

SECRET/NODIS

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MEMORANDUM FOR THE FILES

The following is a synopsis of the judgements of the outside panel of experts convened to consider the suspected nuclear event in the South Atlantic region. The panel, composed of Dr. Harold M. Agnew, Dr. Richard L. Garwin, and Dr. Stephen Lukasik, were fully briefed on need to assess the particular signals in question.

They concluded that:

- (1) The signals were consistent with detection of a nuclear explosion in the atmosphere.
- (2) No other sensors should clearly have "seen" this event.
- (3) Because the event took place at night, near new moon, inquiries should be made of ship and aircraft crews operating in the area.
- (4) Other data should be sought from:
 - (a) radioactive debris from aircraft in the area;
 - (b) analysis of infrasound and microbarographic data from a station in northern Sweden;
 - (c) additional air sampling;
 - (d) information on out of area air/naval activity by third countries;
 - (e) evidence of test preparations from photography or the monitoring of South African naval activity.

The panel also noted that:

- (1) The Vela sensor outputs were less "self-consistent" than usual;
- (2) Night-time testing was unusual;
- (3) The 1.5 to 2 KT yield was probably lower than the design yield.

Drafted: INR/STA:RECowey;jrs

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