

NRC Aerospace

NRC Aerospace and Efforts to Promote Technology Development Partnerships

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NRC - the Government of Canada's premier R&D organization

- Over 4,000 employees and 1,500 visiting workers
- Labs and facilities across the country
- Support for industrial innovation
- Partners with Canadian industry to take research from the lab to the marketplace
- 2012-2013 budget: \$797M





NRC – Addressing major issues for Canada





NRC Aerospace - Canada's national aerospace laboratory

 In very broad terms, we conduct research that affects the safety, weight and cost of aircraft and their effect on the environment





NRC Aerospace Vision, Mission and Value Proposition

- Vision NRC is recognized as the premier organization in the development of technologies and manufacturing processes for aerospace.
- MissionTo advance and apply aerospace technologies for
the benefit of Canadians.

ValueNRC Aerospace will provide facilities and expertisePropositionto support industry and government agencies that
will result in fresh ideas, new technologies and
development and demonstration of products and
processes targeting the strategic and market
challenges faced by the Canadian aerospace sector.



Role in the Canadian aerospace sector

- Providing large-scale infrastructure and technology foresight (strategic R&D and technical services)
- Moving technologies past the "valley of death" (from TRL 4 to 7) / de-risking technologies
- Fostering consortia for large-scale technology demonstration projects
- Making connections between Canada's aerospace SMEs with upper tier suppliers and OEMs



NRC Aerospace and the Canadian innovation system





NRC Aerospace: five areas of expertise

- Aerodynamics
- Flight research
- Gas turbine engines
- Aerospace manufacturing
- Structures and materials performance



Research focussed on six market segments

- Aeronautical product development technologies
- Aerospace defence systems
- Civil unmanned aircraft systems
- Future transport aircraft
- Human factors associated with working and travelling on aircraft
- Reduction of aviation icing risks













How NRC Aerospace is fostering technology demonstrators

- Technology demonstrator plans included in the business plans for each NRC Aerospace market segment
- Typically, these demonstrations will take place in the mid-TRL levels 4-6, although consortia may be formed for lower TRL technologies
- Of particular interest to the MRO sector is NRC Aerospace focus on the aerospace defense systems market segment





Questions?

Thank-you



