

## **NTRD Program Disclaimers**

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**Texas Commission on Environmental Quality  
New Technology Research & Development (NTRD) Program  
Monthly Project Status Report**

Contract Number: 582 – 5 – 65591 – 0008

Grantee: Rotec Design, Ltd

Date Submitted: May 9, 2006

Report for the Monthly period: Ending April 30, 2006

Starting Date: Jun. 22, 2005

(Notice to Proceed date)

Ending Date: Aug. 31, 2006

(Per Amendment #1)

**Section I. Accomplishments** *(Please provide a bulleted list of project accomplishments as well as a description of their importance to the project.)*

1. Continued design analysis and CFD modeling to optimize final design parameters, general configuration, and unit specification estimates for the FreedomAir system.
2. "Testing Protocol – Scope of Work" with US EPA and RTI (Research Triangle Institute) Discussions with Ms. J. Ellion (RTI) and D. Johnson (EPA) re: testing changes proposed by RTI – not acceptable by EPA without further discussions.
3. Follow-up conference call rescheduled (TBD) per EPA do to personnel issues.
4. Notice of Texas ETF Award received from Governor Perry's office.
5. Continued discussion with Orbital re: Design Review proposal.
6. Contacted Australian government contacts (State / Federal) to potentially resolve problems with Orbital proposal.
7. Initiated contacts with Queensland Univ. / Univ. Texas / other sources to generate contacts for candidates to provide required "automotive engineering" expertise to add to Rotec staff.

**Indicate which part of the Grant Activities as defined in the grant agreement, the above accomplishments are related to:**

- Task 3: Construction of FreedomAir system. Initial design of components prior to prototype manufacturing.
- Meet TCEQ / NTRD general guidelines vis-à-vis the commercialization of the emission reduction system as soon as possible and pursue additional economic benefits to the State of Texas.

**Section II: Problems/Solutions**

<p><b>Problem(s) Identified</b></p> <p><i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i></p>	<ul style="list-style-type: none"> <li>• State of Texas Emerging Technology Fund (ETF) Award approved. Final Grant Contract provisions (Re: Rotec business relocation, component manufacturing, and system assembly resourcing to Texas) to be finalized. Task # 3 delay = TBD</li> <li>• Revised project timetable (Task # 3 delay) under review.</li> </ul>
<p><b>Proposed Solution(s)</b></p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<ul style="list-style-type: none"> <li>• Meetings with Governor Perry’s Office and RCIC staff requested to be conducted as soon as possible to finalize Grant parameters. Schedule = TBD.</li> <li>• Resourcing of “automotive” engineering subcontractor and components suppliers under review.</li> </ul>
<p><b>Action(s) Conducted and Results</b></p> <p><i>(Please describe the action(s) taken to resolve the problem(s) and its effect)</i></p>	<ul style="list-style-type: none"> <li>• Received notice of ETF Award and proposed meeting with Governor Perry’s Office / RCIC staff -- ASAP.</li> <li>• Revised project timetable under review to be completed as part of Grant Contract Amendment request.</li> </ul>

**Section III. Goals and Issues for Succeeding Period:** *(Please provide a brief description of the goal(s) you hope to realize in the coming period and identify any notable challenges that can be foreseen)*

1. Continue engine-modeling analysis to refine and optimize design parameters, continue system layout and design activities.
2. Review and finalize changes to testing methodology, proposed by RTI, to allow for “dynamometer” aging vs. “field run-in” aging in order to reduce testing costs and expedite final testing data results.
3. Schedule / conduct meetings with ETF stakeholders to finalize relocation and resourcing requirements.
4. Continue discussions with Orbital re: engineering support. To the extent possible finalize initial quotation / costs for project support.
5. Initiate RFQs for “automotive” engineering review / design input from (USA / Texas) suppliers & manufacturers.
6. Continue discussions with potential Texas component / prototype suppliers to confirm continued interest in the project and obtain detailed requirements to develop “RFQ’ packages.
7. Finalize revised “timetable” incorporating Orbital and ETF anticipated delays and submit to TCEQ for Contract Amendment.

  
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Date: May 9, 2006

*Authorized Project Representative's Signature*

**NOTE:** *Please attach any additional information that you feel should be a part of your report or that may be required to meet the deliverable requirements for tasks completed during this reporting period.*