



Editorial

LONDON, OCT 4 (AP) – MOSCOW RADIO SAID TONIGHT THAT THE SOVIET UNION HAS LAUNCHED AN EARTH SATELLITE. With this remarkable sentence I would like to welcome you to the first issue of the Sputnik Gazette in 2007. This year marks the half centennial of our object of adoration: The Sputnik satellite, which was launched on October 4, 1957.

The first issue in 2007 gives an overview on the commemorating activities of this year and introduces this year's major topics. It includes the Sputnik Manifest, a very open call for participation and recent information on subscribing to the Sputnik Gazette.

THE SPUTNIK MANIFEST

1. Sputnik is a project of Modernism – The faith in a progressive future.
2. Sputnik paths – on the height of Fordism – the way to post-Fordism.
3. Sputnik was the first truly global radio transmitter.
4. Sputnik – Thanks to you we enjoy Internet, Global Positioning System and the Integrated Circuit.
5. Sputnik is the icon of globalisation.

We, the Multitudes of the World, celebrate the 50th Anniversary of the heroic Sputnik Launch as the Advent of Globalisation!

Very Open Call

The Festive Committee of the International Sputnik Day 2007 invites you to participate in a global event to commemorate the advent of the first truly global radio transmitter and the predecessor of many technological developments which benefit humankind. How? – It's up to your imagination. Invite friends for a festive dinner, produce a radio program, create a Website using the newest technologies, organize a public commemorating demonstration – all in honour of the Sputnik 1. The dates and activities will be published at <http://sputnik.irmielin.org/> and of course in the Sputnik Gazette. Major date for the festivities is October 4, 2007.

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Subscription

You may subscribe online to the Sputnik Gazette at <http://sputnikgazette.irmielin.org> using the Leanest Distribution System

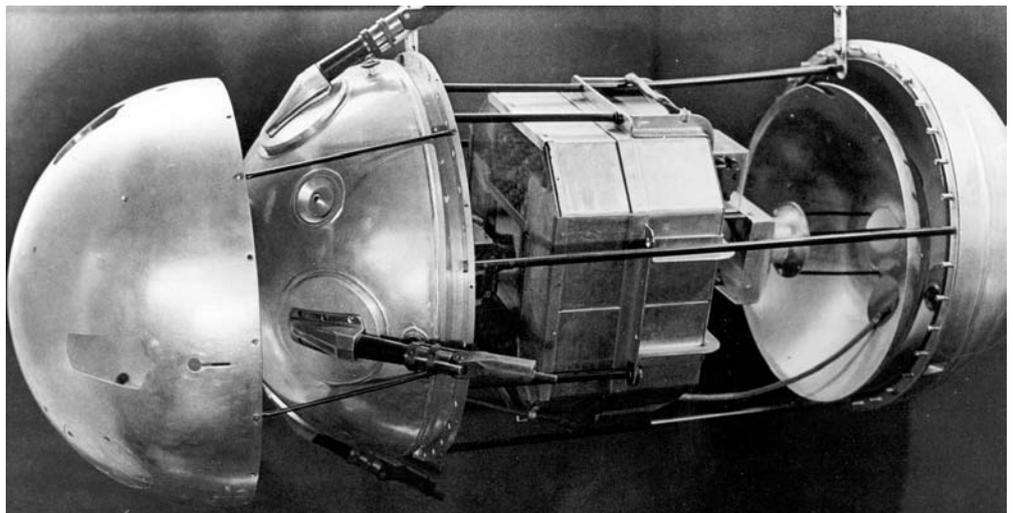
Sputniks' repercussions

In the night of October 4, 1957, at 22.28 hrs Moscow time (19.28 hrs UTC/GMT), the Soviet Union started the Sputnik Satellite on a slightly modified R7 intercontinental ballistic missile. The sphere of 58 cm diameter, 83,6 kg weight was equipped with four antennas of 2,4 m – 2,9m length and a radio transmitter. The transmitter sent a beep-signal on short wave (20.005 and 40.002 MHz) until batteries ran out after 21 days. The satellite orbited earth until January 4th, 1958.

A wave of irrational fear called "Sputnik Shock" among the overwhelmed US public, which was fuelled by successful Soviet propaganda, combined with the military's realization of a new threat led to the establishment of two major

ARPA and the participating universities, was intended for time-sharing on multiple mainframe computers. The ARPANAET became one of the initial nodes of today's Internet.

Also the development of the transistor's successor, the integrated circuit, was supported through an unexpected broad military and civil demand for computing power. "A substantial push for something new [the integrated circuit – F.H.] had come from the U.S. Air Force, which needed ever more sophisticated electronic equipment onboard ballistic missiles and airplanes." (Ceruzzi, Paul E.: A History of modern Computing. MIT Press 1998, p 179) In addition the Apollo program created the demand for integrated circuits to be used in Apollo guidance computers, which led to falling purchase prices from 1000\$ to about 30\$ per chip within 6 years. The early technology maturity and early product maturity must be embedded in the context of the post-Sputnik-shock governmentally supported basic research in the US.



scientific programs in the US: The ARPA (Advanced Research Projects Agency) by the Department of Defense in February 1958 and the civil NASA (National Aeronautics and Space Administration) in October 1958. Comparable with the efforts that were put into the Manhattan Project (construction of nuclear bomb) after Pearl Harbour, the US establishes a governmentally funded research body, which was a novelty regarding the fundamentally public financing of research and development. On May 25, 1961 after the Soviet Union also managed to have the first human in space, President John F. Kennedy announces the Men on the Moon program: "I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to the earth. No single space project in this period will be more impressive to mankind, or more important for the long-range exploration of space; and none will be so difficult or expensive to accomplish."

The promised expenses which were channelled through bodies like the ARPA and NASA supported a series of technical developments to occur in an unexpected short period of time. The development of ARPANET, co-sponsored by

Parts of the Global Positioning System (GPS) were also inspired by the Sputnik. Scientists at the Applied Physics Laboratory (APL) in Baltimore (NY) realized that it was possible to determine Sputniks' trajectory by observing the Doppler measurements of Sputnik's beep. "Dr. Frank T. McClure of APL noted conversely, if the satellite orbit were known, position on the earth could be determined using these same Doppler measurements." (Pace et. al. 1995, p. 238)

After the end of the Man on the Moon program the laid of NASA scientists of settled down in an area, now known as Silicon Valley and founded commercial enterprises in computing technology and software production. Thus Sputnik paved the way for many technological developments which now form the basic technological layer for what is called Globalisation. (Francis Hunger)

Thank You – Soviet Union!

Thank you – Sputnik!

