

INTRODUCTION TO SECOND DAY OF SYMPOSIUM

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I would like to say a few words on the work that is carried out by the Functional Textiles Section, Textiles Branch, of Materials Laboratory.

Our work is not covered entirely by contracts carried out by the people to whom you are listening . A number of projects are carried out in the laboratories here at WADC. Some of these are for the purpose of gathering data and others include the investigation of material failures and/or deficiencies. In addition, we carry out the ever continuing job of preparing and revising specifications on parachute materials.

One example of internal research data development is the continuation of high temperature studies of nylon and dacron. Both yarn and fabric have been evaluated up to 425°F. In addition to exposure in air, yarns have been exposed in pure oxygen and pure nitrogen. Results indicated the oxidation of nylon in pure oxygen, less oxidation in air and little, if any, in nitrogen. Each degree of oxidation is accompanied by an increasing loss in strength of the nylon, and with very little strength loss in dacron.

The studies of nylon and dacron cloth indicated that the heat resistance of dacron is about the same as that shown by the data obtained at the Fabric Research Laboratories and discussed by Mr. Coplan.