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A BRIEF HISTORY OF THE PROGRESSIVE CASE

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1. INTRODUCTION

1.1 SYNOPSIS

On February 16, 1979, the Department of Energy (DOE) received from George Rathjens a draft article by Howard Morland for The Progressive magazine which contained classified information on the design and operation of nuclear weapons. On February 27, the DOE received another draft, this time from the Progressive, for comment. When publication in the Progressive seemed imminent, despite warnings that the information would damage U.S. national security, the Government sought an injunction.

A U.S. district court issued a temporary restraining order on March 9 and then a preliminary injunction on March 26. The defendants appealed.

On September 16, while the appeal was still pending, the case was mooted by publication in a newspaper of information similar to that in Morland's article. The preliminary injunction was vacated on September 28 and the Progressive published the article on October 4, 1979 after a six month delay.

1.2 EVALUATION

In many ways, the Government suffered a grievous defeat in the Progressive case. It failed to prevent eventual publication of the article. The Court case only ensured the widest possible dissemination of the sensitive Restricted Data material, now clearly identified, somewhat amplified, and authenticated by the Government.

In other respects, the Government clearly "won" the Progressive case. A Federal Court ruled that the Government was entitled to a preliminary injunction to prevent publication of such material on national security grounds under both the Atomic Energy Act and inherent constitutional powers.

The actual long-term effects of the case are yet to be seen.

1.3 DESCRIPTION OF THIS REPORT

This report is intended to present a brief account of the Progressive case; it is not intended to be a complete history. Additional information is available in the references. In particular, Reference 1 gives a list of 408 documents filed in five federal courts in connection with the Progressive case. Reference 2 gives summaries of the 120 affidavits. The approximately 300 other filings are summarized in Reference 3.

The next section of this report describes events from the first hints to DOE about the article on February 13, 1979, through issuance of a Preliminary Injunction (PI) on March 26.

Section 3 covers later events through June 15, when a defense motion to vacate the PI in view of recently discovered open publications was denied. Section 4 describes events through mootng of the case, vacation of the preliminary injunction, and dismissal of the appeals on October 1, 1979. Section 5 describes events through final dismissal of the case on September 4, 1980.

Section 6 is an epilogue with a description of relevant events since the case was dismissed, and some discussion of the overall effects of the case.

A description of DOE's system for control of nuclear weapon design information is given in the Appendix.

2. TEMPORARY RESTRAINING ORDER AND PRELIMINARY INJUNCTION,
FEBRUARY 13 to March 26, 1979

2.1 BEGINNING

On February 13, 1979, George Rathjens, an MIT professor then serving as Deputy U.S. Special Representative for Non-Proliferation in the State Department (DOS), called Jack Griffin, head of DOE's Office of Classification. He asked what could be done about a draft article he had heard of on the design of H-bombs; an article that might present serious problems. The article was for either Rolling Stone or The Progressive, he could not recall the author. Griffin said that it would depend on the contents and circumstances. Persuasion could be tried first, but if that failed the government could proceed under the Atomic Energy Act (AEA), which required special protection of nuclear weapon design information*, backed by injunctive powers and criminal penalties against unlawful dissemination.

On Friday, February 16, Rathjens called again and said he now had a copy of the article, which was written by a Howard Morland for The Progressive, a monthly magazine in Madison, Wisconsin. Griffin had the article picked up from Rathjens' office at DOS.**

DOE's Office of Classification (OC) immediately found it to contain, as it claimed, the "secret of the H-bomb." The article contained text and diagrams which in spite of

* A brief description of the scheme set up under the AEA to protect nuclear weapon information and other "Restricted Data" (RD) is given in the Appendix.

** This was a slightly earlier draft of the article than the "final" version eventually published (Ref. 4). It was filed in the case as document 8A2, see Ref. 1.

inaccuracies described the classified, Restricted Data, main principles of operation of thermonuclear weapons. No previous open publication on nuclear weapons had been even remotely so revealing. Previous open publications had contained many bits and pieces purporting to describe how H-bombs worked--most wrong and all far from complete. In particular, before Morland's article there had been no credible hint that X rays were used to transfer energy from a fission explosion to implode and ignite a physically separate fusion stage.

DOE promptly notified the FBI, and Bureau agents interviewed Rathjens the next day, Saturday February 17. They learned that Rathjens had gotten the article from one of his former students at MIT, Ron Siegel. Siegel had received it on February 9 from Sam Day, an editor of the Progressive magazine, for comment.

2.2 DECISION

That same Saturday, February 17, Duane Sewell, Assistant Secretary for Defense Programs of the Department of Energy (ASDP/DOE), discussed the article with James Schlesinger, Secretary of Energy. The following week the DOE's Senior Reviewers, then DOE's principal technical and policy advisors on classification, advised DOE that the article indeed contained RD. The Office of Classification made a formal determination that the article contained RD, and the DOE formally requested the FBI to investigate. On Saturday, February 24, Sewell and Lynn Coleman, DOE's General Counsel, discussed the situation with Schlesinger. He decided to request Attorney General Griffin Bell to attempt to stop publication.

The next Monday, February 26, Sam Day called Jim Cannon of DOE's Office of Public Affairs and asked if he had received the diagrams of how H-bombs work that Day had sent for technical comment on February 21. When Cannon told him they had not been received (they finally arrived March 1), Day said he would send new copies immediately by express mail. They arrived the next day, along with the "final" version of Morland's article they were intended to illustrate.*

Two days later, on the morning of March 1, Day again called Cannon. He said his publication deadline was noon the next day. Since DOE had not called, he assumed there was no problem? Cannon said DOE's legal and technical people now had the article, and they would contact him soon.

2.3 CONFRONTATION

Shortly after 1:00 pm on March 1, Coleman called the Progressive and notified them that the Department of Energy, the Department of State, and the Arms Control and Disarmament Agency (ACDA) had determined that the article contained RD whose publication or other dissemination would aid the proliferation of thermonuclear weapons, which would damage national security. Coleman offered DOE's assistance in removing the sensitive material.

The next day Duane Sewell and four technical and legal people from DOE and the Department of Justice (DOJ) met the editors and lawyers of the Progressive in Madison. Sewell restated that the article had been determined to contain Restricted Data as defined in the Atomic Energy Act and that dissemination would damage the U.S. When asked to identify

* This is the version finally published in the November 1979 Progressive (Ref. 4).

specifically what was RD, Sewell said he could not do that without compromising the information. However, the diagrams and about 10% of the text were included. He offered to assist the Progressive in recasting the article to remove the RD.

Editor Erwin Knoll said that if the information were in fact secret it could not have been obtained by a freelance reporter with such limited resources in such a short time. Sewell said he was surprised and concerned. The Progressive asked for a few days to consider the government position.

On March 7, counsel for the Progressive called Coleman to notify him that the magazine intended to publish the article without alterations. The next day the Government filed a civil suit in U.S. District Court for the Western District of Wisconsin in Madison for an injunction to stop publication.

DOJ attorneys (led by Thomas Martin, Deputy Associate Attorney General, Civil Division) filed requests for a Temporary Restraining Order (TRO) and a Preliminary Injunction (PI) to prevent imminent publication of Restricted Data. They filed a statement of Government arguments in support of the TRO and PI, with supporting affidavits. The Government argued that the Morland article contained Restricted Data whose publication the defendants had reason to believe would harm the United States and give advantage to foreign powers by allowing them to develop thermonuclear weapons 3-5 years faster, and with more certainty. This would violate the provisions of the AEA, and under such circumstances an injunction was specifically authorized by the AEA. At the same time, the inherent constitutional powers of the Executive to provide for the common defense

and security also justified an injunction to prevent damage of such magnitude.

The Government felt required to make an extensive showing of the degree of harm in order to overcome the "heavy burden" of prior restraint, presumptively unconstitutional under the First Amendment. The DOJ cited the AEA and the Nuclear Non-Proliferation Act of 1978 as Congressional determinations of the degree of harm. Officials of the Departments of Energy and State and of the Arms Control and Disarmament Agency filed affidavits concerning the impact of publication on proliferation. DOE's Director of Classification detailed (in camera) specific items of RD in the article.* The government proposed to voluntarily allow access by the defense to the in camera material under a Protective Order (PO) in order to provide the fullest possible opportunity for defense. The PO also would provide that the government would review defendants' submissions before public filing to identify any classified material which must remain in camera.

After Judge Doyle of the Western District disqualified himself, citing past personal associations with the Progressive, the case was assigned to be heard at 2:00 pm on Friday, March 9, in Milwaukee by Judge Robert W. Warren of the Eastern District of Wisconsin.**

* The RD parts of the article "censored" by the Government are indicated in U.S. District Court documents 8A1 and 8A2 (see Ref. 1) and in a reproduction of the final draft in the Appendix of Morland's book, Ref. 5.

** The first press accounts of the Progressive case on March 9 were based on a DOJ press release that morning. Media coverage thereafter was, with a few exceptions, generally favorable to the defendants, with emphasis on First Amendment protections.

2.4 TEMPORARY RESTRAINING ORDER

At the hearing on March 9, the Government argued that an injunction to prevent dissemination of information in the article was authorized under both the Atomic Energy Act and the inherent constitutional powers of the Executive.

The defense (led by Earl Munson for Knoll, Day, and The Progressive; and by Thomas Fox for Morland) argued that the information in the article was in the public domain and so could not harm the national security of the U.S. Furthermore, if the AEA authorized an injunction in this case, it was unconstitutionally overly broad and vague.

Judge Warren ruled that the Government had shown the required elements for a Temporary Restraining Order: (1) likely success on the merits, (2) irreparable harm in the absence of restraint, (3) lesser harm to defendants, and (4) on balance, in the public interest. Judge Warren granted a TRO until March 16, when a hearing would be held on the issuance of a Preliminary Injunction.

2.5 PRELIMINARY INJUNCTION

On March 13, the government filed a supplemental legal memorandum. Affidavits were filed from nuclear weapon design experts, including the directors of DOE's nuclear weapon design laboratories, Los Alamos National Laboratory (LANL), and Lawrence Livermore National Laboratory (LLNL). These affidavits affirmed that the Morland article contained crucial RD concepts for design of thermonuclear weapons, which were not publicly available. Affidavits were also filed from the Secretary of Energy and the Director of the Arms Control and Disarmament Agency affirming that publication of the concepts in the Morland article would

irreparably damage the national security of the United States by aiding foreign nations in developing thermonuclear weapons and so increasing the risk of thermonuclear war. Similar affidavits were filed three days later by the Secretaries of State and Defense.

On March 15, the defense obtained a delay of the preliminary injunction hearing until March 26 in order to prepare their case. DOE cleared three defense counsel for access to the government's in camera filings. Three scientists were cleared for access to the Morland article as defense expert witnesses.

The next day, the defense filed affidavits from Knoll and from Day describing how the Progressive had sponsored Morland's efforts to write an article on the illusion of secrecy surrounding nuclear weapons. They had arranged for him to visit DOE facilities. When Morland produced a rough draft in January, Day edited it and sent it to several scientists for comment on its accuracy.

On February 15, Day said, George Rathjens called him to discuss the article, which he had received from one of his students. The next day Rathjens called to say he had sent a copy of the article to DOE. Day sent a copy of the diagrams to DOE on February 21. When they had apparently had not been received by February 26, Day sent another copy, along with the article itself, by express mail.

Both Day and Knoll stated that the Morland article was not a blueprint for an H-bomb. It only contained design principles deducible from public sources by investigative journalism. There was no reason to believe it would be utilized to injure the United States, or to secure an advantage to foreign nations. Rather, it would benefit the

U.S. by demonstrating that security lies in informed debate, not oppressive and ineffective "secrecy."

The defense also filed affidavits from five scientists who, although they supposedly had not seen the article, affirmed that the relevant basic physical concepts and the general manner of their application to thermonuclear weapons were widely known.

The defense filed in camera two affidavits from Theodore A. Postol, a scientist from DOE's Argonne National Laboratory (ANL). He said he received a copy of the article for review in mid-February and concluded that it contained no information not already common knowledge to scientists. Furthermore, Postol said, any competent physicist could derive such information in a matter of hours from a diagram in E. Teller's article on hydrogen bombs in the Encyclopedia Americana (Ref 6).

After considerable argument between counsel over the general question of classifying references to published material, Postol's first more general affidavit was filed publicly. This openly made a close connection between Morland's design and the "Teller diagram."

Over the next week or so, DOE cleared for access to Morland's article as defense expert witnesses 12 of the 17 scientists requested by the defense. The defense filed affidavits from four of these, Hugh Dewitt,* Ralph Hager,

* As apparent "insiders," Dewitt and Ray Kidder of LLNL (and to a lesser degree the ANL affiants) turned out to play major roles for the defense.

and Calvin Andre of LLNL and Kosta Tsipis of MIT. As an amicus curiae, the American Civil Liberties Union (ACLU) filed supporting affidavits from Alexander De Volpi, Gerald Marsh, and George Stanford of Argonne National Laboratory, who had assisted Postol earlier in reviewing Morland's article. In essence, these affidavits all stated that the information in the Morland article was either already publicly available or deducible from previous publications.

The defense also filed two affidavits in which Morland purported to describe how he obtained specific items in his article from public sources, including the Encyclopedia Americana article by Teller, visits to DOE facilities, and interviews with knowledgeable people.

Defense briefs amplified their earlier arguments to the effect that the First Amendment prohibited prior restraint of publication, certainly in the absence of meeting the "New York Times test" established by the Supreme Court in the Pentagon Papers case. This test required the Government to prove clear, certain, imminent, and grave damage. The defense argued that the present situation, where all the article's contents were already in the public domain, failed to meet any aspect of that test. Certainly, defendants could have no reason to believe publication of this information would harm national security or violate the Atomic Energy Act. If it did, the AEA was unconstitutional.

A closed hearing was held on March 23 to address a defense motion to relax the procedures established under the Court's Protective Order for handling classified in camera material. After argument, the Court ruled that existing procedures were reasonable and denied the motion.

Also on March 23, the Government filed an affidavit from Hans Bethe (Professor at Cornell, Nobel Laureate, head of LANL's Theoretical Division during WW II, and head of the Government's "Bethe Panel" to evaluate foreign nuclear capabilities). Bethe concluded, based on his detailed knowledge of both classified and open publications, that the Morland article contained classified thermonuclear weapon concepts that were fundamental and not publicly available. According to Bethe, to develop the design information in the article required extensive analysis and creativity, not just assembly of public information.

Similar conclusions were expressed in an affidavit by Harold Lewis (Professor at the University of California at Santa Barbara) and in the first of four joint affidavits by Jack Rosengren and William Grayson (both for many years in the nuclear weapon program at LLNL).

Rosengren and Grayson analyzed in some detail both the Morland article and Morland's affidavits and other defense affidavits. They found that the article's detailed diagrams and descriptions would be of tremendous assistance in developing an efficient thermonuclear weapon. They stated that Morland's lack of understanding and the fragmentary nature of his design story strongly suggested a great deal of guidance from persons with access to secret, classified design information.

Rosengren and Grayson also stated that Postol's affidavits failed to prove his contention that Morland's design could be derived by any competent physicist within hours. Given Postol's prior access while helping review the article and the incorrect statements he presented, his affidavits actually showed even the difficulty of providing the correct rationale for a known design.

On March 26, the day of the PI hearing, the defense filed another affidavit from Morland and two affidavits from Ray Kidder, a LLNL physicist familiar with thermonuclear weapon design. Morland's affidavit was intended to rebut what he understood to be the theme of the Rosengren and Grayson affidavit. It essentially repeated his statements that he derived his information from open sources (not all named), and that he had no access to classified documents. Kidder's affidavits stated that Postol had indeed demonstrated that the principle of radiation implosion in Morland's article was readily deducible from public information. Kidder stated that, in fact, attached reports* showed that the principle was appearing increasingly in the public literature. Kidder said that Morland's design did not describe modern U.S. stockpile devices. It was largely schematic and would be of little assistance to a would-be bomb designer.

Later that day, the government filed the second Rosengren and Grayson affidavit, in rebuttal to Kidder's affidavit. It said that Kidder's assertion that Postol had demonstrated the derivability of radiation implosion had in fact overlooked Postol's prior access to the Morland article and had ignored his mistakes. It stated that Kidder's attachments, which supposedly demonstrated the public availability of the concept, were actually only loosely related publications on fusion energy. In addition, it noted that Morland's design definitely did resemble weapons in the stockpile.

At the hearing on the PI on March 26 both sides presented in their oral arguments shorter versions of their filings. After those presentations Judge Warren stated that the

* These attachments introduced into the case for the first time the topic of inertial confinement fusion (ICF), whose connection with nuclear weapons remains somewhat sensitive.

Government had shown enough to warrant a preliminary injunction. However, he asked both sides to consider consultation by a panel of lawyers and experts from both sides to attempt to reconcile opposing judgmental and factual views.

After a recess, the Government accepted the proposal, but the defense rejected it. Judge Warren then issued a Preliminary Injunction, which bound the defendants and all acting in concert with them not to disseminate the RD information identified by the Government. He also ordered the defendants to report to the Court all prior dissemination of the article and to use their best efforts to retrieve all RD.

3. DEFENSE MOTION TO VACATE THE PRELIMINARY INJUNCTION,
MARCH 27 TO JUNE 15, 1979

After Judge Warren issued the Preliminary Injunction the Government began to prepare for the expected defense appeals and for eventual trial on the merits for a permanent injunction. At this time, though, there occurred the first of several incidents that threatened to moot the case.

3.1 AUSTRALIA

On March 30, the Australian Government notified the U.S. that it had received a copy of what appeared to be the Morland article from a small weekly paper, the Melbourne Sunday Observer. The Prime Minister stated that the Government of Australia (GOA) would attempt to block publication. The next day, at the request of the GOA, the U.S. sent an attorney from the DOJ Progressive team and a technical advisor from DOE to Canberra to identify the article and to provide assistance to any Australian legal efforts to block publication.

The Australian article turned out to be a slightly later draft of the Morland article. It had been brought to Australia by an Australian-born Boston pediatrician and anti-nuclear activist, Helen Caldicott. As it happened, no newspaper challenged GOA's blocking publication, and the article was not published there.

3.2 ACCOUNTING

On April 3 and 4 defendants filed their accountings ordered by the Court concerning dissemination of RD in the article and their efforts to retrieve that information. For the

first time, the Government had some information on how widely the article had already been distributed. In addition to being distributed to Day, Knoll, and presumably the staff of the Progressive, the RD in the article was said to have also been directly distributed (beginning on December 24, 1978) to some 16 others, including Daniel Ellsberg, of Pentagon Papers fame, and Helen Caldicott.

On April 12, the defense filed an appeal from the PI and the Protective Order in the U.S. Court of Appeals for the Seventh Circuit in Chicago. The ACLU (led by Bruce Ennis) now represented Knoll and Day as individuals. Earl Munson et al., continued to represent The Progressive. Thomas Fox represented Morland.

3.3 MILWAUKEE SENTINEL

On May 1, the second major incident occurred that threatened to moot the case. The Milwaukee Sentinel published an article that contained, albeit in speculative terms, an RD description of how H-bombs work. While stated to be derived from libraries and other open sources, it was similar in many ways, including mistakes, to descriptions in the in camera documents filed in the Progressive case.

On May 7, the defense filed parallel motions in the Court of Appeals and in the District Court arguing that the May 1 Milwaukee Sentinel story and other recent publications definitively put the RD in Morland's article into the public domain, and that the PI should be vacated.

3.4 LANL LIBRARY, UCRL-4725

Before the defense motion to vacate could be considered, news of an even more serious incident surfaced. On May 9, a

LANL employee found an obviously RD document, UCRL-4725, left out on a worktable in the unclassified section of the LANL library by Dimitri Rotow.* Rotow was at the LANL library on behalf of the ACLU, looking for mistakes in Government classification that might affect the Progressive case. He had succeeded. The document he had found, UCRL-4725, was a monthly progress report of the University of California's weapon laboratory at Livermore (now LLNL), for June 1956. The report contained a large amount of detailed data on the design and testing of fission and thermonuclear weapons. By error this report had been marked declassified and filed in the unclassified report section of the LANL library.

After this discovery, LANL management closed the unclassified report section of the library to look for any other mistakes. The ACLU promptly protested that this blocked the preparation of their case.

It was not until the following week that it was learned that Rotow had actually already copied UCRL-4725 and sent copies to Bruce Ennis of the ACLU, to his other employer Tom Cochran of the Natural Resources Defense Council, and to John Fialka of the Washington Star. Efforts were immediately begun to recover these copies, or at least to notify all known recipients that UCRL-4725 was actually RD and must be protected.

* Dimitri Rotow had in March 1978 starred as an amateur fission bomb designer at a hearing held by Senator John Glenn (Ref.7). Later, in May 1978, he was at LANL for a TV spot and while there found a mislabelled RD document on design of an obsolete fission weapon (the TX-7) in the public section of the LANL library. This incident was cited in Rotow's first affidavit (May 3, 1979) as indicating the kind of information on nuclear weapons available in the public literature.

With the UCRL-4725 incident added to the Milwaukee Sentinel story, the Government's case now seemed in substantial trouble. However, at a meeting held on May 17, representatives of DOJ, DOE, DOS, ACDA, and DOD agreed the case should continue. They believed that there remained a good chance of showing the Courts that publication of Morland's article would still violate the AEA and would still cause grave harm.

3.5 GLENN HEARING I

On May 23, 1979, Senator John Glenn held hearings (Ref. 8) of his Subcommittee on Energy, Nuclear Proliferation and Federal Services of the Committee on Governmental Affairs to examine Rotow's finding of UCRL-4725 on the open shelves at LANL. Rotow testified that he found UCRL-4725 at the LANL library in a matter of ten minutes or so by checking documents listed under "weapons." He said he made five or six copies at the library and several dozen in all. He said that prior to being notified that DOE still considered UCRL-4725 classified, he had mailed at least six copies. He refused to give any names without checking first with the recipients.

Ted Taylor, a former weapons designer at LANL, testified that the compromise of UCRL-4725 was the most serious breach of security in the U.S. nuclear program since World War II.

Duane Sewell stated that the whole UCRL-4725 report had been mistakenly marked declassified when only a small excerpt was actually declassified. Because of an incorrect title on a declassification list, the error had escaped a review caused by Rotow's discovery of another mistake a year earlier. Sewell noted that a complete page-by-page review of all declassified reports had been started to find any possible

additional mistakes and that declassification procedures had since been greatly tightened.

In response to questions from Senator Glenn, Sewell said DOE had not made any attempt to obtain directly from Rotow the names of people to whom he sent copies of UCRL-4725. OGC/DOE and DOJ had advised that Rotow was part of the Progressive defense team and should be contacted only through counsel. Only the FBI could investigate possible violations of the AEA, and they had been notified.

Senator Glenn was severely critical of DOE's failure to use every means to find out to whom Rotow had sent copies and to retrieve them. He asked Rotow and the ACLU to furnish the names. Rotow said he would not until he asked the recipients, but if there was no problem he could furnish a list in the next two days.

The next day, May 24, Rotow returned 10 copies of UCRL-4725 to DOE. He said all other other copies he had made had been accounted for to DOE or destroyed. He refused to give a list of people to whom he had showed copies, but said all had been notified that DOE considered it RD and that it must be protected.

3.6 POSTOL LETTER

The next major incident was on May 30, when DOE received from Senator Glenn's staff for comment a copy of a letter dated April 25, 1979 to Glenn from defense affiants Postol,

Marsh, Stanford, and De Volpi.* The "Postol" letter asked for a congressional investigation of the Government's breach of national security through selective declassification in the Progressive case. In particular, the Government had allowed open publication of Jack Rosengren's and Harold Brown's affidavits saying Morland's article described the basic design concept of efficient U.S. weapons. The writers of the letter said that those affidavits should have been classified, as well as Teller's diagram and their own affidavits.

During the next week, OC/DOE determined that in pointing out supposed Government mistakes, Postol et al. had revealed RD through their comments on Teller's Encyclopedia Americana article. These comments were based on their knowledge of the Morland article, which they had earlier helped review. On June 5, while the Government was still deciding how to respond, the Postol letter was filed in camera with Marsh's affidavit. Under the terms of the PO, the government had to identify any classified material, so DOE no longer had the traditional option of "no comment," ignoring the relatively minor RD revealed by the letter.**

On June 6, DOE notified the Glenn Committee staff, and tried to notify the authors, that the letter was RD. Next day, when finally contacted by DOE, Marsh read off a long list of Congressional and media recipients of what had appeared to be a confidential letter to Senator Glenn protesting the

* This was one of several instances where the defense was able to use Congressional interest and the media to influence the case.

** The Government was required to identify specifically the sensitive portions of whatever defendants filed. Even Government filings eventually had to be "bracketed" to show RD.

Government's failure to protect secrets. In the next day or so, all known recipients were notified that the Postol letter contained RD and were asked to return it or protect it appropriately.

Among the recipients named was Hugh Dewitt of LLNL, who said he had a copy but couldn't locate his original. Later that day Dewitt notified LLNL Security that he now recalled that he had sent a copy to Charles (Chuck) Hansen* of Mountain View. Dewitt agreed to arrange to recover the unopened envelope from Hansen as soon as Hansen received it.

The next night Dewitt phoned LLNL security to tell them that Hansen said the letter had already been opened and copied. One copy had been given to Hansen's Congressman, Pete McCloskey.

The next day (June 9), the San Jose Mercury and the Washington Post both carried stories on the letter, with minor quotes and paraphrases. The Oakland Tribune had a similar story on June 10, 1979. McCloskey was quoted as saying the letter was not classified and that he would not return his copy to DOE. All known recipients were promptly notified of the AEA requirements against dissemination of RD.

* H-bomb fan Hansen had corresponded with DOE for some time, including a letter April 23, 1979 announcing an H-bomb design contest he set up to defy DOE. Also on April 23 he himself had written to DOE, his Congressman Paul (Pete) McCloskey, and others, accusing DOE of discriminating against Morland and tending to classify works by E. Teller, T. Taylor, and George Rathjens. This was also the theme of an article, "Has the U.S. Government Disclosed the Secret of the H-Bomb?" by Hugh Dewitt in the April 1979 issue of the Bulletin of the Atomic Scientists.

The Daily Californian, an off-campus student-run paper in Berkeley, revealed in a phone call to DOE Public Affairs on June 10, and then in a descriptive story on June 11, that they also had a copy of the letter. They were officially notified by DOE of their responsibilities under the AEA not to disseminate it. However, they defied the AEA by publishing the letter in full on June 13.

3.7 HEARING ON DEFENSE MOTION TO VACATE PI

Meanwhile, in the Progressive case itself, a hearing was held in District Court on June 12 on the defense motion to vacate the PI. The defense (now joined by Paul Friedman as the new lead attorney for Morland) contended, based on numerous affidavits from their expert witnesses, that the availability of UCRL-4725, the Milwaukee Sentinel story, and other open publications since the PI hearing had conclusively put the RD in the Morland article into the public domain. The PI could not be effective and must be vacated.

The Government argued that UCRL-4725 was not in the public domain, no dissemination was known except for the limited distribution by Rotow. Affidavits from Government experts stated that defense contentions were incorrect. The Milwaukee Sentinel and other open publications fell far short of the damage that still would be done by publication of Morland's article. The Government attorneys argued that the Court's findings remained valid and there was no basis for vacating the PI.

On June 15, Judge Warren denied defendants' motion. He found that the Government's error in inadvertently declassifying UCRL-4725 and other documents did not put them in the public domain. The Milwaukee Sentinel article and other publications cited by the defense were clearly dissimilar from the Morland article. Only that article contained a

comprehensive, accurate and detailed analysis of all three concepts utilized in the construction of a thermonuclear weapon. There was no showing that the injunction had become ineffectual. Therefore, the Court found that publication of the Morland article would likely violate the AEA and would likely cause a direct, immediate, and irreparable injury to this nation.

Defendants immediately filed a second appeal.

4. APPEALS, JUNE 16 TO OCTOBER 1, 1979

4.1 SEVENTH CIRCUIT

Court action in the case now largely shifted to the U.S. Court of Appeals for the Seventh Circuit in Chicago. The two pending appeals were consolidated on June 21. Defendants' motions for expedition were denied, and a hearing was set for September 10. The next day, the defense filed in the Supreme Court a petition to force a more expedited hearing for the Appeals. This was denied by the Court in a per curiam decision on July 2.

A defense motion to take judicial notice of the Milwaukee Sentinel article, UCRL-4725, and other newly discovered material was denied on June 28, and preparation of briefs for the September 10 hearing continued.

4.2 HANSEN-PERCY LETTER

However, once again a major distraction occurred. On September 7, DOE received from Chuck Hansen a draft article "for classification review" which contained, mixed in with a lot of innocuous or erroneous material, reasonably clear statements of the principles of operation of H-bombs, in terms very similar to those used in the in camera documents in the Progressive case.

The "article" was clearly classified and clearly intended by Hansen to provoke legal action by DOE. On September 12, DOE notified Hansen by phone that his article contained RD and must be protected. Hansen refused to state his publication plans or to whom the article had already been disseminated without written confirmation that DOE had determined it was RD.

Later that day, while a letter confirming DOE's determination was being prepared, a copy of a letter dated August 27 from Hansen to Senator Charles Percy* was received from the LLNL Classification Office. Hugh Dewitt had just turned it in, although he said he had received it from Hansen in late August. This letter contained all of the material in Hansen's so-called "article."

DOE's letter to Hansen was revised to notify him that both his article and his letter contained RD and that the AEA forbade dissemination. Hansen was offered assistance in proper protection of the RD material and was asked to supply the names of everyone to whom he had already communicated it.

4.3 HEARING ON APPEALS

Oral arguments on the consolidated appeals were heard in Chicago by Judges William Bauer, Walter Cummings, and Wilbur Peil on Thursday, September 13.

The defense appealed both the March 26 PI and the June 15 decision denying the defense motion to dismiss. They contended that both decisions violated their First Amendment rights in that prior restraint on national security grounds, if ever justified, required a showing of grave, certain, imminent, and irreparable damage to the nation or its people, while in this case the Government had failed to prove any of these. In particular, there was no possibility of an injunction being effective and no possibility of damage.

* Hansen had also earlier sent several increasingly explicit letters concerning the case to Congressman McCloskey and to Senators George McGovern and Alan Cranston.

The Government argued that the appeals should be denied. The material was not in the public domain, publication would violate the AEA and lead to the gravest damage to national security.

The Court took the appeals under advisement.

4.4 HANSEN DEVELOPMENTS

DOE's letter to Hansen confirming that his "article" and letter to Percy were RD was delivered to him by a DOE official on September 14. He told the official that he had sent his only copy of the article to DOE. However, he said that he had sent copies of the letter to a number of individuals and newspapers, including the Daily Californian. The DOE notified all known recipients that the letter contained RD and attempted to retrieve all copies of the letter.

The Daily Californian editors, who had previously defied the Government by publishing the Postol letter, refused to even acknowledge that they had a copy of the Hansen letter. On Saturday September 15, the Government filed in U.S. District Court for the Northern District of California for an injunction against publication or dissemination of the letter by the Daily Californian. Judge Robert H. Schnacke issued a TRO and set a hearing for the next Friday, September 21.

4.5 GOVERNMENT DROPS THE CASE

Before the TRO hearing could be held, on Sunday, September 16, the Hansen-Percy letter was published in full in a special edition of the Madison Press Connection, not one of the known recipients.

On Monday September 17, after consultation with DOE and the other affected Government departments, the DOJ announced that it was dropping the Progressive case and would ask for dismissal of the PI against the Progressive and the TRO against the Daily Californian. The DOJ also announced a preliminary criminal inquiry to determine if there had been violations of the AEA or Court orders.

The Seventh Circuit Court vacated the PI on September 28, 1979. On October 1 it dismissed the consolidated appeals and remanded the case to the District Court for further proceedings on the disposition of the in camera material.

The Progressive called a victory press conference and handed out advance copies of the November issue containing the Morland article (Ref. 4). At the conference Morland pointed out supposed errors in the article using his H-bomb design T-shirt for illustration.

5. END GAME, OCTOBER 2, 1979 TO SEPTEMBER 4, 1980

5.1 IN CAMERA MATERIAL

Nominally the remaining issue to be resolved in District Court was the status of the in camera materials. However, there was also the underlying question whether DOJ's ongoing "preliminary criminal inquiry" would lead to criminal prosecutions for violations of the AEA or Court orders.

The defense contended that all of the in camera materials should immediately be filed publicly. The Government admitted that publication of the article would require some declassification, but stated that development of new classification guides and their application to the in camera material would take until about mid-November.

5.2 GLENN HEARING II

Meanwhile, on October 2 Senator Glenn held a second hearing (Ref. 8) on the DOE's erroneous declassification of nuclear weapons information. This hearing was based primarily on a General Accounting Office (GAO) report on the LANL library incident that he had requested.

Duane Sewell testified that declassification mistakes, such as the TX-7 report Rotow found in 1978 and UCRL-4725, arose from shortcuts in usual declassification procedures during the Comprehensive Classification Review Program (CCRP), a large-scale program from 1971 to 1976 to review the classification of all AEC files.

After Dimitri Rotow found the improperly declassified TX-7 document on the public shelves of the LANL library in May 1978, the DOE ordered a systematic review of all weapons-

related reports declassified in the CCRP. Some 2000 reports were identified for review by their corporate authors and removed from public access.

Sewell said that before this review was completed, Rotow returned to LANL and found UCRL-4725, a very sensitive SRD report that had been mismarked as "declassified" and filed on the open shelves through a series of clerical errors.* DOE immediately closed the report section of the LANL library. All weapons-related reports declassified under the CCRP would be treated as classified until positively identified as unclassified under rigid new procedures.

At the Glenn hearing, Sewell also gave an interim summary of the re-review process. Of 2.8 million documents reviewed by the CCRP, 1.5 million had been declassified, including 36,000 formal reports. After Rotow's first discovery in May 1978, 2000 reports with weapons-related titles were re-viewed. This review had only recently been completed. 104 reports were upgraded. Seven of these were "sensitive" in that they gave substantial information on thermonuclear or modern fission weapons.

In the second review, ordered after Rotow found UCRL-4725 in May 1979, about 34,000 additional reports were being re-viewed. At the time of the hearing some 9100 had been reviewed and 23 had been formally upgraded.

In the two reviews, eight documents were found to be "highly sensitive," including UCRL-4725, UCRL-5280, and UCRL-5315. Twelve were sensitive. 53 had relatively low sensitivity

* For example, UCRL-4725 escaped the earlier review because it was mistitled on the Declassification Notice.

and 51 had very low or borderline sensitivity. Three of those upgraded contained classified non-weapons information of low sensitivity.

Sewell said that apparently none of the incorrectly declassified reports was distributed. However, in principle, most of them were available to the public at LANL's library from its opening in April 1974 until they were removed in May 1978. UCRL-4725 and a few others were not removed until May 1979.

Sewell stated that the precise degree of damage to U.S. nonproliferation policy from the availability of the mislabelled RD documents at the LANL library could not be determined. It is not known whether any of these documents were actually compromised, other than the TX-7 document and UCRL-4725 found by Rotow. Rotow had stated that he had given DOE all the copies he had made of the TX-7 document.*

5.3 MORLAND ARTICLE PUBLISHED

On October 4, the Morland article "The H-Bomb Secret: How We Got It, Why We're Telling It" was finally published in the November Progressive (Ref. 4) after a six month delay.

5.4 RE-MARKING OF IN CAMERA DOCUMENTS

The lengthy process of DOE revision of classification of the in camera documents to account for the revelations by Hansen and Morland was completed and newly re-marked copies were filed on December 28, 1979.

* Later, in a letter to Glenn dated October 9, 1979, Rotow also said that all copies he had made of UCRL-4725 were retrieved by DOE or destroyed, except for the copy he had sent to the ACLU.

5.5 PREYER HEARING II

On March 20, 1980, Congressman Richardson Preyer held the second of three hearings on "The Government Classification of Private Ideas" by his subcommittee on Government Information and Individual Rights of the House Committee on Government Operations (Ref 9, 10). The first hearing, February 28, had dealt primarily with the Invention Secrecy Act. This second hearing dealt primarily with the National Security Agency (NSA) and the current concern over public cryptography. However, the AEA and the Progressive case were included at the urging of former subcommittee member Congressman McCloskey.

McCloskey stated that this committee should explore options other than the present AEA. He said that the Progressive case showed the AEA no longer worked. Rotow, Morland and Hansen were able to use publicly available sources to write and publish material that DOE had classified RD. Six Government scientists (four at ANL, two at LLNL) wrote material in good faith that the Government later classified. They accuse the Government of misusing classification for political purposes. McCloskey noted that while (supposedly) RD had been published, nobody had been prosecuted.

McCloskey filed a proposed amendment to the AEA to make private citizens subject to the same provision as DOE employees against dissemination of RD, regardless of motive. Private citizens would be obligated to check with DOE before publication. This amendment would at least provide a basis for Congressional examination.

At the hearing, Duane Sewell gave a short description of DOE's classification scheme. He also gave a short description of the Progressive case and stated that the AEA had

proved an effective tool in spite of unfortunate developments which led to publication of the Morland article. He believed a major overhaul of the enforcement provisions was unnecessary and could be counterproductive. He said DOE could not comment on possible violations of the AEA or Court orders pending imminent completion of DOJ's preliminary criminal inquiry.

5.6 IN CAMERA DOCUMENTS (CONTINUED)

Negotiations continued between DOJ and defense counsel on the disposition of the in camera documents. By the time of a July 16, 1980 status report to the Court, most issues had been settled. The defense had agreed to DOE's current identification of RD in the documents. They had even agreed, for the time being at least, not to quote directly certain statements from Government-originated documents. Attribution of these "sensitive" statements to official Government sources was considered by the Government to be harmful to U.S. nonproliferation objectives and to foreign relations.

Accordingly, the in camera documents were to be filed in three forms: (1) a public set with both classified and "sensitive" information removed, (2) an in camera set with classified material removed and sensitive material marked (which would remain accessible to cleared defense counsel and defense experts), and (3) an in camera set with both classified and sensitive material marked.

However, the defense refused to formally accept final disposition before some definite decision was announced by DOJ on its "preliminary criminal inquiry" and possible criminal prosecutions. Judge Warren reluctantly agreed to

postpone further action for about six weeks until the DOJ reached a decision.

5.7 PREYER HEARING III

On August 21, 1980, the third and final hearing on the Government's classification of private ideas was held by Congressman R. Preyer (Refs. 9, 10).

Assistant Secretary Duane Sewell elaborated on the classification and declassification procedures of the DOE. He stated that the current status of the Progressive case was that the preliminary criminal inquiry was continuing and that a status report on the civil suit was scheduled for September 4, 1980.

In response to a question from Preyer, Sewell agreed that DOE should document the Progressive case as fully as possible since it was the first major test of the AEA.

5.8 THE END

In late August, the criminal division of DOJ recommended dropping the preliminary criminal inquiry into possible violations of the AEA and Court orders. This recommendation was adopted by the Attorney General, Benjamin Civiletti, and DOE, State, ACDA, and DOD were notified.

The Progressive case finally came to an end in Milwaukee on September 4, 1980. After the DOJ stated that they had no intention of criminal prosecutions in the Daily Californian and Progressive cases, the defense agreed to the previously negotiated disposition of the in camera materials.

Judge Warren denied defense motions to vacate his memorandum opinions and to assess all costs to the United States. He then dismissed the case.

6. EPILOGUE

6.1 SEQUEL

Since the Progressive case was dismissed on September 4, 1980, there have been several requests under the Freedom of Information Act for the withheld portions of the in camera documents and for DOE/DOJ files on the case. None of that material has been released as of December 1987.

In May 1981, Morland's book about the case, The Secret That Exploded, (Ref. 5) was published. In that book he gave a detailed description of uncovering the secret and writing the article, then of the case itself. His account essentially confirmed the Government's contentions that the RD material in Morland's article was derived from inside sources, rather than from the public domain as Morland had stated in his Affidavits. Morland's book presented a picture of DOE's protection of RD as vulnerable to penetration by a plausible, determined "amateur spy."

In addition to Morland's book, several subsequent publications have referred to Morland's article and purported to critique it or to add information. References 11 and 12 give two such publications by Morland himself.

A discussion of the Progressive case also appears in Born Secret (Ref. 13), by defense affiants De Volpi, Marsh, Postol, and Stanford. References 14-20 provide additional commentary, largely on legal aspects of the case.

6.2 EVALUATION

The likely ultimate effects of the Progressive case are still not clear. The Government said disclosure of the

information in Morland's article on the principles of operation of nuclear weapons would cause grave, immediate, and irreparable harm to this nation and its people by reducing the time and increasing the certainty of other nations developing thermonuclear weapons. The defense said that this information was already public, so no injunction could be effective, and there could be no harm.

Both sides produced affidavits by experts to support their arguments. The District Court that had to weigh the arguments found completely for the Government, under both the AEA and the inherent powers of the Executive under the Constitution. The Court of Appeals did not have an opportunity to rule because the case was mooted.

The value of this case as a precedent can only be determined by the courts in later cases. As the only direct test of the enforcement of the control of information provisions of the AEA it will undoubtedly have some effect.

What will be the effect of the Progressive case on possible future publications relating to design of nuclear weapons? It would seem, on balance, that such publications are encouraged by the highly public success of Morland and the Progressive (as well as Hansen, the Press Connection, the Daily Californian, and others) in defying the Government. However, the actual Court rulings were all in favor of the Government and they may have some mild deterrent effect.

With the publication of Morland's article, its contents are certainly now in the public domain. Has thermonuclear weapon proliferation been speeded? So far, there has been no public evidence, but such evidence is likely to be obscure until there is an actual test explosion. In any

case, proliferation of nuclear weapons also depends on political considerations. Only time will tell.

APPENDIX 1. CONTROL OF NUCLEAR WEAPON DESIGN INFORMATION

The Atomic Energy Act of 1946 and the present law, the Atomic Energy Act of 1954, as amended (AEA), set up a system to protect certain sensitive information, separate and distinct from other types of national security information. Called "Restricted Data" (RD), this sensitive information deals with the use of nuclear energy for military purposes. Section 11 of the AEA states, "The term 'Restricted Data' means all data concerning (1) the design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142." The intent of Congress was to prevent dissemination outside the U.S. Government of information which would facilitate the military use of nuclear energy. This objective has been repeatedly reaffirmed by Congress, most recently in The Nuclear Non-proliferation Act of 1978.

In Section 12 of the AEA, Congress also dealt with the counterbalancing objective of promoting the dissemination of scientific and technical information relating to atomic energy for "that free interchange of ideas and criticism which is essential to scientific and industrial progress and public understanding."

Section 142 establishes a procedure for a continuous review of Restricted Data for the purpose of declassifying and removing from Restricted Data such information as the Atomic Energy Commission (now the Assistant Secretary of Energy for Defense Programs, ASDP/DOE) finds can be published without undue risk to the common defense and security.

At present, all basic science and most of the non-weapon technology of nuclear energy has been declassified. Restricted Data today primarily involves a very limited set of information on actual design and manufacture of nuclear weapons, on practical methods of producing fissile material useful for nuclear weapons, and on military reactors.

The Department of Energy has set up, by regulations, offices under the Assistant Secretary for Defense Programs (ASDP) for controlling Restricted Data: the Office of Classification defines RD, and the Office of Safeguards and Security protects it.

The Office of Classification (OC) implements policy decisions of ASDP regarding Restricted Data. It develops detailed classification guides as to which information is classified and at what level of sensitivity (Top Secret, Secret, or Confidential). These guides are for use by individuals specifically authorized to make classification decisions in DOE or in its contractor organizations. At every step in the decision process, ASDP, OC, and authorized classifiers make extensive use of the advice of experts in the appropriate fields of science and engineering. Usually detailed classification guides themselves need to be classified.

The Office of Safeguards and Security (OSS) develops and administers procedures for protecting information identified as RD. These include a system of clearances for Government or contractor employees who have a "need-to-know" RD in their work. Procedures have also been established for transmitting and storing such information. DOE regulations concerning "outside" publication of RD generally require "no comment" by cleared individuals who could confirm or deny

their accuracy. However, in exceptional cases, comment by appropriate authorities may be necessary.

OSS has very limited authority in cases of suspected violation of the AEA. It may conduct preliminary inquiries to ascertain the likelihood of violations, but investigation of such violations is, under the AEA, exclusively the responsibility of the FBI.

REFERENCES

1. Grayson, W.C., Jr., "List of Court Documents in the Progressive Case," RDA-TR-122136-001 (February 1985).
2. Grayson, W.C., Jr., "Summary of the Affidavits Filed in the Progressive Case," RDA-TR-122136-002 (May 1985).
3. Grayson, W.C., Jr., "Summary of Legal Proceedings in the Progressive Case," RDA-TR-122136-007 (December 1984).
4. Morland, H., "The H-Bomb Secret: How We Got It--Why We're Telling It," The Progressive (November 1979).
5. Morland, H., The Secret That Exploded, Random House, NY, NY (1981).
6. Teller, E., "Hydrogen Bomb," Encyclopedia Americana (14), NY, NY (1977).
7. U.S. Congress. Senate. Committee on Governmental Affairs. An Act to Combat International Terrorism, Hearings, 95th Congress, 2nd Session, January 23, 25, 27, 30; February 22; March 22, and 23, 1978, Washington, U.S. Govt. Printing Office, 1978.
8. U.S. Congress. Senate. Committee on Governmental Affairs. Subcommittee on Energy, Nuclear Proliferation, and Federal Services, Erroneous Declassification of Nuclear Weapons Information. Hearings, 96th Congress, 1st Session, May 23 and October 2, 1979, Washington, U.S. Govt. Printing Office, 1980, 2 pts.
9. U.S. Congress. House. Committee on Government Operations. Subcommittee on Government Information and Individual Rights, The Government's Classification of Private Ideas, Hearings, 96th Congress, 2nd Session, February 18; March 20; and August 21, 1980. Washington, U.S. Govt. Printing Office, 1981.
10. U.S. Congress. House. Committee on Government Operations. Subcommittee on Government Information and Individual Rights, Thirty-Fourth Report, The Government's Classification of Private Ideas, Washington, U.S. Govt. Printing Office, 1980, 244p. (96th Congress, 2nd Session, House Report no. 96-1540.
11. Morland, H., "Errata," The Progressive, December 1979.
12. Morland, H., "Tritium: Secret Ingredient of the H-Bomb," The Nation, July 12, 1980.

13. De Volpi, A., et al, Born Secret, Pergamon Press, NY, NY (1981).
14. Cheh, M.M., "The Progressive Case and the Atomic Energy Act: Waking to the Dangers of Government Information Controls," The George Washington Law Review 48(2), 163-210 (January 1980).
15. Ronhovde, K.N., "The Progressive Case: Legal Issues," Congressional Research Service, Library of Congress (February 14, 1980).
16. Tribe, L.H., Remes, D.H., "Some Reflections on the Progressive Case: Publish and Perish?," Bulletin of the Atomic Scientists (March 1980).
17. Hewlett, R.G., "'Born Classified' in the AEC: A Historian's View," Bulletin of the Atomic Scientists (December 1981).
18. Green, H.P., "Born Classified in the AEC: A Legal Perspective," Bulletin of the Atomic Scientists (May 1982).
19. Martin, T.S., "National Security and the First Amendment: A Change in Perspective," ABA Journal, 680-685 (June 1982).
20. Relyea, H.C. (ed.), "Striking a Balance: National Security and Scientific Freedom - First Discussions," American Association for the Advancement of Science Committee on Scientific Freedom and Responsibility, Washington (May 1985).

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A BRIEF HISTORY OF THE PROGRESSIVE CASE

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APRIL 1987

Prepared for:

**Office of Classification
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Washington, D.C. 20545**

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1. INTRODUCTION

1.1 SYNOPSIS

On February 16, 1979, the Department of Energy (DoE) received from George Rathjens a draft article by Howard Morland for The Progressive magazine which contained classified information on the design and operation of nuclear weapons. On February 27, the DoE received another draft, this time from the Progressive, for comment. When publication in the Progressive seemed imminent, despite warnings that the information would damage U.S. national security, the Government sought an injunction.

A U.S. district court issued a temporary restraining order on March 9 and then a preliminary injunction on March 26. The defendants appealed.

On September 16, while the appeal was still pending, the case was mooted by publication in a newspaper of information similar to that in Morland's article. The preliminary injunction was vacated on September 28 and the Progressive published the article on October 4, 1979 after a six month delay.

1.2 EVALUATION

In many ways, the Government suffered a grievous defeat in the Progressive case. It failed to prevent eventual publication of the article. The Court case only ensured the widest possible dissemination of the sensitive Restricted Data material, now clearly identified, somewhat amplified, and authenticated by the Government.

In other respects, the Government clearly "won" the Progressive case. A Federal Court ruled that the Government was entitled to a preliminary injunction to prevent publication of such material on national security grounds under both the Atomic Energy Act and inherent constitutional powers.

The actual long-term effects of the case are yet to be seen.

1.3 DESCRIPTION OF THIS REPORT

This report is intended to present a brief account of the Progressive case; it is not intended to be a complete history. Additional information is available in the references. In particular, Reference 1 gives a list of 408 documents filed in five federal courts in connection with the Progressive case. Reference 2 gives summaries of the 120 affidavits. The approximately 300 other filings are summarized in Reference 3.

The next section of this report describes events from the first hints to DoE about the article on February 13, 1979, through issuance of a Preliminary Injunction (PI) on March 26.

Section 3 covers later events through June 15, when a defense motion to vacate the PI in view of recently discovered open publications was denied. Section 4 describes events through mooting of the case, vacation of the preliminary injunction, and dismissal of the appeals on October 1, 1979. Section 5 describes events through final dismissal of the case on September 4, 1980.

Section 6 is an epilogue with a description of relevant events since the case was dismissed, and some discussion of the overall effects of the case.

A description of DoE's system for control of nuclear weapon design information is given in the Appendix.

2. TEMPORARY RESTRAINING ORDER AND PRELIMINARY INJUNCTION,
FEBRUARY 13 to March 26, 1979

2.1 BEGINNING

On February 13, 1979, George Rathjens, an MIT professor then serving as Deputy U.S. Special Representative for Non-Proliferation in the State Department (DOS), called Jack Griffin, head of DoE's Office of Classification. He asked what could be done about a draft article he had heard of on the design of H-bombs; an article that might present serious problems. The article was for either Rolling Stone or The Progressive, he could not recall the author. Griffin said that it would depend on the contents and circumstances. Persuasion could be tried first, but if that failed the government could proceed under the Atomic Energy Act (AEA), which required special protection of nuclear weapon design information*, backed by injunctive powers and criminal penalties against unlawful dissemination.

On Friday, February 16, Rathjens called again and said he now had a copy of the article, which was written by a Howard Morland for The Progressive, a monthly magazine in Madison, Wisconsin. Griffin had the article picked up from Rathjens' office at DOS.**

DoE's Office of Classification (OC) immediately found it to contain, as it claimed, the "secret of the H-bomb." The article contained text and diagrams which in spite of

* A brief description of the scheme set up under the AEA to protect nuclear weapon information and other "Restricted Data" (RD) is given in the Appendix.

** This was a slightly earlier draft of the article than the "final" version eventually published (Ref. 4). It was filed in the case as document 8A2, see Ref. 1.

inaccuracies described the classified, Restricted Data, main principles of operation of thermonuclear weapons. No previous open publication on nuclear weapons had been even remotely so revealing. Previous open publications had contained many bits and pieces purporting to describe how H-bombs worked--most wrong and all far from complete. In particular, before Morland's article there had been no credible hint that X rays were used to transfer energy from a fission explosion to implode and ignite a physically separate fusion stage.

DoE promptly notified the FBI, and Bureau agents interviewed Rathjens the next day, Saturday February 17. They learned that Rathjens had gotten the article from one of his former students at MIT, Ron Siegel. Siegel had received it on February 9 from Sam Day, an editor of the Progressive magazine, for comment.

2.2 DECISION

That same Saturday, February 17, Duane Sewell, Assistant Secretary for Defense Programs of the Department of Energy (ASDP/DoE), discussed the article with James Schlesinger, Secretary of Energy. The following week the DoE's Senior Reviewers, then DoE's principal technical and policy advisors on classification, advised DoE that the article indeed contained RD. The Office of Classification made a formal determination that the article contained RD, and the DoE formally requested the FBI to investigate. On Saturday, February 24, Sewell and Lynn Coleman, DoE's General Counsel, discussed the situation with Schlesinger. He decided to request Attorney General Griffin Bell to attempt to stop publication.

The next Monday, February 26, Sam Day called Jim Cannon of DoE's Office of Public Affairs and asked if he had received the diagrams of how H-bombs work that Day had sent for technical comment on February 21. When Cannon told him they had not been received (they finally arrived March 1), Day said he would send new copies immediately by express mail. They arrived the next day, along with the "final" version of Morland's article they were intended to illustrate.*

Two days later, on the morning of March 1, Day again called Cannon. He said his publication deadline was noon the next day. Since DoE had not called, he assumed there was no problem? Cannon said DoE's legal and technical people now had the article, and they would contact him soon.

2.3 CONFRONTATION

Shortly after 1:00 pm on March 1, Coleman called the Progressive and notified them that the Department of Energy, the Department of State, and the Arms Control and Disarmament Agency (ACDA) had determined that the article contained RD whose publication or other dissemination would aid the proliferation of thermonuclear weapons, which would damage national security. Coleman offered DoE's assistance in removing the sensitive material.

The next day Duane Sewell and four technical and legal people from DoE and the Department of Justice (DOJ) met the editors and lawyers of the Progressive in Madison. Sewell restated that the article had been determined to contain Restricted Data as defined in the Atomic Energy Act and that dissemination would damage the U.S. When asked to identify

* This is the version finally published in the November 1979 Progressive (Ref. 4).

specifically what was RD, Sewell said he could not do that without compromising the information. However, the diagrams and about 10% of the text were included. He offered to assist the Progressive in recasting the article to remove the RD.

Editor Erwin Knoll said that if the information were in fact secret it could not have been obtained by a freelance reporter with such limited resources in such a short time. Sewell said he was surprised and concerned. The Progressive asked for a few days to consider the government position.

On March 7, counsel for the Progressive called Coleman to notify him that the magazine intended to publish the article without alterations. The next day the Government filed a civil suit in U.S. District Court for the Western District of Wisconsin in Madison for an injunction to stop publication.

DOJ attorneys (led by Thomas Martin, Deputy Associate Attorney General, Civil Division) filed requests for a Temporary Restraining Order (TRO) and a Preliminary Injunction (PI) to prevent imminent publication of Restricted Data. They filed a statement of Government arguments in support of the TRO and PI, with supporting affidavits. The Government argued that the Morland article contained Restricted Data whose publication the defendants had reason to believe would harm the United States and give advantage to foreign powers by allowing them to develop thermonuclear weapons 3-5 years faster, and with more certainty. This would violate the provisions of the AEA, and under such circumstances an injunction was specifically authorized by the AEA. At the same time, the inherent constitutional powers of the Executive to provide for the common defense

and security also justified an injunction to prevent damage of such magnitude.

The Government felt required to make an extensive showing of the degree of harm in order to overcome the "heavy burden" of prior restraint, presumptively unconstitutional under the First Amendment. The DOJ cited the AEA and the Nuclear Non-Proliferation Act of 1978 as Congressional determinations of the degree of harm. Officials of the Departments of Energy and State and of the Arms Control and Disarmament Agency filed affidavits concerning the impact of publication on proliferation. DoE's Director of Classification detailed (in camera) specific items of RD in the article.* The government proposed to voluntarily allow access by the defense to the in camera material under a Protective Order (PO) in order to provide the fullest possible opportunity for defense. The PO also would provide that the government would review defendants' submissions before public filing to identify any classified material which must remain in camera.

After Judge Doyle of the Western District disqualified himself, citing past personal associations with the Progressive, the case was assigned to be heard at 2:00 pm on Friday, March 9, in Milwaukee by Judge Robert W. Warren of the Eastern District of Wisconsin.**

* The RD parts of the article "censored" by the Government are indicated in U.S. District Court documents 8A1 and 8A2 (see Ref. 1) and in a reproduction of the final draft in the Appendix of Morland's book, Ref. 5.

** The first press accounts of the Progressive case on March 9 were based on a DOJ press release that morning. Media coverage thereafter was, with a few exceptions, generally favorable to the defendants, with emphasis on First Amendment protections.

2.4 TEMPORARY RESTRAINING ORDER

At the hearing on March 9, the Government argued that an injunction to prevent dissemination of information in the article was authorized under both the Atomic Energy Act and the inherent constitutional powers of the Executive.

The defense (led by Earl Munson for Knoll, Day, and The Progressive; and by Thomas Fox for Morland) argued that the information in the article was in the public domain and so could not harm the national security of the U.S. Furthermore, if the AEA authorized an injunction in this case, it was unconstitutionally overly broad and vague.

Judge Warren ruled that the Government had shown the required elements for a Temporary Restraining Order: (1) likely success on the merits, (2) irreparable harm in the absence of restraint, (3) lesser harm to defendants, and (4) on balance, in the public interest. Judge Warren granted a TRO until March 16, when a hearing would be held on the issuance of a Preliminary Injunction.

2.5 PRELIMINARY INJUNCTION

On March 13, the government filed a supplemental legal memorandum. Affidavits were filed from nuclear weapon design experts, including the directors of DoE's nuclear weapon design laboratories, Los Alamos National Laboratory (LANL), and Lawrence Livermore National Laboratory (LLNL). These affidavits affirmed that the Morland article contained crucial RD concepts for design of thermonuclear weapons, which were not publicly available. Affidavits were also filed from the Secretary of Energy and the Director of the Arms Control and Disarmament Agency affirming that publication of the concepts in the Morland article would

irreparably damage the national security of the United States by aiding foreign nations in developing thermonuclear weapons and so increasing the risk of thermonuclear war. Similar affidavits were filed three days later by the Secretaries of State and Defense.

On March 15, the defense obtained a delay of the preliminary injunction hearing until March 26 in order to prepare their case. DoE cleared three defense counsel for access to the government's in camera filings. Three scientists were cleared for access to the Morland article as defense expert witnesses.

The next day, the defense filed affidavits from Knoll and from Day describing how the Progressive had sponsored Morland's efforts to write an article on the illusion of secrecy surrounding nuclear weapons. They had arranged for him to visit DoE facilities. When Morland produced a rough draft in January, Day edited it and sent it to several scientists for comment on its accuracy.

On February 15, Day said, George Rathjens called him to discuss the article, which he had received from one of his students. The next day Rathjens called to say he had sent a copy of the article to DoE. Day sent a copy of the diagrams to DoE on February 21. When they had apparently had not been received by February 26, Day sent another copy, along with the article itself, by express mail.

Both Day and Knoll stated that the Morland article was not a blueprint for an H-bomb. It only contained design principles deducible from public sources by investigative journalism. There was no reason to believe it would be utilized to injure the United States, or to secure an advantage to foreign nations. Rather, it would benefit the

U.S. by demonstrating that security lies in informed debate, not oppressive and ineffective "secrecy."

The defense also filed affidavits from five scientists who, although they supposedly had not seen the article, affirmed that the relevant basic physical concepts and the general manner of their application to thermonuclear weapons were widely known.

The defense filed in camera two affidavits from Theodore A. Postol, a scientist from DoE's Argonne National Laboratory (ANL). He said he received a copy of the article for review in mid-February and concluded that it contained no information not already common knowledge to scientists. Furthermore, Postol said, any competent physicist could derive such information in a matter of hours from a diagram in E. Teller's article on hydrogen bombs in the Encyclopedia Americana. [Ref 6]

After considerable argument between counsel over the general question of classifying references to published material, Postol's first more general affidavit was filed publicly. This openly made a close connection between Morland's design and the "Teller diagram."

Over the next week or so, DoE cleared for access to Morland's article as defense expert witnesses 12 of the 17 scientists requested by the defense. The defense filed affidavits from four of these, Hugh Dewitt,* Ralph Hager,

* As apparent "insiders," Dewitt and Ray Kidder of LLNL (and to a lesser degree the ANL affiants) turned out to play major roles for the defense.

and Calvin Andre of LLNL and Kosta Tsipis of MIT. As an amicus curiae, the American Civil Liberties Union (ACLU) filed supporting affidavits from Alexander De Volpi, Gerald Marsh, and George Stanford of Argonne National Laboratory, who had assisted Postol earlier in reviewing Morland's article. In essence, these affidavits all stated that the information in the Morland article was either already publicly available or deducible from previous publications.

The defense also filed two affidavits in which Morland purported to describe how he obtained specific items in his article from public sources, including the Encyclopedia Americana article by Teller, visits to DOE facilities, and interviews with knowledgeable people.

Defense briefs amplified their earlier arguments to the effect that the First Amendment prohibited prior restraint of publication, certainly in the absence of meeting the "New York Times test" established by the Supreme Court in the Pentagon Papers case. This test required the Government to prove clear, certain, imminent, and grave damage. The defense argued that the present situation, where all the article's contents were already in the public domain, failed to meet any aspect of that test. Certainly, defendants could have no reason to believe publication of this information would harm national security or violate the Atomic Energy Act. If it did, the AEA was unconstitutional.

A closed hearing was held on March 23 to address a defense motion to relax the procedures established under the Court's Protective Order for handling classified in camera material. After argument, the Court ruled that existing procedures were reasonable and denied the motion.

Also on March 23, the Government filed an affidavit from Hans Bethe (Professor at Cornell, Nobel Laureate, head of LASL's Theoretical Division during WW II, and head of the Government's "Bethe Panel" to evaluate foreign nuclear capabilities). Bethe concluded, based on his detailed knowledge of both classified and open publications, that the Morland article contained classified thermonuclear weapon concepts that were fundamental and not publicly available. According to Bethe, to develop the design information in the article required extensive analysis and creativity, not just assembly of public information.

Similar conclusions were expressed in an affidavit by Harold Lewis (Professor at the University of California at Santa Barbara) and in the first of four joint affidavits by Jack Rosengren and William Grayson (both for many years in the nuclear weapon program at LLNL).

Rosengren and Grayson analyzed in some detail both the Morland article and Morland's affidavits and other defense affidavits. They found that the article's detailed diagrams and descriptions would be of tremendous assistance in developing an efficient thermonuclear weapon. They stated that Morland's lack of understanding and the fragmentary nature of his design story strongly suggested a great deal of guidance from persons with access to secret, classified design information.

Rosengren and Grayson also stated that Postol's affidavits failed to prove his contention that Morland's design could be derived by any competent physicist within hours. Given Postol's prior access while helping review the article and the incorrect statements he presented, his affidavits actually showed even the difficulty of providing the correct rationale for a known design.

On March 26, the day of the PI hearing, the defense filed another affidavit from Morland and two affidavits from Ray Kidder, a LLNL physicist familiar with thermonuclear weapon design. Morland's affidavit was intended to rebut what he understood to be the theme of the Rosengren and Grayson affidavit. It essentially repeated his statements that he derived his information from open sources (not all named), and that he had no access to classified documents. Kidder's affidavits stated that Postol had indeed demonstrated that the principle of radiation implosion in Morland's article was readily deducible from public information. Kidder stated that, in fact, attached reports* showed that the principle was appearing increasingly in the public literature. Kidder said that Morland's design did not describe modern U.S. stockpile devices. It was largely schematic and would be of little assistance to a would-be bomb designer.

Later that day, the government filed the second Rosengren and Grayson affidavit, in rebuttal to Kidder's affidavit. It said that Kidder's assertion that Postol had demonstrated the derivability of radiation implosion had in fact overlooked Postol's prior access to the Morland article and had ignored his mistakes. It stated that Kidder's attachments, which supposedly demonstrated the public availability of the concept, were actually only loosely related publications on fusion energy. In addition, it noted that Morland's design definitely did resemble weapons in the stockpile.

At the hearing on the PI on March 26 both sides presented in their oral arguments shorter versions of their filings. After those presentations Judge Warren stated that the

* These attachments introduced into the case for the first time the topic of inertial confinement fusion (ICF), whose connection with nuclear weapons remains somewhat sensitive.

Government had shown enough to warrant a preliminary injunction. However, he asked both sides to consider consultation by a panel of lawyers and experts from both sides to attempt to reconcile opposing judgmental and factual views.

After a recess, the Government accepted the proposal, but the defense rejected it. Judge Warren then issued a Preliminary Injunction, which bound the defendants and all acting in concert with them not to disseminate the RD information identified by the Government. He also ordered the defendants to report to the Court all prior dissemination of the article and to use their best efforts to retrieve all RD.

3. DEFENSE MOTION TO VACATE THE PRELIMINARY INJUNCTION,
MARCH 27 TO JUNE 15, 1979

After Judge Warren issued the Preliminary Injunction the Government began to prepare for the expected defense appeals and for eventual trial on the merits for a permanent injunction. At this time, though, there occurred the first of several incidents that threatened to moot the case.

3.1 AUSTRALIA

On March 30, the Australian Government notified the U.S. that it had received a copy of what appeared to be the Morland article from a small weekly paper, the Melbourne Sunday Observer. The Prime Minister stated that the Government of Australia (GOA) would attempt to block publication. The next day, at the request of the GOA, the U.S. sent an attorney from the DOJ Progressive team and a technical advisor from DoE to Canberra to identify the article and to provide assistance to any Australian legal efforts to block publication.

The Australian article turned out to be a slightly later draft of the Morland article. It had been brought to Australia by an Australian-born Boston pediatrician and anti-nuclear activist, Helen Caldicott. As it happened, no newspaper challenged GOA's blocking publication, and the article was not published there.

3.2 ACCOUNTING

On April 3 and 4 defendants filed their accountings ordered by the Court concerning dissemination of RD in the article and their efforts to retrieve that information. For the

first time, the Government had some information on how widely the article had already been distributed. In addition to being distributed to Day, Knoll, and presumably the staff of the Progressive, the RD in the article was said to have also been directly distributed (beginning on December 24, 1978) to some 16 others, including Daniel Ellsberg, of Pentagon Papers fame, and Helen Caldicott.

On April 12, the defense filed an appeal from the PI and the Protective Order in the U.S. Court of Appeals for the Seventh Circuit in Chicago. The ACLU (led by Bruce Ennis) now represented Knoll and Day as individuals. Earl Munson et al, continued to represent The Progressive. Thomas Fox represented Morland.

3.3 MILWAUKEE SENTINEL

On May 1, the second major incident occurred that threatened to moot the case. The Milwaukee Sentinel published an article that contained, albeit in speculative terms, an RD description of how H-bombs work. While stated to be derived from libraries and other open sources, it was similar in many ways, including mistakes, to descriptions in the in camera documents filed in the Progressive case.

On May 7, the defense filed parallel motions in the Court of Appeals and in the District Court arguing that the May 1 Milwaukee Sentinel story and other recent publications definitively put the RD in Morland's article into the public domain, and that the PI should be vacated.

3.4 LANL LIBRARY, UCRL 4725

Before the defense motion to vacate could be considered, news of an even more serious incident surfaced. On May 9, a

LANL employee found an obviously RD document, UCRL 4725, left out on a worktable in the unclassified section of the LANL library by Dimitri Rotow.* Rotow was at the LANL library on behalf of the ACLU, looking for mistakes in Government classification that might affect the Progressive case. He had succeeded. The document he had found, UCRL 4725, was a monthly progress report of the University of California's weapon laboratory at Livermore (now LLNL), for June 1956. The report contained a large amount of detailed data on the design and testing of fission and thermonuclear weapons. By error this report had been marked declassified and filed in the unclassified report section of the LANL library.

After this discovery, LANL management closed the unclassified report section of the library to look for any other mistakes. The ACLU promptly protested that this blocked the preparation of their case.

It was not until the following week that it was learned that Rotow had actually already copied UCRL 4725 and sent copies to Bruce Ennis of the ACLU, to his other employer Tom Cochran of the Natural Resources Defense Council, and to John Fialka of the Washington Star. Efforts were immediately begun to recover these copies, or at least to notify all known recipients that UCRL 4725 was actually RD and must be protected.

* Dimitri Rotow had in March 1978 starred as an amateur fission bomb designer at a hearing held by Senator John Glenn (Ref.7). Later, in May 1978, he was at LANL for a TV spot and while there found a mislabelled RD document on design of an obsolete fission weapon (the TX-7) in the public section of the LANL library. This incident was cited in Rotow's first affidavit (May 3, 1979) as indicating the kind of information on nuclear weapons available in the public literature.

With the UCRL 4725 incident added to the Milwaukee Sentinel story, the Government's case now seemed in substantial trouble. However, at a meeting held on May 17, representatives of DOJ, DoE, DOS, ACDA, and DOD agreed the case should continue. They believed that there remained a good chance of showing the Courts that publication of Morland's article would still violate the AEA and would still cause grave harm.

3.5 GLENN HEARING I

On May 23, 1979, Senator John Glenn held hearings (Ref. 8) of his Subcommittee on Energy, Nuclear Proliferation and Federal Services of the Committee on Governmental Affairs to examine Rotow's finding of UCRL 4725 on the open shelves at LANL. Rotow testified that he found UCRL 4725 at the LANL library in a matter of ten minutes or so by checking documents listed under "weapons." He said he made five or six copies at the library and several dozen in all. He said that prior to being notified that DoE still considered UCRL 4725 classified, he had mailed at least six copies. He refused to give any names without checking first with the recipients.

Ted Taylor, a former weapons designer at LANL, testified that the compromise of UCRL 4725 was the most serious breach of security in the U.S. nuclear program since World War II.

Duane Sewell stated that the whole UCRL 4725 report had been mistakenly marked declassified when only a small excerpt was actually declassified. Because of an incorrect title on a declassification list, the error had escaped a review caused by Rotow's discovery of another mistake a year earlier. Sewell noted that a complete page-by-page review of all declassified reports had been started to find any possible

additional mistakes and that declassification procedures had since been greatly tightened.

In response to questions from Senator Glenn, Sewell said DoE had not made any attempt to obtain directly from Rotow the names of people to whom he sent copies of UCRL 4725. OGC/DoE and DOJ had advised that Rotow was part of the Progressive defense team and should be contacted only through counsel. Only the FBI could investigate possible violations of the AEA, and they had been notified.

Senator Glenn was severely critical of DoE's failure to use every means to find out to whom Rotow had sent copies and to retrieve them. He asked Rotow and the ACLU to furnish the names. Rotow said he would not until he asked the recipients, but if there was no problem he could furnish a list in the next two days.

The next day, May 24, Rotow returned 10 copies of UCRL 4725 to DoE. He said all other other copies he had made had been accounted for to DoE or destroyed. He refused to give a list of people to whom he had showed copies, but said all had been notified that DoE considered it RD and that it must be protected.

3.6 POSTOL LETTER

The next major incident was on May 30, when DoE received from Senator Glenn's staff for comment a copy of a letter dated April 25, 1979 to Glenn from defense affiants Postol,

Marsh, Stanford, and De Volpi.* The "Postol" letter asked for a congressional investigation of the Government's breach of national security through selective declassification in the Progressive case. In particular, the Government had allowed open publication of Jack Rosengren's and Harold Brown's affidavits saying Morland's article described the basic design concept of efficient U.S. weapons. The writers of the letter said that those affidavits should have been classified, as well as Teller's diagram and their own affidavits.

During the next week, OC/DOE determined that in pointing out supposed Government mistakes, Postol et al. had revealed RD through their comments on Teller's Encyclopedia Americana article. These comments were based on their knowledge of the Morland article, which they had earlier helped review. On June 5, while the Government was still deciding how to respond, the Postol letter was filed in camera with Marsh's affidavit. Under the terms of the PO, the government had to identify any classified material, so DoE no longer had the traditional option of "no comment," ignoring the relatively minor RD revealed by the letter.**

On June 6, DoE notified the Glenn Committee staff, and tried to notify the authors, that the letter was RD. Next day, when finally contacted by DoE, Marsh immediately read off a long list of Congressional and media recipients of what had appeared to be a confidential letter to Senator Glenn

* This was one of several instances where the defense was able to use Congressional interest and the media to influence the case.

** The Government was required to identify specifically the sensitive portions of whatever defendants filed. Even Government filings eventually had to be "bracketed" to show RD.

protesting the Government's failure to protect secrets. In the next day or so, all known recipients were notified that the Postol letter contained RD and were asked to return it or protect it appropriately.

Among the recipients named was Hugh Dewitt of LLNL, who said he had a copy but couldn't locate his original. Later that day Dewitt notified LLNL Security that he now recalled that he had sent a copy to Charles (Chuck) Hansen* of Mountain View. Dewitt agreed to arrange to recover the unopened envelope from Hansen as soon as Hansen received it.

The next night Dewitt phoned LLNL security to tell them that Hansen said the letter had already been opened and copied. One copy had been given to Hansen's Congressman, Pete McCloskey.

The next day (June 9), the San Jose Mercury and the Washington Post both carried stories on the letter, with minor quotes and paraphrases. The Oakland Tribune had a similar story on June 10, 1979. McCloskey was quoted as saying the letter was not classified and that he would not return his copy to DoE. All known recipients were promptly notified of the AEA requirements against dissemination of RD.

* H-bomb fan Hansen had corresponded with DoE for some time, including a letter April 23, 1979 announcing an H-bomb design contest he set up to defy DoE. Also on April 23 he himself had written to DoE, his Congressman Paul (Pete) McCloskey, and others, accusing DoE of discriminating against Morland and failing to classify works by E. Teller, T. Taylor, and George Rathjens. This was also the theme of an article, "Has the U.S. Government Disclosed the Secret of the H-Bomb?" by Hugh Dewitt in the April 1979 issue of the Bulletin of the Atomic Scientists.

The Daily Californian, an off-campus student-run paper in Berkeley, revealed in a descriptive story on June 11 that they also had a copy of the letter. They were officially notified by DoE of their responsibilities under the AEA not to disseminate it. However, they defied the AEA by publishing the letter in full on June 13.

3.7 HEARING ON DEFENSE MOTION TO VACATE PI

Meanwhile, in the Progressive case itself, a hearing was held in District Court on June 12 on the defense motion to vacate the PI. The defense (now joined by Paul Friedman as the new lead attorney for Morland) contended, based on numerous affidavits from their expert witnesses, that the availability of UCRL 4725, the Milwaukee Sentinel story, and other open publications since the PI hearing had conclusively put the RD in the Morland article into the public domain. The PI could not be effective and must be vacated.

The Government argued that UCRL 4725 was not in the public domain, no dissemination was known except for the limited distribution by Rotow. Affidavits from Government experts stated that defense contentions were incorrect. The Milwaukee Sentinel and other open publications fell far short of the damage that still would be done by publication of Morland's article. The Government attorneys argued that the Court's findings remained valid and there was no basis for vacating the PI.

On June 15, Judge Warren denied defendants' motion. He found that the Government's error in inadvertently declassifying UCRL 4725 and other documents did not put them in the public domain. The Milwaukee Sentinel article and other publications cited by the defense were clearly dissimilar from the Morland article. Only that article contained a

comprehensive, accurate and detailed analysis of all three concepts utilized in the construction of a thermonuclear weapon. There was no showing that the injunction had become ineffectual. Therefore, the Court found that publication of the Morland article would likely violate the AEA and would likely cause a direct, immediate, and irreparable injury to this nation.

Defendants immediately filed a second appeal.

4. APPEALS, JUNE 16 TO OCTOBER 1, 1979

4.1 SEVENTH CIRCUIT

Court action in the case now largely shifted to the U.S. Court of Appeals for the Seventh Circuit in Chicago. The two pending appeals were consolidated on June 21. Defendants' motions for expedition were denied, and a hearing was set for September 10. The next day, the defense filed in the Supreme Court a petition to force a more expedited hearing for the Appeals. This was denied by the Court in a per curiam decision on July 2.

A defense motion to take judicial notice of the Milwaukee Sentinel article, UCRL 4725, and other newly discovered material was denied on June 28, and preparation of briefs for the September 10 hearing continued.

4.2 HANSEN-PERCY LETTER

However, once again a major distraction occurred. On September 7, DoE received from Chuck Hansen a draft article "for classification review" which contained, mixed in with a lot of innocuous or erroneous material, reasonably clear statements of the principles of operation of H-bombs, in terms very similar to those used in the in camera documents in the Progressive case.

The "article" was clearly classified and clearly intended by Hansen to provoke legal action by DoE. On September 12, DoE notified Hansen by phone that his article contained RD and must be protected. Hansen refused to state his publication plans or to whom the article had already been disseminated without written confirmation that DoE had determined it was RD.

Later that day, while a letter confirming DoE's determination was being prepared, a copy of a letter dated August 27 from Hansen to Senator Charles Percy* was received from the LLNL Classification Office. Hugh Dewitt had just turned it in, although he said he had received it from Hansen in late August. This letter contained all of the material in Hansen's so-called "article."

DoE's letter to Hansen was revised to notify him that both his article and his letter contained RD and that the AEA forbade dissemination. Hansen was offered assistance in proper protection of the RD material and was asked to supply the names of everyone to whom he had already communicated it.

4.3 HEARING ON APPEALS

Oral arguments on the consolidated appeals were heard in Chicago by Judges William Bauer, Walter Cummings, and Wilbur Pell on Thursday, September 13.

The defense appealed both the March 26 PI and the June 15 decision denying the defense motion to dismiss. They contended that both decisions violated their First Amendment rights in that prior restraint on national security grounds, if ever justified, required a showing of grave, certain, imminent, and irreparable damage to the nation or its people, while in this case the Government had failed to prove any of these. In particular, there was no possibility of an injunction being effective and no possibility of damage.

* Hansen had also earlier sent several increasingly explicit letters concerning the case to Congressman McCloskey and to Senators George McGovern and Alan Cranston.

The Government argued that the appeals should be denied. The material was not in the public domain, publication would violate the AEA and lead to the gravest damage to national security.

The Court took the appeals under advisement.

4.4 HANSEN DEVELOPMENTS

DoE's letter to Hansen confirming that his "article" and letter to Percy were RD was delivered to him by a DoE official on September 14. He told the official that he had sent his only copy of the article to DoE. However, he said that he had sent copies of the letter to a number of individuals and newspapers, including the Daily Californian. The DoE notified all known recipients that the letter contained RD and attempted to retrieve all copies of the letter.

The Daily Californian editors, who had previously defied the Government by publishing the Postol letter, refused to even acknowledge that they had a copy of the Hansen letter. On Saturday September 15, the Government filed in U.S. District Court for the Northern District of California for an injunction against publication or dissemination of the letter by the Daily Californian. Judge Robert H. Schnacke issued a TRO and set a hearing for the next Friday, September 21.

4.5 GOVERNMENT DROPS THE CASE

Before the TRO hearing could be held, on Sunday, September 16, the Hansen-Percy letter was published in full in a special edition of the Madison Press Connection, not one of the known recipients.

On Monday September 17, after consultation with DoE and the other affected Government departments, the DOJ announced that it was dropping the Progressive case and would ask for dismissal of the PI against the Progressive and the TRO against the Daily Californian. The DOJ also announced a preliminary criminal inquiry to determine if there had been violations of the AEA or Court orders.

The Seventh Circuit Court vacated the PI on September 28, 1979. On October 1 it dismissed the consolidated appeals and remanded the case to the District Court for further proceedings on the disposition of the in camera material.

The Progressive called a victory press conference and handed out advance copies of the November issue containing the Morland article (Ref. 4). At the conference Morland pointed out supposed errors in the article using his H-bomb design T-shirt for illustration.

5. END GAME, OCTOBER 2, 1979 TO SEPTEMBER 4, 1980

5.1 IN CAMERA MATERIAL

Nominally the remaining issue to be resolved in District Court was the status of the in camera materials. However, there was also the underlying question whether DOJ's ongoing "preliminary criminal inquiry" would lead to criminal prosecutions for violations of the AEA or Court orders.

The defense contended that all of the in camera materials should immediately be filed publicly. The Government admitted that publication of the article would require some declassification, but stated that development of new classification guides and their application to the in camera material would take until about mid-November.

5.2 GLENN HEARING II

Meanwhile, on October 2 Senator Glenn held a second hearing (Ref. 8) on the DoE's erroneous declassification of nuclear weapons information. This hearing was based primarily on a General Accounting Office (GAO) report on the LANL library incident that he had requested.

Duane Sewell testified that declassification mistakes, such as the TX-7 report Rotow found in 1978 and UCRL 4725, arose from shortcuts in usual declassification procedures during the Comprehensive Classification Review Program (CCRP), a large-scale program from 1971 to 1976 to review the classification of all AEC files.

After Dimitri Rotow found the improperly declassified TX-7 document on the public shelves of the LANL library in May 1978, the DoE ordered a systematic review of all weapons-

related reports declassified in the CCRP. Some 2000 reports were identified for review by their corporate authors and removed from public access.

Sewell said that before this review was completed, Rotow returned to LANL and found UCRL 4725, a very sensitive SRD report that had been mismarked as "declassified" and filed on the open shelves through a series of clerical errors.* DoE immediately closed the report section of the LANL library. All weapons-related reports declassified under the CCRP would be treated as classified until positively identified as unclassified under rigid new procedures.

At the Glenn hearing, Sewell also gave an interim summary of the re-review process. Of 2.8 million documents reviewed by the CCRP, 1.5 million had been declassified, including 36,000 formal reports. After Rotow's first discovery in May 1978, 2000 reports with weapons-related titles were re-viewed. This review had only recently been completed. 104 reports were upgraded. Seven of these were "sensitive" in that they gave substantial information on thermonuclear or modern fission weapons.

In the second review, ordered after Rotow found UCRL 4725 in May 1979, about 34,000 additional reports were being re-viewed. At the time of the hearing some 9100 had been reviewed and 23 had been formally upgraded.

In the two reviews, eight documents were found to be "highly sensitive," including UCRL 4725, UCRL 5280, and UCRL 5315. Twelve were sensitive. 53 had relatively low sensitivity

* For example, UCRL 4725 escaped the earlier review because it was mistitled on the Declassification Notice.

and 51 had very low or borderline sensitivity. Three of those upgraded contained classified non-weapons information of low sensitivity.

Sewell said that apparently none of the incorrectly declassified reports was distributed. However, in principle, most of them were available to the public at LANL's library from its opening in April 1974 until they were removed in May 1978. UCRL 4725 and a few others were not removed until May 1979.

Sewell stated that the precise degree of damage to U.S. nonproliferation policy from the availability of the mis-labelled RD documents at the LANL library could not be determined. It is not known whether any of these documents were actually compromised, other than the TX-7 document and UCRL 4725 found by Rotow. Rotow had stated that he had given DoE all the copies he had made of the TX-7 document.*

5.3 MORLAND ARTICLE PUBLISHED

On October 4, the Morland article "The H-Bomb Secret: How We Got It, Why We're Telling It" was finally published in the November Progressive (Ref. 4) after a six month delay.

5.4 RE-MARKING OF IN CAMERA DOCUMENTS

The lengthy process of DoE revision of classification of the in camera documents to account for the revelations by Hansen and Morland was completed and newly re-marked copies were filed on December 28, 1979.

* Later, in a letter to Glenn dated October 9, 1979, Rotow also said that all copies he had made of UCRL 4725 were retrieved by DoE or destroyed, except for the copy he had sent to the ACLU.

5.5 PREYER HEARING II

On March 20, 1980, Congressman Richard Preyer held the second of three hearings on "The Government Classification of Private Ideas" by his subcommittee on Government Information and Individual Rights of the House Committee on Government Operations (Ref 9, 10). The first hearing, February 28, had dealt primarily with the Invention Secrecy Act. This second hearing dealt primarily with the National Security Agency (NSA) and the current concern over public cryptography. However, the AEA and the Progressive case were included at the urging of former subcommittee member Congressman McCloskey.

McCloskey stated that this committee should explore options other than the present AEA. He said that the Progressive case showed the AEA no longer worked. Rotow, Morland and Hansen were able to use publicly available sources to write and publish material that DoE had classified RD. Six Government scientists (four at ANL, two at LLNL) wrote material in good faith that the Government later classified. They accuse the Government of misusing classification for political purposes. McCloskey noted that while (supposedly) RD had been published, nobody had been prosecuted.

McCloskey filed a proposed amendment to the AEA to make private citizens subject to the same provision as DoE employees against dissemination of RD, regardless of motive. Private citizens would be obligated to check with DoE before publication. This amendment would at least provide a basis for Congressional examination.

At the hearing, Duane Sewell gave a short description of DoE's classification scheme. He also gave a short description of the Progressive case and stated that the AEA had

proved an effective tool in spite of unfortunate developments which led to publication of the Morland article. He believed a major overhaul of the enforcement provisions was unnecessary and could be counterproductive. He said DoE could not comment on possible violations of the AEA or Court orders pending imminent completion of DOJ's preliminary criminal inquiry.

5.6 IN CAMERA DOCUMENTS (CONTINUED)

Negotiations continued between DOJ and defense counsel on the disposition of the in camera documents. By the time of a July 16, 1980 status report to the Court, most issues had been settled. The defense had agreed to DoE's current identification of RD in the documents. They had even agreed, for the time being at least, not to quote directly certain statements from Government-originated documents. Attribution of these "sensitive" statements to official Government sources was considered by the Government to be harmful to U.S. nonproliferation objectives and to foreign relations.

Accordingly, the in camera documents were to be filed in three forms: (1) a public set with both classified and "sensitive" information removed, (2) an in camera set with classified material removed and sensitive material marked (which would remain accessible to cleared defense counsel and defense experts), and (3) an in camera set with both classified and sensitive material marked.

However, the defense refused to formally accept final disposition before some definite decision was announced by DOJ on its "preliminary criminal inquiry" and possible criminal prosecutions. Judge Warren reluctantly agreed to

postpone further action for about six weeks until the DOJ reached a decision.

5.7 PREYER HEARING III

On August 21, 1980, the third and final hearing on the Government's classification of private ideas was held by Congressman R. Preyer (Refs. 9, 10).

Assistant Secretary Duane Sewell elaborated on the classification and declassification procedures of the DoE. He stated that the current status of the Progressive case was that the preliminary criminal inquiry was continuing and that a status report on the civil suit was scheduled for September 4, 1980.

In response to a question from Preyer, Sewell agreed that DoE should document the Progressive case as fully as possible as the first major test of the AEA.

5.8 THE END

In late August, the criminal division of DOJ recommended dropping the preliminary criminal inquiry into possible violations of the AEA and Court orders. This recommendation was adopted by the Attorney General, Benjamin Civiletti, and DoE, State, ACDA, and DOD were notified.

The Progressive case finally came to an end on September 4, 1980. After the DOJ stated that they had no intention of criminal prosecutions in the Daily Californian and Progressive cases, the defense agreed to the previously negotiated disposition of the in camera materials.

Judge Warren denied defense motions to vacate his memorandum opinions and to assess all costs to the United States. He then dismissed the case.

6. EPILOGUE

6.1 SEQUEL

Since the Progressive case was dismissed on September 4, 1980, there have been several requests under the Freedom of Information Act for the withheld portions of the in camera documents and for DoE/DOJ files on the case. None of that material has been released as of April 1987.

In May 1981, Morland's book about the case, The Secret That Exploded, (Ref. 5) was published. In that book he gave a detailed description of uncovering the secret and writing the article, then of the case itself. His account essentially confirmed the Government's contentions that the RD material in Morland's article was derived from inside sources, rather than from the public domain as Morland had stated in his Affidavits. Morland's book presented a picture of DoE's protection of RD as vulnerable to penetration by a plausible, determined "amateur spy."

In addition to Morland's book, several subsequent publications have referred to Morland's article and purported to critique it or to add information. References 11 and 12 give two such publications by Morland himself.

A discussion of the Progressive case also appears in Born Secret (Ref. 13), by defense affiants De Volpi, Marsh, Postol, and Stanford. References 14-20 provide additional commentary, largely on legal aspects of the case.

6.2 EVALUATION

The likely ultimate effects of the Progressive case are still not clear. The Government said disclosure of the

information in Morland's article on the principles of operation of nuclear weapons would cause grave, immediate, and irreparable harm to this nation and its people by reducing the time and increasing the certainty of other nations developing thermonuclear weapons. The defense said that this information was already public, so no injunction could be effective, and there could be no harm.

Both sides produced affidavits by experts to support their arguments. The District Court that had to weigh the arguments found completely for the Government, under both the AEA and the inherent powers of the Executive under the Constitution. The Court of Appeals did not have an opportunity to rule because the case was mooted.

The value of this case as a precedent can only be determined by the courts in later cases. As the only direct test of the enforcement of the control of information provisions of the AEA it will undoubtedly have some effect.

What will be the effect of the Progressive case on possible future publications relating to design of nuclear weapons? It would seem, on balance, that such publications are encouraged by the highly public success of Morland and the Progressive (as well as Hansen, the Press-Connection, the Daily Californian, and others) in defying the Government. However, the actual Court rulings were all in favor of the Government and they may have some mild deterrent effect.

With the publication of Morland's article, its contents are certainly now in the public domain. Has thermonuclear weapon proliferation been speeded? So far, there has been no public evidence, but such evidence is likely to be obscure until there is an actual test explosion. In any

case, proliferation of nuclear weapons also depends on political considerations. Only time will tell.

APPENDIX 1. CONTROL OF NUCLEAR WEAPON DESIGN INFORMATION

The Atomic Energy Act of 1946 and the present law, the Atomic Energy Act of 1954, as amended (AEA), set up a system to protect certain sensitive information, separate and distinct from other types of national security information. Called "Restricted Data" (RD), this sensitive information deals with the use of nuclear energy for military purposes. Section 11 of the AEA states, "The term 'Restricted Data' means all data concerning (1) the design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142." The intent of Congress was to prevent dissemination outside the U.S. Government of information which would facilitate the military use of nuclear energy. This objective has been repeatedly reaffirmed by Congress, most recently in The Nuclear Non-proliferation Act of 1978.

In Section 12 of the AEA, Congress also dealt with the counterbalancing objective of promoting the dissemination of scientific and technical information relating to atomic energy for "that free interchange of ideas and criticism which is essential to scientific and industrial progress and public understanding."

Section 142 establishes a procedure for a continuous review of Restricted Data for the purpose of declassifying and removing from Restricted Data such information as the Atomic Energy Commission (now the Assistant Secretary of Energy for Defense Programs, ASDP/DoE) finds can be published without undue risk to the common defense and security.

At present, all basic science and most of the non-weapon technology of nuclear energy has been declassified. Restricted Data today primarily involves a very limited set of information on actual design and manufacture of nuclear weapons, on practical methods of producing fissile material useful for nuclear weapons, and on military reactors.

The Department of Energy has set up, by regulations, offices under the Assistant Secretary for Defense Programs (ASDP) for controlling Restricted Data: the Office of Classification defines RD, and the Office of Safeguards and Security protects it.

The Office of Classification (OC) implements policy decisions of ASDP regarding Restricted Data. It develops detailed classification guides as to which information is classified and at what level of sensitivity (Top Secret, Secret, or Confidential). These guides are for use by individuals specifically authorized to make classification decisions in DoE or in its contractor organizations. At every step in the decision process, ASDP, OC, and authorized classifiers make extensive use of the advice of experts in the appropriate fields of science and engineering. Usually detailed classification guides themselves need to be classified.

The Office Safeguards and Security (OSS) develops and administers procedures for protecting information identified as RD. These include a system of clearances for Government or contractor employees who have a "need-to-know" RD in their work. Procedures have also been established for transmitting and storing such information. DoE regulations concerning "outside" publication of RD generally require "no comment" by cleared individuals who could confirm or deny

their accuracy. However, in exceptional cases, comment by appropriate authorities may be necessary.

OSS has very limited authority in cases of suspected violation of the AEA. It may conduct preliminary inquiries to ascertain the likelihood of violations, but investigation of such violations is, under the AEA, exclusively the responsibility of the FBI.

REFERENCES

1. Grayson, W.C., Jr., "List of Court Documents in the Progressive Case," RDA-TR-122136-001 (February 1985).
2. Grayson, W.C., Jr., "Summary of the Affidavits Filed in the Progressive Case," RDA-TR-122136-002 (May 1985).
3. Grayson, W.C., Jr., "Summary of Legal Proceedings in the Progressive Case," RDA-TR-122136-007 (December 1984).
4. Morland, H., "The H-Bomb Secret: How We Got It--Why We're Telling It," The Progressive (November 1979).
5. Morland, H., The Secret That Exploded, Random House, NY, NY (1981).
6. Teller, E., "Hydrogen Bomb," Encyclopedia Americana (14), NY, NY (1977).
7. U.S. Congress. Senate. Committee on Governmental Affairs. An Act to Combat International Terrorism, Hearings, 95th Congress, 2nd Session, January 23, 25, 27, 30; February 22; March 22, and 23, 1978, Washington, U.S. Govt. Printing Office, 1978.
8. U.S. Congress. Senate. Committee on Governmental Affairs. Subcommittee on Energy, Nuclear Proliferation, and Federal Services, Erroneous Declassification of Nuclear Weapons Information. Hearings, 96th Congress, 1st Session, May 23 and October 2, 1979, Washington, U.S. Govt. Printing Office, 1980, 2 pts.
9. U.S. Congress. House. Committee on Government Operations. Subcommittee on Government Information and Individual Rights, The Government's Classification of Private Ideas, Hearings, 96th Congress, 2nd Session, February 18; March 20; and August 21, 1980. Washington, U.S. Govt. Printing Office, 1981.
10. U.S. Congress. House. Committee on Government Operations. Subcommittee on Government Information and Individual Rights, Thirty-Fourth Report, The Government's Classification of Private Ideas, Washington, U.S. Govt. Printing Office, 1980, 244p. (96th Congress, 2nd Session, House Report no. 96-1540.
11. Morland, H., "Errata," The Progressive, December 1979.
12. Morland, H., "Tritium: Secret Ingredient of the H-Bomb," The Nation, July 12, 1980.

13. De Volpi, A., et al, Born Secret, Pergamon Press, NY, NY (1981).
14. Cheh, M.M., "The Progressive Case and the Atomic Energy Act: Waking to the Dangers of Government Information Controls," The George Washington Law Review 48(2), 163-210 (January 1980).
15. Ronhovde, K.N., "The Progressive Case: Legal Issues," Congressional Research Service, Library of Congress (February 14, 1980).
16. Tribe, L.H., Remes, D.H., "Some Reflections on the Progressive Case: Publish and Perish?," Bulletin of the Atomic Scientists (March 1980).
17. Hewlett, R.G., "'Born Classified' in the AEC: A Historian's View," Bulletin of the Atomic Scientists (December 1981).
18. Green, H.P., "Born Classified in the AEC: A Legal Perspective," Bulletin of the Atomic Scientists (May 1982).
19. Martin, T.S., "National Security and the First Amendment: A Change in Perspective," ABA Journal, 680-685 (June 1982).
20. Relyea, H.C. (ed.), "Striking a Balance: National Security and Scientific Freedom - First Discussions," American Association for the Advancement of Science Committee on Scientific Freedom and Responsibility, Washington (May 1985).

RDA

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March 14, 1988

Mr. Gerald W. Gibson
Office of Classification
DP-321.1
U.S. Department of Energy
Washington, DC 20585

Dear Gerry:

Attached is the memorandum I promised, "Description of Files on the Progressive Case". It is intended to give a very brief summary description of DOE and other government files on the Progressive Case. This could be helpful for any future historical investigation. Please let me know if any clarifications are needed.

Sincerely,

Bill

William C. Grayson, Jr.

WCG:kjh

Encl: As stated Above

Distribution List:

Bryan Siebert, DOE/OC
Don Little, DOE/OC
Jo Ann Williams, DOE/OGC
Ken Adney, DOE/OMA
Jack Holl, DOE Historian
David Anderson, DOJ/Civil Division

*Weapons Violations -
Mag, News & Books
Progressive Case*

March 14, 1988

MEMORANDUM

TO: Gerry Gibson, OC/DOE
FROM: W. Grayson

SUBJECT: DESCRIPTION OF FILES ON THE PROGRESSIVE CASE

It may be helpful to record my present understanding of the status of available U.S. Government files of information on the Progressive Case. The most extensive files are probably those I helped put together and organize for the Department of Energy. Most of these files have now been transferred to the Office of the DOE Historian.

The Civil Division of the Department of Justice has custody of the District Court's files of in camera documents. Their files also contain assorted other classified, sensitive, and open material on the case.

The public file of the District Court is fairly complete. The public file of the Appeals Court is quite incomplete. Both are now in storage in Federal Records Centers.

It should be noted that under the terms of the final Stipulation and Protective Order (document nos. 189, 190, copies attached) the District Court (later, DOJ) will maintain two versions of the in camera documents. One set (Appendix C) has classified material removed, and sensitive material marked. The other set (Appendix B) contains both classified and sensitive material, appropriately marked. Set C remains available for inspection by defense counsel and affiants who were originally cleared by DOE during the case for access to the in camera material. Set B is only available to people currently holding the necessary clearances and "need to know". As noted above, Civil Division/DOJ now holds the Court's in camera file. DOE has duplicate sets.

Note that the final stipulation specifies that if at any time the Government releases to the public any of the in camera material, it shall attempt to notify defendants and, on request, provide copies of the material released.

The true current status of any Progressive material to be released to the public should be very carefully evaluated before release.

INVENTORY

1. DOE Historian Files: This material was delivered to OC on 31 December 1987 and most of it is now in the custody of the DOE Historian.
 - 1.1. Complete unclassified public file of Progressive case court documents (2 boxes). The only other set was sent to the Civil Division, DOJ.
 - 1.2. Assorted unclassified reference material (2 boxes) Included are:
 - 1.2.1 Clippings, correspondence, congressional reports.
 - 1.2.2 Complete set of my unclassified reports on the case:
 - "A Brief History of the Progressive Case", RDA-TR-138562-004R.1 (December 1987)
 - "Summary of Legal Proceedings in the Progressive Case", RDA-TR-122136-007 (December 1984)
 - "List of Court Documents in the Progressive Case", RDA-TR-122136-001 (February 1985)
 - "Summary of Affidavits Filed in the Progressive Case", RDA-TR-122136-002 (May 1985)
 - "Source Material for History of the Progressive Case"
 - Part 1: Chronology", RDA-TR-138562-005R.1; Part 1 (September 1987)
 - Part 2: Clippings", RDA-TR-138562-005; Part 2 (June 1987)
 - Part 3: Miscellaneous", RDA-TR-138562-005; Part 3 (September 1987)
 - 1.3. Classified (or sensitive) material; miscellaneous draft, undocumented, classified or sensitive (and unreviewed formerly classified or sensitive) material (1 sealed box)
 - 1.4. Classified, documented, material to be transferred to Gerald Gibson, OC (1 sealed packet).
2. OC FILES: There are 5 boxes of other Progressive case material stored in OC central files. Most of this material consists of various sets of the court documents originally filed in camera. (Note: this material also has now been transferred to the DOE Historian, as of March 2, 1988).

2.1 "Box No. 1" contains originals of in camera filings (incomplete). Note that some of these contain classified or sensitive material but are not so marked.

2.2 "Box No. 2"

2.2.1 "RED MARKED", Appendix C of Final Protective Order (190) set of in camera court documents (Unclassified but "SENSITIVE") with "Sensitive" material marked with red brackets and classified material (RD or NSI) deleted.

Documents included are those numbered (on the in camera document list given in the final Protective order): 2, 3, 4, 11, 13, 14, 16, 17, 18, 19, 23a, 23b, 23c, 24, 26, 28a, 28b, 29, 30, 38, 39, 40, 45, 46, 47, 61, 62, 64, 65, 66, 67, 68, and "73" (Appendix for the United States, A79).

Note that only documents with SENSITIVE or CLASSIFIED material are included.

2.2.2 "RED and BLACK MARKED", Appendix B (of 190) set of in camera documents (CLASSIFIED and SENSITIVE). This set includes documents numbered on the in camera document list: 2, 3, 4, 13, 14, 16, 17, 18, 19, 24, 26, 28b, 29, 38, 39, 40, 45, 46, 47, 61, 62, 64, 65, 66, 67, 68, and "73" (document A79, DOE-documented, cy 1 of 4, series OC August 1979, 221 p., original of series).

Note that this set includes only documents with CLASSIFIED material.

2.3 "Box No. 5" "PURPLE STRIPE" set, complete set of in camera documents (except for "70", "71", "72", i.e., SC 2, SC 1, SC 3) with CLASSIFIED material as original-ly marked. Like "RED and BLACK MARKED" set (except complete) i.e., with classified material marked with BLACK brackets and "SENSITIVE" marked with RED brackets. In addition, this set includes "20A", the Fox to Warren letter of 5/30/79 re accounting (122A), and "73", the Appendix of US (A79, cy 3 of 4, DOCUMENTED).

2.4 "Box No. 7" ASDP topical files.

2.5 "Box No. 8" Selected classified or sensitive material returned by the Defense after the case was dismissed (including copies of Morland article, UCRL-4725, affidavits, etc.)

3. DOJ Files

It should be noted that in addition to DOE's file on the Progressive case, there are (or were) fairly extensive files at the Civil Division, Department of Justice. As of February 2, 1984, the Civil Division's in camera files on the Progressive case were in a 4-drawer safe file, which included:

3.1 Top Drawer:

"Court" set of documents originally filed in camera, maintained for U.S. District Court for the Western District of Wisconsin per Final Protective Order (document no. 190)

3.1.1 Appendix B set with classified material marked in black, "sensitive" material marked in red; DOE-documented and marked SRD.

3.1.2 Appendix C set with sensitive material marked in red; classified material deleted.

3.1.3 Appendix D "public" set of in camera documents (only), with both sensitive and classified material deleted.

3.2 Next drawer down: Defense Attorneys' classified or sensitive notes (sealed, in camera, pursuant to Final Protective Order (190)).

3.3 Next drawer down:

3.3.1 "Justice" set of in camera court documents; same as Appendix B set, i.e., with classified material marked in black and sensitive material marked in red. Marked "Justice", not documented by DOE or marked "SRD".

3.3.2 FBI reports.

3.3.3 Two memoranda dated February 13, 1980 to Phillip Heymann, AAG Criminal Division, from consultant Tony Lapham.

3.3.4 2 National Intelligence Estimates (NIE) on proliferation

3.3.5 Miscellaneous court documents

- 3.4 Bottom drawer: Copies of miscellaneous Appeals Court in camera documents; marked "Appellate", not documented by DOE or labelled "SRD".
4. Other: Additional material on the Progressive case can no doubt also be found in the files of some of the relevant parts of DOE, DOJ, and (to a lesser extent) the other Government agencies involved.

It should be noted that the Courts themselves generally do not keep archival material. Court material from the Progressive case has now been transferred to various Federal storage facilities. The Milwaukee District Court documentation is fairly complete. Chicago Appeals court files are sketchy. The in camera files mandated by the Final Protective Order (doc. 190, September 4, 1980) are now at the DOJ (see above).

STIPULATION (189, 9/4/79)

The plaintiff and defendants by their respective attorneys hereby stipulate and agree as follows:

1. The plaintiff will file a motion with the Court pursuant to Rule 26(c) of the Federal Rules of Civil Procedure requesting that certain portions of the documents filed in camera in this action be filed publicly and that other portions remain under seal in the manner set forth in the Protective Order submitted herewith, and a motion for dismissal. Although defendants do not accept the factual or legal basis for such motions, particularly with respect to the material designated herein as "sensitive," defendants take no position with respect to the motions.

2. Should the plaintiff's motions be granted, the Protective Order submitted herewith and approved by counsel as to form may be entered by the Court forthwith and without further notice.

3. The defendants do not waive any legal rights they may otherwise have under the Freedom of Information Act (FOIA) to request access to materials that remain under seal, nor does the plaintiff waive the right to oppose in any way such a request, except as otherwise provided herein. In the event that the defendants are unsuccessful in any Freedom of Information Act

request for the portion of the materials that remain under seal, they shall not be deemed to have waived the right to assert any other legal claims they may have with respect to the continued in camera status of such material, nor shall the plaintiff be deemed to have waived any legal right to oppose such access. The defendants agree not to assert such other legal claim during the pendency of any FOIA proceeding initiated by any of the defendants. Furthermore, the defendants agree not to assert such other legal claims within two years from the date of entry of the Protective Order submitted herewith, or until a final resolution by a district court of any FOIA claim submitted by any defendant, whichever is sooner. The filing of a FOIA claim by any defendant shall not be deemed to be a prerequisite to the assertion of such other legal claims, subject to the time restrictions set forth in this paragraph.

4. If the defendants or persons covered by the Protective Order file a Freedom of Information Act request within six months of the entry of this Stipulation, the entry of the Protective Order submitted herewith shall not be deemed to create any defense the Government would not have had under the Protective Order of March 14, 1979, as amended, as to those parties.

5. The plaintiff agrees not to raise the lack of physical custody of the in camera documents as a defense to a Freedom of Information Act request by the defendants to the Departments of Energy or Justice for such materials.

6. In the event that plaintiff releases material covered by the Protective Order to third parties under the Freedom of Information Act, or otherwise to third parties without restriction on its public use or distribution, the plaintiff shall attempt to notify the defendants of such releases and upon request shall provide defendants with copies of the material released, at defendants' expense.

7. The parties agree that the restriction in paragraph 8. of the Protective Order extends only to the physical release of, or reading from portions of the Appendix C documents containing red bracketed material. It does not prohibit the public or private communication or description of the information contained in the red brackets in such documents, provided that those persons covered by paragraph 8. of the Protective Order agree not to identify the United States as the source of such information.

8. Plaintiff will supply at its expense for each defendant and counsel one copy of all documents filed publicly pursuant to the Protective Order submitted herewith.

Dated this 4th day of Sept, 1980.

Robert E. Catherick

Elizabeth Vere Whitaker
Counsel for Plaintiff

Earl Munson, Jr.

Bradycen Ellison
Counsel for The Progressive, Inc.

Paul M. McKe

Bruce Erwin
Counsel for Erwin Knoll and
Samuel Day, Jr.

Paul L. Klein
Counsel for Howard Morland

APPROVED:

Robert W. Warren
United States District Judge

Date:

September 4, 1980

PROTECTIVE ORDER (190, 9/4/80) _____

Pursuant to Rule 26(c) of the Federal Rules of Civil Procedure and on motion of plaintiff and the stipulation of all parties to this action dated Sept 4, 1980, it is hereby ORDERED that:

1. Attached hereto as Appendix A is a list which identifies by number and title all documents previously filed in camera in any court in this case.

2. Documents numbered 1, 5, 6, 7, 8, 9, 10, 12, 15, 20, 21, 22, 25, 27, 31, 32, 33, 34, 35, 36, 37, 41, 42, 43, 44, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 63, 69, 70, 71 and 72 in Appendix A shall be filed publicly in their entirety by plaintiff.

3. All other documents listed in Appendix A shall also be filed publicly by the plaintiff, provided that:

A. The portions of the documents that plaintiff contends contain Restricted Data as defined in 42 U.S.C. §2014(y) or classified information under Executive Order 12065 shall not be filed publicly. Those portions are contained within the black brackets on the documents submitted herewith for filing under seal as Appendix B;

B. The portions of the documents originated by the United States that contain information which is no longer classified under Executive Order 12065 or designated as Restricted Data as defined in 42 U.S.C. § 2014(y), but which plaintiff considers sensitive, contained within the red brackets on the documents submitted herewith for filing under seal as Appendix C.

4. A public version of all documents described in paragraph 3., above, with those portions set forth in subparagraphs 3.A and 3.B, above, deleted, is attached hereto as Appendix D and shall be filed publicly by plaintiff with the Clerk of this Court;

5. All of the documents contained in Appendix B and in Appendix C shall remain under the seal and control of this Court in secure containers at the following facilities:

A. A set of the documents contained in Appendices B and C shall be located at the Department of Justice in Washington, D. C.

B. A set of the documents contained in Appendix C shall be located in the United States Attorney's Office in Madison, Wisconsin.

6. All documents, papers, notes, and other materials possessed or prepared by any individual who has been approved for access to the in camera materials in accordance with the

provisions set forth in the Protective Order of this Court entered on March 14, 1979, as amended, that contain information required to be maintained in camera by the terms of this Order shall be destroyed or, at the option of the parties, placed under the control and seal of this Court as provided in paragraph 5. of this Order.

7. Any individual who has been approved for access to in camera documents in accordance with the provisions set forth in the Protective Order of this Court entered on March 14, 1979, as amended, shall not, without permission of the Court, disclose Restricted Data or classified information as identified in Appendix B that he or she obtained as a result of his or her access to the in camera documents.

8. Any individual who has been approved for access to in camera documents in accordance with the provisions set forth in the Protective Order of this Court entered on March 14, 1979, as amended, shall not, without permission of the Court, release copies of any portion of any documents attached as Appendix C that contain material within red brackets. Defendants' counsel and expert witnesses who had access to in camera documents shall have continued access to the Appendix C documents at the facilities designated in paragraph 5. of this Order.

9. This Order shall not be construed to affect plaintiff's right or obligation to conduct declassification reviews of the material covered by paragraph 3.A of this Order

and to release such material pursuant to such reviews without further Order of this Court. Furthermore plaintiff shall reconsider the sensitive nature of the material covered by paragraph 3.B of this Order five years from the date of the entry of this Order or at such earlier times as plaintiff considers appropriate, and shall release such material as it determines is no longer sensitive, without further Order of this Court.

10. Except as provided in the Stipulation filed herewith, this Order shall not prohibit the parties or persons subject to its terms from asserting any other legal rights with respect to access to or protection of the documents described in paragraph 3.

11. This Order supersedes all other Protective Orders entered in this case, which shall have no further force and effect. It is subject to further modification on motion of any person subject to its terms.

Dated at Milwaukee, Wisconsin, this 4th day of Sept, 1980.

Robert W. Warren
United States District Judge

APPENDIX A OF FINAL PROTECTIVE ORDER (190)

1. **Early draft of Morland article, undated.**
2. **Affidavit of Duane C. Sewell, dated March 7, 1979.**
3. **In camera affidavit of Thomas R. Pickering, dated March 13, 1979.**
4. **"Analysis of Article for 'Progressive' Magazine by H. Morland", undated, and copy of Morland article, undated -- attachment to J.A. Griffin affidavit.**
5. **Affidavit No. I of Theodore A. Postol, dated March 15, 1979.**
6. **Affidavit No. II of Theodore A. Postol, dated March 15, 1979.**
7. **Affidavit No. I of Howard Morland, dated March 19, 1979.**
8. **Affidavit No. II of Howard Morland, dated March 19, 1979.**
9. **Affidavit of Kosta Tsipis, dated March 17, 1979.**
10. **Affidavit of Hugh Dewitt, dated March 20, 1979.**
11. **Supplemental Affidavit II of John A. Griffin, dated March, 1979.**
12. **In camera memorandum brief submitted by Defendants, the Progressive, Inc., Erwin Knoll and Samuel Day, Jr., dated March 21, 1979.**
13. **In camera joint affidavit of Jack W. Rosengren and William C. Grayson, Jr., dated March 23, 1979.**
14. **In camera reply brief of United States, undated.**
15. **Affidavit III of Howard Morland in opposition to motion for preliminary injunction, dated March 25, 1979.**
16. **Affidavit I of Ray E. Kidder, dated March 23, 1979.**
17. **Affidavit II of Ray E. Kidder, dated March 23, 1979.**
18. **In camera joint supplemental affidavit of Jack W. Rosengren and William C. Grayson, Jr., dated March 26, 1979.**
19. **Letter to J.A. Griffin from A.D. Thomas, COK-77-160, dated November 2, 1977.**

20. Letter to Robert W. Warren from LaFollette, Sinykin, Anderson and Munson, dated April 2, 1979, subject: re, accounting of Morland material.
21. Letter to Robert W. Warren from Thomas P. Fox, dated April 2, 1979, subject: re, accounting of Morland material.
22. Affidavit of Earl Munson, Jr. (III) with attachments, dated April 30, 1979.
23.
 - a. Motion to take judicial notice of adjudicative facts or to remand to District Court to consider new evidence, dated May 7, 1979.
 - b. In camera memo in support of motion to take judicial notice of adjudicative facts or to remand to district court to consider new evidence, undated.
 - c. In camera affidavit of Earl Munson, Jr., dated May 7, 1979.
24. Affidavit of Dimitri A. Rotow, dated May 3, 1979.
25. In camera Defendants' motion to reconsider and to vacate the preliminary injunction issued March 26, 1979, dated May 8, 1979.
26. In camera affidavit IV of Earl Munson, Jr. with attachments, dated May 8, 1979.
27. In camera affidavit of John A. Griffin, dated May 2, 1979, with attachment.
28.
 - a. In camera transcript of proceedings, dated March 23, 1979.
 - b. In camera transcript of proceedings, dated June 12, 1979.
29. Defendants' supplemental motion to reconsider and to vacate the preliminary injunction issued March 26, 1979, dated June 5, 1979.
30. Memorandum in support of defendants' motion to reconsider and to vacate the preliminary injunction, dated June 5, 1979.
31. Stipulation (I) in connection with defendants' motion to reconsider and to vacate preliminary injunction, dated June 5, 1979.

32. Memorandum of points and authorities in support of defendants' motion to vacate the court's order postponing discovery, dated June 5, 1979.
33. Defendants' motion to present oral testimony in support of its motion to reconsider and to vacate the preliminary injunction issued March 26, 1979, dated June 5, 1979.
34. Defendants' motion to vacate the court's order postponing discovery, dated June 5, 1979.
35. Affidavit of Thomas Kirkman, dated June 5, 1979.
36. Affidavit of Mark Lynch, dated June 4, 1979.
37. Affidavit of Ray E. Kidder, dated June 4, 1979.
38. In camera supplemental affidavit of Ray E. Kidder, dated May 31, 1979.
39. Affidavit (II) of Gerald E. Marsh, dated June 1, 1979.
40. Affidavit (III) of Alexander DeVolpi, dated June 1, 1979.
41. Affidavit of Charles E. Sims, dated May 31, 1979.
42. Affidavit of Theodore B. Taylor, dated June 1, 1979.
43. Affidavit of Hugh Edgar Dewitt, undated.
44. In camera affidavit III of Hugh E. Dewitt, dated June 4, 1979.
45. Affidavit (II) of Dimitri A. Rotow, dated June 4, 1979.
46. In camera plaintiff's opposition to defendants' motion to reconsider and to vacate the preliminary injunction, undated.
47. In camera joint supplemental affidavit of Jack W. Rosengren and William C. Grayson, Jr., dated June 19, 1979.
48. supplemental affidavit of Hans A. Bethe, dated June 8, 1979.
49. Supplemental affidavit of James R. Schlesinger, dated June 10, 1979.
50. Letter from Mark H. Lynch to Robert E. Warren, dated June 6, 1979, with attachment.

51. Findings of fact and conclusions of law on defendants' motion to reconsider and vacate by Robert W. Warren (unsigned).
52. Affidavit V of Earl Munson, Jr., dated June 11, 1979, with attachment.
53. a. In camera letter from Earl Munson, Jr., to Robert W. Warren, dated July 31, 1979.
b. Letter from Earl Munson, Jr., to Thomas Martin, dated July 20, 1979.
54. In camera memorandum and order (signed by Robert W. Warren), dated June 15, 1979.
55. a. Letter from B. Ennis to Clerk of the Court in Milwaukee, dated August 20, 1979.
b. Affidavit of Bruce J. Ennis, dated August 20, 1979.
c. Marked-up version of the in camera memorandum and order.
56. In camera supplemental affidavit of John A. Griffin, dated June 20, 1979.
57. Motion of defendants Knoll, Day and Morland for expedited hearing to consider vacating or modifying the protective order and to reconsider the court's decision not to make public the memorandum and order of June 15, 1979, dated October 19, 1979.
58. Memorandum of defendants Knoll, Day and Morland in support of motion for expedited hearing to consider vacating or modifying the protective order and to reconsider the court's decision not to make public the memorandum and order of June 15, 1979, dated October 19, 1979.
59. Joint brief of appellants Knoll, Day and Morland, dated June 15, 1979.
60. Brief of appellant, the Progressive, Inc., dated June 15, 1979.
61. Joint brief of appellants Knoll, Day and Morland on consolidated appeal from preliminary injunction and from order denying motion to vacate preliminary injunction, dated July 13, 1979.

62. Supplemental brief of appellant, the Progressive, Inc., dated July 13, 1979.
63. Motion of the Progressive, Inc., for an order requiring portions of its in camera materials, briefs and appendix to be publicly filed, dated August 7, 1979.
64. Brief of appellee, the U.S. Government, dated August 7, 1979.
65. In camera joint reply brief of appellants Knoll, Day and Morland, August 31, 1979.
66. Reply brief of appellant, the Progressive, Inc., dated August 28, 1979.
67. Appendix for the appellant, The Progressive, Inc., undated.
68. Appendix of Appellants Knoll, Day and Morland.
69. Response of Defendants Knoll, Day and Morland to Motion of the United States to Vacate Preliminary Injunction, Dismiss Appeals as Moot, and Remand to District Court for Proceedings Concerning the Protection of In Camera Material dated September 24, 1979.
70. Motion For Immediate Consideration Of A Motion For Leave To File A Petition For Writ Of Mandamus And Petition For Writ Of Mandamus, dated June 22, 1979.
71. Motion For Leave To File A Typewritten Motion For Leave To File A Petition For Writ Of Mandamus And Petition For Writ Of Mandamus, dated June 22, 1979.
72. Motion For Leave To File Petition For Writ Of Mandamus And Petition For Writ Of Mandamus, dated June 22, 1979.

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APPENDIX E. DRAFT GUIDELINES FOR EQUATION OF STATE INFORMATION (U)

These draft guidelines are intended for use in international nonproliferation discussions whose objective is to further elaborate a common policy on control of government ("insider") equation of state (EOS)* information relevant to nuclear weapons.

These guidelines are intended to identify areas of EOS information which are important for development and improvement of nuclear weapons, but are not yet widely available. Most such information is likely to continue to be developed in nuclear weapons programs, or other government-sponsored military programs.

Most EOS information on weapons material is already controlled by individual nuclear weapon state (NWS) governments using what appears to be generally similar criteria. These guidelines are an attempt to arrive at common standards which can then be recommended on nonproliferation grounds to non-nuclear weapon states.

Certain EOS information is essential for design of nuclear weapons. The better the thermo-mechanical behavior of weapons materials** is understood, the better computer codes can describe implosion and explosion of fission or thermonuclear explosives.

* "EOS" as used here includes the thermodynamic and mechanical properties of materials (elements, compounds, alloys, or mixtures) at pressures above 20 Kb and temperatures above 10,000 K.

** Weapons materials include high explosives, uranium, plutonium, beryllium, and various isotopic compositions of hydrogen, lithium, and lithium hydride, as well as certain special materials specifically developed for use in nuclear weapons.

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Quantitative theoretical description of the operation of nuclear explosives using sophisticated computer codes plays a central role in design of nuclear weapons, along with hydrodynamic (non-nuclear) experiments and nuclear explosions.

These guidelines are necessarily not as precise or as specific as a classification guide. They are intended to indicate what international scientific discourse can be undertaken without detriment to either nonproliferation or other national security interests.

Each topic is labelled by its importance for proliferation of nuclear weapons.

- "BLACK" (B) - likely to make significant contributions, should be controlled according to agreed criteria.
- "GRAY" (G) - possibly can make substantial contribution, should be reviewed according to agreed criteria before release.
- "WHITE" (W) - unlikely to make substantial contribution, uncontrolled.

In cases where information that would be controlled under these guidelines is published, the appropriate public response would be to neither confirm it nor deny it.

The guidelines below first give topics concerning the capability to measure or calculate EOS information, and then topics describing controls appropriate to various categories of EOS data.

Note that, in general, theoretical and experimental EOS data are treated similarly. Topic 2.8 refers to "evaluated" EOS data, which is the form in which EOS data is nearly always actually used--an expert blend of the relatively few measured data available with theoretical data to cover the range of parameters (e.g., density and temperature) of interest in nuclear weapon design.

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EQUATION OF STATE* (EOS) TOPICS

1. CAPABILITY TO OBTAIN EOS DATA: METHODS AND HARDWARE

1.1 CAPABILITY FOR EXPERIMENTAL MEASUREMENTS OF EOS.

This includes experimental techniques, apparatus, and samples of the materials to be measured.

1.1.1 Capability for static (isotherm) measurements, e.g. diamond anvil cells

1.1.1.1 With maximum pressure $P_{\max} \leq 1\text{Mb}$ (W)

1.1.1.2 $P_{\max} > 1\text{Mb}$ (G)

1.1.2 Capability for dynamic (Hugoniot) measurements

Driven by guns (light gas, powder, electric, and others), lasers or particle beams:

1.1.2.1 Capability below threshold** (W)

1.1.2.2 Capability above threshold (G)

Driven by High Explosive (HE)

1.1.2.3 Non-converging geometry (G)

1.1.2.4 Converging geometry (B)

Driven by Nuclear Explosive

1.1.2.5 (B)

1.1.2 Targets or samples for measurements (controls based on material, amount, fabrication, or other factors)

* As used here, EOS refers to the thermodynamic and material properties of materials at pressures above 20 kb and temperatures above 10,000K (~1eV). This definition is adopted in order to exclude controls on the wide variety of low pressure and low temperature thermodynamic and material properties of matter.

** Quantitative or qualitative capability thresholds to be defined.

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- 1.1.2.1 Uncontrolled materials (W)
- 1.1.2.2 Weapon materials* (G)

1.2 CAPABILITY FOR THEORETICAL CALCULATIONS OF EOS.

This includes theoretical models, computer codes and adequate computer capability.

- 1.2.1 Computers, ancillary equipment, and general-purpose software
 - 1.2.1.1 Below threshold capability (W)
 - 1.2.1.2 Above threshold capability (G)
- 1.2.2 Theoretical EOS Models and Codes
 - 1.2.2.1 Identified as used or useful in nuclear weapon (NW) design (B)
 - 1.2.2.2 New or unpublished models or codes that are used or especially useful for NW design (but not so identified) (G)
 - 1.2.2.3 Otherwise (W)

* Here weapon materials include high explosives, uranium, plutonium, beryllium, various isotopic compositions of hydrogen, lithium, and lithium hydride, and special materials specifically developed for use in nuclear weapons.

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- 2. EOS DATA, (THEORETICAL OR EXPERIMENTAL)
 - 2.1 Already published* (W)
 - 2.2 Identified as used or useful in NW design (B)
 - 2.3 Adjusted to correlate with nuclear weapon test results (B)
 - 2.4 EOS data from controlled experimental or theoretical methods, e.g., static measurements at pressures above 1Mb, dynamic measurements using above-threshold gun, laser or particle beam drivers, or theoretical data from controlled codes (G)
 - 2.5 EOS data from dynamic measurements using HE implosion or nuclear explosions
 - 2.5.1 For weapons materials (B)
 - 2.5.2 For other materials (G)
 - 2.6 New, unexpected, theoretical or experimental EOS data, (pending review) (B)
 - 2.7 Theoretical or experimental EOS data significantly more useful for nuclear weapon design than are published results (B)
 - 2.8 Evaluated EOS data defined over a range of parameters (e.g., pressure, density, temperature) of interest for nuclear weapons
 - 2.8.1 For weapon materials (B)
 - 2.8.2 For other materials (G)
 - 2.9 Theoretical or experimental EOS data for special materials specifically developed for use in nuclear weapons (B)

* "No comment", if necessary.

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- 2.10 Theoretical or experimental EOS data not covered by the above topics
- 2.10.1 EOS data for materials (elements, compounds, alloys, or mixtures) with all components having atomic number $Z < 72$
 - 2.10.1.1 Data for pressures $P \leq 10 \text{ Mb}$ (W)
 - 2.10.1.2 $P > 10 \text{ Mb}$ (G)
 - 2.10.2 EOS data for materials whose composition includes less than 5% by weight of elements with $72 \leq Z \leq 91$, no $Z > 91$
 - 2.10.2.1 Data for pressures $P \leq 1 \text{ Mb}$ (W)
 - 2.10.2.2 $P > 1 \text{ Mb}$ (G)
 - 2.10.3 EOS data for materials whose composition includes at least 5% by weight of elements with $72 \leq Z \leq 91$, no $Z > 91$
 - 2.10.3.1 Data for pressures $P \leq 1 \text{ Mb}$ (W)
 - 2.10.3.2 $1 < P \leq 10 \text{ Mb}$ (G)
 - 2.10.3.3 $P > 10 \text{ Mb}$ (B)
 - 2.10.4 EOS data for uranium ($Z=92$) including all compounds, alloys, and mixtures
 - 2.10.4.1 Data for pressures $P \leq 1 \text{ Mbar}$ (W)
 - 2.10.4.2 $P > 1 \text{ Mb}$ (B)
 - 2.10.5 EOS data for all materials (elements, compounds, alloys, mixtures) containing $Z > 92$:
 - 2.10.5.1 Data from dynamic measurements (B)
at any pressure
 - 2.10.5.2 Data from static measurements (G)
or calculations at pressures
 $P \leq 1 \text{ Mb}$
 - 2.10.5.3 $P > 1 \text{ Mb}$ (B)