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How one man lied his way into the most dangerous lab in America

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The most lethal forms of life on Earth are contained inside a small, innocuous-looking suite of laboratories at the heart of the United States Army Medical Research Institute of Infectious Diseases complex at Fort Detrick, Maryland. On September 18, 1997, microbiologist Steven Jay Hatfill walked through the gates of the facility, which is known by the acronym USAMRIID, to begin work in the Virology Division.

USAMRIID grew from the ashes of an aggressive biowarfare research program run by the US until President Nixon shut it down in 1969. Afterward, the base converted to defense work. USAMRIID is home to a vast collection of nightmare pathogens and organisms—Lassa fever, monkey pox, plague, and various strains of anthrax, including the new AMES strain identified by the army in 1980. The facility is also home to the Ebola and Marburg viruses, the most feared and respected of all USAMRIID's microscopic horrors. There are no cures and no vaccines for these viruses, whose victims bleed to death. In fact, many microbiologists refuse to work with Ebola and Marburg because they are simply too dangerous. At USAMRIID, Ebola and Marburg are imprisoned in a Level Four biosafety environment, a super-secure suite of laboratories accessed through a series of airlocks, security doors, coded entry panels, and decontamination showers. In Level Four—the heart of USAMRIID—scientists wear spacesuits.

Hatfill was approved to begin work at USAMRIID after a two-year sojourn as a federally funded Fellow with the National Institutes of Child Health and Human Development (NICHD). His job was to study filoviruses, the family to which Ebola and Marburg belong. Within a month, he was authorized to access the Level Four pathogens, as well as the Level Three bugs such as anthrax and plague.

Hatfill had not been hired as an official employee of USAMRIID—which would have required a mandatory national agency security check—but as a Special Volunteer, effectively borrowed from the NICHD. His evaluation consisted of an academic review of his research, which prima facie looked both innovative and impressive. On September 2, 1997, after his resume and credentials were reviewed by the National Research Council, Hatfill received a letter from Arthur S. Levine, scientific director of the NICHD, confirming his appointment as a National Institutes of Health adjunct scientist, sponsored and paid for by USAMRIID. Now cleared to begin work at Fort Detrick, Hatfill's resume went into an NICHD filing cabinet along with the resumes of hundreds of other scientists past and present.

It is almost certain that many of the resumes in those cabinets had been polished to present the best possible image of their owners. There's nothing unusual about that. All resumes land on the desks of personnel departments with a bit of top-spin. But there's a world of difference between a lick of polish and what was lurking in Hatfill's resume.

Between 1995 and 1999, Hatfill prepared and submitted around six versions of his resume for various positions and research grants. Each resume was tailored to suit the audience it was intended for, yet together they painted a consistent portrait. Here, said the resumes, is a successful, brave, and daring man. Here is a soldier, a scientist, and a leader—an innovator with a hint of maverick, a dash of the establishment, and a splash of joie de vivre.

But the resumes were not as they seemed; they were documents intended to deceive. Though they had been constructed around a skeleton of truth, they were clothed in a carefully woven concoction of lies, half-truths, and exaggerations. Hatfill's resumes, his ticket into the NICHD and later, USAMRIID's Level Four biocontainment labs, were misrepresentations of the man and his achievements. And yet, it appears these lies were not uncovered until Hatfill had already passed through some of America's most sensitive and dangerous military and biological facilities.

UNITED STATES OF AMERICA
FALL 2001

The atrocity of September 11, 2001, had barely sunk into the national consciousness when another attack was unleashed. A week after more than 3,000 people died in the three plane attacks on the World Trade Center and the Pentagon, three letters were deposited into a mailbox in Trenton, New Jersey. The letters, addressed to *The New York Post*, NBC, and *The National Enquirer* all contained powdered anthrax.

On October 2, Robert Stevens, a photo editor at the *Enquirer* building, died of inhalation anthrax. His was to be the first of five anthrax deaths all linked to a series of letters sent in the wake of 9/11. Two more letters containing anthrax were posted on October 9, addressed to Senators Tom Daschle and Patrick Leahy.

The FBI launched a massive investigation out of its Washington, DC headquarters. One of the first tasks was to analyze the anthrax. Genetic tests revealed that all the letters contained the same AMES strain of anthrax and that at least one sample was weaponized, possibly using a process similar to one developed at Fort Detrick. On January 29, 2002, the FBI wrote to the American Society of Microbiology asking for its membership list. The FBI had concluded the motivation for the anthrax attacks was criminal and not ideological. Suddenly eyes turned away from Islamic terrorists abroad and toward the homefront.

According to the FBI, the perpetrator had "the technical knowledge and/or expertise to produce a highly refined and deadly product." The attacker, the Bureau suggested, had worked at USAMRIID sometime in the past, might have worked as a CIA contractor, and could have a connection to the UN's weapons inspectors. The attacker was probably middle-aged and might be described as stand-offish, likely preferring to "work in isolation as opposed to a group/team setting."

In February, White House spokesperson Ari Fleischer revealed that the FBI had "several suspects" before re-emphasizing: "All indications are that the source of the anthrax is domestic."

Actually, there were some 30 individuals being scrutinized, but one name was at the top of the list, thanks to a tip about a former USAMRIID researcher. Media and Internet chatter later reported that this researcher had been heard bragging about using anthrax in the former Rhodesia.

There was no arrest, but by March, a name had been leaked. The name belonged to a man who had worked for Science Applications International Corporation (SAIC), a DC-based contractor for both the Pentagon and the CIA. Before that, he'd been a researcher at USAMRIID.

On June 25, Hatfill signed a consent form allowing the FBI to search his apartment without a warrant. Minutes after he signed, television camera crews and reporters began to swarm into the street outside his home, which was close to the gates of Fort Detrick. Hatfill challenged an FBI agent about the remarkably rapid appearance of the press. "How the hell did they know to get here so fast?"

"Sorry," the agent told him. "Orders from above."

On July 2, *The New York Times* columnist Nicholas D. Kristof named a "Mr. Z" as a "biodefense insider who intrigued investigators," and he criticized the FBI for not pursuing "Mr. Z" more aggressively. The details of Kristof's Mr. Z appeared to match the FBI's profiles, as well as what was known of Hatfill.

Indeed, there were remarkable similarities between Hatfill and the suspect described in FBI profiles. Hatfill had worked at USAMRIID researching exotic pathogens; he had later worked for a company that did CIA contract work (including a study on a hypothetical anthrax mail attack); and he had trained as a UN weapons inspector.

In the weeks and months that followed, Hatfill's life was torn apart by both the FBI and the media, yet no charges were laid. Then on August 22, live on national television, Attorney General John Ashcroft named Hatfill as a "person of interest." The pressure on Hatfill became intense. Twice the scientist gave anguished news conferences proclaiming his innocence. Near tears at times, he addressed the television cameras staring: "I want to look my fellow Americans in the eye and declare to them, 'I am not the anthrax killer.' My life is being destroyed by arrogant government bureaucrats who are peddling groundless innuendo and half information." Hatfill lashed out at Ashcroft: "In my view, he has broken the ninth commandment: thou shalt not bear false witness."

Hatfill's choice of commandment was interesting. Thou shalt not bear false witness.

Thou shalt not lie.

FORT BRAGG, GEORGIA
JUNE 1976

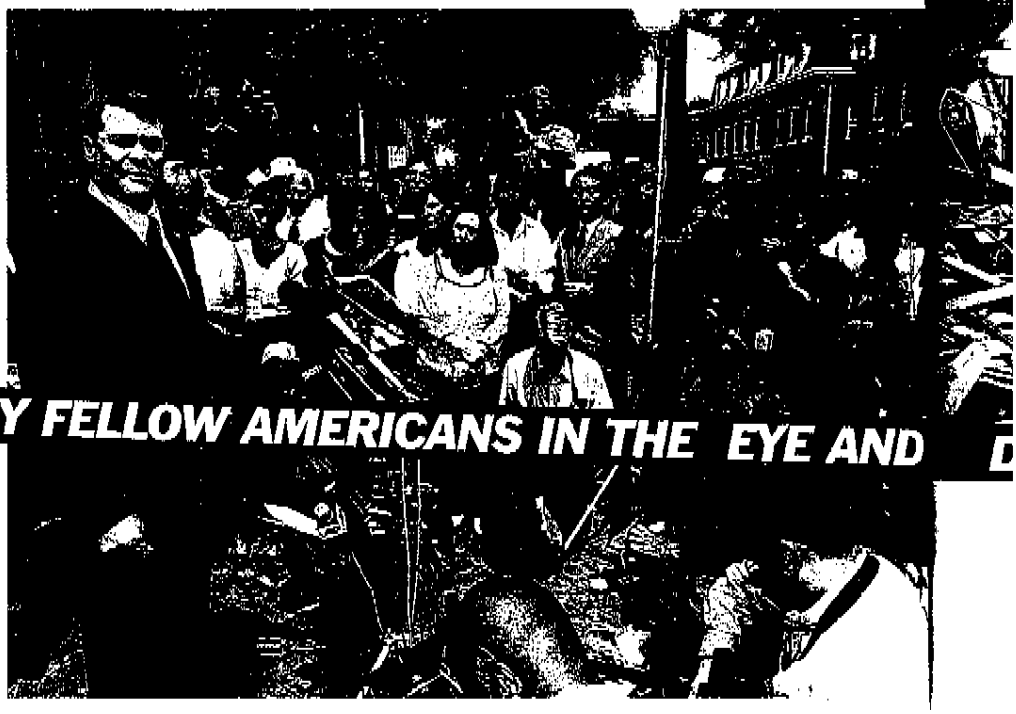
Hatfill had made it. He had survived being bawled at by drill sergeants, being marched for miles and miles in full combat gear, the endless inspections, drills, and exercises. He'd been pushed out of planes, pulled up through and over every conceivable type of obstacle, man-made and natural. Finally, he'd made it to Fort Bragg, home of US Special Forces. It was the beginning of a grueling year-long training program; those who suceeded would become members of one of the world's finest, toughest fighting units. As Hatfill passed through the gates of Fort Bragg, he must have been feeling a multitude of emotions: excitement, apprehension, pride, and maybe, a small but healthy dash of fear. He was 22 years old.

Hatfill was born in St. Louis, Missouri, on October 4, 1953, and attended Mattoon Senior High School in Illinois. He showed a flair for science, which he carried through to college, studing biology at Southwestern University in Winfield, Kansas.

Partway through his degree, Hatfill halted his studies to work as a 'health assistant' with Methodist missionary Glenn Eschtruth at a mission Eschtruth had operated in Zaire since 1960. Through Eschtruth, Hatfill met the woman who was to become his future wife, Eschtruth's daughter, Caroline Ruth.

After spending eight months in Zaire, Hatfill returned to Kansas and completed his degree. On June 20, 1975, at the age of 21, Hatfill enlisted in the US Army with his sights set high; he wanted to join the Special Forces. A few weeks later, Private Hatfill graduated with his BA from Southwestern, but he was already a long way from Kansas, on the road toward his Special Forces goal. Over the next year, Hatfill would complete a series of training courses that took him from Airborne school in Fort Benning, Georgia, to West Germany and back. In the spring of 1976, Hatfill finally made it to Fort Bragg and began the Special Forces Qualification Course, a grueling five-stage selection process that takes at least a year to complete.

But on July 2, 1976, just a few weeks after starting at Fort Bragg, and just over a year after enlisting in the army, Hatfill was discharged from active duty. He spent the rest of his service period languishing,



L to R: Hafill addresses the press outside his lawyer's office on August 25, 2002; Hatfill's girfriend's apartment after an FBI search earlier that month

unused by the Army National Guard.

In Hatfill's army records there is little to see; under "Medals and Citations" there is no Good Conduct Medal. There are no Special Forces tabs that he would automatically have been awarded had he completed the Special Forces course. Without completing that course he could never have "served with the US Army Special Forces" as he later would proudly claim on the resume he submitted to USAMRIID in 1997, which includes the following entry:

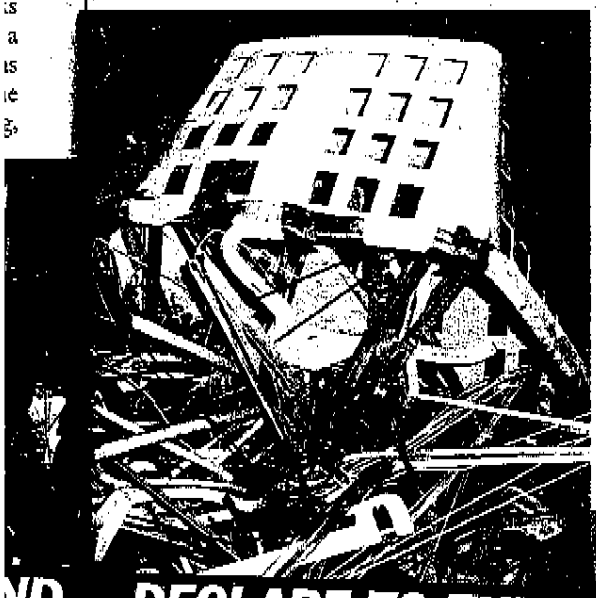
6/75—6/77 United States Army, 7th

Special Forces Group, JFK Center for Special Warfare.

Further down the resume under the heading "Practical Experience" is the entry:

USMC [United States Marine Corps] Officer Candidate Program... served with US Army Special Forces after college graduation where my commanding officer was Col. Charles Beckworth, who was later to lead the abortive hostage rescue mission into Iraq.

Hatfill would lie about his military experience throughout his entire life, creating ever more elaborate accounts as time progressed. In an interview with Richard Preston, author of the internationally



"I DECLARE TO THEM: I AM NOT THE ANTHRAX KILLER."

acclaimed *The Hot Zone*, Hatfill, sitting in his office at USAMRIID, claimed not only an army career spanning two decades, but also to have been a captain in the Special Forces.

Two months after his 1976 separation from Fort Bragg, Hatfill married 19-year-old Caroline Ruth Eschtruth at the United Methodist Church in Pinnebog, Michigan. It was not to be a happy or a long union. In April 1977, Caroline's father was killed at his mission during fighting between Zairian and Angolan troops. His death devastated Caroline. Hatfill too was affected deeply and in later years would often bitterly recount his father-in-law's death.

Following his army discharge, Hatfill returned to his interest in science and, in particular, medicine. In August 1977, Hatfill gained qualification as a medical laboratory technician from the American Society of Clinical Pathology, but decided he wanted to be a doctor. By this time, his marriage was under strain, and soon after, Hatfill left the United States.

HARARE, RHODESIA
EARLY MARCH 1979

The war was over—unofficially at least. After a decade and a half of fighting and the loss of more than 40,000 lives, Rhodesia's civil war was winding down. A ceasefire had been declared. Shops and restaurants began to reopen. People scattered by the conflict picked their way home; foreigners and foreign money returned to the country, which, within a year, would be renamed Zimbabwe.

March is considered the best month in southern Africa. The rains abate and the baking heat of the African summer is still only a distant threat. Temperatures hover around a delightful 75 degrees. It is pristine weather. Weather fit for new beginnings.

In March 1979, at the Godfrey Huggins School of Medicine at the University of Rhodesia, students were preparing to enroll for their first year's study. Their first true year of peace. The university's main hall was crowded with tables, in front of which dozens of students queued to register. As they stood in line chatting, a loud voice caught their ears, a voice that seemed to defy the hubbub of the hall, cutting through the hundreds of other voices with a forceful, unpleasant tone. Turning to see who the voice belonged to, a student in the line for the medical school saw its source was a short, stocky man with dark hair, a moustache, and dark, dark eyes; the man was corralling various groups of students, telling them where to go and what to do. His swagger and confidence struck the student. He must be a senior professor, or at least a lecturer, he thought.

"Who's that shouting the odds?" he asked the student next to him.

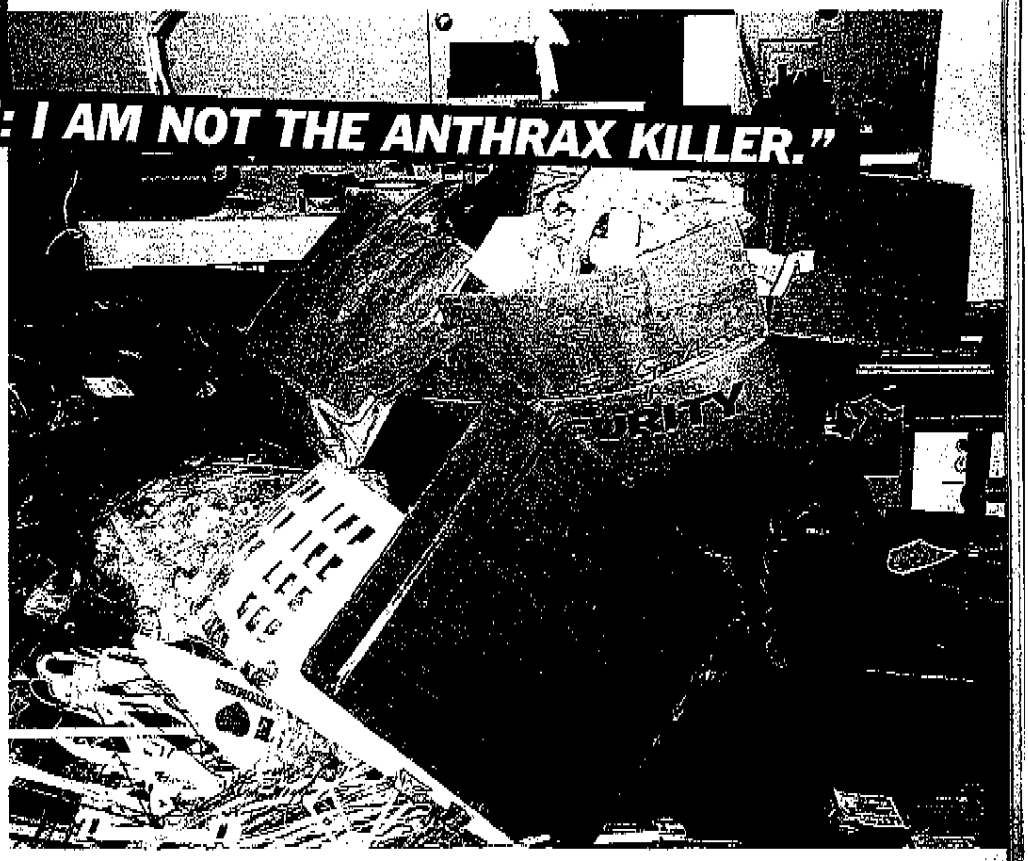
"He's an American. Don't pay any attention to him," came the reply.

"Is he a professor?"

There was a snort of laughter. "God no. Just some asshole who has too much to say for himself."

Steven Hatfill would often incite this type of reaction at Godfrey Huggins, where he had enrolled a year earlier. Caroline, who had filed for divorce, remained in the US. Two months into his studies, their divorce came through, marking a year that would only get worse; Hatfill failed the first university barrier exam and was forced to repeat a year.

Many of Hatfill's freshman class were conscripted war veterans, released early from the armed forces to start their medical training on the proviso they remained available for call-up. There were still pockets of sporadic violence in Rhodesia and,



on weekends and vacations, some class members would rejoin their units and go out on active duty.

A few months after the start of Hatfill's second try at first-year medical school, a small group of undergraduates were unwinding in a campus bar after a weekend call-up. The beer was cold and cheap, the company good and reassuring. Many were recounting experiences of their last missions—a kind of barroom therapy to smooth out the jitters and fatigue of a conflict that had gone on far too long.

As they talked, Hatfill walked into the bar. Immediately, a few in the group grew quiet. Hatfill wandered over to the edge of the conversation. No one acknowledged his presence. Most avoided his gaze.

One of the students in the bar recalls what happened next. He, like most of Hatfill's classmates interviewed for this investigation, has asked for his name to be withheld. (Such has been the fallout of Hatfill's "person of interest" status that former classmates have been placed under suspicion by colleagues and employers merely because they happened to go to school with him.)

"We were fairly jovial, but then Steve walked into the bar. He butted in with a story of an experience he said he'd had as a pilot in Vietnam. The conversation stopped dead. A few of the guys even walked out. Everybody turned toward him. There was a real sense of animosity—some people were bristling."

"I did quick mathematics and said, 'There's no way, Steve. The Vietnam War ended in '74 and the Americans pulled out in '72. There's no way you could have been there. When did you start your training—when you were 16?' "

There were a couple of snickers from the group. Hatfill said nothing, turned on his heel, and left.

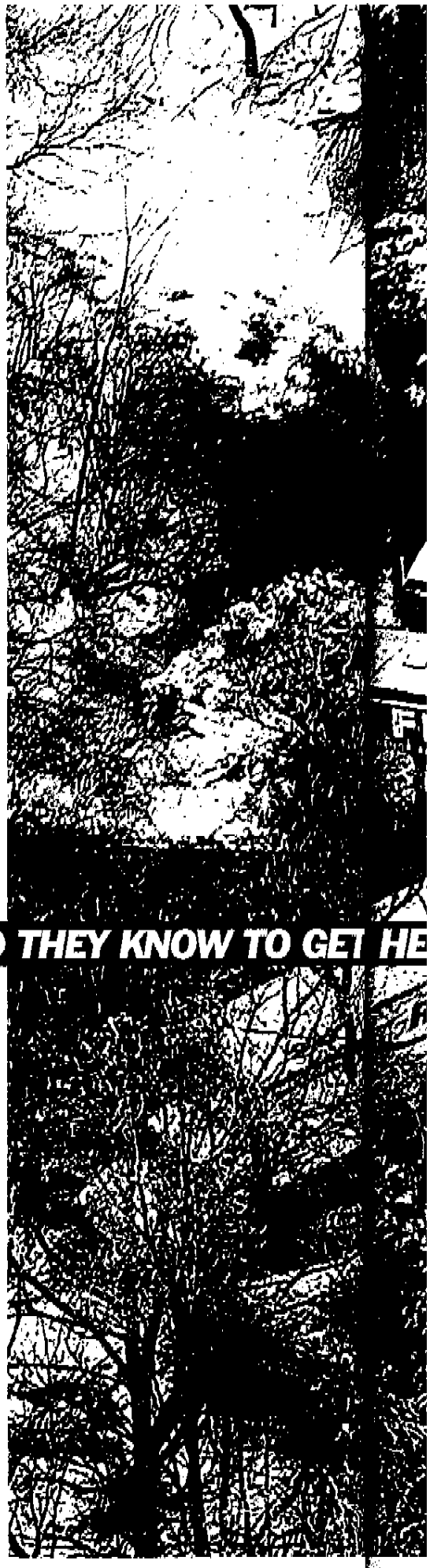
A classmate of Hatfill's remembers a clever, energetic man hampered by an apparently overwhelming desire to impress at any cost. "That was the thing about Steve. He was an extraordinary guy and very, very bright. But he was also a real Walter Mitty kind of character, and he would tell these enormous, awful lies. He once told me his wife had died in the Congo."

"And when he told a lie like that, you were never certain if he was telling a lie to see what he could get out of it, or if he was telling a lie to see how far he could go with it, to see how gullible you were. If I ever caught him in a lie he'd just sort of wink at me and give me a nudge, as if to say 'you caught me on that one.' "

Hatfill's antics divided his class into two camps: those who could tolerate him and those who could not. In one incident, a few classmates were pulling late-night duty in one of Harare's teaching hospitals. "We were sitting, chatting in the lounge when Hatfill walked in. Probably three quarters of the students got up and walked out," says a classmate who was there that night.

Hatfill became isolated from the rest of his year. Yet, outwardly, he seemed unaffected by his rejection. Indeed, he would go out of his way to engage, amuse, and entertain his fellow students. "He could be absolutely hilarious," says one classmate. "I've seen him bring large groups of students to their knees with his antics. His speciality was to stick a small flashlight up his nose, turn off the lights in a ward, and then 'fly' around the ward turning the flashlight on and off to simulate an aircraft's landing lights."

Meanwhile, outside of medical school, Hatfill was still chasing after lost military ambitions. Sometime after arriving in Rhodesia, Hatfill turned up at the door of the Rhodesian police's Special Branch—their equivalent of the FBI—and offered his services. At the time, the Special Branch was a part of the Selous Scouts, an elite Rhodesian Special Forces counterinsurgency unit, which spent much of its time behind enemy lines. The Scouts were an amalgam of Army Special Forces soldiers and Special Branch police officers. Intelligence was vital to Scouts operations and the mainly black officers of Special Branch undertook this function.



"HOW THE HELL DID THEY KNOW TO GET HE

Hatfill was 24 at the time, still an undergraduate, and struggling at medical school. He had little to offer Special Branch, other than a willingness to help. He was referred on to the medics of the Scouts and was dispatched as a volunteer junior medic to a field hospital at a base called Fort Bindura. There, he bandaged wounded guerilla fighters and acted as an assistant of sorts for the true Scouts medics. By the time 1980 arrived, the war was over, the Scouts disbanded, and Hatfill's brief, tangential association with them ended.

Yet, in Hatfill's mind, his Rhodesian military "service" was somewhat more grandiose. He claimed to have been a "badged" member of the Scouts and to have worked behind enemy lines. Those lies were manifested into two certificates

(continued on page 102)

'90s, the pharmaceutical industry worldwide objected to the notion of on-site inspections. Their complaints were, in part, reasonable, as the drug industry survives on patents and trade secrets. While the most powerful drug companies are multinational corporations, many nations have government-operated or pharmaceutical plants that might thrive off stolen trade secrets and patent violations. In other words, it's a nasty business climate.

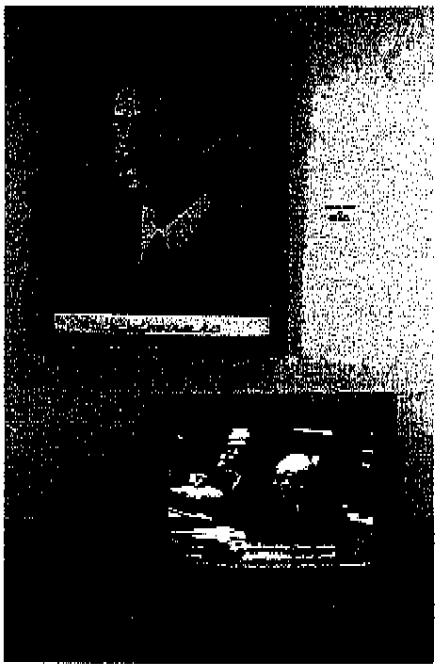
In 1998, Thomas Monath of OraVax Inc. in Boston—a company that now makes smallpox vaccines, among other things—condemned the industry's opposition. Writing in *Science*, Monath said, "It is the time for US industry to take the moral high ground and to focus collective wisdom and creativity to bring about a resolution of the issues surrounding on-site activities and the compliance protocol."

British science writer Debora MacKenzie went a step further, writing in the editorial pages of the *Los Angeles Times* in 1998 that "the highly speculative, and in any case avoidable, threat to industrial profit should not be allowed to undermine the creation of an inspection regime that might actually prevent the next Saddam. As long as governments and would-be terrorists think they can get what they want by waving a bit of anthrax around, we desperately need a treaty with all the teeth it can get."

Gillian Woollett, speaking on behalf of the Pharmaceutical Research and Manufacturers of America—the industry's lobbying group—scoffed: "At its best, a treaty is only for those who play cricket," she said. "Essentially, we don't trust the government to protect us" from trade secrecy violations and patent thefts during inspections.

National security analyst Brad Roberts of the Institute for Defense Analysis in Alexandria, Virginia, believes that stockpiling may be the key issue: Why would a legitimate lab have a stockpile of anthrax or genetically engineered super-resistant forms of cholera or streptococcus in its freezers? Europeans and Americans have differed sharply on this concept for more than ten years, he pointed out, with European leaders insisting the mere possibility of detection of such stockpiles would serve as a deterrent to treaty violation. That fight exploded in the Security Council in 2003 when US Secretary of State Colin Powell faced off against French Foreign Minister Dominique de Villepin.

Christopher Chyba of Stanford University, served on President Clinton's National Security Council from 1993 to 1995, during the period when Cohen issued his dire warnings about asymmetrical warfare. He contends that germ weapons, because of their microscopic potency, can never realistically be controlled through nonproliferation treaty measures. So, he said, abandon such mechanisms and beef up public health and other forms of "biological security" as a defensive posture. The Bush administration seemed to echo such sentiments in its first year in office, arguing that the BWC ought to have a monitoring component carried out by, of all agencies, the World Health Organization.



A television in the Baghdad press center broadcasts a report delivered by Mohamed El Baradei and Hans Blix to the UN Security Council

In the end, there must be a place somewhere between the treaty optimism of the SALT II accord and the grim defeatism of the Cohen asymmetrical warfare statement. After all, the list of nations known to possess biological weapons is far too long for full-scale war to remain the only means of verification and enforcement.

Hatfill

(continued from page 58)

seized by the FBI during their anthrax investigation; one purporting to show his graduation from a Scouts tracking course, the other a citation for good conduct. Both bore the forged signatures of genuine Scouts officers.

A number of Hatfill's resumes go on to claim that while in Rhodesia he served with the Rhodesian SAS. His 1997 resume elaborates, claiming he had seen "active combat experience with C Squadron Special Air Service (Rhodesia)." The regimental association of the Rhodesian SAS is adamant Hatfill never belonged to the unit. In a terse e-mail, their spokesman states, "Hatfill is not an ex-member of this unit; he was never attached to the unit in any way. He has also made claims that he was a member of an American unit giving 'assistance' to C Squadron. This is also untrue."

Following the "person of interest" furor, Hatfill was accused in a number of media stories of being a protégé of Robert Symington, an anatomy professor at the University of Rhodesia's medical school, rumoured to have been the head of an alleged secret Rhodesian biowarfare program.

"Prof," as Symington was known, was a polarizing figure on the university campus, which, despite its heritage, was solidly liberal. Silver-haired with piercing blue eyes, Symington was an unapologetic old-style Rhodesian. A student who considers himself a protégé of Symington's recalled the following incident. "Prof had seen me talking to Steve Hatfill and invited me for a walk," he stated. "[Symington] told me in no uncertain terms that Steve was a frigging idiot and it wasn't going to do anyone any good, particularly me, if I became a friend of his. It seems very unlikely to me that Steve was involved with Bob Symington—unless Bob had gone out of his way to lie to me, which wasn't his way. He never minced words about anything."

Symington died in 1982 while swimming in the pool at the University of Cape Town. To date, no concrete evidence has been produced proving his involvement in a Rhodesian biowarfare program. Or that a biowarfare program even existed.

UNIVERSITY OF ZIMBABWE, HARARE
3PM, NOVEMBER 11, 1983

Hatfill's class crowded around a locked, glass-fronted wooden cabinet near the main campus hall to see the final exam results of four years of hard work. After seeing their grades, they repaired to the hall to start celebrating or commiserating.

Suddenly, amid the celebrations, the sound of violent shouting and breaking glass could be heard from the hall. The students ran out to find Hatfill, his face painted with rage, fuming in front of the

cabinet. Behind the shattered glass were the results indicating Hatfill's failure. As the students looked on, a campus security guard arrived and tried to stop Hatfill from leaving the scene, but in a fit of rage, Hatfill resisted, and threw the guard into a plate glass window. The incident nearly got Hatfill arrested and thrown out of university, but he was allowed to stay on for an extra six months to re-sit his exams, and passed in 1984. By then Hatfill's classmates had already moved on to start their careers. For many, the incident was the last they would hear of him until 2002, when, as part of the anthrax coverage, tales of his alleged African exploits would be reported in newspaper and television broadcasts worldwide.

QUEEN MAUDE LAND, ANTARCTICA
DECEMBER, 1986

Hatfill stepped off the boat that had carried him south from Africa onto the desolate, frozen expanse of Antarctica. The voyage was the beginning of a phase in Hatfill's life in which he would pursue a dream job: a position with NASA.

In the autumn of 1986, Hatfill was chosen to participate in the South African National Antarctic Expedition (SANAE), and by December, was destined for a 14-month tour of duty at South Africa's isolated base in Queen Maude Land, one of the most hostile environments on the planet. It was a perfect starting point for a would-be space scientist who, only a year earlier, had completed a 12-month internship at a small rural hospital in South Africa's North-West Province.

In 1985, he'd registered as a medical practitioner with the South African Medical and Dental Council. His certificate to practice cited his Bachelor of Medicine qualification as MB ChB (Zimbabwe) 1984. And in July 1986, Hatfill also successfully completed the process of having his medical degree recognized in the US.

But mere doctoring was a million miles from Hatfill's mind. He was headed for the stars. When the SANAE post turned up on his resumes some ten years later, he variously records himself as the expedition's "Research Team Leader," "Assistant Research Team Leader," "Science Leader and Physician," or simply "Team Physician." But Richard Skinner, a director of SANAE, stated Hatfill's position had been as an "expedition doctor only."

Hatfill's resume also claims that while at SANAE he conducted "research on pineal-hypothalamic dysfunction for NASA's Solar System Exploration Division." At the time, Mike Duke was the chief of the division, headquartered at Johnson Space Center in Houston, Texas. Duke, a geologist now retired from NASA, recounts his contact with Hatfill. "From what I remember I got a letter from him telling me about his experiences in the Antarctic. He was interested in applying his experiences in that environment to isolation in space. He then sent me a paper, which as far as I could see was part of a strategy of his for getting a job with NASA. I passed it on to the medical section people at NASA and my recollection is they didn't do anything with it." A year later Duke received another unsolicited paper from Hatfill. Again, Duke sent the paper along to his medical colleagues. According to Duke, "the result was that nobody paid much attention to it."

STELLENBOSCH, SOUTH AFRICA
LATE 1988

Professor Lothar Bohm was impressed. His new student—a Dr. Steven Jay Hatfill—was proving to be quite a catch. Hatfill had thawed out from his Antarctic expedition and had completed a microbiology master's degree at the University of Cape Town. While socializing at the UCT campus club, Hatfill met Bohm—then director of the Stellenbosch University's radiobiology laboratory. The two discussed a second master's, this time under Bohm's tutelage. A master's in medical biochemistry and radiation biology would be an excellent stepping stone for Hatfill's journey to NASA.

Bohm would later recall Hatfill as an "intellectually quick" researcher who had devised what Bohm describes as "a brilliant, brilliant concept." Hatfill proposed that by metabolizing thalidomide with a special enzymal extract known as S-9, the drug could be used to restore leukemic cells back to normal function; it looked like a significant new treatment for leukemia. Bohm was impressed with Hatfill's theory and requisitioned the S-9, at some expense to his laboratory.

Because of funding shortages, Hatfill's time at Stellenbosch was not fully covered. As a result, he took a job in the university's hematology laboratory as a clinical assistant, and this position paid his way through school.

Hatfill's research results were impressive, Bohm says. "Because of his job, he ended up working not in my lab, but mostly in hematology. He was very mature and talked with so much confidence. When he brought you data it looked right and you trusted the guy. He was very convincing and he gave these superb seminars." Hatfill's thesis, "Thalidomide Induction of Differentiation and Potentiation of Radiation-Induced Apoptosis in Human K562 Cells," won him his second master's in December 1990. He immediately began a three-year hematological pathology residency at Stellenbosch and in 1992 he began to work on his PhD under the supervision of Professor Ralph Kirby at Rhodes University.

Hatfill's resume records that in 1991, after starting his hematology residency, he "established" and then "managed" or was "director" or "laboratory chief" of a

Lawyer consoles Hatfill during emotional press conference

"Molecular Haematology Laboratory" at the Tygerberg Hospital, which is part of the Stellenbosch medical campus. In fact, no formal molecular hematology lab was ever established at Tygerberg.

Erna Mansvelt, current director of hematology at Tygerberg, states, "Dr. Hatfill was a registrar (postgraduate student) in this department until the end of 1993. I am not aware that he had a recognized molecular laboratory in our department at that time. He did not have any official administrative duties in the department." Interviews with numerous scientists and officials familiar with Hatfill's work at Tygerberg confirm this statement. One such official adds, "Molecular research was performed as and when a particular individual displayed such an interest and ceased as soon as Hatfill departed in 1993. He could hardly regard himself as a director as there was nothing other than his own research project to direct. There were certainly a number of people in the academic department at the time who would have been more eligible than he for the status of 'director,' but such a designation simply did not exist."

During the same period between 1990 and 1993, Hatfill also claims to have performed "clinical rotations" at the hematology-oncology and bone marrow transplantation unit at Groote Schuur Hospital, which also acts as part of the Stellenbosch medical campus. Hospital records show that after registrar posts at Groote Schuur were advertised in October 1992, Hatfill applied for and was awarded one of them. But in January 1993, he wrote on Stellenbosch University letterhead to inform Groote Schuur that he would be unable to take up the post, citing that his research was "at a critical stage." Subsequent checks confirm that Hatfill is not on record as being "on the staff establishment of Groote Schuur Hospital." Hatfill's resume also has him working as an "Emergency Medical Officer at Conradie General Hospital, RSA." Again, there is no record of him working there. Interviews were conducted with staff who worked there in the early 1990s. "No one remembers Hatfill," reports an employee.

According to his resume, 1993 was an extremely busy year. In addition to completing his hematological pathology board certification, Hatfill also claims to have been chairman of a South African scientific organization, the Experimental Biology Group (EBG) and a member of the Blood Transfusion Utilization Committee at Tygerberg. Checks with current and former members of the EBG have failed to find any record of Hatfill's chairmanship. Moreover, Tygerberg's Blood Transfusion Committee has no records of Hatfill's involvement. Hatfill also claims to have been a member of an AIDS advisory panel organized through the Council for Scientific Industrial Research (CSIR) on AIDS in 1994. CSIR never convened an AIDS advisory panel.

Hatfill's penchant for the military also managed to bleed its way into the sections of his resume dealing with South Africa. Hatfill claims to have been assigned to the "2nd Medical Battalion (TA Reserve)" of the South African Defence Force during his time in South Africa. But Lieutenant Colonel Louis Kirstein, spokesperson for the South African Department for Defence states the following; "We have no records of a Dr. Steven Jay Hatfill on our system."

In most of his resumes Hatfill also describes himself as a "consultant flight surgeon to 32 Squadron [changed in later resumes to 30 Squadron] Air/Sea rescue unit based at Yesterplatt [sic] Air Force Base, Cape Town." Apart from the incorrect spelling of Ysterplaat, the main problem with this entry is that there are no such Squadrons. Ysterplaat is home to two air and sea rescue squadrons: 22 Squadron and 35 Squadron. Ysterplaat's commanding officer Lieutenant Colonel Harry Treurnich can remember "no one of that name [Hatfill] having served at the base."

To date, Hatfill remains unemployed

Hatfill attended two medical courses while in South Africa; one at the Institute of Aviation Medicine, the other at the Institute of Maritime Medicine. Both courses were only two-week certification courses, but Hatfill claims they were, respectively, eight and five weeks long, and records them under a section marked "Postgraduate Diplomas." Neither course is considered a postgraduate qualification. While at the Maritime Institute, Hatfill claims to have gained qualification in hyperbaric medicine. Hyperbaric medicine is not part of the course he completed.

On Friday September 17, 1993, Lothar Bohm was fuming. There were major problems with Hatfill's master's thesis experiments. Other researchers could not reproduce the results. Also, other scientists at the laboratory were finding it impossible to extract DNA markers using a special "melting" technique Hatfill claimed to have used.

Bohm, who had coauthored a research paper with Hatfill based on the thesis work, sat down at his computer and hammered out the following e-mail to Kirby, Hatfill's PhD supervisor and coauthor of another paper based on Hatfill's work that had been published in the prestigious medical journal *The Lancet*.

Dear Ralph,

2 problems here: We are rather disappointed if not to say PISSED OFF with so much ignorance, carelessness and indifference. 9 months of time plus 4000 odd Rand wasted. You are both DEEP in our memory.

A Japanese worker has problems in reproducing the Thalidomide work on K 562. After some correspondence relating to buffers and drug metabolism using S-9 fraction he still cannot do it. When I discussed the problem with Steven it became clear that he could not have done the experiment as his handling of the S-9 fraction indicated total confusion.

Taking these observations and the wonderful TGE melt mitochondrial DNA referred to in the Lancet *paper it also transpires that the experiment could not have been done by S. because essential parts of the TGE machine accessories were still unopened. It goes to show that S takes great liberties with the truth.*

I think you may wish to be on guard when you assess his PhD thesis not to risk a scandal. I can only pray that the Japanese

worker is not going to blow the whistle—but with increasing interest in Thalidomide somebody else might. I find it utterly distasteful and unprofessional to practice science in this way and I am reassessing my position regarding S. and asking you again for advice.

Lothar Bohm

According to Bohm, Kirby never replied to this e-mail. Nor did Kirby reply to an e-mail from SEED about his communication from Bohm.

When a technician came to examine the TGE machine, he found the electrodes used to facilitate the DNA extraction wired the wrong way round. "The machine could never have worked," stated a source at Stellenbosch, who witnessed the technician's examination.

Bohm says he now regrets allowing Hatfill to do much of his research in the hematology lab where he was earning a living as a clinical assistant. "He had a job there and he wanted to work there and at the time that was fine by me. But in hindsight it would have been better to have him in [my] lab and see what he was doing. There is no doubt about it—the guy was extremely capable. But time seems to have a different meaning for him than to a normal person. He was always very fast intellectually and always racing ahead. Had he worked in my lab, the whole thing would probably have taken a different course."

OXFORD, ENGLAND
SEPTEMBER 1994

It wasn't quite Cape Canaveral, but Oxford University was still a pretty big feather to have in his cap. Hatfill had left South Africa to take up a new job as a clinical research scientist at the University's Nuffield Department of Pathology and Bacteriology, based at the John Radcliffe Hospital. Hatfill worked in the cancer research lab.

In a resume prepared while at Oxford, Hatfill claimed that he was a "licentiate" of the "Royal College of Physicians and Surgeons, Edinburgh." Three of his later application forms for NIH grants state Hatfill gained his MD at "Edinburgh, UK" in 1984.

There is no such thing as the Royal College of Physicians and Surgeons, Edinburgh. And Hatfill does not have a UK medical degree.

Scotland has three distinct medical colleges: the Royal College of Surgeons, Edinburgh, the Royal College of Physicians of Edinburgh, and the Royal College of Physicians and Surgeons of Glasgow. In the early '80s, medical degrees from Rhodesia, like the one Hatfill was carrying, were not accepted in the UK. The University of Zimbabwe therefore made an arrangement with the Scottish colleges to let its graduates sit what was known as "The Scottish Triple," an exam set by all three colleges. Zimbabwean graduates who passed the Triple were allowed to practice medicine in the UK.

Fiona Sinclair, membership administrator for the Royal College of Surgeons, Edinburgh, states, "A full search of our records has been conducted, both in Edinburgh and in Glasgow, and there is no record of Dr. Steven Jay Hatfill having obtained any college qualification. We have no records of Dr. Hatfill at all."

While at Oxford, Hatfill also claimed to have been elected a Fellow of the Royal Society of Medicine. Society spokesperson Rosamund Snow says that, "as far as we can tell, he has never had any association whatsoever with the society."

In January 1995, Hatfill's PhD was submitted for examination to Rhodes University. Bohm's warning had, apparently, gone unheard or unnoticed.

Hatfill was already applying for other jobs by the summer of 1995. He responded to an advertisement for a fellowship position placed by the NICHD in the journal *Science*.

The NICHD personnel charged with reviewing Hatfill's application called Oxford University, where the NICHD say they received confirmation that Hatfill "had experience qualifying him for the position he was applying for."

The resume accompanying Hatfill's application claimed not only the "licentiate" Edinburgh medical qualification but, crucially, also a PhD apparently awarded by Rhodes University in 1994. Despite the fact that back in South Africa examiners were still three months from giving their decision on the PhD, Hatfill's resume was titled "Dr. Steven Jay Hatfill M.D/Ph.D."

Also submitted was a bundle of certificates including a PhD certificate apparently issued by Rhodes on April 16, 1994. Hatfill's resume details the "PhD Degree in Molecular Cell Biology," but gives a contradictory date of August 1994. In fact, Hatfill's PhD thesis was failed in November 1995. One of Hatfill's thesis examiners—interviewed on condition of anonymity—describes the thesis as "an embarrassment to South African science," adding, "more than once the question was asked of aspects of the thesis whether Hatfill had made a mistake, or whether he was deliberately trying to deceive."

Hatfill also enclosed a letter of recommendation bearing the signature of his head of department at Oxford, J O'D McGee. The letter was fulsome in its praise for Hatfill. "Steven is a very valuable member of the Cancer Metastasis Laboratory," the letter reads. "He is a good molecular biologist with a good knowledge of most of the technology in this area and even more important, he can apply it to real problems."

Hatfill's penchant for the military also managed to bleed its way into the sections of his resume dealing with South Africa.

The letter stated McGee had gotten to know Hatfill "very well" and concludes, "As a person, he is popular, self-sufficient, and can step into any 'crisis' situation and deal with it effectively without demonstrating anger or any other emotion. He is also a man with a sense of driving the research team forward in a united way.

I have the highest regard for Dr. Hatfill and unreservedly recommend him to you."

When shown the letter in question, McGee stated he had no recollection of providing the reference, adding the letter was "not in the style" in which he would write a reference for a member of staff. He added he never had direct contact with Hatfill, other than one meeting where Hatfill asked him to be "a referee for him for a NASA program."

Hatfill also submitted a letter of reference purportedly from a Tygerberg professor repeating the claim that Hatfill had established a molecular hematology laboratory there. Officials at Tygerberg dispute its authenticity.

In addition, Hatfill included a certificate proving his graduation from medical school. But the certificate Hatfill presented was issued by the "University of Rhodesia." By the time Hatfill was recorded as graduating in 1984, Rhodesia hadn't existed for four years. The university had changed its name to the University of Zimbabwe, and stopped issuing University of Rhodesia certificates in 1982. Those who graduated in 1983—Hatfill's intended year of graduation—received certificates

issued by the University of Zimbabwe.

Apparently, the NICHD never picked up these discrepancies. On September 18, 1995, Hatfill was granted an Intramural Research Training Award, a fellowship that would mark the start of a four-year association with the US government.

SEPTEMBER 18, 1997
FORT DETRICK, MARYLAND

The most lethal forms of life on earth are contained inside a small, innocuous-looking suite of laboratories at the heart of the United States Army Medical Research Institute of Infectious Diseases complex at Fort Detrick. Access to these Level Four labs is severely restricted. Those who are granted entry are exposed not only to the most dangerous organisms on the planet, but also to classified information. The work USAMRIID researchers undertake could conceivably be perverted for offensive biowarfare use. The knowledge they possess is as dangerous as the pathogens they manipulate. USAMRIID should be one of the most secure locations on the face of the Earth.

After two years at NICHD, Hatfill applied to the NRC for a transfer to USAMRIID's Level Four labs to study Ebola and Marburg viruses. His career was once again subjected to a scientific review, and within a month, Hatfill was granted Level Four clearance. He was also granted clearance to access material classified as "secret." He would spend the next two years in Level Four battling microscopic nightmares. He loved it.

In 1999, Hatfill's research funding ended, but he traveled onward and upward to a prestigious job as a biodefense consultant with Science Applications International Corporation (SAIC), a contractor for both the Pentagon and the CIA. It was a job that gave Hatfill access to all sorts of interesting places—the FBI, CIA, and the Depart-ment of Defense.

In December 2000, after being accepted into the UNMOVIC weapons inspections training program—a process that required he submit a resume and sit for an interview—Hatfill was sent to Paris to begin basic training. While there, he boasted of his military experience to bemused fellow attendees and claimed he had access to classified documents.

In late summer 2001, Hatfill applied for a CIA contract requiring a high-level security clearance. He had to undergo a rigorous background check. When investigators questioned him about his time in Africa, the house of cards started to topple. On August 23, the secret clearance he had obtained at USAMRIID was suspended and he was removed from his full-time job at SAIC, sidelined as a "consultant."

Still, he kept up with his UN training and in November 2001 returned to England, this time to Porton Down, home of the UK's former chemical and biological warfare research program. By now, news of the anthrax letters was gripping the biodefense community. Hatfill was quick to insist that Iraq was behind the attacks. What he didn't know was that at home, the Bureau was closing in on him as a "person of interest."

On March 4, 2002, Hatfill was fired by SAIC. On July 1, just a few days after his name was first publicized in connection with the anthrax investigation, Hatfill was hired as the associate director of Louisiana State University's Center for Biomedical Research and Training. The money for the post, like the majority of the center's funding, came from the federal government. On August 1, the Department of Justice sent an e-mail to the center's director, Stephen L. Gulliot, ordering him to "cease and desist" employing Hatfill. Hatfill was put on administrative leave the following day and fired from the $150,000-a-year job on September 3. Gulliot was fired a day later.

Hatfill was a month from his forty-ninth birthday when LSU fired him, and the career he'd manufactured for himself in numerous resumes was finally over. Maybe after so many years of misrepresentation, he was unable to tell what was real in his past and what had been falsified. Or maybe this was the first time his credentials were fully scrutinized.

Here is what a complete investigation uncovers: Hatfill never served with the US Special Forces, or the Rhodesian SAS. He was not a member of the Selous Scouts. The South African Department of Defence has no records of Hatfill serving in the 2nd Medical Battalion (TA Reserve) or with the Air/Sea Rescue Squadron at Ysterplaat.

There is no record of Hatfill having been a casualty officer at Conradie Hospital, or working clinical rotations at Groote Schuur's hospital. He could never have established or managed a molecular hematology laboratory at Tygerberg because there was and is no such laboratory.

While in Antarctica, Hatfill was not a research team leader or even assistant research team leader. He hadn't been commissioned to do research for NASA; he was not chairman of the Experimental Biology Group; nor was he a member of Tygerberg Blood Utilization Committee; and he couldn't have sat on the Council for Scientific Industrial Research's advisory panel on AIDS, because such a panel was never convened. He wasn't a Fellow of the Royal Society of Medicine. His Edinburgh "licentiate" medical degree is nonexistent. The "University of Rhodesia" degree certificate he presented had stopped being issued two years before he graduated. His PhD is a fake and there are serious questions about his previous master's research at Stellenbosch.

Any or all of these lies and half truths should have been picked up when he was first evaluated for his job at the NICHD and then again when he applied to USAMRIID. Apparently, none of them were.

Ray Gamble is the director of the NRC awards program that vetted Hatfill for his research position at USAMRIID. The NRC is a nonprofit organization that sits between sponsors—usually federal government agencies—and researchers. Gamble admits the system is not foolproof, but says its methods are the norm in most grant review processes. Gamble explains, "We provide advice on the best quality of applicant for the awards. Our contribution is that quality review, so that the sponsors know that they are going to get the best quality people out of this process."

But the process assumes candidates are telling the truth. "You assume that the facts stated by the applicant are in fact correct and without seeing things that seem to indicate otherwise that's the assumption that's made," adds Gamble.

He stresses that in addition to resumes and reviews, sealed transcripts are required to be sent directly from the applicant's university. But he admits, "We do not individually call a thousand or so universities every time we receive an application to verify a particular document."

It was this process that apparently failed to flag Hatfill or his falsified resumes and forged documents during the four years he spent inside the federal grants system, moving seamlessly from health to defense.

At least four top officials within the federal grants system signed their names to approve grant applications on Hatfill's behalf three times over three consecutive years: Leonid Margolis, head of the NICHD laboratory Hatfill worked at for two years; Joshua Zimmerman, laboratory

chief, NICHD; Arthur S. Levine, scientific director of the NICHD; and Ruth E Mariano, the grants bid official at the NICHD. Their signatures released tens of thousands of dollars to Hatfill and allowed him access to some of the best research facilities and information in the world. Margolis and Levine also signed off on two further years of grant applications that gave Hatfill access to the USAMRIID facilities.

No one from the NIH or NICHD was prepared to be interviewed for this story. An NICHD spokesman said staff had "declined to be interviewed about Steven Hatfill's employment at NIH." They were, he said, "not interested in commenting about this matter." Likewise, "Dr. Margolis does not want to be interviewed regarding Steven Hatfill."

What about the senior officers and scientists of USAMRIID? One of the most sensitive research establishments on the planet, where Hatfill picked up "secret" level security clearance on his way to the Level Four biocontainment labs? As far as USAMRIID was concerned, the NRC had screened and passed Hatfill, and NRC says security checks are beyond their responsibility. "It's a local issue," says Gamble. "Every federal research institute has their own form of security clearance, and we can't become involved in that because it would become too complex. It's outside our area of responsibility."

USAMRIID refused to respond to questions regarding Hatfill, other than to confirm his position in the Virology Division and to stress that "he did not work with anthrax" there.

Maybe after so many years of misrepresentation, he was unable to tell what was real in his past and what had been falsified.

Hatfill also refused to comment on this investigation. But his spokesman and friend, Pat Clawson, issued a statement on his behalf.

"Dr. Steven Hatfill is not the anthrax mailer. He is a scientist and physician who has devoted his career to preserving life, not destroying it."

The statement later continues: "Legal considerations prevent Dr. Hatfill from responding to specific issues about his personal background and professional credentials, but the real questions the press and public should be asking are: Who perpetrated the anthrax attacks that terrorized the nation? Why is the government's 18-month, multimillion-dollar investigation at a dead end? Why has the government conducted a public campaign to destroy the life of an innocent American patriot without having any credible evidence against him?"

In 2001, the US government spent $60 million on biodefense projects. In 2003 that figure will grow to $2 billion. Many more labs—both military and civilian—will be working with lethal pathogens if President Bush fulfills his State of the Union promise to spend an additional $6 billion developing and stockpiling biodefense vaccines.

More scientists will soon have access to anthrax, plague, monkey pox, Ebola, Marburg, and smallpox as the government's biodefense offensive swings into action. Many of those researchers will be vetted by the same government system that vetted Hatfill.

Twice in April 2002, anthrax spores escaped from the Level Three labs of USAMRIID. USAMRIID has refused to release its report into these incidents. On February 12 this year, *The Los Angeles Times* published a story examining USAMRIID's safety record. The facility's commander, Colonel Erik Henchal, was interviewed. He said that screening by the NRC for positions at USAMRIID was now "more stringent." The next sentence, however, ran as follows:

But Ray Gamble, director of the council program that sponsored Hatfill, said there had been no substantive changes in how applications are reviewed. "It's a scientific review that hasn't changed in hundreds of years. It's based on the technical proposal, the scientific merit. There are always opportunities for people to misrepresent themselves."

To date Steven Jay Hatfill remains unemployed. He now spends most of his time shut inside his girlfriend's apartment. The frenzy of press stories about him has died. The FBI has made no public comment on the progress of the anthrax investigation in months.

And no government department or agency involved in the anthrax investigation has offered any evidence of Hatfill's guilt.

The Other Man Who Invented Flight

(continued from page 64)

to the skies in 1906. To evade potential competitors, Orville and Wilbur Wright had worked in near secrecy, choosing Kill Devil Hills for both its favorable winds and its remoteness. The Wright brothers were determined not only to be the first to achieve powered flight, but also the first to build a commercially viable plane.

After the *Bird of Prey* flights, the Wrights protested that they actually deserved the credit as the inventors of the airplane. Although aeronauts across the world soon sided with the brothers—and the evidence was clearly on their side—Santos-Dumont continued to insist that he was the true father of the airplane. The Brazilian government perpetuates this claim and protests to Washington whenever anniversary celebrations of the Wright brothers, like this year's centennial, fail to pay tribute to their countryman.

The Wrights had a different motivation from Santos-Dumont in developing the plane. They were not idealists. They did not dream about bringing distant peoples together. They were not thrill-seekers. They did not rhapsodize about the joys of flying or preach a kind of aerial spirituality. They were not playful men, and they certainly did not host dinners at elevated tables. They were intent on building flying machines for financial gain, and when the US government initially refused to fund them, they had no moral compunctions about approaching foreign militaries.

Santos-Dumont was distraught when the Wrights eclipsed him as the most famous name in aeronautics. He tried to upstage them by building a diminutive plane of minimal weight and elegant simplicity. It was the world's first sports plane. Its fetching silk-covered wings gave it the translucent grace of a dragonfly, which inspired the nickname *Demoiselle* ("dragonfly" or "young lady").

During the summer of 1909, Santos-Dumont flew *Demoiselle* daily. There was not enough space for him to land it in front of his apartment on the Champs Elysées, but it was the closest thing he had had to an aerial car since *Baladeuse*. On January 4, 1910, he had a serious accident in *Demoiselle*. The details are not clear because there were few witnesses and he did not speak or write about the mishap. According to one account, "a bracing wire snapped, collapsing a wing, and he plunged