

The Philadelphia Experiment Revisited

This essay is the first part of a two-part critique of what is called the Philadelphia experiment and will focus on the experiment as a possible episode in naval history. It asks a simple question: Did the Philadelphia experiment take place? This essay applies an historical methodology to answer that question.

Introduction

The Philadelphia experiment has engendered a vivacious literature among fringe science enthusiasts, and its principal expression is found in William L. Moore and Charles Berlitz' *The Philadelphia Experiment: Project Invisibility*... To the initial question, then, we must add a subsidiary one: Did the Philadelphia experiment happen in the way Moore and Berlitz claim it did?

Reduced to its basics, the Philadelphia experiment thesis asserts that during World War II the United States Navy conducted an experiment based on Albert Einstein's Unified Field Theory (UFT) using the destroyer escort *USS Eldridge* (DE 173) aimed at producing the ultimate in camouflage, invisibility. The experiment, however, went hopelessly awry, causing the *Eldridge* to disappear from the Philadelphia Navy Yard, reappear in Norfolk harbor, and then rematerialize back in Philadelphia in a matter of minutes. The supposed effect on the crew sent them to the hospital for the remainder of the war. The ship was so affected that the vessel disappeared and reappeared on one other occasion. At least one variant of the thesis has it that the United States government came into contact with alien beings because of the experiment.¹

This essay does not deal with aliens or the Unified Field Theory, the former being beyond the author's world-view, and the latter beyond his competence. This essay does, however, deal with the Philadelphia experiment thesis as a proposed incident in US naval history. Neither William Moore nor Charles Berlitz claimed to have written a history in *The Philadelphia Experiment*, but nonetheless, they did deal with an incident that supposedly happened some thirty-five years before the publication of their book, and almost a half-century removed from our own day. The Philadelphia experiment thesis, then, is subject to historical inquiry and methodology. This is particularly true because the events involved a United States Navy vessel, *USS Eldridge*, and both government and private documents.

Any thesis or interpretation which seeks to explain the past must pass at least three critical tests: the interpretation must be consistent with itself, the interpretation must be consistent with the adduced evidence, and the evidence

must be verifiable. It is also desirable to produce a thesis or interpretation flexible enough to withstand the discovery of new evidence, should it become available. The following essay, the first of two parts, examines the Philadelphia experiment thesis as presented by Moore and Berlitz in light of these three fundamentals of historical inquiry.

According to Moore and Berlitz, the genesis of the Philadelphia experiment was a 1940 suggestion by Albert Einstein and his fellow Princeton physicist Rudolf Landenburg to use electromagnetic fields on surface ships to counter magnetic mines and torpedoes. Dr. John von Neumann, Robert Harrington Kent, a Dr. Albrecht (a pseudonym used in the text) and several other scientists were soon drawn into the enterprise. It was "most probably" von Neumann who suggested the idea to the National Defense Research Committee the same year. Moore and Berlitz, however, never isolate who exactly said that electromagnetic fields could make a ship invisible.² The project proceeded through several committee meetings until mid-1943 when *USS Eldridge* was procured to conduct the experiment to determine if a ship could be made invisible.³

USS Eldridge

The *Eldridge* was a Cannon Class destroyer escort⁴ built at the Federal Ship Yard, Port Newark, New Jersey⁵ which, according to Moore and Berlitz, was launched on 25 June, 1943, a full month before its official launch date, and sailed to the Philadelphia Navy Yard via Bermuda to participate in the experiment. While at the Philadelphia Yard, special electronic equipment based on navy degaussing⁶ machinery was installed on board. The equipment was to produce the electronic "resonance" necessary for invisibility. The ship itself was manned with US Navy technical experts. "...It appears that the Philadelphia experiment," Moore and Berlitz state, "took place sometime between July 20 and August 20, 1943," before *USS Eldridge* was commissioned on 27 August, 1943⁷. Later in the work, however, Moore and Berlitz claim the experiment took place in October, 1943.⁸

The authors claim to have interviewed at least one of the approximately forty-man crew during the July/August experiment, Engineer First Class Victor Silverman, who says he was on board when the vessel ‘teleported’ from Philadelphia to Norfolk and back. The materialization of the *Eldridge* at Norfolk was witnessed by five British merchant seamen who were awaiting transport back to the United Kingdom. As corroborating evidence, Moore and Berlitz insist that the experiment later became the subject of a Special Memorandum from the Secretary of the Navy to Captain James R. Teague of the aircraft carrier *USS Antietam* [CV-36] in May 1945. *Antietam* was then at the Philadelphia Navy Yard for standard maintenance after its shakedown cruise and its crew was concerned that the Navy would try another Philadelphia experiment on them during the standard degaussing procedures. According to Moore and Berlitz, the secretary’s memo instructed the crew of the *Antietam* not to discuss the Philadelphia experiment outside the confines of their vessel. Captain Teague read the memo to the crew and entered that fact in the ship’s log.⁹

After the alleged July/August 1943 experiment, *USS Eldridge* was commissioned with a full crew of 216 officers and men, and went on a shakedown cruise in the Bermuda area from early September through December 28, 1943. While on this cruise *Eldridge* was assigned to protect convoy GUS-22 going east from New York to Casablanca from 2 to 12 November, 1943. On the return leg of the voyage, according to Moore and Berlitz, *Eldridge* escorted convoy UGS-23 from Casablanca west to New York. During this return leg, *Eldridge* depth-charged a suspected enemy submarine on 20 November 1943, and filed an action report on the encounter which listed the ship’s position as latitude 34° 03’ N and longitude 08° 57’ W, about 200 miles west of Casablanca. The position of the ship at this point is critical for the Philadelphia experiment thesis, because it was during escorting convoys GUS-22 and UGS-23 that the *Eldridge* supposedly disappeared and reappeared for a second time. This event, we are told, was witnessed by one Carlos Miguel Allende (aka Carl Allen), an individual with at least five aliases, who was a merchant seaman on board the freighter *SS Andrew Furuseth* during its passage with both GUS-22 and UGS-23.¹⁰

On the basis of the *USS Eldridge*’s action report, Moore and Berlitz conclude that “the official history [of the vessel] for the period up to January 4, 1944, is almost certainly false!”¹¹ The “official history,” as Moore and Berlitz summarize it, has the *USS Eldridge* only in the “Bermuda area.”¹² Based partially on the conflicting information between the “official history” (they give no more specific citation) and the action report, and partially on their contention that the ship’s deck log is missing,¹³ Moore and Berlitz imply that the US Navy had engaged in a massive cover-up of the Philadelphia experiment.

Moore and Berlitz are not consistent in their appraisal of this second disappearance. At one point in the monograph, Moore and Berlitz quote a naval officer “who must of necessity go nameless,” that the United States Navy would not have “dared to risk placing several hundred tons of valuable electronic equipment [necessary for the experiment] at the mercy of some German submarine commander in the middle of the Atlantic.”¹⁴ They then conclude the experiment took place in the Philadelphia Navy Yard between 20 July and 20 August, 1943.¹⁵ Some eighty pages later, however, Moore and Berlitz assert that this second disappearance, which occurred while the *USS Eldridge* was escorting convoy UGS-23, was not an accident but the actual experiment.¹⁶

The second disappearance is also important for the Philadelphia experiment literature. Carlos Allende (aka Carl Allen), who claimed to have seen the vanishing, later corresponded with Morris K. Jessup. Both an eclectic and eccentric scientist, Jessup laid the foundation for and popularized the Philadelphia experiment legend.¹⁷ Although the founding and development of the legend deserves a study in its own right, it is only important for this essay to note the inconsistencies of the Philadelphia experiment thesis as expressed by Moore and Berlitz.

The Philadelphia experiment thesis as presented by Moore and Berlitz fails the test of internal consistency. It is not consistent in its dating of the experiment: Did the experiment happen in July/August 1943 or October 1943, or, given the convoy UGS-23 incident, was it in November 1943? Because the chronology is inconsistent, the geographical location of the experiment is also inconsistent. The thesis is also internally inconsistent as to whether the second alleged disappearance of the *USS Eldridge* was an accident or part of a planned experiment. Inconsistency, however, is not the Philadelphia experiment’s thesis’ only problem. Its major problems are evidential.

Reviewing the Evidence

In Moore and Berlitz’s *The Philadelphia Experiment: Project Invisibility*, evidence falls into four broad categories: government documents, interviews, published works, and some private papers. In terms of quantity, the bulk of the evidence is from private interviews and is anecdotal. The use of interviews is a well-established part of historical methodology, and the subdiscipline is called oral history. In academic history the rules for interviews are rather strict. If an interview is used as a source in a published work, a taped copy should be deposited in a university archive or other depository. This permits the interview to be verified. Also, the individual interviewed must be identified. Anonymous sources are not permitted. Not all disciplines, however, have such exacting standards. In journalism, for instance, the use

of anonymous sources is common and acceptable. Even in journalism, the information of anonymous sources is verified before the story is printed. This does not mean that history is superior to journalism as a discipline, just different. Using anonymous sources to explain the past, however, presents considerable difficulties, as we will see.

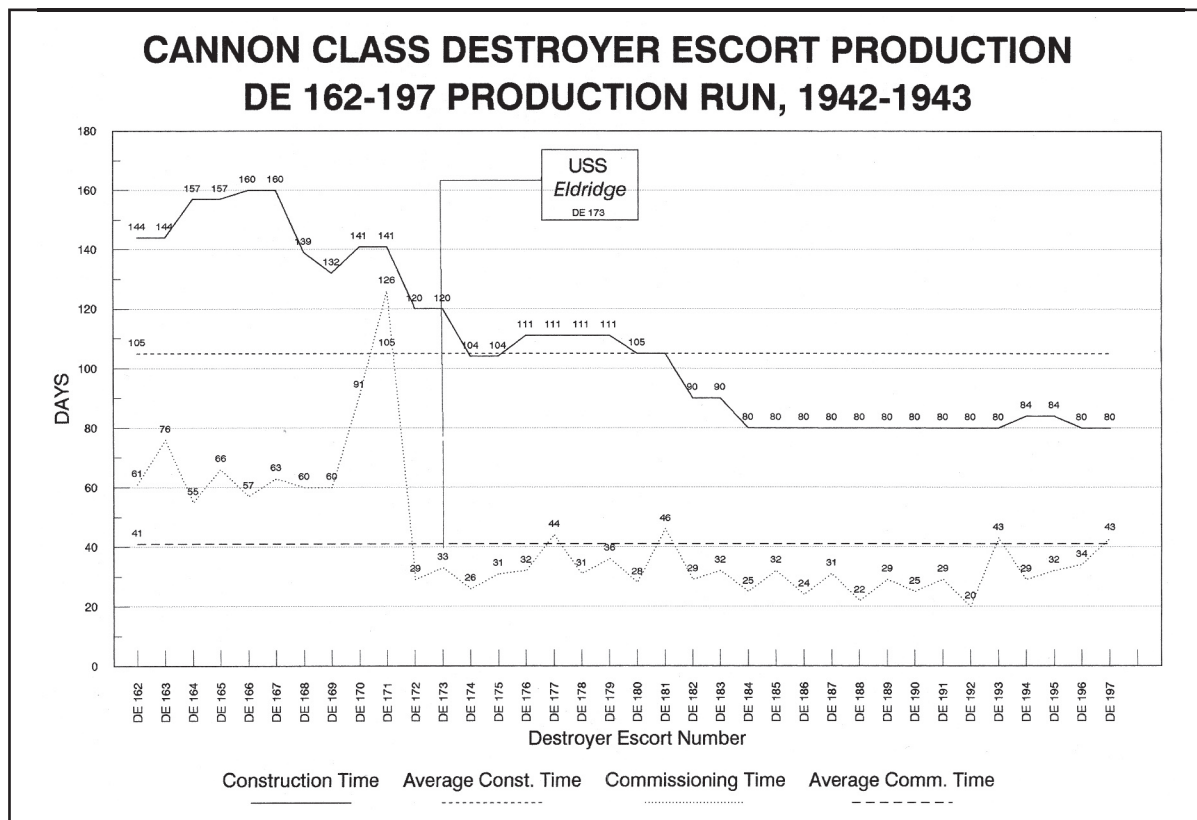
Turning to government documents, specifically US Navy documents, we begin by examining the possible early launch of the *Eldridge* from the Federal Ship Yard, Newark, NJ, in late June 1943, to participate in the supposed experiment at the Philadelphia Navy Yard. All the consulted US Navy sources give the launch date of *USS Eldridge* as 25 July, 1943.¹⁸ Moore and Berlitz's contention that the *Eldridge* was launched a month earlier than officially stated in American records is based on unnamed Greek sources. After WW II, *USS Eldridge* was sold to the Greek Navy and entered Hellenic service as *Léon* in 1951. According to Moore and Berlitz, the Greek records have the ship being launched on 25 June 1945. This is a thin reed upon which to build an argument. It is also difficult to verify. This author was unable to locate the relevant Greek documents to either confirm or deny the Moore/Berlitz assertion.¹⁹

An analysis of the construction times for destroyer escort numbers 162 through 197 at the Port Newark, NJ, Federal Shipbuilding Yard shows that *USS Eldridge* had a slightly longer than average construction time for this production run of

destroyer escorts. (See Fig. 1.) The overall trend in the production run, however, was toward decreased per unit production time. This decreased production time was the result of the application of prefabrication techniques to destroyer escort production.²⁰ The production run analysis does not confirm Moore and Berlitz's assertion the *USS Eldridge* was launched a month earlier than official records indicate.

There is also the somewhat technical question of *Eldridge's* displacement. A warship's weight is measured by the weight of the water it displaces. According to Moore and Berlitz: "...the Greek records show that the *Eldridge*, when transferred to the Greek Navy in 1951, was rated at 1240 tons displacement standard and 1900 full load, a discrepancy of some 660 tons. According to one former Navy man, the only way for a ship to gain 660 tons of buoyancy is for something of that weight to have been removed from that ship before the time of its sale to the Greeks. Electronic equipment perhaps?"²¹

There are three types of displacement: standard, full and maximum. For a warship of the WW II era, standard displacement meant the weight of the vessel without fuel of reserve feed water for the boilers. *USS Eldridge* had a standard displacement of 1240 tons, as Moore and Berlitz state. Full displacement meant the weight of the ship ready for combat, including a complete load of fuel and reserve feed water for the boilers. The *USS Eldridge's* full displacement



Based on K. Jack Bauer and Stephen S. Roberts, *Register of Ships of the U.S. Navy, 1775-1990* (New York: Greenwood Press, 1991), pp. 222-223.

FIGURE 1

was 1620 tons. The 1959 barrels of diesel oil carried by the *Eldridge* when the fuel bunkers were topped off accounts for this extra weight. The maximum displacement is the heaviest weight at which a vessel can be operated, which in part depends on sea conditions. These are the normal displacement figures for the Cannon Class destroyer escorts and there is nothing here to indicate that *USS Eldridge* had any weight capacity over its Cannon Class peers, or carried any special equipment.²²

Ship's Logs and Andrew Furuseth

Before continuing, it is necessary to define a basic naval term: log. In generic terms, "a log is a book or a ledger in which data or events during a watch are recorded."²³ There can be, and usually are for US Navy ships, several different logs, one for each of the ship's actions (e.g., engineering log, medical log, communications log, etc.).²⁴ In legal terms (i.e., US Navy Regulations), however, the definition of a log is more specific. By US Navy General Orders in effect in 1943, every ship was required to keep a deck log, which was also called a ship's log. The terms deck log and ship's log are interchangeable. The deck log is based on the day-to-day log of each ship's action. It is a deck log which is a legally compulsory document, has legal protection, and eventually will be deposited in the National Archives as a permanent record.

The logs of each of the ship's individual sections, however, are not granted permanent legal protection. Technically these section logs are supposed to be "retired," that is, sent to the relevant US Naval bureau: for example, the medical should go to the US Navy's Bureau of Surgery and Medicine. In practice, however, these logs may be disposed of before reaching the appropriate bureau, or may be disposed of once there, or (unofficially) taken as souvenirs by personnel. The situation is particularly lamentable for the World War II period, where, for instance, less than half the medical logs are currently extant.²⁵ "There is the right way, the wrong way, and the Navy way."

The United States Merchant Marine is not the United States Navy, and has a different logology. *SS Andrew Furuseth*, a civilian vessel, fell under the jurisdiction of the US Merchant Marine. That administration recognized three types of logs: the official log, the operational log, and the armed guard log.

The official log was a legally compulsory document based on the operational log. These logs are now deposited in one of the regional branches of the National Archives, depending on where the vessel was decommissioned from the US Merchant Marine fleet, but the logs are technically under United States Coast Guard authority.

The operational log, also called the deck log in Merchant Marine parlance, was the day-to-day log of the ship. In the Merchant Marine, the operational log was not a legally com-

pulsory document and had no permanent legal protection. The World War II Merchant Marine operational logs were "retired" to the Transportation Department during the early 1970's. Regrettably, in 1972, the Transportation Department literally trashed virtually all the World War II Merchant Marine operational logs because they were taking up too much of the newly formed department's warehouse space.

The armed guard log, like the official log, had protected legal status because the armed guards on the Merchant Marine vessels were United States Navy personnel (either regular or reserve). These units had two principal functions: to man the anti-aircraft batteries and deck guns installed on merchant shipping, and if needed, act as a ship's police force.²⁶

The Deck Log and Action Reports

Some of the other important US Navy documents for the Philadelphia experiment thesis are: the deck log from the *USS Eldridge*, any action reports for its activities from October through November 1943, and the documents related to convoys GUS-22 and UGS-23 (which will be covered in part II). Moore and Berlitz state specifically that "Moore attempted... to obtain copies of the log books of the two ships in question. The result of such a request was the surprising discovery that (1) the deck logs of the *Eldridge* for the period from the date of commission (August 27, 1943) through December 1, 1943, were 'missing and therefore unavailable'; and (2) the logbooks of the *Andrew Furuseth* had been 'destroyed by executive order' and thus no longer exist."²⁷ One might well wonder where Moore and Berlitz placed their request, as the deck log of the *USS Eldridge* is deposited in the United States National Archives, Washington DC, and has been available to the public since the mid-1960s. Furthermore, the deck log contains daily entries for the dates Moore and Berlitz claim are missing.

As the *Andrew Furuseth* was a privately owned vessel, its logs fall under the US Merchant Marine rules. Two of the three logs are extant. The armed guard's log is at the National Archives, Washington DC, and the official log is in the keeping of the United States Coast Guard. (These logs will be examined in part II.) The operational log of the *Andrew Furuseth* is not extant and is presumed destroyed in the Department of Transportation document purge of 1972.

As we have seen, the destruction of the Merchant Marine operational logs was a result of a decision by the Transportation Department which affected hundreds of logs. A search of Presidential Executive orders for the years 1943-1989 failed to turn up one dealing with *SS Andrew Furuseth*, thus one might wonder to whose "executive order" Moore and Berlitz refer.²⁸ The destruction of *Andrew Furuseth's* operational log was not part of a conspiracy to cover up a Philadelphia experiment.

Turning to the *USS Eldridge's* deck log, an examination of that document only yields partial answers to the questions raised by the Philadelphia experiment thesis. If the Philadelphia experiment took place sometime in late July through August 1943, before the ship's commissioning, as Moore and Berlitz contend, then a deck log might not have even been kept.) An analysis of the deck log for October 1943, an alternative date for the experiment, indicates nothing more than normal housekeeping affairs, transfers on or off ship of some crew members, daily testing of the general alarm, ship fueling, etc. According to the deck log several enlisted men were brought before the Captain's Mast for the offences of "Leaving Shore Patrol Post and Drinking while on Duty," returning to ship "absent over leave," and "Intoxicated while on Small Shores Party," during the month of October. These entries clearly show that for the month of October 1943, *USS Eldridge* was in port. The ship was in Brooklyn, New York, according to Moore and Berlitz.²⁹ The deck log makes no mention of an experiment of any kind, nor is there any indication that the behavior of any of the crew was in any way out of the ordinary – except, of course, for those behaviors for which sailors have been known for a millennia. Furthermore, there is no indication of a transfer, even on a temporary basis, of special electronics experts, who would be necessary to conduct such a test as the Philadelphia experiment.³⁰

Deck log entries for November, when Carlos Allende on board the *SS Andrew Furuseth* was supposed to have witnessed the *Eldridge* disappear and reappear, are equally disappointing. The *Eldridge's* deck log does not give the ship's positions for these dates and the entries are a monotonous daily litany; "Tested general alarm. Condition satisfactory. Mustered crew on stations. No absentees." The entry for 20 November, 1943, reads the same and, curiously, makes no mention of the combat operations against an enemy submarine cited by Moore and Berlitz.³¹ The action report, however, clearly shows such combat took place.

Moore and Berlitz do claim that: "While the missing deck logs of the *Eldridge* had still not turned up, the engineer's log had. While not containing much information related to the search, it did contain a record of the ship's positions for the dates in question, which were missing from the deck-log file."³² The existence of this "engineer's log" is possible, but neither the National Archives nor the US Navy's bureau could find a record of it when queried by this author. Furthermore, how would Moore and Berlitz have known that the ship's positions were not in the missing deck log unless they had seen it? It was on the basis of this "engineer's log" that Moore and Berlitz connected *USS Eldridge* with Allende's ship *SS Andrew Furuseth*, as both became part of convoy GUS-22 eastbound across to Oran, Algeria in the Mediterranean.³³

The Witness, Allende

As we have seen, and will see again, Moore and Berlitz treat Allende's testimony as fundamental in establishing the validity of the Philadelphia experiment thesis. They must, therefore, connect *USS Eldridge* and *SS Andrew Furuseth*, to get *Eldridge* to a geological location in the right time frame for Allende to witness *Eldridge's* disappearance. Moore and Berlitz do this by citing the "engineer's log" to connect the two ship in convoy GUS-22, and an action report against a submarine filed by *Eldridge's* captain, which connects *USS Eldridge* to *SS Andrew Furuseth* for the westbound convoy UGS-23, and to which both *Eldridge* and *Andrew Furuseth* were supposedly assigned. Moore and Berlitz contend:

The first missing piece that fitted into this puzzle came quite unexpectedly, with the uncovering of a previously classified piece of information about the *Eldridge* which seemed to discredit the official histories completely. The document in question was a report on Antisubmarine Action by Surface Ship filed by the commander of the *Eldridge* on December 14, 1943, in accordance with fleet regulations and concerned an action which took place on November 20 in the North Atlantic. According to official histories, the *Eldridge* was operating on shakedown cruise in the vicinity of Bermuda from early September until late December 1943, and her first overseas voyage began on January 4, 1944. According to the action report filed by the ship's commander, Lieutenant C. R. Hamilton, the *Eldridge* dropped seven depth charges against a suspected enemy submarine shortly after 1:30 PM local time on the afternoon of November 20, 1943, while steaming westward (toward the United States) in escort of convoy UGS 23. The position of the *Eldridge* as listed in the report was latitude 34°03' north and longitude 08°57' west – a position which places the ship barely 200 miles off the coast of Casablanca, North Africa, and some 3,000 miles from Bermuda!³⁴

It is by this method that Moore and Berlitz get *USS Eldridge* into position for Allende's viewing.

Unlike US Navy log books which are kept at the National Archives, action reports are currently housed at the Naval Historical Center (NHC), Operational Archives Branch (OAB), Washington Navy Yard, Washington, DC. This action report is available at the OAB. The report does state that *USS Eldridge* was escorting convoy UGS-23, and attacked a submarine contact with seven depth charges.³⁵ It is indeed strange that information about the attack on the enemy submarine does not occur in the deck log. Although the action report does establish the location of the vessel, and a connection with USG-23, this is at best circumstantial evidence on which to claim that the ship disappeared.

In dealing with US Navy documents vis-à-vis the Philadelphia experiment thesis, the log which is supposed to be

missing is, in fact, in the National Archives and has never been heard of there, nor can it be located in the relevant US Navy bureau. The action report which Moore and Berlitz cite to connect *USS Eldridge* and *SS Andrew Furuseth* to convoy USG-23 for Allende's sighting is in the Operational Archives Branch and does make the necessary connection. If, in fact, the merchant was in the convoy (which has yet to be verified), this connection is significant merely in setting up the situation for the Allende viewing, and thus represents only circumstantial evidence.

Clearly more primary research work needs to be done in the government documents. Some answers may be found in the records of the Tenth Fleet. This fleet was responsible for all convoy activity in the Atlantic, as well as convoy and anti-submarine intelligence. The records of convoys GUS-22 and UGS-23 are extant and will be examined in Part II of this essay.

On balance, Moore and Berlitz' presentation of evidence from government sources leaves a great deal to be desired. They did not name their Greek sources for the contention that *USS Eldridge* was launched a month earlier than US Navy records indicate. This makes their information difficult if not impossible to verify. Secondly, their contention that the ship had a 1,900 ton displacement and that this indicates the existence of special electronic equipment for an experiment is simply incorrect. Thirdly, they were wrong in stating that the deck log of the *USS Eldridge* is missing. Although technically correct that the deck log of the *SS Andrew Furuseth* was destroyed, they do not seem aware of the existence of the official log and armed guards' log. Although correct about the action report, the significance of the evidence is still open to question.

Evidence That Is Not Evidence

Moore and Berlitz' use of government documents evidence in the Philadelphia experiment does not meet our three fundamentals of historical inquiry, nor does their use of interview evidence. Throughout the text the reader is faced with a plethora of pseudonyms and sources who, "must remain anonymous" or "must go nameless." On example of how Moore and Berlitz use anonymous sources is provided in Chapter IX, "The Unexpected Key." This chapter claims to uncover the connection between US Navy scientists and the Philadelphia experiment. The key, according to Moore and Berlitz, was to discover the identity of and locate the scientist Carlos Allende referred to in his letters to Jessup as "Dr. Franklin Reno." The authors claim to have located the scientist when they realized that Franklin Reno was not a name but a road sign between Franklin and Reno, Pennsylvania. Exactly how Moore and Berlitz traced down the elusive scientist from this lead, they will not say. Even though

this source died a year before the publication of the book, Moore and Berlitz will not give his real name, and give him the pseudonym "Dr. Rinehart" in the text.

Moore and Berlitz tell precious little about Rinehart except that he held a Ph.D., was a department head at a government research institution, and abandoned a distinguished scientific career for the life of a recluse when he feared he knew too much because of his association with the Philadelphia experiment. On the basis of the pseudonymous Rinehart interviews, Moore and Berlitz link Albert Einstein, John von Neumann, and other scientific luminaries to the Philadelphia experiment. Rinehart's linkage to them is at the Nation Defense Research Committee, a Dr. W. W. Albrecht, another pseudonym. (When Rinehart quotes Albrecht in the interview, one pseudonym cites another pseudonym, clearly an unusual literary event.) It was Albrecht who assigned Rinehart to do the basic calculations for bending light using Navy degaussing equipment. The interview is cited as evidence that the US Navy was indeed interested in invisibility equipment, had assembled a team of scientists to work on such an experiment, and that such an experiment did take place.³⁶

Regrettably, this interview is typical of the poor quality of evidence adduced in *The Philadelphia Experiment*. No date (except a time frame of 1939-1940) or place is given for the meeting, and Rinehart's real name and that of his superior are withheld. It is impossible for any historian (or anyone else for that matter) to verify that the meeting did in fact take place, that it involved cited interlocutors, and that what Rinehart claims was discussed was actually discussed.

The Rinehart interview does demonstrate, however, that Moore and Berlitz use a specific model, a paradigm, for presenting evidence. The first step in the paradigm is usually to introduce some well-known personality (a famous scientist, admiral or other naval officer) or legitimate source. The next step is to connect these reputable sources with an anonymous or pseudonymous source which is often the source of the interview or information. The final step is to make these anonymous or pseudonymous sources the connection to the Philadelphia experiment. In the chapter discussed above, Einstein, von Neumann, et. al., are first introduced, then the pseudonymous sources Reinhart and Albrecht take center stage and make the direct connection to the experiment. The closer one comes to the actual events of the Philadelphia experiment, the more anonymous or pseudonymous the sources become, and the less credible the evidence, because those sources cannot be verified. "Validity by association" is a good term to describe this paradigm. Although not as virulent as its intellectual cousin, "guilt by association," it suffers from the same logical defects.

The paradigm is also evident in Chapter 6, "Investigations Can Be Fatal," which proposes that Morris K. Jessup was assassinated for investigating the Philadelphia experiment.

In this chapter we are first introduced to Albert Einstein and Bertrand Russell, have a brief mention of Carlos Allende, are introduced to Admirals Rawson Bennett II and Frederick R. Furth, former Chiefs of the Office of Naval Research, and to Admiral Howard T. Bowen, the Director of the Naval Research Laboratory at the time of the birth of the Philadelphia experiment. This sets up phase one of the paradigm, the citation of legitimate sources. Then Moore and Berlitz introduce Reilly H. Crabb, author of *The Strange Case of Dr. M. K. Jessup* and continue on to cite one of his pseudonymous sources, a “Colonel B.” who states that the Philadelphia experiment was indeed conducted. Phases two and three of the paradigm, the use of anonymous or pseudonymous sources, and connection to the experiment, are completed.³⁷

A third example of the “validity by association” paradigm may be found in those British merchant sailors who supposedly witnessed *Eldridge* materialize and dematerialize in Norfolk harbor. “Tony Wells,” Moore and Berlitz state, “now living in Southampton, England, writes about five British merchant seamen who, in 1943, were waiting in Norfolk... to go to England. One day, looking at the harbor from the dock, they were understandably amazed to see a sea-level cloud suddenly form in the middle of the harbor, and almost immediately dissipate, leaving a destroyer escort in full view, which stayed but a few moments before it was covered by a cloud and vanished again.”³⁸ Although Tony Wells may not be a famous scientist or naval officer, he is presented here as a legitimate source, but the actual witnesses to the experiment are anonymous. As such, this evidence cannot be corroborated. These are three of many examples of “validity by association” used throughout *The Philadelphia Experiment*.³⁹ Of all the interview evidence used to justify the Philadelphia experiment thesis, only two stand out as liable for verification: Carlos Allende (aka Carl Allen) and Engineer First Class Victor Silverman. Finding them, if they are still alive, might prove a gigantic task.

An examination of the Philadelphia experiment thesis bring to mind the story, usually attributed to Mark Twain, of the traveler and the stranger. A stranger was sitting on a brick wall looking wistfully at a tree across the road. A traveler came walking along and said “Good morning, anything happening in these parts?” “Why yes,” replied the stranger, “a miracle happened by that tree yesterday.” Taken aback, the traveler, a skeptical sort, said, “I don’t believe you.” “Well,” responded the stranger, “there’s the tree.”

About the author: Joseph Pothier received his MA in diplomatic/military history from the University of Wisconsin-Milwaukee in 1983 and his Ph.D. from the University of Kansas in 1989. He is currently revising his dissertation, *The Eagle and the Anchor: The Influence of the United States Navy Policy on American Foreign Relations, 1933-1941*, for publication.

Notes

- 1 Although the Philadelphia experiment thesis has several variations, it reaches its fullest expression in William L. Moore in consultation with Charles Berlitz, *The Philadelphia Experiment: Project Invisibility. An Account of a Search for a Secret Navy Wartime Project That May Have Succeeded-Too Well* (New York: Fawcett Crest 1979) (henceforth cited Moore and Berlitz *The Philadelphia Experiment*), which forms the basis for this paper. For the alien connection see *Ibid.*, pp. 259-267.
- 2 *Ibid.*, pp. 178-189.
- 3 *Ibid.*, pp. 165-170, 200-201.
- 4 Normally, as in this case, warships are divided into classes. Each class has certain characteristics and the name of the class is the name of the first vessel contracted. Canon class destroyer escorts had a standard displacement of 1240 tons. They were 306 feet in length, had a 36 feet eight inch beam, and a draft of 11 feet eight inches. The Canon class was powered by diesel engines with electric drive and had a speed of 21 knots. They were armed with three 3-inch guns and three 21-inch torpedo tubes. The crew complement was 216 officers and men. Sixty-six Canon class destroyer escorts were built during the war. Samuel Eliot Morrison, *History of United States Naval Operations in World War II, Volume XV, Supplement and Index* (Boston: Little, Brown and Co., 1962), p. 53.
- 5 K. Jack Bauer and Stephen S. Roberts, *Register of Ships of the US Navy, 1775-1900. Major Combatants* (New York: Greenwood Press, 1991), p. 155. The vessel was named after Lieutenant Commander John Eldridge, Jr., a 1927 Naval Academy graduate who was killed in action in the Solomon Islands 2 November, 1942. Department of the Navy, Office of the Chief of Naval Operations, Naval History Center, *Directory of American Fighting Ships, Vol II*, (Washington, DC: Government Printing Office, 1963), p. 336.
- 6 Degaussing was the procedure of neutralizing the magnetic field of a ship’s hull so it would not detonate a magnetic mine.
- 7 Moore and Berlitz, *The Philadelphia Experiment*, pp. 164-165, 169-170. Quote p. 170.
- 8 *Ibid.*, pp. 89, 252 and 271.
- 9 *Ibid.*, pp. 247-252.
- 10 *Ibid.*, pp. 158-165. Moore and Berlitz are confused in their assignment of convoy designations. Convoys proceeding east from the United States to the Mediterranean were given the designation “GUS-number,” those preceding west from the Mediterranean to the United States were designated “UGS-number”. See Samuel Eliot Morrison, *History of United States Naval Operations in World War II, Vol. 10, The Atlantic Battle Won, May 1943-May 1945* (Boston: Little, Brown and Co., 1962), p. 168. Also see, United States, Navy Department, “Administrative History of the Tenth Fleet,” unpublished manuscript, Operational Archives Branch, Washington Navy Yard, Washington D.C.
- 11 Moore and Berlitz, *The Philadelphia Experiment*, p. 166.
- 12 Moore and Berlitz never cite a source for this “official history,” but some of their quotations indicate clearly once source is Department of the Navy, Office of the Chief of Naval Operations, Naval History Center, *Directory of American Fighting Ship, Vol II*, (Washington DC: Government Printing Office, 1963), p. 336.
- 13 Moore and Berlitz, *The Philadelphia Experiment*, p. 169.
- 14 *Ibid.*, pp. 166 and 170.
- 15 *Ibid.*, pp. 169 and 170.
- 16 *Ibid.*, p. 250, but compare with p. 163.
- 17 Department of Navy, Office of Information, Evelyn H. Bauserman, Assistant Head, Research and Public Inquiries Section, Letter, undated, regarding the Philadelphia experiment, Reference # OI2252B/EB/dh. National Archives, Washington D.C. The author would like to express his gratitude to the National Archives for making a photocopy of this letter available. It is also printed in Moore and Berlitz, *The Philadelphia Experiment*, pp. 134-136.
- 18 United States, United States Navy, Chief of Naval Operations (Admiral Ernest J. King), *The U.S. Navy at War, 1942-1945: Official Reports to the Secretary of the Navy*, (Washington D.C., Government Printing Office, 1946) and K. Jack Bauer and Stephen S. Roberts, *Register of*

- Ships of the U.S. Navy, 1775-1990: Major Combatants* (New York: Greenwood Press, 1991), p. 222.
- 19 The author is currently working with the Greek Cultural and Naval Attaché's Offices at the Greek Embassy in Washington DC to locate the relevant documents and procure photo-copies. A search of the documents of the US Mutual Defense Assistance Program under which the Greeks purchased *USS Eldridge* may also prove fruitful.
- 20 This analysis and graph are based on construction data from K. Jack Bauer and Robert S. Roberts, *Register of Ships of the US Navy, 1775-1990, Major Combatants* (New York: Greenwood Press, 1991), pp. 222-223. For the use of prefabrication and its effect on destroyer and destroyer escort production see *United States, United States Navy, Chief of Naval Operations (Admiral Ernest J. King), The US Navy At War, 1942-19445, Official Reports to the Secretary of the Navy*, pp. 16-17.
- 21 Moore and Berlitz, *The Philadelphia Experiment*, pp. 165-166.
- 22 United States Navy, Bureau of Ships, *Ships Data, US Navy Vessels*, Vol. 1 (Washington DC: Government Printing Office, 1945) and Joseph Parker, Ed., *Jane's Dictionary of Naval Terms* (London: MacDonalds and Jane, 1975), p. 264. During WWII the US Navy measured fuel in terms of barrels even though the fuel was actually in the fuel bunkers.
- 23 Bruce W. Watson and Susan Watson, eds., *The United States Navy: A Dictionary* (New York and London: Garland Publishing, 1991), pp. 488-489.
- 24 John V. Noel, Jr. and Edward L. Beach, eds. *Naval Terms Dictionary*, 5th Edition (Annapolis MD: Naval Institute Press, 1988), p. 173. The definition of a log varies by country, see Peter Kemp, ed., *The Oxford Companion to Ships and the Sea* (London, New York and Melbourne: Oxford University Press, 1976), p. 494.
- 25 The author would like to express his appreciation to the staff of the Ships History Branch of the Center for Naval History for their help negotiating shoals of naval logology. For the legal definition of a log see *United States Navy, General Orders and Circular Letters, 1943*, copy located in the Library, Center for Naval History, Washington Navy Yard, Washington DC. The author also wishes to thank Mr. Jan Herman, Archivist, United States Navy, Bureau of Medicine and Surgery, Bethesda, MD, for his help in trying to locate the medical log of *USS Eldridge*. Regrettably, the medical log of the *Eldridge* could not be found and is presumed not extant.
- 26 National Archives, "Reference Information Paper Number 97," May 1991; and "Reference Paper Number 77," April 1992. The author would like to thank the research staffs of the Military Reference Branch, National Archives; and the Maritime Information Records Office, Department of Transportation, Washington DC, for their help in defining the terms "log" and directing the author to other sources.
- 27 Moore and Berlitz, *The Philadelphia Experiment*, p. 160.
- 28 Searches were conducted in the following sources for a Presidential Executive Order dealing with the *SS Andrew Furuseth*: Office of the Federal Register, National Archives and Record Service, *Code of Federal Regulations, Title 3 – The President, 1943-1949 Compilation* (Washington DC: Government Printing Office, 1957); Office of the Federal Register, National Archives and Record Service, *Code of Federal Regulations, Title 3- The President, 1949-1953 Compilation* (Washington DC: Government Printing Office, 1958); Office of the Federal Register, National Archives and Record Service, *Codification of Presidential Proclamations and Executive Orders, April 13, 1945- January 20 1989* (Washington DC: Government Printing Office, 1989).
- 29 Moore and Berlitz, *The Philadelphia Experiment*, p. 164.
- 30 United States National Archives, Washington DC, *Log Book of the USS Eldridge, 1 October-31 October 1943*. Also, photo copies in author's and Charles Yost's possession. The Captain's Mast, also called Deck Court, was a disciplinary hearing for minor offences not meriting court-martial.
- 31 *Ibid.*, 15 November-30 November 1943.
- 32 Moore and Berlitz, *The Philadelphia Experiment*, p. 162.
- 33 *Ibid.*, pp. 162-163.
- 34 *Ibid.*, pp. 161-162. The "official history" of the *Eldridge* does not say that its "first overseas voyage began on January 4, 1944," nor does it mention that the ship was assigned to the Bermuda area. The relevant paragraph reads: "Between 4 January and 9 May 1945, *Eldridge* sailed on the vital task of escorting to the Mediterranean vital men and materials to support Allied operations in north Africa and on to southern Europe. She made nine voyages to deliver convoys safely to Casablanca, Bizerte, and Oran." Department of the Navy, Office of the Chief of Naval Operations, Naval History Center, *Dictionary of American Fighting Ships*, Vol. II, p. 336.
- 35 *USS Eldridge*, Lieutenant C. R. Hamilton, Action Report, 14 December 1943, DEI73/A16-3/A9-8, Serial 57. Center for Naval History, Operational Archives Branch, Washington Navy Yard, Washington DC. Hereafter cited OAB. Pleased be advised that the US Navy's Action Reports and many other naval documents from the World War II period are scheduled to be transferred from the OAB to the National Archives in 1995.
- 36 Moore and Berlitz, *The Philadelphia Experiment*, p. 173-205.
- 37 *Ibid.*, pp. 115-123.
- 38 *Ibid.*, p. 250.
- 39 Other examples of the "validity by association" paradigm and the use of anonymous or pseudonymous sources may be found in Moore and Berlitz, *The Philadelphia Experiment*, see pp. 17-21, 35, 73, 88, 109, 117-119, 122-125, 131, 150-151, 164-166, 173-178, 182, 207-216, 235, 238-347, 251-253, 255, and 262-264.