I wondered, General Trudeau, if we could have someone explain just what is meant by a study and evaluation of combat surveillance

General TRUDEAU. Yes, we can. It is one of the most important fields in which the Army is engaged, and this is the effort to find out what is behind the enemy's lines other than by putting in somebody on foot behind there to find out.

With these very expensive weapons systems and the tendency for dispersion on the battlefield and rapid movement, we have got to find out where these targets are and quickly bring this fire to bear on them if we are going to be successful.

And with the cost of modern weapons we can't afford to be firing at places where there isn't anybody, so I would like to have the Signal Colonel Johnston. Yes, sir.

Mr. Sandweg. I think if we could limit ourselves, Colonel Johnston, to just what type of work they were doing, it would give an explanation of this. Colonel Johnston. All right.

Mr. Goldwag is here from the Combat Surveillance Agency and can give you that information, also Mr. Greenspan—we are talking of two contracts—who can give you information on the particular devices and developments stemming from these contracts. Perhaps Mr. Goldwag would care to start.

Mr. Goldwag. The efforts of the Cornell Combat Surveillance project, Contract No. 74980.

Mr. Norblad. May I ask at the outset, is the word "Cornell' to be associated with the university, or has it nothing to do with it?

Mr. Goldwag. Cornell Aeronautical Laboratory is a not-for-profit subsidiary of Cornell University. Mr. Norblad. Thank you.

Mr. Goldwag. As General Trudeau indicated, the combat surveillance and target acquisition problem is a most critical one for the

Back in early 1957, the Chief of Staff of the Army directed an acceleration of the Army's efforts in combat surveillance and target acquisition and shortly after that, the U.S. Army Combat Surveillance Agency was activated to manage the Chief Signal Offices programs for the development of a combat surveillance capability for the field army.

In July 1957, the Chief of Research and Development, General Gavin at that time, stated that the activities of the Combat Surveillance Agency must be expedited without delay and indicated that contractual support to assist the Agency in its management rule might be desirable.

As an outgrowth of this, action was taken to obtain contractual support, and after multiple source negotiations with a variety of companies and detailed technical evaluation of bids and so forth, a contract was awarded to Cornell Aeronautical Laboratory.

They have been concerned with the assessment of the state of the art and the various technologies applicable in the field of combat surveillance. This means radar, photography, infrared, seismics and acoustics, aerial reconnaissance systems, both manned and unmanned,