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**Assignment #1**

**Requirements Inception**

**CSE-478- SRE**

**Submitted to**

*Dr Arif Raza*

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**Problem definition by gaining agreement of stakeholders**

|  |  |
| --- | --- |
| Element | **Description** |
| Problem | Inefficient handling of the crew and lack of information of activities currently in progress. Large number of paper files make search difficult. A lot of effort required to edit some emergency record. Reports geteneration is difficult because of mistakes in statistics calculation |
| Affects | Crew manager, Control Room Wireless Operator, Station Incharge, Crew |
| Results | In the current system the staff maintains the record manually and informs each other personally, once some emergency is reported. The list of currently available staff is not uptodate most of the time. Search, edit is resource consuming in terms of time and manpower and money. |
| Benefits | The Automated Record & Management System(ARMS) will enable staff i.e. (Control Room Wireless Operator, Crew Manager, Station In charge) to remain in picture that what activity is curretnly in progress and what all crew is free at the moment. It will provide uptodate list of committments of the crew which will help in better in management of crew. It will reduce the effort required to perform search and edit. It will help in report generation by providing accurate statistics. |

**Understand and illustrate the root causes**

|  |  |
| --- | --- |
| Element | **Description** |
| The problem | Manual System for keeping emergency records |
| Affects | Crew manager, Control Room Wireless Operator, Station Incharge, Crew |
| Results | More Efforts required to manage the records. Uptodate information regarding crew commitments is not possible. |
| Benefits | The Automated Record & Management System(ARMS) will provide  Uptodate committments of crew  Less effort to search and edit reocrds  Accurate Statistics for report generation |

**Identify the stakeholders**

* Control Room Wireless Operator
  + It receives the phone calls for emergency and fills the initial emergency request form. Generally Two types of Calls
    - Request for Emergency
    - Request for Additional Crew
* Crew Manager
  + When an initial request form is filled, Crew manager assigns the crew based on nature of emergency.
* Crew Informer
  + When some crew is assigned to some emergency dealing, it sends them to the location of emergency. And fills out the time of leaving the garage and coming back.
* Station In charge
  + It is overall supervisor of a rescue 1122 station. He manages all the reports and supervises all the staff.
* Crew
  + Crew deals with emergency by physically going on location. On completion, crew fills out detailed report about the emergency. Crew consists of
    - Medical Officer(MO)
    - Rescue 1122 Staff(driver, helper, rescuer)
    - Nursing Staff

**Define the solution system vision and boundary**

* + For

[Rescue 1122]

* + What

[Management of the crew and information sharing]

* + The

[Automated Record & Management System]

* + Is

[Replacement of existing manual system]

* + That

[Helps in efficient handling of crew]

* + Unlike

[The current system],

* + Our product

[Is faster, reliable and efficient]

CRWO

Crew Manager

Crew Informer

Crew

SI

Automated Record Management System(ARMS)

Database

User Interface

The proposed system is built to assist Rescue 1122 Staff to effeiceintly manage the emergency records. It shall provide uptodate list of crew commitments and statictics for report generation.

**Identify the constraints to be imposed on the solution**

|  |  |
| --- | --- |
| Description | **Rationale** |
| The system will be implemented on LAN | All the staff sits in one building and they need to share information. |
| Central Database | All the staff needs consistant information |
| Graphical User Interace | Easy to learn and use. |
| Authentication | Information need to be prevented from unatuhorised access. |