

## Pre Flight Workflow

(One person's way of doing it)

I'm a big believer in creating and using solid, robust Workflows. They will catch things that slip through the cracks, especially when interruptions, unusual or non-standard things start bogging you down or loading you up. They are especially handy when you get lots of distractions during cockpit preparation (MEL items, inop systems, ground/engineering/cabin crew interruptions etc.).

You must have firm grip of NP's. The Workflow will only assist your NP's – not replace them.

### Before Entering The Cockpit

If I have been dropped off at the airbridge stairs, I check the general area and have a quick look over the aircraft (big picture stuff). In particular (FCOM 3.03.03 P1):

- Wheels chocked (and if possible check that the amber light is illuminated on the NW to indicate that the Park Brake is set,
- Ground Equipment (external power, LP/HP air, cooling air)
- LG door positions
- APU inlet and outlet areas clear
- Any maintenance being done (e.g. cowls or access doors open)

### Initial Items

On entering the cockpit stow bags, hats etc. If CN try to let the F/O enter first and check the Aircraft Documents on the rear wall of the cockpit (FCOM 3.03.02 P1). Before I sit down I check to see if my torch is flashing and tell the other guy (if PF) or ask him to check his (if PM).

If I am PM, I complete my PM duties i.e. complete the Flight Deck and Safety Equipment Check, then get the (D)ATIS, recall any ECAMs (FCOM 3.03.04).

### Awareness

When you first get into the seat ensure that your speaker is turned up and that VHF 1 & 2 and INT is selected for reception on your ACP. Put the relevant ATC frequency on VHF 1 (with the ACP volume turned down) and as you are doing your cockpit NP's listen out for changes that might affect you.

Some things might be a change of QNH (a good prompt to get a new (D)ATIS), delays to other traffic, aircraft pushing back in the vicinity of your bay (that might block you pushing back), runway changes or wind changes that might cause a runway change (use the SEC FPLN and get ACARS RTOW for the other runway – then load everything, so if a short notice runway change occurs all you have to do is active the SEC).

Try and include what is happening in the cabin. You can normally hear the various PA's that the ISM makes to the cabin crew or pax (Security checks etc.). This might be the first indication of a potential problem. The earlier you start on a problem the more likely it is to be successfully resolved.

### AML

If CN, when in my seat I review the AML if it is available. If not, I get on with my duties and grab the AML as soon as it is available.

As CN I don't expect the F/O to wait while I do this. I let him get on with his duties and I have a quick summary of the relevant details in the AML when I've been through it with the other crew. I usually start at the front and work my way to the back.

- NTC – I usually just tell the F/O any relevant items that will have a direct effect, not all of them (e.g. this aircraft will remain in SRS during Go Around).
- Log Pages – Let the F/O know the FOB at arrival (for recording on the CFP). Review the last sector and the previous few sectors to identify any relevant defects or trends or what work has been recently completed. I don't get into MEL stuff just yet.
- PADD/SADD/ADD – I write down relevant MEL/CDL items to summarise later.

- Damage Charts – review any external damage and relay any pertinent information (especially if the F/O is PM and will be completing the exterior pre flight inspection).
- If there are any MEL/CDL items I get the MEL out, get the F/O to stop what he is doing and go through the MEL/CDL items and any Operational Procedures required.

## **NP's & "Blobs"**

Now just do your NP's, whether they be PF or PM.

A couple of things usually happen while you doing your NP's that can be effectively completed as a grouping of items or a "Blob". The most common are ACARS initialization, receiving the Fuel Upload documentation, receiving the Final ZFW and getting confirmation of the Pax numbers and Loadsheet Edition.

**ACARS** Initialise (usually after you have loaded the FM route) and check the correct information has been uplinked (i.e. Crew details)

Pre load the Final Fuel Figures (but don't send them)

Fill in as much as possible of the ACARS RTOW

**Fuel** When the Refuelling is complete and the Fuel documentation is delivered to the PM, he completes the Refuel Form, the CN ensures that a water check has been completed, check the fuel distribution, complete the CFP Fuel Uplift and then put the Fuel Documentation on top of the CFP in front of the SD with the Fuel SD page selected. The CN and F/O then checks:

- Amount of Fuel ordered
- Amount of FOB from the Refuel form
- Actual FOB from the ECAM
- Expected Uplift vs. Actual Uplift (resolve any discrepancies), and
- Then the PF can turn on the Seat Belt Signs

This covers all the Refuel items included in the NP's in FCOM 3.03.02 P2 to 6.

**Final ZFW** When you receive the Final ZFW (after informing the other guy) you can:

- Decide your Final Fuel figures (let the refueller know what your Final Fuel order figure is if you've loaded a Standby figure)
- Send the ACARS Final Fuel figures
- Update the ZFW in the INIT B page (just so you don't get a Warning message on the ACARS RTOW if the Final ZFW is significantly different from the CFP ZFW that you inserted doing your NP flow)
- Finalise all data for the ACARS RTOW and when the PM has checked it, send it

**L/Sheet EDNO** When the Traffic Staff inform you of the Pax numbers and the Loadsheet Edition Number, insert the EDNO and send it.

If you will get a LMC Loadsheet after the Traffic Staff leave, insert the EDNO but only send it when the LMC Loadsheet is actually received. This can be after pushback but before Take Off.

## **Workflow Items**

I use a pneumonic of **FUEL – 4 – 2 – 4** to ensure everything has been done. This is normally fits in to the NP's when both PF and PM have finished their cockpit flow as per NP's. Be flexible though – e.g. if refuelling is still underway you can skip that and come back to it later.

**Fuel** Has been loaded and the "Fuel Blob" completed.

About now you should be thinking about starting the APU (if it's not already running) and thinking about disconnecting any ground equipment (or connecting stuff if required e.g. APU inop).

**4** This first “**4**” is completed when both pilots have completed their initial NP’s and are both ready for the Take Off CTWO-Plus brief. It consists of four items which use the mnemonic **ITEM**:

- **I**nstruments Check
- **T**ake Off Briefing CTWO-Plus
- **E**FIS Check
- **M**EMO ECAM Memo (normally 5 Memo items, 6 if Pack Flow Lo)

At this point you can normally complete the Before Start Cxs.

**2** This “**2**” is completed when you have received both the Loadsheet and the (ACARS) RTOW data. It consists of completing:

- INIT B (ZFWCG and ZFW), and
- Inserting the Take Off Performance data into the FM (check PFD speed indications, set the Stby ASI bugs, check that GD and derate is set).

While you have the T/O PERF page displayed complete the Flap Retraction brief.

**4** This “**4**” is to ensure that everybody is ready for the Pushback and engine start. There are normally four groups of people that you have to interact with:

- Other Cockpit Crew
- ISM, Cabin Crew, Pax (PA completed?)
- ATC (has the Airways Clearance been requested/received?), and
- Others (e.g. Ground Engineer, IOC, Traffic Staff etc.)

At this point if you have Push/Start clearance you can normally complete the Start Cxs.

## **CN Signatures**

There are normally 5 bits of paper that a CN is required to sign:

- Dispatch CFP Cover Sheet (signed at Dispatch in HKG or when you get the paperwork at outports)
- AML (ensure the Ground Engineer has signed everything that he is required to sign)
- Refuel Record Form
- Loadsheet (usually only 1, but sign both if unable to acknowledge the Loadsheet by ACARS)
- NOTOC (if required)

## **Summary**

Incorporate these “Workflow” items if you think it will help. If you’ve already got a system include any stuff you think is beneficial and ditch the rest.

When ever there is a break in proceedings or I have a bit of spare capacity (if it is too busy, make some time) I think of the “Blobs”, **Fuel – 4 – 2 – 4** and of the 5 things I have to sign as CN.