**EXEL FRANGIBLE WEATHER MASTS**

**ICAO’S FRANGIBILITY RULING**

AERODROME DESIGN MANUAL PART 6, Frangibility – First Edition, 2006 states that: ...

... certain airport equipment and installations, because of their function, must be located in an operational area. All such equipment and installations as well as their supports should be of minimum mass and frangible in order to ensure that impact does not result in loss of control of the aircraft. Among these equipment are for example:

- Wind direction indicators
- Anemometers
- Ceilometers
- Transmissometers

Support structures for wind direction indicators, transmissometers and forward-scatter meters should be tested for frangibility in accordance with procedures for approach lighting towers.

**EXEL WIND CONE MASTS**

Exel wind cones are available in two configurations:

- Externally illuminated wind cone
- Internally illuminated wind cone

The wind cone can be full size Ø90 x 360 cm or heliport size Ø63 x 250 cm.
Exel masts are full scale impact tested according to the Aerodrome Design Manual Part 6, chapter 5 and FAA AC 150/5345-45C, section 4

- Exel lattice masts provide an excellent base for installation of various weather monitoring instruments. The firm but lightweight structure is available in a wide range of heights to cover practically any type of installation and ground condition.
- The standard colouring scheme is orange/white in seven sections, as specified in Annex 14. Other colouring schemes are available.
- The most typical installation interface for the weather instruments is a spigot at the top of the mast. Other interfaces are available upon request.
- The mast is supplied with tilting from the base as standard. For taller masts an option of centre hinge is available.

**BUILT-IN FRANGIBILITY:**

- Built-in frangibility—no break-away points needed
- Rigid lattice structure of glass fibre material
- Transparent to electromagnetic signals
- Easy installation
- Maintenance free

- Bottom hinged mast is best suited for airports having the utility of an access platform. Servicing of the instruments can be done from the basket of the platform without lowering the mast down.
- Centre hinged mast can be tilted down by one service person for easy maintenance.