59 minutes, 59.45 seconds Pacific Daylight Time (16:59:45 GCT) on 19 September at the end of a tunnel about 2000 feet long dug horizontally into the side of a mesa at the northern edge of the Yucca Basin. The explosion took place in a layer of volcanic tuff. The coordinates of the detonation point were: latitude 37° 11′ 44.8″ N., longitude 116° 12′ 11.3″ W., elevation 6615 feet above mean sea level. The vertical distance from the detonation point to the mesa surface was 899 feet, and the slant distance to the side of the mesa was approximately 800 feet.

Grants, Fellowships, and Awards

Jet Propulsion. The Daniel and Florence Guggenheim Foundation has announced that from 18 to 20 Daniel and Florence Guggenheim fellowships will be awarded in 1958 to outstanding graduate students residing in the United States and Canada for study at the Daniel and Florence Guggenheim Jet Propulsion Centers at Princeton University and California Institute of Technology, and at the Institute of Flight Structures at Columbia University. The awards carry stipends of $1500 to $2000 each, plus tuition. Application forms are available at each of the institutions named and at the Daniel and Florence Guggenheim Foundation, 120 Broadway, New York, N.Y.

Radiation. A David Anderson–Berry Medal, together with a sum of money amounting to not less than £100, will be awarded in 1958 by the Council of the Royal Society of Edinburgh for recent work on the effects of x-rays and other forms of radiation on living tissues. Published work will be taken into consideration if it is submitted to the society with the application. In addition to direct application for the prize, proposals may be made on behalf of others. Applications and proposals must be received before 31 March by the General Secretary, Royal Society of Edinburgh, 22,24 George St., Edinburgh 2, Scotland.

Lilly Converts to Metric System

In January 1957 Eli Lilly and Company, pharmaceutical firm in Indianapolis, Ind., discontinued the avoirdupois system of weights and measures and converted all operations to the metric system. The United States and Great Britain are the only civilized countries in the world which still have not adopted the metric system for commercial use, despite the simplicity of calculation it provides.

Thomas Jefferson recognized the advantages of the metric system as long ago as 1790 and recommended that Congress introduce the system in this country; Congress failed to act. John Quincy Adams made a similar unsuccessful proposal to Congress in 1821, and it was not until 1866 that legislation was passed that made the metric system legal.

In the October 1957 issue of the *Hoosier Purchasor,* Lilly spokesmen describe the company's conversion to the metric system as follows:

"We found the 90-year-old roots of the avoirdupois system quite difficult to sever. . . . [However,] there was enough agitation among our scientific personnel to cause management to decide that it might be advantageous if the entire plant operated on only one weights and measures system instead of the five systems in existence—metric, avoirdupois, apothecary, avoirdupois and apothecary combined, and decimal avoirdupois.

"This led to the establishment of a committee with all groups concerned represented. The committee was under no pressure . . . allowing ample time to study all phases of the program thoroughly over a period of several years.

"One of the first actions of the committee was to request that a half dozen formulas in each product group, that is ampoules, tablets, liquids, capsules, etc., be revised to show both avoirdupois and metric on the manufacturing formula used in dispensing and production. . . . When our men in the dispensing group saw that instead of measuring out 1 gallon, 2 pints, 3 fluid ounces, 2 fluid drams, and 50 minims of a liquid they would merely have to measure 4920 cc. in the metric system, they were sold at once. . . .

"One problem the committee had to face was how to accomplish such a conversion program economically. We had about 2500 manufacturing formulas . . . which required revision. . . . The approximate cost of a revision . . . is about $50. Therefore, to revise all formulas to metric, specifically for that purpose alone, the cost would have been nearly $125,000. . . . Finally it was decided that all manufacturing formulas would be rewritten to show both the avoirdupois and the metric systems. Under this setup the use of the avoirdupois system would be dropped at the time of conversion to metric, but the avoirdupois figures would still show on our formulas. However, the rewriting was only to be done when the formula came up for a routine revision, such as a change in lot size, an alteration of the manufacturing process, [or] a change in assay standards. . . . This was, therefore, a very long-range program to convert our formulas to express both systems; but we could also assume that it would not cost $125,000. We established a target date of December, 1956, for the completion of this formula revision phase and were able to meet this date. . . .

"As for the purchasing department, we found it was very interesting to attempt to develop sources which would supply us in metric. . . . With only minor exceptions, our suppliers rallied to the challenge and began shipping packages in even metric packages or in standard avoirdupois packages with the metric conversion stenciled on each container. They also complied with our request to invoice in metric. We found that we were not able only to receive fine chemicals in metric, but also carloads of heavy chemicals and tank trucks of solvents, corn syrup, and acids. . . . We now estimate that greater than 90% of our chemical raw materials are coming to us in metric. . . .

"In addition to soliciting cooperation verbally through sales representatives, we prepared an "Important Progress Announcement" which was attached to each purchase order. . . . As an aid to suppliers, we prepared conversion charts for their use. We sent over 100 of these to one company alone. . . .

"Based on our successful venture, we can see no reason why other industries should not take a serious look at the many advantages of the metric system. We will be happy to help anyone toward this goal in any way that we can."

Foreign Technical Information Center

A Foreign Technical Information Center is being established within the Department of Commerce to collect, evaluate, and distribute valuable foreign scientific and technical literature for the use of American scientists and engineers. To finance prompt action on the new project, the department is requesting a special Congressional appropriation of $300,000. (In addition, the President's budget for 1959 includes $1.25 million for the department's Foreign Technical Information program.)

The new program will set up a central clearinghouse in the Office of Technical Services, headed by John C. Green. In announcing the plan, Secretary of Commerce Sinclair Weeks said:

"In recent years, government agencies and private institutions and industries have steadily increased their translation of Soviet magazines, monographs and books. At the present time, however, there is no central agency in the Government responsible for acting as a clearinghouse on all such foreign, technological, scientific and engineering information for the purpose of making it generally available to American scien-