The University of Colorado UFO Project and The Demise of Project Blue Book
by Michael Swords, Ph.D.

(Editorial Note: The Colorado UFO project, also known as the Condon Project or Condon Committee after its nominal Director Edward U. Condon, was an Air Force-sponsored "Scientific Study of UFOs," 1966-1968. Project Blue Book was the name of the final Air Force UFO project that was terminated at the conclusion of the Condon Project. Dr. Swords, professor of natural sciences at Western Michigan University, has examined archival documents extensively and is in the process of writing a book about UFO history. The Condon Project played a pivotal role in that history.)

Introduction

The Condon Project was an investigation into UFOs that lasted approximately a year and a half and spent about a half-million dollars of US Air Force money. It is important to analyze records and findings of the project because it is the single most quoted instance of a formal academic study of the phenomenon, and it is cited by debunkers as being a responsible, well-organized, thoroughgoing negation of UFOs. Its basic finding was that UFOs are not of any scientific research interest.

Upon studying the primary project documents, any historian or sociologist of science will discover, however, that none of this is true. Rather, the Condon Project reveals itself as an intriguing but especially egregious case of bad scholarship. This too-brief retelling of a complex affair reports and documents the major elements of the episode.

Why the Project Was Created

The Air Force had been supporting an intelligence operation at Wright-Patterson AFB to study UFOs since 19471. There had been much dissatisfaction about the UFO project, especially at this base. From the early 1950s onward there was a stream of complaints expressing the desirability of removing the UFO project from the base2. By the early 1960s this idea had grown into the concept of the Air Force getting rid of the UFO project entirely. Plans to shift the project to a think tank (such as RAND or Brookings Institution), to a university, or a group of associated institutions, had been discussed3.

The UFO flap of 1966 and the notorious write-off of the UFOs in Michigan as swamp gas became the catalysts for acting on these desires. Spurred by outraged citizens and their congressmen, the Secretary of the Air Force authorized the search for a university that would conduct a one-year study of the phenomenon4. After many institutions turned the Air Force down, Dr. Edward U. Condon, with the urging of Pentagon officers and scientists and Dr. Walter Off Roberts of the National Center for Atmospheric Research (NCAR), accepted the task in August 19665. Condon was a well-qualified physicist and had a reputation for being an outstanding and fiercely nonpolitical former director of the National Bureau of Standards.

Condon probably accepted because Walter Roberts's former observatory administrator-manager, Robert J. Low, was a university administrator at Condon's institution, the University of Colorado, and was willing to take the burden of managing the project off Condon's shoulders. Low was also
willing to do the sales job necessary to convince the administration to accept a grant on such a controversial and, therefore, academically dangerous subject.

Low did this by writing a memo in prejudicial language that was aimed at assuring the administration that, although the public would believe that the project was very open to the idea of extraterrestrial visitors, no one in the academic world would get the impression that the researchers really believed there was any chance of this being true. Low's memo and his salesmanship were very effective, and the project was underway officially in mid-October 1966.

The Major Difficulties

The project faced almost insurmountable difficulties from the start. Most research grants are given to scientist's expert in the field of study who wants to do the work, and who have a well-thought-out plan for doing it. None of this was true of Edward Condon. That, plus a very difficult subject and a severely restricted time frame, is all one needs to know to realize that the project had almost no chance from the beginning.

Other things were working against the project, as well. The leadership from the top was very poor. Condon never wanted to do the project in the first place, thus Robert Low acquired managerial status. When Condon did assert himself into the activities, the results were not neutral but consistently detrimental (detrimental to the functioning of the project, not merely to UFOs or ETs).

Low was in a peculiar situation, between a boss who was at best absentee and at worst a destructive element, and a research staff whose members were senior to him in both degrees and scientific training. He adopted a relatively laissez-faire management style that resulted in most staff members "doing their own thing." While occasionally pleasant, this was a recipe for ultimate disaster.

Also, the task of getting rapid and complete case information was not helped by the Air Force, whose cooperation tended to be lackadaisical and disorganized. Add to this a largely ill informed though enthusiastic staff and one split by opposing research goals and philosophies, and it probably would have taken J. Robert Oppenheimer to pull this project together. Members of the "team" argued, sometimes violently, for the first three months about what research approach to take or whether one was even possible.

Bias

A different sort of difficulty came under the arch antiscientific category of bias. People have pointed to the Low memo as clear evidence of this. When the memo was discovered by accident, and later revealed, outside scientists and UFOlogists understandably reacted negatively. Actually, I believe that the memo (though very biased in its language) is a red herring. Low's later actions indicate that he was quite open to UFOs and the ET hypothesis. I believe he wrote the unfortunate memo not believing a word of it. He was just being Bob Low, the salesman. However, there is clear documentation of severe early bias.

In January 1967, with the project staff still split and confused about an appropriate way to research the subject, Air Force representatives paid a briefing visit to the Boulder campus. Robert Low and Edward Condon asked the contract officers specifically what they wanted them to do. In the open meeting they got a vague, almost ridiculous, runaround answer, something about just giving
it a try. However, upon returning to his office, Col. Robert Hippler immediately wrote Condon privately with an answer.\textsuperscript{11}

The Air Force wanted a recommendation stating it should get out of the UFO business completely. Even if the university needed more money and a time extension to come up with a "proper recommendation," this would be arranged. Condon accepted Hippler's suggestion and voiced it as his own opinion at a scientific meeting within the week.\textsuperscript{12} Low wrote back for Condon, thanking Hippler for answering their question from the briefing session very explicitly.\textsuperscript{13} Thus, before the project had even settled on a methodology, the main recommendation of the final report was already in place.

Although it cannot be documented as concretely and unambiguously as the foregoing, this early fixing of the main recommendation probably influenced how seriously Condon could allow the UFO phenomenon to be taken. If the UFOs were treated in the final report as in any way mysterious (and possibly extraterrestrial), how could one really rationalize a recommendation for the Air Force getting out of the game? On the other hand, it could be argued that the door was still open to consider UFOs a legitimate scientific problem, and so toss the governmental ball to an organization such as the National Aeronautics and Space Administration (NASA). This, apparently, is what Low believed, and he said as much to a Jet Propulsion Laboratory (JPL) audience in October 1967.\textsuperscript{14}

Condon, however, was another matter. He never took UFOs seriously (as evidenced by his sole concentration on the most bizarre sideshow elements of the subject), and to him the ET hypothesis was even more of a joke. He had heard Col. Hippler argue against studying the most difficult old cases, so, despite almost unanimous staff support for just such a study, he consistently argued against it.\textsuperscript{15} Even when Robert Low made the "core of puzzling cases" the foundation of the project methodology in April 1967,\textsuperscript{16} Condon still worked to defeat it and ultimately had his way. No casebook of classic puzzlers appeared in the final report.

Condon became increasingly negative and emotional as the project wore on. For unknown reasons, he became convinced that reading about and studying UFOs was mentally dangerous, possibly related to psychosis, and capable of doing "immeasurable harm to America's schoolchildren." Condon's own mental state at this point is inexplicable, but it certainly is evidence of an inappropriate condition from which to unilaterally write the final report recommendations on whether UFOs are worth researching.

Doubtless everyone on the project was biased one way or another, but the combination of extremes in prejudice and power resident in Edward Condon made anything resembling objective, scientific study almost impossible.

The Research Plan

Given the circumstances described here, it is unlikely that any research plan could have succeeded. There were a few glimmers of hope, however. Low's April 1967 schemata for the project featured the collection and in-depth analysis of the most recent and the older puzzling cases (the casebook), plus David Saunders's computer analysis of bulk data, William Hartmann's photo case analyses, Norman Levine's radar case studies, and whatever physical evidence was available.\textsuperscript{19}

Outside experts were to produce reviews of debated physical phenomena (e.g., mirages, plasmas, radar ghosts) and the project would apply its expert reviews to disputed casebook reports. The
projects own field teams would, it was hoped, contribute meaningful information, as well. Actually, this was about as good a plan as could be developed given the short time frame, and it might have worked except for a few problems unrelated to science.

First, Condon opposed the foundation of the whole enterprise, as mentioned earlier. It is a tribute to his lack of personal involvement in any serious way that this work went on over his objections. Second, Bob Low's soft managerial style allowed personnel to drift off into what they wanted to do, and no one took the core casebook on as his or her project. So, the heart of the method fell through the cracks.

Some case reports were prepared, of course, but the production was slim enough that Condon found it easier to discard the casebook. It never became enough of an impressive entity for a staff member to resuscitate and present on its own as an antidote to the final report. Third, before it was all over, Condon had fired Saunders and Levine, and had quietly removed Low from the project. By this means, almost all of the true players were exorcised before the report writing began.

The Disintegration

The original staff of the project consisted of Condon, Low, Stuart Cook in psychology, and atmospheric physicist Franklin Roach. Three more psychologists, David Saunders, Michael Wertheimer, and William Scott, joined a short time later in October 1966. By February 1967, Scott, Wertheimer, and Cook were gone, or essentially so. Condon had retreated to his new office away from the group and begun to focus on fringe elements. Roach had availed himself of an opportunity to pursue research in atmospheric physics and was moving on to Hawaii. This left Low and Saunders to pick up the pieces.

Levine came from Arizona to do field work and radar analysis. Roy Craig, chemist, volunteered to do field work, and, with two psychology graduate students and Condon's former secretary, they became the new team. This group persevered (with comings and goings of Roach and a multitude of others) until the fall of 1967. At that time Condon emerged from his relative isolation with a vengeance.

Having progressed from "light-hearted fooling around with nuts" to the near-paranoid state described earlier, Condon gave an extremely negative, mocking speech to the personnel at a National Bureau of Standards meeting. When Saunders questioned him about this (and whether he would allow other project members to balance his remarks to the press), Condon reacted in an authoritarian manner and, as if saying, I'll show you, immediately gave an even more biased interview to the Boulder press.

Condon's ill behavior shocked not only the UFO community, but also the project staff. A majority of the staff considered resigning on the spot. They did not; perhaps because no real option existed at that point in the project. With Saunders, Levine, and even Robert Low still talking sympathetically about UFOs as a worthy science problem, there was still some hope that the main project members could salvage something. However, this hope was naive.

Condon began moving to take control of the final report. Saunders and Levine concurrently began speaking with outside experts such as Dr. J. Allen Hynek of Northwestern University and Dr. James E. McDonald of the University of Arizona, both very knowledgeable about UFOs, and the officers of NICAP, Maj. Donald Keyhoe and Richard Hall. NICAP was an influential civilian
research organization. The hope was that these key individuals could band together to offset Condon's expected negative recommendations.

During these extramural meetings, Levine and Saunders passed the notorious Low "sales memo" of August 1966 on to McDonald. McDonald was stunned, but the two project scientists prevailed on him not to use the item in any destructive way. He remained patient for about two months, and then, sensing that things were going so badly that something had to be done, confronted Bob Low with it. Low went immediately to Condon, who called in Saunders and Levine and fired them in another emotional barrage of name calling.

Apparently fearing a loss of credibility for his forthcoming final report, Condon said that the memo was inappropriate and that Low should repudiate it. Within about two months Low was removed from the project too. The project's administrative assistant, Mary Lou Armstrong (Condon's former secretary), resigned in protest.

Shortly after, one of the graduate students (a major field investigator) left the project on an unrelated legal matter. When the bloodletting stopped, Condon, the absentee and emotional director, was left with Roy Craig, William Hartmann in Arizona, and one graduate student, from the main team. He called in Craig and pleaded with him not to abandon him (which Craig seems unlikely to have done anyway, judging by his memoir).

The Report

Given this background, one needn't wonder that the report became a disorganized and prejudiced nightmare. But it is even worse than might have been imagined. The first unusual element has been mentioned already: practically no one who was intimately involved with the project was still available to write any of the report. Roy Craig and William Hartmann were the exceptions. Franklin Roach was recruited again to write a chapter on alleged UFO sightings by astronauts, an area on which little or no time had been spent.

There is no indication where this last-minute idea came from. A possible hint, however, is in the documentation involving Roach's chapter. Prereader Dan Culberson complained that there seemed to be a lot of irrelevant padding in the chapter, which, he said, served to make Roach look ridiculous. However, Air Force scientist Dr. Thomas Ratchford, project monitor, said that he wanted as much "bulk" as possible in the report. With Condon's support, the "ridiculous" bulk stayed in unedited.

Several other additions were recruited piecemeal and often at the last minute. Without Saunders's statistical expertise, a local statistician, Paul Julian, was asked to add an almost irrelevant, highly abstract chapter on statistics that contained essentially no UFO information. Several other apparent space-filling chapters suddenly materialized. Even Condon's secretary, Harriet Hunter, was pressed to write a chapter on UFO investigations in foreign countries. As far as actual project research was concerned, only the discredited Bob Low was qualified to write such a chapter.

This bulk, of course, replaced the original foundation of the whole project research plan: there was no casebook of the best and most puzzling reports. Its omission accomplished one of Condon's main aims: to avoid presenting UFOs as any more mysterious than necessary. Some of the "classics" nevertheless found their way into the report because separate authors were writing chapters on photo cases (Hartmann) and radar cases (Thayer). Both authors considered it necessary to look at specific case data. Most of the unsolved cases that appear in the final report are in these chapters and are
older, "classic" cases. No classic cases originally intended for the casebook appear elsewhere in the final report.

The absence of casebook reports creates another awkward anomaly; without them there is no reason for the various "scientific reviews" on mirages, plasmas, radar anomalies, and the like. The only rationale for them was that they were to be applied to the puzzling cases in the casebook. There they stand without application, but they give the naive reader the impression that they are the reasons why UFOs don't constitute a mystery, and they add bulk to the report. If this were not so methodologically outrageous, one would have to congratulate Condon on the brilliance of his design.

Another unusual element is the emotional atmosphere within which this nominally scientific report was composed. Not only were project members enraged and hurling epithets, but the whole world also was suddenly made aware of project misbehaviors through publication in Look magazine of a May 1968 article by John Fuller titled, "Flying Saucer Fiasco." A furor arose, and not only among UFOlogists.

Several scientists wrote to Condon protesting. They also wrote to the National Academy of Sciences. Science magazine, the organ of the American Association for the Advancement of Science (AAAS), wrote a concerned article. Condon resigned his AAAS membership in a fury. The project was decried on the floor of Congress, and a GAO investigation was started.

Saunders and Levine began legal action against Condon and the University of Colorado. Higher university administrators wanted explanations. The AAAS decided that a symposium on UFOs was appropriate, inviting, among others, James McDonald, who had been an outspoken critic of the Condon project. If Condon's paranoia about damage to schoolchildren wasn't bad enough, these developments cinched it. He reported in all seriousness that Saunders was a NICAP plant who had been working against him from the beginning to destroy the project.

In such an atmosphere objectivity stands little chance. In the concluding paragraphs of his draft chapter, William Hartmann wanted to include some comments sympathetic to the possibility of the ET hypothesis, the need for more research funding, and the botched nature of previous UFO research. Condon wrote on the pages, "Good God!!" and scratched it all out.

It comes as no surprise that the final report recommends that the Air Force get completely out of the UFO investigation business and stop wasting taxpayer money. Given Condon's emotional state, it also comes as no surprise that he concludes UFOs have offered nothing to science and are not likely to do so in the future. With clever use of words, he gives the reader the impression that all scientists agree with him that UFOs are not worthy of study.

Considering the work of Hynek, McDonald, Jacques Vallee, William Powers, Charles Maney, and many others, this is an outrageous assertion. But one does not need to go outside of the Condon Project staff to find people who completely disagreed with him. Of the leading 15 or so members of the project, only Craig and Wertheimer are likely members of the "there's nothing to it" school. Most of the others are on record disagreeing with Condon's viewpoint.

Condon's opinions in his final report summary were his own, and as project director he had the right to express them. Nevertheless, they are an extraordinary violation of everything the ideals of science hold sacred.
Results

Many things resulted from publication of the final report, the most important of which was closing the Air Force Project Blue Book at Wright-Patterson AFB. Given the poor analytical job the project had been doing, one wonders why anyone would care. Blue Book had been completely mismanaged.

Bad decision-making had turned something that originated as the secret business of the military into an operation from which the public felt it could demand information and answers. Due to regular foul-ups, the Pentagon had to install what amounted to a public relations office, as well the American people certainly have a right to demand good service from their military servants, but one hardly can expect that intelligence operations are at our beck and call.

Mismanaged and incompetent though it was, Blue Book helped keep interest in UFOs alive, especially in periods of few sightings when NICAP could continue to drive home its charges of cover-up. The mere presence of Blue Book proved that UFOs were important. Occasional off-the-cuff (or honest) comments by military officials kept fires burning and could be quoted endlessly. The project also gave the military the impression that reports could be made, and these often were leaked to researchers and fueled civilian interests. With the closing of Blue Book, the focal point disappeared and all this stopped. Taxpayer money was not the main issue. It was a bad day for UFOlogy.

Another result was the impact on academics, which was mixed. Science establishment loyalists rallied around Condon to support the grand old patriarch. The National Academy of Sciences, then led by Condon's old student, Frederick Seitz, quickly approved the report. The extraordinarily conservative and often reactionary journal Nature happily reviewed the report as a "sledgehammer for nuts." The AAAS (and Science) reversed its stand and lined up behind the report. Harvard astronomer Fred Whipple praised Condon for a fine job and referred to UFOlogists as members of a cult. Former CIA organizer of the Robertson Panel on UFOs and now an administrator at the Smithsonian, Fred Durant lauded the report as the tombstone for UFOs. Famous MIT physicist Philip Morrison plumbed new depths by commenting that the report would stand forever as a monument to the scientific method. But the report was a mockery of science. The only saving grace for these commentators is that they had no idea what they were talking about. This too, however, gives one pause.

Although this ignorance and misinformation was effective in putting many academics off of UFOs, and certainly putting funding beyond hope, this whole affair did not have a uniform impact on academic personnel Allen Hynek, out of his job as a consultant to Blue Book, was finally free from his responsibilities to military intelligence. He could at last serve as a rallying point for academic researchers.

The Colorado project, paradoxically, had brought the interests of many such persons partially or totally out of the closet. Many of the more open academics like Peter Sturrock, Frank Salisbury, James Harder, Leo Sprinkle, and Robert Hall, joined Hynek, McDonald, Vallee, and William Powers to form an "invisible college" willing to engage actively in research.

Others, such as Carsten Haaland of Oak Ridge, Friedwart Winterberg of Nevada, Richard Henry
of NASA and Johns Hopkins, and even Thornton Page of the NASA Johnson Space Flight Center, at least peeked out of their closets and placed their names on the board of the Hynek center. People who remember those halcyon days recall Hynek's conversations with people like Richard Feynman expressing interest in the phenomenon and wondering how they could help.

A brief period in the mid-1970s was a quiet but brightly burning moment for academic UFOlogy. Slowly, as the good cases, the necessary level of funding, and the proper degree of focused leadership failed to materialize, this light dwindled. It can be argued that it has never been rekindled.

A third sort of result should be mentioned to place the Colorado project in full context: the results of the UFO investigations themselves. When the report with its negative recommendations was published, a few hardy souls actually read the whole 900 plus pages to see what the investigations said. Such dedication was rewarded surprisingly. Even using the highly filtered case selection of the project, a strong case could be made that the UFO phenomenon was certainly mysterious and unsolved. Key academic researchers such as Allen Hynek, James McDonald, and R. M. L. Baker of UCLA all pointed this out in a variety of forums, including books, professional talks, and scientific literature. The American Institute of Aeronautics and Astronautics agreed.

The most extensive analysis was by Peter Sturrock of Stanford: "Evaluation of the Condon Report on the Colorado UFO Project," an Institute of Plasma Research special report. Sturrock points out that of the 59 cases dealt with in the report, 14 were listed as unidentified, 2 others as possible UFOs (i.e., objects flying around), and 2 more as probable UFOs. This would seem to support the view expressed by Robert Low in April 1967 when he laid out a prospective project methodology. At that time he said that we have three nested questions:

1. Are there unexplainable reports?
2. Are any of these solid objects?
3. Are any of these objects extraterrestrial?

He said that we already know the answer to the first question is yes, and, therefore; there is a UFO problem worthy of research. The two probable UFOs also seem to indicate that the answer to the middle question may also be yes. . . and this from a project resolutely refusing to look at the most puzzling cases.

Summary

The Colorado project was begun by the Air Force without any concern for science. It had a purely political goal, which was achieved. Coupled with a project director who evolved from minimal mocking indifference to paranoia and explosive emotionalism, this served to produce one of the worst so-called scientific studies on record. Regrettably, there is no more moderate, academically civilized way to characterize it, but the supporting evidence for this conclusion is plainly there in the primary documents for any historian to read.

I would welcome any scholar willing to reread the materials at the American Philosophical Society Library archives in Philadelphia, the J. Allen Hynek Center for UFO Studies, and other cited repositories, to place a better light on the Colorado project. I would like to believe that such a breakdown of our search for truth could not happen, especially in the loftiest ranks of science. Sadly, apparently it did happen in 1968. .
Notes

7. Saunders and Harkins (J 969).
9. Robert J. Low. Audiotaped lecture at Jet Propulsion Laboratory, California Institute of Technology, October 1967 (Richard Hall files)
20. Colorado Project, "Notes on Internal Meeting of Thursday, July 6, 1967" (Center for UFO Studies files).
21. Colorado Project. "First Meeting of the CU. UFO Investigators" (American Philosophical...
22. Saunders and Harkins (1969); Letter from Donald E. Keyhoe to Edward Condon, November 14, 1967 (Center for UFO Studies files)
25. Saunders and Harkins (1969); Letter from David R. Saunders to Allen Hynek, November 29, 1967 (Center for UFO Studies files); Letter from James E. McDonald to David Saunders, November 27, 1967 (Richard Hall files)
26. McCarthy (1975); Letter from James E. McDonald to Robert Low, January 31, 1968 (Richard Hall files)
32. Fuller (1968).
34. Boffey (1968).
40. Communication from Fred Whipple to Allen Hynek, May 7, 1969 (Center for UFO Studies files).
41. Communication from Frederick Durant to Charles Gibbs-Smith, February 26, 1970 (Smithsonian Institution files).
42. Communication from J. Allen Hynek to Jenny Zeidman, June 19, 1970 (Center for UFO Studies files).
44. Sturrock (1974).