



# Kuwait Aviation College: Part – 147 Maintenance Training Organization

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IE 4466 SENIOR DESIGN



# Introduction



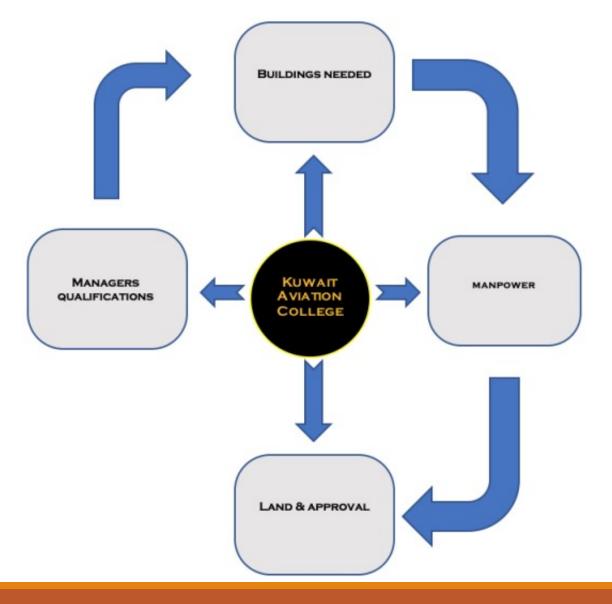
• Judging from the number of companies, the number of sectors, the number of aircraft and the way the State of Kuwait deals with the aviation industry (buying aircraft instead of manufacturing them), Kuwait's aviation industry needs more aircraft maintenance engineers than any other engineering profession. In fact, the State of Kuwait has a small department at Australia College of Kuwait, which has been approved by Kuwait Directorate General of Civil Aviation (DGCA) to teach aircraft maintenance engineering. It is feasible and necessary to set up another college in Kuwait that specializes in training aircraft maintenance engineers. In this study, we are going to explain how to establish this kind of college and how to get the Kuwait Directorate General of Civil Aviation (DGCA) approval by following their rules and regulations.



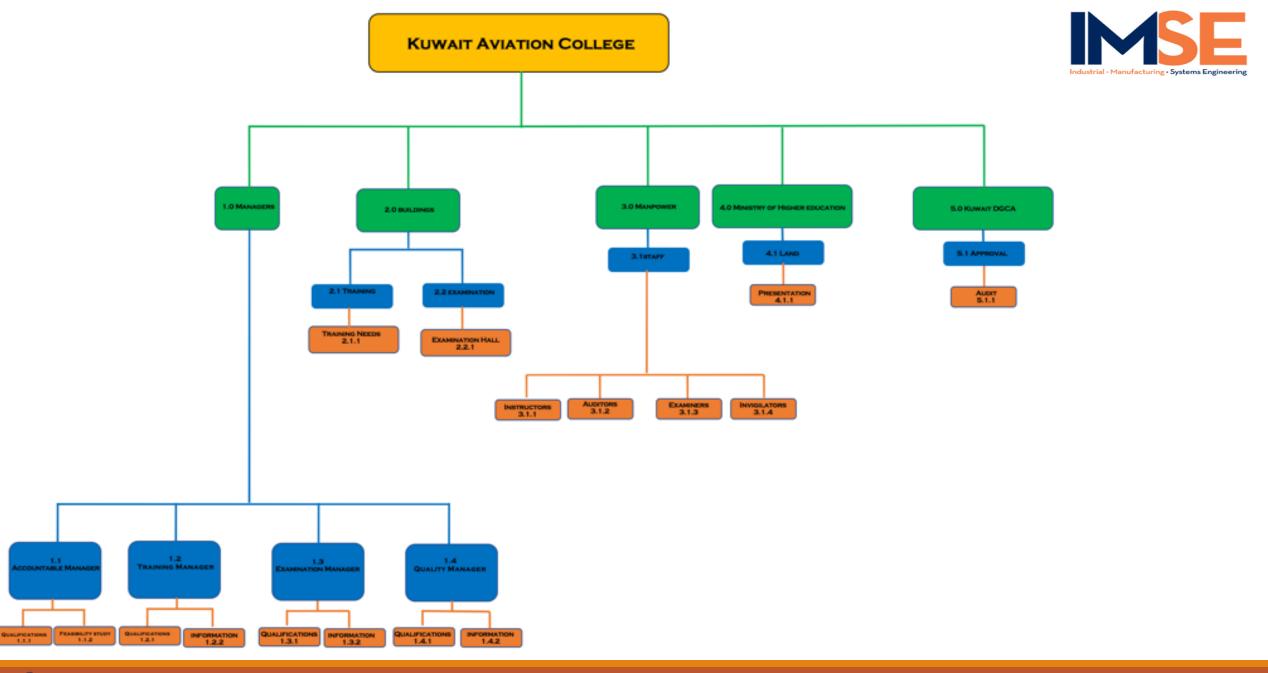
# **Concept of Operations**



• What should be there for the stakeholders to use the system?









# Requirements Validation and Verification Plan



Requirement Validation	I	Α	Т	D	Verification Plan
The Accountable Manager is going to be responsible to the stakeholders and Kuwait DGCA administratively, legally and financially.	x				Inspect that the selected Accountable Manager meets the requirements and the skills of the Accountable Manager position.

Requirement Validation	- 1	Α	Т	D	Verification Plan
The challenge that the Accountable Manager will face in getting land from the Ministry of Higher Education is how to prove that Kuwait needs this type of college.				×	Demonstrate by preparing a presentation to the Ministry of Higher Education that focus on the value of Kuwait Aviation College, and how rare it is in Kuwait as the only college that focus in only teaching aviation studies.



## **Subsystem and Part Design**





The Training Manager should report the Training Department needs to the Accountable Manager.

The responsibility of the Training Manager:

 Recommending, to the Accountable Manager, training manpower and equipment requirements to meet the agreed and projected training requirements.

Inspections in the Training Department by the Training Manager Before every managers meeting to collect the needs by doing a spot check on the classrooms, hanger, workshops, and the labs to report the needs.

Requirement & Information provided by *Saad N Mishari* telephone conversation on 3/19/2021 based on experience as Ex-Training Manager.

- 12 Classrooms are needed, and no classroom will contain more than 28 students.
- 2 hangers are needed

- Hangar 1
- Hangar 2
- Training Aircrafts & Other Training Aids



#### Kuwait Aviation College (Systems Process)

#### 4.0 Kuwait MHE

 Presenting a presentation to the Ministry of Higher Education that focus on the value of this college, how many sectors need this major, the fact that there is no college teach this major exept a small department. [Demonstration Method]



Land Granted.



• 2.1 Training Buildings
(Classrooms, Hangers, Workshops, Labs)

• 2.2 Examination Building (Examination hall)

### 3.0 Manpower

[inspection Method]

- Training classrooms/hangers need well-qualified **instructors**.
- Exam's preparation and conducting need wellqualified **Examiners** and **Invigilators**.
- To get and keep the College Approval, we need well-qualified **Auditors**.

- 3.1.1 Instructors
- 3.1.2 Auditors
- 3.1.3 Examiners
- 3.1.4 Invigilators





#### 5.0 Kuwait DGCA

• The Organization and the manpower must work under certain authority In order to start teaching the program. [inspection Method]

#### 1.0 Managers

- [inspection Method]
   Knowing Manager's qualifications.
- · Manager's Resume.
- Managers know their Responsibilities.

### Start



- 1.1 Accountable Manager
- 1.2 Training Manager
- 1.3 Examination Manager
- 1.4 Quality Manager



#### 2.0 Buildings

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[Demonstration Method]

• Every manager, based on his experience and familiarization with the DGCA rules and regulations, is going to recommend to the Accountable Manager, the building's, training equipment, and examination required to teach 250-300 students (50 students will be accepted per semester).



# **Validating Overall System**



• Validation was performed for each of the system requirements to ensure that the right system was built according to stakeholder expectations and Kuwait DGCA requirements

We were checking periodically with:

- ❖ Marzoug Alsharifi Ex-Accountable Manager
- ❖ Saad Mishari Ex-Training Manager
- ❖ Saud Alfarisi Ex-Examination Manager
- ❖ Abdulrahman Buhaimed Ex-Quality Manager
- ❖ Othman Alsharifi Ex-Director of Academic and Training Affair

To know that our entire system will perform as intended.







