Subject : Development & Operationalisation of RCS (Round-2)
Airports in UP

- Feasibility study regarding

A meeting was held under Chairmanship of Secretary, Ministry of Civil Aviation, Delhi on 27.03.2018 for deliberation on development and operationalisation of RCS (Round-2) Airports in UP. DGCA, COSCA, AVM, IAF, Chairman, AAI, Member (Planning), Member (Ops), AAI, RED-NR, Principal Secretary, and Spl. Secretary, Deptt of Civil Aviation, UP and other senior officers from MOCA, DGCA, IAF and AAI were also present in the meeting. During meeting, DGCA intimated that before operationalisation of these airports, license is required to be taken from DGCA for which CAR requirements are required to be met. Hence, it was decided to send a team comprising of officers from AAI, DGCA and State Govt. immediately to these airports for inspection & for assessing feasibility of commencement of RCS flights at the earliest.

Accordingly, a team comprising of following officers visited at these Airports from 04.04.2018 to 05.04.2018:

Airports Authority of India

1. Sh. H.S. Balhara - GM(Engg-C)NR
2. Sh. S.K. Punwar - GM(ATC)NR
3. Sh. Vinod Kumar Punyal - Jt. GM(Arch)CHQ

DGCA

1. Sh. Ajit Kumar Yadav - Asstt. Director(Ops), DGCA

State Govt.

1. Sh. Moti Rai - Dy. Quality Manager (Nodal Officer, RCS), CAD, GoUP
2. Sh. Raj Kamal Nigam - PA to Director, CAD, GoUP

Airports-wise observations are as under:

1. BAREILLY

i) First of all, team visited at Bareilly Airport on 4.4.2018. It is an IAF airport. For construction of Civil Enclave at this Airport, a parcel of 36.75 acres of land has already been acquired by State Govt. and handed over to AAI. Further, 07 acres of land is being acquired by State Govt. for construction of link taxi track. Contract for “Construction of apron, taxi track etc.” has already been awarded by AAI and work will commence shortly. Similarly, tenders for “Construction of terminal building” have been floated and will be opened soon.

ii) Since construction of Apron, Terminal building etc may take time and RCS flights are proposed to be commenced from June / July 2018, as an interim measure, it has been decided to construct a temporary Terminal Building in the form of Porta Cabin by acquiring additional land of 2-3 acres near operational wall of IAF. After Check-in and Security Check,
passengers shall be taken to designated Aircraft parking in operational area by buses under surveillance of IAF.

iii) Accordingly, team visited at site along with DM, Bareilly and identified a parcel of 2.5 acres of land abutting land proposed to be acquired for Link Taxi track. DM, Bareilly intimated that this land belongs to farmers and acquisition of land may take 2 to 3 months. To avoid this delay, team suggests that temporary Terminal Building (Porta Cabin) may be constructed in the land already acquired for Civil Enclave. After construction of Terminal Building, this Porta cabin can be utilized as office complex / Cargo building.

iv) Team also met IAF officers along with DM, Bareilly for locating a suitable place for parking of Aircraft in operational area. During deliberations, IAF officers agreed to permit use of their Apron for parking of the Aircraft. They also agreed to temporarily allocate a piece of land near Apron for parking of Airlines buses, vehicles, ground handling equipments and construction of toilets etc. However, this parcel of land will required to be paved and fenced all around with a wicket gate for security reasons. IAF officers also insisted for providing CCTV coverage of Apron and proposed trolley gate up to their control room and to provide View Cutters at some locations along road from Apron to proposed Trolley Gate for security reasons.

v) Thereafter, team along with IAF and State officers travelled from Apron to location of proposed Trolley Gate along p and found that distance between the two is approx. 4.5 KM. Hence, the airlines may require 2 buses each for arriving and departing passengers apart from baggage vehicles for transporting luggage from / to Aircraft to avoid delays. It may not be financially viable to Airlines and convenient to the passengers. Moreover, AAI has to provide pavement for bus parking, fencing, view cutters etc. which may not only involve huge expenditure, but may take time also.

vi) Since, contract for “Construction of Apron, Link Taxi Track etc.” has already been awarded, team is of the opinion that instead of parking Aircraft inside operational area, we may construct Link taxi track from Runway 29 up to land proposed to be acquired for Link Taxi Track and construct a dumble there for parking of Aircraft as per Layout Plan (enclosed). Porta cabin (temporary Terminal Building) may be connected to this dumble through perimeter road. In this way, we can avoid any infructuous expenditure in operational area as, both, Link Taxi Track and Porta cabin are going to be utilized after construction of Civil enclave.

vii) Infrastructure Available at Airport:

a) Runway (11/29): Size of Runway is 2750 Mtrs. x 47 Mtrs., which is adequate for operation of 4C type of Aircraft.
b) Basic Strip : Available
c) Control Tower : Available (IAF)
d) Fire Station : Available (IAF)
e) Cooling pit : A revised layout plan indicating locations of Porta Cabin, perimeter road, temporary Aircraft parking (dumble), cooling pit (if required) etc. shall be issued by Planning Dte. of AAI.

(Action: ED(Planning)AAI)

f) All construction works shall be done by AAI.
2. MORADABAD

After visit of Bareilly Airport, team reached at Moradabad and inspected the Airport. Following are the observations:

i) Runway (12/30): Size of Runway is 2238 Mtrs. x 30 Mtrs., which is adequate for 19 seater Aircraft(M-28). Condition of runway surface is fairly good. However, some maintenance works are required to be done by UP PWD. Turning pads are available on both sides of Runway.

(Action : UP PWD)

ii) Basic Strip: Basic strip of 30 Mtrs. is available on both sides of Runway, adequate for operation of 19 seater Aircraft(M-28). However, it is not being maintained as par CAR of DGCA. It needs to be graded and provided with proper drainage system. Some trees were observed in basic strip near taxi track, which are required to be cut. Height of boundary wall is 2.4 Mtr with 0.6 Mtr high barbed wire over it. However, it is to be provided with concertina coil. Fire crash gates are also to be provided in the wall at both ends of Runway. Boundary wall was found broken at 2-3 places & is required to be repaired. An Overhead Water tank and some buildings were observed in transition surface of Runway 30. H.T. line was also seen at some places along boundary wall. Mobile towers, & trees were observed on both sides of Runway. These trees may be pruned / trimmed and mobile towers may be shifted. However, final decision on it shall be taken after receipt of report of OLS survey, through ED(ATM), AAI.

(Action: ED(ATM), AAI / DFO, UP / UP PWD / GoUP)

iii) Apron: Size of existing apron is 30 Mtrs. x 60 Mtrs. which is required to be extended to 35 Mtrs. x 70 Mtrs. for parking 02 nos.19 seater Aircrafts(M-28). It was observed that a piece of land near apron (where apron extension is proposed) is under cultivation. ADM, Moradabad intimated that this land is under litigation. However, he assured that the issue shall be sorted out shortly and land will be in their possession soon. Hence, we may request GoUP to resolve the issue at the earliest.

(Action: GoUP)

iv) Control Tower: A Control Tower is required to be constructed at the Airport. On inspection of proposed site for the Tower it was observed that height of Control Tower mentioned in Standard drawing i.e. 10 Mtrs. may not be adequate as Runway 30 end may not be visible from this height. Hence, its height is required to be increased. Since OLS survey is going on in all the RCS Airports in UP, we may ask concerned agency to suggest height of Tower in such a way that both the ends of Runway are visible from it. It may suggest revised location of Tower also, if required. Height and location of Control Tower shall be finalized and Drawings shall be issued by Planning Dte. of AAI accordingly.

(Action: ED(ATM), AAI / ED(Plg.), AAI)
v) **Fire Station**: Proposed location for Fire Station was also inspected and found to be OK. However, a Police Chowki & Pump House is available in front of it, which are required to be demolished as these may obstruct line of sight from Control Tower. However, final decision on demolition of these buildings shall be taken after receipt of report of OLS survey.

(Action: ED(ATM), AAI/UPPWD)

vi) **Terminal Building**: It is proposed to convert existing VIP Guest House into Terminal Building by making some modifications. This building was inspected and Executive Engineer, PWD UP was requested to furnish soft copy of Modification Plan for approval of AAI before preparing estimate by them. Sufficient land is available in front of Terminal Building for construction of car park.

(Action: UP PWD)

vii) **Cooling pit / fire pit etc.:** Locations of Cooling Pit & Fire Pit have been marked in Lay out Plan of the Airport (copy enclosed). Standard drawing of Cooling Pit has already been furnished to Special Secretary, Dept. of Civil Aviation, UP by email. Standard drawing of Fire Pit is enclosed herewith for reference.

viii) All construction / modification works shall be done by UP PWD.

(Action: UP PWD)

3. **ALIGARH**

After visit of Moradabad Airport, team reached at Aligarh and inspected the Airport. Following are the observations:

i) **Runway (11/29)**: Size of Runway is 1200 mtr x 24 mtr, which is adequate for 19 seater Aircraft(M-28). Condition of runway surface is fairly good. Turning pads are not available on any side of Runway. However, they are not mandatory for the intended Aircraft.

ii) **Basic Strip**: Basic strip of 30 Mtrs. is available on both sides of Runway, adequate for operation of 19 seater Aircraft(M-28). However, it is not maintained as par CAR of DGCA. It needs to be graded and provided with proper drainage system. Height of boundary wall is 1.5 Mtrs. with 0.6 Mtrs. high barbed wire over it. It is in dilapidated condition and is required to be reconstructed / repaired. It is also to be provided with 600 mm dia concertina coil as per Standard Drawing of operational wall (based on BCAS norms) (copy enclosed). Fire crash gates are to be provided in boundary wall on both ends of Runway. Some electrical poles / grids / trees were observed on Runway-11 side and along Southern side of Runway. They may need to be shifted / pruned after receipt of report of OLS Survey. In addition, there are 2 Hangers constructed near Apron, on Western side of Runway. Their height is approx. 13-14 mtr, which may foul with transition slope of Basic Strip. However, further decision regarding these hangars shall be taken after receipt of report of OLS Survey.

(Action: ED(ATM)AAI / UP PWD / GoUP)

iii) **Apron**: Size of existing Apron is 69 Mtrs. x 40 Mtrs. & is abutting the Runway. Hence, a portion of it, falling in Basic Strip of 30 Mtrs. from centerline of Runway, cannot be used. Thus,
Apron is required to be extended by 30 Mtrs. x 35 Mtrs. towards hangars, making overall effective size of Apron as 70 Mtrs. x 35 Mtrs., for parking of 02 nos.- 19 seater Aircrafts(M-28).

(Action: UP, PWD)

iv) Control Tower: A Control Tower is required to be constructed at the Airport. On inspection of proposed site, it was observed that height of Control Tower mentioned in Standard drawing i.e. 10 Mtrs. may not be adequate as Runway 11 end may not be visible from this height. Hence, its height is required to be increased. Since OLS survey is going on in all the RCS Airports in UP, we may ask concerned agency to suggest height of Tower in such a way that both the ends of Runway are visible from it. It may suggest revised location of Tower also, if required. Height and location of Control Tower shall be finalized and Drawings shall be issued by Planning Dte. of AAI accordingly.

(Action : ED(ATM), AAI / ED(Plg, AAI))

v) Fire Station: Proposed location for Fire Station was also inspected and found to be OK. However, some old residential quarters situated at site will have to be demolished before construction of Fire Station & Control Tower. Final decision on it shall be after receipt of report of OLS survey through ED(ATM), AAI.

(Action: ED(ATM)AAI)/UPPWD)

vi) Terminal Building: It is proposed to convert existing VIP Guest House into Terminal Building by making some modifications. This building was inspected and found that sizes of rooms are quite small. It was intimated by Executive Engineer, PWD UP that it is a load bearing structure and hence extensive modifications shall not be feasible. Hence, team feels that this Guest House cannot be converted into Terminal Building. Instead, a new Terminal Building is required to be constructed after demolition of some old offices along Apron, allocated to Flying Clubs etc. These offices can be reconstructed at a suitable location outside operational area (location to be approved by AAI) for unrestricted entry of visitors. Sufficient land is available on City side of this proposed Terminal Building for construction of car park. A Layout Plan indicating locations of Terminal Building, Car Park, Approach Road etc. is enclosed herewith.

vii) Cooling pit / fire pit etc.: Locations of Cooling Pit & Fire Pit have been marked in Layout Plan of the Airport (copy enclosed). Standard Drawing of Cooling Pit has already been sent to Spl. Secretary, Deptt of Civil Aviation, Govt. of UP, through email. Standard Drawing of Fire Pit is enclosed herewith.

viii) All construction and modification works at this airport shall be done by UP PWD.

(Action: UP PWD)

4. JHANSI

After visit of Aligarh Airport, team reached at Jhansi and inspected the Airport. Following are the observations:

i) Runway (15/33): Size of Runway is 1070 Mtrs. x 20 Mtrs. Mtrs. On Runway 33 side, a chain link fencing has been provided at a distance of 60 Mtrs. from Runway end. For accommodating
Basic Strip of 30 Mtrs. and RESA, a distance of 130 Mtrs. is required between Runway end and fencing for longitudinal approach space clearance. Hence, threshold on Runway 33 is to be displaced by 70 Mtrs., reducing effective length of Runway as 1000 Mtrs., which will be adequate for 19 seater Aircraft (M-28). Re-carpeting of Runway has been done in 2016 and condition of its surface is fairly good. However, as intimated by Col. Singh, Incharge of Jhansi Airport, LCN of Runway is only 10. Hence, further decision regarding strengthening of Runway is to be taken after receipt of PCN value, for which contract has already been awarded to RITES by AAI. Turning pads are not available on both sides of runway. However, these are not mandatory for operation of 19 seater Aircraft. After evaluation of PCN value by ED(STR.) AAI, strengthening of Runway, if required, shall be done by AAI. A guard room, surrounded with some trees, was seen very close to Runway 15. This room and trees may be removed, if required, after receipt of report of OLS survey.

(Action: ED(STR.) AAI/ED(ATM), AAI/RED-NR, AAI)

ii) Basic Strip: Basic strip of 30 Mtrs. is available on both sides of Runway, adequate for operation of 19 seater Aircraft (M-28). No boundary wall is provided around operational area. Only barbed wire fencing is available. Hence, a boundary wall as per BCAS norms and with provision of fire crash gates on both ends of Runway is required to be constructed.

(Action: RED-NR)

iii) Apron: Size of existing apron is 125 Mtrs. x 58 Mtrs. which is adequate for parking of 02 nos.- 19 seater Aircrafts (M-28). However, as intimated by Col. Singh, Incharge of Jhansi Airport, LCN value of Apron is only 10. Hence, further decision regarding strengthening of Apron is to be taken after receipt of PCN value of apron, for which contract has already been awarded to RITES by AAI. After intimation of PCN value by ED(STR.) AAI, strengthening of Apron, if required, shall be done by AAI.

(Action: ED(STR.) AAI/RED-NR, AAI)

iv) Control Tower: Control Tower is available at the Airport. However, all ANS equipments will required to be installed by AAI as intimated by Col. Singh.

(Action: ED(CNS-P), AAI)

v) Fire Station: Fire Station is also available. However, as intimated by Col. Singh that Fire Tenders available at the Airport are not upto the mark / as per ICAO Standards. Hence, CFTs, Ambulance, all other fire appliances, consumables etc. are to be provided by UP Govt. or by AAI on hire basis to GoUP.

(Action: GoUP/ ED(Tech), AAI)

vi) Terminal Building: During inspection of Airport, it was learnt from Col. Singh that Army has taken 4-5 acres of land from GoUP on lease basis. This land contains one old hanger (Constructed around 1980 by GoUP) and an Apron. This old hanger is being used by Army for storing old material. After inspection of hanger, it was opinioned that if RCS operations are to be commenced in another 3-4 months, this hanger can be converted into Temporary Terminal Building by providing partitions etc. Hence, DM, Jhansi was requested to get the structural stability of hanger checked through IIT / Govt. Engineering College. It was also seen that
adequate land is available on city side of hanger for construction of Car Park. This portion of land is adjacent to NH-75 and can be connected to the highway with a 25 Mtrs. long Approach Road. SDM, Jhansi intimated that land between NH-75 and Airport belongs to farmers and assured that it will be acquired from them immediately for construction of approach road. Alternatively, a gate with Approach Road to NH is already available at a distance of 150-200 Mtrs. from hanger, which can be utilized for connectivity to the Highway.

However, if hanger is not found structurally safe, it is proposed to acquire 5 acres of land on Western Side of Runway, between NH and operational boundary of the Airport for construction of Temporary Terminal Building, Car Park, Road etc. (Please see Layout Plan enclosed). Drawings for Modifications in Hanger, Temporary Terminal Building, Car Park, Road etc. shall be prepared by AAI after receipt of information regarding structural stability of Hanger / acquisition of 5 acres of land as mentioned above from GoUP.

(Action: GoUP / ED(P1g.)AAI)

vii) Cooling pit / fire pit etc.: A Layout Plan indicating locations of Cooling Pit & Fire Pit is enclosed herewith.

viii) All construction & modification works shall be done by AAI.

(Action: RED-NR, AAI)

5. MUIRPUR
On 05.04.2018, team visited at Muirpur and inspected the Airport. Following are the observations:

i) Runway (08/26): Size of Runway is 1915 Mtrs. x 25 Mtrs. with a Turning Pad on Runway 26 side. Width of land available is varying from 27 Mtrs. to 92.5 Mtrs. from centerline of Runway. On inspection, it was observed that out of 1915 Mtrs. length of Runway, Basic width of 30 Mtrs. is available only in 900 Mtrs. portion. However, for maintaining Basic Strip of 30 Mtrs. and approach surface on both sides, thresholds may required to be shifted by 90 Mtrs. on both sides. It may reduce usable Runway length to 720 Mtrs. (900 Mtrs. – 2x90 Mtrs.), whereas minimum Runway length required for M-28 Aircrafts is 800 Mtrs. to 900 Mtrs. Hence, additional land is required to be acquired towards Runway 08 side for 300 Mtrs. length along Runway in such a way that a Basic Strip of 30 Mtrs. is available in these areas (Layout Plan indicating land proposed to be acquired is enclosed for reference). After acquisition of land as above, effective length of Runway shall be increased to 1020mtr., which will be adequate for operations of M-28 type of Aircrafts. Surface of Runway appeared to be bitumen hungry and may require re-carpeting soon.

(Action: GoUP)

ii) Basic Strip: Width of Basic strip is not adequate in most of the portion of Runway as mentioned above. Moreover, it is not maintained as per CAR of DGCA. It needs to be graded and provided with proper drainage system. Boundary wall is in dilapidated condition with height as 2.1 Mtrs. and no barbed wire / concertina coil over it. This wall is required to be reconstructed as per Standard Drawing of AAI & as per BCAS norms. In addition, fire crash gates may be
provided in it on both ends of Runway. A Mobile tower was observed in approach path of Runway 26. Lots of trees were seen on both sides of Runway which may required to be pruned based on report of OLS Survey.

(Action: ED(ATM),AAI / DFO, UP / GoUP/RED,NR,AAI)

iii) Apron: Apron is not available at the Airport. Hence, a new Apron of size 35 Mtrs. x 70 Mtrs. and Link Taxi Track of size 44 Mtrs. x 15 Mtrs. are required to be constructed for parking of 02 nos. - 19 seater Aircrafts(M-28). Some old buildings like Guest House, Security Room, NDB room etc. fouling with location of Apron are required to be demolished. Revised Layout Plan indicating additional land requirement, location of boundary wall, NDB room, Apron, Terminal Building, Control Tower, Fire Station etc. is enclosed.

(Action: RED,NR AAI)

iv) Control Tower: A Control Tower is required to be constructed at the Airport. On inspection of proposed site of Tower it was felt that location of the Tower is required to be shifted towards Runway 08 side, to make it more centrally located. Secondly, as OLS survey is going on in all the RCS Airports in UP, we may ask concerned agency to review height of Tower in such a way that both the ends of useable portion of Runway are visible from it. It may suggest revised location of Tower also, if required. Height and location of Control Tower shall be finalized and Drawings shall be issued by Planning Dte. of AAI accordingly. Thereafter, construction of Tower shall be taken up by AAI.

(Action: ED (ATM), AAI/ED(Plg.), AAI /RED-NR,AAI)

v) Fire Station: Proposed location for Fire Station was also inspected and found to be OK.

vi) Terminal Building: No Terminal Building is available at the Airport. Hence, new Terminal building is required to be constructed as per Standard Drawing of AAI for 19 Passengers. This building shall be constructed by AAI. However, sufficient land for car park is not available. Hence, a parcel of land admeasuring 1 Hectare is required to be acquired towards Western Side of proposed Terminal Building as per Layout Plan (copy enclosed). If this land is acquired, we may shift location of proposed Apron in front of Proposed Terminal Building and locations of Fire Station, Control Tower etc. will be shifted accordingly. Hence, GoUP may take necessary action to acquire land as above so that revised Master Plan could be prepared by Planning Dte. of AAI & further works could be taken up accordingly.

(Action: GoUP/ED(Plg.),AAI/RED-NR,AAI)

vii) Cooling pit / fire pit etc.: Locations of Cooling Pit & Fire Pit have been marked in Layout Plan of the Airport.

viii) All Construction / modification works shall be done by AAI.

(Action : RED-NR, AAI )

6. AZAMGARH
After visit of Muirpur Airport, team reached at Azamgarh and inspected the Airport. Following are the observations:

i) Runway (14/32) : Size of Runway is 1400 mtr x 23 mtr, which is adequate for 19 seater Aircraft(M-28). The condition of runway surface appeared to be good but bitumen hungry. Hence, it is required to be re-carpeted in near future. Secondly, PCN Value of Runway, Apron etc. is not available. RITES has been engaged by AAI for evaluating PCN values at all RCS Airport in UP. If PCN value is not found adequate, strengthening of Runway will required to done by UPPWD.

(Action : ED(Str)AAI / UP PWD)

ii) Basic Strip : Basic strip of 30 Mtrs. is available on both sides of Runway, adequate for operation of 19 seater Aircraft(M-28). However, it is not maintained as par CAR of DGCA. It needs to be graded and provided with proper drainage system. A Mobile Tower was observed towards Runway 32 side. Decision regarding shifting of this Tower shall be taken after receipt of report of OLS Survey. Height of boundary wall is 2.1 Mtrs. with no barbed wire over it. Boundary wall was missing at 2 locations (total length -approx. 400 Mtrs.). Hence, boundary wall is required to be raised / reconstructed as per Standard Drawing of AAI and as per BCAS Norms. Also fire crash gates are to be provided in it on both ends of Runway.

(Action : ED(ATM),AAI/GoUP/UP PWD )

iii) Apron : Size of existing apron is 30 Mtrs. x 60 Mtrs. which is required to be extended to 35 Mtrs. x 70 Mtrs. for parking of 02 nos- 19 seater Aircrafts(M-28). Extension of Apron shall be done by UP PWD.

(Action : UP PWD)

iv) Control Tower: A Control Tower is required to be constructed at the Airport. On inspection of proposed site of Tower it was observed that height of Control Tower mentioned in Standard drawing i.e. 10 Mtrs. may not be adequate as Runway 32 end may not be visible from this height. Hence, its height is required to be increased. Since OLS survey is going on in all the RCS Airports in UP, we may ask the concerned agency to suggest height of Tower in such a way that both the ends of Runway are visible from it. It may suggest revised location of Tower also, if required. Height and location of Control Tower shall be finalized and Drawings shall be issued by Planning Dte. of AAI accordingly. Thereafter, construction of Tower shall be taken up by UP PWD.

(Action : ED(Plg.), AAI / ED(ATM),AAI /UP PWD)

v) Fire Station : Proposed location for Fire Station was also inspected and found to be OK. Construction of Fire station shall be done by UP PWD.

(Action : UP PWD)

vi) Terminal Building : It is proposed to convert existing VIP Guest House into Terminal Building by making some modifications. This building was also inspected and Executive Engineer, PWD UP was requested to furnish soft copy of Modification Plan for approval of AAI
before preparing estimate by them. Sufficient land is available in front of Terminal Building for construction of car park. All modification works in proposed Terminal Building and Construction of Car Park, Approach Road as per Lay out Plan shall be done by UP PWD.

\(\text{(Action: UP PWD)}\)

ei) Cooling pit / fire pit etc.: Locations of Cooling Pit & Fire Pit have been marked in Lay out Plan (copy enclosed). Standard Drawing of Cooling Pit has already been furnished to Special Secretary, Dept. of Civil Aviation, UP by email. However, Standard Drawing of Fire Pit is enclosed herewith as desired. Construction work will be done by UPPWD.

\(\text{(Action: UP PWD)}\)

7. SHRAVASTI

After visit of Azamgarh Airport, team reached at Shravasti and inspected the Airport. Following are the observations:

i) Runway (12/30): Size of Runway is 1350 Mtrs. x 23 Mtrs., which is adequate for 19 seater Aircraft(M-28). Condition of Runway surface is fairly good. Turning pads are available on both sides of Runway.

ii) Basic Strip: Basic strip of required width (30 Mtrs.) is not available on both sides of Runway. Hence, additional land is required to be acquired on both sides of Runway as per Layout Plan (enclosed). Thereafter, Boundary wall is to be constructed as per Standard Drawing of AAI as per BCAS Norms, with provision of fire crash gates on both ends of Runway. Whole Basic Strip is to be graded and proper drainage system is to be provided as per CAR requirements. A Highway is passing very close to Runway-12 side. Hence, threshold is required to be shifted by 30 Mtrs. approx. After shifting of threshold, effective length of Runway shall be 1320 Mtrs. which is adequate for operation of intended aircraft. Some trees were seen close to threshold of Runway 30 approach path on both sides of Runway. Trees on South West Side of Runway may obstruct line of sight from Control Tower. Hence, these trees may required to be pruned. One temple having big statue of Bhagwan Budha and one Stoop were also observed in Transition surface. However, final decision on removal of obstacles shall be taken after receipt of report of OLS survey.

\(\text{(Action: ED(AMT), AAI / GoUP / DFO, UP / UP PWD)}\)

iii) Apron: Size of existing apron is 30 Mtrs. x 50 Mtrs. which is required to be extended to 35 Mtrs. x 70 Mtrs. for parking of 02 nos- 19 seater Aircrafts(M-28). Extension of apron & strengthening of existing Apron (if PCN value is found inadequate by RITES) shall be done by UP PWD.

\(\text{(Action: ED(STR), AAI / UPPWD)}\)

iv) Control Tower: Control Tower is provided at top of Terminal Building. Height of floor of the tower is 9 Mtrs. approx. On inspection it was observed that Runway 30 is not visible from the Tower. Hence, Executive Engineer PWD, UP was requested to evaluate structural feasibility to construct one more floor / Porta cabin above existing Control Tower for using it as Control...
Tower. Also, as OLS survey is going on in all the RCS Airports in UP, we may ask the concerned agency to suggest height of Control Tower to be raised in such a way that both the ends of Runway are visible from it. All construction/modification works shall be taken up by UP PWD.

(Action : ED(ATM), AAI/UP PWD)

v) Fire Station: Fire station building is available at the Airport. Minor modifications/repair works shall be done by UP PWD.

(Action : UPPWD)

vi) Terminal Building: Terminal Building is already available at the Airport. However, minor repairs, renovation of toilets, painting and other maintenance works are required to be done by UP PWD apart from air conditioning of the building. Executive Engineer, PWD UP was requested to provide soft copy (AUTOCAD) of floor plans of Terminal Building to AAI for suggesting modifications, if any, and for designating various areas of the building as per Airport Norms. Car Park is already available on city side of Terminal Building.

(Action: UP PWD)

vii) Cooling pit / fire pit etc.: Locations of Cooling Pit & Fire Pit have been marked in Layout Plan of the Airport (copy enclosed). Standard Drawings of Cooling Pit has already been furnished to Special Secretary, Dept. of Civil Aviation, UP by email. Standard Drawing of Fire Pit is enclosed herewith. Construction work is to be done by UP PWD. However, since, their locations are falling in the land proposed to be acquired, construction work can be taken up after acquisition of land.

(Action : GoUP / UP PWD)

General:

1. All the above Airports except Bareilly Airport require license from DGCA before commencement of operations. Apart from this, various security plans viz Airport Security Programme, Anti Hijacking Contingency Plan, Bomb Threat Contingency Plan, Quality Assurance Programme, various SOPs, Aerodrome Manuals, Safety Management Manual etc. are to be prepared by Airport Operator i.e. by GoUP. Safety Assessment has to be conducted by Airport operator along with all Stake holders i/c Airlines, ATC, CNS, Security Services etc.

(Action: GoUP)

2. Agencies have already been hired by AAI for evaluation of PCN value of Runway, Taxiway and Apron at various airports. Their reports shall be furnished to GoUP/RED-NR for further necessary action including strengthening of above pavements, if required.

(Action: ED(St.), AAI/GoUP/RED-NR)

3. Agencies have also been hired for OLS Survey of the Airports by AAI. Their reports shall be furnished to GoUP for further necessary action including removing of obstacles.

(Action: ED(ATM), AAI/ GoUP)
4. Friction Value of Runway Surface at various airports shall be ascertained by AAI. Reports shall be furnished to GoUP/RED-NR for further remedial action, if required.

(Action: GoUP /RED-NR)

5. Grading of Basic Strip as per CAR requirement of DGCA, construction of proper drainage system etc are required to be done at all airports.

(Action: GoUP/RED-NR)

7. ARP is not available at any airport. Agency assigned for OLS survey may be advised to decide the location, elevation and coordinates of ARP and thereafter it is to be established by UP PWD /AAI.

(Action: ED(ATM),AAI /UP PWD/RED-NR)

8. Designated Isolation bays are to be marked on Layout Plans by Planning Dte, AAI in the consultation with BCAS/ Dte. of Security.

(Action: ED(Plg),AAI)

9. All Runway, Taxi Track & Apron Markings including following are to be done at all Airports as per CAR 4/B/1 before commencement of operations:
   i. Runway side strip and taxiway side strip markings
   ii. Apron safety lines markings
   iii. Aircraft stand markings
   iv. Altimeter check point markings
   v. Runway holding point markings

(Action: GoUP/RED,NR,AAI)

10. Signages including following were not available during inspection and to be provided as per CAR 4/B/1 before commencement of operations:-
   i) Runway designation and Runway holding position
   ii) No entry, road holding position.
   iii) Aircraft stand identification signs.

(Action: GoUP/RED-NR,AAI)

11. Following essential facilities were not available at the airports during inspection and are to be required as per CAR 4/B/1 before commencement of operations:-
   i. Landing T
   ii. Wind direction indicators
   iii. Signal square area
   iv. PAPI
   v. Navigational Aids such as VOR/NDB
   vi. Aerodrome Beacon over Control Tower
The above said facilities are to be provide by Airport operator i.e. GoUP. However, if required by GoUP, the said facilities can be provided by AAI on payment / hire basis.

(Action: GoUP /AAI)

12. Locations of Wind Direction Indicators, PAPI and NDB are to be marked on Layout Plans of the airports by Planning Dte, AAI.

(Action: ED(Plg),AAI)

13. Working permission to be sought from IAF for Bareilly Airport and from Army for Jhansi Airport.

(Action: GoUP)

14. Metrological equipments and observatories are to be provided at all airports. ATM Dte, AAI shall take up matter with Met Deptt. for further necessary action.

(Action: ED(ATM-ASM),AAI)

15. All the Engineering works at Muirpur, Chitrakoot, Bareilly and Jhansi Airports shall be done by AAI and works at Moradabad, Aligarh, Azamgarh and Shravasti Airports shall be done by UPPWD.

(Action: RED,NR,AAI/UPPWD)

(AJIT KR YADAV)
ASSTT.DIR(OPS) DGCA

(VINOD KR PUNIYAL)
JT.GM(ARCH),AAI,CHQ

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