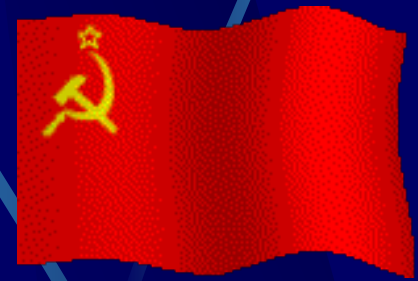




The Internet has its origin in the fear of nuclear war. It was established with the goal of keeping communications open in a catastrophe.

History of the Internet



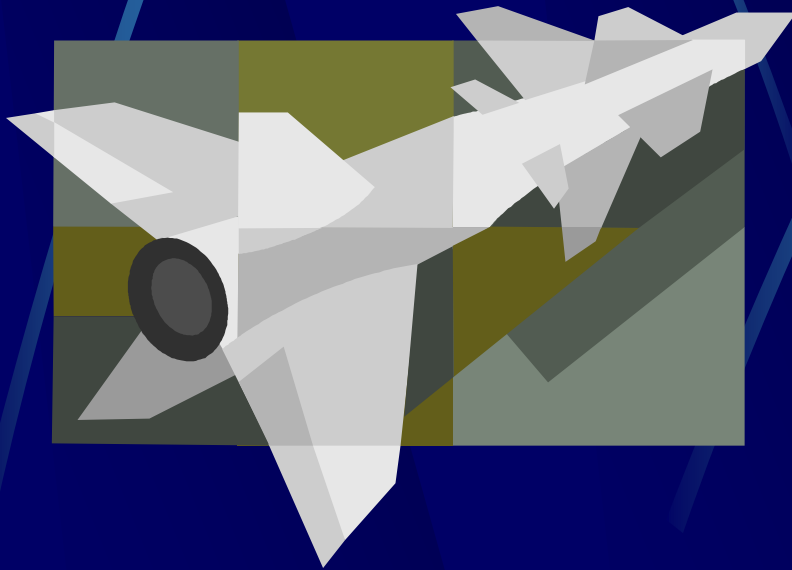


US

Cold War



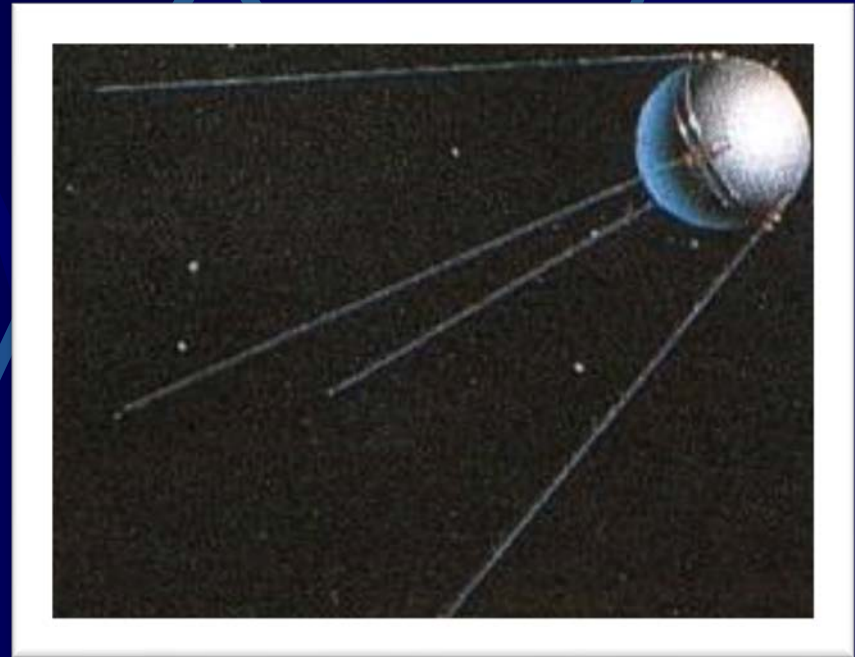
USSR



- East-West Competition
 - Technology & Science
 - Atomic Bombs
 - 1945 US
 - **1949 USSR**
 - Space Race
 - **Satellite in Space**
 - **Man in Space**

Space Race

- 1957 Sputnik I
Satellite launched
into space
- US Fears USSR
 - Satellite
 - Cameras
 - Missiles
 - Atomic War



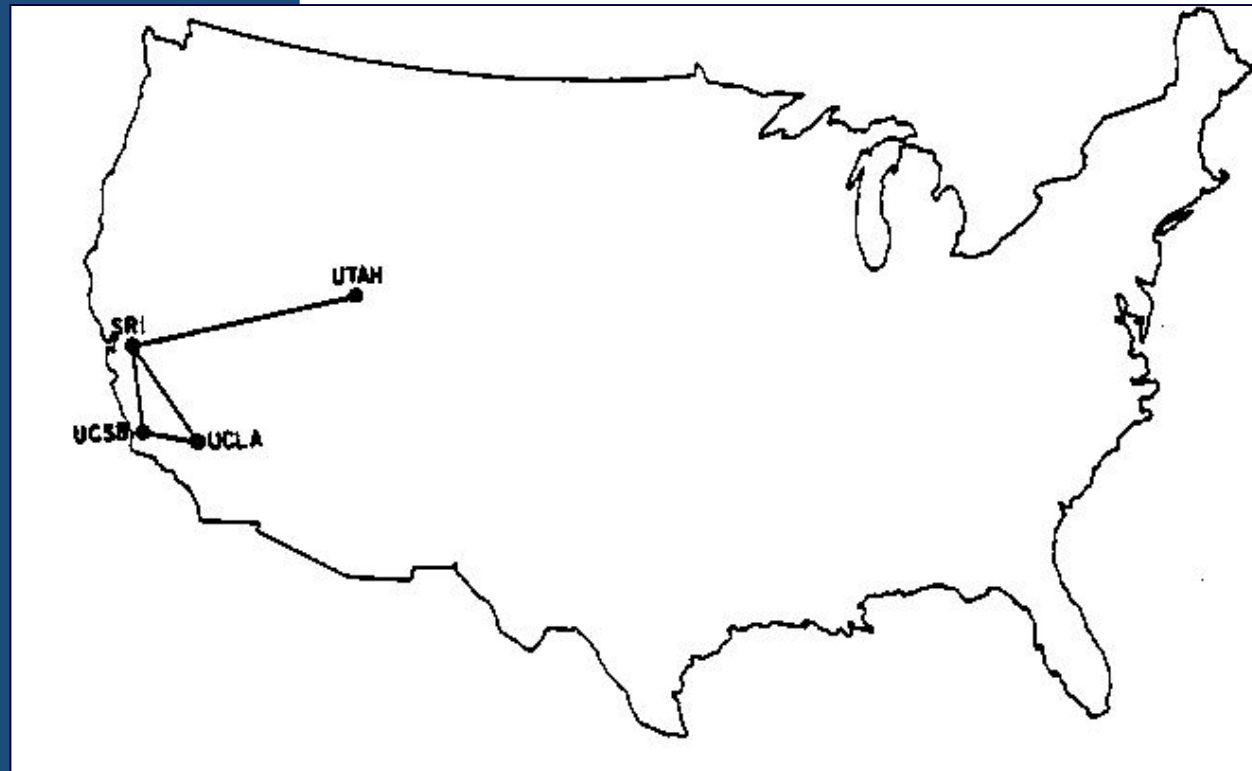
US Responds

- Department of Defense (DoD) Establishes Advanced Research Projects Agency (ARPA)
- Pours hundreds of millions of dollars in research and development (R&D)
- Research centers worked on:
 - Making weapons even more destructive
 - **How to survive an atomic war**
 - Keep Communications Open
- **US Achievements**
 - 1958 Established ARPA
 - 1958 Launches Explorer I
 - 1961 Launches Man into Space
 - USSR - April 1961
 - US - May 1961
 - 1969 Establishes ARPANET



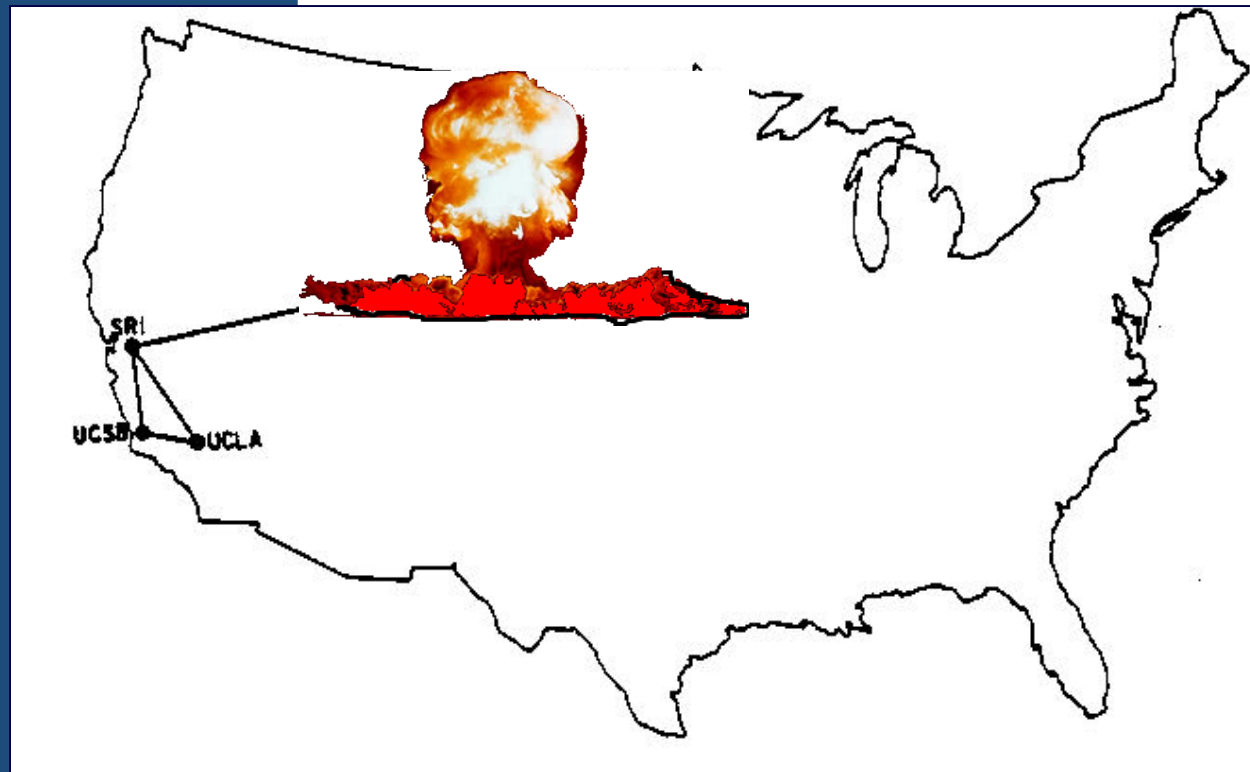
ARPANET 1969

- Protecting the nation's modes of communication
- ARPA creates ARPANET
 - A Four Node network
 - UCLA
 - Stanford
 - Santa Barbara
 - Utah



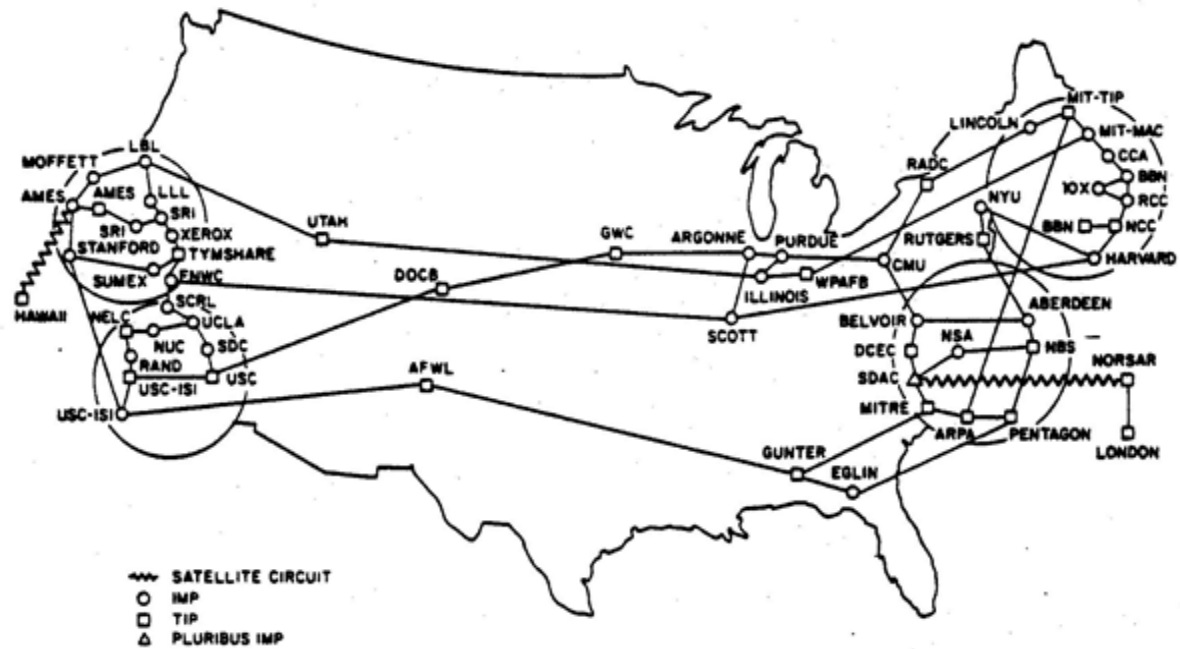
ARPANET 1969

- Allowed military and university engineers to share work and communicate
- No single point of failure in case of atomic war
- 4 nodes



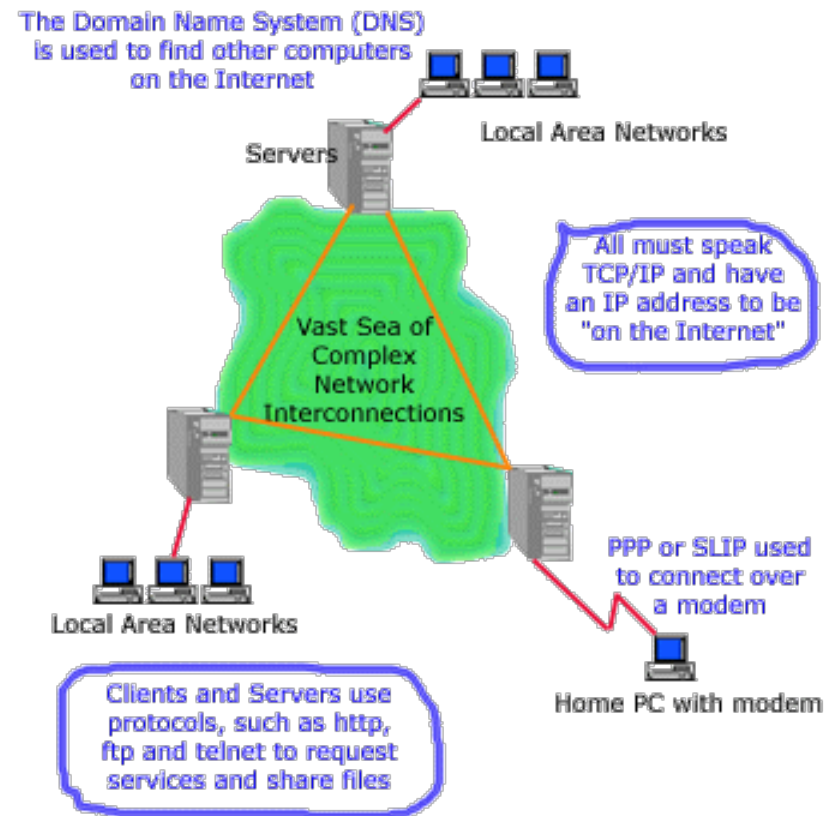
ARPANET 1976

- ARPANET resulted in a robust network that would continue working even if some hosts were destroyed
- 111+ nodes



Internet 1984

- 1972 Vinton Cerf and Richard Kahn create TCP/IP
- 1983 ARPANET adopts TCP/IP created by Vint Cerf and Richard Kahn.
- 1984 ARPANET split into military and civilian sections (networks)- MILNET and ARPANET - **Internet is born.**
- Is a global network of networks, or a bunch of connected computers.

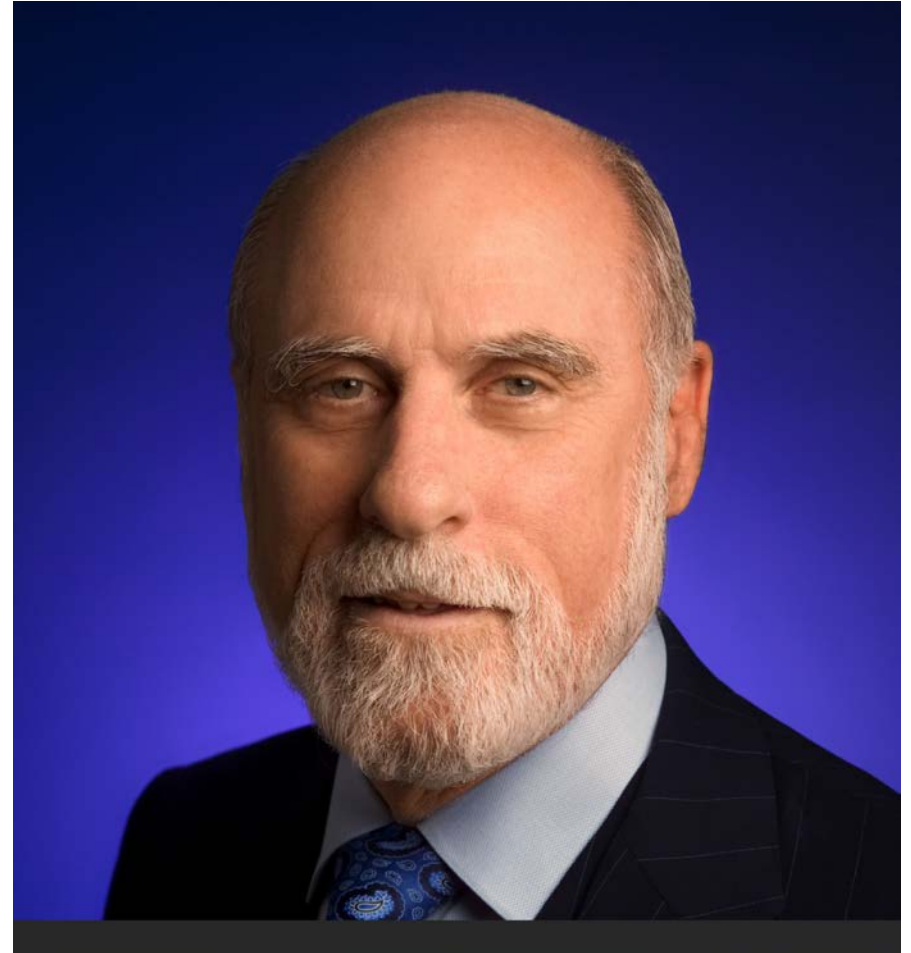


Internet

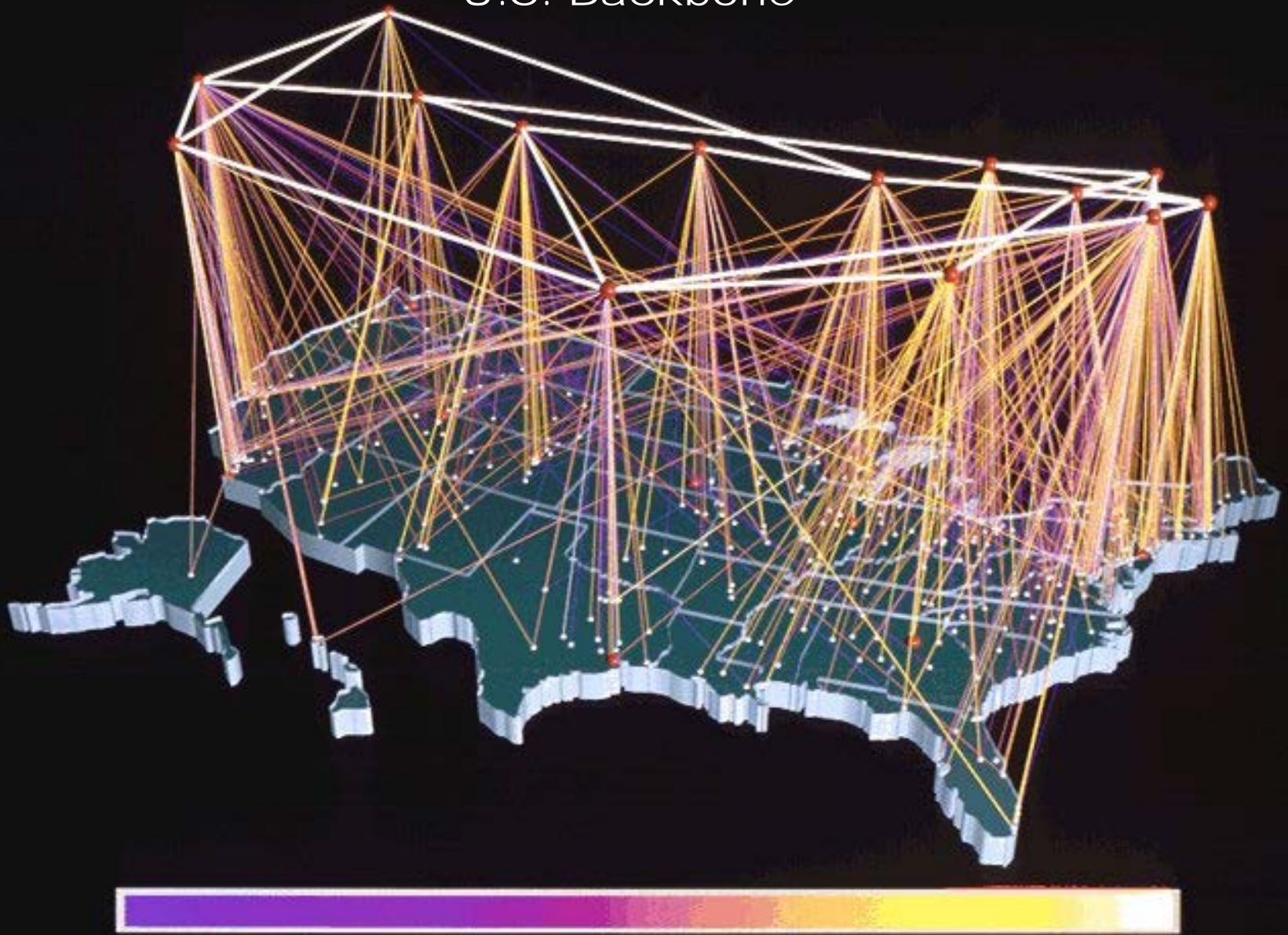


Father of the Internet

- 1972 Vinton Cerf and Richard Kahn create TCP/IP
 - Transfer Control Protocol
 - Internet Protocol
- Father of the Internet
- Robert Kahn partner and co-creator



U.S. Backbone



Simplified view of U.S. Internet

World Wide Web 1989-1991

- **1989** Tim-Berners-Lee Invents WWW
- Tim Berners-Lee creates “WorldWideWeb” browser
- **1990** Internet goes live
- **1991** Internet Access Goes Public
 - <http://www.internetlvestats.com/internet-users/>
- Access to the Internet (Physical Network) using multimedia browser
 - 1993 Mosaic
 - 1994 Netscape
 - 1995 Internet Explorer

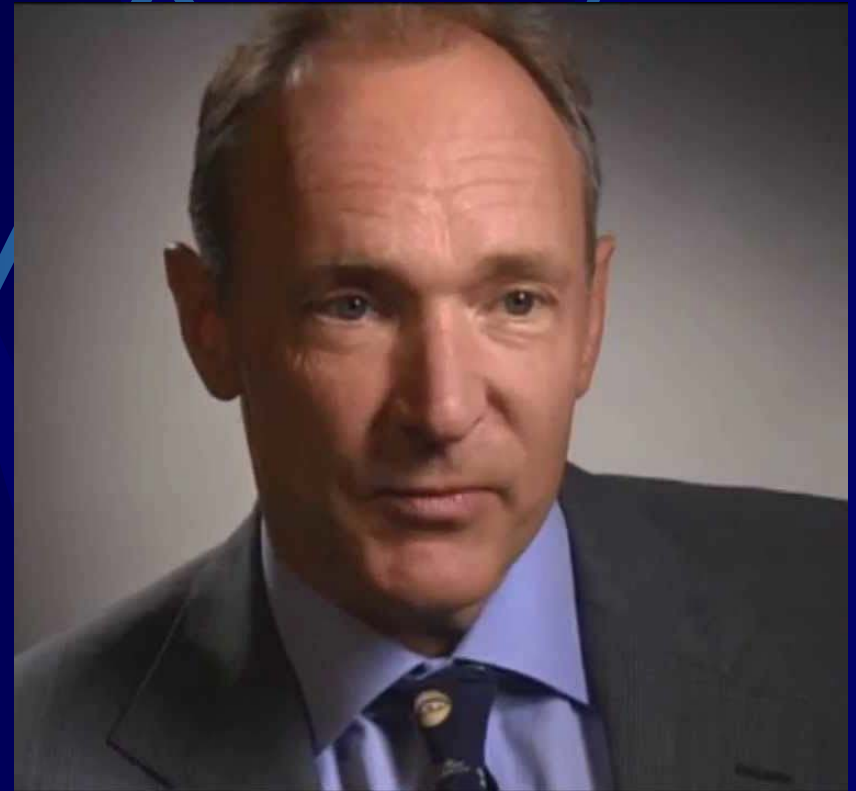


World Wide Web



Inventor of the World Wide Web

- **1989** Tim-Berners-Lee Invents WWW
- Tim Berners-Lee creates “WorldWideWeb” browser



The Internet

The World Wide Web

- Vinton Cerf
- Tim Berners Lee





Internet Chronology

- 1957 USSR launches Sputnik I into space
- 1958 USA creates ARPA and launches Explorer I satellite into space
- 1961 USSR launches man into space
- 1962 RAND corporation commissioned by Air Force to develop network capable of surviving nuclear strike
- 1969 ARPANET is established at four western universities
- 1971 first email sent by Ray Tomlinson and use of @ symbol
- 1972 Vinton Cerf and Bob Kahn develop TCP/IP
- 1973 first international connections to London and Norway established. Satellites used on ARPANET
- 1981 IBM releases personal computer
- 1984 ARPANET split into military and civilian sections (networks)- MILNET and ARPANET - **Internet is born.**
- ✦ 1988 The first recorded "Internet sabotage" occurs when a hacker distributes the "Internet Worm" and disables over 6,000 hosts
- ✦ 1989 WWW invented by Tim Berners-Lee
- ✦ 1990 First WWW software created by Tim Berners-Lee – First Web page goes live
- ✦ 1991 WWW becomes available to the public
 - ✦ **WWW is born**

Internet Time Line



Sputnik I
launched by
USSR

1st man in
space by
USSR

ARPANET
created by
ARPA

First IBM PC
sold to
consumers

WWW goes
public



1957



1961



1969



1981



1991

Video

- Go to Video
 - History of the Internet



Video





Activity 2

- Go to Activity 2
 - Passage Questions
 - Syllabus Questions
 - Teacher Questions

