

DEPARTMENT OF AERONAUTICAL ENGINEERING

INDUSTRIAL VISIT to

HAL OVERHAUL DIVISION, Bengaluru on 12.11.2024

HAL Overhaul Division

HAL, Overhaul Division is one of the largest military aircraft production, maintenance, repair and overhaul unit in Asia. It was established at Bangalore in early 1950s for production and overhaul of post-World War II fighter aircraft.

During the 1950s, Hindustan Aircraft Limited (HAL) had developed and produced several types of trainer aircraft, such as the HAL HT-2. However, elements within the firm were eager to expand into the then-new realm of supersonic fighter aircraft. Around the same time, Govt. of India formulated the requirements for a Mach 2-capable combat aircraft for Indian Air Force (IAF). In 1956, HAL formally began design work on the supersonic fighter project and subsequently, this division became the pioneer by developing India's indigenous jet fighter aircraft HF-24 Marut in early 1960s which made its maiden flight in June 1961.

Over the last six decades, this division has either produced or overhauled various aircraft including

- HJT-16 Kiran
- Hawk AJT
- HTT-40
- Jaguar
- Mirage

Also, this division has carried out many upgrades of fighter aircraft with indigenous systems and accessories.

This Division also undertake many overhaul and maintenance services to aircraft belonging to Asian and European both defence and civil customers. The Division has also Exported many aircraft components to other aircraft manufacturers worldwide.

VISIT TO HAL OVERHAUL DIVISION

The students from 7th Semester Aeronautical Engineering 'B' Section made a visit to HAL OVERHAUL DIVISION on 12.11.2024. Total 27 students (7B-AE) attended this industrial visit along with the faculty Dr.P.Suresh.

After the security clearance, the students were briefed about the Overhaul Division and the work carried out in this Division. Senior Executives of the Division escorted the students to various Aircraft Hangers in the Division. The students are taken to Kiran Hanger where they can see the maintenance and overhaul activities carried out. Also, they were briefed about the periodic maintenance schedules of various aircraft. Then they were taken to Jaguar and Mirage 2000 hangers. Students could see the aircraft and their major components, maintenance procedures, overhaul activities. Also, they could learn about various defects and problems generally aircraft encounter during flight and how they are addressed. HAL Senior Executives explained to the students about the performance parameters of these aircraft and how the components are fabricated. Group photos taken as shown in figure 1 and 2 during the visit in front of HAL overhaul division.



Fig.1 Group of 7th semester B Section Aeronautical Engineering Students of MVJCE during their visit to HAL Overhaul Division, Bengaluru on 12 Nov 2024



Fig.2 Group of 7th semester B Section Aeronautical Engineering Students of MVJCE during their visit to HAL Overhaul Division, Bengaluru on 12 Nov 2024

Students' exposure to various aircraft and systems such as: -

- Kiran Aircraft
- Jaguar aircraft
- Mirage aircraft

Outcome of the Industrial Visit

- Students practically learned about various systems involved in fighter aircraft
- The students could learn about the materials used for aircraft fuselage and wing and other major components.
- They could physically see the major components of various aircraft such as Jaguar and Mirage 2000.
- Students witnessed the assembly of an aircraft and were briefed about assembly

procedure

- They could visualize the application of fundamental theories in aerodynamics and aircraft systems what they cover in their curriculum.

Acknowledgment

The entire group of students of 7th semester (Section-B) Aeronautical Engineering is grateful to the management of MVJCE for arranging such a wonderful industrial visit to HAL Overhaul Division, Bangalore. The students are very thankful to The General Manager, HAL Overhaul Division for giving the permission for this visit and to the Senior Executives [Mr.Kempa Raju (Jaguar hanger), Mr.Charan (kiran hanger), Mr.Dileep kumar (mirage Hanger)] for their technical interaction and making all arrangements inside the Overhaul Division.

Event Coordinator

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