Ministry of Civil Aviation
Rajiv Gandhi Bhawan, New Delhi-110003

GUIDELINES ON ALLOWABLE PENETRATION OF OLS IN AERONAUTICAL STUDY REPORTS

An Expert Committee was constituted in MoCA to examine the reports of the Aeronautical Study and submit their recommendations to facilitate decision on the Aeronautical Study reports by the Appellate Committee.

The Expert Committee in their meeting held on 9th February, 2015 desired that there should be guidelines by the Competent Authority to accept the percentage of penetration of the AGA surfaces indicated in the Aeronautical Study reports. Earlier the Appellate Committee in its meeting of 24th September, 2013 had also taken a decision with regard to processing of the cases and minuted as follows:

"Permitting construction of a large numbers buildings penetrating AGA surfaces through Aeronautical Studies may lead to a cluster of buildings. The Committee is of the opinion that extent of penetration of AGA surfaces may be restricted to ensure certain uniformity and symmetry in permitting such penetration in the overall interest of safety of operations."

Subsequent to the above meeting of Expert Committee another meeting of the Expert Committee was held in which members of the Appellate Committee were also present wherein a consensus view was taken that the increased height penetrating OLS even though permitted from Aeronautical Study needs to be gradual and uniform as the distance of the object from the Airport Runway End increases.

The Airports Authority of India has conducted a study to check the deterioration in performance of the NAV AIDS particularly at Mumbai Airport due to terrain in its close proximity and also due obstacles penetrating the OLS of that airport. The study report reflects that:-

> *"1) AAI is finding it difficult to meet the standard siting criteria for installation of CNS facilities due to existence of several hills very near to airport and the airport being in the midst of the city.*
>
> *2) The performance of navigational aids is also being affected, for example:*
>
> *a) ILS runway 09 coverage is restricted at lower levels.*
> *b) ILS Glidepath 14 is not meeting coverage requirement at lower levels.*
> *c) DVOR, Mumbai abrupt change of Radial observed between 110 Deg. to 150 Deg."*

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The deficiency in the coverage as reflected in the report has been attributed to terrain profile and obstacles around the airport where the terrain profile is of permanent nature.

The above study report of AAI has suggested following actions:

"1) With the existing obstacles and terrain profile, situation in and around Mumbai airport has already become difficult any further deterioration in obstacle profile in and around the airport is likely to aggravate the situation. It is therefore essential that obstacle profile in and around airport is maintained so that further deterioration in performance of Navaids facilities is avoided.

2) NOC cases for new constructions in and around Mumbai airport need to be examined carefully and no relaxation should be given for height clearance.

The Appellate Committee in its meeting on 26th March, 2015 considered the above views of the Expert Committee, Airports Authority of India 'study report' with regard to performance of Nav-aids at Mumbai Airport, the observations made in Aeronautical Study report regarding degraded operational performance of aircraft and adopted the following guidelines for restricting penetration above OLSs by objects which are granted higher heights through Aeronautical Study as follows:

1) In IHS higher heights penetrating OLS to be restricted in the slope of 1.27% from end of the Transitional surface upto the maximum height of 90 m above Aerodrome Elevation
2) In continuation thereto in the conical surface including outer conical surface the heights penetrating OLS to be restricted in the slope of 4.11% from the end of the IHS upto the maximum height of 300 m above Aerodrome Elevation

The above guidelines shall apply to all cases except for structures needed for specific operational aviation requirement at all airports and shall be included in the guidelines for Aeronautical Study which was already issued with regard to the decisions taken in the Appellate Committee meeting of 11th July, 2014.

The Expert Committee may finalise the Aeronautical Study reports accordingly as per the guidelines at (1) and (2) above.

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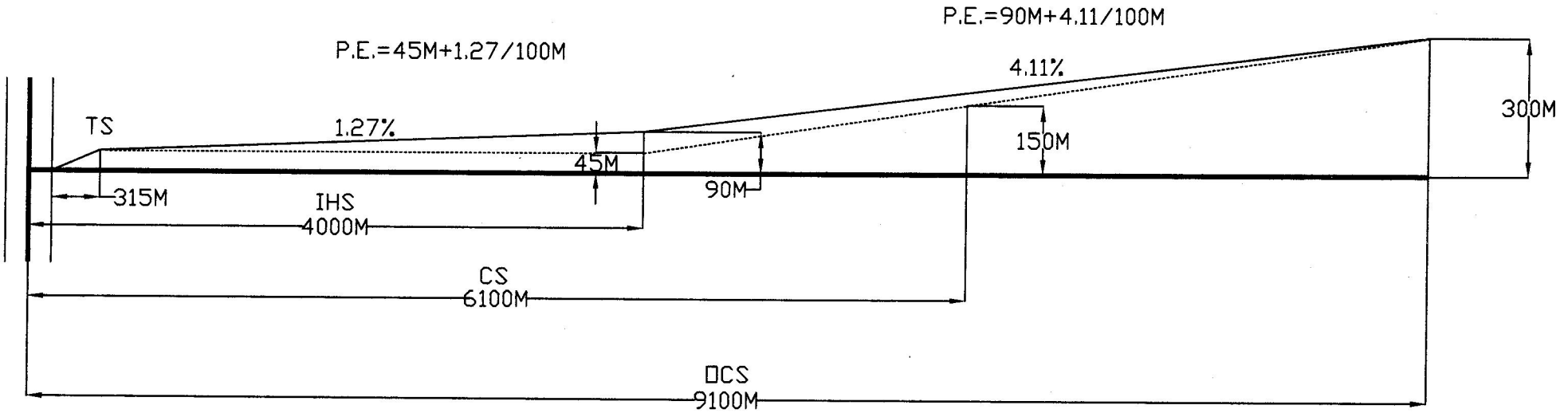
CHAIRMAN, APPELLATE COMMITTEE

Place: New Delhi
Date: 26th March, 2015


P.E.=45M+1.27/100M
P.E.=90M+4.11/100M
4.11%
TS
1.27%
300M
150M
45M
90M
315M
IHS
4000M
CS
6100M
DCS
9100M