



MUFFAKHAM JAH COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRICAL ENGINEERING

Report On Drone Centre of Excellence

The unmanned aerial vehicles, popularly known as Drones, is one of the thrust areas in today's world where it can be used for delivery of medicines, spraying of pesticides in agriculture, monitoring and analysis of soil moisture, military applications and many more. To keep the students abreast with the latest developments in drone technology the Muffakham Jah College of Engineering and Technology has established Drone Centre of Excellence. As per Directorate General of Civil Aviation (DGCA) norms, at least two faculty members are to be certified as Remote Pilots to impart the knowledge to the students and fly the drones. In this regards, two faculty members Dr. Arshad Mohammed & Mr. G. Ravi Kiran were sponsored by the college who got trained as DGCA Certified remote pilots by Telangana State Aviation Academy.

The aim of this centre is to train students in the area of drones. In this centre students will learn how to assemble, operate drones and to learn basic things about the connections, repair and the concept of multi-motor operation and detailed training about different components of drones. The students will be trained to design, manufacture, calibrate and fly both autonomous and non-autonomous drones as per the DGCA norms for the applications on video surveillance, photography, Land/Mines Survey and Pollution monitoring.

A batch of 20 students is formed to train the students which are open to all the students of MJCET. Before flying the drone the students are trained using Zephyr Simulation software in which the students simulate the flying of a drone. After passing the test in simulation the students are allowed to fly a drone under the supervision of trained remote drone pilots. The training imparted here, will help the students in getting the opportunities in the area of drone technology and the students can plan for their career in this area. They can also have their own startups benefiting the society.



Remote Pilot Certificate

Certificate No. **PC082200000IF** ✔ **Active**

Generated On: **13 August 2022 11:59:47**



Scan the code to verify the current status of certificate



Name of the Pilot:

ARSHAD MOHAMMED

Gender:

MALE

Date of Birth:

15 Jun 1985

Address:

**G-204 Gadavari Block Divyashakthi Homes , SBH Colony,
Yellareddy Guda Hyderabad 500045 , Hyderabad ,
TELANGANA , 500045 , INDIA**

ENDORSEMENT DETAILS

Category of UAS:

ROTORCRAFT

Sub-category of UAS:

RPAS, AUTONOMOUS

Class of UAS:

SMALL

VLOS/BVLOS:

VLOS Only

Date of Endorsement:

13 August 2022

Expiry Date:

12 August 2032

Status:

✔ **Active**

Declaration:

Pilot has successfully completed the Remote Pilot Training Classes [both theory and practical] for the above mentioned category. Pilot has successfully passed both theory and practical exam conducted by us.

RPTO Name:

Telangana State Aviation Academy

RPTO Authorisation No.:

RA05220000001

*This Remote Pilot Certificate is issued under the provision of Rule 4 and Rule 5 of Drone (Amendment) Rules 2022

** This is a digitally signed document and hence does not require signature.



Remote Pilot Certificate

Certificate No. **PC08220000011** ✔ **Active**

Generated On: **13 August 2022 15:56:22**



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Name of the Pilot:

GUNTUKU RAVI KIRAN

Gender:

MALE

Date of Birth:

21 Apr 1984

Address:

**H.No. 9-1-364/B/38, NEAR VIDYANIKETAN HIGH SCHOOL ,
BAPUGHAT, LANGER HOUSE, HYDERABAD 500008 , K.V.
Rangareddy , TELANGANA , 500008 , INDIA**

ENDORSEMENT DETAILS

Category of UAS:
ROTORCRAFT

Sub-category of UAS:
RPAS, AUTONOMOUS

Class of UAS:
SMALL

VLOS/BVLOS:
VLOS Only

Date of Endorsement:
13 August 2022

Expiry Date:
12 August 2032

Status:
✔ **Active**

Declaration:

Pilot has successfully completed the Remote Pilot Training Classes [both theory and practical] for the above mentioned category. Pilot has successfully passed both theory and practical exam conducted by us.

RPTO Name:

Telangana State Aviation Academy

RPTO Authorisation No.:

RA05220000001

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Drone Centre of Excellence Photos



Drone centre of excellence front view



Drone centre inauguration photo

Drone Training Photos



Drone Technology Certification Photos



Drone Technology Certification Photos



Report on 100 kWp Solar PV Power Project

The scientists, engineers and environmentalists all over the world, are currently working on two major aspects such as reduction of Global warming and saving of dwindling fossil fuel resources, by effectively using renewable energy sources such as Solar and Wind.

Solar energy is radiant light and heat from the Sun that is harnessed using a range of technologies such as solar power to generate electricity, solar thermal energy (including solar water heating), and solar architecture. It is an essential source of renewable energy.

Photovoltaic (PV) is the conversion of light into electricity using semiconducting materials that exhibit the photovoltaic effect. The photovoltaic effect is used for electricity generation. A photovoltaic system employs solar modules, each comprising a number of solar cells, which generate electrical power.

In line with the above objective, the Sultan-UI-Uloom Educational society has approved a project for installation of 100 kWp Solar Photovoltaic Power project on the roof top of Block 1 of Muffakham Jah College of Engineering and Technology at a cost of Rs. 60 lakhs. The solar project was implemented with the latest technology incorporating MonoPERC halfcut Solar PV Modules. MonoPERC technology is an advanced version of Solar panels having higher efficiency even in low-light conditions and require less space compared to the earlier poly crystalline modules, for the same power rating.

The project was inaugurated by Mr. Mohammad Waliullah, Chairman, Sultan-UI-Uloom Educational Society, Mr. Zafar Javeed, Hon. Secretary, Mr. Syed Abdul Wahab, Vice-Chairman, Mr. Masood Abdul Khader, Joint Secretary, Dr. Mir Akbar Ali Khan, Treasurer, and Sultan-UI-Uloom Educational Society in the presence of other Board members.

The project would generate a minimum of about 1,44,000 units per year on average and the life of the panels is nearly 25 years and the payback period is about 4 and half years to 5 years.

Project progress...A few glimpses

