

# FOURTEEN POINTS TO LIGHTNING SAFETY

by Richard Kithil, Founder & CEO  
National Lightning Safety Institute (NLSI)  
[www.lightningsafety.com](http://www.lightningsafety.com)

- 1.0 This Paper summarizes Lightning Safety as understood by the author summarizing 18 years experience in lightning hazard mitigation. Several fundamental statements apply:
  - 1.1 Absolute lightning safety is impossible.
  - 1.2 Lightning has its own agenda. Sometimes it ignores science maxims.
  - 1.3 Codes and Standards are useful minimum guidelines for reducing consequential effects.
  
- 2.0 Risk management of the lightning hazard requires:
  - 2.1 People Safety
    - 2.1.1 Early Detection
    - 2.1.2 Notification
    - 2.1.3 Safe Shelter
    - 2.1.4 Re-Evaluate Threat
    - 2.1.5 Resume Activities
    - 2.1.6 Policies/Procedures
    - 2.1.7 Education/Training

## 2.2 Safety for Facilities and Structures

2.2.1 Air Terminals

2.2.2 Bonding

2.2.3 Shielding

2.2.4 Grounding/Earthing

2.2.5 Surge Protection

2.2.6 Maintenance

2.2.7 Inspection/Testing

3.0 Conclusion Application of the above fourteen points to achieve lightning safety is recommended. Site specificity will necessitate more or less attention to each of these topics. Example: a radio tower is an air terminal – no more are required. Example: Concrete-encased electrodes far exceed the merits of ground rods – usually. Example: Hearing thunder is a first class lightning detector.

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Author contact; [rkithil@lightningsafety.com](mailto:rkithil@lightningsafety.com)