

The Story of the Drug BZ

Mark Unno

March 1998 (updated January 2002)

(all links worked as of March 1998)

"If you're afraid of dying, and you're holdin' on, you'll see devils tearin' your life away. But if you've made your peace, then the devils are really angels, freein' you from the world. It all depends on how you look at it."

-Louie paraphrasing Meister Eckhart at the end of *Jacob's Ladder*.

At the end of the movie *Jacob's Ladder*, the main character Jacob Singer has a talk with Michael, a chemist who explains to him that the violent deaths of the soldiers in his battalion in Vietnam were caused by a drug-induced psychosis brought about by the hallucinogen BZ, or quinuclidinyl benzilate. This drug was invented under the direction of the U.S. government to maximize the aggression of the soldiers, but it backfired when the unwitting human guinea pigs turned on one another. This is a classic conspiracy theory, but is the story of BZ actual fact or movie fiction? A little research on the internet revealed the following:

Psychiatric Oppression of African Americans

In a document on the "[Psychiatric Oppression of African Americans](#)" produced by the [Citizens Commission on Human Rights](#),¹ BZ is linked to experimentation on African American citizens of the U.S.:

At the National Institute of Mental Health Addiction Research Center in Kentucky in the mid-1950s, drug-addicted African Americans were given LSD, with seven of them kept hallucinating for 77 consecutive days. At this same center, healthy African American men were still being used as test subjects almost 10 years later, this time for an experimental drug, BZ--100 times more powerful than LSD.

This follows a long psychiatric tradition of using for experimental purposes the incarcerated, the dispossessed and others who have no voice.

This first report seems to confirm the existence of BZ, its psychoactive and psychotomimetic properties, and its abuse by government agencies. However, lack of mainstream media coverage leaves one to wonder about the actual facts. One search engine, Hotbot, however, did yield further information from organizations with more established credentials.

Psychotomimetic Chemical Weapons

In "[Psychotomimetic Chemical Weapons](#)," The [Organisation for the Prohibition of Chemical Weapons \(OPCW\)](#), an international organization opposing the use of chemical weapons, describes in detail the effects of BZ as a psychotomimetic agent:

This group of agents usually includes substances which, when administered in low doses (<10 mg) cause conditions similar to psychotic disorders or other symptoms emanating from the central nervous system (loss of feeling, paralysis, rigidity, etc.). The effects are transitory and cause inability to make decisions and incapacitation. Several such substances may be used to achieve these objectives and only a few examples are given here.

During the 1950's, studies were made of substances such as glycolic acid esters (glycolates). Particular interest was paid to 3-quinuclidinylbenzilate, BZ. The effects of this group of substances are similar to those caused by atropine. BZ causes poisoning at doses of 0.5-5 mg. Peripheral symptoms such as distended pupils, deteriorated short-distance vision, dry mouth and palpitations occur after about 30 minutes.

A serious effect of poisoning with BZ, as also with other atropine-like substances, is an increased body temperature. Deterioration in the level of consciousness, hallucinations and coma occur subsequently. Incapacitating after-effects may remain 1-3 weeks after the poisoning. Since the effect of glycolates was found to be difficult to predict, interest in continued research into this type of substance gradually decreased.

NASA Space Drugs

Indeed, researchers [Martin A. Lee and Bruce Shlain confirm](#) that the Army and other government agencies such as NASA have had research and testing facilities where substances such as BZ were created for military and domestic use:

[The] Millbrook [Institute] was Psychedelic Central for the whole East Coast. Like a magnet, it attracted illustrious visitors from all walks of life. The doors were always open, and people were constantly coming and going. One day a NASA scientist named Steve Groff dropped by for a visit. Dr. Groff wanted to observe how Leary and his clan ran their sessions. They gave him some acid, and he in turn provided samples of a secret drug known only as JB-II8, which the military had developed as an incapacitating agent. Similar to the army's BZ, this potent superhallucinogen simulated a kind of free fall, at the same time triggering bizarre visions.²

The CIA-FDA Connection

However, the question remains as to how these studies continued after research and use of hallucinogens were banned by the FDA. [Lee and Shlain report](#) that in fact the FDA was in collusion with the CIA:

Up until the early 1960s LSD studies had flourished without government restrictions and the CIA had sponsored numerous research projects to enhance its mind control capabilities. . . .

While acid was still an important part of the cloak-and-dagger arsenal [in 1962], by this time the CIA and the army had developed a series of superhallucinogens such as the highly touted BZ, which was thought to hold greater promise as a mind control weapon...

In 1962, Congress enacted new regulations which required that anyone who wanted to work with LSD had to receive special permission from the FDA. This was the first of a series of increasingly restrictive measures with respect to LSD research. But the CIA and the military were not inhibited by the new drug laws. A special clause in the regulatory policy allowed the FDA to issue "selective exemptions" that favored certain researchers. With this convenient loophole the FDA never attempted to oversee in-house pharmacological research conducted by the CIA and the military services. . . .

The FDA simply ignored all studies that were classified for reasons of national security, and CIA and military investigators were given free reign to conduct their covert experimentation. Apparently, in the eyes of the FDA, those seeking to develop hallucinogens as weapons were somehow more "sensitive to their scientific integrity and moral and ethical responsibilities" than independent researchers dedicated to exploring the therapeutic potential of LSD.

Incapacitating Agents

These secondary sources do not provide any direct evidence for these covert operations on the part of the U.S. government and military. However, [recently declassified Army documents](#) do confirm these reports. What they tell us is that BZ is a military agent designed specifically to incapacitate soldiers (not necessarily to incite them to aggression). Frederick R. Sidell, M.D., states in his description of chemical agent terrorism,

Incapacitating agents are usually defined as chemical agents that produce reversible disturbances in the central nervous system that disrupt cognitive ability. The former military agent BZ (now used in pharmacology where it is known as QNB) is a cholinergic blocking compound and produces many effects similar to those of atropine, such as mydriasis, drying of secretions, heart rate changes, and decreased intestinal motility. BZ, after an onset time of an hour or more, will--like high doses of atropine--produce confusion, disorientation, and disturbances in perception (delusions, hallucinations) and expressive function (slurred speech). The antidote, physostigmine (Antilirium⁷), reverses these effects for about an hour, and because the effects of BZ last for hours to days repeated doses must be given.

Glossary

In the recently declassified field manual for the [Treatment Of Chemical Agent Casualties And Conventional Military Chemical Injuries](#) published as [FM8-285](#) of the U.S. Army, BZ is listed in the glossary and described in Chapter 6 as an incapacitating agent:

- BDU battle dress uniform
- BZ incapacitating agent
- C Celsius/centigrade

Chapter 6, Incapacitants, Section I - General

602. CNS Depressants.

CNS depressants produce their effects by interfering with transmission of information across central synapses. An example of this type of agent is 3-quinuclidinyl benzilate (BZ), which blocks the muscarinic action of acetylcholine both peripherally and centrally. In the central nervous system anticholinergic compounds disrupt the high integrative functions of memory, problem solving, attention and comprehension. Relatively high doses produce toxic delirium which destroys the ability to perform any military task.

Government Confirmation

Finally, In 1994, The Committee On Veterans Affairs Of The United States Senate confirmed the involvement of the Army and CIA in covert operations involving the testing of BZ:

["Is Military Research Hazardous To Veterans' Health? Lessons Spanning Half A Century"](#) ³

A Staff Report Prepared For The Committee On Veterans Affairs United States Senate,
December 8, 1994

For at least 50 years, DOD [Department of Defense] has knowingly exposed military personnel to potentially dangerous substances, often in secret. The U.S. General Accounting Office issued a report on September 28, 1994, which stated that between 1940 and 1974, DOD and other national security agencies studied hundreds of thousands of human subjects in tests and experiments involving hazardous substances. GAO stated that some tests and experiments were conducted in secret. Medical research involving the testing of nerve agents, nerve agent antidotes, psychochemicals and irritants was often classified. Additionally, some work conducted for DOD by contractors still remains classified today. For example, the Central Intelligence Agency (CIA) has not released the names of 15 of the approximately 80 organizations that conducted experiments under the MKULTRA program, which gave psychochemical drugs to an undetermined number of people without their knowledge or consent. According to the GAO report, the CIA has not released this information because the organizations do not want to be identified. . . . (underline mine).

Hallucinogens

Working with the CIA the Department of Defense gave hallucinogenic drugs to thousands of "volunteer" soldiers in the 1950's and 1960's. In addition to LSD, the Army also tested quinuclidinyl benzilate, a hallucinogen code-named BZ. Many of these tests were conducted under the so-called MKULTRA program, established to counter perceived Soviet and Chinese advances in brainwashing techniques. Between 1953 and 1964, the program consisted of 149 projects involving drug testing and other studies on unwitting human subjects. Although many human subjects were not informed or protected, Dr. Gottlieb defended those actions by stating "...harsh as it may seem in retrospect, it was felt that in an issue where national survival might be concerned, such a procedure and such a risk was a reasonable one to take."

Appendix

Lastly, this examination of internet documents related to BZ concludes with some telling messages posted to the newsgroup "alt.drugs"

Newsgroups: alt.drugs

Message-ID: <5QQYd2N3zI@bion101.bionic.zer.de>

From: M.LIEBERMANN@BIONIC.zer.de (Martin Liebermann)

Subject: Re: Research information

Date: Tue, 07 Jun 1994 21:16:00 +0200[text deleted -cak]

About BZ I found the following news in my archive:

Nachricht von : bwhite@oucsace.cs.ohiou.edu (William E. White)

Betrifft : Re: Your worst nightmare

Erstellungsdatum : 06.02.1994 14:19:29 W+0:00

In article <lonewolfCKqK9q.B9u@netcom.com>, Joseph E. Gladstone

<lonewolf@netcom.com> wrote:>: Sounds like BZ to me. I guess it's closely related to nerve gas. The feature film "Jacob's Ladder" portrayed BZ experiments in Vietnam during the war.

Jody>No way - BZ lasts for quite a while depending on doseage, 8 - 72 hours.>Cholinergics produce wierd effects, but not predictably nightmarish. Actually, BZ (quinuclidinol benzilate, or QNB) is an anticholinergic,acting specifically on muscarinic receptors. It is extremely potent (andis, in fact, used in research for its antimuscarinic properties). It also seems to have a greater LD50/ED50 ratio than other antimuscarinics (such as atropine, scopolamine, etc). But I wouldn't try it, it's stillnot particularly safe. *Incidentally, it has been reported to tend to induce*

nightmarish hallucinations/delusions (I could never find out why). In any case, I can imagine that in a combat situation, one could easily find oneself in a bad trip.

Newsgroups: alt.drugs

From: keith@marlin.ssnet.com (Keith MaloneyHuss)

To: lamont@hyperreal.com

Subject: Re: Research information

Date: Tue, 7 Jun 94 18:52:05

EDTBZ is the benzoic acid ester of 3-Quinuclidinol. I believe it was explored as a chemical warfare incapacitating agent by the CIA. I know Dr. James Moore who used to be a prof at the U of DE and made compounds for the CIA. He tells some amazing tales. Case in point: He made BZ for the CIA and got some on his hands. He felt very disoriented. "I felt like the whole world turned sideways on me." This effect lasted for days and so he asked the big boys at the CIA how to get back. They told him to take some THA (tetrahydroacridine) that is now used as an experimental Alzheimers treatment. He claims it straightened him right out. MK-801 is a sigma opiate receptor agonist (I think) not sure about that one. Forward this anon to alt.drugs if you think it is worth it. Thanks.--keith -- Lamont Granquist (lamont@hyperreal.com)"

And then the alien anthropologists - Admitted they were still perplexed - But on eliminating every other reason - For our sad demise - They logged the only explanation left - This species has amused itself to death" -- Roger Waters

Notes

1. The Citizens Commission on Human Rights was founded by Dr. Thomas Szasz, Professor Emeritus of Psychiatry, State University of New York, and the Church of Scientology.

2. Quoted from *Acid Dreams: The Complete Social History of LSD: The CIA, the Sixties and Beyond* (Grove Press, 1989).

3. [Reported by the International Gulf War Illness Coalition](#), 68 Dearmin Terrance Ln #11, Franklin, NC 28734,