

Minutes of the Meeting of No Objection Certificate (NOC) Appellate Committee held on 13/08/2010 in Ministry of Civil Aviation, Rajiv Gandhi Bhawan, New Delhi.

The meeting of the Appellate Committee set up by the Government to consider appeals made by different applicants with regard to the height allocated to them for their constructions vis-a-vis the height sought by them was held under the Chairmanship of Joint Secretary, Ministry of Civil Aviation wherein the following Members of the Appellate Committee were also present:

1. Sh. A.K. Misra, former Member (PIng.), AAI	-	Outside Expert
2. Sh. K. Gohain, former DGCA	-	Outside Expert
3. Sh. Alok Shekhar		Director, M/o Civil Aviation
4. Sh. Jyoti Prasad,	-	ED (ATM), AAI

The Committee was assisted by Sh. V.K. Dutta, GM(ATM) & also In-charge NOC Cell of AAI.

There were total no. of 41 cases submitted by AAI for consideration of the Committee, out of which 03 were absent (Case No MUM/09/393, MUM/297-K and NR/2010/59).

Each of the applicants present were given a hearing by the Committee on their respective case and the following decisions are made with respect to the individual cases as given below:

- Case Sl. No. 1  
MUM/09/393  
Smt. Bahar Nacem Khan, Mumbai.

Absent.

- Case Sl. No. 2  
MUM-297-K  
Charlet Hotels Ltd., Mumbai

Absent.

- Case Sl. No. 3  
NR/2009/52  
Delhi Metro Rail Corporation (DMRC), Delhi

As per available records, the site lies in approach funnel of Rwy-27 at IGI Airport. Delhi Metro Rail Corporation has built the above-ground railway line as part of the Airport Metro Express Line project. 6 no. peers numbering from P-250 to P-255 have been found penetrating into the approach surface of Rwy-27. During the presentation, the representatives of DMRC Ltd. informed that they were informed by the representatives of Airports Authority of India (AAI) initially that these peer heights (including poles and traction wires) would not penetrate into the approach surface of Rwy-27. However, on making formal application to AAI, it was then revealed that the above set of 6 peers are penetrating into the approach surface of Rwy-27. On perusal of available records, it is not clear whether AAI, while determining the heights of these peers with respect to the nearest end of Runway, have



considered the distances of each of these peers from physical end of the Runway or with respect to the displaced threshold and also whether the declared distances of Rwy-27/09 have been considered in the calculations.

The applicant was advised by the Committee to explore the possibility of reducing the tower height to ensure that the traction wire and the poles do not create any obstruction in the approach surface of Rwy-27.

**The Committee is, therefore, of the view that AAI should confirm the calculation made by them, particularly with respect to Para 1.3.1.4 of Annexure-II of the Notification 84 E of January, 2010, and put up in the next meeting of the Appellate Committee.**

- **Case Sl. No. 4**

**770/08-HY**

**M/s Annapurna Studios Pvt. Ltd., Jubilee Hills, Hyderabad.**

The applicant had requested a height of 638 mtrs. AMSL in December, 2008 and was granted NOC upto a height of 578.55 mtrs. AMSL on 23<sup>rd</sup> March, 2009. The applicant while making presentation, informed the Committee that there are number of buildings namely, Sandeep Builders Pvt. Ltd., Pioneer Builders and Jubilee Hills Landmark Project Ltd. who have been granted higher height in the same area. The applicant was requested to provide further details about these buildings in that area which should contain the site elevation, top elevation as per the NOCs issued and the distances of each of these buildings from nearest Runway end as well as ARP.



Also, on examination of available records, it is seen that the distance of the site is 4050 mtrs. from the end of the Runway. Since the site falls beyond IHS, i.e. in the conical surface, the distances need to be calculated afresh by AAI after getting the above-said information from the applicant and also with reference to Para 1.5.1 of Annexure-II of the Notification.

**The Committee is of the opinion that the case can be examined further in the Committee's next meeting after the above exercise.**

- **Case Sl. No. 5**

**771/08-Hy**

**M/s Annapurna Studios Pvt. Ltd., Jubilee Hills, Hyderabad.**

As per available records, the site lies at 4100 mtrs. from the nearest end of Runway. The applicant had requested a height of 632.88 mtrs. AMSL in December, 2008 but was granted NOC upto a height of 579.80 mtrs. AMSL on 23/02/2009. The applicant while making presentation in this case informed the Committee that there are number of buildings namely, Sandeep Builders Pvt. Ltd., Pioneer Builders and Jubilee Hills Landmark Project Ltd. who have been granted higher height in the same area. The applicant was requested to provide further details about these buildings in that area which should contain the site elevation, top elevation as per the NOCs issued and the distances of each of these buildings from nearest Runway end as well as ARP.



The Committee is of the opinion that the case can be further examined on receipt of the information as requested above.

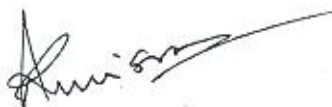
- Case Sl. No. 6

773/08-Hy

M/s Annapurna Studios Pvt. Ltd., Jubilee Hills, Hyderabad.

As per available records, the site lies at 4200 mtrs. from the end of Runway. The applicant had requested a height of 648 mtrs. AMSL in 10/12/2008 but was not granted NOC since the site elevation is higher than permissible elevation at that location. The applicant while making presentation in this case informed the Committee that there are number of buildings namely, Sandeep Builders Pvt. Ltd., Pioneer Builders and Jubilee Hills Landmark Project Ltd. who have been granted higher height in the same area. The applicant was requested to provide further details about these buildings in that area which should contain the site elevation, top elevation as per the NOCs issued and the distances of each of these buildings from nearest Runway end as well as ARP.

The Committee is of the opinion that the case can be further examined on receipt of the information as requested above.



- Case Sl. No. 7

772/08-Hy

M/s Annapurna Studios Pvt. Ltd., Jubilee Hills, Hyderabad.

As per available records, the site lies at 4250 mtrs. from the end of Runway. The applicant had requested a height of 655 mtrs. AMSL in 10/12/2008 but was not granted NOC since the site elevation is higher than permissible elevation at that location. The applicant while making presentation informed the Committee that there are number of buildings namely, Sandeep Builders Pvt. Ltd., Pioneer Builders and Jubilee Hills Landmark Project Ltd. who have been granted higher height in the same area. The applicant was requested to provide further details about these buildings in that area which should contain the site elevation, top elevation as per the NOCs issued and the distances of each of these buildings from nearest Runway end as well as ARP.

The Committee is of the opinion that the case can be further examined on receipt of the information as requested above.

- Case Sl. No. 8

MUM/09/431

M/s Resilience Realty Pvt. Ltd, Mumbai.

As per available records, the site lies in IHS of Rwy-14/32 at a distance of 3384 mtrs. from the 32 end of the Runway. The applicant had requested a height of 82.40 mtrs. AMSL in August, 2009 and they were granted NOC upto a height of 56.27 mtrs. AMSL on 30/11/2009. The



applicant has now made an appeal for consideration of their case for a height of 76 mtrs. AGL i.e. 80 mtrs. AMSL.

During the presentation, the applicant has requested for Aeronautical Study to be conducted to determine the maximum permissible height at that location. While making request for Aeronautical Study, the applicant had made reference to NOC granted to Sofitel Hotel (Naman Group) & M/s Kalpataru in their adjoining plot. They also indicated that the plot for M/s Reliance Maker who have been granted NOC upto 73.55 mtrs. AMSL also lies at similar distance as that of the site under reference.

During the presentation, the applicant has also indicated that the building is being constructed under a PPP model for redevelopment of the existing building under MHADA Resolution of May, 2009 and August, 2009 to be used for residential purposes only.

**The Committee is of the view that an Aeronautical Study needs to be carried out to determine the maximum permissible height in that location subject to confirmation of their request in writing for Aeronautical Study.**

The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the vicinity of the proposed structure and also the impact of this obstruction



should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

- Case Sl. No. 9

MUM/08/427

M/s B.K. Constructions Ltd., Bandra Kurla Complex.

K. Raheja Corporate Service Pvt. Ltd. (Plot C-30), Mumbai

As per available records, the site lies in IHS of Rwy-14/32 at a distance of 2577.96 mtrs. from Rwy-32 end. The applicant had requested for height of 79.60 mtrs. AMSL initially and was granted a height of 56.27 mtrs. AMSL vide AAI letter dated 12/06/2009. Subsequently vide their letter dated 11/05/2010, the applicant had requested for grant of height upto 94.60 mtrs. AMSL on the grounds that "the entire 'G' Block of Bandra Kurla Complex is being designed and marketed as International Finance & Business Centre by MMRDA". While making the presentation, the applicant could not specifically indicate location of their site vis-a-vis the site of Naman Hotel.

The applicant has been requested to provide exact details of their plot vis-a-vis Naman Hotel particularly indicating the width of the proposed structure of Naman Hotel and the width of their proposed building as seen from the ARP of the Airport. The applicant should also clearly indicate the distance between their proposed building structure and the Naman Hotel.

**The Committee is of the view that the matter can be further examined on receipt of the above said details from the applicant.**





• Case Sl. No. 10

MUM/08/428


M/s B.K.C. Properties Pvt. Ltd. (Plot C-62), Mumbai.

As per available records, the site lies in the IHS Rwy 32/14 at a distance of 1792 mtrs. from 32 end of the Runway. The applicant had requested a height of 79.70 mtrs. AMSL and was granted NOC for 56.27 mtrs. AMSL vide AAI letter dated 5th August, 2009.

During the presentation, the applicant has requested for Aeronautical Study to be conducted to determine the maximum permissible height at that location. While making request for Aeronautical Study, the applicant had made reference to NOC granted to Sofitel Hotel (Naman Group) & M/s Kalpataru in their adjoining plot. They also indicated that the plot for M/s Reliance Maker who have been granted NOC upto 73.55 mtrs. AMSL also lies at similar distance as that of the site under reference.

The applicant had requested a height of 79.70 mtrs. AMSL on the grounds that "the entire 'G' Block of Bandra Kurla Complex is being designed and marketed as International Finance & Business Centre by MMRDA"

**The Committee is of the view that an Aeronautical Study needs to be carried out to determine the maximum permissible height in that location subject to confirmation by the applicant of their request in writing for Aeronautical Study.**

The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the vicinity of the proposed structure also the impact of this obstruction should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

- Case Sl. No. 11

MUM/10/21

Slum Rehabilitation Society, Mumbai.

As per available records, the site lies in the IHS of Rwy-14/32 at a distance of 3560 mtrs. from end of the Runway14. The applicant had requested for top elevation of 86.985 mtrs. AMSL vide their application dated 18/06/2009. AAI vide their letter dated 2nd July, 2010 have informed the applicant that their request could not be considered since the site elevation itself is 77.985 mtrs.

The applicant while making the presentation informed the Committee that their site is much below the contour levels of high terrain in the vicinity of their site. They also informed that there are a number of buildings and also a water reservoir at the top of the hillock, while their site is below the top of hillock.



The applicant was requested to provide the exact details of contours of the hills, relative position of their proposed site with respect to other buildings , water reservoir, etc. as seen from Santa Cruz Airport.

**The Committee is of the view that the matter could be further examined only after the applicant provides the above said details as claimed by him in the presentation.**

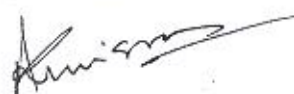
- Case Sl. No. 12

MUM/08/228

M/s TCG Urban Infrastructure Holdings Ltd, Mumbai.

As per available records, the site lies in the IHS of Rwy-14/32 at a distance of 1120 mtrs. from Rwy-32 end. The applicant had made a request for grant of NOC for a height of 70.602 mtrs. AMSL vide their application dated 7<sup>th</sup> May, 2008. They were granted NOC for 56.27 mtrs. AMSL vide AAI letter dated 12<sup>th</sup> June, 2009.

The applicant vide their application dated 21<sup>st</sup> April, 2010 have requested for consideration of their case for grant of height upto 61.77 mtrs. AMSL on the argument that other buildings in 'G' Block of Bandra Kurla Complex have been granted similar heights. Their proposed site is at Plot No. C-53 while M/s Earnest Towers Pvt. Ltd. have been granted a height of 61.77 mtrs. AMSL on adjacent Plot No. 54-55. The Committee was also informed that 'G' Block of Bandra Kurla Complex is being promoted as International Finance & Business Centre by MMRDA, which would become a major revenue source for MMRDA.



The Committee is of the view that an Aeronautical Study needs to be carried out to determine the maximum permissible height in that location, subject to confirmation by the applicant of their request in writing for Aeronautical Study.

The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the vicinity of the proposed structure also the impact of this obstruction should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

- Case Sl. No. 13

MUM/06/37

M/s Kalptaru Properties, Santa Cruz, Mumbai.

The case was discussed in the Appellate Committee meeting held on 22<sup>nd</sup> June, 2010 and the findings of the Appellate Committee are placed at Case Sl.No. 14 of the Minutes of the meeting.

The Committee had requested the applicant to provide the details of changed circumstances to justify second Aeronautical Study at the same location. The applicant vide their letter dated 8<sup>th</sup> July, 2010 have once again requested for second Aeronautical Study for grant of height of 90 mtrs. AMSL.

On perusal of records, it is seen that initially the applicant had requested for a height of 100 mtrs. AMSL but the Competent Authority had granted height of 73.55 mtrs. AMSL after conducting an Aeronautical Study assisted by ICAO. The last application dated 8<sup>th</sup> July, 2010 made by the applicant provides justification for conduct of Aeronautical Study but does not provide the changed circumstances requiring second Aeronautical Study as advised by the Appellate Committee during its last meeting.

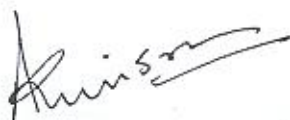
Thus, the **Committee is of the opinion that once Aeronautical Study has been conducted and the Competent Authority has accorded approval for grant of height of 73.55 mtrs. AMSL, the second Aeronautical Study would not be justified.**

- **Case Sl. No. 14**

**MUM/10/15**

**M/s Chouhan Builders India Ltd, Mumbai.**

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 624 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 24.75 mtrs. AMSL but was granted the NOC for a height of 16.32 mtrs. AMSL vide AAI letter dated 1<sup>st</sup> April, 2010. The applicant has now requested for grant of NOC upto a height of 19.32 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has







granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference point for the assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**



• Case Sl. No. 15

MUM/10/14

M/s Chouhan Builders India Ltd, Mumbai.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 624 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 22.05 mtrs. AMSL but was granted the NOC for a height of 16.32 mtrs. AMSL vide AAI letter dated 1<sup>st</sup> April, 2010. The applicant has now requested for grant of NOC upto a height of 19.32 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference point for assessment of distance.



Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**

- **Case Sl. No. 16**

**MUM/179-K**

**M/s Chouhan Builders India Ltd, Mumbai.**

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 856 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.25 mtrs. AMSL but was granted the NOC for a height of 20.96 mtrs. AMSL vide AAI letter dated 05/10/2009. The applicant has now requested for grant of NOC upto a height of 23.96 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

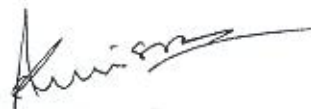




On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for the assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**



• Case Sl. No. 17

MUM/180-K

M/s Chouhan Builders India Ltd.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 760 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.40 mtrs. AMSL but was granted the NOC for a height of 19.04 mtrs. AMSL vide AAI letter dated 05/10/2009. The applicant has now requested for grant of NOC upto a height of 22.04 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for the assessment of distance.



Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

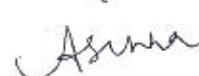
In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**

- Case Sl. No. 18

MUM/174-K

M/s Chouhan Builders India Ltd, Mumbai.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 800 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.40 mtrs. AMSL but was granted the NOC for a height of 19.84 mtrs. AMSL. The applicant has now requested for grant of NOC upto a height of 22.84 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

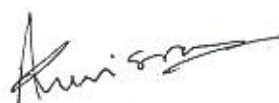


On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

It is also observed from available records that the site lies in the approach funnel of Rwy-34 of Juhu Airport. AAI needs to consider whether Rwy-34 is likely to be made operational in near future or not. In case there is no likelihood of this runway being made operational, calculation need not be carried out with respect to this runway at Juhu Airport while granting NOC.

**The Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 of Santa Cruz Airport and put up in the next meeting of the Appellate Committee indication clearly the height of the existing and proposed obstacles and their respective distances from displaced threshold.**



• Case Sl. No. 19

MUM/178-K

M/s Chouhan Builders India Ltd, Mumbai.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 856 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.25 mtrs. AMSL but was granted the NOC for a height of 20.96 mtrs. AMSL vide AAI letter dated 05/10/2009. The applicant has now requested for grant of NOC upto a height of 23.96 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.



Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**

- Case Sl. No. 20  
MUM/175-K  
M/s Chouhan Builders India Ltd.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 920 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.20 mtrs. AMSL but was granted the NOC for a height of 22.24 mtrs. AMSL. The applicant has now requested for grant of NOC upto a height of 25.24 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.




On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

It is also observed from the available records that the site lies in the approach funnel of Rwy-34 of Juhu Airport. AAI need to consider whether Rwy-34 is likely to be made operational in near future or not. In case there is no likelihood of this runway being made operational, calculation need not be carried out with respect to this runway at Juhu Airport while granting NOC.

**The Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 of Santa Cruz Airport and put up in the next meeting of the Appellate**



Committee indication clearly the height of the existing and proposed obstacles and their respective distances from displaced threshold.

- Case Sl. No. 21

MUM/173-K

M/s Chouhan Builders India Ltd, Mumbai.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 640 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.50 mtrs. AMSL but was granted the NOC for a height of 16.64 mtrs. AMSL vide AAI letter dated 05/10/2009. The applicant has now requested for grant of NOC upto a height of 19.64 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are



not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

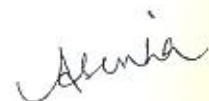
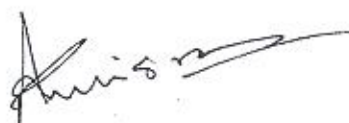
In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**

- **Case Sl. No. 22**

**MUM/177-K**

**M/s Chouhan Builders India Ltd, Mumbai.**

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 920 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.20 mtrs. AMSL but was granted the NOC for a height of 22.24 mtrs. AMSL vide AAI letter dated 09/12/2009. The applicant has now requested for grant of NOC upto a height of 25.24 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than

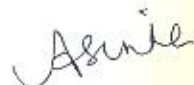


their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**



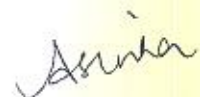
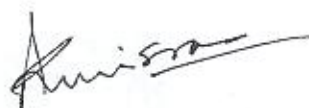
• Case Sl. No. 23

MUM/172-K

M/s Chouhan Builders India Ltd, Mumbai.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 696 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.50 mtrs. AMSL but was granted the NOC for a height of 17.76 mtrs. AMSL vide AAI letter dated 05/10/2009. The applicant has now requested for grant of NOC upto a height of 20.76 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.

On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.

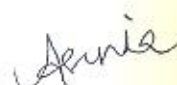
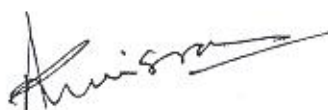



Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

In view of the above observations as well as the specific obstructions brought to the notice of the Committee by the applicant, **the Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 end and put up in the next meeting of the Appellate Committee indicating clearly the height of the existing and proposed obstacles as relevant in this case and distances of the same from displaced threshold.**

- Case Sl. No. 24  
MUM/176-K  
M/s Chouhan Builders India Ltd.

As per available records, the site lies in the approach funnel of Rwy-09 of Santa Cruz Airport at a distance of 864 mtrs. from basic strip of Rwy-09. The applicant had requested for grant of NOC upto a height of 27.25 mtrs. AMSL but was granted the NOC for a height of 21.12 mtrs. AMSL. The applicant has now requested for grant of NOC upto a height of 24.12 mtrs. AMSL vide their letter dated 05/07/2010 on the ground that their site lies west of Western Railway Line which has traction pole much higher than their proposed height. The applicant has also indicated that AAI has granted NOC for flyover near Milan Subway which also falls in the approach path of Rwy-09.




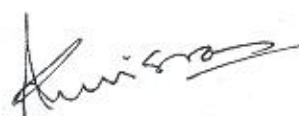


On perusal of available records, it is observed that the distance has been calculated by AAI from the basic strip of Rwy-09 while as per Para 1.3.1.4 of Annexure -II of the Notification 84E of January, 2010, the physical extremities of the Runway are to be considered for determining the distance. Further in case of displaced threshold, the permissible height shall be calculated based on approach surface and transitional surface with respect to the runway extremity or displaced threshold whichever is more restrictive. However, in case the threshold has been displaced due to the obstacles of permanent nature, which are not likely to be removed, the displaced threshold will be taken as reference for assessment of distance.

Considering the provisions of above Para of the Notification 84(E), the distances need to be calculated from displaced threshold as reference for Runway-09 approach surface since the existing railway line is not likely to be removed.

It is also observed from the available records that the site lies in the approach funnel of Rwy-34 of Juhu Airport. AAI needs to consider whether Rwy-34 is likely to be made operational in near future or not. In case there is no likelihood of this runway being made operational, calculation need not be carried out with respect to this runway at Juhu Airport while granting NOC.

**The Committee is of the view that AAI should conduct obstacle survey upto a distance of 2 Kms. from threshold of Rwy-09 of Santa Cruz Airport and put up in the next meeting of the Appellate**



Committee indication clearly the height of the existing and proposed obstacles and their respective distances from displaced threshold.

- Case Sl. No. 25

MUM/09/516

M/s Bhupendra Patrawala, Mumbai.

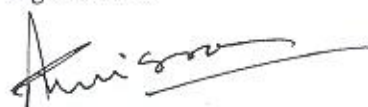
As per available records, the site falls in IHS of Rwy-09 of Santa Cruz Airport at a distance of 3328 mtrs. from 09 end of the Runway. The case was discussed in the last Appellate Committee meeting held on 22/06/2010 as recorded at Case Sl. No. 19 of the Minutes of the said meeting.

The Committee had in the last meeting requested the applicant to provide specific reference of buildings from which shielding benefit was being sought and the relative positions of these buildings vis-a-vis the applicant's building and the runways at Mumbai Airport.

The applicant in the meeting has now requested for conduct of Aeronautical Study for this site to determine the maximum permissible height at this location.

On perusal of available records as well as the presentation given by the applicant, the Committee is of the view that this site does not qualify to get shielding benefit as has been contended by the applicant.

**However, the Committee feels that an Aeronautical Study could be conducted to determine the maximum permissible height at this location in view of the justification provided by the applicant vide their letter dated 15th June, 2010.**



The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the vicinity of the proposed structure also the impact of this obstruction should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

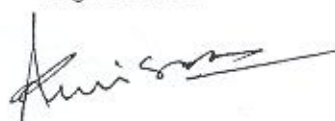
- Case Sl. No. 26

NR/2010/52

M/s Raheja Developers Ltd., Shadipur Depot, New Delhi.

As per available records, the site lies in the Outer Horizontal Surface (OHS) of IGI Airport as 10.275 Kms. from IGI Airport. As per available records, the case was considered for grant of NOC for a height of not exceeding 368.10 mtrs. AMSL on 13/04/2010. The applicant had been granted height of 351.214 mtrs. AMSL vide AAI letter dated 19/04/2010. Subsequently, the case was re-examined in AAI during June-July, 2010 and the restricted top elevation has been worked out as 353.52mtrs. AMSL.

While making the presentation, the applicant informed that the project is to cater to the needs of the slum-dwellers and the project is under DDA wherein 2800 families of economically weaker section will be given individual apartments. They requested 190 mtrs AGL as appealed in their letter dated 14<sup>th</sup> July, 2010. The applicant also informed the Committee that the height requested by them is top



elevation (AMSL) of the highest point of a tower being built at the same site. The applicant also informed that the tower dimensions are quite narrow and hence could be considered for clearance from radar point of view.

The Committee advised the applicant to provide the exact dimensions of the tower and its location within the plot in plan view to AAI. AAI thereafter should make fresh calculations and permit the maximum permissible height to the tower at this location. In case the applicant has certain reservations about the NOC to be granted by AAI, they may make their appeal to the Appellate Committee.

- Case Sl. No. 27

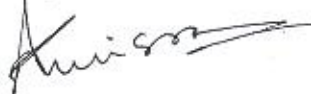
NR/2008/291

M/s Riveria Commercial Developers Ltd, Delhi.

The case was discussed in the meeting held on 22<sup>nd</sup> June, 2010 and the details are available at Case Sl.No. 4 of the Minutes of the said meeting of 22/06/2010.

The applicant has now provided further details as requested by the Committee in the earlier meeting. It is seen that the site lies at a distance of 964 mtrs. at 12 end the Runway at Safdarjung Airport.

The Committee notes that Safdarjung Airport does not have any commercial flight at present and there is no likelihood of any





commercial flight starting from Safdarjung Airport in future and has been included in Annexure-III(B) of the Notification.

At present, only certain VVIPs and Central/State Govt. aircrafts are permitted at this Airport under VFR conditions and with security clearance.

**The Committee is of the opinion that the proposed structure may be permitted upto a height of 275.70 mtrs. AMSL as requested by the joint venture of NDMC and Riveria Commercial Developers Ltd.**

- **Case Sl. No. 28**  
**MUM/443-I**  
**Indian Film Combine Pvt. Ltd.**

As per available records, the site lies in the IHS of Santa Cruz Airport at a distance of 3608 mtrs. from Rwy-09 end. The applicant was accorded NOC on 15<sup>th</sup> June, 2006 upto a height of 56.27 mtrs. AMSL against their application for a height of 73.55 mtrs. Thereafter the applicant had requested for Aeronautical Study vide their letter dated 01/12/2005 which was conducted by ICAO and they were granted a height of 73.55 mtrs. AMSL. Accordingly, revised NOC was issued by AAI for a height not exceeding 73.55 mtrs. on 12/10/2006.

The applicant has now made an appeal vide their letter dated 25<sup>th</sup> May, 2010 to the Appellate Committee for grant of NOC upto a height of 120 mtrs. AMSL.

 *Aruna*

On perusal of available records, it is seen that :

- (i) The applicant was granted the requested height by Aeronautical Study.
- (ii) The applicant has now directly approached the Appellate Committee for grant of a height of 120 mtrs. AMSL vide their letter dated 25<sup>th</sup> May, 2010.

Considering the above facts, **the Committee is of the opinion that since the applicant was granted NOC after Aeronautical Study upto the height requested by them, their request for second Aeronautical Study cannot be accepted.**

- Case Sl. No. 29  
MUM/80-H  
M/s V. M. Shah  
M/s Akruiti City Ltd., Mumbai

The case was discussed in the meeting held on 22<sup>nd</sup> June, 2010 and the details are available as Case Sl. No. 5 of the Minutes of the said meeting.

AAI have since reviewed the case and have rejected the case vide their letter dated 28<sup>th</sup> July, 2010.

Since the project is part of the implementation of Slum Rehabilitation Scheme under the State Govt., **the Committee is of the view that an Aeronautical Study needs to be conducted to determine the maximum permissible height in this location.**



The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the vicinity of the proposed structure and also the impact of this obstruction should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

- Case Sl. No. 30

MUM/06/495

M/s VK Chari Consultants, Mumbai.

The case was discussed during the Appellate Committee meeting held on 22<sup>nd</sup> June, 2010 and the details are recorded as Case Sl.No. 20 of the Minutes of the meeting. The applicant has now applied to the Appellate Committee and the case has been examined by AAI and rejected.

The applicant during their presentation have mentioned that structures upto height of 110 mtrs. have been granted in the vicinity of their plot and their plot is just below the Palli Hills. They have further indicated that the proposed building on this plot is for slum development scheme.

In view of the above, the Committee is of the view that an Aeronautical Study needs to be conducted to determine the maximum permissible height at the subject location.

The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on



the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the vicinity of the proposed structure and also the impact of this obstruction should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

- Case Sl. No. 31

TVM/16/2009

MM054/2010

Army Welfare Housing Organization, Trivandrum

The proposed construction of residential buildings for Army Welfare Housing Organization is at 4500 mtrs. from Rwy-14 of the Trivandrum Airport and lies within the conical surface of the Airport. The applicant had applied for a height of 66.515 mtrs. AMSL in their application dated 30<sup>th</sup> June, 2009. AAI, HQ had issued an authorization letter dated 12/07/2010 to RED, SR for issuance of NOC for a height of 51.80 mtrs. AMSL (21.525 mtrs. AGL) to the applicant. The applicant on 26<sup>th</sup> July, 2010 had made an appeal for grant of NOC for their housing project to a height of 75.66 mtrs. AMSL.

The applicant during their presentation to the Appellate Committee has indicated that there are other high buildings in their vicinity and also that their site is behind high terrain with respect to the Airport. Since there is no authenticated diagrams/maps submitted by the applicant in supports of their claims, they were advised to submit the contour maps of the area and the location of their site on the contours of the terrain



as contended by them and to indicate the relative distances of the other higher buildings in their vicinity with respect to their location and with respect to the Airport.

The Chairman, Appellate Committee enquired from the applicant the reason for making high-rise buildings in this area and to indicate the FSI granted to them by the Local/State Authorities so as to justify the high-rise buildings proposed by them. The applicant, however, could not clarify the issue.

In view of the above, **the Committee is of the view that the case can be further examined after the above said information and maps, etc. are provided by the applicant.**

- **Case Sl. No. 32**  
**ER/NOC/199/9**  
**M/s Adhunik Power & Natural Resources Ltd., Kolkata.**

The case was discussed in the last Appellate Committee meeting held on 22<sup>nd</sup> June, 2010 wherein the Committee had observed certain discrepancies in the distances calculated by AAI and the distances claimed by the applicant. Thereafter, the Committee had advised the applicant to submit authenticated coordinates of the location of the proposed chimney directly to AAI. The applicant has now submitted the required coordinates to AAI and AAI have reconciled the distances which works out to be 10750 mtrs. from Jamshedpur Airport. The site elevation for the chimney has been indicated as 182.90 mtrs. and the ARP of Jamshedpur Airport has been indicated as 145 mtrs. Since the



site falls in the OHS of Jamshedpur Airport, height upto 300 mtrs. above ARP is permissible as in the Notification 84 E. The calculations as indicated in records show that the permissible height from AGA criteria at this location has been worked out to be 445.69 mtrs. AMSL /262.79 mtrs. AGL (Site elevation 182.9 mtrs). The records also indicate that as per CNS criteria the Chimney is cleared upto 448.12 mtrs. AMSL. The Committee however, takes note of the observation of Jt. GM (NS), AAI, which indicates that, the top 6 mtrs. of the Chimney is made of flueduct, being very narrow may not degrade VOR performance and also the flight inspection report suggest that the VOR in this sector has very good performance and degradation due to Chimney height, if any, will be within limits. The note further states that the Committee may consider the clearance of 457.9 mtrs. AMSL.

The Committee further takes note that Jamshedpur Airport is a private airport having its own air traffic control. The records available indicate that the private airport operator (Tata Aviation Services) had confirmed earlier to AAI that the site falls in North West direction of the airport and is not in the approach path of Runway 08 and that the aerial distance of the site is 12 Kms from ARP.

The applicant during the presentation stressed that the proposed thermal station besides augmenting power capacity to be generated to reach targets set in the 11th & 12th five year plans will also benefit the power deficient state of Jharkhand. As per available records the Govt. of Jharkhand has also supported the setting up of the power plant.


Considering the above and also the height sought for the Chimney is 275 m AGL (457.9 m AMSL) as per Ministry of Environment mandatory requirement, the Committee is of the view that NOC upto 457.9 m AMSL can be granted by AAI.

- **Case Sl. No. 33**

**MUM/08/544**

**M/s Akruti Trade Centre**

The case was discussed in the Appellate Committee meeting held on 22<sup>nd</sup> June, 2010 wherein the Committee had indicated that result of examination by AAI be communicated to the party and in case the



party so desires, they may approach the Appellate Committee through proper channel for consideration of their case.

On perusal of available records at present, it is observed that the applicant had submitted an application on 27<sup>th</sup> July, 2010, however, no formal rejection by AAI for the height has been communicated to the applicant. Instead AAI has once again brought up this case to Appellate Committee. It is presumed that AAI has examined the case and the Committee took cognizance of letter issued by the applicant as an appeal and considered the case.

In their appeal, the applicant has stated that their proposal is under Slum Rehabilitation Scheme which is an initiative by the State Govt. for slum-free Mumbai. As per the scheme, the applicant will be rehabilitating 321 tenants and developing 4356.69 Sq.mtrs of playground which will be handed over to MCGM.

Since the scheme pertains to slum rehabilitation and will be used for development of infrastructure and utilities like road, water supply, drainage, electrical, etc. to support the development in and around the scheme, **the Committee is of the opinion that an Aeronautical Study needs to be conducted to determine the maximum permissible height subject to AAI re-examine the case and formally rejecting the same.**

**The Committee further desires that during the conduct of the Aeronautical Study the impact, both qualitative and quantitative, on the safety of aircraft operations over that area should be determined taking into consideration other existing high-rise buildings in the**



vicinity of the proposed structure also the impact of this obstruction should be studied by employing Collision Risk Modelling and or OAS(Obstacle Assessment Study).

- Case Sl. No. 34  
NR/2010/59  
BSNL, New Delhi

Absent.

- Case Sl. No. 35  
NR/2009/87  
BPTP International Trade Centre, New Delhi.

The site lies beyond OHS at a distance of 21.250 Kms. from IGI Airport which is beyond the limits for NOC specified in Para 1.8 of Annexure-II of Notification 84 E of January, 2010. However, as per Para 3 of Annexure-II of the Notification, this case needs to be examined from PAN-OPS criteria.

On perusal of the records, it is seen that the case has not yet been examined by AAI in detail and the same has not been rejected.

Since prima facie no requirement seems to be there for case to be brought to the Appellate Committee, AAI is advised to examine the case and take appropriate action as required. In case the applicant has any reservations about the height granted by AAI, the same





could be then brought to the Appellate Committee if they so desire in the due course.

- Case Sl.No. 36

MUM/08/530

M/s Mohan Babani.

The applicant had sought clearance for height of 68.00 metres AMSL for which aeronautical study was conducted by AAI in July/August, 2010 as was earlier recommended by the Committee. The Aeronautical Study Report has dealt with the impact of the construction on the safety and regularity of aircraft operations by using the criterion of ICAO document 8168 and also the effect on the protection surfaces of CNS facilities as per SO 84(E) of January, 2010 including the effect on the coverage of air navigation aids. The aeronautical study conducted by Airports Authority of India examined the impact on Obstacle Limitation Surfaces, PAN-Ops and CNS criteria as contained in Para 2.1 & 2.2 of the Report. As per ICAO Annex '14' recommendation contained in Para 4.2.20, "*New objects or extension of existing objects should not be permitted above the conical and inner horizontal surfaces except when in the opinion of the appropriate authority, an object would be shielded by an existing immovable object or after aeronautical study, it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aircrafts.*"

Since the proposed construction is penetrating the Inner Horizontal Surface by 11.73 metres, the examination has been carried out to



determine its impact on the Obstacle Limitation Surfaces, PAN-Ops surfaces and impact on CNS criteria.

The Aeronautical Study Report, after due deliberations by the Committee, has observed that though the proposed construction penetrates the IHS, however, the PAN-Ops aspects, safety and regularity of aircraft's operational aspects are not affected at the Mumbai CSI Airport. The proposed construction does not affect the minimum visual manoeuvring altitude, minimum sector altitude, minimum radar vectoring altitude, OCA/H of the VOR procedures, OCA/H of Surveillance Radar Procedures, OCH of ILS procedures of all runways as existing today for the airport. The Report has indicated that since the basic ILS surfaces of all the procedures are not violated, hence, there is no requirement to examine the same for OAS or collision risk model. Examination of the CNS aspects has also cleared the height upto 68 m AMSL for ILS/VOR and ARSR criteria.

The Aeronautical Study Report submitted by AAI also included certain generic comments/observations/recommendations at Para 10 & 11 of the Report which are normally applicable in all such cases wherein aeronautical study is ordered by the Competent Authority. These do not have any specific impact on the findings of the aeronautical study in this particular case.

**In view of the findings of Aeronautical Study Report, the Committee is of the opinion that height of 68m AMSL be permitted.**



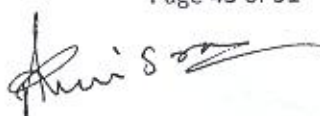
• Case Sl.No. 37

MUM/09/311

M/s M.K. Malls and Developers Pvt. Ltd.

The applicant had sought clearance for height of 108.35 metres AMSL for which aeronautical study was conducted by AAI in July/August, 2010 as was earlier recommended by the Committee. The Aeronautical Study Report has dealt with the impact of the construction on the safety and regularity of aircraft operations by using the criterion of ICAO document 8168 and also the effect on the protection surfaces of CNS facilities as per SO 84(E) of January, 2010 and also the effect on the coverage of air navigation aids. The aeronautical study conducted by Airports Authority of India examined the impact on Obstacle Limitation Surfaces, PAN-Ops and CNS criteria as contained in Para 2.1 & 2.2 of the Report. As per ICAO Annex '14' recommendation contained in Para 4.2.20, "*New objects or extension of existing objects should not be permitted above the conical and inner horizontal surfaces except when in the opinion of the appropriate authority, an object would be shielded by an existing immovable object or after aeronautical study, it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aircrafts.*"

Since the proposed construction is penetrating the Inner Horizontal Surface by 52.1 metres, the examination has been carried out to determine its impact on the Obstacle Limitation Surfaces, PAN-Ops surfaces and impact on CNS criteria.



The Aeronautical Study Report, after due deliberations by the Committee, has observed that though the proposed construction penetrates the IHS, however, the PAN-Ops aspects, safety and regularity of aircraft's operational aspects are not affected at the Mumbai CSI Airport. The proposed construction does not affect the minimum visual manoeuvring altitude, minimum sector altitude, minimum radar vectoring altitude, OCA/H of the VOR/DME procedures, OCA/H of Surveillance Radar Procedures, OCH of ILS procedures of all runways as existing today for the airport. The Report has indicated that since the basic ILS surfaces of all the procedures are not violated, hence, there is no requirement to examine the same for OAS or collision risk model. Examination of the CNS aspects has restricted the maximum permissible height upto 72.32 m AMSL due to ASR.

The Aeronautical Study Report submitted by AAI also included certain generic comments/observations/recommendations at Para 10 & 11 of the Report which are normally applicable in all such cases wherein aeronautical study is ordered by the Competent Authority. These do not have any specific impact on the findings of the aeronautical study in this particular case.

**In view of the findings of Aeronautical Study Report, the Committee is of the opinion that height of 72.32m AMSL be permitted.**



• Case Sl.No. 38

MUM/08/314

M/s Indian Newspaper Society

The applicant had sought clearance for height of 94.42 metres AMSL for which aeronautical study was conducted by AAI in July/August, 2010 as was earlier recommended by the Committee. The Aeronautical Study Report has dealt with the impact of the construction on the safety and regularity of aircraft operations by using the criterion of ICAO document 8168 and also the effect on the protection surfaces of CNS facilities as per SO 84(E) of January, 2010 and also the effect on the coverage of air navigation aids. The aeronautical study conducted by Airports Authority of India examined the impact on Obstacle Limitation Surfaces, PAN-Ops and CNS criteria as contained in Para 2.1 & 2.2 of the Report. As per ICAO Annex '14' recommendation contained in Para 4.2.20, "*New objects or extension of existing objects should not be permitted above the conical and inner horizontal surfaces except when in the opinion of the appropriate authority, an object would be shielded by an existing immovable object or after aeronautical study, it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aircrafts.*"

Since the proposed construction is penetrating the Inner Horizontal Surface by 38.15 metres, the examination has been carried out to determine its impact on the Obstacle Limitation Surfaces, PAN-Ops surfaces and impact on CNS criteria.




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The Aeronautical Study Report, after due deliberations by the Committee, has observed that though the proposed construction penetrates the IHS, however, the PAN-Ops aspects, safety and regularity of aircraft's operational aspects are not affected at the Mumbai CSI Airport. The proposed construction does not affect the minimum visual manoeuvring altitude, minimum sector altitude, minimum radar vectoring altitude, OCA/H of the VOR procedures, OCA/H of Surveillance Radar Procedures, OCH of ILS procedures of all runways as existing today for the airport. The Report has indicated that since the basic ILS surfaces of all the procedures are not violated, hence, there is no requirement to examine the same for OAS or collision risk model. Examination of the CNS aspects has restricted the maximum permissible height upto 62.169 m AMSL due ASR.

The Aeronautical Study Report submitted by AAI also included certain generic comments/observations/recommendations at Para 10 & 11 of the Report which are normally applicable in all such cases wherein aeronautical study is ordered by the Competent Authority. These do not have any specific impact on the findings of the aeronautical study in this particular case.

**In view of the findings of Aeronautical Study Report, the Committee is of the opinion that height upto 62.169m AMSL be permitted.**



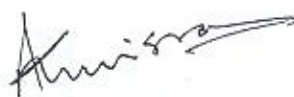
• Case Sl.No. 39

MUM/09/391

M/s Puja Constructions, Mumbai.

The applicant had sought clearance for height of 72 metres AMSL for which aeronautical study was conducted by AAI in July/August, 2010 as was earlier recommended by the Committee. The Aeronautical Study Report has dealt with the impact of the construction on the safety and regularity of aircraft operations by using the criterion of ICAO document 8168 and also the effect on the protection surfaces of CNS facilities as per SO 84(E) of January, 2010 and also the effect on the coverage of air navigation aids. The aeronautical study conducted by Airports Authority of India examined the impact on Obstacle Limitation Surfaces, PAN-Ops and CNS criteria as contained in Para 2.1 & 2.2 of the Report. As per ICAO Annex '14' recommendation contained in Para 4.2.20, "*New objects or extension of existing objects should not be permitted above the conical and inner horizontal surfaces except when in the opinion of the appropriate authority, an object would be shielded by an existing immovable object or after aeronautical study, it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aircrafts.*"

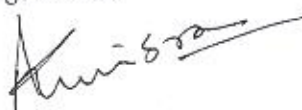
Since the proposed construction is penetrating the Inner Horizontal Surface by 15.73 metres, the examination has been carried out to determine its impact on the Obstacle Limitation Surfaces, PAN-Ops surfaces and impact on CNS criteria.



The Aeronautical Study Report, after due deliberations by the Committee, has observed that though the proposed construction penetrates the IHS, however, the PAN-Ops aspects, safety and regularity of aircraft's operational aspects are not affected at the Mumbai CSI Airport. The proposed construction does not affect the minimum visual manoeuvring altitude, minimum sector altitude, minimum radar vectoring altitude, OCA/H of the VOR procedures, OCA/H of Surveillance Radar Procedures, OCH of ILS procedures of all runways as existing today for the airport. The Report has indicated that since the basic ILS surfaces of all the procedures are not violated, hence, there is no requirement to examine the same for OAS or collision risk model. Examination of the CNS aspects has restricted the maximum permissible height upto 72 m AMSL due ASR.

The Aeronautical Study Report submitted by AAI also included certain generic comments/observations/recommendations at Para 10 & 11 of the Report which are normally applicable in all such cases wherein aeronautical study is ordered by the Competent Authority. These do not have any specific impact on the findings of the aeronautical study in this particular case.

**In view of the findings of Aeronautical Study Report, the Committee is of the opinion that height upto 72m AMSL may be permitted.**





- Case Sl. No. 40  
MUM/09/Chimney/33  
Jhabua Power Ltd.

The Aeronautical Study was carried for the construction of the Jhabua Power plant chimney as was recommended in the Appellate Committee's meeting of March, 2010. AAI had carried out the Study in July, 2010 and the Study was conducted keeping in view the provisions of Para 4.3 of ICAO Annex-14 for the height of 275 mtrs. AGL for the chimney.

The Report of the Aeronautical Study indicates that since the proposed construction is outside the Obstacle Limitation Surfaces, the effect of aircraft operations on infringement of PAN-Ops. surfaces was examined. The safety and regularity issues associated with the obstacle clearance altitude/height shall not be applicable in this case. In the examination, it has been indicated that the minimum holding altitude and the minimum sector altitude need to be revised to 3700 feet vis-a-vis the existing holding altitude of 3600 feet. The Report also indicates that with this revision of altitude, there would be no operational penalty on aircraft operations.

**The Committee reviewed the Aeronautical Study Report and is of the opinion that to permit the construction of the chimney with top elevation of 810m AMSL, the instrument approach procedures as existing for Jabalpur Airport needs to be amended as follows:**



- (i) Minimum sector altitude and the minimum holding altitude at 15 DME need to be revised to 3700 feet in place of the existing 3600 feet.
- (ii) The initial segment altitude via DME arc procedure to be revised to 3700 feet in place of existing 3600 feet for all the ATS routes to/from Jabalpur Airport.

The justification for the Aeronautical Study was examined by the Committee in the earlier meeting and had then taken note of the importance of power plant generation in the country for which the chimney upto a height of 275 mtrs. AGL is mandatory by the MOEF.

The Committee is of the opinion that AAI should examine the feasibility of making amendments to the procedures as given above and thereafter clear the height as requested by the applicant.

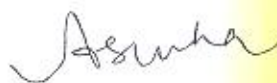
• Case Sl. No. 41

MUM/09/629

Industrial Laundry & Dry Clearing Equipment Co. Ltd., Mumbai

The Aeronautical Study was conducted by AAI based on the recommendations of the Appellate Committee. The Aeronautical Study was conducted to examine the impact of the penetration of the Obstacle Clearance Surfaces and the safety and regularity of aircraft operations at Mumbai Airport for a top elevation of 179 mtrs. AMSL sought by the applicant.

On perusal of the Aeronautical Study Report prepared in August, 2010 by AAI, it is observed that ICAO PAN-Ops. software has been used for calculating the heights of basic ILS Surfaces, Obstacle Assessment Surfaces. The Report indicates that the proposed construction does not




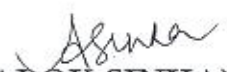
affect the visual minimum manoeuvring altitudes, minimum sector altitudes and minimum radar vectoring altitudes. However, since the proposed construction lies within the final approach area of VOR procedures for Rwy-14, the height needs to be restricted to 146.3 mtrs. AMSL.

The proposed construction is also to be restricted to a maximum of 131 mtrs. AMSL due to the interference in the OCA/H of the surveillance radar procedures for Rwy-14. The proposed construction does not affect the basic ILS surfaces of all the procedures and therefore, the Collision Risk Model Study and the OAS are not required to be examined. It is further observed from the Report that from the CNS criteria, the permissible top elevation has been calculated at 107.83 mtrs. and also 154.52 mtrs. AMSL due to ILS.

In view of the above, **the Committee is of the opinion that AAI needs to conduct simulation study to study the impact of this obstruction on ILS and to work out the maximum permissible height allowed due to ILS.**

  
(A.K. MISRA)  
Outside Expert  
Member

  
(K. GOHAIN)  
Outside Expert  
Member

  
(ALOK SINHA)  
Joint Secretary, M/o Civil Aviation  
Chairman

New Delhi  
Date: 19/08/2010