

INVITED ARTICLE

STAR GATE: THE U.S. GOVERNMENT'S PSYCHIC SPYING PROGRAM

BY EDWIN C. MAY

ABSTRACT: From 1972 to 1995 various agencies of the U.S. government funded applications of and research into psi to the tune of over 20 million U.S. dollars. Although this sounds like a substantial amount of money to most of us, with regard to military and/or intelligence funding it is almost round-off error! This activity was not inspired by some academic curiosity that one might find at a university; rather, it was driven by necessity during the Cold War. Puthoff and Targ deserve unbounded respect for shepherding the project, especially in its early days. My view of STAR GATE extends from late 1975 through 1995, and I am the “keeper of the keys” of all the research and some of the spying. This means I have all the project records, including such things as raw data from a large number of experiments, final reports to a host of clients, administrative records as to who funded the project and for how much money, who was involved, and how and why the government’s in-house activity was established at Ft. Meade. This paper is a personal narrative of my first-hand account of much of that work.

Keywords: psychic spying, government ESP, insider view, intelligence operations

It was late in 1975, in the midst of the Cold War, that I joined the ongoing, highly classified program at Stanford Research Institute (now called SRI International) as a consultant to study and use extrasensory perception, a form of which technically is also known as “remote viewing,” to gather information for the U.S. military and intelligence communities. After I had been notified that my *secret* government clearance had been approved, the director of the program, Harold Puthoff, called me into his office and closed the door behind me. Hal opened an imposing safe in his office. What he showed me blew my mind. Even to this day, after all these years, I still get goose bumps thinking about the then-classified examples he showed me.

Government clearances were not new to me. I was given my first one as a 20-year-old student while working during the summer at the Rand Corporation in Santa Monica, California. I worked there for each summer for the next 5 years in the Earth and Planetary Sciences Department learning about atmospheric physics. Physics, after all, was my declared major at the University of Rochester, and this job offered me an extraordinary opportunity in theoretical research.

The data Hal took from his safe have all been declassified and are now available from the National Archives for \$140 (www.archives.gov). Thus, I will not belabor the details here. I simply quote from Puthoff and Russell Targ’s final report to the CIA, dated December 1, 1975:

Date: 1 June 1973, 1700 hours, Menlo Park, California.

Protocol: Coordinates 38°23’45” to 48”N, 79°25’00”W were given (with no further description) by experimenter Dr. H. E. Puthoff to subject SI [later identified as Pat Price] by telephone to initiate the experiment.

On the morning of 4 June 1973, SI’s written response (dated 2 June 1973, 1250 to 1350 hours, Lake Tahoe, California) was received in the mail:

Looked at general area from altitude of about 1500 ft above highest terrain. On my left forward quadrant is a peak in a chain of mountains, elevation approximately 4,996 ft above sea level. Slopes are greyish slate covered with variety of broadleaf trees, vines, shrubbery, and undergrowth. I am facing about 3° to 5° west of north. Looking down the mountain to the right (east) side is a roadway—freeway, country style—

curves then heads ENE to a fairly large city about 30 to 40 miles distant. This area was a battleground in civil war—low rolling hills, creeks, few lakes or reservoirs. There is a smaller town a little SE about 15 to 20 miles distant with small settlements, village type, very rural, scattered around. Looking across the peak, 2500 to 3000 ft mountains stretch out for a hundred or so miles. Area is essentially wooded. Some of the westerly slopes are eroded and gully washed—looks like strip mining, coal mainly.

Weather at this time is cloudy, rainy. Temperature at my altitude about 54° F—high cumulo nimbus clouds to about 25,000 to 30,000 ft. Clear area, but turbulent, between that level and some cirri stratus at 46,000 ft. Air mass in that strip moving WNW to SE.

1318 hours—Perceived that peak area has large underground storage areas. Road comes up back side of mountains (west slopes), fairly well concealed, looks deliberately so. It's cut under trees where possible—would be very hard to detect flying over area. Looks like former missile site—bases for launchers still there, but area now houses record storage area, microfilm, file cabinets; as you go into underground area through aluminum rolled up doors, first areas filled with records, etc. Rooms about 100-ft long, 40-ft wide, 20-ft ceilings, with concrete supporting pilasters, flare-shaped. Temperature cool—fluorescent light-ed. Personnel, Army 5th Corps Engineers. M/Sgt. Long on desk placard on grey steel desk—file cabinets security locked—combination locks, steel rods through eye bolts. Beyond these rooms, heading east, are several bays with computers, communication equipment, large maps, display type, overlays. Personnel, Army Signal Corps. Elevators.

1330 hours—Looked over general area from original location again—valleys quite hazy, lightning about 30 miles north along mountain ridge. Temperature drop about 6° F, it's about 48° F. Looking for other significances: see warm air mass moving in from SW colliding with cool air mass about 100 miles ESE from my viewpoint. Air is very turbulent—tornado type; birds in my area seeking heavy cover. There is a fairly large river that I can see about 15 to 20 miles north and slightly west; runs NE then curves in wide valley running SW to NE; river then runs SE. Area to east: low rolling hills. Quite a few Civil War monuments. A marble colonnade type: "In this area was fought the battle of Lynchburg where many brave men of the Union and Confederate Armys [sic] fell. We dedicate this area to all peace loving people of the future—Daughters G.A.R."

On a later date SI was asked to return to the West Virginia site with the goal of obtaining information on code words, if possible. In response, SI supplied the following information:

Top of desk had papers labeled "Flytrap" and "Minerva". File cabinet on north wall labeled "Operation Pool" ... [third word unreadable].

Folders inside cabinet labeled "Cueball", "14 Ball", "Ball", "8 Ball", and "Rackup". Name of site vaguely seems like Hayfork or Haystack. Personnel: Col. R. J. Hamilton, Maj. Gen. George R. Nash, Major John C. Calhoun (??).

Urals Site (S1)

After obtaining a reading on the West Virginia site, SI volunteered that he had scanned the other side of the globe for a Communist Bloc equivalent and found one located in the Urals at 65°00'57"N, 59°59'59"E, described as follows:

Elevation, 6200 ft. Scrubby brush, tundra-type ground hummocks, rocky outcroppings, mountains with fairly steep slopes. Facing north, about 60 miles ground slopes to marshland. Mountain chain runs off to right about 35° east of north. Facing south, mountains run fairly north and south. Facing west, mountains drop down to foothills for 60 miles or so; some rivers running roughly north. Facing east, mountains are rather abrupt, dropping to rolling hills and to flat land. Area site underground, reinforced concrete, doorways of steel of the roll-up type. Unusually high ratio of women to men, at least at night. I see some helipads, concrete. Light rail tracks run from pads to another set of rails that parallel the doors into the mountain.

Thirty miles north (5° west of north) of the site is a radar installation with one large (165 ft) dish and two small fast-track dishes.

The two reports for the West Virginia site and the report for the Urals site were verified by personnel in the sponsor

organization as being substantially correct. The results of the evaluation are contained in a separate report filed with the Contracting Office Technical Representative.

As it turned out, the West Virginia site was a very secret National Security Agency (NSA) listening post, and S1's data spawned a substantial internal security investigation that showed no wrongdoing on the part of the SRI team or S1. All this happened before the Internet and tools such as Google Earth. In essence, it was data such as these from S1 and others during those early days of the project that cemented the U.S. government's commitment to the remote viewing programs for the next 20 years.

From the inception of the project under the CIA's auspices in 1972 through 1979, SRI had three primary responsibilities. First, we were to use ESP to obtain information about potential threats from the Soviet Union, other Eastern Bloc nations, and the People's Republic of China. Two, we assessed the credibility and accuracy of intelligence regarding ESP research that was slowly filtering out from the Soviet Union. Finally, with minimal support, we conducted basic and applied research. The basic research concerned the fundamental physics, physiology, and psychology of ESP. The applied research searched for ways to make the "end-product" more accurate and reliable.

It is a sad fact that modern military decision makers are extremely hesitant to finance programs based on a putative extrasensory capability. During the Cold War, Senator William Proxmire invented a prize—the Golden Fleece Award—as a way of embarrassing government officials who routinely funded silly projects. The study of ESP also possessed a high "giggle" factor, regardless of the quality of the work. Both the giggle factor and the fleece award had a chilling effect on the funding community for ESP research. When I became the project director at SRI, more than 40% of my time was spent attempting to raise funds so that the program could continue.

There were many successful applications of ESP within the project at SRI and later at Science Applications International Corporation (SAIC). SAIC is similar to SRI in that it is a private, not-for-profit corporation, but it is much larger. Although it has a number of nondefense contracts, it is, or was then, primarily a defense contractor. When the program closed at SRI for lack of funds, a former Air Force client, then retired, was working for SAIC and arranged for me to establish STAR GATE anew there. That lasted for another 4 years with funding of about four and one half million dollars.

One example of an intelligence-like success. Consider the case of trying to find U.S. Army Brigadier General Dozier, who was kidnapped from his home in Verona, Italy on the evening of December 17, 1981. Joe McMoneagle was asked to locate the general by using remote viewing to accurately draw Dozier's current location. Among McMoneagle's responses was a drawing of a unique circular park with a cathedral. As it turned out, by scouring maps and photographs for such a combination of structures, the searchers found one in the city of Padua, the place where General Dozier was later rescued. Later Dozier was briefed on February 9, 1982, from 9:30 to 10:15 a.m., at the Command's Special Compartmented Information Facility (SCIF: Bldg. 4554) on GRILL FLAME an early nickname for the psychic program. He was then asked to review sketches and narratives generated during the GRILL FLAME sessions for any correlation to places or events surrounding his kidnapping. Dozier was so impressed with the data that he suggested that senior government officials, military officers, and leading business and political personalities be instructed on what to "think" if they were kidnapped so that psychic searchers could more easily locate them.

There are three basic approaches that have worked for such search tasks in the field and in the laboratory. The first is to ask psychics to "stick a pin in a map" corresponding to the lost person. In my experience, this approach usually doesn't work. When it does work, people often give this positive result undeserved attention.

A more effective method is the standard "remote viewing" technique, where the target is the whereabouts of the missing person, in this case General Dozier. However, even this approach has its problems. Excellent remote viewing might not contribute much to finding the lost person. Let me illustrate. Imagine the following scenario. We wish to find a Soviet submarine that is lurking underwater somewhere off the California coast. Fortunately, we have at our disposal a psychic viewer who is nearly perfect with her impressions. The viewer describes the interior of the sub exactly, describes the crew members in detail, provides the name of the captain and his children, and tells what the crew ate for dinner that evening! We now have top-of-the-line accurate psychic data, but it in no way helps us find the sub. Then, using remote viewing to "look outside" the sub yields an amazingly accurate description of—you guessed it—water! This is one example of how intelligence value is often unrelated to the quality of the remote viewing. The quality of remote viewing is excellent; the value of the information nil.

Fortunately, the real world provides a compromise. In the standard out-bound remote viewing protocol, an agent travels to some randomly chosen location and the viewer simply describes the surroundings where that person

is currently located—nothing new here. After all, this is the bread-and-butter laboratory experiment. So how might this approach be used to locate a person? It clearly depends upon the accuracy and detail of the psychic response. In the ultimate case, suppose the viewer gives the street name and address of the hiding or lost person; then finding this person is simply a job of going there and knocking on the appropriate door. Sounds impossible, but this approach, or something conceptually similar, has worked spectacularly well in the past.

In 1986, we were awarded a rather substantial 5-year Army contract of 10 million dollars. However, we never received the full amount. The third year funding was cut in half and after the fourth year it all vanished. So, of the original 10 million dollars, we received only five. Nevertheless, as a result of these resources, substantial progress was made in all of our primary tasks. For the first time we actually had a charter to conduct basic research to attempt to understand the underlying mechanisms of parapsychological phenomena, as part of our role of providing scientific support to the Army and Defense Intelligence Agency (DIAs)'s in-house remote viewing group. Until this contract, we were required mostly to conduct operations-oriented research (i.e., investigations designed to improve the quality of the results) and were not expected to understand the mechanisms involved. Additionally, we continued to conduct foreign assessments—analyses of potential parapsychological threats from other countries—and, to a limited degree, remote viewing of foreign sites.

One aspect of the large Army contract was that we were required to conform to the wishes of three separate Army-constituted panels: a Scientific Oversight Committee (SOC), an Institutional Review Board (a.k.a. Human Use Review Committee), and a Pentagon Policy Review Committee. All committee members were required to hold active security clearances. Let me emphasize that these committees were not “rubber-stamp” bodies. Rather, their members agreed to long-term commitments, and they all took their responsibilities very seriously. As the recipient of their reviews, I can attest that the quality of our output improved substantially.

Probably the most active committee was the SOC. For the first 2 years, it had 12 members who were drawn both from lists of people we supplied and ones provided by the Army. Because in the third year of the contract the 2 million dollar budget was cut in half, I reluctantly had to reduce the SOC membership to only five. The Army had the final decision regarding who would serve on the committee. They all were paid under our contract for their time and travel. A threshold requirement for serving on the SOC was that the member be skeptical of putative parapsychological phenomena, but at the same time open-minded enough to want to take the job seriously. Furthermore, their time commitment was substantial, as the job was to last for the 5-year duration of the contract.

The SOC had three primary tasks: (a) to review and approve the detailed experimental protocol for every experiment to be conducted under the Army contract; (b) to exercise unannounced drop-in privileges to see firsthand what was happening; and (c) to review critically, in writing, the final reports for each of the tasks in the contractual statement of work. There were 38 of the latter in the first year alone.

Because our group was highly professional, the first of the SOC's three tasks was rather straightforward. From time to time they did some protocol “tweaking,” but, for the most part, the protocols we submitted were approved directly, with little or no substantive change. The SOC's second task—unannounced drop-in privileges—looked good on paper but was hardly ever exercised. I suppose this was to be expected, given that the committee members were senior professionals with active individual careers.

The main SOC action came with their third responsibility—critical reviews of our final reports. As soon as the reports were completed and copyedited by SRI International professional editors, they were copied and sent to all the SOC members. They were to review them as if they had been submitted to a scientific journal of which the member was editor-in-chief. They took notes and eventually provided their comments in writing directly to the Contracting Office Technical Representative. In our case, this was an Army officer with the rank of colonel who had been transferred to the Army Presidio in San Francisco, but whose full-time responsibility was to be in his office with our group at SRI. Their opinions were added to our final reports as appendices.

In addition to obtaining their written opinions, we hosted each year a 2-day meeting, during which we presented our results and discussed the outcomes with the group in person. There was good and bad news here, although the bad news should be construed as good. Because we were good at our jobs, we won 85% of the vigorous and sometimes loud arguments, but the better news is the 15% we lost. Our scientific “product,” so to speak, sharply improved. That improvement manifested in two ways. First, we learned to approach all positive results from our experiments in a skeptical way; that is, we learned to assume that what we just saw was a mistake and we needed to set about finding it. If we failed to find an error, we could assume something interesting was happening. Secondly, because of the interdisciplinary nature of the SOC, our group was exposed to experimental and theoretical

techniques that were outside the training of our own researchers but could be incorporated with the SOC's assistance. My interaction with the SOC has been among the highlights of my professional academic research career.

Besides direct ESP, here was another approach to gathering intelligence in which the U.S. government took an interest. Normally, when a new military policy, weapons system, or battle order is being considered, the proposed new system is evaluated critically. Often two teams of evaluators, designated as Red and Blue, are assembled to criticize or support the plan. Our group was awarded a contract to participate as part of a Red team to evaluate a proposal by the Carter Administration, and later by the Reagan Administration, to deploy the new MX missile system.

The proposals were variations on the theme of building many more missile-launching facilities than there are missiles and then continually moving the missiles covertly among the various launching facilities—let's call it a nuclear shell game. The Congressional Budget Office originally estimated that procuring 200 MX missiles, building 5,800 shelters for them, and operating the system would cost 28.3 billion dollars all the way through to fiscal year 2000. Eventually, a "racetrack" idea gained favor. Each missile would be moved among shelters located on spur roads radiating from a central, circular track. There would be about five such patterns, or clusters, in each of about 40 valleys in the deserts of Nevada and Utah. This racetrack system would allow transporters to shift missiles between shelters within 30 min, in time to escape incoming Soviet missiles after they have been launched. The racetracks would be about 56 km in diameter.

The complexity and financial support that would have been required for this proposed system demonstrates how seriously the Carter Administration considered the concept. In fact, they were planning to move ahead as soon as possible. The U.S. Air Force expected to begin site selection for the MX operation's base test and training facility by 1980. Work on the first racetrack and shelters would begin by 1983. The first 10 MX missiles and 230 shelters were scheduled to be operational by 1986. The assumption behind this system was that the Soviets would not know where to aim their missiles to cause the most damage to the US's ability to retaliate, as our missiles would be moved continually among the various shelters.

The question before us was whether we could compromise this racetrack concept using ESP. If so, we would have to assume that the Soviets could also accomplish this. This would imply that the racetrack concept was indefensible, and it would make no sense to build this vast system of racetracks and shelters in the first place.

Our proposal, which was eventually approved, included the following elements in the statement of work, which indicated what we were going to do with the money if the contract was awarded to SRI:

1. As a feasibility study, we would assume 1 actual missile shelter to 9 sham ones, determine the statistics of an MX system compromise as a function of beyond-chance hitting by remote viewers.
2. Conduct a screening program involving about 100 SRI employees and other experienced remote viewers, utilizing a 1-in-10 screening device with 100 trials for each of these employees.
3. Take the five best people from the screening and have each of them contribute 200 more trials.
4. From these data, estimate the potential vulnerability of the racetrack or shell game concept.

In addition, we used a sophisticated statistical technique coupled with a form of ESP called "dowsing" to see if we could compromise the system by using a statistical approach towards compromising the MX missile system.

In our final report to the government, we showed that ESP practitioners were able to locate the hypothetical missile in 12 out of 12 trials, with a total of 452 circle selections (May & Puthoff, 1981). The correct hit rate was over two-and-one-half times what was expected in a 1-in-10 game. Figure 1 shows a letter on U.S. Senate stationery from Senator John W. Warner (R-Virginia) to the Secretary of Defense at the time, the Honorable Caspar W. Weinberger, describing our contribution to the MX missile program.

I doubt that our data alone kept the system from being built, but, on the other hand, our ESP research reports surely contributed in an important way towards that end.

Beginning in 1986, the Air Force became exceptionally interested in learning the degree to which remote viewing could provide useful information on directed-energy weapon systems. To test this idea, they awarded us a contract to examine this question in three trials: one per year, for 3 years. As always, we used a double-blind protocol, meaning that no one who interacted with the remote viewers knew anything about the potential target or even, in this case, the identity of the client. A session would play out as follows. We were usually given the Social Security number of an individual none of us had met. In addition, we were told that on a specific date this person would be

somewhere in the continental US. As project director, I knew that the targets would be directed-energy systems of some kind, but beyond that I too did not know any specifics.

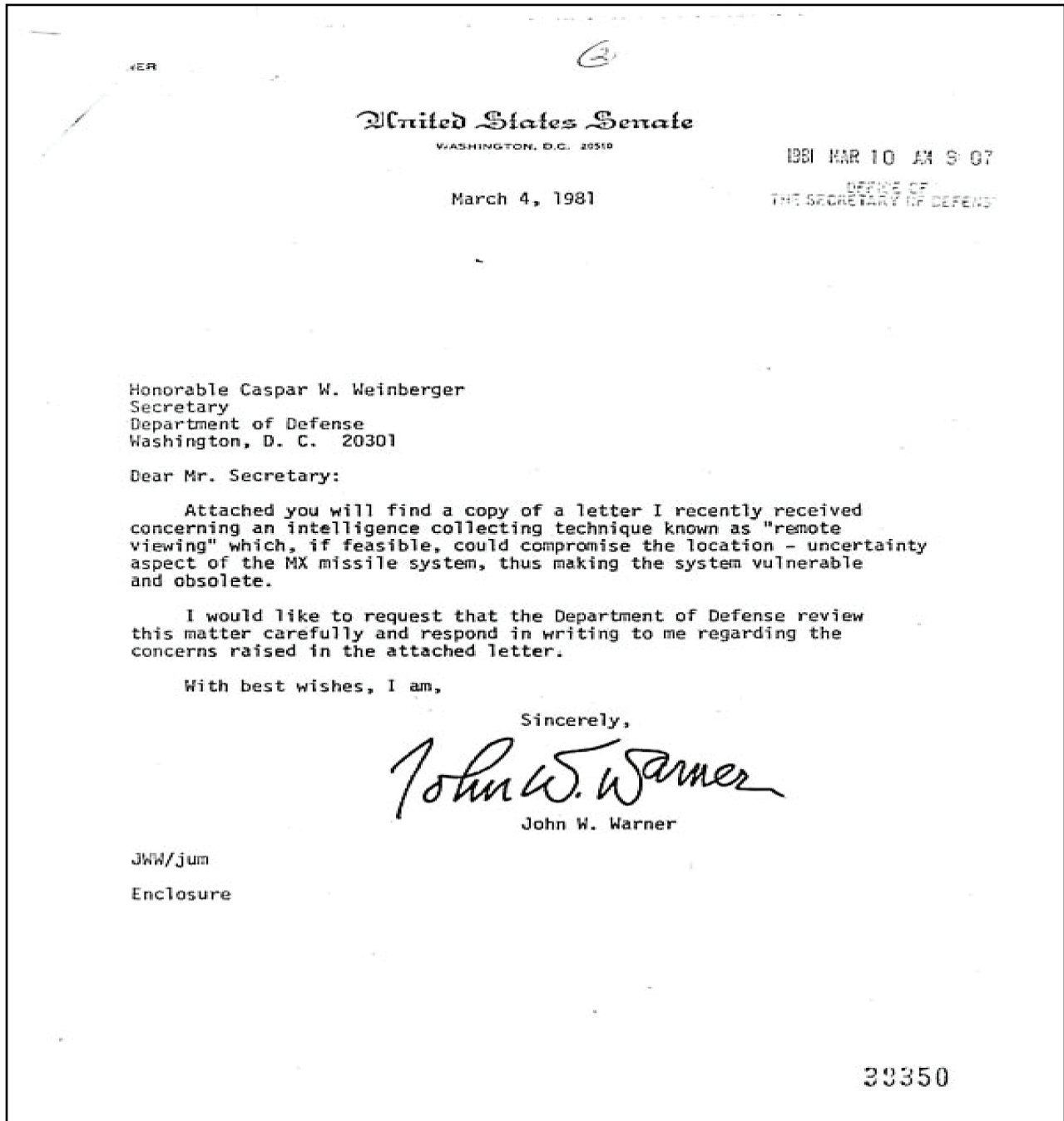


Figure 1. Letter from Senator John W. Warner commenting on the success of our MX missile program compromise.

At a specified time, Nevin Lantz, our project's psychologist and active researcher, would assign a task to the psychic at midnight and again once every 8 hours, including the next day's midnight. That task was simple: describe the surroundings where the person to whom the Social Security number belonged was standing. So far, nothing particularly new or inventive was involved. The analysis of the result was a breakthrough not only for laboratory studies. After all, if used properly, it could easily have been adapted to the real world of psychic spying.

I will not go through the mathematical intricacies, because conceptually the idea is quite simple. Before any of the sessions with a client began, I worked with the sponsor to define three categories of things they wanted

to know about the target. First and foremost was the target's function: why it was being developed. The Air Force had five or six different functions in this category alone in which they were interested. The second category was physical relationships: an instrument, for example, might be underneath a building which is next to a truck. There were around 10 such relationships. Lastly, they specified a rather long list of objects, similar to those one would expect from a traditional remote viewing.

For each of the targets, the Air Force filled out a table for each element in all three categories. The elements in the table were specific to each target to be employed later, and it included ratings of the degree to which each element was germane to that target. After the psychic session, an analyst, who was blind to the target and its list of items, filled out the same table, but this time with regard to the degree to which each item was present in the psychic's response.

Armed with both tables, one for the intended target and one for the response, the computer could take over. Although mathematically complex—the process is known as “fuzzy set analysis”—three simple ideas emerged from the computation. Accuracy was defined as the percentage of the Air Force's predefined target elements that was obtained by the psychic. The reliability was defined as the percentage of the elements in the psychic's response that were correct. Finally, the “figure of merit” was defined as the product of accuracy and reliability.

The way, then, to obtain a high figure of merit was for the psychic to describe as much of the intended target as possible, but in as simple and concise a way as possible, so as not to include many incorrect elements. To get a hint of what a random response could be like in the absence of any psychic ability, we had determined in the laboratory that, using a rough rule of thumb, about a third of any site could be described by about a third of any response. This may seem high, but this rule of thumb arose from considerable analyses of data collected in the laboratory.

How did this work out? I will describe just one of three successful examples: Project Rose, a high-frequency, high-power, microwave device in the New Mexico desert at Sandia National Laboratory. Joe McMoneagle was the psychic on this trial. By the Air Force's own assessment, the accuracy, reliability, and figure of merit for this case were 80%, 69%, and 55%, respectively. Keep in mind that chance, Joe just being lucky, would predict these numbers to be 33%, 33%, and 11%, respectively. Figure 2 shows that the drawing and pictures were more impressive.

From my 30 years of experience in ESP research, I consider this case to be among the very best. If this example had been an intelligence operation instead of a proof-of-principle session, an independent analyst would have had no trouble whatsoever in identifying the target as a microwave device of some sort. The drawings on the bottom in Figure 2 clearly show easily identifiable elements, such as a waveguide and microwave horn. Joe went on to say that this device was in a wrapped environment and was being used as some kind of test evaluator. In fact, they were shining the microwaves on electronic instruments to test their sensitivity to high-energy microwave radiation. For me, however, the *pièce de résistance* is the drawing in the upper left side of Figure 2. Perhaps it is not as visually compelling as other examples, but for me, at least, “He nailed it!” Not only did Joe accurately describe exactly what was going on, but also by his drawing he indicated the spread of the electromagnetic radiation, which matched the known beam angle of the device. The actual device is shown at the top of the figure.

My point in all this detail is important. We had developed a system of analysis that had the potential of allowing an operations analyst looking at real psychic spying data to evaluate the results quantitatively. When combined with more traditional methods of intelligence collection, this method allowed the military to assess more accurately whether or not to invest resources in solving the problem.

Did the psychic spying program work? In short, Yes. I realize, of course, that the “official” U.S. government's response was “No.” However, as I hope I have demonstrated here, the real answer is more complex. The CIA was tasked by Congress in 1995 to conduct a 20-year retrospective review of STAR GATE to determine whether or not the intelligence community should continue funding the program. They hired the American Institutes for Research to conduct the investigation, and they produced two reports: one classified and one not (Mumford, Rose, & Goslin, 1995).

In a release of many of the STAR GATE documents in 2000, the CIA published a report entitled “Summary Report: STAR GATE Operational Tasking and Evaluation in which they conducted a detailed analysis of 40 ESP operations. Quoting from this report (Mumford, Rose, & Goslin, 1995):

From 1986 to the first quarter of FY 1995, the DoD paranormal psychology program received more than 200 tasks from operational military organizations requesting to attain information unavailable from other sources. The operational tasking comprised “targets” identified with as little specificity as possible to avoid “telegraphing the desired response.”

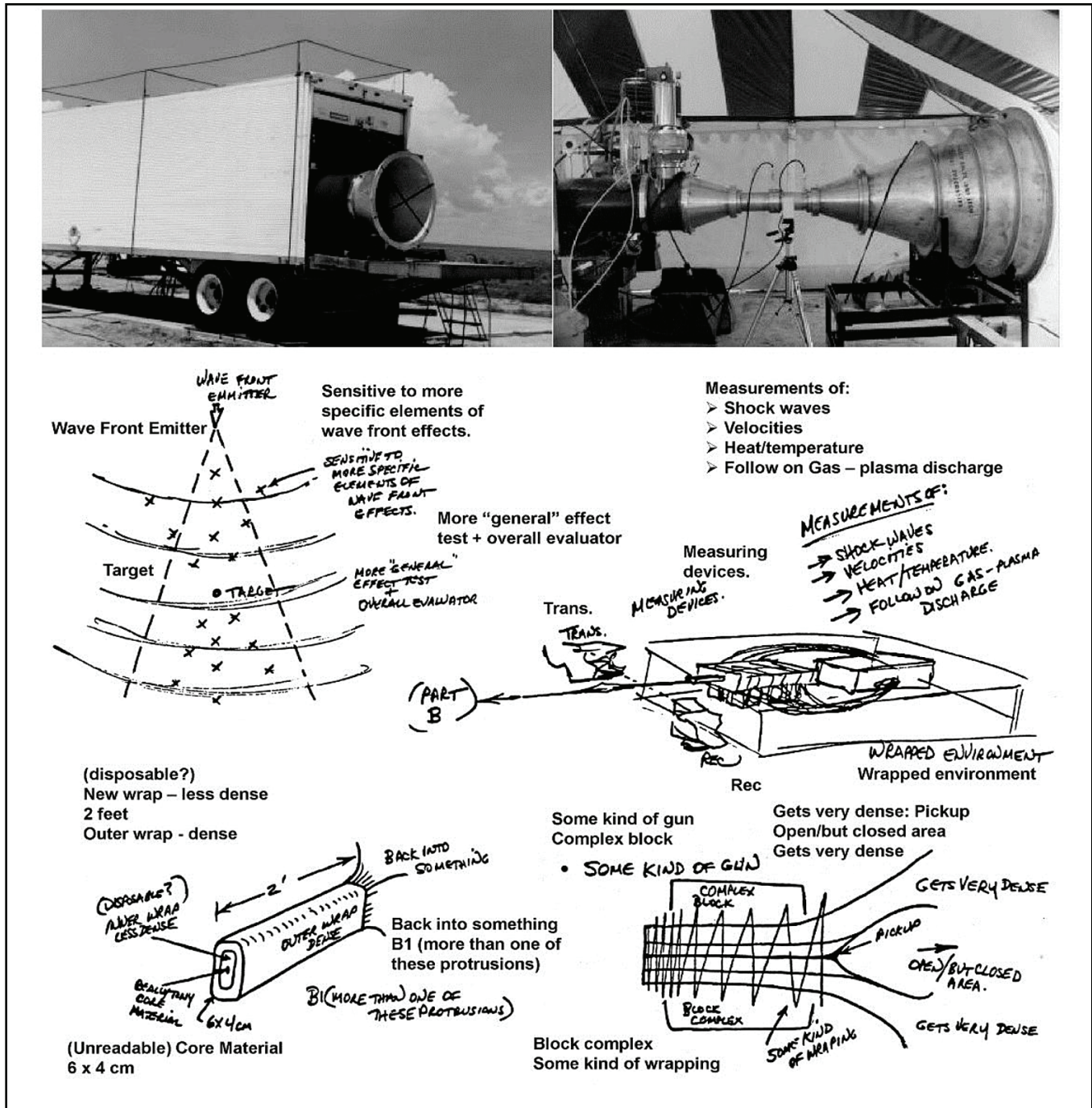


Figure 2. Microwave target test bed for directed energy weapons systems. (I have added typed versions of some of the written words for clarity.)

In 1994, the DIA STAR GATE program office created a methodology for obtaining numerical evaluations from the operational tasking organizations of the accuracy and value of the products provided by the STAR GATE program. By May 1, 1995, the three remote viewers assigned to the program office had responded, i.e., provided RV product, to 40 tasks from five operational organizations. Normally, RV product was provided by at least two viewers for each task (p. D-1)

Data from these 40 operational tasks were evaluated by the tasking organization (not by the ESP team members) along two separate dimensions. About 70% of the 100 separate evaluations of these data were deemed to be possibly true or better; however, only 50% were deemed to be of some practical value, however minimal.

Before we jump to conclusions that the spying unit was worthless, there are a number of major problems not mentioned in this particular CIA report that we must consider. First, the evaluations shown above were all gathered “after the fact”; that is, after some form of “ground truth” had been determined. In all the years of research effort under the STAR GATE program, we were never able to identify in advance a reliable indicator of the value of the data in a particular response, in total or in part. Thus, it would be considered a major risk to assign scarce resources to intelligence gathered by ESP without having confirmatory data from other independent sources and methods.

The conclusion was that ESP was not particularly useful, so the CIA eventually decided not to assume responsibility for the STAR GATE program in 1995, although they did suggest that the academic community continue to look into ESP—an odd comment if they had been convinced that ESP did not actually exist. Thus, the government sponsorship of ESP activity came to a close.

It was clearly a mistake to curtail our operations, based on their analysis. By the CIA's own admission, they only evaluated 40 sessions out of many hundreds, and they only looked at data from 1994 onward. Even though they were requested to do so, they did not interview McMoneagle or any of the individuals who were responsible for his receiving a Legion of Merit award—the highest honor for any intelligence officer—for his excellent contribution to intelligence collection. To place this into context, allow me to quote from a part of the citation for this prestigious award:

...[McMoneagle] used his talents and expertise in the execution of more than 200 missions, addressing over 150 essential elements of information. These EEI contained critical intelligence reported at the highest echelons of our military and government, including such national level agencies as the Joint Chiefs of Staff, DIA, NSA, CIA, DEA, and the Secret Service, producing crucial and vital intelligence unavailable from any other source....

This inconvenient citation was never considered in the CIA decision, nor was it part of the overall investigation ordered by the U.S. Congress to evaluate a 20-year-long program. The issue of whether the unit was pulling its own weight in the intelligence community remains murky.

According to McMoneagle's assessment, during his time at Ft. Meade from 1978 to when he retired in 1984, approximately 15 to 20% of the cases of psychic espionage were resolved successfully. This sounds terrible. But let us remember that the program, first at SRI and later at Ft. Meade, always seemed to be a court of last resort. Only the “impossible” problems were tasked, that is, those problems that did not yield to traditional methods of intelligence collection. Thus, from that perspective, a 15 to 20% success rate is as close as one can get to a miracle. Many of these successes remain classified, along with the few that been gained since then. Here I may also add the oft-quoted “intelligence failures” that occurred when traditional human and technological intelligence methods were used after the recent spate of terrorist attacks in many parts of the world. The point is that we have to ensure we use all available sources of data collection to decrease the instances of intelligence failure.

Shortly after the government closed the Ft. Meade Unit, Congress required the staff to send all their records to the CIA. The person who helped pack up the material told me that many of our research reports were still in their original packages, unopened! This is one terrible consequence of self-defeatism and of a well that was poisoned against scientific inquiry.

In the closing days of the Ft. Meade Unit, the staff sent to the CIA approximately 35 sealed boxes so that the agency could conduct their Congressionally-directed evaluation of the STAR GATE program. In both the classified and unclassified versions of their report to Congress, they implied that the result of their careful examination of the record showed that further military or intelligence community support was not warranted.

Two years later, after the CIA program evaluation reports had been published, two colleagues, one from the DIA and one from the Pentagon, officially were given access to the room at the CIA in which all the boxes were stored. They found that not a single sealed box had ever been opened! The fix was in!

The implications are obvious: the careful and in-depth review of the material required by the U.S. Congress was not based on an evaluation or even a reading of the data! Because the DIA person had helped pack the boxes and could identify which ones to open, in a matter of minutes they were able to find incontrovertible proof of intelligence collection examples that were not only successful, but constituted a valuable contribution to solving the problem at hand. Former CIA Director Robert Gates commented on the news television program ABC Nightline (1995):

Well, all I can say is that in the 20 years or 25 years where I was in a position perhaps to be aware, I don't know of a single instance where it is documented where this kind of activity contributed in any significant way to a policy decision or even informing policymakers about important information.

This statement is blatantly false, and Director Gates was aware that I knew he had been briefed on specific examples to the contrary. In fact, my role on this episode of *Nightline* was simply to act as a foil to Director Gates. Many of my comments contradicting him were edited out in the final aired version. I chose to go on this program, even though my managers at SAIC ordered me not to, and I was issued the threat, by implication, that both CIA and SAIC lawyers were going to watch the show for any transgressions I might commit. My only alternative was to resign my post at SAIC, effective immediately.

Under a contract from the CIA, Mumford et al. (1995) prepared a report for the American Institute for Research on the STAR GATE program. This report was based on the expert evaluation of Professors Jessica Utts (1995a, 1995b), dubbed as representing the pro-psi group, and Ray Hyman (1995), considered a skeptic. The tasking for the reviewers was to answer four general questions: (a) Was there a statistically significant effect? (b) Could the observed effect, if any, be attributed to a paranormal phenomenon? (c) What mechanisms, if any, might plausibly be used to account for any significant effects and what boundary conditions influence these effects? (d) What would the findings obtained in these studies indicate about the characteristics and potential applications of information obtained through the remote viewing process? As Mumford et al. (1995) reported:

One of Dr. Hyman's first comments about Dr. Utts' review was that he considered it perhaps the best defense of parapsychological research he had come across. We concur; likewise, we feel that Dr. Hyman's paper represents one of the clearest expressions of the skeptic position we have seen.

At the outset, it should be noted that the two reviewers agreed far more than they disagreed. One central point of agreement concerns the existence of a statistically significant effect: Both reviewers note that the evidence accrued to date in the experimental laboratory studies of remote viewing indicate that a statistically significant effect has been obtained. Likewise, they agree that the current (e.g., post-NRC review) experimental procedures contain significant improvements in methodology and experimental control (p. 3-80)

Utts (1995a), a professor of statistics at the University of California at Irvine, and formerly at Davis, stated as part of her analysis:

Using the standards applied to any other area of science, it is concluded that psychic functioning has been well established. The results of the studies examined are far beyond what is expected by chance. Arguments that these results could be due to methodological flaws in the experiments are soundly refuted. Effects of similar magnitude to those found in government sponsored research at SRI and SAIC have been replicated at a number of laboratories across the world. Such consistency cannot be readily explained by claims of flaws or fraud (p. 3-2).

The second expert reviewer, Hyman (1995), a professor of psychology at the University of Oregon, while agreeing on the statistical evidence, felt that competing explanations of the phenomena had not been eliminated, a viewpoint that is disputed by Utts (1995b). However, considering these are early days in the investigation of psi phenomena, and there is a growing body of research from other groups and laboratories, in the spirit of science and inquiry we need to continue with this investigation and attempt to address the most vital question, the *how* of psi. There are also a host of technical reviews of the experimental literature on parapsychology, known as meta-analyses, which merge most of the available published research studies directed towards a particular topic. For example, Utts (1991) published one such review paper in the prestigious statistics journal *Statistical Science*, and psychology professor Daryl Bem from Cornell University, along with the late Charles Honorton, published a notable review in *Psychological Bulletin* of the literature on a type of ESP procedure known as the ganzfeld—where psi is observed when the participant is in a mildly altered state of consciousness (Bem & Honorton, 1994). Furthermore, since the publication of the AIR report on the STAR GATE program 19 years ago (Mumford et al., 1995), scientists have continued evidentiary and explanatory studies using improved methods and technology, the results of which cannot be dismissed outright.

Although doubts have also been raised about the utility of psi for military purposes, it is important to note that many eminent scientists, including academicians and Nobel laureates, have supported these programs. Prominent scientists have been involved in the exploration of these phenomena from the early days of its experimental investigation in the late 19th century. While officials of the American government involved in the STAR GATE program may be reluctant to “come in from the cold,” the most prestigious award—the Legion of Merit—given to McMoneagle for his excellence in providing psychic intelligence in peacetime, is evidence of their support and satisfaction with the applied aspect of the program.

Not only does this lend credence to the existence of effective psychic functioning, it hints at the U.S. government's high-level involvement, which reached all the way to the West Wing of the White House. Needless to say, this acknowledgement does not support the doubts raised by the reviewers of the program on the value of psychic espionage as *one* of the methods of intelligence gathering.

I was visiting a senior senator on the Senate Select Committee on Intelligence, who asked if I could rebut the report's conclusion. I said it would be simple, and he asked that I do so, and, to quote him, “pull no punches.” That published report can be found in May (1996). How did all this affect me personally? One thing is obvious. I learned to be a program manager with a substantial budget and a group of very bright people who often held firm and diverse opinions on nearly everything. But something more important may have happened to me and my world view. In modern consciousness studies, there is a spread of ideas about the nature of consciousness, ranging from the dualist perspective, on the one hand, that some part of us, for example our soul or some other non-material aspect, survives our death, to the materialist point of view, that mind and brain are the same and death is the end of an individual's consciousness. More technically, according to the latter view, mind or our rich internal and subjective experience is an outgrowth (a.k.a. an emergent property) of the vast number of neurons in our brain and the even larger number of interconnections among them. This is the view that I have arrived at based on the data, my experiences, and a growing accumulation of supportive research data. Currently this reductionist/materialist view is held by a very small minority of researchers currently active in trying to understand ESP, although it is easily the consensus within the neurosciences and research psychology communities.

One fallout of the Cold War conflict finally being over is that I have joined forces with our former enemies from the Soviet era to jointly author a book on how both sides approached the art of psychic warfare (May, Ruble, & Auerbach, 2014). This has turned out to be a much more difficult task than I had originally thought. Although atheism was part of the official Soviet dogma, on a working level it was simply ignored by many. Even the Russian Orthodox Church has its unofficial roots in Russian shamanism, and the good news is that in shamanistic traditions ESP is considered a good thing. Thus, we had no difficulty at all getting quotes and the support of former very senior officials in the Soviet system, who were quite happy to come forward and admit their interest in ESP.

On the American side of the ocean, however, we are generally a Protestant nation, and in many denominations of that tradition ESP is considered the work of the Devil. We also enjoyed top-level government supporters, which included a Secretary of Defense and other agency directors, most all of whom have retired by now. None of them, however, are willing, as the spy stories say, to “come in from the cold.” They will not allow me to mention their names, even though the evidence of their involvement in the programs is now part of the public record.

I have had the pleasure of visiting Moscow maybe a dozen times by now, and these former “enemies” have become good friends. Thus, during one of my many visits to Moscow, I met with three of my Russian coauthors and our host in his office. Major General Nikolai Sham, Deputy Director of the KGB (Ret.), who kindly wrote the foreword to our book, had also joined us. All of the Russians present had been members of the Communist Party, which officially implied they were firm atheists and materialists. From our discussion of the nature of consciousness, we realized that there was one, and only one, materialist-atheist in the room. Me! The rest were hard-line idealists and theists. We had a great laugh over the obvious irony.

Conclusion

Psychic phenomena have been part of the human experience ever since we, as a species, could communicate, or possibly even before the evolution of language in other species. The skeptic might say, with considerable justification, that much of the putative psychic reporting has been little more than fantasy, selective memory, or some other form of self-delusion. Beginning with the founding of the Society for Psychical Research in London in 1882 and the later pioneering efforts of J. B. Rhine at Duke University, scientists have been challenged to determine

what, if any, of these remarkable self-reports can be teased into the laboratory and studied according to the rules of the scientific method. Perhaps surprisingly, a great deal of research has passed that requirement.

For example, card-guessing experiments, initiated by J. B. Rhine and colleagues at Duke University (Rhine, 1934, 1936), were controversial but taken seriously, culminating with Price's (1955) review of that research in *Science*. Price acknowledged that Rhine's results were revolutionary if true, but because he could not identify any technical or procedural flaws or think of any other viable explanation, he concluded that the results must have been due to fraud. This suggestion spawned a lively debate in *Science* in the 1950s (Bridgman, 1956; Meehl & Scriven, 1956; Price, 1956; Rhine, 1956a, 1956b; Soal, 1956). Two decades later, Price (1972) apologized for his unfounded suggestion. The present public brouhaha regarding the studies on precognition by Bem (2011) is reminiscent of the controversy created around the Rhine data by Price.

As project leader for the research section of STAR GATE, I subcontracted nearly one million dollars over the years to qualified researchers in the field. In one of those contracts, I asked Charles Honorton to conduct a detailed meta-analysis of the precognitive Zener card guessing data. He and Ferrari conducted a meta-analysis to examine all such experiments published from 1935 to 1987 (Honorton & Ferrari, 1989). Their assessment of all such experiments between 1935 and 1987 showed a cumulative statistical effect 11.4 standard errors over chance expectation: a knock-your-socks-off result. Moreover, they determined that neither selective reporting practices nor variations in study quality could account for the observation that, on average, human subjects were able to correctly guess the symbol of a randomly-determined future stimulus card (slightly but significantly) more often than expected by chance. These results stand to this day.

It is beyond the scope of this article to provide an assessment of all the anomalous cognition (a.k.a. ESP) research spanning the last 80 years or so. But perhaps the best evidence for the existence of anomalous cognition arises not from pure academic pursuits, but rather from successful applications. The intelligence community, for example, could not care less about the mechanisms of anomalous cognition. It certainly worked well enough for them to keep the program alive for two full decades. I realize, of course, that the cynical reader will simply observe that our stupid government kept lots of dumb things funded. Hence the Golden Fleece Awards. The defense I offer against that accusation is simple. There were many people in the government who wanted to shut the program down even from its beginning. If it were not for a handful of heroes who put their considerable weight and reputations on the line supporting our project, these detractors would clearly have been successful.

I am often asked, "Is the government still involved?" As I gave up all my security clearances long ago in the spy versus spy game, I simply cannot say for certain. But in my opinion, it is not funding further work. Given the state of the world just now in 2014, all I can do is hope that my assessment is incorrect.

References

- ABC Nightline (1995). *Psychic spies*. Retrieved from <http://lfr.org/LFR/csl/media/videoclips/StarGate/nightline.html>
- Bem, D. J. (2011). Feeling the future: Experimental evidence for anomalous retroactive influences on cognition and affect. *Journal of Personality and Social Psychology, 100*, 407–425.
- Bem, D. J., & Honorton, C. (1994). Does psi exist? Replicable evidence for an anomalous process of information transfer. *Psychological Bulletin, 115*, 4–18. doi: <http://dx.doi.org/10.1037//0033-2909.115.1.4>
- Bridgman, P. W. (1956). Probability, logic, and ESP. *Science, 123*, 15–17.
- Honorton, C., & Ferrari, D. C. (1989). "Future telling:" A meta-analysis of forced-choice precognition experiments, 1935–1987. *Journal of Parapsychology, 53*, 281–301.
- Hyman, R. (1995). Evaluation of program on "anomalous mental phenomenon." In M. Mumford, A. H. Rose, & D. A. Goslin, *An evaluation of remote viewing: Research and applications* (pp. 3–41–3–75). Washington, DC: American Institutes for Research.
- May, E. C. (1996). The American Institutes for Research review of the Department of Defense's STARGATE program: A commentary. *Journal of Parapsychology, 60*, 3–23.
- May, E. C., & Puthoff, H. E. (1981). Feasibility study on the use of RV detection techniques to determine location of military targets. Revised final report. Menlo Park, CA: SRI International.
- May, E. C., Ruble, V., & Auberbach, L. (2014). *ESP wars: East and West*. Manuscript in preparation.
- Meehl, P. E., & Scriven, M. (1956). Compatibility of science and ESP. *Science, 123*, 14–15.
- Mumford, M. D., Rose, A. H., & Goslin, D. A. (1995). *An evaluation of remote viewing: Research and applications*. Washington, DC: American Institutes for Research.

- Price, G. R. (1955). Science and the supernatural. *Science*, 122, 359–367.
- Price, G. R. (1956). Where is the definitive experiment? *Science*, 123, 17–18.
- Price, G. R. (1972). Apology to Rhine and Soal. *Science*, 175, 359.
- Rhine, J. B. (1934). Extra-sensory perception of the clairvoyant type. *Journal of Abnormal and Social Psychology*, 29, 151–171.
- Rhine, J. B. (1936). Some selected experiments in extra-sensory perception. *Journal of Abnormal and Social Psychology*, 31, 216–228.
- Rhine, J. B. (1956a). Comments on “Science and the supernatural.” *Science*, 123, 11–14.
- Rhine, J. B. (1956b). The experiment should fit the hypothesis. *Science*, 123, 19.
- Soal, S. G. (1956). On “Science and the supernatural.” *Science*, 123, 9–11.
- Utts, J. M. (1991). Replication and meta-analysis in parapsychology. *Statistical Science*, 6, 363–403.
- Utts, J. M. (1995a). An assessment of the evidence for psychic functioning. In M. Mumford, A. H. Rose, & D. A. Goslin, *An evaluation of remote viewing: Research and applications* (pp. 3-2–3-40). Washington, DC. American Institutes for Research.
- Utts, J. M. (1995b). Response to Ray Hyman’s Report of September 11, 1995 “Evaluation of program in anomalous mental phenomena.” In M. Mumford, A. H. Rose, & D. A. Goslin, *An evaluation of remote viewing: Research and applications* (pp. 3-76–3-79). Washington, DC. American Institutes for Research.

Laboratories for Fundamental Research
Palo Alto, CA, 94306, USA
may@lfr.org

Abstracts in Other Languages

German

STAR GATE: DAS PARAPSYCHISCHE SPIONAGEPROGRAMM DER U. S.-REGIERUNG

ZUSAMMENFASSUNG: Von 1972 bis 1995 haben verschiedene Geheimdienste der U.S.-Regierung in Anwendungsbereiche und Forschungen in Bezug auf Psi eine Summe von sage und schreibe über 20 Millionen U.S. Dollar investiert. Obwohl dies für die meisten von uns nach einer erheblichen Geldsumme klingt, ist dies in Bezug auf militärische und/oder geheimdienstliche Fördergelder eher wie ein Rundungsfehler! Hinter diesem Programm steckte nicht irgendeine akademische Neugierde, so wie sie an Universitäten üblich ist; es verdankte sich vielmehr einer Notwendigkeit während des Kalten Krieges. Puthoff und Targ verdienen größten Respekt dafür, dass sie das Projekt besonders in der Anfangsphase betreut haben. Meine Beschäftigung mit STAR GATE reicht von Ende 1975 bis 1995, und ich bin der „Schlüsselbewahrer“ für die gesamte Forschung einschließlich einiger Spionageunternehmen. Dies bedeutet, dass ich im Besitz aller Projektunterlagen bin, unter Einschluss der Originaldaten der meisten Experimente, der Abschlussberichte für eine Gruppe von Auftraggebern sowie der Verwaltungsunterlagen, aus denen hervorgeht, wer das Projekt und mit welcher Summe finanziert hat, wer daran beteiligt war, und wie und warum sich die internen Regierungsabläufe in Ft. Meade entwickelt haben. Der Artikel gibt eine persönliche Sicht aus erster Hand auf das damalige Geschehen wieder.

Spanish

STAR GATE: EL PROGRAMA DE ESPIONAJE PSÍQUICO DEL GOBIERNO NORTEAMERICANO

RESUMEN: Desde 1972 hasta 1995 varias agencias del gobierno de EEUUAA subvencionaron aplicaciones e investigación en psi con una suma de más de 20 millones de dólares. Aunque esto suena como una cantidad considerable de dinero para la mayoría de nosotros, para los militares y/o financiación de inteligencia es apenas cambio en el bolsillo! Esta actividad no se inspiró en la curiosidad académica que uno podría encontrar en una universidad; más bien fue impulsado por una necesidad durante la Guerra Fría. Puthoff y Targ merecen un enorme respeto por haber guiado el proyecto, especialmente en sus primeros días. Mi perspectiva de Star Gate se extiende desde finales de 1975 hasta 1995 y yo soy el “guardián” de toda la investigación y parte del espionaje. Esto significa que tengo todos los archivos del proyecto, incluyendo los datos en bruto de un gran número de experimentos, los informes finales a una gran cantidad de clientes, registros administrativos sobre quién financió el proyecto y con cuánto dinero, quién

estuvo involucrado, y cómo y por qué se creó esta actividad interna del gobierno en el Fuerte Meade. Este artículo es una crónica de primera fuente de gran parte de ese trabajo.

French

STAR GATE : LE PROGRAMME D'ESPIONNAGE PSYCHIQUE DU GOUVERNEMENT ETATS-UNIEN

RESUME : De 1972 à 1995, diverses agences du gouvernement états-unien ont financé des recherches et des applications du psi à hauteur de 20 millions de dollars U.S. Bien que cela semble représenter un montant important pour la plupart d'entre nous, pour le budget de l'armée et/ou du renseignement, c'est une somme négligeable ! Cette activité n'était pas inspirée par une curiosité académique similaire à celle que l'on rencontre dans une université ; il s'agissait plutôt d'une nécessité durant la Guerre froide. Puthoff et Targ méritent un grand respect pour avoir chapeauté le projet à son démarrage. Ma perspective sur STAR GATE s'étend de 1975 à 1995, et je suis le « gardien des clefs » de toutes ces recherches et de certains espionnages. Cela signifie que j'ai en ma possession tous les documents de travail, dont les données d'un grand nombre d'expérimentations, les rapports finaux remis aux clients, les documents administratifs pour savoir qui a financé quel projet et à quelle hauteur, qui était impliqué, et comment et pourquoi cette activité interne au gouvernement fut établie à Fort Meade. Cet article est un récit personnel de première main sur une grande partie de ce travail.