Online Maintenance Action Form (O-MAF) for aviation maintenance. The issue that we are having in the aviation field is using a computer-based software (OOMA) to run our process. The problem is whenever the system is down, we are forced to use a paper copy of all our MAF.

The solution is to create an online MAF system that can mimic the function of OOMA. This way, we can eliminate time wasted on the following process:

1. Writing MAF on paper form (Green MAF)
2. Managing the Green MAF
3. Updating real time status of maintenance by writing on the Green MAF
4. Ordering parts on Green MAF

There are just too many things to update while the maintenance actions are open. Then, to top that off, after the system comes back online, we have to contingency all the Green MAF and type all the open and closed MAFs to OOMA.

These processes are too time consuming for the workers and for the controllers. So, to start this new process, I need to create the following features of the software.

Features:

1. Initiate maintenance
2. Order parts
3. Parts complete?
4. In Process
5. Status – must be filtered for management
6. Complete maintenance
   1. Pn/sn removed/installed
   2. Completed time
7. Sign authority
   1. Initiator
   2. Worker
   3. CDI always required
   4. QA if required
   5. MC always required
   6. MDS always required

Then create the table. The following is just an outline of how it’s going to be prcoessed.

CREATE DATABASE oomaContingency;

CREATE TABLE (

acft ( mafId(9), buno, modex, tms, version(b,b#,c,c+,c#,c+m), )

,maf ( mafId(9),

initiateDate, upd, trans, disCd, sysReason, discrepancy, initiatorPilot, cdiReq, qaReq,

wuc, iwDate )

completeDate, mal, act, signer, supervisor, mc, jcDate )

inPro, date, cdiName, qaName, pin(4)

,personnel ( mafId(9),

worker, name, pin(4)

cdi, name, pin(4)

qa, name, pin(4)

pc, name, pin(4)

mc, name, pin(4)

pilot, name, pin(4)

mds, name, pin(4)

,requisition ( mafId(9), ddsn(8), pn, sn, stats, dateSent, dateCompl )

,td ( mafId(9), cd, basic, I, r, a, pt, 41, 47 )

,sff ( mafId(9), apu, oilComsump, daily, ta, fuel, ord, limitations )

,cannibalization ( mafId, date,

);

All of these table will have a relationship using (mcnId PRIMARY KEY NOT NULL ). With these, I will need a back up copy of all the necessary information from OOMA. The back up copy of the data needs to be done daily in between shifts. This will ensure that the date we will be using to run the program are current and without duplicates. The system should be purged on first use in contingency mode.

The steps to run the program are the following:

1. Back up copies of the data.
2. Input
   1. Purged data on O-MAF
   2. Upload data to O-MAF
3. Process
   1. Sort OPEN MAF by JCN column
   2. Sort OPEN MAF by MCN column
   3. Sort OPEN MAF by Shop
   4. Sort OPEN MAF by Aircraft
   5. Have an available sorting capability for Job Status column
   6. Option to Complete and Close the MAF by having authorized user to sign off the MAF.
4. Output
   1. Select an MCN
   2. Transfer data to a Digital MAF ready for printing
      1. Open MAF
      2. Closed MAF
      3. Parts ordered

Using O-MAF will enable the controllers to effectively manage all MAFs and set priorities. Efficiency will be increased by 67% based on previous studies done by Certified Lean Six Sigma Green Belt.

Future concept will enable controllers to automatically upload all data from O-MAF to OOMA if permitted by the Navy system administrators.