

A Game of Drones:

Using Drones and Thermal Imaging Technology to
Modernise and De-Risk Condition Surveys

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Agenda

- Overview of Condition Surveys
- Current Challenges in Asbestos Condition Surveys
- Introduction to Drone Technology
- Introduction to Thermal Imaging Technology
- Benefits Specific to Asbestos Professionals
- Future Trends and Developments

Overview of Condition Surveys

Definition: "Condition surveys are systematic inspections to assess the state of a structure or material."

Importance: "Critical for ensuring safety and compliance, especially in asbestos management."

Traditional Methods: "Manual inspections, visual assessments, and physical sampling."



Current Challenges in Condition Surveys

- **Health and Safety Risks**
 - Exposure risks to asbestos fibers
 - Physical dangers in unstable environments
- **Access Issues**
 - Difficult-to-reach areas (e.g., roofs, confined spaces)
 - Structural concerns limiting access
- **Accuracy and Documentation**
 - Potential for human error in assessments
 - Challenges in comprehensive documentation and reporting





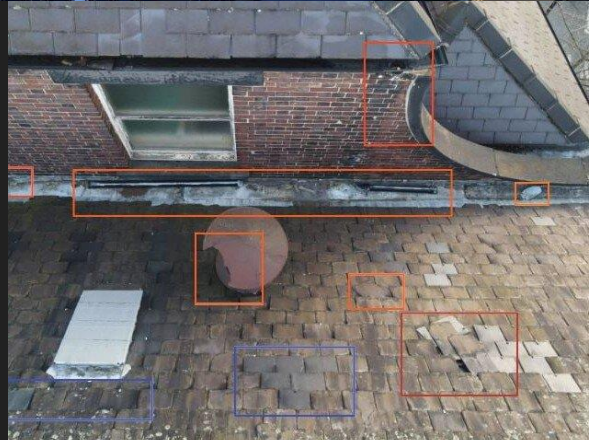
Introduction to Drone Technology

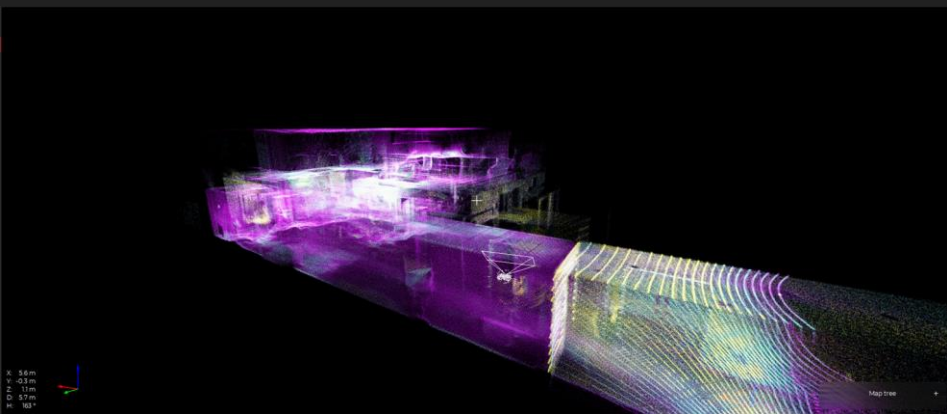


Introduction to Drone Technology

- How Drones Work
- Types of Drones
 - Multirotors: Versatile, easy to maneuver, suitable for detailed inspections.
 - Fixed-wing: Longer flight times, greater coverage, ideal for large areas.







Benefits of Drones

- Enhanced safety by reducing the need for manual inspections in hazardous areas
- Ability to access hard-to-reach areas
- Time efficiency and cost savings



Introduction to Thermal Imaging Technology



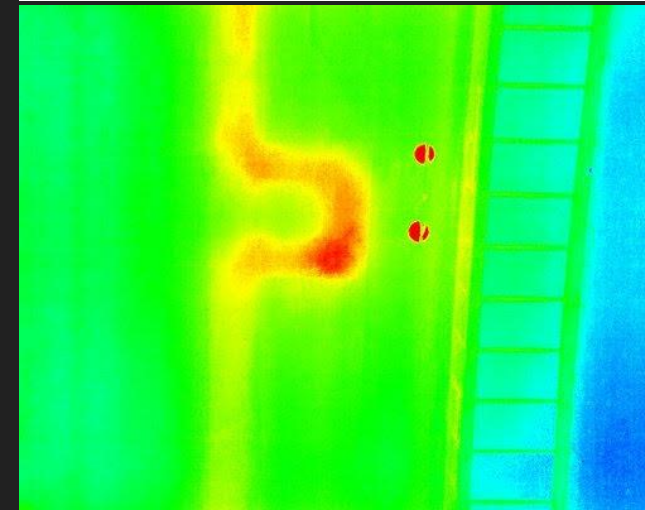
Types of Thermal Cameras

- Handheld: Ideal for close-up inspections
- Drone-mounted: Excellent for aerial surveys and large areas



Benefits of Thermal Imaging

- Detecting temperature anomalies indicating issues like moisture or insulation defects
- Non-invasive and quick assessments
- Ability to see what the naked eye cannot



Benefits Specific to Asbestos Professionals



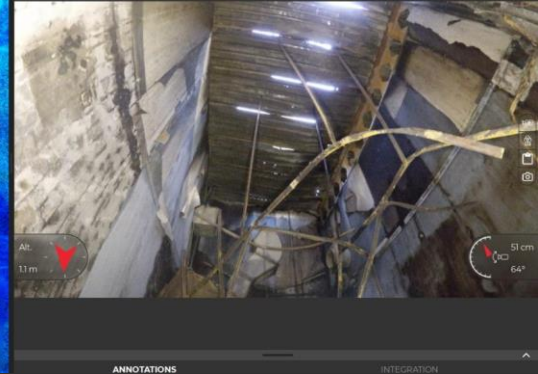
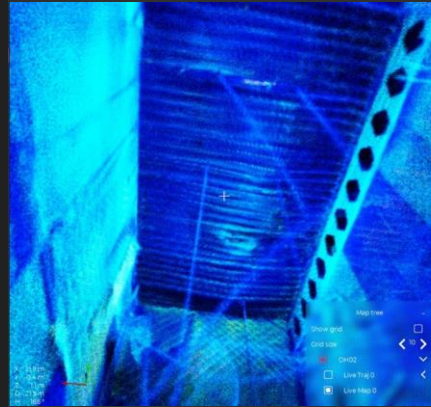
Safety Improvements

Reduced risk of asbestos
exposure and physical accidents



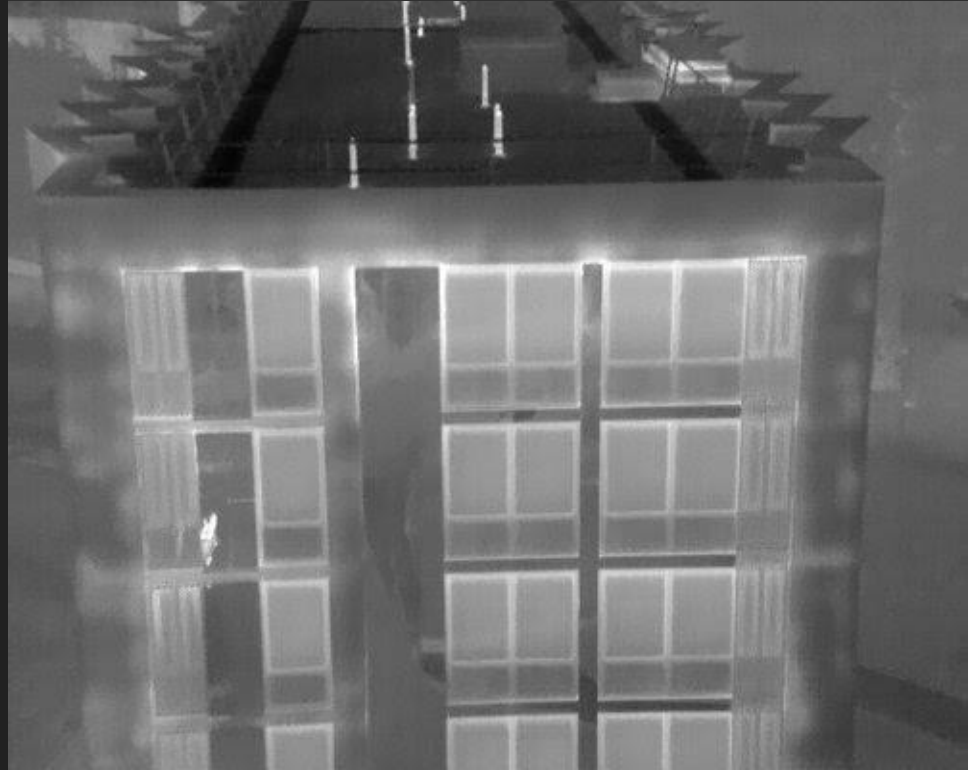
Increased Accuracy and Reliability

- More precise data collection with drones and thermal imaging
- Comprehensive visual and thermal documentation



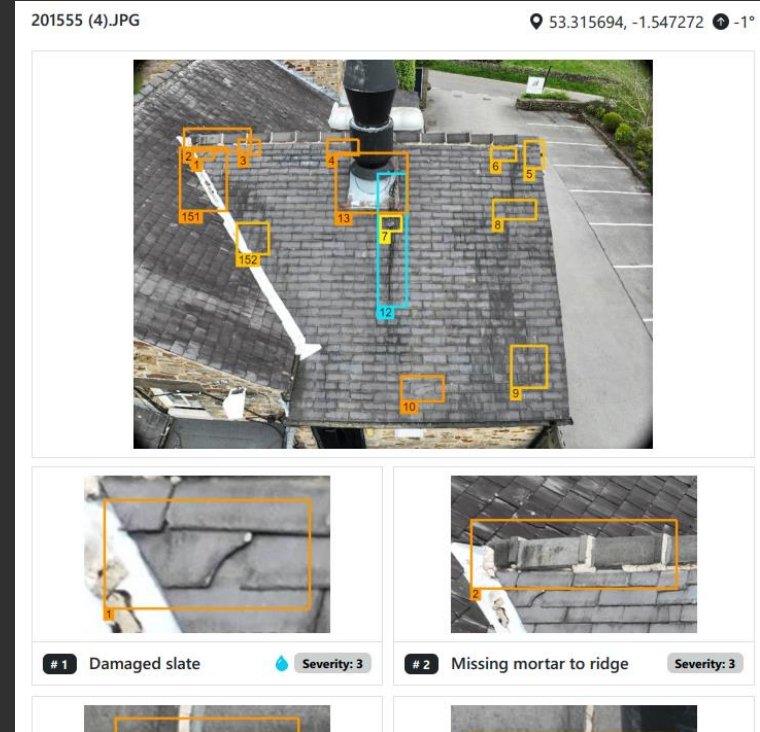
Efficiency and Cost-effectiveness

- Faster surveys with less manual labor
- Potential cost savings from reduced time on-site



Improved Documentation

- High-quality visual records
- Enhanced data for reporting and compliance



Future Trends and Developments

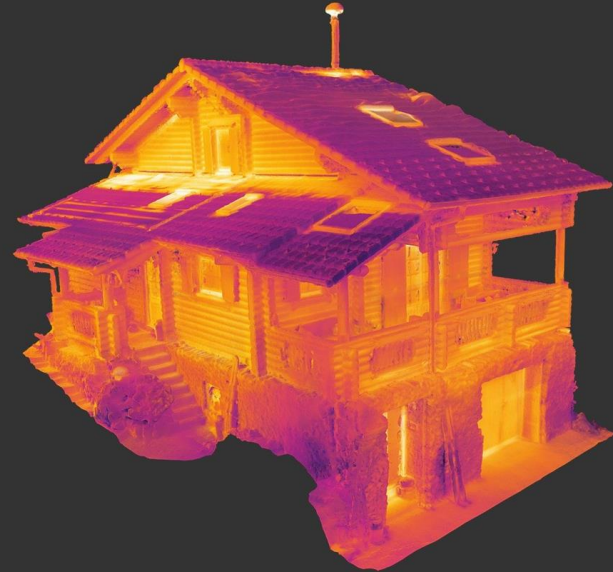
Advancements in Drone Technology

- AI and machine learning integration
- Improved battery life and flight time
- More sophisticated sensors



Advancements in Thermal Imaging

- Higher resolution cameras
- Better data processing software
- Integration with other sensor data (e.g., LIDAR)



Regulatory Considerations

- Overview of current drone regulations
- Future regulatory trends affecting drone and thermal imaging use



Conclusion