A System Development as Inclusive Technology for Fleet Equipment Maintenance and Planning in International Airport for Sustainable Solution

Dr. S. Sridhar
Professor & DEAN
RV Centre for Cognitive & Central Computing
R.V. College of Engineering, Mysore Road,
Bangalore-560059 India

Abstract: To monitor, control and plan job and ensure that jobs are carried out efficiently and cost effectively. GSE and VM (MT) department undertakes Equipment/Vehicle maintenance of various customers which is used for supporting the International airport Fleet, customers are broadly classified as Sharjah Airport, Other Agency and Personal. Unit (Equipment / Vehicle) may come for Servicing / Breakdown (BJ), Repairs (RJ), Accident repair (AJ), Schedule maintenance (RJ), for other agency maintenance (CJ) job card is opened. When the unit comes for maintenance, it gets registered at the receptionist. Arrival id generated by the system and a Job card is opened. Supervisor checks the unit and detects the problem and accordingly the job to be done is filled in the job card and an internal stores requisition is made for spare parts. Other Agency and Personal maintenance is chargeable, Estimation is done and only on approval maintenance is carried out. The mechanic who does the job fills the job-code and the time taken by him to do the job. Receptionist is informed about the status of all the equipment from time to time and the reason for pending is entered in the system. In this note, we present the following on fleet equipment maintenance and planning in International airport based on the experience of the author: - Is project on track for delivery as expected? What is final data for deliver? What are final cost estimates? And Status against any other high-level shipping goals, namely Manufacturing rates, Delivery, Partners and so on.

Keywords : Fleet equipment maintenance, planning, international airport

Progress Planning

In the case of Progress planning, the following are to be taken care: - List achievements and progress since last status update was given; Address schedule implications and Highlight those things that made process possible.

Attention areas

The areas where attention is needed are: - List delays and problems since last status update was given; List corrective actions being taken; Address schedule implications, Make sure you understand: Issues that are causing delays or impending progress and Why problem was not anticipated.

Schedule

In the case of Schedule we have to consider:-List top high-level dates, Keep simple, Attach more detailed schedule below if appropriate.

Deliveries

Here we present the deliveries as follows:-List main critical deliverables: Yours to client, yours to outside services, Outside services to you, other departments to you and Understand your confidence rating to each deliverable: Indicate confidence level on slides if appropriate

Costs

In the case of costs, consider the following: - List new projections of costs: Include original estimates and Explain source of differences. If there are cost overruns, then summarize why, List corrective or prevention action you’ve taken, Set realistic expectations for expenditures.

Technology

Consider the following in the case of technology :- List technical problems that have been solved, List outstanding technical issues that need to be solved, Summarize their impact on the project and List any dubious technological dependencies for project : Indicate source of doubt, Summarize action being taken or backup plan.

Resources

The resources considered are :- Summarize project resources: Dedicated (full-time) resources, Part-time resources, If project is constrained by lack of resources, suggest alternatives and Understand that customer may want to be assured that all possible resources are being used, but in such a way that costs will be properly managed.

Goals for Next Review

They are: - Date of Next status Update, List goals for next reviews: Specific items that will be done, Issue that will be resolved and Make sure anyone involved in project understands action plan.
**Fleet Equipment Maintenance and Planning – system overview**

**Purpose:** To monitor, control and plan job and ensure that jobs are carried out efficiently and cost effectively. GSE and VM (MT) department undertakes Equipment/Vehicle maintenance of various customers which is used for supporting the International airport Fleet; customers are broadly classified as Sharjah Airport, Other Agency and Personal. Unit (Equipment / Vehicle) may come for Servicing / Breakdown (BJ), Repairs (RJ), Accident repair (AJ), Schedule maintenance (RJ), for other agency maintenance (CJ) job card is opened. When the unit comes for maintenance, it gets registered at the receptionist. Arrival id generated by the system and a Job card is opened. Supervisor checks the unit and detects the problem and accordingly the job to be done is filled in the job card and an internal stores requisition is made for spare parts. Other Agency and Personal maintenance is chargeable, Estimation is done and only on approval maintenance is carried out. The mechanic who does the job fills the job-code and the time taken by him to do the job. Receptionist is informed about the status of all the equipment from time to time and the reason for pending is entered in the system. To monitor, control and plan job and ensure that jobs are carried out efficiently and cost effectively. GSE and VM (MT) department undertakes Equipment/Vehicle maintenance of various customers which is used for supporting the International airport Fleet, customers are broadly classified as Sharjah Airport, Other Agency and Personal. Unit (Equipment / Vehicle) may come for Servicing / Breakdown (BJ), Repairs (RJ), Accident repair (AJ), Schedule maintenance (RJ), for other agency maintenance (CJ) job card is opened. When the unit comes for maintenance, it gets registered at the receptionist. Arrival id generated by the system and a Job card is opened. Supervisor checks the unit and detects the problem and accordingly the job to be done is filled in the job card and an internal stores requisition is made for spare parts. Other Agency and Personal maintenance is chargeable, Estimation is done and only on approval maintenance is carried out. The mechanic who does the job fills the job-code and the time taken by him to do the job. Receptionist is informed about the status of all the equipment from time to time and the reason for pending is entered in the system. Schedule maintenance dates for equipments is generated from the system to plan for the maintenance job and to follow up with the user, in case the unit has not come in the scheduled date, follow-up is done by the receptionist, follow-up remarks is entered in the system. Maintenance charge (Man-hour, spare, Fluid cost) posting is done by the system automatically when the unit is released. Receptionist release the unit, user acknowledges, once the unit is released, the maintenance episode is closed, modification of transactions (job card) related to this maintenance is not allowed.

**Fuel stock:**

Fuel (Petrol/Diesel) the unit of measurement is Gallons. Fuel is consumed by SAA/Other Agency and Personal Customers. Fuel station store keeper enters the Fuel Receipt /Issues/Physical stock on the fuel sheet. Fuel is received from the supplier (default is Emarat), stocks gets added. On fuel issue, stock is reduced; reading kms of the unit is entered in the system in-order to get the mileage. Physical stocks is taken in order to verify with the computer stock. In case of discrepancy a positive or negative entry is passed by the supervisor. Please note: In case of fuel, minor difference in the physical stock and computer stock is possible because of the evaporation. Study has to be conducted in order to know the exact evaporation level.

**Registers to be maintained are:-**

(a) Schedule Maintenance List.

(b) Charge sheet

(c) Job card register

(d) Material consumption and costing.

(e) Man-Hours consumption and costing

(f) Fuel consumption

(g) Fluid consumption

(h) Department unit wise consumption

(i) Unit repeated list

(j) Spare parts details register

(k) Fuel ledger.

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**Fleet Equipment Maintenance – System Flow**
### Tool Bar Operations:

<table>
<thead>
<tr>
<th>Tools</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 <strong>Click the button ‘A’ (ADD)</strong></td>
<td>Screen will clear and cursor will wait at <strong>First Navigable</strong> field. Enter all the information. Click ‘SAVE’ Button to store information</td>
</tr>
<tr>
<td>2 <strong>Modification ‘M’ (MODIFY)</strong> information can be seen and modify</td>
<td>Press the <strong>CLEAR</strong> button. Enter the Party code and press ‘M’ (Modify) If any such record is existing, the system will slow that particular record or set of records. Otherwise, it will give a comment as ‘Query causes no records to retrieve’ message at the bottom of the screen. Change the information of necessary. Press Save button to store the modified information.</td>
</tr>
<tr>
<td>3 <strong>Query ‘Q’ (Query)</strong> Information can be viewed (No modification allowed)</td>
<td>Press the <strong>Clear</strong> button. Enter the Party Code and Press ‘Q’ (Query)</td>
</tr>
<tr>
<td>4 <strong>Scroll Up (^)</strong></td>
<td>To Navigate Previous record (If any)</td>
</tr>
<tr>
<td>5 <strong>Scroll Down (v)</strong></td>
<td>To Navigate Next record (If any)</td>
</tr>
<tr>
<td>6 <strong>Clear</strong></td>
<td>To Clear the Screen</td>
</tr>
<tr>
<td>7 <strong>List of Variables (LOV)</strong></td>
<td>List of Values for the Particular field (If any)</td>
</tr>
<tr>
<td>8 <strong>Print</strong></td>
<td>For Printing</td>
</tr>
<tr>
<td>9 <strong>Exit</strong></td>
<td>Exit out from the Screen</td>
</tr>
</tbody>
</table>

### REFERENCES


