



**UTTARAKHAND CIVIL AVIATION DEVELOPMENT AUTHORITY
GOVERNMENT OF UTTARAKHAND
SAHASTRADHARA HELIDROME
STANDARD OPERATING PROCEDURE**

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GOVERNMENT OF UTTARAKHAND

**SAHASTRADHARA HELIDROME
STANDARD OPERATING PROCEDURE**

**SAHASTRADHARA HELIDROME,
P.O. KULHAN,
DEHRADUN-248001
Email : ops.ucadadoon@gmail.com,
Telefax : 0135-2608981**

Approved vide DGCA letter No.



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1. General Introduction

Sahastradhara Helidrome, located at Dehradun, is the main operating helibase ex-Dehradun city. The operations at Sahastradhara are under the command and control of CEO, Uttarakhand Civil Aviation Development Authority (UCADA). The CEO, UCADA will nominate a suitable person as Base Manager to look after the day-to-day operations of Sahastradhara Helidrome. Mr Shah Alam, will be functioning as the Base Manager at Sahastradhara Helidrome.

2. Scope of Activity

The air operations are mainly in State of Uttarakhand and involve carriage of passengers as per task, as allocated by the respective operators or UCADA.

3. Types of Operations

The operations will be restricted to General Aviation, Non Scheduled and Aerial work. Necessary clearances will be sought where necessary, by the operators themselves, with information to the CEO UCADA or his nominated representative.

4. Flying Operations

(a) **Supervision:** The operations at Sahastradhara will be supervised by Operations Manager / Base Manager of the respective operators. He shall ensure that suitable and qualified operational and maintenance personnel are available at the Base to undertake required flights and maintenance tasks.

(b) **Operational Responsibility:** The Head of Operations UCADA, through the Base Manager Sahastradhara Helidrome shall be responsible for the safe operations of the helicopters. He shall ensure that all existing rules and regulations are followed. The Base Manager will be tasked with the overall responsibility of the Sahastradhara Helidrome which includes supervision of refueling of helicopters, storage and handling of fuel barrels as laid down in CAR Sec 2 Series 'H' Part III. He will be also responsible for the security of the helidrome.

(c) **Rules:** All existing operating limitations are to be strictly adhered to. Any deviation will be intimated to the respective Accountable manager as soon as practicable with intimation to the Base Manager UCADA in writing.



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(d) **Flight Clearances**: It will be the responsibility of the PIC/ designated rep to obtain necessary clearances for the flight. A copy of the Flight Plan will be submitted to the Base Manager UCADA prior to the flight.

(e) **Helipad** :Sahastradhara Helidrome has a 50 m X 105 m FATO (RCC) with a TLOF of a 15 m diameter.

-The N-W edge of the FATO is to be used for parking.

-Co-ordinates are 3022.54 N 07805.89 E. Elevation is 2750'

-General orientation from VIDN is 340°/12nm

- To locate SAHASTRADHARA Helidrome in case lost, the Helidrome is located 06 nm south of Mussorie and 04 nm north of cricket stadium which is located in the sports college premises. It lies in an easterly direction approximately 05 nm from the centre of Dehradun city (Clock Tower).

-Fire fighting facilities are available as per CAR Sec. 4, Series B, Part III table 6-1 & 6-2.

-Wind sock is positioned at the helidrome to the S-E of FATO. Along with, an Automated Weather Observing System (AWOS) is also installed at this helidrome.

-AWOS is presently functioning on 122.9 MHz and transmits weather on pressing the PTT three times.

Sahastradhara Helidrome is located in Class 'G' airspace. It will be the individual pilot's responsibility to maintain separation from other traffic.

The following R/T (informatory nature) calls are to be made on 122.3 MHz (VIDN Tower frequency) during departure:

1. Before start up
2. Before taxi
3. Before take off
4. After take off, position report to Dehradun ATC to include distance and altitude wrt Sahastradhara Helidrome.



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The following mandatory RT Calls (informatory nature) calls to be given on 122.3 MHz at the time of arrival at Sahastradhara Helidrome.

1. Position report at dist of 5 - 10 nm inbound to Sahastradhara to include ETA, radial, dist & altitude wrt Sahastradhara Helidrome.
2. On final app.
3. Before S/W off.

Individual Operators are to draw out their individual SOPs for Sahastradhara Helidrome for the use of their personnel. A copy of it would be provided to UCADA.

- (f) **Danger Areas**: The Restricted/ Danger areas around the Sahastradhara Helidrome are marked in App 'C'.
- (g) **Routing**: All routes will be preferably along recognized valleys. Flights will be flown to the right of the valley. Going up the valley odd thousands of feet will be maintained and down the valley even thousands of feet. Blind calls will be given over all recognized reporting points, valley junctions, passes, etc. as per laid down norms. In the hills, standard altimeter settings of 1013.2 mb will be used and out of hills QNH setting will be used. In hills, VHF frequency on 122.9 MHz will be maintained.
- (h) **Circuit Pattern**: Sahastradhara Helidrome is located in Class G airspace and is VFR Helidrome. The responsibility of traffic avoidance/separation lies with the pilot. Circuits should be carried out towards North of the Helidrome. Downwind leg will be carried out at 500' AGL and straight in approach to be commenced at 300'AGL. Approaching the Helidrome, the pilot has to visually ascertain and confirm the winds. Thereafter, decide on the approach direction and type of approach. Two landing and take off directions are available i.e. 050° and 230°.

In case of R/T failure, the pilot should keep a sharp look around for other traffic, do not descend below 1000' AGL till the pilot has ascertained the winds and traffic. Keeping clear of traffic, the pilot should initiate descend and carry out approach and landing. Post-landing, inform respective Accountable Manager and Base Manager UCADA.



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- (i) **Weather**: Crew may obtain weather briefing from online weather briefing websites (e.g. IMD). Before departure, actual weather at the destination is to be obtained from the operational personnel located at destination helipad/local civil administration. Due to quick changing weather patterns in the hills, adequate diversions will be planned and proper weather look out to be maintained at all times.
 - (j) **Flight Coordination** : PIC/designated representative of the operator will be responsible for flight operation coordination and clearances. Passenger manifest and boarding passes will be handed over by representative of the operator to Base Manager UCADA in time before the security check. Flight following will be the responsibility of the respective operators.
 - (k) **Aircraft Unserviceability**: Base Manager UCADA will be informed expeditiously regarding unserviceability of any helicopter at Sahastradhara or outstation.
 - (l) **Emergencies**: In case of any flight emergency all actions to be taken as per Flight and Operational Manuals.
 - (m) **Pre Flight Medical**: Medical fitness of the crew is an integral part of flight safety. Crew will not undertake any flight if unfit or under medication / influence of drugs. PFME procedure as laid down in CAR Sec 5 Series F Part III (Procedure for Medical Examination of aircraft personnel for alcohol consumption) is to be followed.
- 7. Applicable Operating Minima** : Sahastradhara is a VFR Helidrome.
- 8. Manning**: All Operators will designate an Ops Manager/ Base Manager at Sahastradhara who will be in contact with the Base Manager UCADA to ensure seamless coordination.
- 9. Security Policy**
- (a) **Security of helicopter**: Sahastradhara Helidrome is an enclosed area with day & night security including CCTV surveillance.
 - (b) **Security check of passengers**: Security Check of passengers incl. bag and baggage will be the responsibility of individual operators. Passenger manifest and boarding passes must be provided by the Operator to Base Manager UCADA prior to every flight.
 - (c) The Base Manager Sahastradhara Helidrome is responsible for security related issues of the Helidrome.



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10. Maintenance

(a) Aircraft are to be maintained as per existing regulations and rules on the subject. Ground Support Equipment necessary to support operations is to be catered by the respective operator.

(b) Marshalling of helicopter is to be ensured by technical personnel. Marshallers are to wear high visibility jackets and be in view of PIC at all times during the marshalling operations.

(c) No weather forecasting service is available at either Jollygrant airport or a Sahastradhara Helidrome. Picketing and proper lashing of the helicopter will be the responsibility of the respective operator. The technical personnel of the operator are to ensure that there are no loose articles lying around the helicopter which can cause Foreign Object Damage.

(d) **Refuelling**: Aircraft will be refueled from barrels. Refuelling of aircraft will be carried out by trained personnel of the respective operators under supervision of the UCADA personnel. UCADA will ensure that all standard regulatory procedures are followed in storage and transportation of ATF. Any deviation may be brought to the immediate notice and attention of the Base Manager Sahastradhara Helidrome. Operators are to ensure no fuel barrels are kept outside the fuel shed. Leaking barrels should be removed from the premises and rejected for future use.

(e) **Firefighting facilities**: Hydrant based Firefighting facilities is being created at the Helidrome. Adequate number of trolley fire extinguishers as per CAR Sec. 4, Series B, Part III table 6-1 & 6-2 are available for use. Fire fighting equipment will be operated by personnel of the respective operator under supervision of trained personnel of UCADA.

(f) **First aid kit / Ambulance**: First aid kit is available at the Helidrome. Ambulance / Ambulances are available nearby and can be accessed on dialling 108.

11. Helipad Management: Operators have to apply for Helipad Identification passes for their authorised personnel to UCADA. No unauthorised personnel should enter the operational area. Helipad surfaces are to be ensured free of pebbles, loose articles. Base manager will confirm helidrome preparedness and availability prior to flight departure and arrival. It is the operator's responsibility to check from the Base Manager Sahastradhara, the availability of Helidrome, parking slot for the respective helicopter and take necessary clearances before arrival and departure of their respective aircraft.

Copy of the SOP is also available and can be downloaded from the UCADA website for reference. MOU with UCADA will be signed by the operators before



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commencing operations from Sahastradhara Helidrome, copy of the MOU can be downloaded from UCADA website www.ucada.in.

12. Passenger handling and facilitation. Passenger waiting lounge is available for use with prior notice to the UCADA Base Manager by the respective operator. Boarding passes and passenger manifest will be prepared by the operator's authorised personnel and one copy of manifest will be handed over to the base manager UCADA.

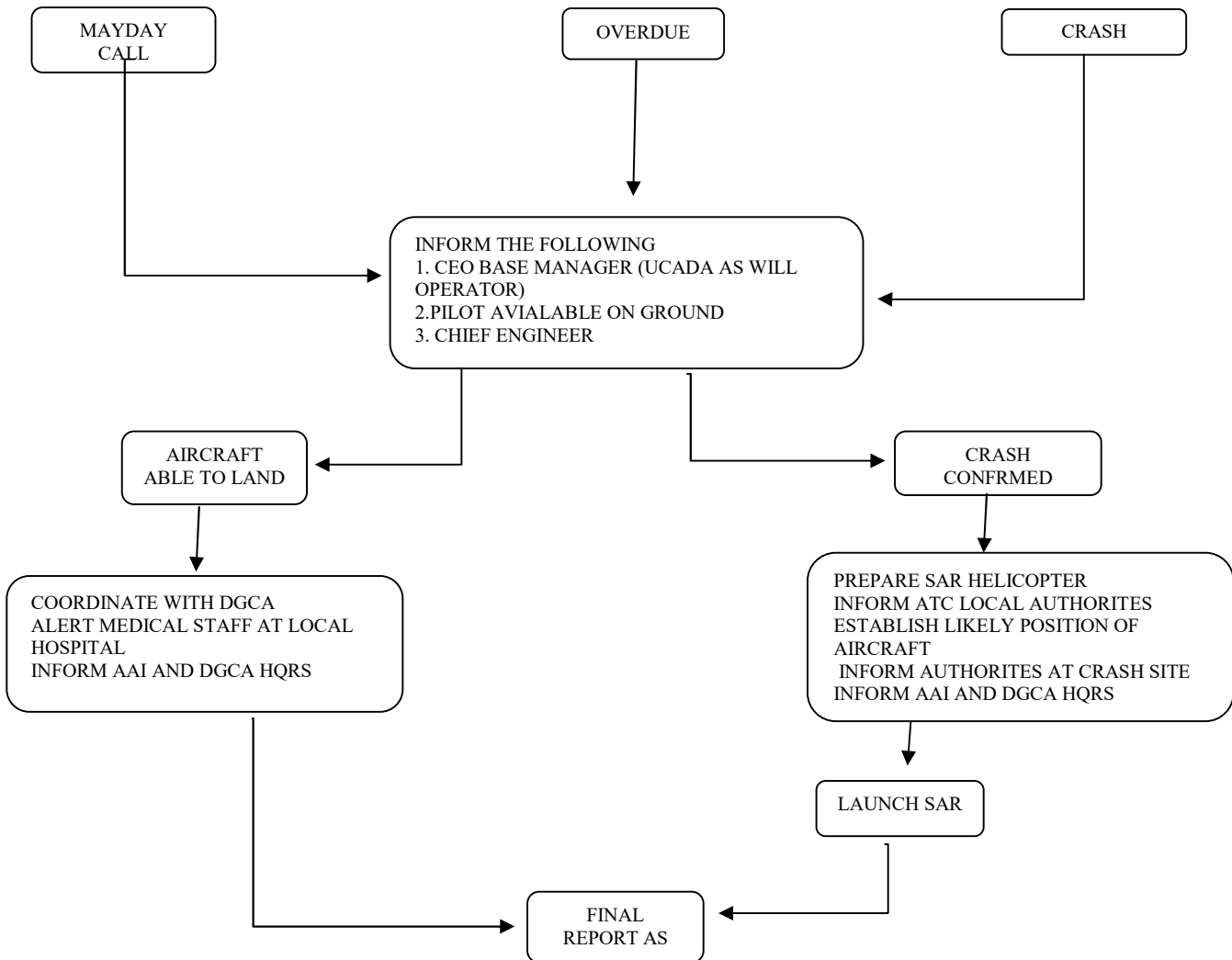
13. Severe Weather Plan. In case the weather is expected to deteriorate, it will be responsibility of the individual operators to lash up their machines. In case of availability of hangar space, it will be offered on first come basis.

14. Contingency Plan. In case of any exigency / non-availability of Helidrome, the Base Manager Sahastradhara will inform Dehradun ATC and the operators of the same. But as enumerated in Para 11, it remains the responsibility of the respective operators to check the availability of the Helidrome. In case of exigency, such as disabled helicopter on FATO, helicopter landing is permitted on the grassy area west of FATO.

The contingency plan has been incorporated in the respective flight safety manuals and same has to be followed. A description of the process and the local telephone numbers are given as Appendix 'A' and 'B' of this SOP. These are to be read in conjunction with the respective company Emergency Response Plan given in their FSM.



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IMPORTANT TELEPHONE NUMBERS	
108 - - AMBULANCE (ALL OVER UTTARAKHAND)	
CEO --	885999977
ACEO --	790063333
Head of ops --	789555437
Chief Engr --	9411382215
DM DEHRADUN --	0135-2623503, 753602222
SSP DEHRADUN --	0135-2716203, 9411112706
SDM DEHRADUN --	9450554882
SDM RISHIKESH --	9557139762
SP RISHIKESH --	9411112752
THANA DOIWALA --	0135-2716230
HIMALAYAN HOSPITAL --	0135-2471100
DOON HOSPITAL --	0135-2659355
CMI HOSPITAL --	0135-2624536
MAX HOSPITAL --	0135-6673000



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APPENDIX "B"

CONTACT PHONE NUMBERS

S no	Appointment /Institution	Office	Residence
	DEHRADUN		
1.	<i>Dehradun ATC</i>	0135-2412053	
2	CEO, UCADA Ms Sonika ACEO, UCADA Mr Ashish Bhatgain	0135-2719912/ 8859999977 7900633333	
3	<i>Head/chief Operations UCADA</i> Col. Sameer Singh Sahastradhara Base Manager Mr Shah Alam Engineering-in- Chief Mr K Santosh	7895555437 9837015632 9411382215	
5.	<i>Meteorology Section Dehradun</i>	0135-2410901	
6.	<i>Airport Director Dehradun</i>	9068814488	
7.	<i>Max Hospital</i>	0135-6673000	
	DGCA		
1.	<i>DDG Air Safety, DGCA</i>	011-24629539	011-24640892
2.	<i>Director Air Safety</i>	011-24620272	
3.	<i>Director, RDAS</i>	011-24615070	
4.	<i>Dy CFOI (H)</i>	9971367778	
5.	<i>POI Capt PK Sinha</i>	9650320935	



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Refers to Para 6.2 of CAR Section 4 Series B Part V

I. Duties and Responsibilities of Key Personnel

a. CEO

- Overall supervision of SAR effort.
- Liaison with higher authorities in the govt. including CM, CS etc.
- Briefing the press.

b. Head of Operations

- Coordinate with RCC.
- Liaison with CEO and Base Manager.

c. CFS

- Liaison with DAS (NR) and DAS (Headquarters).

d. Base Manager

- Collate information from all possible sources
- Call Sign, Type of aircraft, Operator, Accountable Manager, Colour and distinctive markings
- Last place of departure and time of departure.
- Destination, flying time to destination, intended route, endurance.
- Name of Crew.
- Location if possible, last known position with some easily defined geographical point / lat long.
- Last known radio contact with the aircraft.
- Date and time of accident or incident.
- Weather actual and forecast of departure station, enroute and destination.
- Details of Passengers.
- Extent of injury to crew and passengers.
- Extent of damage to the aircraft.
- Third party damage.
- Details of informant / source of information.
- Any other relevant information.



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II. Telephone numbers and persons required to be contacted in case of emergency.

Within Organization

Outside organization

CEO

Ms. Sonika 0135-2719912/ 8859999977

RCC 011-25654367

Head/Chief Operations

Col. Sameer Singh 7895555437

APD Dehradun

Mr Gautam 9068814488

Chief of Flight Safety

Capt Sandeep Soti 9412992192

DM Dehradun 0135-2622389

Base Manager

Mr Shah Alam 9837015632

SSP Dehradun 0135- 2716203

DAS (Headquarters) 011- 24620272

DAS (NR) 011-24615070

III. Information regarding SAR services in area over which the helicopter will be flown.

- (a) SAR is mainly provided by the Armed forces, NDRF, SDRF, ITBP, SSB apart from State Police and Distt. Administration. Command and Control will be with DM of concerned district.
- (b) Nearest Alerting Post – Jollygrant airport is the nearest alerting post for Sahastradhara helidrome. Contact Number is as given. APD: 0135-2412052
- (c) Rescue and Coordination Centre (nearest) and procedure to coordinate with them. Head of Operations UCADA will coordinate with SAR Coordinator in RCC, details as given:

GM (ATM) New Delhi will be the SAR coordinator during SAR Operations.

Room No. 203, New ATS Complex, IGI Airport. Phone No. 011-25654367.

IV. Safety assessment of operating environment at landing sites, en-route and terrain and mitigation measures required.

Periodic Safety assessment of Sahastradhara helidrome will be carried out by the Safety Manager, DSCA, Government of Uttarakhand and required mitigation measures of the assessed hazards be suggested to CEO UCADA.

Take off and Landing direction as given in the SOP as well as adherence to procedure given in RFM will minimize collateral damage on ground in case of any exigency.



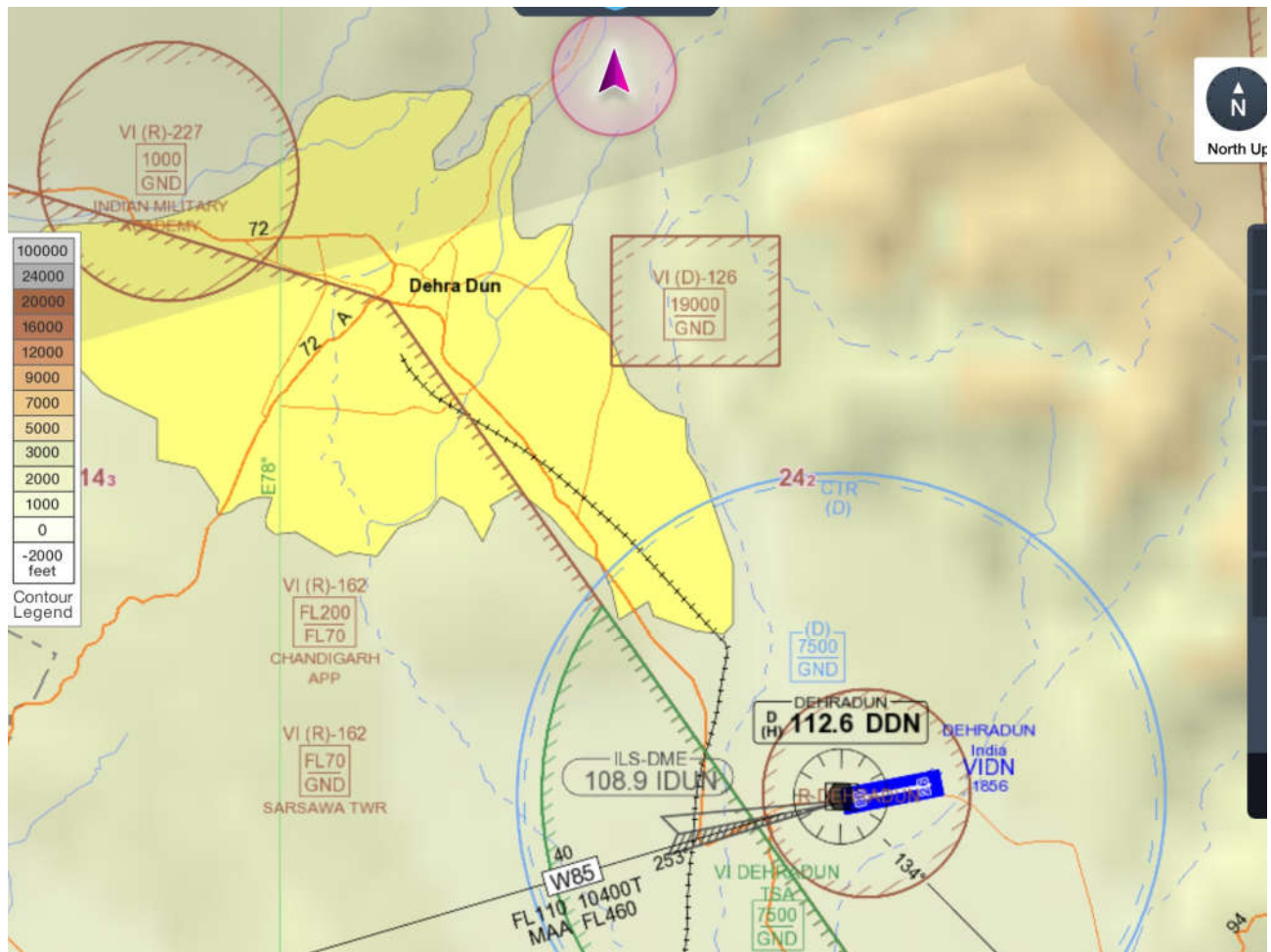
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Helidrome consists of area approximate 150m by 60 m which can be used for landing in case of emergency / evacuation other than FATO which is located in the centre of the helidrome. However on approach path there are two clear landing areas at a distance of

approximate 400m & 600 m in case emergency landing is required. Police line helipad (3018.27N 07802.41E) is available if required in case of emergency landing which is at a distance of 5 Nm in the Southerly direction. ONGC helipad (3021.15N 07800.48E) is also available if required in case of emergency landing which is at a distance of 5 Nm in the South Westerly direction.

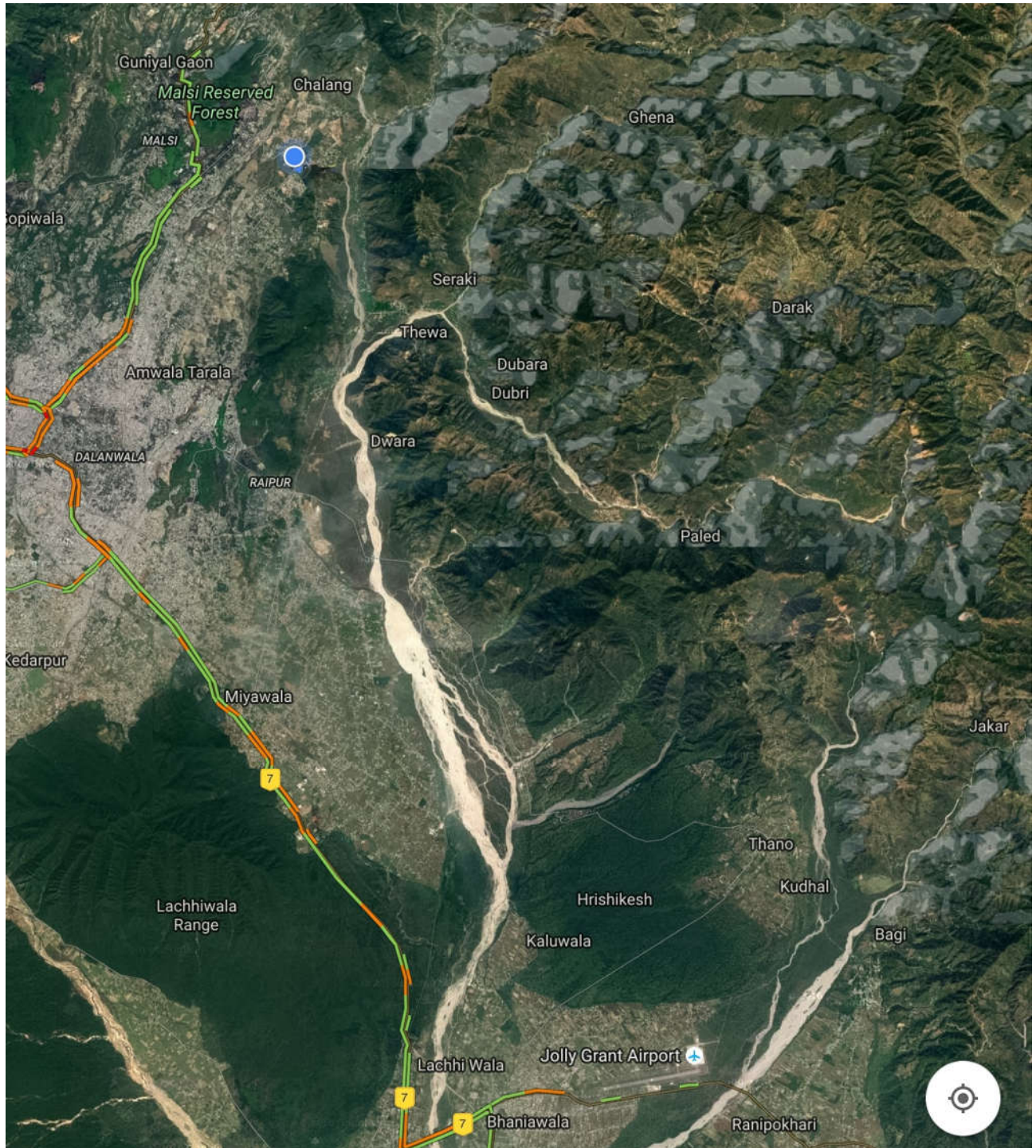


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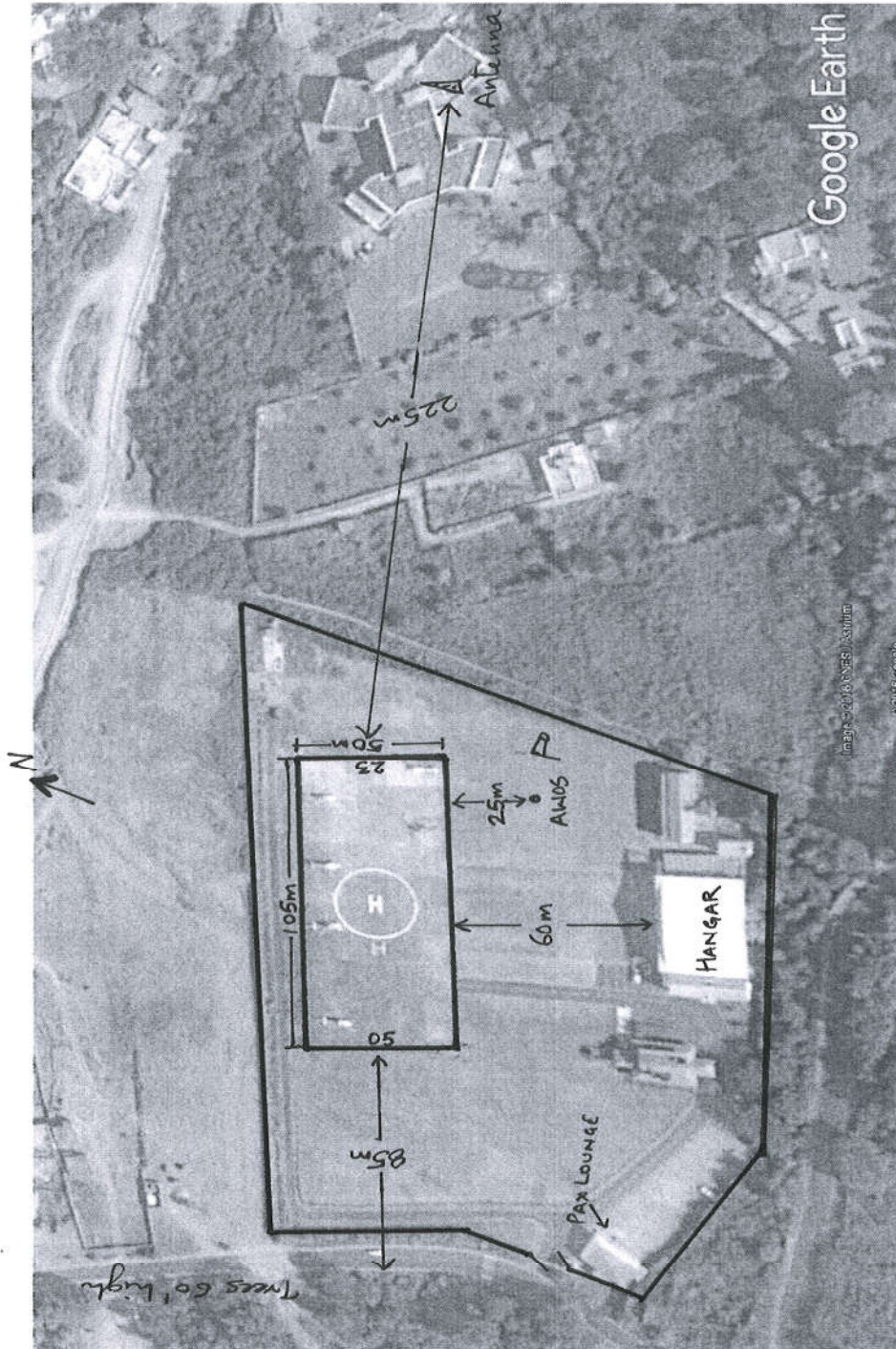


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SKETCH OF SAHASTRADHARA HELIDROME AT DEHRADUN

Coordinates : 3022.54N 07805.89E Ele:2750'