



NRC Aerospace

NRC Aerospace and Efforts to Promote Technology Development Partnerships

Jerzy Komorowski, General Manager, NRC Aerospace

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National Research
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Canada

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



Pressures on natural resources



Climate change and the environment



Growing health care pressures



Increasingly complex security challenges



Changing sense of communities



Economic growth and sustainability



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.
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- Mission** To advance and apply aerospace technologies for the benefit of Canadians.
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- Value Proposition** NRC Aerospace will provide facilities and expertise to 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.

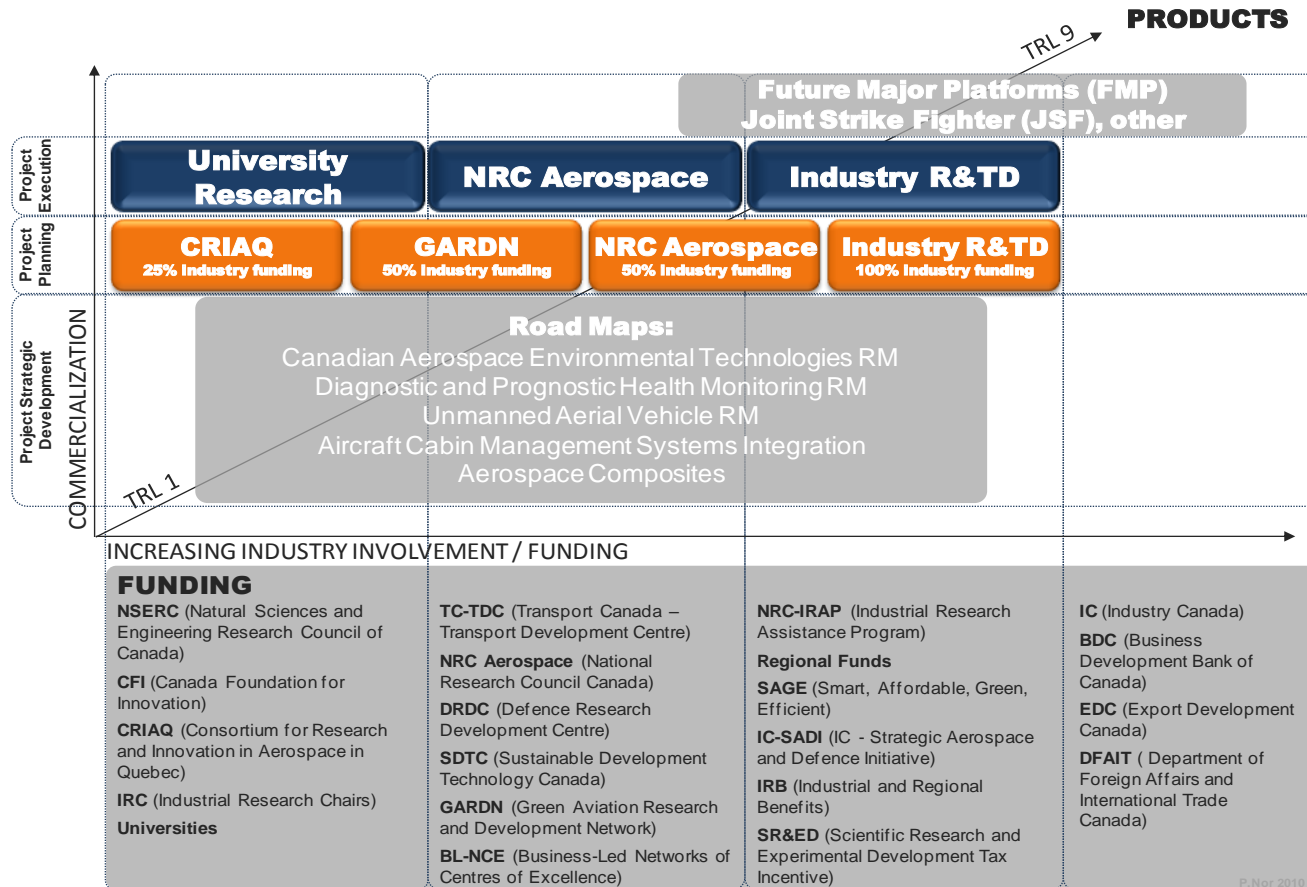


Role in the Canadian aerospace sector

- 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**

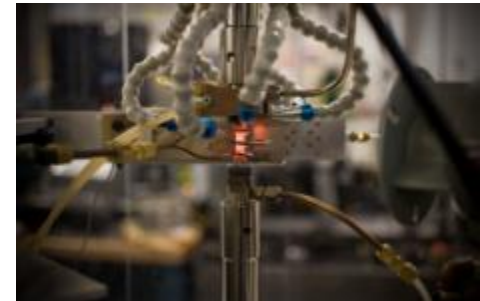


NRC Aerospace and the Canadian innovation system



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



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