



Drone Research and Development

Our Mission

RTI's mission is to improve the human condition by turning knowledge into practice. We help our clients integrate drone technologies and solutions into their current business processes for meaningful human and business impact.

What We Do

RTI International is exploring the capabilities of the latest commercial unmanned aerial systems (UASs), seeking ways to use UASs for research and projects that improve the human condition. In Federal Aviation Administration (FAA)-approved testing centers in North Carolina, we are developing solutions that align with our core research programs and contribute to research and technical assistance. Our testing efforts in Guatemala, Ireland, Italy, and Ecuador help us deploy these innovations internationally.

RTI is committed to staying at the forefront of UAS technologies, having already addressed solutions to many of the difficult technical challenges of integrating UASs (e.g., regulations, data management, and operating conditions). By combining RTI's broad expertise with specific experience in UAS-related research, we are well positioned to navigate clients through this relatively new area of study.

Application Development

We engage RTI and university scientists in the development of drone-based solutions that reflect the state of the science:

- Client-tailored solutions to support organizational needs
- Data management solutions to manage information collection
- Data analysis for actionable intelligence
- Sensor development for integration onto unmanned aerial vehicles (UAVs)





Our Experience

RTI started researching drones in 2012 as social and economic phenomena, and began using them in 2014 to develop technical solutions. We now want to share the knowledge we have gained with our clients.

More Information

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Research and Development (R&D) Resources

We have the resources and processes necessary to test solutions safely, legally, and ethically:

- Proof-of-concept testing
 - Visual-line-of-sight testing on-site at our headquarters in Research Triangle Park and across North Carolina
 - Fully autonomous beyond-visual-line-of-sight testing at international test sites
 - FAA Part 107 waiver and Section 333 exemption
- Training for client pilots on regulation, safety, and data collection protocols
- Experienced RTI pilots for missions

Business Insights

Streamlining the path to market for solutions by assessing markets, engaging partners, and navigating barriers:

- Competitive and market intelligence
- Technology scouting and landscaping
- UAV regulations
- Policy research



Sensor Development



Site Mapping and Autonomous Object Identification



Survey Sampling

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world. For more information, visit www.rti.org.

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