

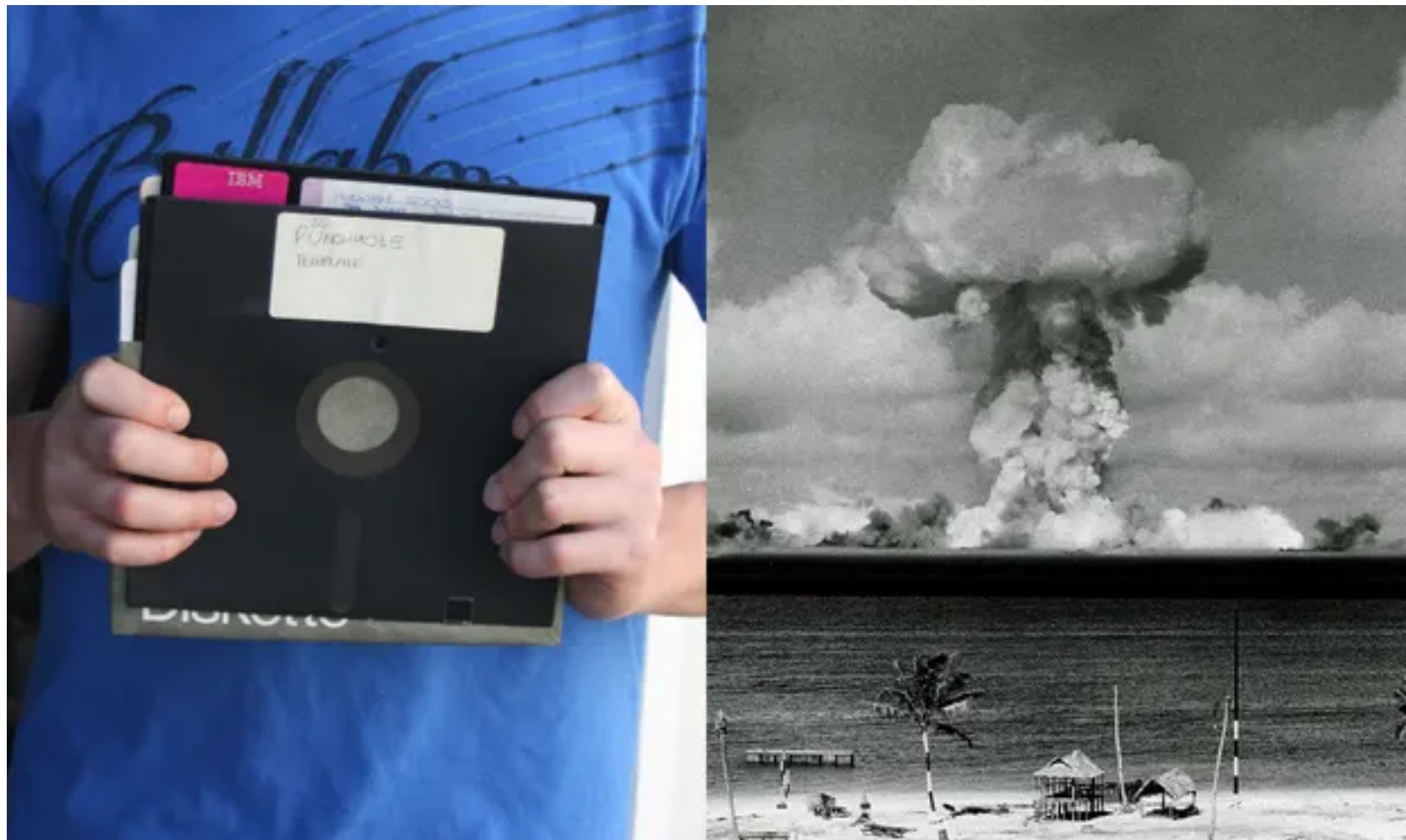
Spam filter  
Computing

HAL 90210  
Thu 26 May 2016 07:30 EDT

Facebook Twitter Email 3,307

## US nuclear arsenal controlled by 1970s computers with 8in floppy disks

Government Accountability Office report details ‘museum-ready’ machines controlling nuclear force messaging system that are ‘obsolete’



▲ Computers that need 8in floppy disks as large as your head are still required to communicate with US nuclear forces. Composite: Richard Masoner/Joint Task Force One/Flickr/AP

The US military’s nuclear arsenal is controlled by computers built in the 1970s that still use 8in floppy disks.

A report into the state of the US government, released by congressional investigators, has revealed that the country is spending around \$60bn (£40.8bn) to maintain museum-ready computers, which many do not even know how to operate any more, as their creators retire.

The Defense Department’s Strategic Automated Command and Control System (DDSACCS), which is used to send and receive emergency action messages to US nuclear forces, runs on a 1970s IBM computing platform. It still uses 8in floppy disks to store data.

We’re not even talking the more modern 3.5in floppy disk that millennials might only know as the save icon. We’re talking the OG 8in floppy, which was a large floppy square with a magnetic disk inside it. They became commercially available in 1971, but were replaced by the 5¼in floppy in 1976, and by the more familiar hard plastic 3.5in floppy in 1982.

Shockingly, the US Government Accountability Office said: “Replacement parts for the system are difficult to find because they are now obsolete.”

The Pentagon said it was instigating a full replacement of the ancient machines and while the entire upgrade will take longer, the crucial floppy disks should be gone by the end of next year.

Given that magnetic media has a finite shelf life, and that disks and the drives needed to read and write to them are older than some of the operators of the machinery, the floppy revelation makes you wonder whether the US could even launch a nuclear attack if required. An “error, data corrupted” message could be literally life or death.

- BB-8’s Windows XP makeover is the stuff of nightmares
- A drone is no match for the high-tech weaponry of the middle ages

### America faces an epic choice ...

... in the coming year, and the results will define the country for a generation. These are perilous times. Over the last three years, much of what the Guardian holds dear has been threatened - democracy, civility, truth. This administration has cleared out science and scientists across all departments. America’s reputation as a competent global leader is in peril. Truth is being chased away. But with your help we can continue to put it center stage.

Rampant disinformation, partisan news sources and social media’s tsunami of fake news are no bases on which to inform the American public in 2020. We believe every one of us deserves equal access to fact-based news and analysis. So we’ve decided to keep Guardian journalism free for all readers, regardless of where they live or what they can afford to pay. This would not be possible without the generosity of readers, who now support our work from across America in all 50 states.

Our journalism relies on our readers’ generosity - your financial support has meant we can keep investigating, disentangling and interrogating. It has protected our independence, which has never been so critical. We are so grateful.

We hope you will consider supporting us today. We need your support to keep delivering quality journalism that’s open and independent. Every reader contribution, however big or small, is so valuable. Support the Guardian from as little as \$1 - and it only takes a minute. Thank you.

Support The Guardian →

Remind me in July



Topics

Computing / Spam filter

US military / Nuclear weapons / Data and computer security / blogposts



Reuse this content

Choose the best subscription for you



### Digital subscription

The Guardian’s complete digital subscription is built to fit with any routine. Two innovative apps, plus ad-free reading on theguardian.com, will give you an enhanced experience of our reporting across all your devices with a 14 day free trial.

See options



Subscribe now



### Guardian Weekly

Get a global perspective on the issues that matter. Subscribe to The Guardian’s essential new magazine.

6 issues for \$6

Subscribe now

## Most popular

Sign up to our daily email

Email address

Sign up

About us  
Contact us  
Complaints & corrections  
SecureDrop  
Work for us  
Privacy settings  
Privacy policy  
Cookie policy  
Terms & conditions  
Help

All topics  
All writers  
Digital newspaper archive  
Facebook  
Twitter

Advertise with us  
Guardian Labs  
Search jobs  
Dating  
Discount Codes

Support The Guardian

Available for everyone, funded by readers

Contribute → Subscribe →

