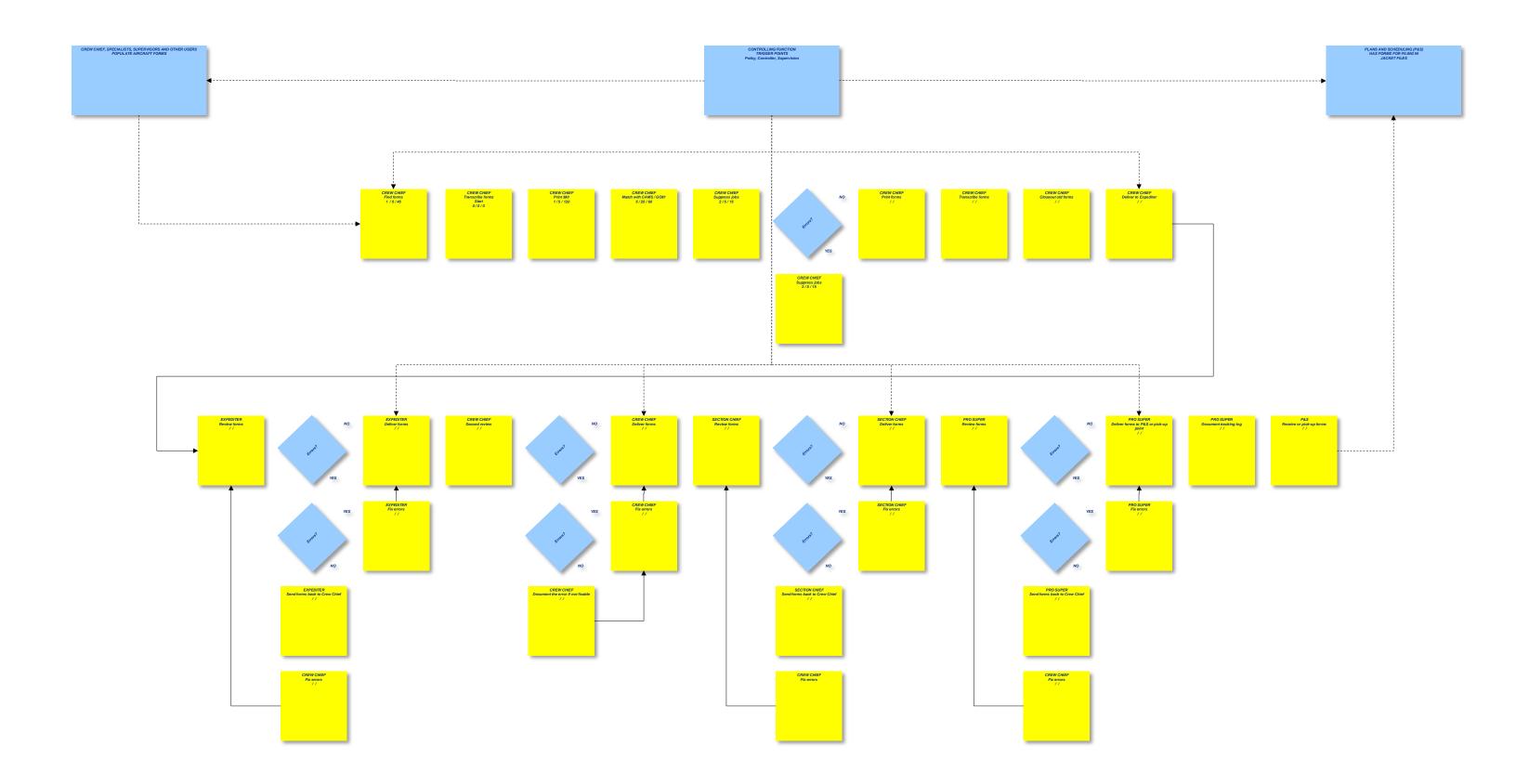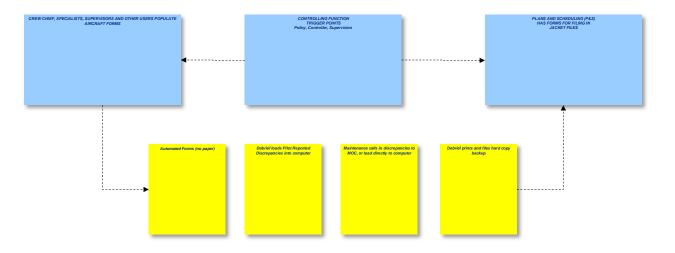Team Members:
Facilitator: Lt Col Cox, SMSgt Wagus
Team Leader: MSgt Penrod
Team Members: 718 AMXS (See block 8)

18 MXG 718 Aircraft Jacket Files / Forms Transcribing Process
27 - 30 Oct 09
OODA – **O**bserve. **O**rient. **D**ecide. & **A**ct

Approval Information/Signatures
Col Dave Brown, 18 MXG/CC
Maj Brian Moore, 718 AMXS/CC
Reviewed and approved 30 Oct 09

1. Clarify & Validate the Problem   Ⓞ O D A
- Numerous Forms Writeups; Jacket File Inspection Failures
- AMUs do not bring forms to P&S in a timely fashion
- AMUs not returning missing forms or signed missing form letters
- Aircraft forms take too long to review and process for filing in the Jacket Files, contain numerous errors, and in some cases are missing forms altogether
- AMUs take from 5 to over 90 days to review and forward active aircraft forms to Plans and Scheduling (P&S) for filing in the aircraft Jacket Files - Huge backlogs are prevalent across the 5 AMUs
- Huge batches of forms being delivered to P&S for filing

Voice of the Customer (what P&S expects):
  -- Deliver latest set of forms on a weekly basis
  -- Needs to be the "right" set i.e. latest set, no gaps/no missing form sets
  -- Can separate forms by A, H, J,...
  -- Can deposit forms in accordion folder at a central drop-off/pick-up area
- Tools used: Voice of Customer, VSM Current State Map

2. Break Down the Problem/Identify Performance Gaps   Ⓞ O D A
- Presently takes as long as 44 days once the forms are pulled and when they arrive at P&S -- Must be able to do this in 5 days
- Presently takes 4 to 5 people to perform the process -- Need to reduce this amount to the absolute minimum required by AFI 21-101 and T.O. 00-20-1
- Presently quality assurance pass rates are barely meeting standards -- Need to be able to meet quality standards consistently
- Tools used: KPI/Metrics, Performance Gap Analysis, Bottleneck Analysis

3. Set Improvement Target   O Ⓞ D A
- Presently takes as long as 44 days once the forms are pulled and when they arrive at P&S -- Target reduction is 39 days
- Presently takes 4 to 5 people to perform the process -- Target reduction is 2 to 3 people
- Presently quality assurance pass rates are barely meeting standards -- Target is consistent performance above the standard
- Tools used: Ideal and Future State Maps

4. Determine Root Cause   O Ⓞ D A
- Review process sometimes results in lost forms
- Review process is inconsistent across AMUs
- Different reviewers look for and find different types of discrepancies
- At least 19 inconsistencies in the process ("sometimes", "usually", "it depends")
- Some AMUs match forms against 380 computer screen "before" printing new set
- Checking/validating correctness against 21-101 and 00-20-1 requirements is highly inconsistent by crew chiefs, reviewers, and quality assurance
- Quality Assurance evaluation standard unclear (evaluator experience/preference)
- Training is unclear and apparently insufficient
- Some AMUs have the Crew Chief review, then Expediter review, then another Crew Chief review (3 sets of eyes versus 2 sets as in other AMUs)
- If there are errors any time in review process, forms re-cycle back to Crew Chief
- Some AMUs have log/track missing forms, other AMUs rely on P&S to track
- Inconsistent ways of getting forms to P&S, some deliver, some rely on P&S
- There is no set process, or checklist for transcribing forms -- Existing cover sheet has a list of items to check, but only used as a guide/not item-by-item cklist
- There are no "triggers" to keep the process moving along smoothly
- Lengthy review process and multiple reviewers with excessive work in process creates delays and creates opportunities for lost form sets
- Quote from a team member: "I think we have too many reviews in there."
- Tools used: 5-Whys and Brainstorming/Affinity

5. Develop Countermeasures   O O Ⓓ A
Action Plan:
- Build checklist for transcribing forms
  -- Coordinate with QA, pro Super, Section Chief, etc.
  -- Cover page includes the checklist
  -- Validate the checklist to ensure it is consistent with Regs and TOs (21-101, 00-20-1)
  -- Two signature blocks, possibly: transcriber and reviewer
- Build file system in the AMU for P&S
  -- Coordinate pick-up location for P&S
- Create the training plan for the checklist
  -- 797 Training block for qualification
  -- Review FTD Forms Training Outline and adjust as needed
- Create tracking log
  -- 33rd has a basic template
- Create a Mx Group Directive
  -- Include a description of the process, the checklists, and have reviewed by AMU, Section Chief, QA, FTD, etc.
- Review the linkage between QA and FTD courses
- Tools used: A3, Action Plan, and Timeline/Schedule

6. See Countermeasures Through   O O D Ⓐ
- Follow the Action Plan
- Establish and change policy
- Train personnel on procedures
- Use the tracker (forms closeout date, Section Chief review date, date dropped off at P&S pick-up point, and date P&S picked up the forms)
- Develop and use the checklist
- Have P&S acknowledge the pick-up
- Brief the new process to AMUs, i.e. Exp, Pro Sup, Supervision, etc.
- 30, 60, 90 and 6-month reviews of action plan
- Tools used: Visual Mgt and Standard Work

7. Confirm Results & Process   O O D Ⓐ
- Monthly tracking of the following KPIs/measures:
  -- Reduction in the number of missing forms letters (P&S tracks)
  -- QA pass rate
  -- Time to P&S
  -- Time between forms closeout date and Section Chief review
  -- Time between Section Chief review complete and pickup by P&S
- Tools used: KPIs/Metrics, Performance Mgt, Standard Work, and Audit

RESULTS	Current	Future	Delta	Improvement
Total # Steps	40	15	-25	62.5%
# People	5	2	-3	60.0%
# Form Sets	1	1	0	0.0%
Min Time (days)	4.0	0.4	-3.7	91.2%
Avg Time (days)	18.1	1.1	-17.0	94.0%
Max Time (days)	43.7	5.1	-38.5	88.2%

8. Standardize Successful Processes   O O D Ⓐ
- Maintenance Group directive (local supplement to AFI 21-101) (CAF/MAF)
- Local training plan
- Annual review of supplement, checklist, and training plan
- Tools used: Checkpoints/Standardization Table, AFI Policy Change with Checklist and Training, Annual Reviews

TEAM MEMBERS:
Section Chief - MSgt Lawrence Penrod
Lead Tech - TSgt Zirah Daigle
DCC - SSgt Richard Narvaez
DCC - (S)Sgt Christopher Blanchette
ADCC - SrA Reid Beimling
P&S - MSgt Warren

CURRENT STATE

CREW CHIEF, SPECIALISTS, SUPERVISORS AND OTHER USERS
POPULATE AIRCRAFT FORMS

CONTROLLING FUNCTION
TRIGGER POINTS
Policy, Controller, Supervision

PLANS AND SCHEDULING (P&S)
HAS FORMS FOR FILING IN
JACKET FILES

CREW CHIEF
Find forms
1 / 5 / 45

CREW CHIEF
Transcribe forms
Start
0 / 0 / 0

CREW CHIEF
Print 380
1 / 5 / 120

CREW CHIEF
Match with CAMS / GO81
5 / 20 / 60

CREW CHIEF
Suppress jobs
2 / 5 / 15

Errors? — NO

CREW CHIEF
Print forms
/ /

CREW CHIEF
Transcribe forms
/ /

CREW CHIEF
Closeout old forms
/ /

CREW CHIEF
Deliver to Expediter
/ /

YES

CREW CHIEF
Suppress jobs
2 / 5 / 15

EXPEDITER
Review forms
/ /

Errors? — NO

EXPEDITER
Deliver forms
/ /

CREW CHIEF
Second review
/ /

Errors? — NO

CREW CHIEF
Deliver forms
/ /

SECTION CHIEF
Review forms
/ /

Errors? — NO

SECTION CHIEF
Deliver forms
/ /

PRO SUPER
Review forms
/ /

Errors? — NO

PRO SUPER
Deliver forms to P&S or pick-up
point

PRO SUPER
Document tracking log

P&S
Receive or pick-up forms
/ /

Errors? — YES

EXPEDITER
Fix errors
/ /

Errors? — YES

CREW CHIEF
Fix errors
/ /

Errors? — YES

SECTION CHIEF
Fix errors
/ /

Errors? — YES

PRO SUPER
Fix errors
/ /

Errors? — NO

EXPEDITER
Send forms back to Crew Chief

CREW CHIEF
Document the error if not fixable
/ /

SECTION CHIEF
Send forms back to Crew Chief

PRO SUPER
Send forms back to Crew Chief

CREW CHIEF
Fix errors
/ /

CREW CHIEF
Fix errors
/ /

CREW CHIEF
Fix errors
/ /

IDEAL STATE

CREW CHIEF, SPECIALISTS, SUPERVISORS AND OTHER USERS POPULATE AIRCRAFT FORMS

CONTROLLING FUNCTION
TRIGGER POINTS
Policy, Controller, Supervision

PLANS AND SCHEDULING (P&S)
HAS FORMS FOR FILING IN
JACKET FILES

Automated Forms (no paper)

Debrief loads Pilot Reported Discrepancies into computer

Maintenance calls in discrepancies to MOC, or load directly to computer

Debrief prints and files hard copy backup

FUTURE STATE

CREW CHIEF, SPECIALISTS, SUPERVISORS AND OTHER USERS POPULATE AIRCRAFT FORMS

CONTROLLING FUNCTION
TRIGGER POINTS
Policy, Controller, Supervision

PLANS AND SCHEDULING (P&S)
HAS FORMS FOR FILING IN
JACKET FILES

CREW CHIEF
Find forms
1 / 5 / 45

CREW CHIEF
Transcribe forms
Start
0 / 0 / 0

CREW CHIEF
Match with CAMS / G081
5 / 20 / 60

CREW CHIEF
Suppress jobs
2 / 5 / 15

CREW CHIEF
Print forms
1 / 3 / 20

CREW CHIEF
Transcribe forms
End
0 / 0 / 0

CREW CHIEF
Transcribed Forms Review
5 / 10 / 60

CREW CHIEF
Deliver to Expediter
1 / 2 / 2

SECTION CHIEF
Review forms
15 / 3d / 5d

Errors? — NO / YES

SECTION CHIEF
Deliver forms
1 / 2 / 2

PRO SUPER
Document tracking log
1 / 2 / 2

P&S
Receive or pick-up forms
240 / 1 / 2

SECTION CHIEF
Fix errors
5 / 20 / 90

Errors? — YES / NO

CREW CHIEF
Fix errors
1 / 5 / 30

SECTION CHIEF
Send forms back to Crew Chief
1 / 5 / 60

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Avg Time (days)	18.1	1.1	-17.0	94.0%
Max Time (days)	43.7	5.1	-38.5	88.2%

ACTION PLAN

Event Name:	718 Jacket Files				0% Complete	
Goal:	Reduce closed form processing time and decrease errors.					

Priority	Projects	RIE	Just-do-it	Project Description	POC	Start Date	ECD	Status	Comments
			X	Build checklists for transcribing forms	TSgt Daigle	3-Nov-09	1-Jan-10		Coordinate with QA, Pro Sup, Sect Chief etc.
			X	Validate checklist with AFI/TO	TSgt Daigle	3-Nov-09	1-Jan-10		Review CAF/MAF sups
			X	Build file system for acft forms	SrA Beimling	3-Nov-09	15-Dec-09		Coordinate with TSgt Robinson from P&S
			X	Coordinate acft form pick-up location and schedule	SrA Beimling	3-Nov-09	15-Dec-09		
	X			Create training plan for new checklists/procedures	MSgt Penrod	15-Dec-09	1-Feb-10		Review FTD forms training and adjust as needed
			X	Initiate 797 requirement for new process	MSgt Penrod	15-Dec-09	1-Feb-10		
			X	Create tracking log	MSgt Penrod	3-Nov-09	10-Nov-09		
	X			Write MXG Directive on new process	SrA Blanchette	3-Nov-09	1-Mar-10		Include annual checklist review by AMU, Section Chief, QA and FTD
				Review linkage between QA & FTD courses	Lt Col Cox	3-Nov-09	1-Dec-09		

TEAM MEMBERS
(from left to right)

DCC - SSgt Richard Narvaez
ADCC - SrA Reid Beimling
Lead Tech - TSgt Zirah Daigle
Section Chief - MSgt Lawrence Penrod
DCC - (S)Sgt Christopher Blanchette