractor performance, and participating in design reviews. A BS degree in Computer Science is required, and an advanced degree in Electrical or Computer Engineering/Science is desired. Two to four years work experience with broad-based and detailed knowledge of computer hardware, communication interfaces, protocols, microprocessors, communications software, and terminals is necessary.

Your skills and diligence in each of these capacities will be rewarded with a competitive salary, excellent career growth potential, and outstanding benefits. Plus, your position with the CIA will afford you access to a myriad of cultural, athletic, and educational attractions in Washington, D.C., our nation's capital. For immediate consideration, send your resume to:

Personnel Representative (AA01)
Office of Information Technology/HRP
2D04 Headquarters
Washington, D.C. 20505

Written inquiries only. We will respond within 30 days to those judged to be of further interest.



Central Intelligence Agency

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needed for dual IBM 4381 shop supporting VM, MVS, VSE, and CICS environment. Will supervise staff of 11 computer operators working all three shifts, 24 hours/day, 7 days/week. Previous supervisory experience in an IBM environment highly desirable. Proven ability to work long hours in high pressure situations, and on rotating shifts is also desirable. Salary range: \$23,938 - \$32,682 per year. Applications must be received by November 14, 1986. Apply to: University of Virginia, Department of Personnel Administration, Cammer Hall, 1001 North Emmet Street, PO Box 9007, Charlottesville, VA 22906. An equal opportunity/affirmative action employer.

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Software development shop has immediate openings for qualified professionals with background in:

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SUBJECT:

Publication of Letter in Computerworld

PURPOSE OF ACTION:

D/OIT Signature

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ACTION OFFICER (Incl. Ext.)

REFERENCES:

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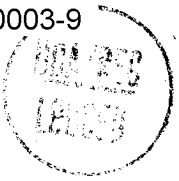
DISCUSSION:

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SIGNATURE OF ACTION OFFICER

Nov 5, 1981
DATE

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OIT 0790-86

Sept 19, 86

OIT/TRIS

LOGGED

MEMORANDUM FOR: Director of Central Intelligence
FROM: William F. Donnelly
Deputy Director for Administration
SUBJECT: Letter to Computerworld Magazine

1. Last month Computerworld magazine sent a letter to you requesting a short, unclassified article describing the use of computers in the Central Intelligence Agency. The article was to be included in a special issue along with selected contributions from major corporations and government agencies. Action for drafting a direct response was assigned to the DDA, and a letter was coordinated with Public Affairs and mailed on 29 August 1986.

2. We have been told that the magazine's editorial staff liked the article, but would like to attribute it to you so they will have a uniform level of response. They have received letters from Secretary of Commerce Baldrige and at least one other agency head. Since we believe publication of the article will help our recruiting efforts, it is requested that you sign the attached letter to the Editor in Chief of Computerworld.

3. Copies of the original request and the 29 August response are attached for your information. This request has been coordinated with the Office of Public Affairs.

William F. Donnelly

STAT

Attachments:

- A. Original Request
- B. 29 August Response
- C. Letter for DCI's Signature

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SUBJECT: Letter to Computerworld Magazine

MD/OIT, (9SEPT86)

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COMPUTERWORLD

375 Cochituate Road, Box 9171/Framingham, MA 01701-9171/(617) 879-0700

August 5, 1986

William J. Casey
Central Intelligence Agency
Washington, D.C. 20505



EXECUTIVE FILE
86- 3620X

**BIT/TRIS
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Dear Mr. Casey:

Computerworld, the world's leading computer newspaper, will incorporate within its pages a special four-color supplement on Nov. 3 to commemorate the 40th anniversary of Eniac, the first large-scale, electronic digital computer. We also intend to publish this special supplement separately as a keepsake edition to be distributed widely.

As a key editorial component, we are soliciting commentary from writers, scientists, artists, chief executive officers, educators, politicians and others. We invite your commentary of 50 to 500 words on the attached sheet. When published, your thoughts will reach 685,000 Computerworld readers. This commentary can reflect on one or more of the following questions:

- 1) What role should computers play in society?
- 2) How do you use computers at work or at home?
- 3) How have computers changed your life or field?
- 4) How do you believe computers will change society in the 21st century?

The style of your commentary is up to you, but we welcome anecdotes or personal experiences.

In this issue, Computerworld will be stepping beyond its normal role as the weekly newspaper of the information systems industry. Our intention is not to chronicle Eniac's formal history. We are using Eniac's anniversary as reason to broadly consider the place of the computer in business and everyday life. We will depict the use of computers from 40 years ago to now and speculate a bit about the future. We hope you will join us in this project.

Please call me at 1-800-343-6474, ext. 325, should you have any questions. We will send you a complimentary copy of the issue on publication. We would appreciate your response by Sept. 1.

Sincerely,

George Harrar
Features Director

/lmg

COMPUTERWORLD

375 Cochituate Road, Box 9171/Framingham, MA 01701-9171/(617) 879-0700

Please comment below in 50 to 500 words on one or more of the questions in the cover letter. Feel free to use additional paper as necessary. Return to George Harrar at the Computerworld address above.

I transfer the entire copyright regarding this material to CW Communications, Inc. I certify that this piece is an original work and has not been published elsewhere.

Signed _____

Title _____

Company (if applicable) _____

Address _____

Phone (optional) _____

OIT 0751-86

29 AUG 1986

Mr. George Harrar
Features Director, Computerworld
Framingham, Massachusetts 01701

Dear Mr. Harrar:

Mr. Casey, the Director of Central Intelligence, asked that I respond to your letter of August 5, 1986, requesting some commentary for your special issue on November 3. As Director of the office that manages computer use in the Central Intelligence Agency, I am pleased to submit the enclosed article. I hope it will be of help to you.

Sincerely,

/s/

Edward J. Maloney
Director
of
Information Technology

Enclosure

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OIT 0787-86

19 SEP 1986

Mr. Terry Catchpole
Editor in Chief
Computerworld
Framingham, Massachusetts 01701

Dear Mr. Catchpole:

In response to the request by your publication for a contribution from the Central Intelligence Agency for your special issue of November 3, we submitted a letter on 29 August to Mr. George Harrar. To provide you with a uniform level of response from U.S. Government agencies, you may describe that letter, as it was sent, as a statement of the Director of Central Intelligence. I hope that it will be of use to you in your 40th anniversary issue.

Sincerely,

/s/ William J. Casey

William J. Casey
Director of Central Intelligence

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