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Site Inspection Report of Airport Infrastructure at Jhansi Airport, UP for operationalization under Regional Connectivity Scheme (RCS)

Date of Visit-23.02.2018 & 24.02.2018

INDEX

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Existing Infrastructure</td>
<td>1-6</td>
</tr>
<tr>
<td>2.</td>
<td>Aircraft Characteristics and Requirements for Category 1B Airport</td>
<td>7-8</td>
</tr>
<tr>
<td>3.</td>
<td>Action Plan</td>
<td>9-15</td>
</tr>
<tr>
<td>4.</td>
<td>Drawings</td>
<td>16-18</td>
</tr>
</tbody>
</table>
**Development of Jhansi Airport (UP) for operation of flights under RCS – UDAN**

(M 28, DO228-200, Beech craft 200 type - 19 Seater Aircraft-Runway codes 1B)

AAI team consisting of officials from CNS Dte., (ATM), Structure, Electrical Engg., Civil Engg., Planning, Arch., Fire Services visited Jhansi Airport on 23.02.2018 and 24.02.2018 along with officials from U.P. State Govt. to study existing infrastructure for establishing a Civil terminal building and other requirements to enable operation of civil aircraft at Jhansi. The recommended action plan for works required to be carried out for operation of flights under RCS-UDAN.

**Existing infrastructure:** - Existing airport at Jhansi is under the control of Indian Army. The Runway and associated pavements of aerodrome are seeming to be in good condition. As informed by army authorities the resurfacing work has been carried out in 2016. Runway is a flexible pavement whereas the Taxiways and Apron are rigid pavements which is suitable for General Aviation small aircraft and Helicopter. The ATC tower, CNS and firefighting and rescue services are also available.

At present, there is no scheduled commercial operation at this airport, but as told by Army Officials, the airport caters in general helicopter operations and occasionally for non-scheduled aircraft by Cessna/King air type small aircraft.

The following are the technical details:

- Runway : 1070mX20m, Designation 15/33
- LCN value of runway : 10
- Turn Pad : Not Available
- Stop way/Blast Pad : Not Available
- VFR/IFR : VFR
- Apron : Apron of Size 318 x 50m is available in front of Hanger
- Area of dispersal : 125 x 58m
- No. of Parking bays :
- Taxiway : 3 no link taxi connecting apron to Runway (53.5m X15.00m)
- Terminal Building : Not Available
- ATC tower : Available
- Fire Station : Available
- Boundary Wall : Fencing of boundary available
- Availability of Electric supply : State electricity supply is available and stand by Generator is also available in Defence Area
- Availability of Water Supply : Yes
- Availability of Approach road to Airport : Available
- Sewage disposal system : Available in Defence Area
- Wind direction indicator (Windsock) : Available
- Landing Direction Indicator (T) : Available

1. **Land position:**

As Jhansi is being maintained by ARMY therefore, for RCS operation a new Civil Enclave is proposed to be developed for which additional land is required. In this regard the team has met with DM Jhansi regarding the development of Jhansi Airport. As per the discussion held and the land shown by the State Govt. Officials that approximately 4 to 5 acres land can be made available for immediate development of terminal building and Car Park on the West side of the runway 15 having approach from NH-75.

Further, a meeting was held in the office of Chief Secretary Govt. of UP on 07.03.2018 at Lucknow regarding operationalization of RCS Airports in Uttar Pradesh with RED (NR) and GM (Arch). In the meeting the State Govt. has informed that State Govt. have 60 acres of land at Jhansi and this land will be handed over to AAI for development of Civil Enclave. Subsequently, RED (NR) also informed
that construction of Civil Enclave shall be done by AAI, whereas construction of approach road to Civil Enclave is to be done by Govt. of UP as it is being done all State Govt. in RCS stations.

2. Terminal Building: It is proposed to construct pre-engineered structure as Passenger Terminal Building to accommodate 20 nos. arrival passengers and 20 nos. departure passengers at a time.

3. Runway:
   1. The length of existing runway is 1070m and width is 20m, as informed by Defence Officials, the resurfacing work had been carried out in 2016. At present, the condition of runway at Jhansi seems to be good. However, the turn pads are not available at both ends.
   2. The space between runway and boundary wall at 15 beginning is sufficient for compliance of Longitudinal transitional slope but at 33 beginning the space is insufficient for longitudinal transitional slope clearance. In view of this, it is proposed to shift the threshold at 33 side by 70m to make the effective length of runway 1000m as shown in Annexure-I. In addition to above GM (Arch.) has also intimated that in the meeting held with Chief Secretary on 07.03.2018, it has been decided that the runway width will be increased by 10m to make them total 30m wide. Accordingly, it is proposed to extend the width of runway by 10m to make them overall size of 1000x30m as shown in Annexure-I.

3. Basic Strip and Runway End Safety Area (RESA):
   1. For operations of Category 1B aircraft under VFR conditions a Runway strip of size 1060m X 60m properly levelled and graded is to be provided as per the required specifications.
   2. After reducing the effective length of runway, sufficient land will available on both sides of runway for providing a runway strip of width 60 mtr. The condition of existing basic strip seems to be good and it is properly graded and levelled. However, the same can be assured as per the required specification by operating authorities.
   3. Runway End Safety Area (RESA) is not available at both the end of runway strip. Sufficient land is available on both ends for the same in the existing infrastructure. Therefore, RESA (Runway End Safety Area) of size 30m X 40m is to be provided on both the ends of runway as per the as per CAR.

4. Runway marking
   1. Runway marking are available but before commencement of operation its needs to be repainted.

5. Taxiways, Taxiway Strip & Taxiway Markings
   Three taxiways of length 125m and width 15 m. are available in North side of runway connecting the apron to runway.

   One taxiway of length 53.5m and width 15 m. is available in South side of runway which connecting the apron/ area of dispersal to runway. PCN value of Taxiway is also need to be determined for the proposed aircraft operation.

6. Apron & Apron Markings
   The existing apron/ area of dispersal of size 125 x 58m at North side is suitable for parking of two nos. Category 1B type of aircraft. As an immediate measure the area of dispersal / apron at North side can be used as an apron for operation of RCS Flights. However, the feasibility to use the same will be depend upon the location of land will be made available
by State Govt. for Civil Enclave. PCN value of apron is also needs to be determined for the proposed aircraft operation. The apron marking is not available same needs to be done.

7. **Subgrade Strength and Pavement Classification Number (PCN):**

The desired PCN (Pavement Classification Number) value for operations of Category 1B type Aircraft should be more than 7. The declared LCN value of runway is 10. However, the PCN of the existing pavement is not known. Therefore, PCN and Subgrade Strength evaluation of the existing runway, taxiway and apron shall have to be carried out and if required, the runway, taxiway & apron may have to be strengthened to meet the desired PCN value.

8. **Car Parking:**

On the city side a suitable area parking area should be developed for at least 30-40 vehicles. The parking shall preferably be developed at a clear distance of minimum 100 mtr from the Terminal Building as per BCAS norms. However, as per BCAS letter dated 17/03/2017, due to land constraints in No-frill airport under RCS, BCAS has given relaxation for RCS operation that the parking can be developed at least a clear distance of minimum 20m instead of 100m from the terminal building.

9. **Perimeter Road & Lighting:**

Perimeter lighting is available. However, perimeter road is available in some part at Jhansi airport. Same needs to be provided inside the operational area along the operational boundary wall. The road width and strength should be sufficient for movement of safety vehicles Fire Crash Tenders. General lighting to be provided for security concerns.

10. **Boundary Wall:**

1. A barbed wire fencing is available all around the Defence Airfield.
2. As per the Bureau of Civil Aviation (BCAS) norms, boundary wall of 8 feet height plus 1.50 feet overhang consisting of barbed wire concertina coil shall have to be provided all around civil enclave. An entry gate segregating the civil apron with operational area is also required.

11. **Water Supply System**

1. Two nos. bore-well with overhead/underground tank is required to fulfill the requirement of water supply system of Civil Enclave.

12. **Electrical Requirements for VFR operation—**

(1) The 11 KV HT Supply with 11 KV / 415 V transformer is required with LT metering connection from UPPCL. The 63 KVA DG Set is also required for standby power supply.
(2) The approximate 8 mtr x 10 mtr covered hall to be required for installation of AMF Panel, LT Panel and Sub-station equipment’s.
(3) The standby power supply source i.e. DG set with AMF Panel and LT Panel.
(4) Internal & External electrification as per operational requirement.
(5) Electrical fitting and fixtures i.e. Fan, LED Light fitting in existing terminal building.
(6) Air-Conditioning of existing terminal building for passenger facilitation and operational equipment’s.
(7) Water Coolers and RO System for drinking water supply.
(8) Electronic Weighing Machine for checking counters.
(9) Signages for passenger facilitation in existing terminal building.
(10) Electrical fitting & fixtures for new proposals / requirements by CNS, Civil etc.
13. CNS Equipment: No space is available for CNS equipment. A room of size 6x4 is required for placement of CNS equipment.

- **Availability of CNS Equipment:** One no. VHF 119.7/ALT122.7 is available, VHF Trans-receiver 10W available and One no. DVR 16 Channel is also available.

- **Power supply:** Power source in the airport premises can be utilized to energize UPS for equipment after proper cabling.

- **Air Conditioning:** It is required to install two ACs for VHF AND DVR equipment.

- **Availability of Earthing:** A new Earthing is required to make before installation of CNS equipment.

- **Availability of Telephone line:** Telephone line is not available inside airport premises. Local administration has to take up the issue with BSNL/Other service provider to terminate few lines inside airport premises.

- **Availability of DG Set as back up:** DG set is required as back-up for mains supply.

- **Availability of Furniture for CNS equipment:** Needs to provide few basic furniture for equipment and officers.

**CNS Requirements for VFR operation**

Following essential facilities are required to be provided by CNS Dte in order to provide Air Traffic Control Service under RCS at AAI and non AAI airports.

1) VHF for Control Tower (Main & Standby Frequency) with associated equipment’s recording facility (DVR) etc.
2) Digital Clock.
3) Direct Telephone line with STD facilities and Fax machine.
4) Intercom facilities with CNS units, fire stations etc.
5) Direct Hot Line with City fire brigade.
6) At least two sets of Walky-Talky equipment’s.
7) Crash Fire Alarm and PA systems.
8) Mobile Phone with dual SIM (One from BSNL and other having good coverage)
9) Computer with internet facility and Printer.

**Remarks for CNS Equipment’s/facilities:**

1) CHQ (CNS-P) is taking action to procure facilities at Sl. No: 1 wherever not available.
2) RHQ’s are required to take action to provide facilities from Sl. No. 2 to 9 wherever required.
14. Airport Security:
State Police shall provide/ensure Airport security and shall be trained by Bureau of Civil Aviation Security (BCAS) for anti-hijacking and peripheral security. The number of police personnel to be deputed shall be communicated to State Govt. by BCAS after inspection for training and deployment.

- Minimum two watchtowers to be provided at ends of runway
- State Govt. to provide following Security equipments/ gadgets:
  - X-ray Baggage Inspection System for Hand Baggage – 1 No.
  - ETD (Explosive Trace Detector) – 1 No.
  - DFMD (Door Frame Metal Detector) – 2 Nos.
  - HHMD (Hand Held Metal Detector) – 2 Nos.
  - CCTV – As per requirement
  - FIDS (Flight Information Display System) – 2 Nos.
  - PA System – 2 Nos.

15. Fire Services:
The fire station is available in operational area. The same can be utilized as a fire station according to Fire Safety Manual-15 (AAI). ARFF facility i.e. 1+5 crew for 1 CFT is available. 1 Ambulance and 2 TFF is also available. The proctin form and CO2 trolley extinguishing is also required.

The airport operator/ ARMY may ensure the facility according to Cat-IV along with Communication facility for fire service/fire Static tank and overhead tank. Further, crash gate at both the ends of runway is not provisioned which is a mandatory factor. Considering these facts into account a Fire Service Manual-15(AAI) extract is attached.

16. Obstacle Limitation Surfaces (OLS) survey:
During the inspection, the following natural/man made obstacles were observed and these needs to be assessed/removed for the proposed operations:

(a) Height clearance of the overhead tank at North East side w.r.to transitional slope is to be ensured.
(b) Some trees are coming in approach towards 15 side of runway, same is to be ascertain and should be trimmed before commencement of operation.
(c) A guard room surrounded with bunch of trees is very near to runway 15, same is to be ascertain and shall be removed if found obstacle.

A detailed Obstacle Limitation Surfaces (OLS) survey of the airport area and the area around the airport as per CAR (Civil Aviation Requirement) published by DGCA has to be carried out mandatorily for establishment of obstacle limitation surface (i) conical surface (ii) inner horizontal surface (iii) approach surface (iv) transitional surface in order to find out existing obstacles penetration and thereby subsequently issue NOC for others. This is essential to identify the obstacles, to check the viability of operation and to ascertain declared distances before taking up any operations and also for development of Aerodrome chart, Grid Map, Zoning Map and type-A obstacle chart of approach runway 15 & 33 etc.
17. **Notification for obstacle limitation:**
   The Master Plan for the airport development (including proposed future development, if any for bigger aircraft operations) may be finalized and accordingly DGCA and the state Govt. should be requested to immediately issue the notification to include Jhansi Airport as an VFR Airport in the Airport list of GOI notification no. GSR-751 (E) for making it mandatory for obtaining of “NOC for height clearance” for construction of buildings and structures around airport taking into account the proposed Master plan.

18. **Aerodrome Licensing requirement:**
   Presently Airport license is not available. As the proposal is intended for scheduled flight operation by Airline and also for general Aviation flights etc, the airport shall have to obtain aerodrome license for ‘public use category from Directorate General of Civil Aviation (DGCA)’ it is therefore proposed that the development plan should be submitted to DGCA before execution and prior consent of meet the regulatory compliance thereby facilitating obtaining of aerodrome license.

   It shall also be desirable to obtain BCAS clearance on the development plan before execution.

   Further, any other statutory clearance required from local/central authorities shall be obtained.
Requirements for operation of RCS Airport Code-1B

1. Minimum Length of Runway - 800 mtr.
2. Minimum Basic Strip - 30 Mtr. on either side
3. Shoulder required – Nil
4. RESA - (2xwidth of runway) x 30 mtr.
5. Apron Size - 70X35
6. Taxiway width - 10.5 mtr.
7. Terminal Building - Covered area 525 sqm.
8. Car Park for 25 cars @ 20 sqm. per car = 500 sqm.
9. Lateral Transition slope 20%
10. Longitudinal Transition slope 5%

M 28 Aircraft Technical Information (M 28 Twin Turboprop Aircraft)

- Passenger Capacity - 19 passengers + 2 Crew
- Cabin Length - 5.26 mtrs.
- Cabin Height - 1.70 mtrs.
- Cabin Width - 1.73 mtrs.
- Cabin Volume - 13.7 m3
- External Luggage Pod Volume - 1.3 m3
- Rear door length - 2.6 mtrs.
- Rear door width - 0.9 – 1.2 mtrs.
- Wing Span - 22.06 mtr.
- Length - 13.10 mtr.
- Tail height - 4.90 mtr.

Specifications: Performance (estimated)
Sea level, standard day, maximum takeoff gross weight unless otherwise noted

- Maximum Takeoff Gross Weight - 7500 Kg.
- Takeoff Distance - 548 m
- Landing Distance - 499 m
- VMO - 355 km/h
- Maximum Cruise Speed - 355 km/h
- Long Range Cruise Speed - 244 km/h
- Range (10,000 ft, 45 minute reserve) - 1592 km
- Range with Auxiliary Fuel Tanks (10,000 ft, 45 minute reserve) - 2444 km
- Average Fuel Flow (10,000 ft.) - 268 kg./hr
- Endurance Standard Tanks (10,000 ft., 45 minute reserve) - 6.2 hours
- Endurance Auxiliary Tanks (10,000 ft., 45 minute reserve) - 11 hours
- Stall Speed - 118 km/h
- Rate of Climb - 12.29 m/s
- Service Ceiling - 7620 m
- OEI Service Ceiling - 3901 m
Weights

Maximum Takeoff Gross Weight - 7500 kg.
Empty Weight - 4354 kg.
Useful Load - 3145 kg.
Maximum Payload - 2300 kg.
Maximum Fuel Weight - 1766 kg (2278 l)

Fuel System

Normal Capacity - 2278 l
Auxiliary Ferry Tank - 2090 l

Dimensions

Propeller Diameter - 2.82 m
Wheelbase - 3.39 m
Wing Tip to Wing Tip turn radius - 14.73 m

Engines

Manufacturer/ Type - (2) PRATT & WHITNEY, CANADA PT6A-65 B
Max. take-off power (per engine) - 820 kw
Max. continuous power (per engine) - 820 kw
Max. cruise power (per engine) - 745 kw
Max. climbing power (per engine) - 745 kw

Dornier 228-212
- Wing Span (Over Winglets) - 16.97 m
- Wheel Base - 6.29 m
- Passanger Capacity - 19 Seats

Beechcraft 1900 D

Aircraft Range - 1500 nm
Fuel Capacity - 2022 kg.
Main Gear - Dual
Passenger Capacity - 19 seats

A. Maximum Aircraft Ramp Weight - 7736 kg.
B. Maximum Aircraft Landing Weight - 7530 kg.
C. Maximum Aircraft Takeoff Weight - 7688 kg.
D. Minimum Turning Radius - Not Available
E. Length (Overall) - 17.63 m
F. Wing Span (Over Winglets) - 17.67 m
G. Tall Span - 5.63 m
H. Wheel Base - 7.25 m
I. Wheel Track - 5.23 m
J. Tail Height - 4.72 m
**Action Plan**

The sketch/Development plan of Jhansi Airport for this is attached as Annexure-I. However, the requirements as mentioned in the following Paras shall be fulfilled for the same:

1. **Handing over of land:** The State Govt. has 60 acres of land at Jhansi and same is to be handed over to AAI for proposed work for development of Civil Enclave at Jhansi.
   
   **Action:** State Govt.

2. **Joint Use Permission from ARMY:** Necessary approval / NOC is required for operation of RCS flight and development of Civil Enclave from Ministry of Defence.
   
   **Action:** State Govt. / Defence/ AAI Plg. Dte.

3. **Pavement works:**
   - Widening of runway by 10m (1000x10=10000 Sqm) (overall size 1000x30m)
   - Basic strip grading at runway ends
   - Construction of RESA 40X30 mtr
   - Apron and Link Taxiway
   - Runway Marking
   - Internal Road
   - Construction of car parking area of size 25x30m to accommodate 25 nos. vehicles.

   The pavement works shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

   **Approx. Cost:** Rs. 13.0 Crore  
   **PDC:** July 2018 (subject to handing over of land by State Govt)

   **Action:** State Govt. / AAI Plg. Dte. / RED, NR, AAI

4. **Terminal Building:**
   - It is proposed to construct pre-engineered structure as Passenger Terminal Building of covered area 525 sqm (as per enclosed drawing as Annexure-II) to accommodate 20 nos. arrival passengers and 20 nos. departure passengers at a time to provide the following essential facilities/areas:
     - Arrival lounge, Departure lounge, Security hold area with Washroom facility for Male, Female & Differently abled passengers, Passenger Check-in Area, VIP Lounge, First Aid Room, Fire control room, Arrival baggage claim area, Baggage Make up area.

   Suitable seating arrangement is required in departure and security hold area. The drinking water facility has to be provided in terminal building. Suitable arrangement to be made for passenger baggage trolleys for arriving as well as departing passengers.
   - The air conditioning should be provided for at least SHA.
   - Internal road around terminal building, VVIP room and for control tower is to provided.

   The passenger traffic picks up, food stalls, TR stalls, etc can be provided by positioning porta cabins on the side of terminal building.
The work for construction of Terminal Building along with above mentioned facilities shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 2.5 Crore  PDC: July 2018 (subject to handing over of land by State Govt.)  
Action: State Govt. / AAI Plg. Dte./ RED, NR, AAI

5. **Operational Boundary Wall:**

1. Construction of boundary wall of 8 feet height plus 1.50 feet overhang consisting of barbed wire concertina coil all around civil enclave, as per the Bureau of Civil Aviation (BCAS) norms.
2. Construction of operational wall to separate the city side area from airside as per proposed Master Plan with gate.
3. Provision of fire crash gates on both ends of boundary wall.

The work for construction of boundary wall shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 2.5 Crore  PDC: July 2018 (subject to handing over of land by State Govt.)  
Action: State Govt. /RED, NR, AAI

6. **Runway Strength (PCN)** – PCN and Subgrade Strength evaluation of the existing runway, taxiway and apron shall have to be carried out and if required same needs to be strengthened to meet the desired PCN value. The CBR/K value of soil subgrade, cross section of runway/taxiway/apron/pavements shall be required for PCN evaluation. The State Govt. shall take-up the matter with the Defence authorities for providing the same.

For PCN evaluation, action has been initiated by AAI, CHQ Structure Directorate.  
PDC: April 2018  
Action: Defence/ AAI, CHQ Structure Dte.

7. **Other Misc. Civil works:**

- Provision of Cooling pit is also required. The location of the same will identified and action for completion shall be taken up by UP State govt.
- Fire Pit
- Development of green area in front of Terminal Building.
- Construction of a room of size 6x4m for installation of CNS equipment’s.
- Construction of 8x10m room / space for installation of electrical panels etc.
- Underground and overhead tank for water supply.
- Guard room / Watch Tower etc.
- Septic tank
- 2 no Borewell
The above-mentioned work shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs. 1.3 Crore  **PDC: July 2018** (subject to handing over of land by State Govt.)

**Action:** State Govt. / AAI Plg. Dte. / RED, NR, AAI

8. **Access Control/ Approach Road:**

Approach road from highway to be widened to two lane road with boom barriers at the airport entrance and properly illuminated. Necessary signage’s from highway also to be provided. Shelter covers/ booths to be provided for checking security staff.

In addition to above a new Approach Road is required from NH-75 to Civil Enclave.

The work for construction of approach road shall be carried out by state Govt.

**PDC: July 2018**

**Action:** State Govt.

9. **Control Tower:**

All the Control Tower facilities are available with Defence and same will be provided by them for Civil operations.

**Action:** Defence/State Govt. / Planning Dte. AAI/RED, NR, AAI

10. **Documentation:**

The necessary documentation like security manual, quality control manual, aerodrome manual, emergency procedure and contingency plans, safety management manual etc. to be prepared by State Govt. in co-ordination with AAI Ops. Dte.

**Action:** State Govt.

11. **CNS Works:**

Following essential facilities are required to be provided by CNS Dte in order to provide Air Traffic Control Service under RCS at AAI and non AAI airports.

1) VHF for Control Tower (Main & Standby Frequency) with associated equipment’s recording facility (DVR) etc.- **CHQ (CNS-P) is taking action to procure facilities**
2) Digital Clock.
3) Direct Telephone line with STD facilities and Fax machine.
4) Intercom facilities with CNS units, fire stations etc.
5) Direct Hot Line with City fire brigade.
6) At least five sets of Walky-Talky equipment’s with one Base Station.
7) Crash Fire Alarm and PA systems.
8) Mobile Phone with dual SIM (One from BSNL and other having good coverage)
(9) Computer with internet facility and Printer.
   - RHQ’s is required to take action to provide facilities from Sl. No. 2 to 9
   - It is required to install two ACs for VHF AND DVR equipment.
   - A new Earthling is required to make before installation of CNS equipment.
   - **Local administration has to take up the issue with BSNL/Other service provider to terminate few lines inside airport premises.**
   - DG set is not provided as back-up for mains supply. It needs to be provided as back-up.
   - No furniture available for CNS equipment. Needs to provide few basic furniture for equipment and officers.

The CNS equipment shall be precured/ arranged by AAI and shall be provided to State Govt. on rental basis.

Approx. Cost: Rs. 1.0 Crore                  PDC: July 2018
Action: CNS Dte., AAI, CHQ

12. **Security Equipment:**

Security equipment required are assessed as below:
   - XBIS (RB)-1 No.
   - X-BIS(HB)-1 No.
   - DFMD-4Nos. (SHA-2 Nos., Entrygate-1 No., Stop Gate- 1 No.)
   - HHMD- 8 Nos.
   - CCTV
   - ETD-2 Nos.
   - FIDS-2 Nos.
   - PA System – 2 Nos.

The Security equipment shall be precured/ arranged by AAI and shall be provided to State Govt. on rental basis.

Approx. Cost: Rs. 1.5 Crore                  PDC: July 2018
Action: AAI

13. **Airspace Management perspective and removal of obstacles** -

Airspace of Jhansi Airport is clear from Airspace Management point of view, OLS Survey needs to be carried out before commencement of operations. For survey and OLS charting Award letter has already been placed by CHQ vide letter No. AAI//9-3/RCS/2018(Survey) dated 23.02.2018. The identified obstacles from survey, buildings, towers, trees, HT Lines (if any) shall be removed by State Govt.

Approx. Cost: Rs. 11.8 Lakhs (for OLS survey) PDC: April 2018
Action: State Govt. / ED(ATM), CHQ, AAI
14. Fire Services:

At present the Fire and Rescue Services are available with ARMY. However, in-order to commencement of operation immediately at the Airport below mentioned infrastructure works and facilities shall be ensured or immediately required.

- ARFF competent firefighting crew along with fire extinguishing media for category- IV is required to be commissioned before commencement of operation.
- The following mandatory equipment’s and transport facilities are required
  a. 01 CFT and 01 Ambulance to be commissioned.
  b. 01 CFT 01 Ambulance to be kept stand-by.
  c. Fire store requirements:
     I. At least 700 liters of foam compound should be kept in reserve.
     II. At least 135kg of DCP should be kept in reserve.
     III. Rescue tools, Communication System, required furniture for Fire Station, Fire Pit
     IV. Fire Crash Gate at both ends of runway.

At present Jhansi airport is operated by ARMY so the abovementioned Fire facilities shall be ensured by them. However, if the same will not be provided by Defence, then the required/balance equipment’s / facilities shall be precured/ arranged by AAI and shall be provided to State Govt. on rental basis.

PDC: July 2018

Action: State Govt./Defence/ RED, NR, AAI

15. Security Services:

The Security services are to be provided by the State Govt. The State Police shall provide/ensure Airport security and shall be trained by Bureau of Civil Aviation Security (BCAS) for anti-hijacking and peripheral security. The number of police personnel to be deputed shall be communicated to State Govt. by BCAS after inspection for training and deployment.

Action: State Govt. / BCAS
16. **Electrical works:**

- The Dedicated 11 KV HT Supply with 11 KV / 415 V transformer is required with LT metering connection from UPPCL.

  (1) The standby power supply source i.e. DG set with AMF Panel and LT Panel.
  (2) Internal & External electrification as per operational requirement.
  (3) Electrical fitting and fixtures i.e. Fan, LED Light Fitting in existing terminal building.
  (4) Air-Conditioning of existing terminal building for passenger facilitation and operational equipment’s.
  (5) Water Coolers and RO System for drinking water supply.
  (6) Electronic Weighing Machine for checking counters.
  (7) Signages for passenger facilitation in existing terminal building.
  (8) Signages for operational area i.e. runway, taxiway etc.
  (9) Electrical fitting & fixtures for new proposals / requirements by CNS, Civil etc.

**NOTE:** The Runway Lights, Taxiway Lights, PAPI Lights, Approach Lights, Apron High Mast Lights, Perimeter Lights are not considered for VFR operation.

The Electrical work shall be carried out by state Govt. However, necessary drawings/specifications shall be provided by AAI. The monitoring during execution of work will be done by RED, NR AAI.

Approx. Cost: Rs2.6 Crore    **PDC:** July 2018 (subject to handing over of land by State Govt.)

**Action:** State Govt. /RED, NR, AAI

17. **Meteorology** - Some Met observatory facilities are available with Defence. However other Met observatory facilities and the trained Met. Officials may be required before commencement of commercial flights. Necessary coordination with Met. Department to be taken up by State Govt. of UP.

**Action:** State Govt.

18. **Status of Airport Licence** - Presently Airport license is not available. The state Govt shall initiate action for obtain aerodrome license ‘public use category from Directorate General of Civil Aviation (DGCA).

**PDC:** July 2018

**Action:** State Govt.
19. **Suitability of Airport**

Presently, Aerodrome is not fit for commercial flights, however, after actions as above and obtaining aerodrome licence, the commercial flight operations may be commenced.

Sh. Ashish Shrivastava  
DGM (CNS-P)

Sh. S. Ghosh  
AGM (Str.)

Sh. Dheeraj Kumar  
AGM (ATM-AIS)

Sh. R K Shami  
AGM (Engg.-Civil)

Sh. Rajkumar  
AGM (Engg.-Elect.)

Sh. Ganesh Sharma  
SM (Engg.-Civil) Plg.

Sh. Ram Sawaroop  
Manager (FS)

Sh. Anupam Kumar  
AM (Drg.-Plg.)
LEFT HAND SIDE ELEVATION

CITY SIDE ELEVATION