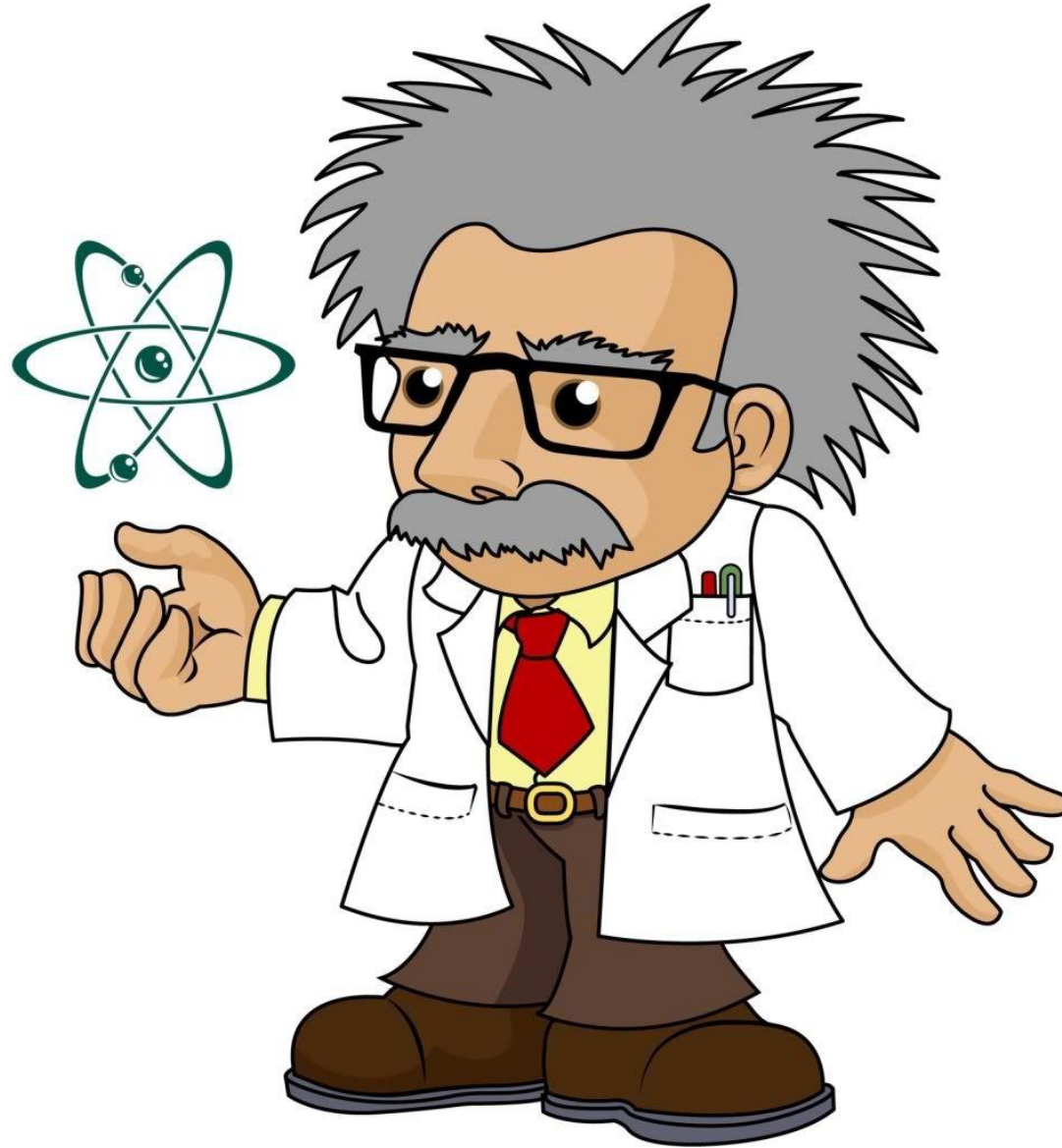


The background of the slide is a deep blue color, overlaid with a complex, glowing pattern of light blue lines. These lines form a network of interconnected loops and straight segments, resembling a circuit board or a data network. The lines have a slight glow and some points where they intersect are brighter. A wide, white, curved band runs horizontally across the middle of the slide, framing the title text.

Internet History

Inventions Over Time



170,000 BC

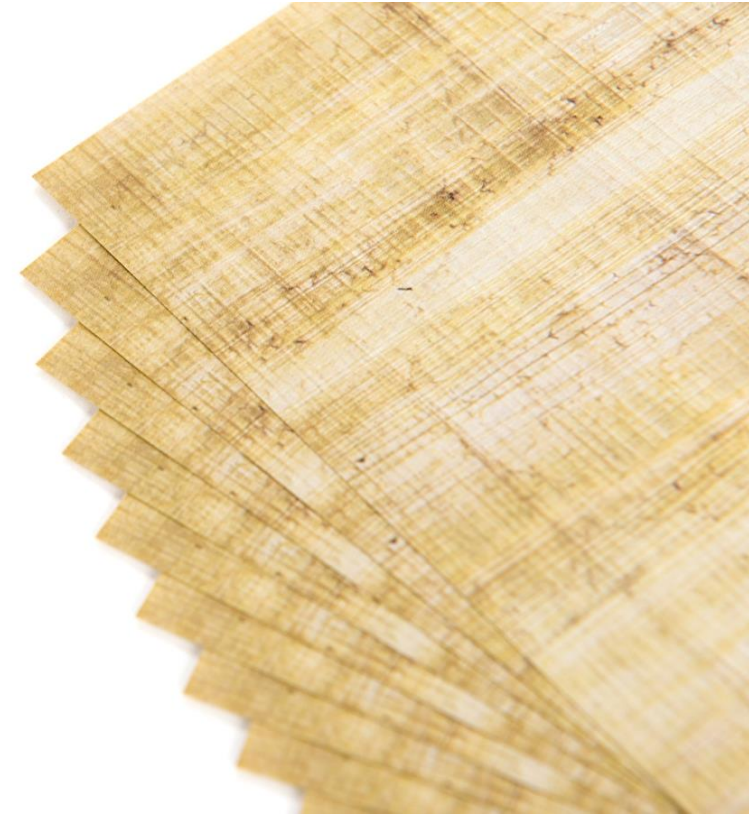


40,000 BC



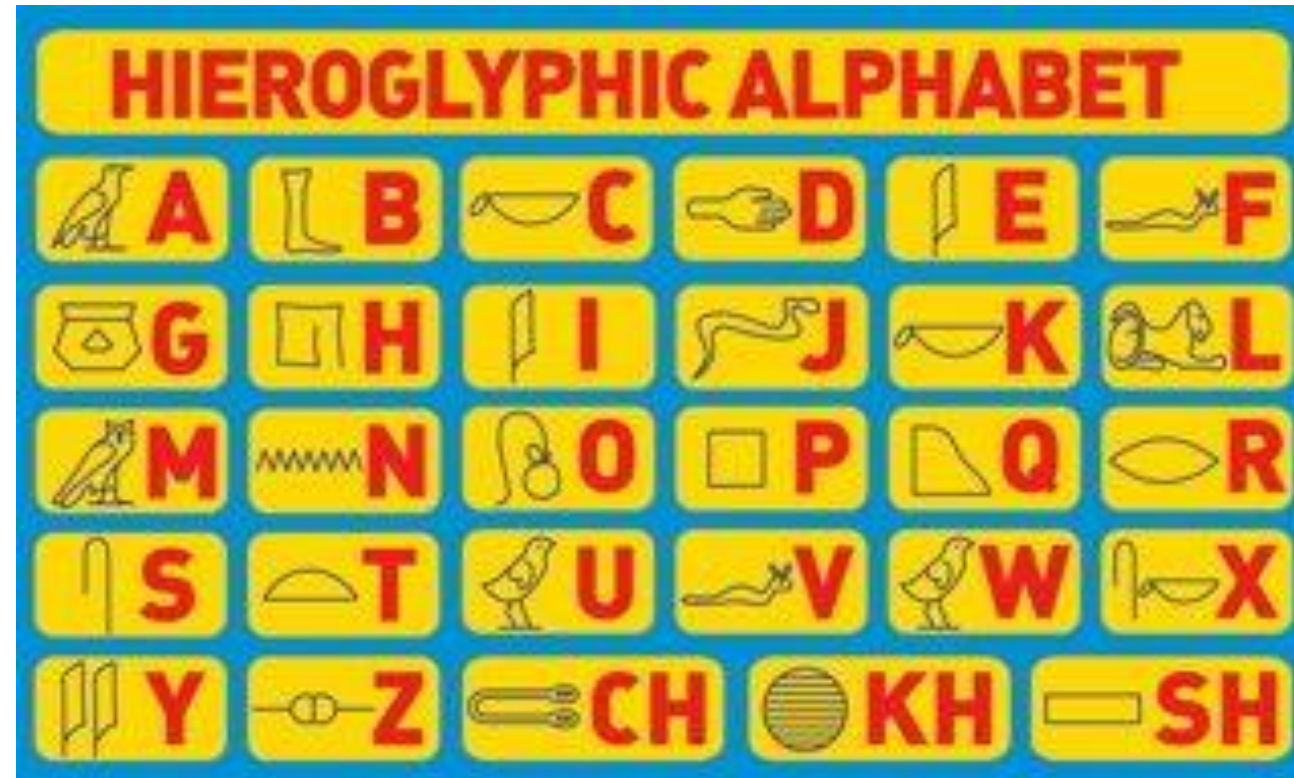
Papyrus – 4000 BC

- Papyrus was invented somewhere around 4,000 BC in the area known as Egypt today.
- It was made from a plant called Papyrus.



Hieroglyphics – About 3500 BC

- Ancient Egypt



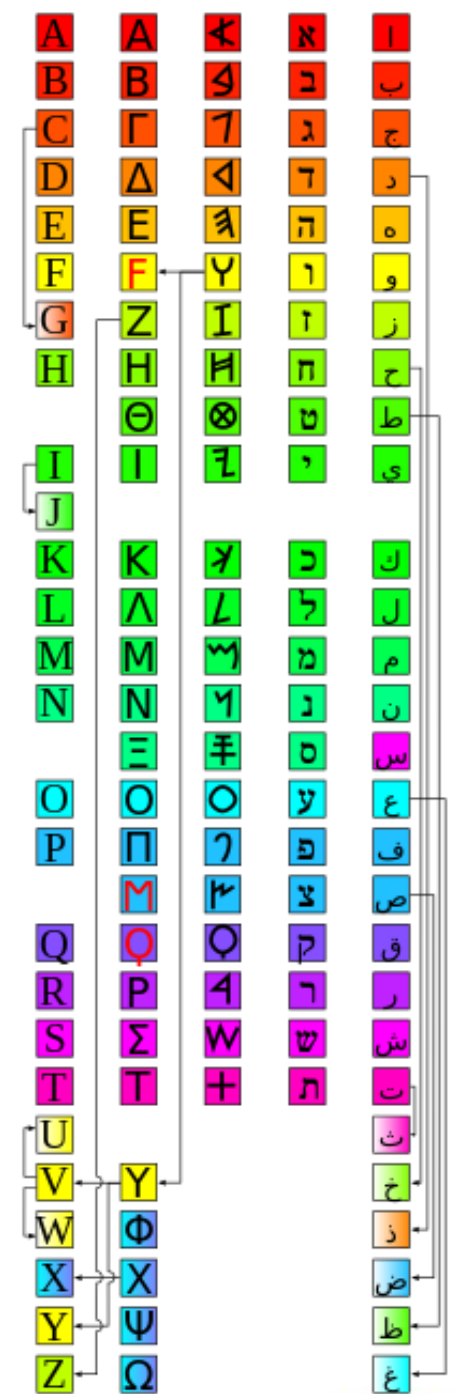
First Written Language – 3500 BC

- Cuneiform by the Sumerians



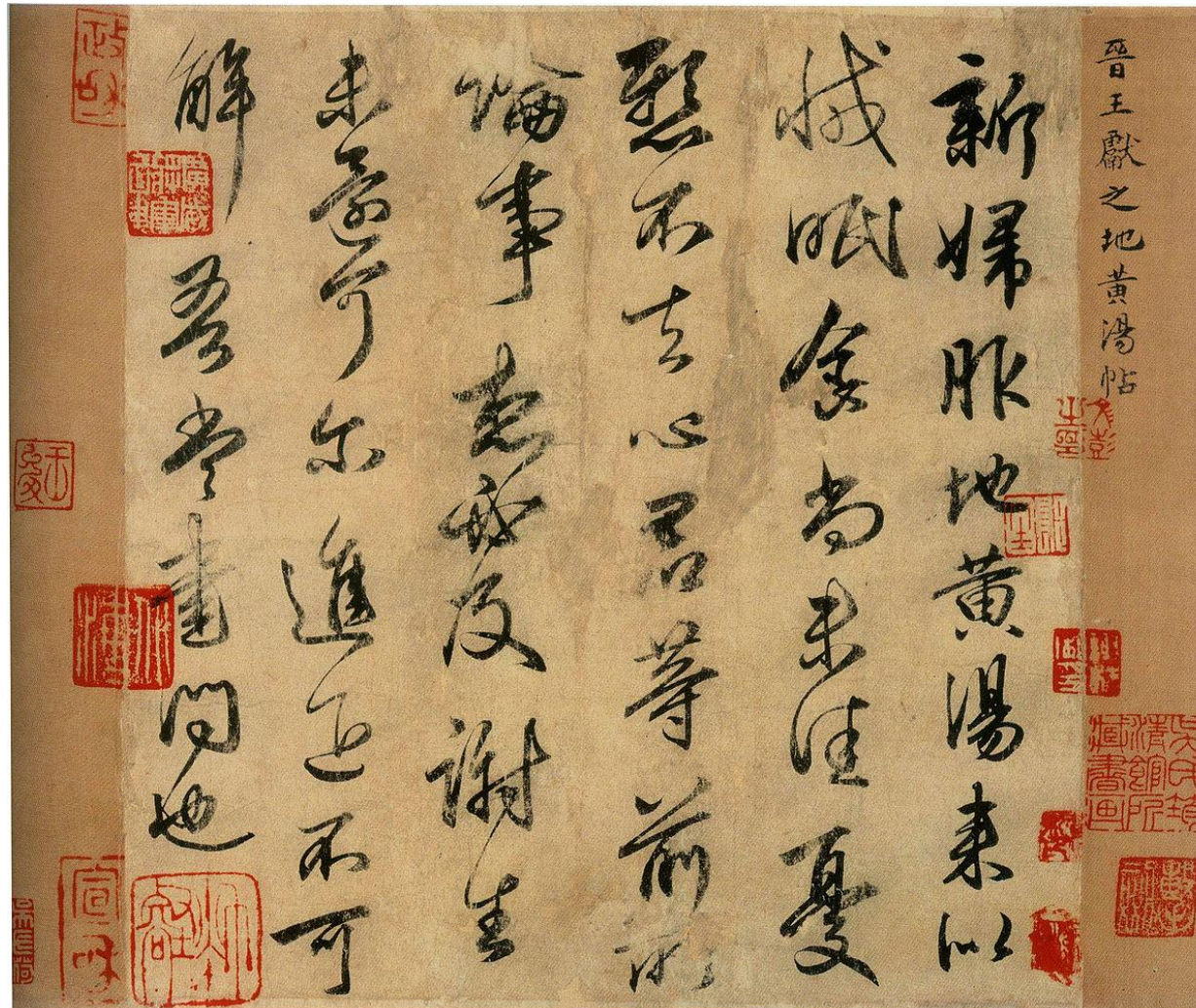
First Alphabet – 800 BC

- Greek Alphabet



Paper – 100 BC

- Paper was invented in about 100 BC in China.



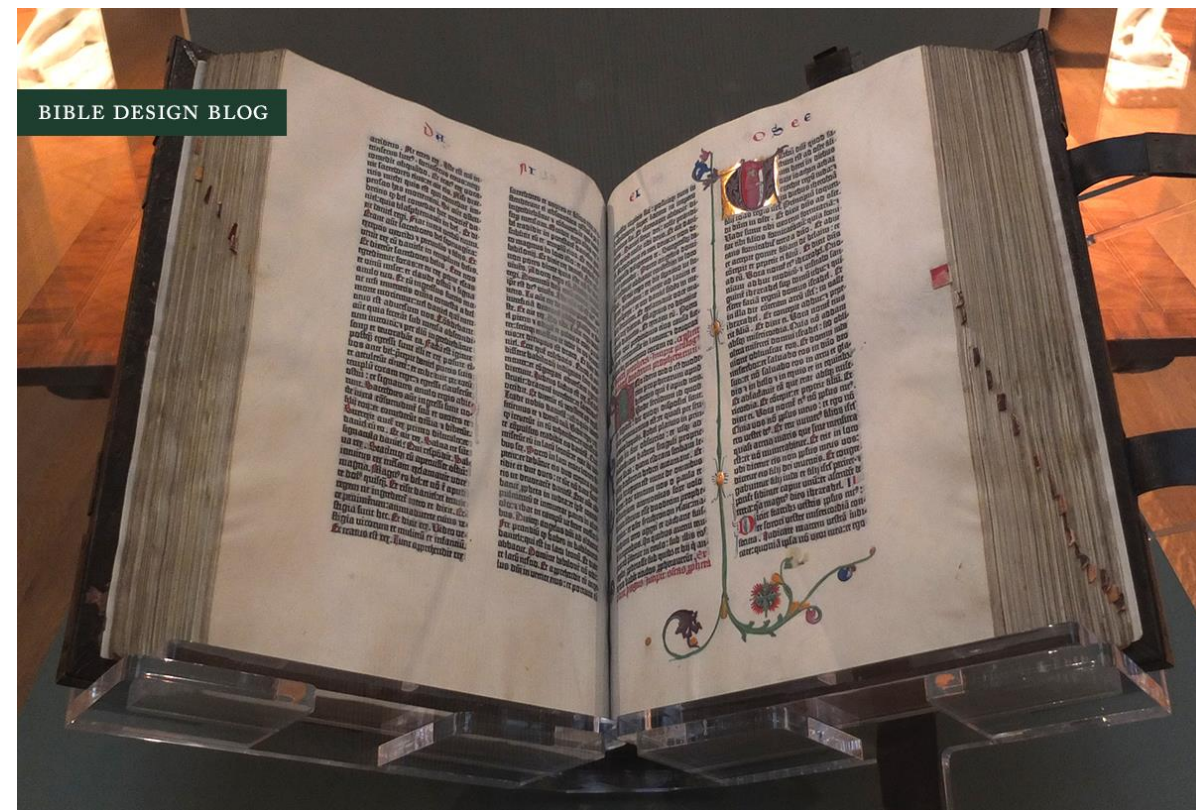
Woodblock Printing – 200 AD

- In about 200 AD, people in Asia carved their text onto a block of wood, smeared ink on it, and then pressed it onto paper. It could only make a small quantity of pages until the ink made the wood too soft.



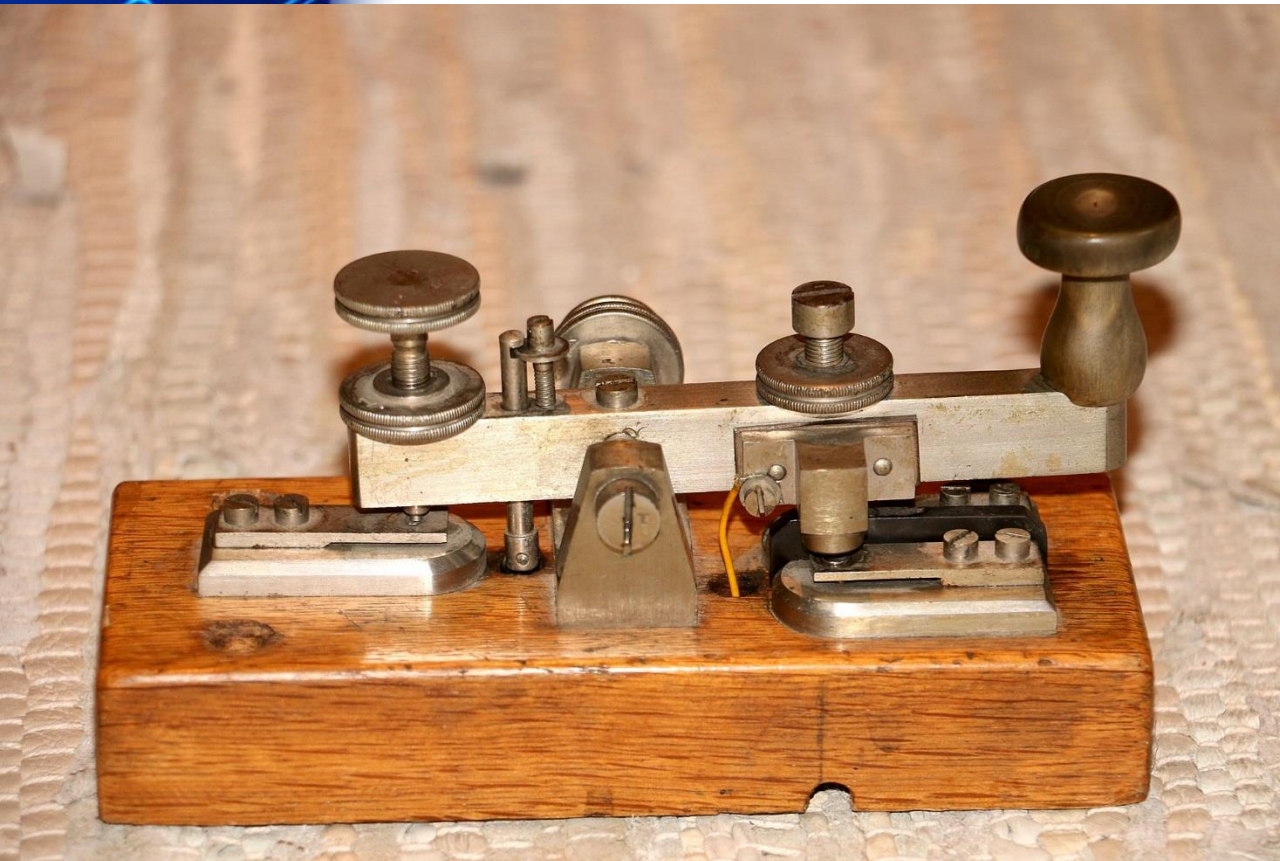
Moveable Type - 1439

- Moveable Type invented in 1439 by Johannes Gutenberg.
- The first thing he printed was the bible



Telegraph - 1837

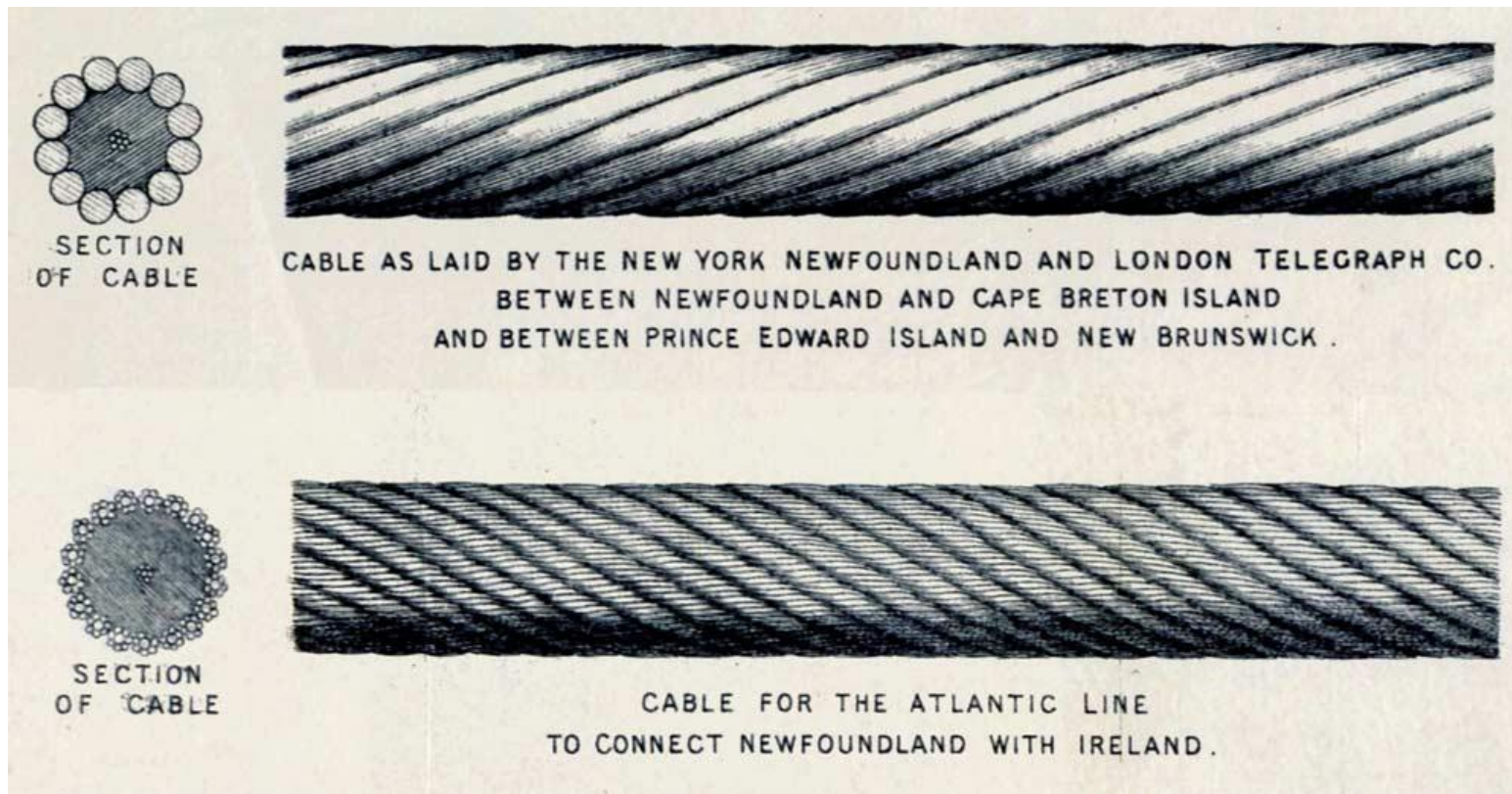
- Used Morse Code



A	B	C	D	E	F
• —	— • • •	— • — •	— • •	•	• • — •
G	H	I	J	K	L
— • — •	• • • •	• •	• — — — —	— • — •	• — • •
M	N	O	P	Q	R
— —	— •	— — —	• — — •	— — • —	• — •
S	T	U	V	W	X
• • •	—	• • —	• • • —	• — — —	— • • —
Y	Z	WAIT	UNDERSTAND	DONT UNDERSTAND	
— • — — —	— — • •	— • •	• • • — •	— • • • • — •	
PERIOD		INTERROGATION		EXCLAMATION	
• • • • •		• • — — • •		— — • • — — —	
1	2	3	4	5	
• — — — —	• • — — —	• • • — —	• • • • —	• • • • •	
6	7	8	9		
— • • • •	— — • • •	— — — • •	— — — — •		
0	CALL	FINISH			
— — — — —	— • — • •	• • • — •			

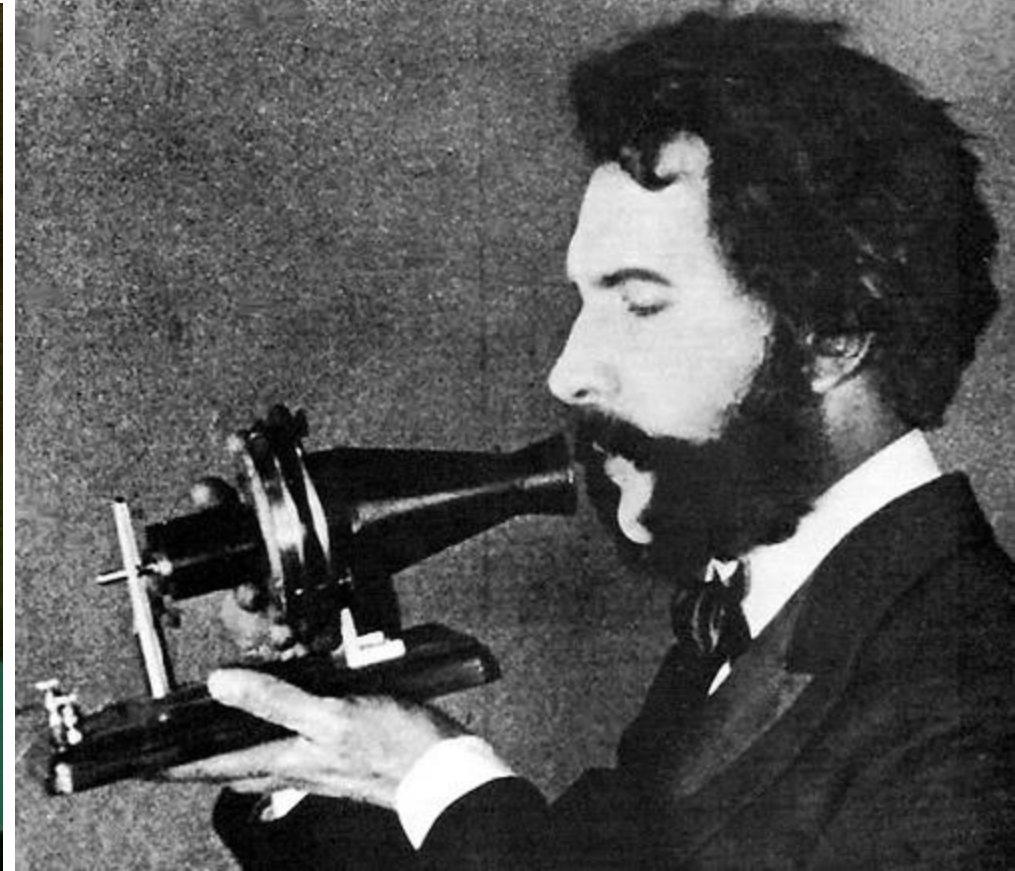
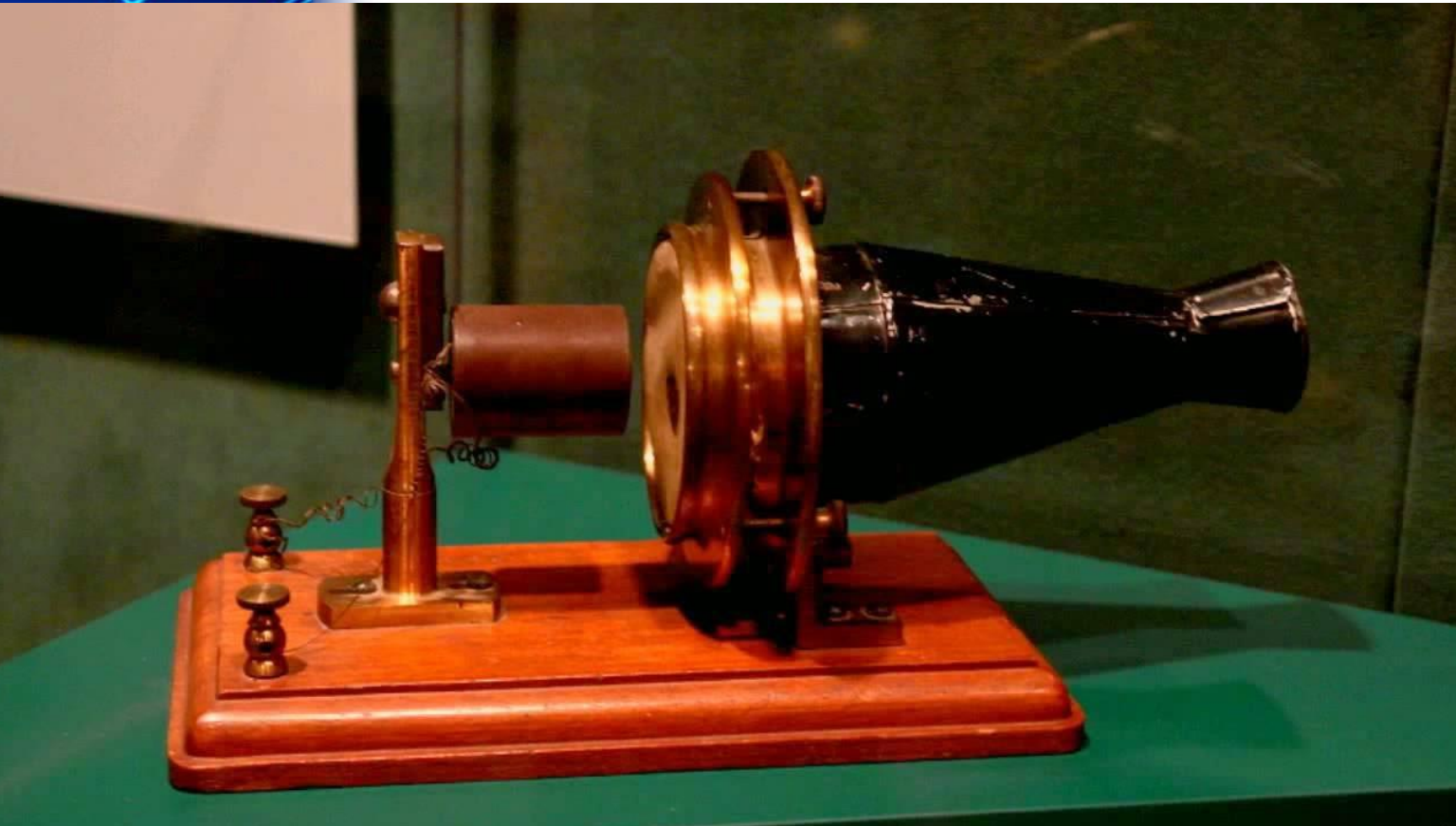
Undersea Cables - 1858

- 1858
- The first undersea cable across the Atlantic ocean was laid. It only worked for a month before it quit working.



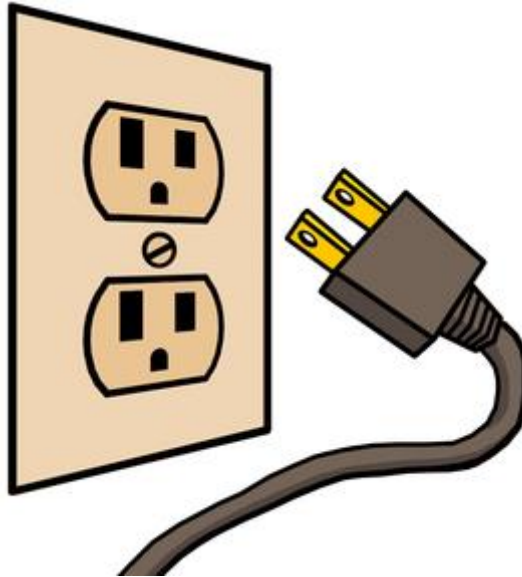
Telephone - 1876

- Invented by Alexander Graham Bell



Household Electricity - 1879

Dolgeville New York was the first town to get electricity in some of the factories.



Motion Pictures - 1892



Radio - 1895

- Invented by Guglielmo Marconi

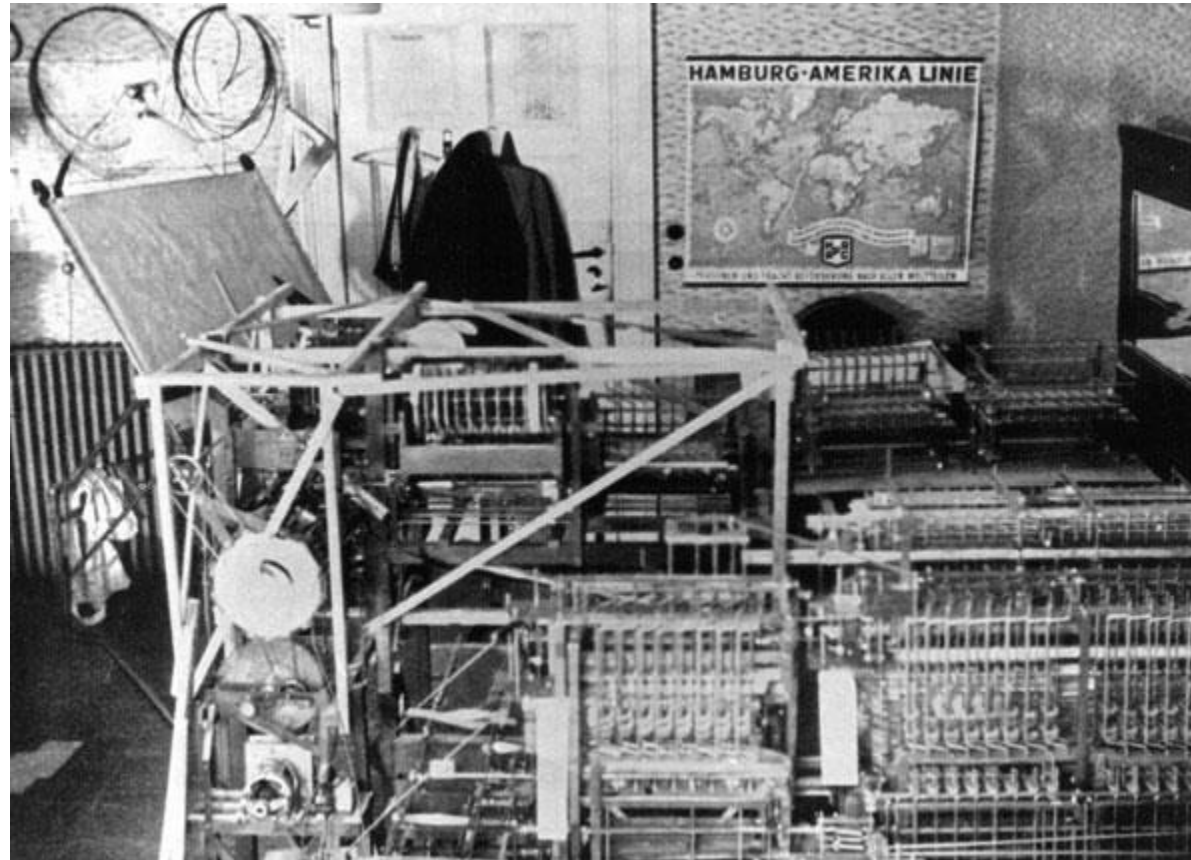


Television - 1927

- Philo Farnsworth

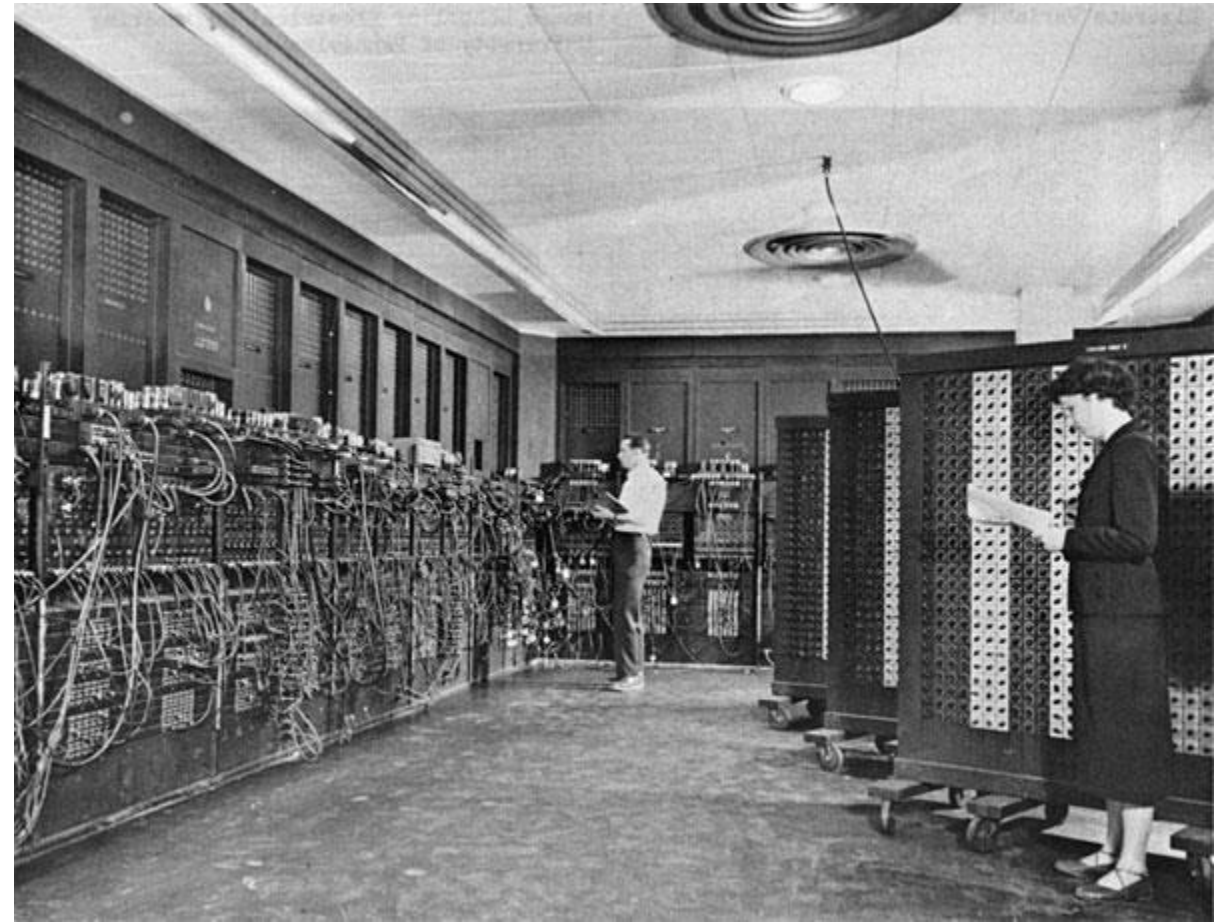


First Programmable Computer - 1936



First Digital Computer - 1943

- Was called the ENIAC
- Weighted 30 tons
- Cost \$487,000



First Communications Satellite - 1962

- Could only be used for 20 minutes every 2.5 hours when it passed overhead.



First Cell Phone - 1973

- Weighed 2.5 lbs
- Cost \$4,000

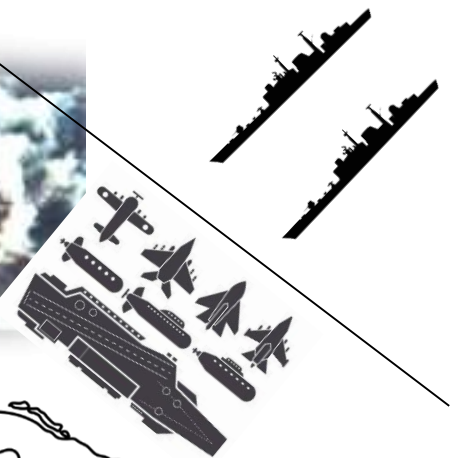


First Home Computer - 1977

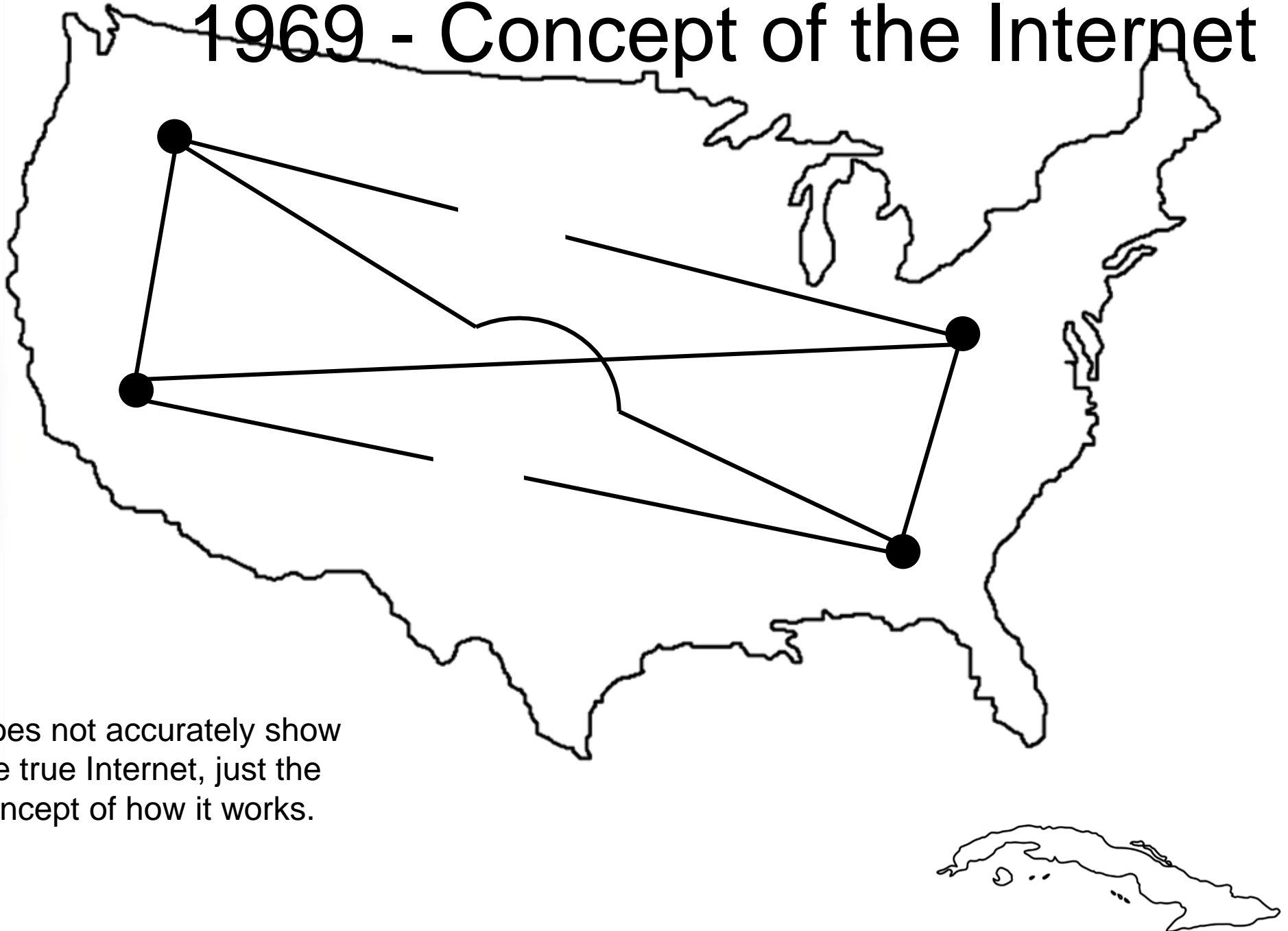
- TRS-80
- Cost \$600



Cold War

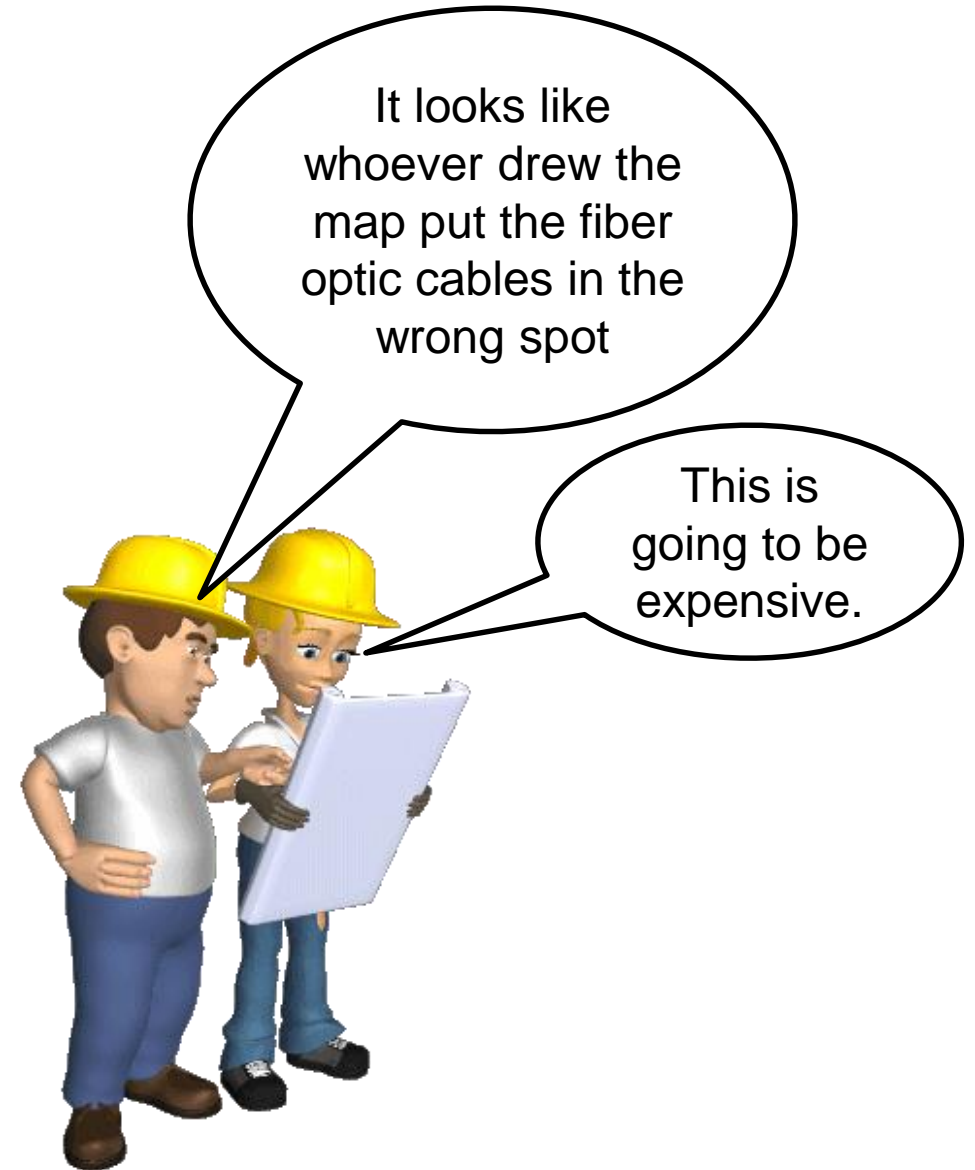


1969 - Concept of the Internet

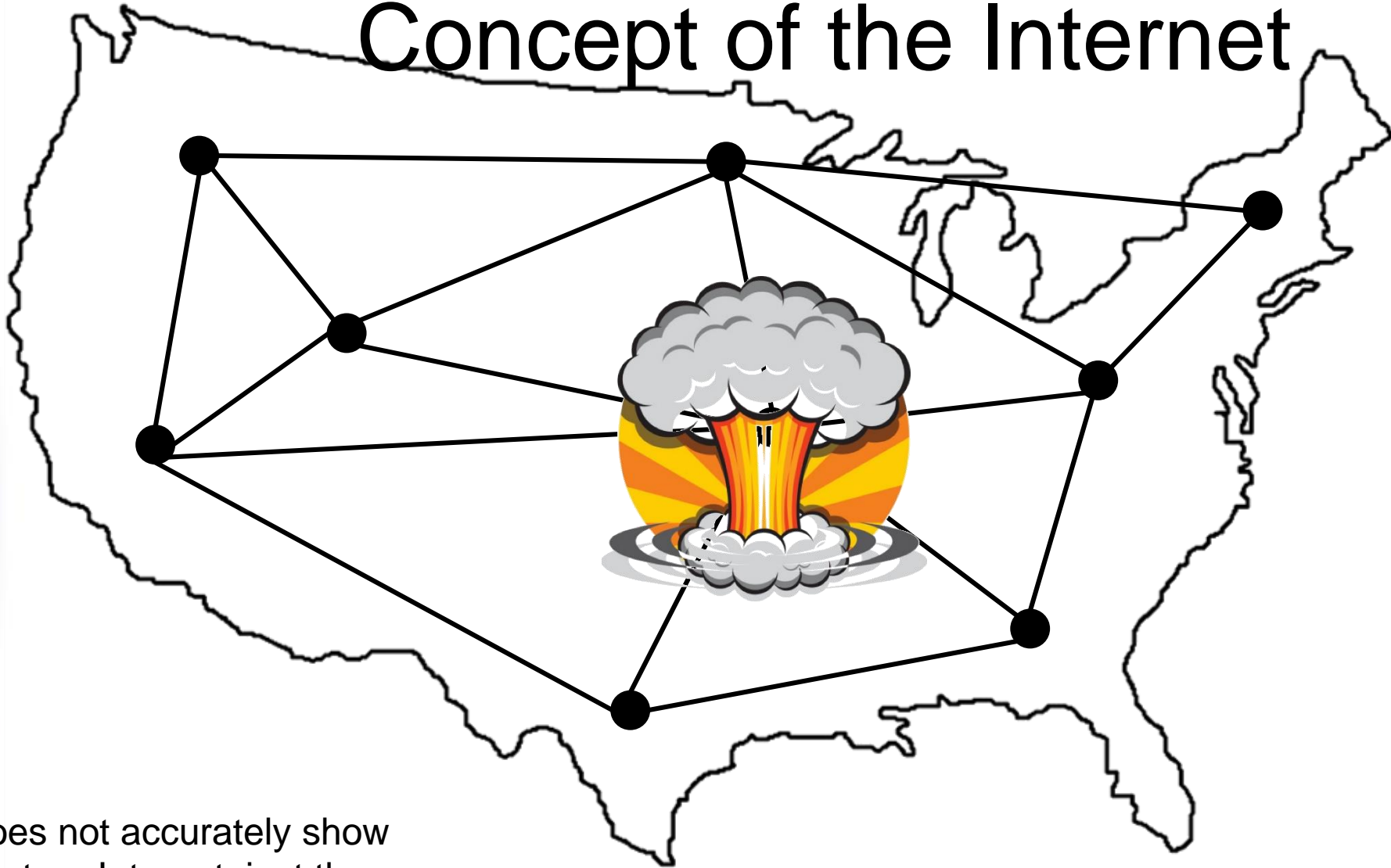


Does not accurately show
the true Internet, just the
concept of how it works.

Why the Internet quit working 😊

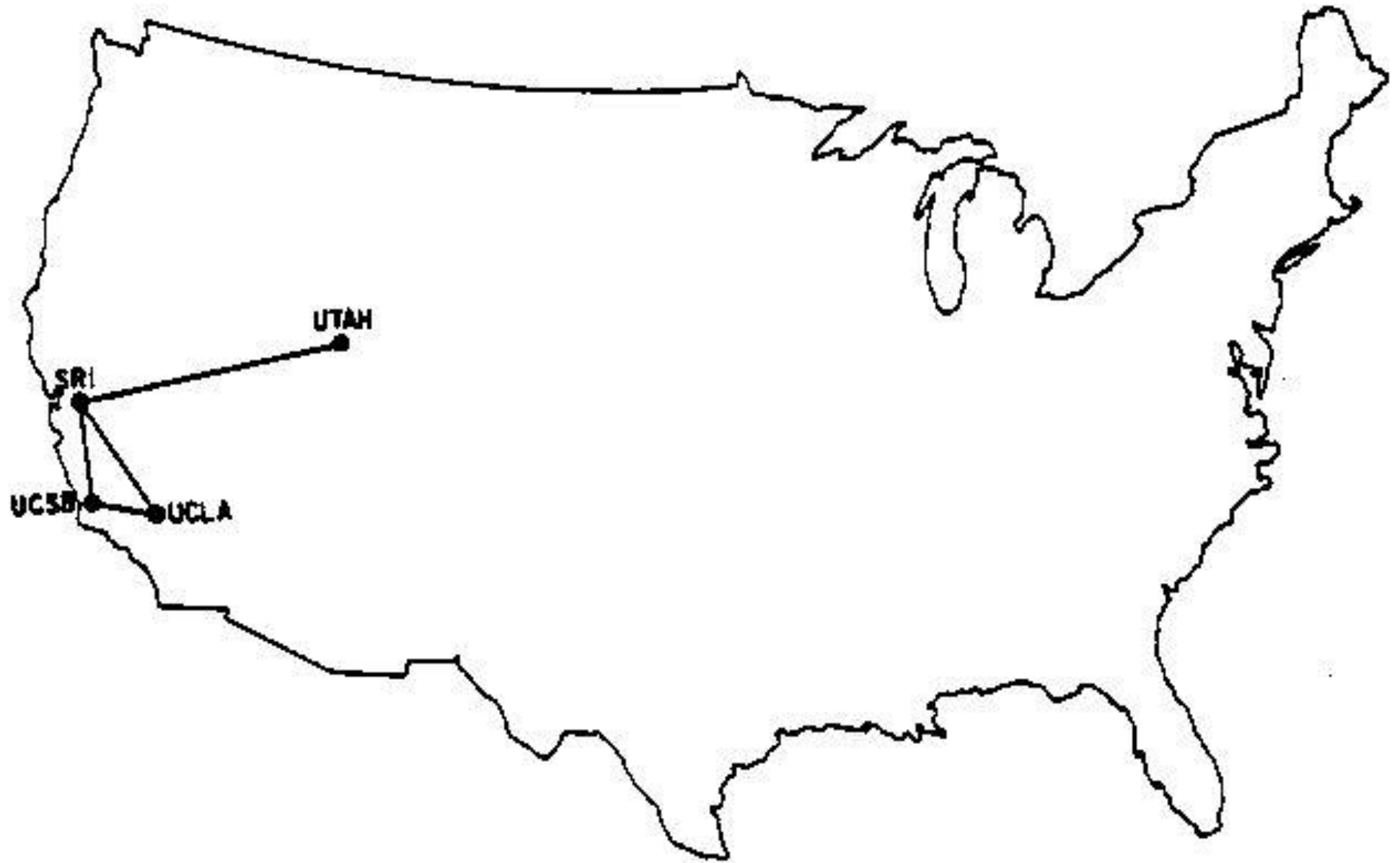


Concept of the Internet

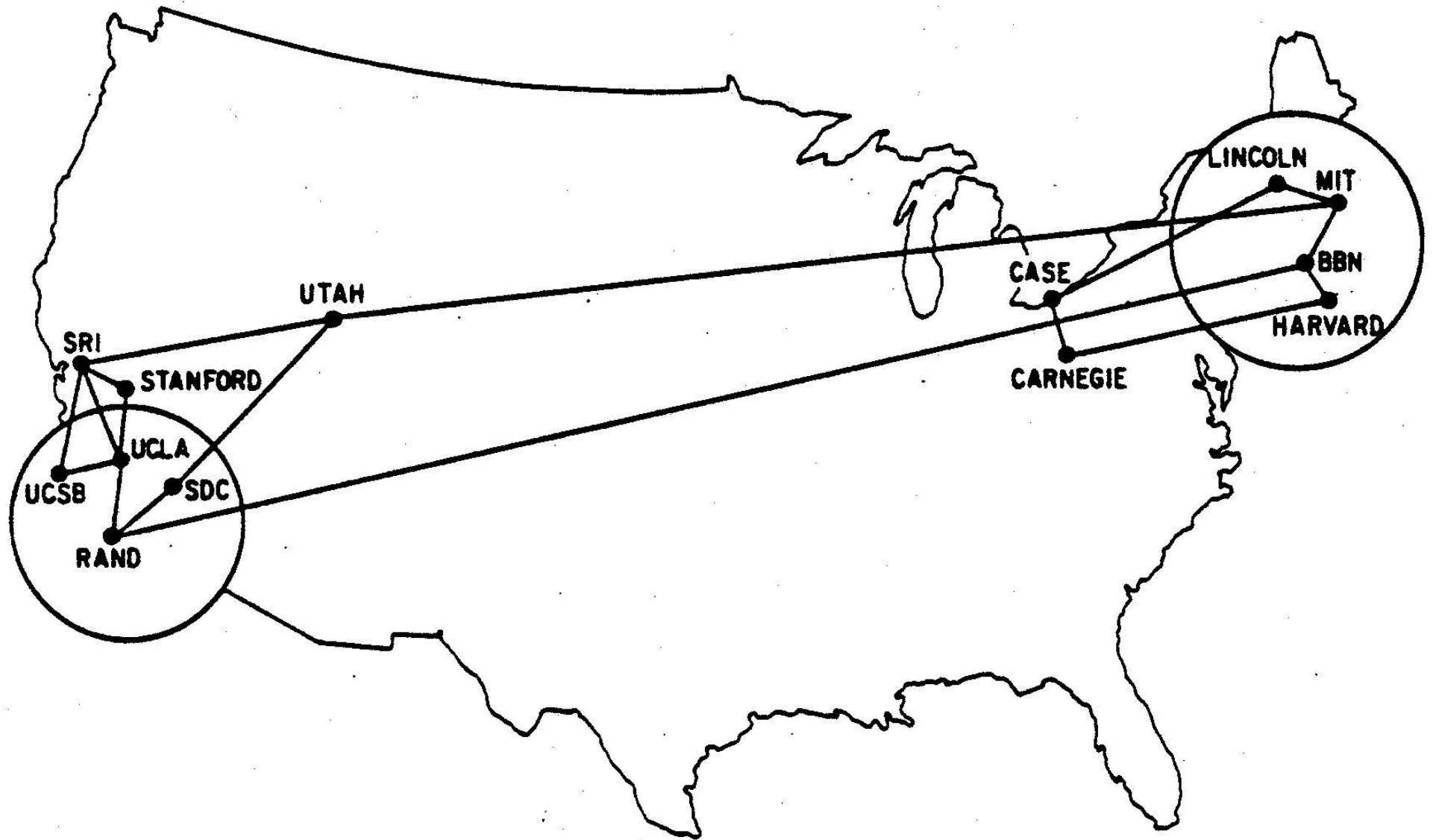


Does not accurately show
the true Internet, just the
concept of how it works.

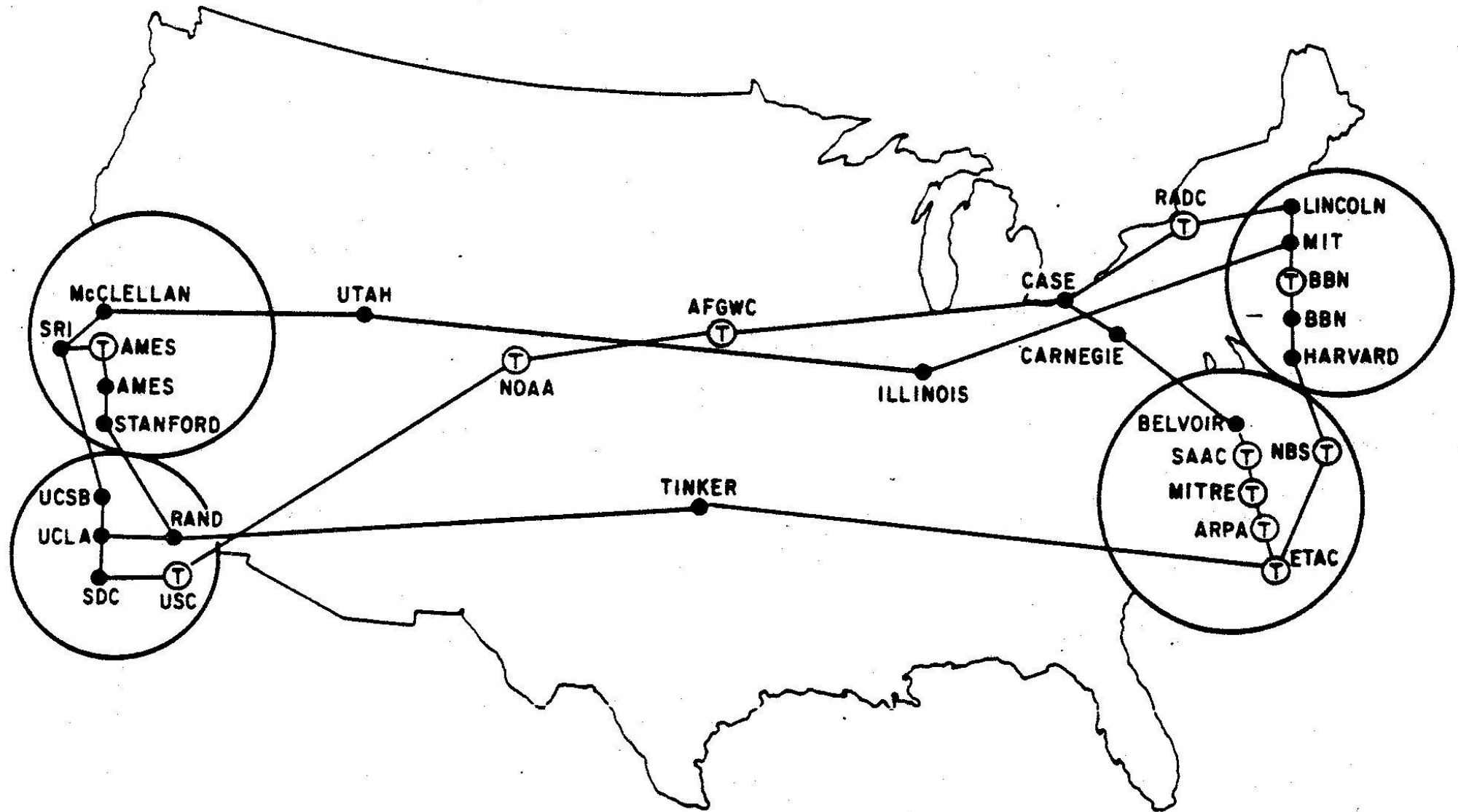
December 1969



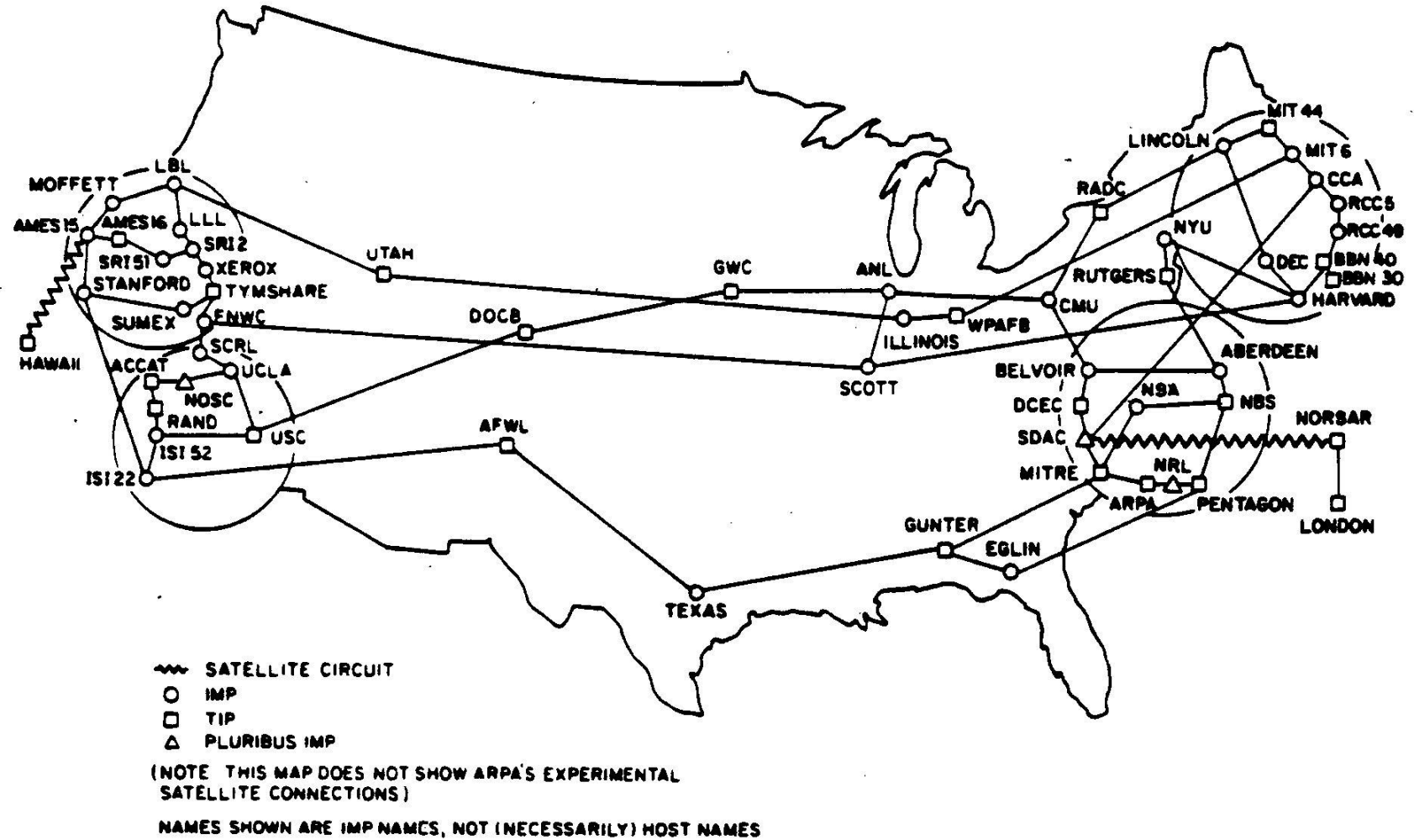
December, 1970



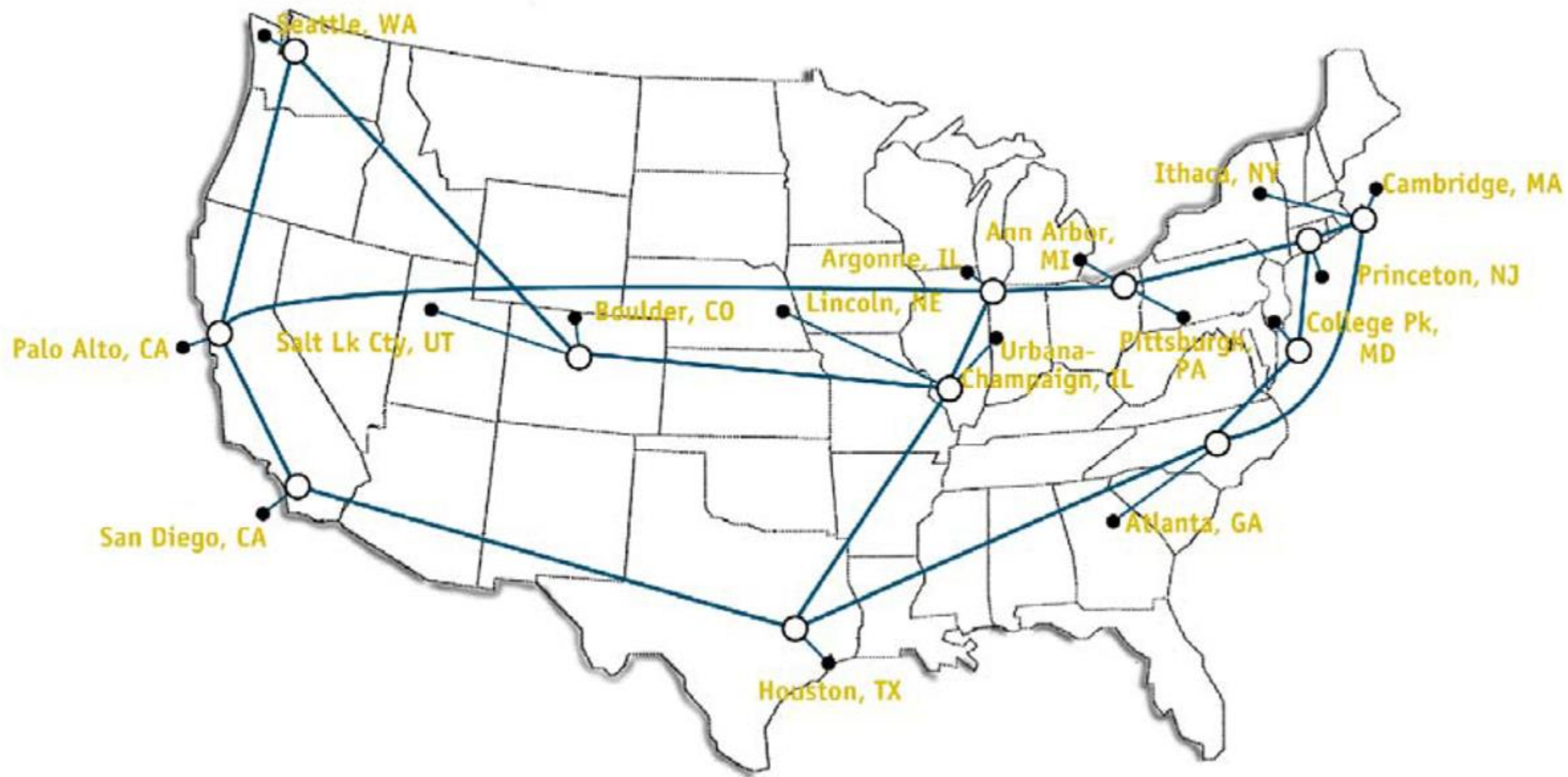
August 1972



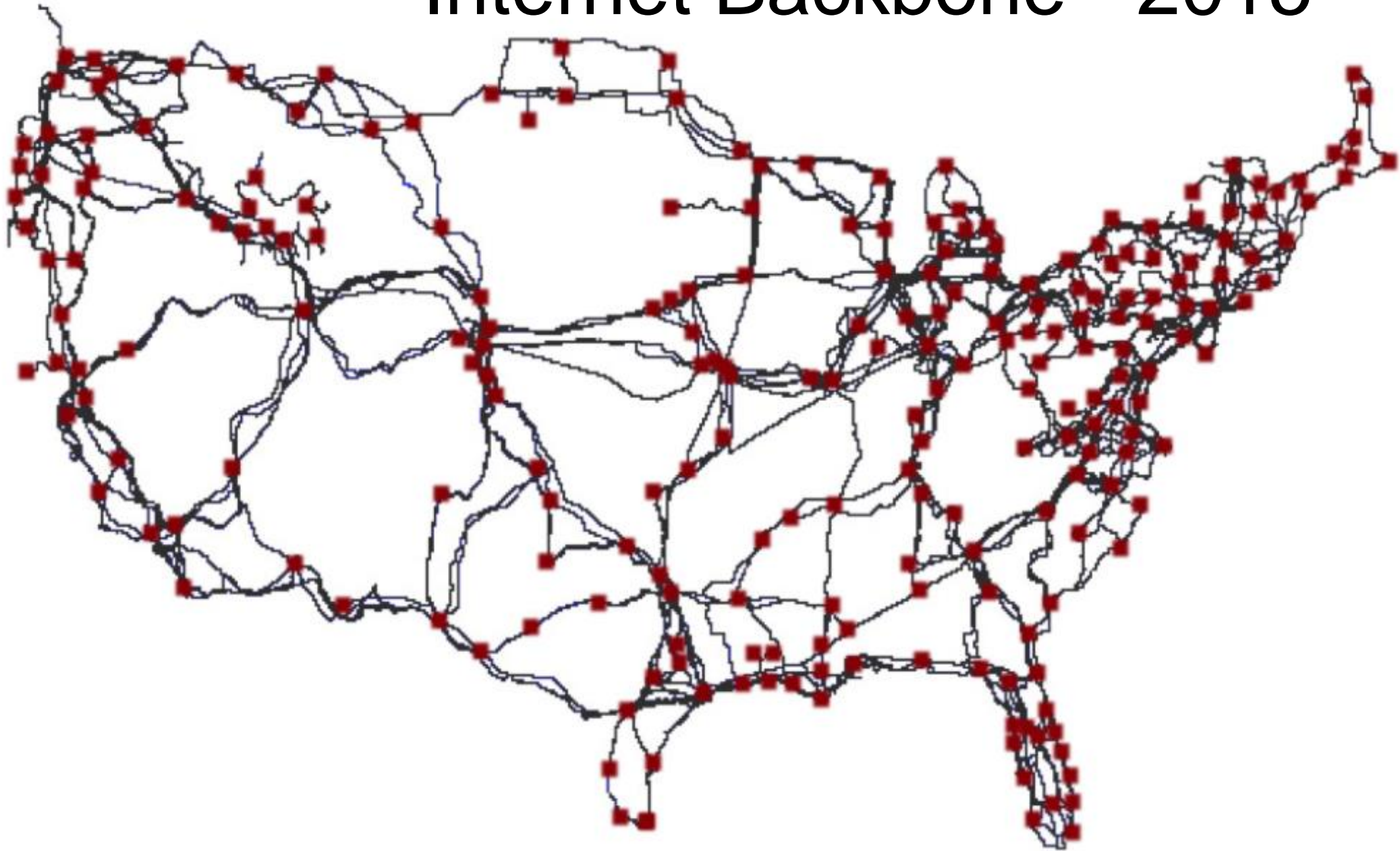
July 1977



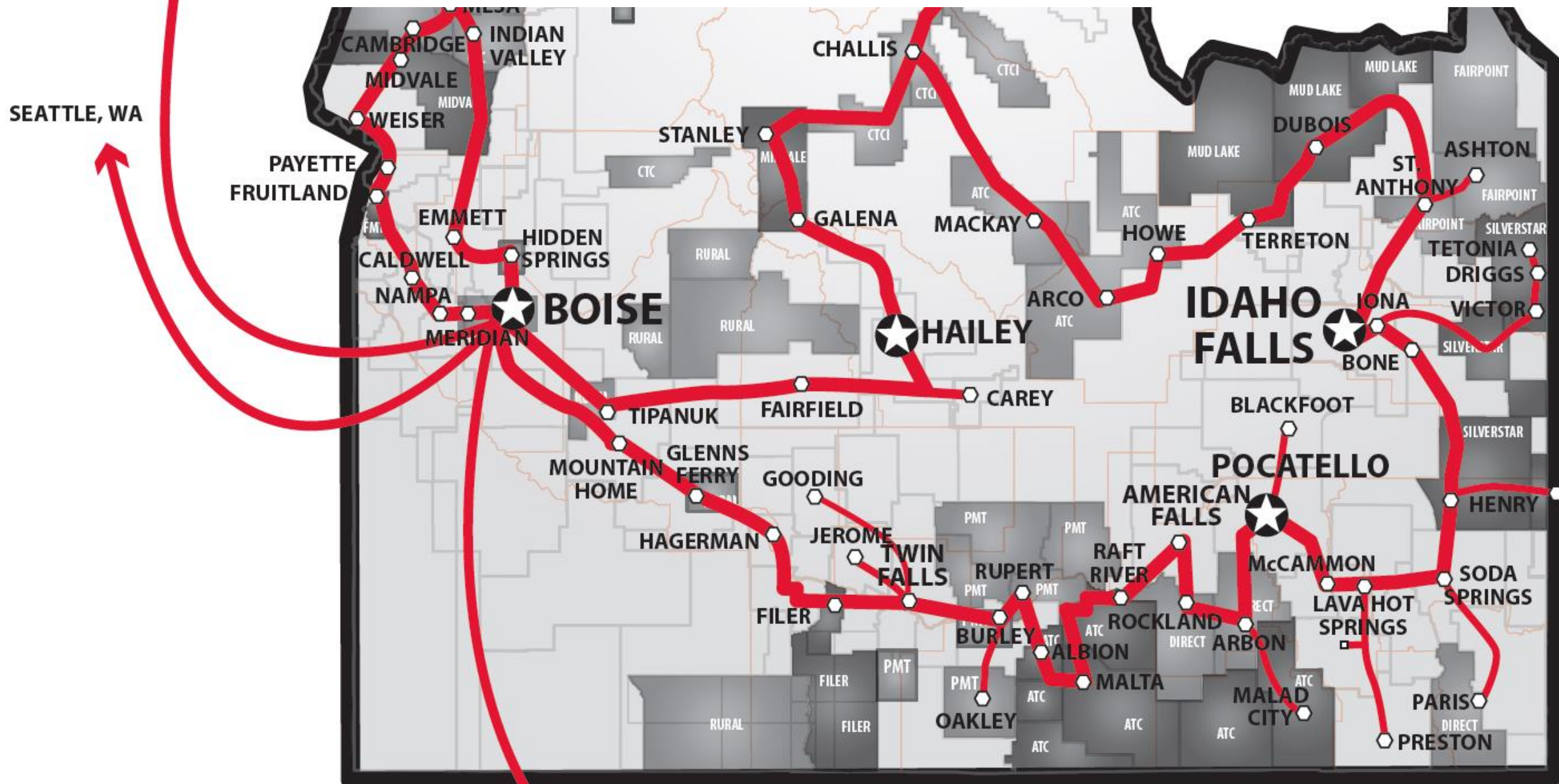
NSFNET T3 Network 1992




Internet Backbone - 2015

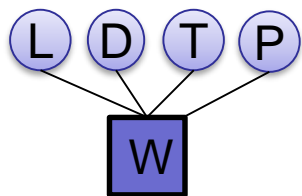
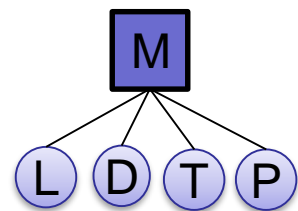
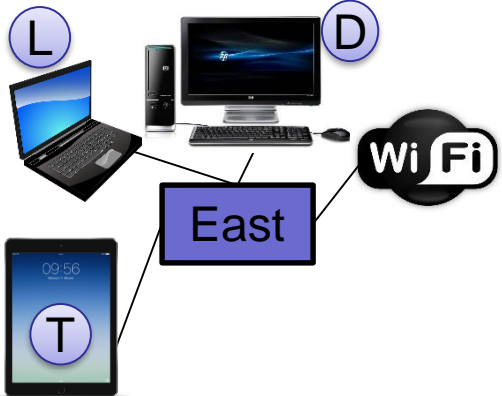


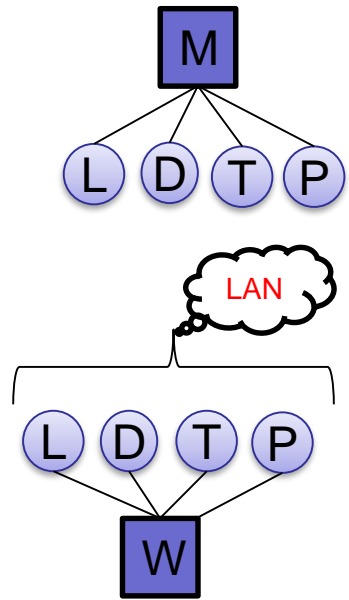
Syringa Networks Backbone

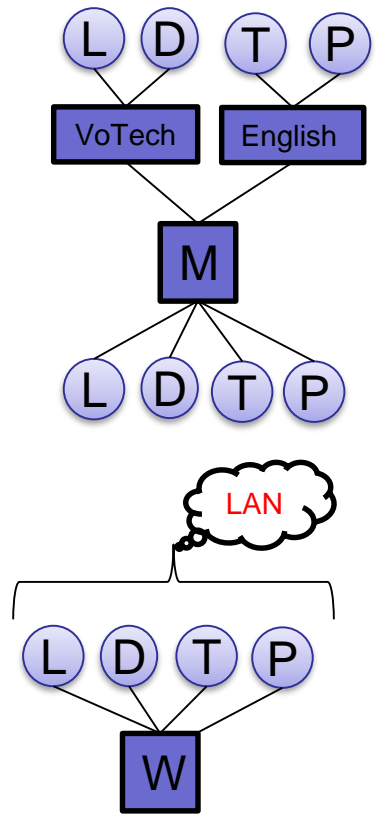


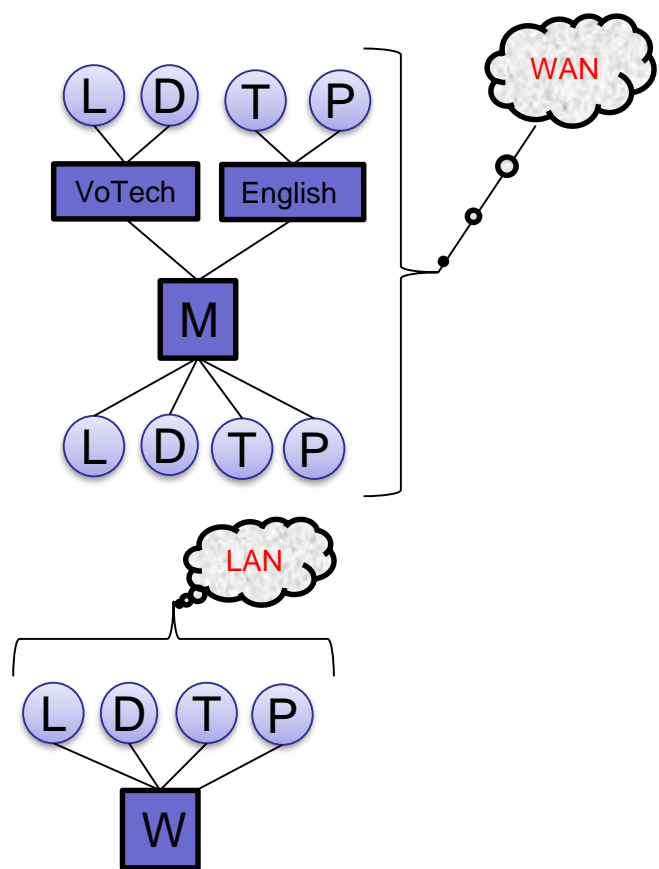


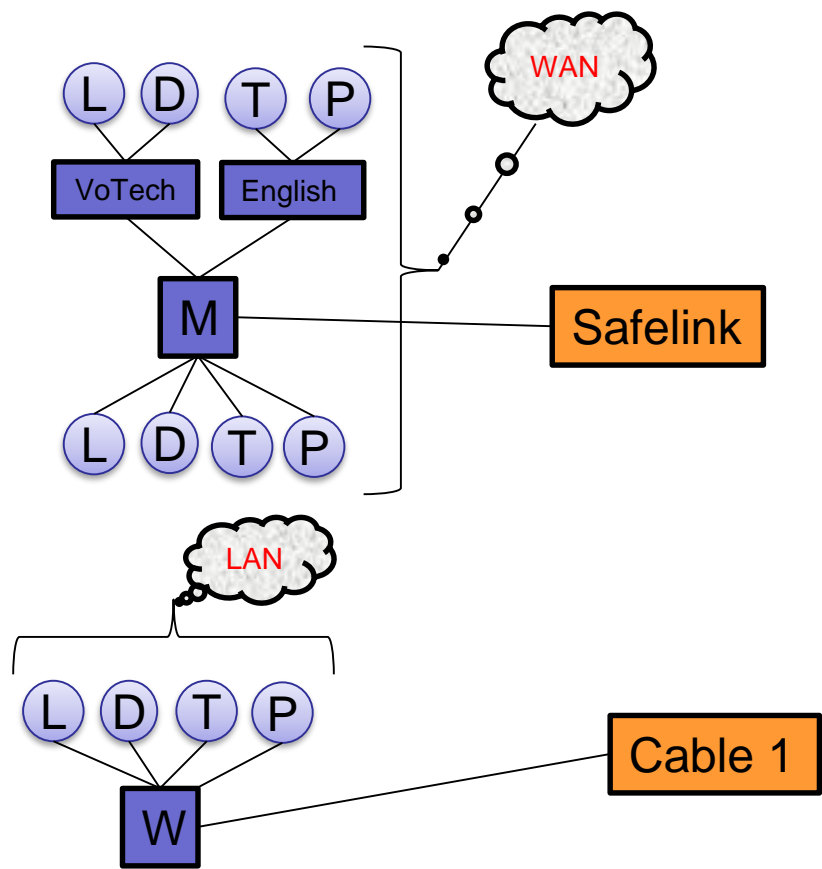
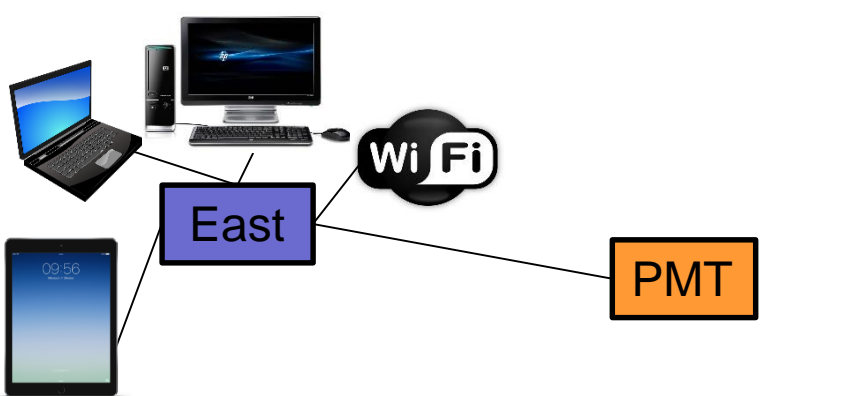
Draw the following on your paper.
Write neatly and draw small so
everything fits nicely!

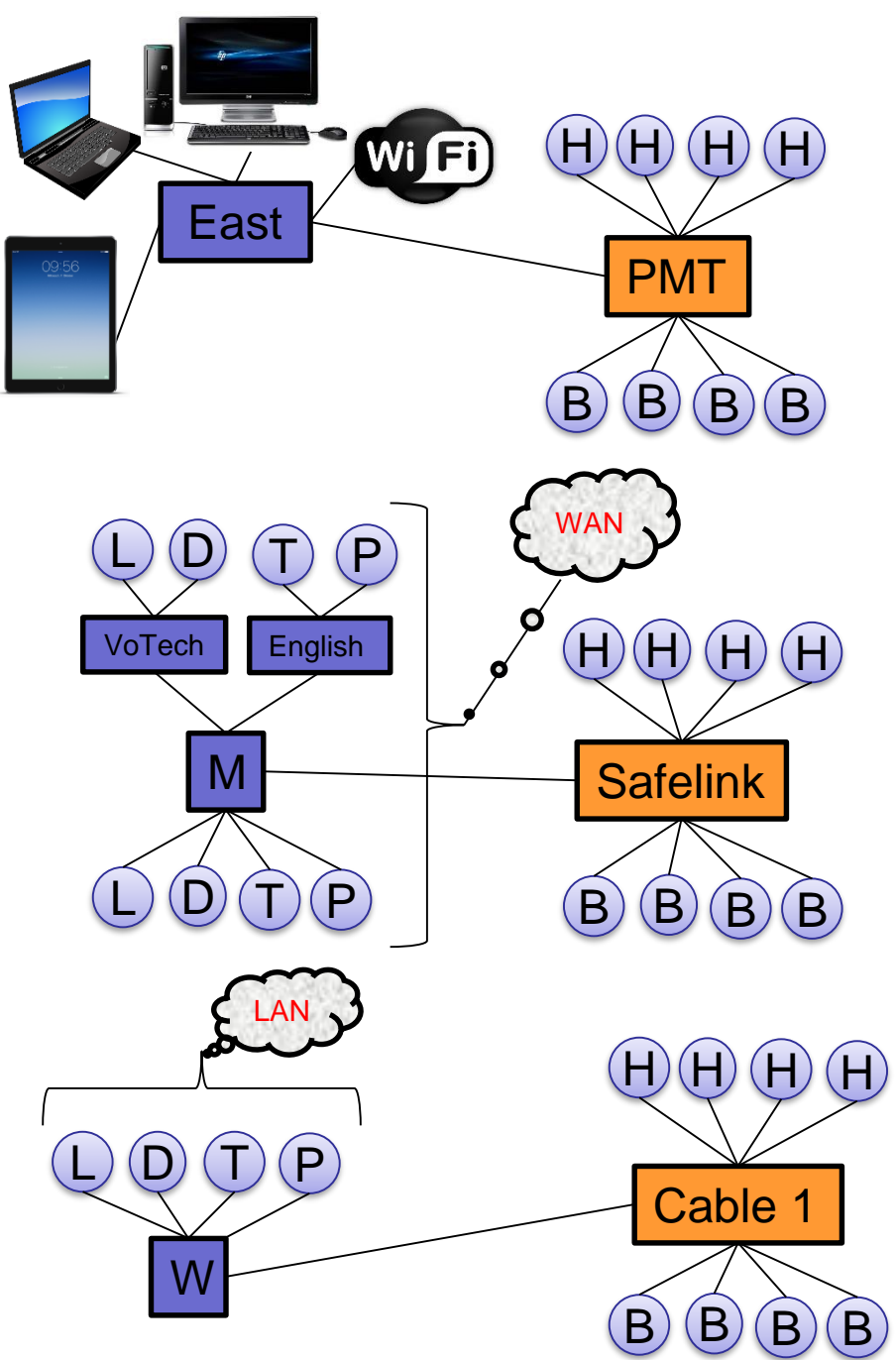


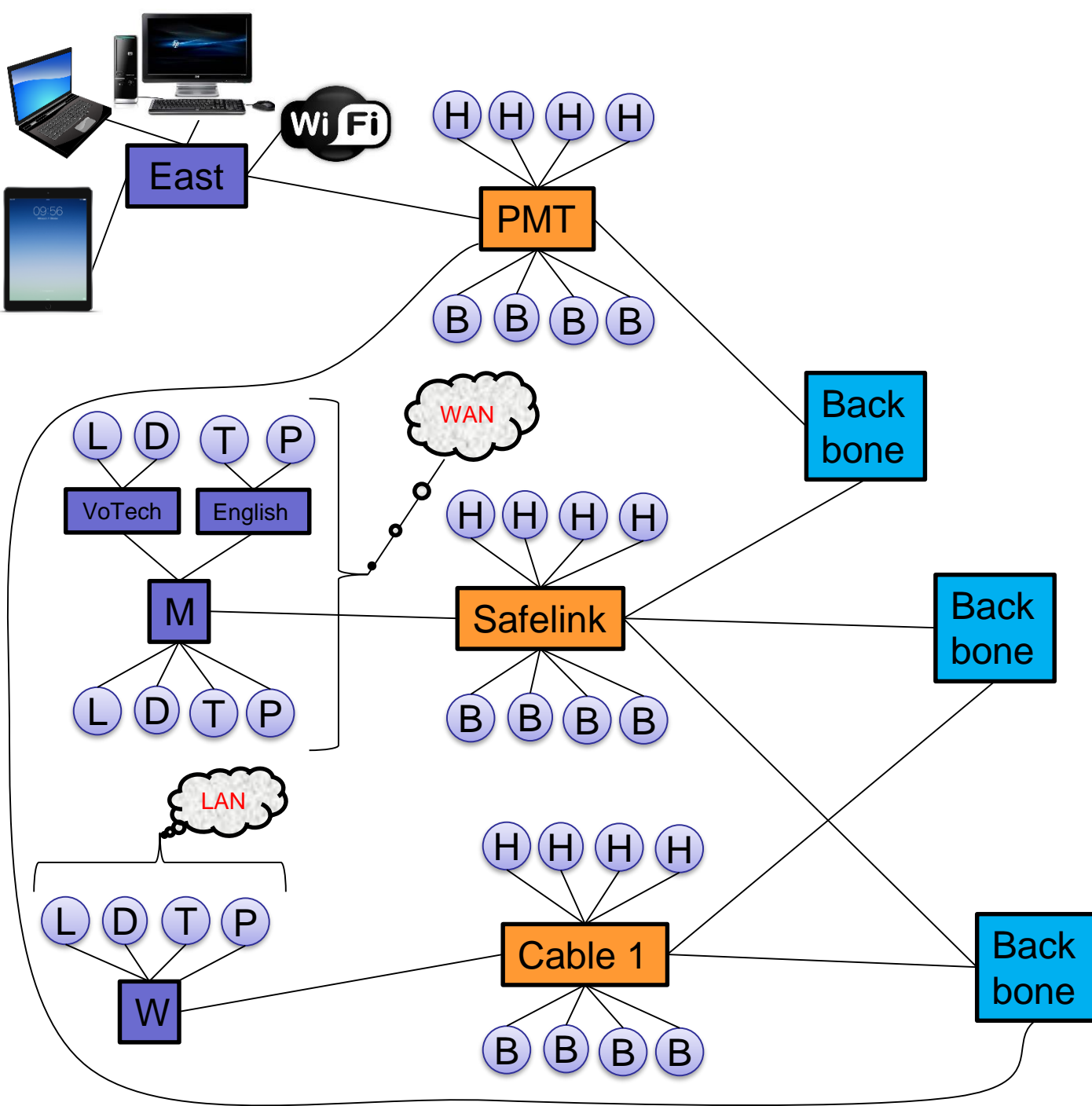


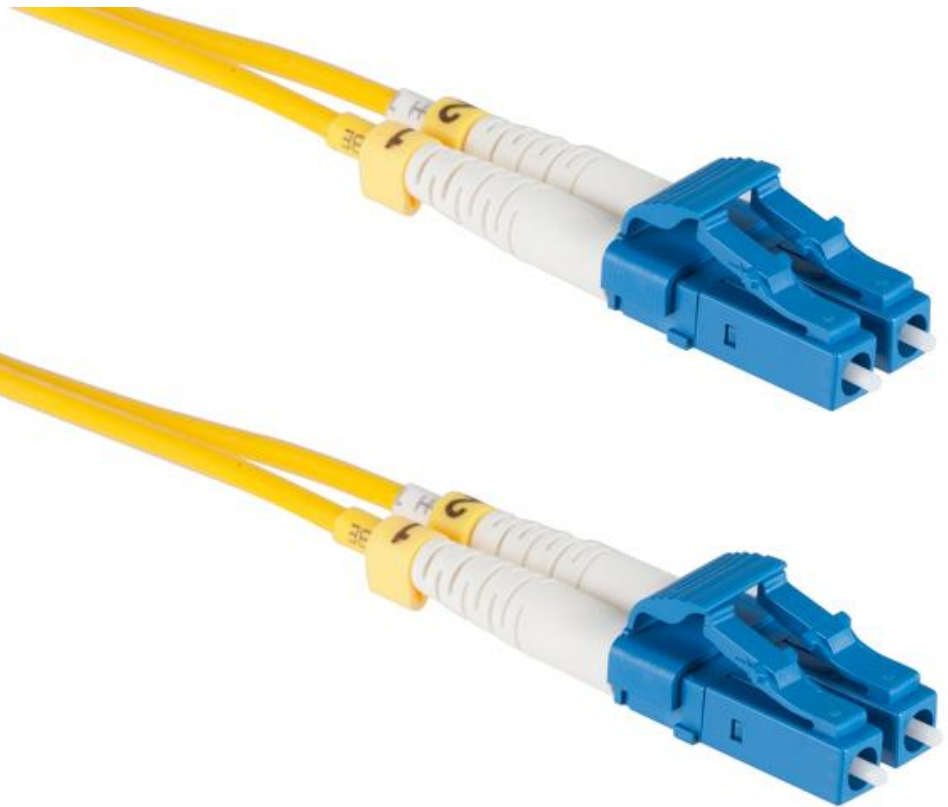
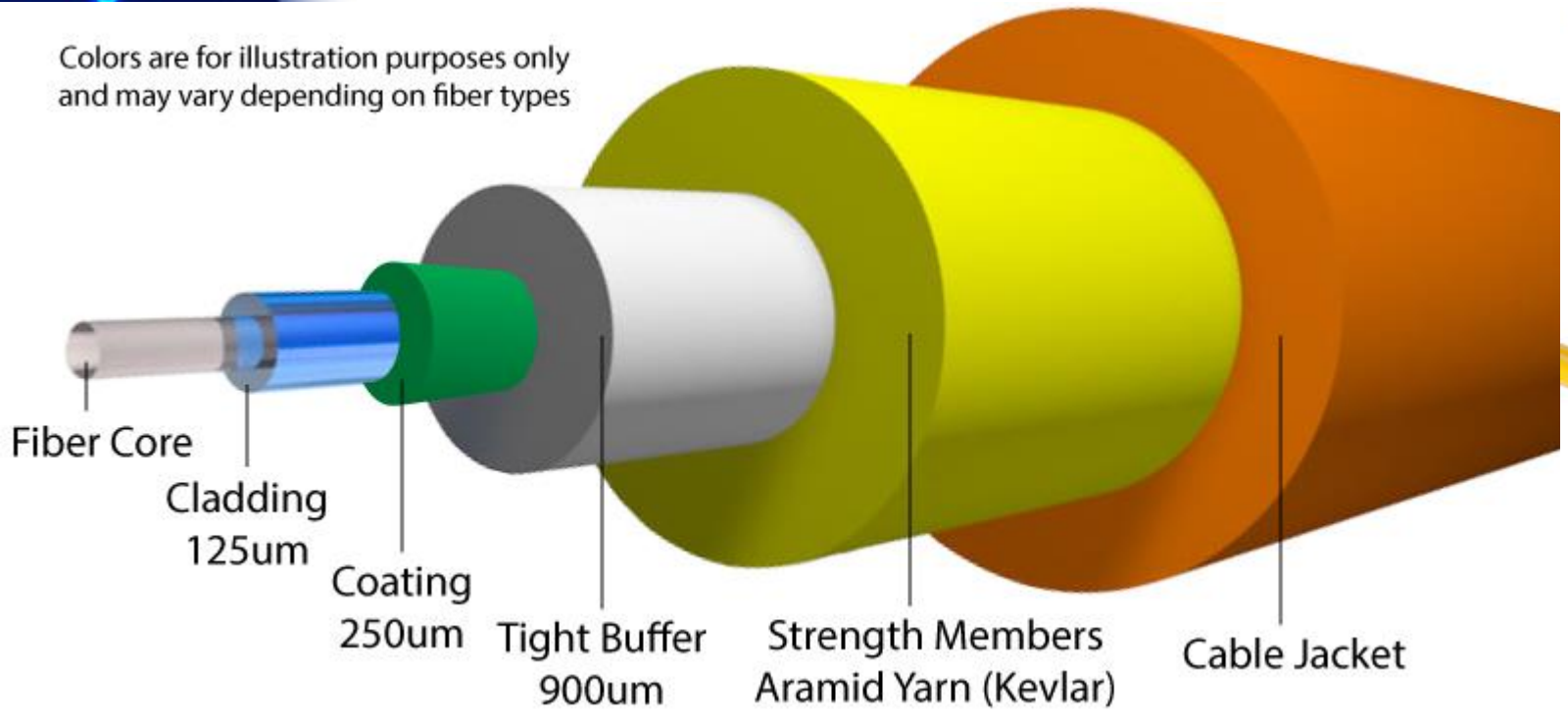




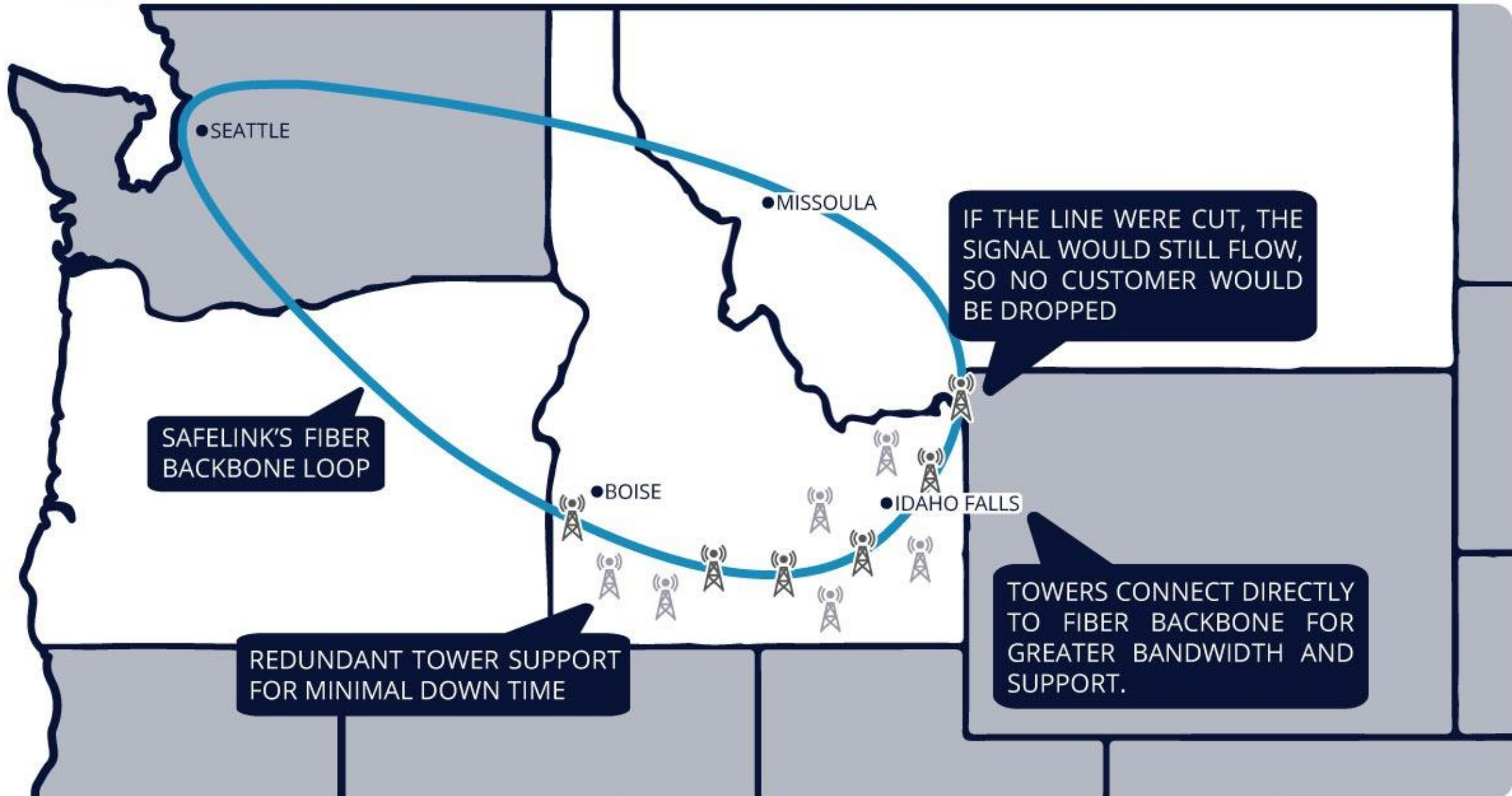


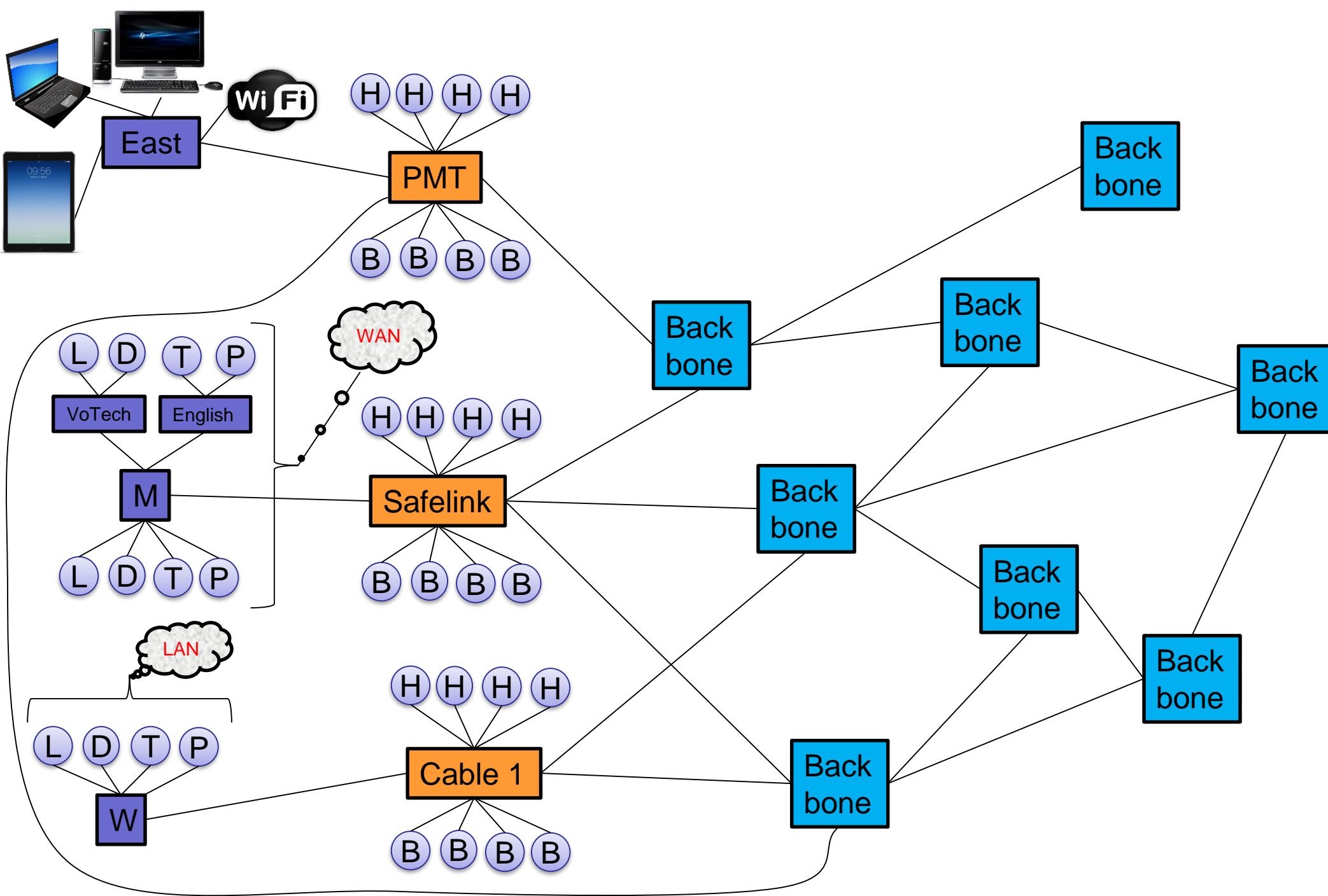


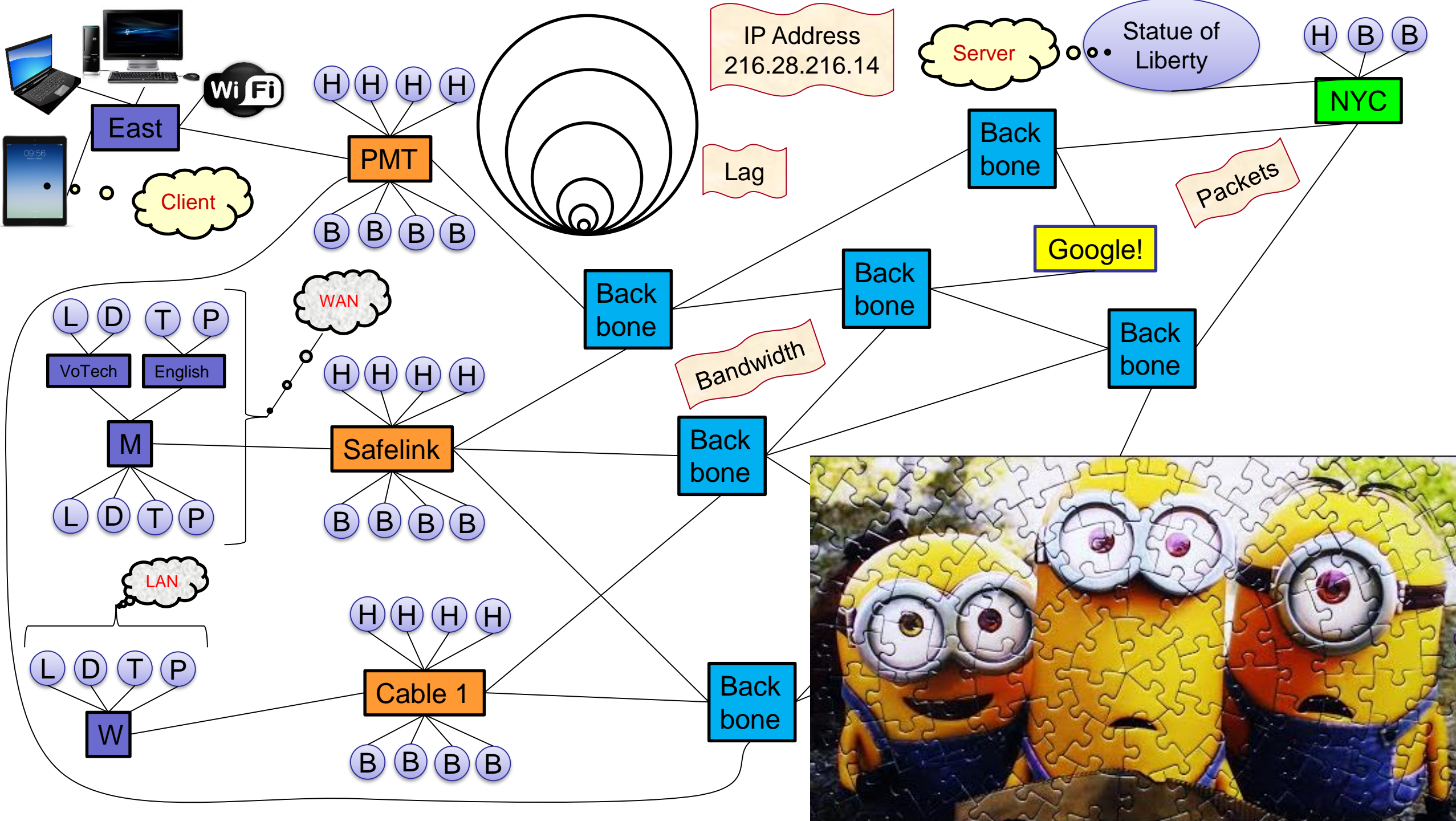




DOES YOUR INTERNET DO THIS?









SHARE  


Result ID [7837664116](#)

 RESULTS


 SETTINGS

 PING ms

13

 DOWNLOAD Mbps

498.51

 UPLOAD Mbps

485.99

PMT

72.22.225.250



GO



Syringa Networks

Idaho Falls, ID

[Change Server](#)

```
Pinging google.com [216.58.216.14] with 32 bytes of data:  
Reply from 216.58.216.14: bytes=32 time=21ms TTL=54  
Reply from 216.58.216.14: bytes=32 time=21ms TTL=54  
Reply from 216.58.216.14: bytes=32 time=21ms TTL=54  
Reply from 216.58.216.14: bytes=32 time=21ms TTL=54
```

```
Ping statistics for 216.58.216.14:  
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
    Minimum = 21ms, Maximum = 21ms, Average = 21ms
```

A byte is a group of eight 0's or 1's in binary (01001010)

A ms (millisecond) is a thousandth of a second.

Tracing route to google.com [216.58.216.14]
over a maximum of 30 hops:

1	<1 ms	<1 ms	<1 ms	10.52.0.1
2	1 ms	<1 ms	<1 ms	10.2.0.1
3	<1 ms	<1 ms	<1 ms	192.168.1.1
4	1 ms	<1 ms	1 ms	72.22.225.193
5	9 ms	9 ms	9 ms	ip-66-232-69-213.syringanetworks.net [66.232.69.213]
6	*	*	*	Request timed out.
7	21 ms	21 ms	21 ms	209.85.172.116
8	22 ms	22 ms	21 ms	108.170.247.161
9	21 ms	21 ms	21 ms	108.170.237.185
10	21 ms	21 ms	21 ms	lax02s21-in-f14.1e100.net [216.58.216.14]

The IP address to my computer

The IP address our server


The IP address at PMT

Servers on the backbone

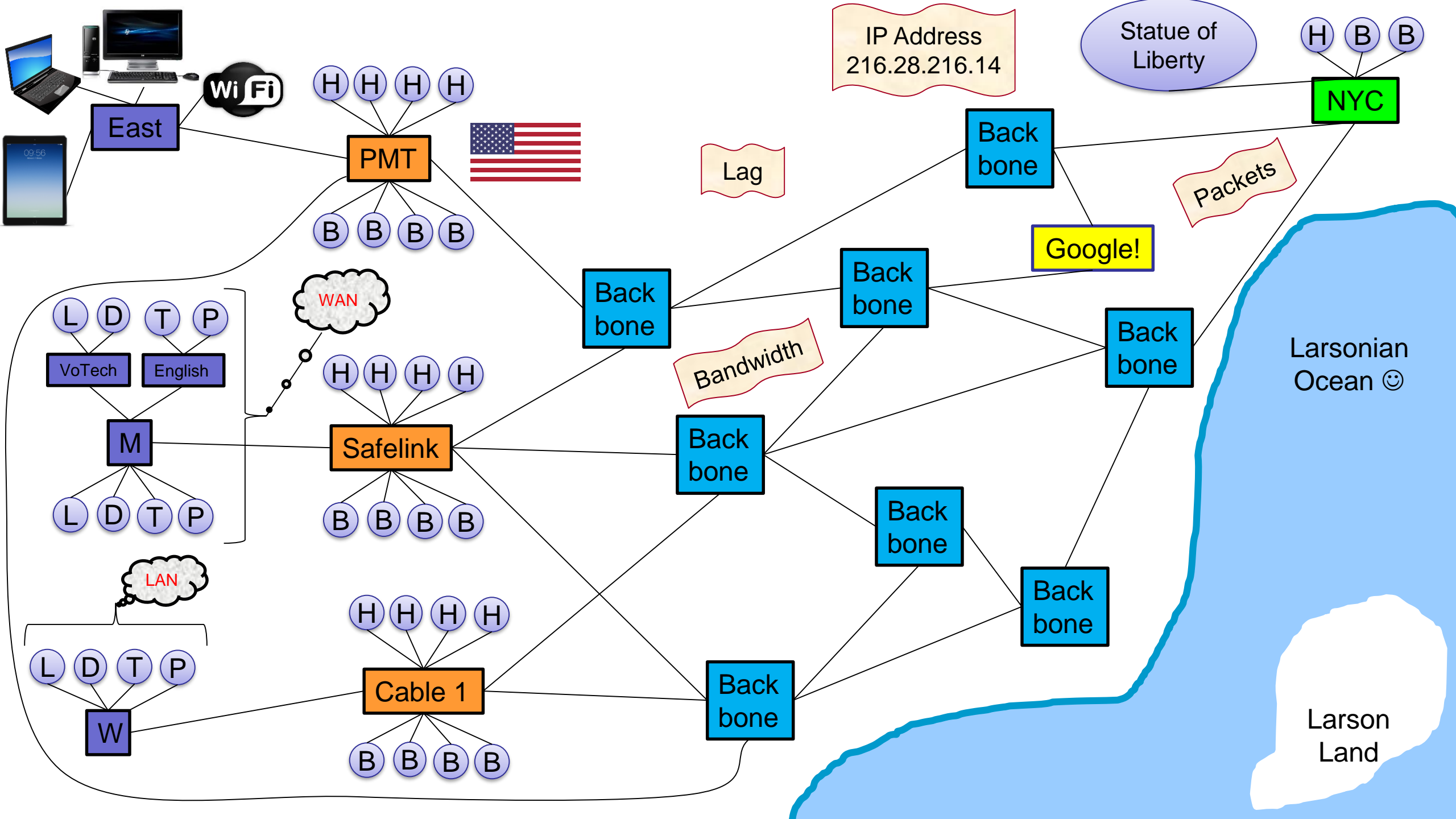
Where Google is

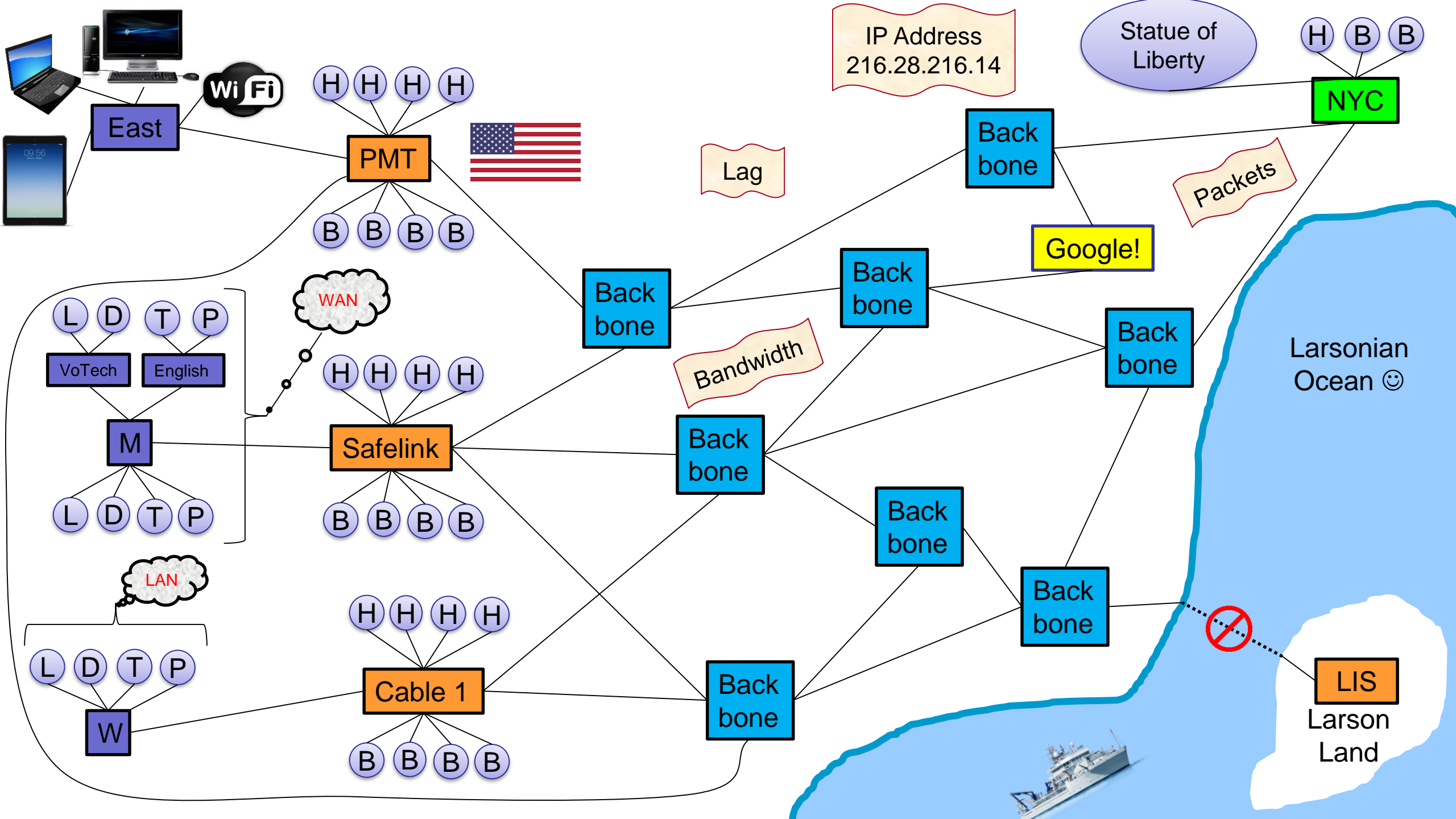
Trace complete.





How do we get Internet to another
continent separated by water, or an
island?







1858



2008



