

ATOMIC ENERGY COMMISSION

MEETING NO. 875

10:30 a.m., Wednesday, June 10, 1953

REPOSITORY NARA/College Park  
COLLECTION AEC Minute (NWS-826-92-006)  
BOX No. 6  
FOLDER Vol 11 (2 of 2)

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Present

Thomas E. Murray  
Eugene M. Zuckert

Harold D. Anamosa  
John H. Stumpf

M. W. Boyer  
Harold L. Price

Also Present

Richard W. Cook  
O. S. Smith  
James G. Beckerley  
William L. Davidson  
Brig. Gen. K. E. Fields  
Col. Vincent G. Huston  
Comdr. Elbert W. Pate, JTF-7  
Morse Salisbury  
Walter F. Colby  
George F. Trowbridge

McKay Donkin  
Comdr. James Dunford  
Edward J. Bloch  
Lyll E. Johnson  
John A. Waters  
E. R. Trapnell  
Philip Mullenbach  
Dr. Walter D. Claus  
Gordon Dunning

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1. Current Activities Reports

The General Manager and Division Directors reported on current developments at field installations and on the progress of matters under study by the staff. Questions by the Commissioners were discussed.

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1ST REVIEW DATE: <u>8/14/95</u>	DETERMINATION (CIRCLE NUMBER(S))
AUTHOR: <u>W. Christoph</u>	<input type="checkbox"/> CLASSIFICATION RETAINED
NAME: <u>W. Christoph</u>	<input type="checkbox"/> CLASSIFICATION CHANGED TO: _____
2ND REVIEW DATE: <u>9/14/95</u>	<input type="checkbox"/> CONTAINS NO DOE CLASSIFIED INFO
AUTHOR: <u>HRB Imidtt</u>	<input type="checkbox"/> COORDINATE WITH: _____
NAME: <u>HRB Imidtt</u>	<input type="checkbox"/> CLASSIFICATION CANCELLED
	<input type="checkbox"/> CLASSIFIED INFO: _____
	<input type="checkbox"/> OTHER (SPECIFY): <u>PP 351-358</u>

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ation of the precautions taken by the AEC to insure against creation of any hazards to health and safety. Mr. Zuckert stressed too the need to enlist the aid of a group of chemical and meteorological experts to assist in preparation of a "case" for presentation to the public on the local level.

Mr. Dunning cited several examples of evidence that the people in the vicinity of the Nevada Proving Ground no longer had faith in the AEC, and there was discussion of the bases for this feeling and of the importance of choosing, for an objective presentation of the AEC "case", men who would enjoy the full confidence of the public.

Mr. Boyer said that upon receipt from the Manager, SFOO, of a report on fall-out during UPSHOT-KNOTHOLE, representatives of the Divisions of Military Application and Biology and Medicine and the Special Assistant to the General Manager would prepare recommendations for a public education program for consideration by the Commission.

11. Effects of IVY Shots on Weather (See also Minutes of Meeting 869)

General Fields said that because of numerous charges which had appeared in the press recently that the tests just concluded at the Nevada Proving Ground were responsible for the unusual weather conditions in parts of the United States, and because of recent inquiries by the Commissioners concerning the effects of the IVY shots on the weather in the Pacific, he had asked Commander Pate, Weather Officer for JTF-7, to discuss with the Commission his study of weather conditions at Eniwetok during the IVY series.

Commander Pate said that he and Professor Palmer of UCLA had made a study of the effects of MIKE and KING shots on weather conditions at Eniwetok because the reported conditions subsequent to the shot did not agree with predictions. Observations prior to MIKE indicated 2-3% cloud conditions, while subsequent to the blast heavy cloud was reported as high as 30-40,000 feet. He described the conditions under which it was possible for an air circulation to occur and create the disturbances observed at Eniwetok, and said it was concluded that the MIKE shot had set up these conditions. Similar weather disturbances occurred after the KING shot, resulting in weather changes

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for a few hours which produced rain squalls over the ocean, small storms, but no winds of hurricane force.

Commander Pate said that air circulations such as those occurring after the KING and MIKE shots had also been observed at certain of the shots at past continental tests, but with two important differences: the circulation had lasted for only a few minutes, and the shots over the desert involved insufficient moisture to create storm conditions. No material in the bomb debris could cause rain or a tornado. It was possible for a tornado to be "triggered" by external conditions, but it needed moisture as a fuel to become self-sustaining.

In response to questions by Mr. Zuckert, Commander Pate said that the unusually high number of tornadoes this spring could be attributed to an unusual pressure condition forcing moist Gulf air across the U. S. at high level until it came in contact with a cold air mass coming down from Canada, and that by no mechanism known was it possible for the tornadoes to have been caused by the Nevada tests.

The Commissioners discussed with Commander Pate the views of various meteorological experts throughout the country concerning the effect of the Nevada tests on weather conditions, and said they considered it necessary to reply immediately to the charges that the Nevada tests were responsible for tornadoes. Mr. Zuckert said that it appeared that the Joint Committee on Atomic Energy might want to hold hearings on this problem, and suggested that the Office of the General Counsel, together with other interested divisions, prepare a case which could be presented to the Joint Committee. Such a case should include testimony by leading meteorologists in the country such as representatives of the U.S. Weather Bureau, professors of meteorology at leading colleges and universities, professional "rainmakers", and representatives of the Department of Defense, such as the Tinker Air Force Base group. The General Manager said that a study such as that suggested by Mr. Zuckert would be undertaken.

Harold D. Anamosa  
Acting Secretary

Approved by the Commission: July 10, 1953