Q. 7

(a) The complete program of research and experimentation proposed including description of equipment and theory of operation

The SCANTER 1002 radar is a sensor in Terma A/S' T.react CIP system and provides data for perimeter surveillance of an area of interest. The main functionalities of the T.react CIP system are:

- Detect, track and classify any movement inside all the assigned areas of interest, which can be inside or outside the actual protected area.
- Provide the operator with the ability to properly identify the type of movement.
- Present a real-time coherent and total picture of activity.
- Ensure recording of all operator activities and video for fast retrieval.

The program is established and is being performed in cooperation with Lockheed Martin Corporation acting through its Mission Systems and Training (MST) division with an office at 1801 State Route 17C, Owego, New York 13827-3998. The program is being credited against Lockheed Martin's offset obligations in Denmark.

(b) The specific objectives sought to be accomplished

The specific objective of this test and demo site installation is to demonstrate and test the system in live operation in an operational environment thereby gaining valuable information about

- the SCANTER 1002 sensor system's behavioral and operational performance in a real time environment;
- the system's ability to detect and track moving objects in a real live environment and under all types of weather conditions;
- get operational user feedback on the system's suitability for use;
- get customer feedback from carefully selected demonstrations; and
- benchmark the SCANTER 1002 sensor against other sensors in the said environment.

(c) How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion or utilization of the radio art, or is along line not already investigated

The program is designed to achieve quality perimeter surveillance to a degree not heretofore possible. Please refer to (a) and (b) above.

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The three year experimental test period requested is considered necessary for the parties to the experiment to observe a seasonal test cycle covering all weather conditions. A period this long is also deemed necessary in order to set up and perform benchmark tests against other sensors thereby getting a solid understanding of the radar system's capability and performance. The benchmark test cycle will also require testing the radar on several locations within the testing area. The result from the analysis is continuously implemented in the system software functionality and verified. This test and implementation pattern will be performed on a rolling basis during the entire period with the objective of reaching an error free and stable product, suitable for the purpose of detecting objects in the area of concern. The experimental test period will also entail an intensive user operation of the system pursuant to a Binder Agreement between TERMA and Lockheed Martin.

The radar unit, which is the sole radio emitting aspect of the experiment, has received European Union Type Acceptance:

From a commercial standpoint, a three year period is considered required in order for the product to get a foothold in the U.S. market.