**Moscow Washington Hotline**

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[](http://en.wikipedia.org/wiki/File:The_Pentagon_January_2008.jpg)

The Pentagon, outside Washington D.C.

[](http://en.wikipedia.org/wiki/File:Moscow_Kremlin_from_Kamenny_bridge.jpg)

The Kremlin in Moscow

The **Moscow–Washington hotline** is a system that allows direct communication between the leaders of the United States and Russia. This hotline was established in 1963 and links the Pentagon with the Kremlin. Although in popular culture known as the "**red telephone**", the hotline was never a telephone line, and no red phones were used. The first implementation used teletype equipment, which was replaced by facsimile units in 1988. Since 2008 the Moscow–Washington hotline is a secure computer link over which messages are exchanged by email.

**Origins of the hotline**

The "hotline", as it would come to be known, was established following an agreement on June 20, 1963, by the signing of the "Memorandum of Understanding Regarding the Establishment of a Direct Communications Line" in Geneva, Switzerland, by representatives of the Soviet Union and the United States at the Eighteen-Nation Disarmament Committee, after the events of the Cuban Missile Crisis made it clear that reliable, direct communications between the two nuclear powers were a necessity.

During the crisis, it took the United States nearly twelve hours to receive and decode Nikita Khrushchev's 3,000-word initial settlement message - a dangerously long time in the chronology of nuclear brinkmanship. By the time the U.S. had drafted a reply, a tougher message from Moscow had been received demanding that U.S. missiles be removed from Turkey. White House advisors at the time thought that the crisis could have been more quickly resolved and easily averted if communication had been faster.

**Technology**

The Moscow–Washington hotline was intended for record communications only, based on the idea that spontaneous verbal communications could lead to miscommunications and misperceptions. Leaders would state their message in their native language, which would be translated at the receiving end.

[](http://en.wikipedia.org/wiki/File:T63-SU12-TP_NCM.jpg)

An East German Siemens T63-SU12 teleprinter from the hotline, as displayed in the National Cryptologic Museum of the NSA. The black box behind the teleprinter is an ETCRRM II encryption machine.

**Teletype**

The first generation of the hotline consisted of a full-time duplex wire telegraph circuit. This was routed Washington, D.C. – London – Copenhagen – Stockholm – Helsinki – Moscow. The Washington–London link was originally carried over the TAT-1, the first submarine transatlantic telephone cable. A secondary radio line was routed Washington, D.C. – Tangier – Moscow, and served as a back-up and for service communications. This network was originally built by Harris Corporation.

In July 1963 the United States sent four sets of teleprinters with Latin alphabet to Moscow for their terminal. A month later the Soviet equipment, four sets of German teleprinters with Cyrillic alphabet made by Siemens, arrived in Washington. The hotline between both capitals became operational on August 30, 1963.

**Encryption**

The encryption of the teletype transmissions was realized by a device called Electronic Teleprinter Cryptographic Regenerative Repeater Mixer II (ETCRRM II), which used the unbreakable one-time pad cryptosystem. Each country prepared the keying tapes used to encode its messages and delivered them via its embassy in the other country. A unique advantage of the one-time pad in this case was that neither country had to reveal more sensitive encryption methods to the other.

**Satellite**

In September 1971, it was decided to upgrade the system with better technology. The countries also agreed for the first time when the line should be used. Specifically, they agreed to notify each other immediately in the event of an accidental, unauthorized or unexplained incident involving a nuclear weapon that could increase the risk of nuclear war. The main telegraph line was complemented by two new satellite communication lines, one formed by two US Intelsat satellites and the other composed of two Soviet Molniya II satellites. This phase of upgrade lasted from 1971 to 1978, and in the process the Washington-Tangier-Moscow radio line was eliminated.

**Facsimile**

In May 1983, President Reagan proposed to upgrade the hotline by the addition of high-speed facsimile capability. This was followed by bilateral negotiations, leading to an agreement signed by the United States and the Soviet Union on July 17, 1984. According to the agreement, facsimile terminals were installed at each end of the hotline in 1985. After several years of testing and use, it proved to be so reliable that the teletype circuits were turned off in 1988. As part of the facsimile upgrade, the Soviets transferred the hotline link over to the newer, geostationary Gorizont-class satellites of the Statsionar system.

**Email**

In 2007 the Moscow–Washington hotline was upgraded to a dedicated computer network, linking the Washington and Moscow terminals. This network runs over the two existing satellite links and a new fiber optic cable, which replaced the old back-up cable link. Commercial software is used for both chat and email. The chat function is used for coordination of link operations, while email is used for sending the actual messages. Transmission is nearly instantaneous. These capabilities became operational on January 1, 2008.

**Usage of the hotline**

The hotline became operational on August 30, 1963, by transmitting the first test messages. Washington sent Moscow the text "The quick brown fox jumped over the lazy dog's back 1234567890", which is a so-called pangram of all letters and numbers of the Latin alphabet, which made sure that all the keys on the teletypes were operational. The Soviets sent back a poetic description of Moscow's setting sun.

The next use of the hotline was in 1967, during the Six-Day War, when both superpowers informed each other of military moves which might have been provocative or ambiguous. The main concern at hand was the close proximity of the Soviet Black Sea Fleet and the US 6th Fleet in the Mediterranean and how to prevent possible misunderstanding between the two groups.

The Moscow–Washington hotline was also used in 1971 during the 1971 Indo-Pakistani War; during the Yom Kippur War (1973 Arab–Israeli War), when there was a United States nuclear alert; in 1974, when Turkey invaded Cyprus; in 1979, when the Soviet Union invaded Afghanistan, and several times during the Reagan Administration, with the Soviets querying about events in Lebanon and the United States commenting on the situation in Poland.

**Other hotlines with Moscow**

Another hotline for record communications between Washington and Moscow is part of the Nuclear Risk Reduction Center, which was initiated by Ronald Reagan in 1988.

In 2012 it was announced that a proposal was being negotiated with Moscow to add cyber warfare to the topics to be discussed on the hotline.

**In popular culture**

[](http://en.wikipedia.org/wiki/File:Jimmy_Carter_Library_and_Museum_99.JPG)

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A non-dial "Red Phone" from the time of President Jimmy Carter, which wasn't part of the hotline, but probably of the Defense Red Switch Network.

In numerous television series, movies, video games and other places, the hotline between Washington and Moscow is represented by a red phone, although the real hotline never was a telephone line. More realistic was Tom Clancy's novel *The Sum of All Fears* and the movie *The Sum of All Fears*, in which a text-based communications system was depicted.

**Television series**

Perhaps the most well-known reference is from the 1966 Batman TV series, so popular that even now the term Bat phone is often interchangeable with the actual "Red Phone" reference. Though the fact the Bat-phone concept itself is similar enough to the Red Phone (a way of direct communication in a crisis), its similarity is solidified in that the phones were almost identical in appearance on the TV show to the actual Red Phone as the public knew it at the time.

A "red phone" has been shown in the *Stargate SG-1* television series, linking the fictional Stargate Command directly with the President.

During the episode "Take This Sabbath Day" of *The West Wing*, President Bartlet comments that the red phone hotline was discontinued before he took office.

**Films**

A hotline telephone was depicted in the film *Fail-Safe* as the "Red 1 / Ultimate 1 Touch phone", and also in Stanley Kubrick's film *Dr. Strangelove*, both from 1964 and both loosely based on Peter George's Cold War thriller novel *Red Alert* from 1958.

The red phone also appears in the film *Airport*, that was based on a novel by Arthur Hailey.

A red telephone appears in at least two of the James Bond films:

* in *Moonraker* from 1979, the head of MI6 uses a bright red phone set for conversations with military commanders.
* in *For Your Eyes Only* from 1981, a bright red telephone is used by senior MI6 officials to report to Prime Minister Margaret Thatcher.

**Video games**

In the video game *Portal*, the "red phone" system is installed so that people monitoring the AI GLaDOS could send out a warning if it became hostile. The system failed as GLaDOS managed to cut the line to the phone and kill everyone in the Enrichment Center with a deadly neurotoxin.

In the real-time strategy game Command & Conquer: Red Alert 2 by Westwood Studios the "red phone" is shown in the opening sequence to the game where the US President is seen calling Premier Alexander Romanov (the Russian President) to call off an apparent invasion by the Soviet Military on the United States. The sequence shows Yuri using his mind control technology over a secured phone line to NORAD, causing US military personnel to turn on each other and thus preventing a nuclear counter-attack on the Soviets.

It also appears in the 2010 video game, *Call of Duty: Black Ops* as an Easter Egg in the 'Five' Zombies map. If the player was to answer 3 red phones in the Pentagon, a song would play by the rapper Eminem.

In the 2004 video game, Metal Gear Solid 3: Snake Eater Soviet Premier Nikita Khrushchev calls U.S. President Lyndon Johnson over the red phone demanding explanations of a fictional nuclear explosion committed on Soviet soil by a rogue US unit and a turned Soviet colonel.

In the opening sequence for the video game *Civilization IV: Beyond the Sword*, one of the scenes shown is of a US President picking up a red phone in response to (or calling for) what may be a nuclear launch based on information from a satellite image.

The cover art for the video game *Balance of Power* features a red telephone prominently in the foreground, with the background having an eagle representing the United States and a bear representing Soviet Russia, in postures of attack against each other.

**Other**

The "red phone" was the centerpiece of television commercials used in the 1984 Democratic primary and 1984 presidential election and the 2008 Democratic primary elections. In 1984, an advertisement made by Bob Beckel and Roy Spence on behalf of candidate Walter Mondale suggested that, "The most awesome, powerful responsibility in the world lies in the hand that picks up this phone." The advertisement was intended to raise questions about candidate Gary Hart's readiness for the presidency.

The red phone was also featured prominently in an advertisement from that year targeting President Ronald Reagan's Strategic Defense Initiative. In the second ad, the ringing phone goes unanswered while the narrator says, "there will be no time to wake a president – computers will take control." Roy Spence revived the "red phone" idea in 2008 in an advertisement for candidate Hillary Clinton.

A song entitled 'The Red Telephone' appears on Love's 1967 album *Forever Changes*. While the phone line is not explicitly mentioned in the lyrics, the title sets the tone for the song's themes of pessimism and uncertainty.

The original Apple Store had a red phone behind the Genius Bar which was a direct line to Apple headquarters to solve problems the local technicians cannot figure out.

BBA Aviation's Signature Flight Support location at Ronald Reagan Washington National Airport has a faux red phone with the presidential insignia which is used to orchestrate day to day ground transportation. It is speculated this is an homage to the close proximity of the airport to the White House.