PRESENTATION ON CIVIL AVIATION PERMISSION - BUILDING HEIGHT NOCs ISSUE & ITS PROGRESS

30th Jan 2018

AT

MCHI Managing Committee Meeting, Mumbai

T. Mohan chandran,
(Ex-Dy. Director, of Operations; DGCA)
Consultant & Advisor, Airodynamiks

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BACKGROUND

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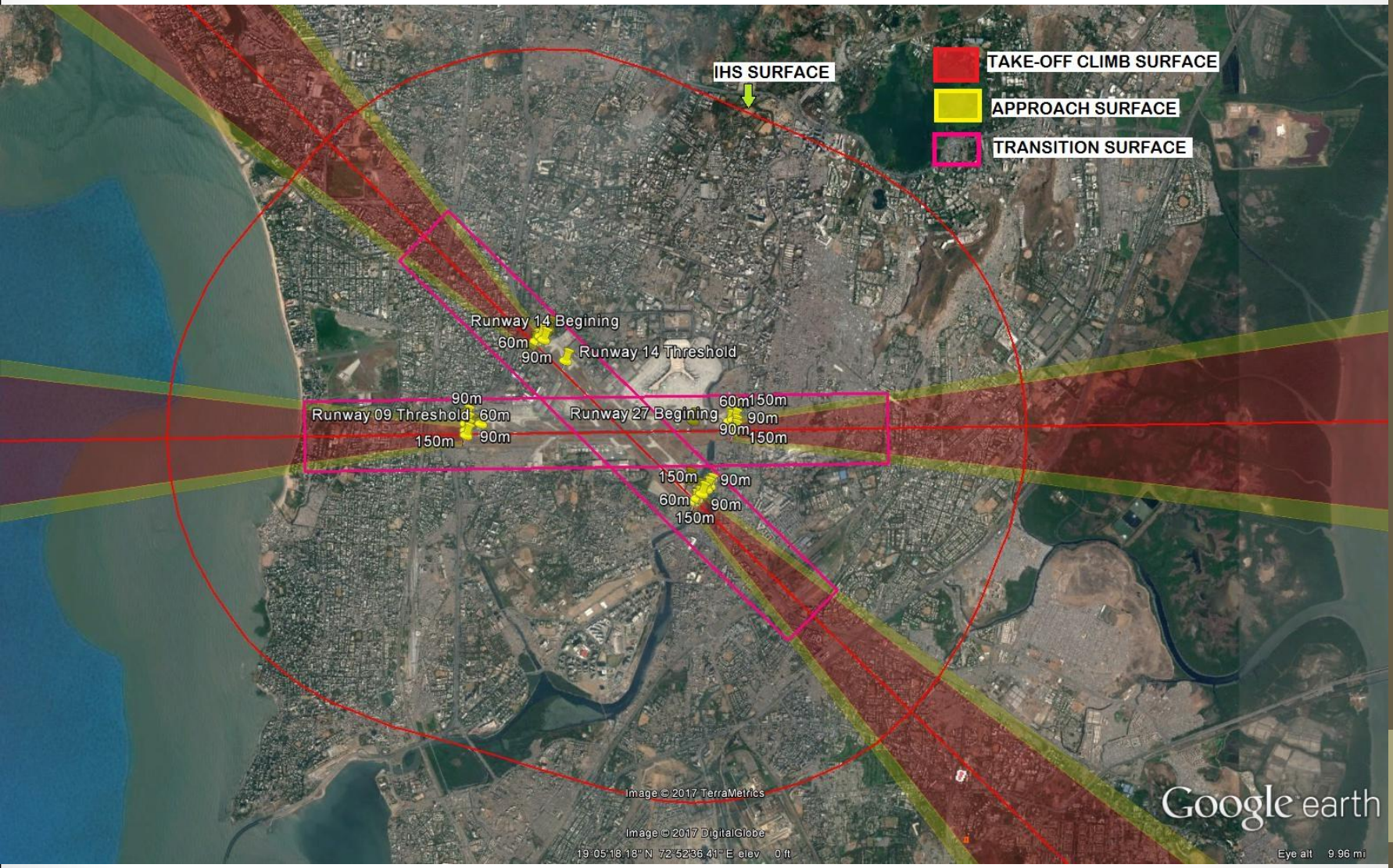
- Uniqueness of Mumbai & Importance of AAI NOC
- Evolution of permission : S.O.84(E) vis-à-vis GSR751(E)
- Governance framework
  - ICAO v/s MoCA v/s DGCA v/s AAI v/s MIAL
- Requirement of Further Height
  - Incentive FSI provisions -> consumption becoming challenge
  - Stringency of Open space requirements
  - Tendency to move up/higher
- Higher Height = Higher Consumption = Higher Profit

MUMBAI - RUNWAYS



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ISSUES BEING FACED BY INDUSTRY

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- Lack of awareness leading to perception of being arbitrary
- Dynamic environment leading to ever changing regulations
- PIL matters / Litigations leading to embargo on grant of additional height
- Highly technical subject involving multiple stakeholders

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STEPS TAKEN BY INDUSTRY

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- Meetings with Shri Jayant Sinha (Hon. MoS – Civil Aviation)
- Formation of NOC Review Working Group 2017 in Oct 2016
- Appointment of Consultants -> Airodynamiks, Mumbai
- Studies carried out by Consultants and submission of common representation on behalf of associations
- Meetings / discussions with AAI from Feb 2017 to May 2017 followed by conclusion of Working Group report in Sep 2017

ACTION TAKEN REPORT

- Intent is to ensure maximum economic benefits to neighbouring communities and least possible interference with rights of property owners

in addition to

- Ensuring greatest possible degree of safety and efficiency for aircraft operations

CURRENT STATUS OF WORKING GROUP's RECOMMENDATIONS

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Sr No	Issue	Discussion with AAI (MoM dated 17-May)	Current Status
1	Vertical height tolerance	Agreed, Tolerance of 0.5mtrs allowed in Top Elevation	ATMC done, GSR pending
2	Restriction due to ADS-B to be removed	Agreed (as per EUR guidelines), restriction limit 2 kms	GSR751(E) pending
3	Validity Period (8 years to 12 years)	Partially Agreed (8 yrs plus case-to-case revalidation up to max 12 yrs)	ATMC done, GSR pending
4	Savings clause (height once issued to be honored till validity period)	Agreed with valid NOC	ATMC done, GSR pending
5	Multi Radar Criteria benefit to be granted	Agreed	Done, Issue resolved
6	Shielding benefit from existing buildings	Not Agreed after AAI internal study	Not Applicable
7	Juhu Runway 08/26 : Code 3 to Code 2	Agreed	Done, Issue resolved
8	Minimum Sector Altitude	Agreed for case to case to basis	Under Consideration
9	Aeronautical study within approach (2.25 kms to 4 kms) – I H S portion	Not Agreed	Not Applicable
10	Aeronautical study (for layouts)	Agreed	Done, Issue resolved
11	Letter from Planning Authority to be replaced with Letter from Architect	Agreed	Incorporated in ATMC and implemented
12	Procedural amendments in aero study	Agreed	GSR751(E) pending
13	Stakeholder's (Developers) - Consultation	Agreed as Stakeholder	GSR Pending
14	Regular meetings / interactions	Agreed	Done

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NEW ISSUE – PERMANENT NATURE DISPLACED THRESHOLD

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- In accordance with **S.O.84E** , para 1.3.1.4, "for determining the approach, the physical extremities of the runway shall be considered and if the displacement of the threshold is permanent nature then, permissible height based on displaced threshold point to be considered".

    - **As the aerodrome operator has not declared permanent, the displaced threshold approach point was not considered for initial NOC and the buildings/structures, which are just outside the approach surface** and falling within Inner Horizontal (I H S), Conical (CS) and Outer Horizontal (OHS) surface were considered for aeronautical study and additional heights have been granted in revised NOC.

- In accordance with **GSR 751 (E)**, para 1.3.1.4, the sentences temporary or permanent threshold were removed and permissible height of approach shall be calculated based on runway extremity or displaced threshold whichever is most restrictive.

    - In the initial NOC, only runway extremity approach and transition surface is considered and permissible height is calculated. **Displaced threshold approach surface is not part of the analysis.**

NEW ISSUE : PERMANENT NATURE DISPLACED THRESHOLD

- The buildings /structure , which fall just outside runway extremity approach surface and within I H S / CS / OHS surface and applied for additional height based on aeronautical study, has been rejected due falling within approach surface, as **approach surface of both (Runway Extremity and displaced threshold) are considered for calculation**.

- Hence, it is requested to consider either to grant permissible height based on displaced threshold approach surface to applicable building /structure (or) not to consider displaced threshold approach surface analysis during aeronautical study request for additional height. If, declared distances, Take off Run Available (TORA) & Take off Distance Available (TODA) are considered till runway extremity, then, the building /structure fall outside take – off Climb surface is/are to be considered for permissible height benefit based on displaced threshold approach consideration

- We therefore request the following to be incorporated in the GSR 751 (E), Para 1.3.1.4: "**In case the Threshold has been displaced due to Obstacles of Permanent Nature, which are in existence for considerable time, not likely to be removed and Instrument Approach Landing Procedure are permanently established by AAI at the aerodrome with the Displaced Threshold reference, the Displaced Threshold shall be considered as reference point" for NOC calculation**.

NEW ISSUE : PERMANENT NATURE DISPLACED THRESHOLD

- **Example:** The plots which are falling in the IHS as per the initial NOC are falling in the displaced threshold approach surface and hence these cases are being rejected for additional height based on aeronautical study.

Partys Name	Case Number	Rejection Date
MICL Realty LLP	AAI/20012/133/2017 NOCAS ID: SNCR/WEST/011817/192566	04.08.2017
Arihant Realtors	AAI/20012/120/2017 NOCAS ID: SNCR/WEST/062715/140016	24.07.2017

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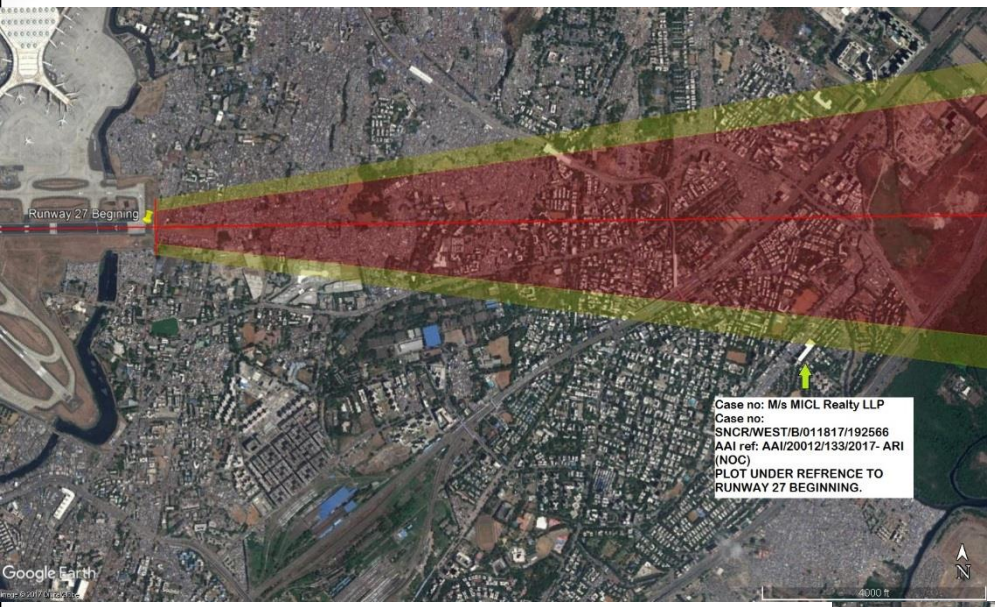
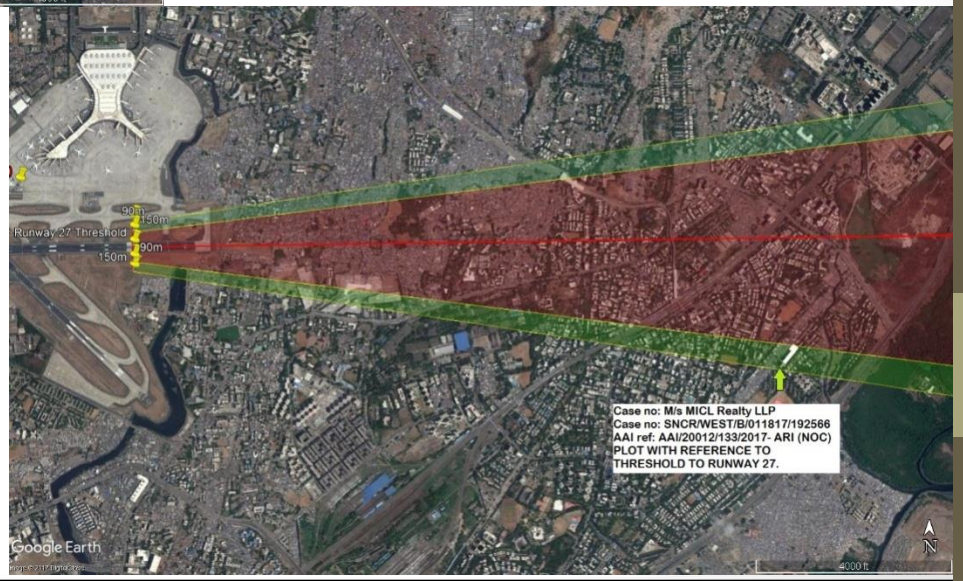


BEFORE

AFTER



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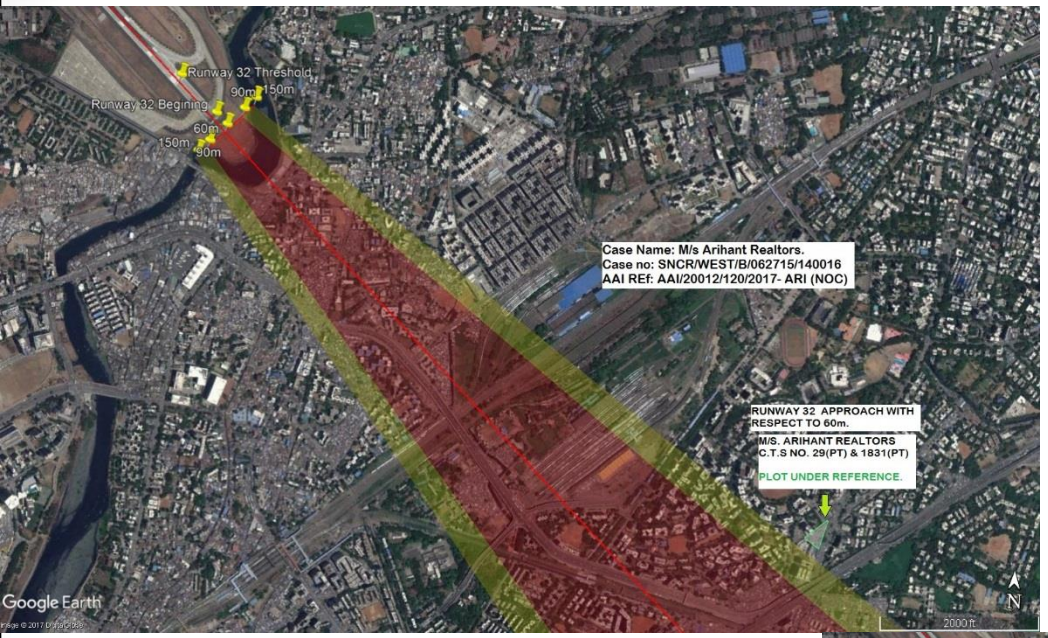

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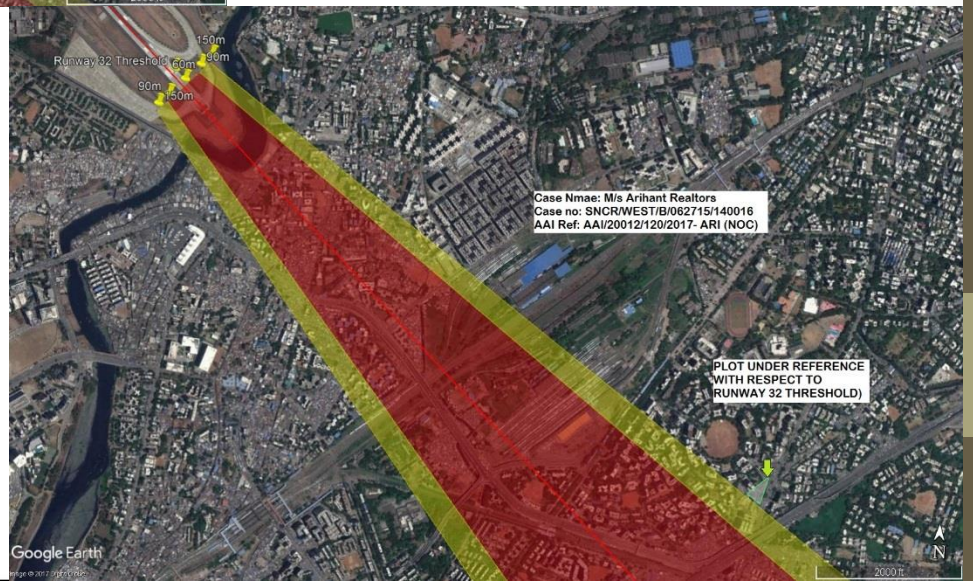


NEW ISSUES : TECHNICAL ANALYSIS UNDERWAY

- AR RNP RWY 32 – Authorization Required RNP (Required Navigation Performance – CASE TO CASE BASIS
- SRA : Surveillance Radar Approach (09/27/14) limitation on Conical Surface (Most Restricted than IAL Limitation).
- Navi Mumbai - Pre NOCAS clearances – OC denied for want of NOC from AAI
- No Aeronautical study - North of Juhu I H S – Shri. Negi Report Implementation.
- Further streamlining of processes, reduce time taken for conducting aeronautical study

VABB/BOM CHHATRAPATI SHIVAJI INTL

JEPPESEN 18 OCT 13 Eff 1 Nov (18-1)

MUMBAI, INDIA SRA Rwy 09, 14, 27

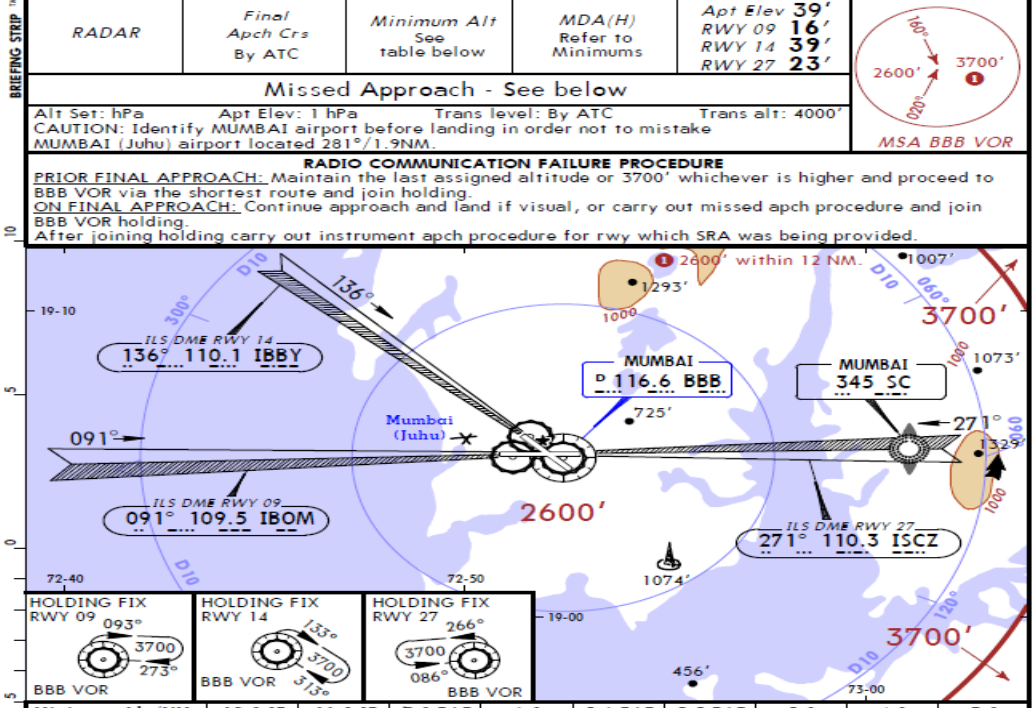
ATIS	MUMBAI Approach (R)	MUMBAI Radar (TAR)	MUMBAI Tower	Ground
126.4	127.9 119.3	127.9	118.1	121.75 121.85 121.9

RADAR	Final Apch Crs By ATC	Minimum Alt See table below	MDA(H) Refer to Minimums	Apt Elev 39′ RWY 09 16′ RWY 14 39′ RWY 27 23′

Missed Approach - See below

Alt Set: hPa Apt Elev: 1 hPa Trans level: By ATC Trans alt: 4000′
CAUTION: Identify MUMBAI airport before landing in order not to mistake MUMBAI (Juhu) airport located 281°/1.9NM.

MSA BBB VOR



RADIO COMMUNICATION FAILURE PROCEDURE

PRIOR FINAL APPROACH: Maintain the last assigned altitude or 3700′ whichever is higher and proceed to BBB VOR via the shortest route and join holding.
ON FINAL APPROACH: Continue approach and land if visual, or carry out missed apch procedure and join BBB VOR holding.
After joining holding carry out instrument apch procedure for rwy which SRA was being provided.

HOLDING FIX RWY 09	HOLDING FIX RWY 14	HOLDING FIX RWY 27
093° 3700 273° BBB VOR	133° 3700 313° BBB VOR	266° 3700 086° BBB VOR

Minimum Alt/NM	12.0 IF	11.0 IF	7.0 FAF	6.0	5.6 FAF	5.5 FAF	5.0	4.0	3.0
SRA 09	—	2600′	—	—	**1800′**	—	1610′	1290′	970′
SRA 14	—	2600′	—	—	—	**1800′**	1640′	1320′	1000′
SRA 27	2600′	—	**2500′**	2140′	—	—	1790′	1430′	1080′

MISSED APCH:
Rwy 09: Climb STRAIGHT AHEAD to 2600′, then climbing turn LEFT to join VOR holding at 3700′, or as directed.
Rwy 14: Climb STRAIGHT AHEAD to 2600′, then climbing turn RIGHT to join VOR holding at 3700′, or as directed.
Rwy 27: Climb STRAIGHT AHEAD to 2600′, then climbing turn RIGHT to join VOR holding at 3700′, or as directed.

Gnd speed-Kts		120	140	160	180
Rwy 09, 14: Descent Angle	3.03°	643	750	858	964
Rwy 27: Descent Angle	3.32°	705	822	940	1058
MAP at 2.0 NM from threshold					

Lighting-Refer to Airport chart

Refer to Missed apch above

Standard/DGCA STRAIGHT-IN LANDING

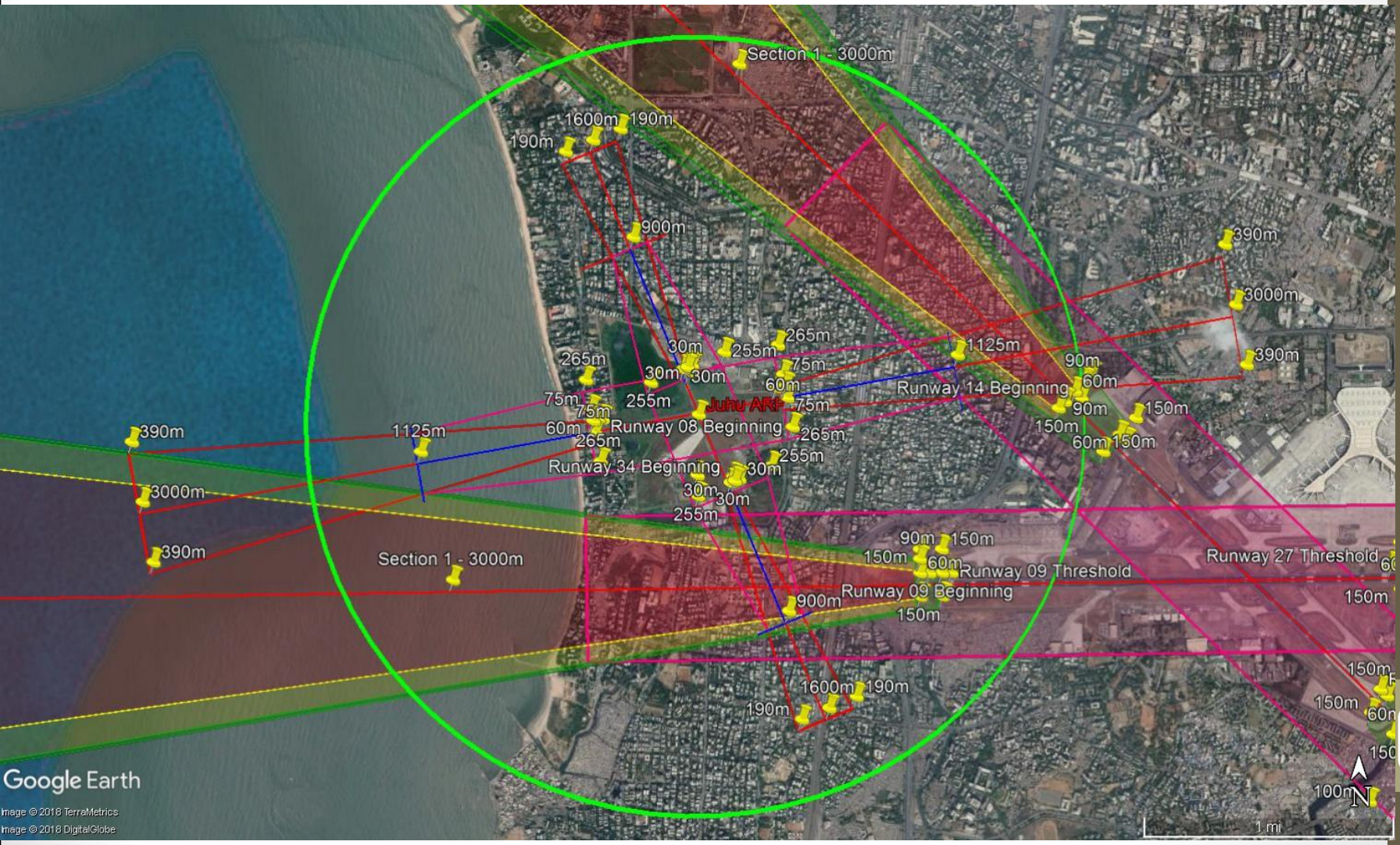
	SRA 09 CDFA	SRA 14 1 CDFA	SRA 27 CDFA
	MDA(H) 660′ (644′) ALS out	MDA(H) 680′ (641′) ALS out	MDA(H) 980′ (957′) ALS out
C	RVR 2400m	RVR 2400m	RVR 2400m
D			

1 Procedure not available when ceiling is 500′ or less.

CHANGES: Airport & rwy elev. Radar frequency. Minimums.

BRIEFING STRIP™ PANS OPS

JUHU – I H S – NORTH OF RUNWAY 09/27 APPROACH NO AERONAUTICAL STUDY



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PIL MATTER : NEXT DATE

15/02/2018

THANKS FOR YOUR VALUABLE TIME

T.MOHAN CHANDRAN

"ENHANCE YOUR OWN LIFE

AND

LIFE'S OF OTHERS AROUND YOU"