Too Close for Comfort

"The probability of a nuclear explosion happening by accident was far greater than the probability that someone would deliberately start a war" Eric Schlosser, Command and Control: Nuclear Weapons, the Damascus Accident and the Illusion of Safety

Thirty six NUCLEAR WEAPONS accidents, mistakes, human errors and almost catastrophes

1. November 5, 1956: Suez Crisis Coincidence

During this crisis British and French forces attacked Egypt. The Soviets backed the Egyptians. There were false reports that Soviet planes and ships were moving toward Egypt. The U.S worried that Russian intervention might trigger the NATO mutual defense agreements with possible nuclear strikes against Russia. Luckily all the reported Russian military actions had non-threatening explanations including a flock of swans being mistaken for Russian MIG fighter planes.

2. January 31, 1958: An accidental fire could have detonated a hydrogen bomb in Morocco

On a runway in Morocco, a B-47's tires blow out, starting a fire that melted the plane—and its Mark 36 hydrogen bomb—into an 8,000-pound hunk of radioactive slag. The high explosive triggers and nuclear core burned but didn't detonate. Two weeks later a Department of Defense statement on nuke safety said, "...it can be stated with assurance that the possibility of an accidental nuclear explosion . . . is so remote as to be negligible."

3. March 11, 1958: Human error dropped an A-bomb on South Carolina

A B-47 flying over rural Mars Bluff, South Carolina, accidentally dropped a Mark 6 atomic bomb into a family's backyard. The bomb did not have its nuclear core, but its high explosives trigger wrecked the home, injure six family members, and left a crater 50 feet wide and 35 feet deep. The crater is now the only nuclear accident tourist attraction in the U.S.

4. October 5, 1960: Mistaking the moon for rockets.

On this day the newly constructed radar station in Thule, Greenland mistakenly reported the launch of dozens of Soviet missiles. In Colorado the nuclear forces command facility (NORAD) went to the highest level of alert and began preparations for a retaliatory strike. Luckily someone realized Soviet Premier Nikita Khrushchev was visiting New York at the time and the alert was canceled. A later investigation found that the radar had mistaken the moon rising over Norway as Soviet missiles.

5. January 24, 1961: The time we bombed North Carolina

A B-52 bomber carrying two nuclear bombs broke apart in midair, causing the pilots to eject and the bombs to drop. The force of the accident caused the arming sequence of the bombs to start. One bomb hit the ground and shattered after its parachute failed. The other bomb's parachute deployed, with only one of the six safety switches preventing a nuclear explosion. That switch was later found to be defective in many bombs and was replaced. The uranium core of one bomb sunk into a swamp and has never been recovered. After the incident, Defense Secretary Robert McNamara stated. "By the slightest margin of chance, literally the failure of two wires to cross, a nuclear explosion was averted."

6. November 24, 1961: A bad phone switch result in an alert.

Contact with two early warning radar stations in Greenland was lost . Because it was unlikely to lose touch with both sites simultaneously, officials ordered all bombers to prepare for takeoff. Luckily, a US plane circling Greenland made contact with the radar operators and the alert was called off. A faulty phone switch was eventually blamed.

7. October 16 to November 20, 1962: The Cuban Missile Crisis

This was the closet the world ever came to nuclear war. The confrontation was caused by the U.S. putting nuclear missiles in Turkey and Russia responding with missiles in Cuba. For 35 days the world teetered on the brink. Secretary of Defense Robert McNamara later said "we were lucky" we didn't destroy the world.

8. October 25, 1962: Cuban Missile Crisis, intruder in Duluth

A guard at the Duluth Air Force Base saw a figure climbing the security fence. He shot at it, and activated the "sabotage alarm" which automatically set off sabotage alarms at all bases in the area. At Volk Field, Wisconsin, the alarm was wrongly wired, and the Klaxon sounded which ordered nuclear armed F-106A interceptors to take off. Communication with Duluth showed there was an error. The original intruder was a bear.

9. August-October, 1962: U2 Flights into Soviet Airspace

U2 high altitude reconnaissance flights from Alaska occasionally strayed unintentionally into Soviet airspace. During the Cuban missile crisis on October 26, a U2 pilots strayed into Soviet territory. Russian fighters were sent to shoot it down. Nuclear armed American fighters were sent to escort it back to Alaska and prevent Russian planes from entering U.S airspace. US fighter pilots had discretion to fire their nuclear missiles. Luckily, the F-102s never encountered the Russian MiGs

10. October 1962: A false attack on Florida

In the midst of the 1962 Cuban Missile Crisis, a New Jersey-based radar base reported a missile launch from Cuba toward Florida, with an estimated flight time of just two minutes. The false alarm was later traced to an unlikely series of events: a test tape simulating a missile launch from Cuba was being run and at the same time a satellite appeared in the same orbit and trajectory that a Cuba-launched missile would use. Redundant radar systems that would have otherwise detected the false alarm were offline.

11. November 1962: Thank Admiral Vasili Arkhipov

During the Cuban Missile Crisis the U.S imposed a naval blockade of Cuba. Russia had four submarines armed with nuclear torpedoes in route to Cuba. One of them was detected by the U.S. Navy which began harassing it with "practice" depth charges. The Soviet sub captain had lost communication with Moscow and thought war may have started. He ordered his sub to load nuclear torpedoes to fight back. Luckily the submarine fleet commander, Admiral Arkhipov, was on board and refused to approve. He ordered the sub to surface and the incident did not set off a nuclear war.

12. January 17, 1966: The time we bombed Spain

A B-52 carrying four nuclear weapons collided with a tanker during routine midair refueling over Palomares, Spain. Both planes crashed. The conventional explosives in two of the bombs detonated on impact. The nuclear warheads were not triggered, but plutonium—radioactive and toxic— was released. Over 1,400 tons of contaminated soil was removed from the crash site but 2015 tests showed lingering contamination.

13. May 23, 1967: A solar storm triggers an alert

Two decades into the Cold War, multiple U.S. early warning radars suddenly stopped working. This was a time of high tension between the U.S. and Soviet Union. U.S. military commanders thought the radars might have been jammed and were the beginning of a Soviet attack. A full, high level alert was ordered including nuclear bombers. Luckily, space-weather forecasters discovered the real cause. A powerful solar flare had jammed the radar. A few military scientists and their knowledge of the sun activity averted a nuclear mistake.

14. January 21, 1968: B-52 Crash near Thule, Greenland

A B-52 flying near Thule AFB, Greenland caught fire and the crew had to bail out. There had been no time to radio HQ in Colorado and the plane crashed.. The high explosive triggers for the nuclear bombs on board exploded but luckily there was no nuclear explosion. If a nuclear detonation had occurred it could have been perceived as an attack with tragic consequences.

15. October 25, 1973: False Alarm During Middle East Crisis

U.S. intelligence reported the USSR planned to intervene for the Egyptians against Israel. The U.S. went to alert level DEFCON 3. On October 25, mechanics repairing an alarm at Kinchole Air Force Base (MI) accidentally activated the base alarm system. B-52 crews prepared to take off. The false alarm was recognized in time but if the bombers had taken off the Soviets might have mistaken the accident for the beginning of an attack.

16. November 9, 1979: The attack of a training scenario

Computers at multiple U.S nuclear command centers reported a nonexistent large scale Soviet attack. Nuclear forces went on alert. The national security adviser was notified that the Soviet Union had launched 250 ballistic missiles (minutes later revised to 2200). President Carter had only 3 to 7 minutes to decide to retaliate. Luckily ground radar systems showed the attack was a false alarm. The real "attack" was from a training scenario that had been accidentally loaded into the computers.

17. March 15, 1980: Soviet training exercise looks like an attack

The Soviet Union launched four submarine-based missiles from near the Kuril Islands as part of a training exercise. One of the launches appeared to have a trajectory aimed at the United States causing a high lever "threat assessment." Luckily warning systems indicated it was a false alarm

18. June 3 1980: A computer chip fails

At about two-thirty in the morning, computers at three U.S. nuclear command centers issued a warning of a Soviet missile attack. U.S. Air Force ballistic-missile crews removed their launch keys from the safes, bomber crews ran to their planes and fighter planes took off to search the skies. It was a false alarm. An investigation later found that a defective computer chip in a communications device at the Colorado NORAD headquarters had caused the false alarm. The chip cost forty-six cents. False alerts of this kind were not a rare occurrence.

19. September 19, 1980: A Maintenance Accident

While performing routine maintenance on a nuclear ICBM missile a large socket wrench socket was dropped. It fell 70 feet into the silo punching a hole in the rocket's thin metal skin and releasing a highly flammable propellant. Efforts to stop the leak failed and the rocket exploded. One person is killed, 21 injured and the nuclear warhead land 200 yards way. Safety features prevented a nuclear explosion which is good because this warhead had three times the power of all bombs dropped in WW2 including Hiroshima and Nagasaki.

20. September 26, 1983: Luck and a Russian army officer saves the world

Lt. Col. Stanislav Petrov was on duty this night because another officer was sick. Petrov just happened to be an engineer familiar with the deficiencies of the new Soviet satellite early warning system. So he was skeptical when the system reported 5 incoming ICBM missiles. He reasoned the U.S. would not launch a surprise attack with five missiles. Petrov told his superiors it was a false alarm before he knew that to be true putting his career at risk. It was a false alarm. But if the satellite data had indicated the launch of many missiles, or if a different officer had been on duty, the outcome could easily have been a catastrophe. Petrov was reprimanded for his breach of procedures.

21. November 7, 1983: The war game that almost became real

Pres. Ronald Reagan called the Soviet Union an "evil empire." It was a time of high Cold War tension. Able Archer 83 was an annual NATO war game which involved simulating a nuclear war. The exercise was very realistic and participants included some European heads of government. The exercise alarmed Soviet analysts who feared that it was a cover for an actual nuclear attack. Soviet nuclear missiles were placed on high alert and readied for launch. Robert Gates, then at the CIA, later said, "We may have been at the brink of nuclear war and not even known it."

22. August 11, 1984: A mic check that was no joke

During a sound check prior to his national radio address, President Ronald Reagan improvises, "My fellow Americans, I'm pleased to tell you today that I've signed legislation that will outlaw Russia forever. We begin bombing in five minutes." When news of the joke leakd the world was not amused.

23. January 25, 1995: A Norwegian scientific research rocket triggers a Russian full alert

Four years after the breakup of the Soviet Union, the launch of a small atmospheric research rocket from an island in Norway triggered Russia's early warning system. The rocket was mistaken for a U.S. submarine launched missile. The Russians thought it might be intended to detonate a nuclear warhead high in the atmosphere "blinding" their radars before a larger attack. Russian nuclear forces went on full alert and President Boris Yeltsin activated launch codes in preparation for retaliation. Norway had notified Russia in advance but this information hadn't filtered down to the right people.

24. July 28, 2012: "Terrorist" attack by an 82 year old nun

Three Catholic peace activists easily broke into a "secure" nuclear weapons production facility in Oak Ridge, TN, to protest nuclear weapons. An 82 year old nun and 2 middle aged men cut and walked through security fences undetected. They spent over an hour spray painting messages on the facility walls and praying before being arrested. Thankfully they were non-violent peace activists and not real terrorists.

25. January 2013: Hacking Nukes

A Defense Science Board report warns the nuclear command-and-control system's may susceptible cyber attacks and hacking. Numerous reports since find similar conclusion. A 2018 report says, "These risks raise significant doubts as to the reliability and integrity of nuclear weapons systems in a time of crisis, regarding the ability to: a) launch a weapon; b) prevent an inadvertent launch; c) maintain command and control of all military systems..."

26. 1969, 2003, 2014: Incompetence and bad behavior

One risk factor with nuclear weapons is normal human behavior. Over the years there have numerous incidents of nuclear force personnel failing proficiency tests or being caught drinking or doing drugs on-the-job. Youth, testosterone, bad behavior and nukes are not a good mix.

27. 1980's: Doomsday on auto-pilot

In the early 1980s, with Cold War tensions at an all-time high, the Soviet Union began work on a top-secret, semi-autonomous nuclear launch system. Its objective was to allow Russia to respond to any nuclear attack even if the United States killed all Soviet leadership. The system was created to deter a US attack but the system would only work if the United States knew it existed. But the Soviets kept it secret. The system's existence didn't become public until the 1990s.

28. 1956 to 1982: Cold War in the Middle East

Four times during the Cold War Israel and Arab countries went to war. 1956: Suez Crisis, 1967: Six-Day War, 1973: Yom Kippur War, 1982: Lebanon War. Four times U.S. and Soviet forces went on nuclear alerts in preparation for any intervention in the Middle East wars. Small wars can escalate into bigger conflicts and each of these was an opportunity for disaster.

29. August 2013, January 2014: Incompetence and Safety Failures

In 2013 the missile wing at Malmstrom AFB failed safety and security inspections. The security officer in charge is relieved of duty. In 2014, over half of Malmstrom's 183 missileers are implicated in the proficiency test cheating scandal.

30. August 2017: Arrogance is dangerous

President Donald Trump publicly proclaims that North Korea "best not make any more threats to the United States. They will be met with fire and fury like the world has never seen." This was an obvious reference to using nuclear weapons on North Korea. U.S. military and civilian leaders have threatened and advocated for using nukes during the wars in Korea and Vietnam. Any use of nukes would be a war crime under the Geneva Conventions.

31. 2022: Playing Russian roulette in Ukraine

The current war in Ukraine is another proxy war between the U.S. and Russia that could easily escalate into a larger conflict to include the use of tactical nuclear weapons. Any use of battlefield nukes is very likely to expand to full scale nuclear war. Is any political objective worth the risk of destroying the world?

32. November 1958: A nuclear bomber with a bad accident record

A B-47 carrying a Mark 39 hydrogen bomb crashes near Abilene, Texas. The bomb's conventional explosives detonate without triggering a nuclear blast. The B-47 had a poor record for accidents. Over its lifetime, 203 aircraft (10 percent of the total) were lost due to crashes, with 464 deaths. 1957-1958 was the worst 2 years when 49 B-47s crashed.

33. October 1962: A bad time to test missiles

During the Cuban missile was not a good time to ri routine tests of ICBM missiles Tensions were very high and nuclear forces were on high alert. But on Oct 26 two missiles were tested –one launched from CA and one from FL. Both targeted test ranges in the Pacific.

34. 1959: Midair collisions

Midair collisions were not uncommon with nuclear bombers and air refueling planes. One incident happened over Kentucky. Two nuclear bomb cores are found resting on a pile of broken high explosives.

35. 1958: Faulty equipment and nukes don't mix well

Warheads of all Mark 28 nuclear bombs were replaced after tests determine that an accident could trigger a nuclear detonation.

36. 2003: We're number one!

In this year half of the Air Force units responsible for nuclear weapons failed their safety inspections, despite a three-day advance warning.

Sources:

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