

**AIRPORTS AUTHORITY OF INDIA  
O/o MEMBER(PLANNING)**

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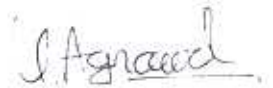
**TECHNICAL INSTRUCTION NO. 3**

Sub:- **Lightning Protection for GLF and other E&M Installations.**

Recently there was an incident at one of the Airports, where both the circuits of runway edge lights became unserviceable due to lightning. To avoid recurrence of such incidents in future, following precautionary measures shall be taken urgently:-

- i) Advanced lightning protection system shall be provided especially for the CCR / Power House Building in place of conventional lightning protection system.
- ii) In the Electrical panels from where power is drawn to individual CCRs, surge protection shall be provided.
- iii) The current rating / time capability and threshold voltage of the lightning arresters provided at the output circuits of the CCRs shall be suitably selected in consultation with the manufacturers to suit the site conditions. The existing lightning arresters of CCRs shall be replaced, should there be any deviation from the selected ratings.
- iv) The soundness of the lightning arresters shall be checked as part of pre-monsoon checks every year. If found defective, same shall be replaced.
- v) Earth resistance of various earth pits shall be measured and corrective action taken wherever required. Earth continuity of all the GLF light fittings shall also be checked before monsoon.
- vi) The leads of lightning arresters at the output circuit of CCRs shall be separated and provided with bakelite sleeves so that the leads are not short-circuited during lightning, to prevent entry of lightning induced surges to the CCRs.

All concerned are advised to implement these measures to ensure trouble free operation of the ground lighting facilities and other E&M installations.



( V. P. AGRAWAL )  
MEMBER(PLANNING)

**Distribution: As per list enclosed.**

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