



# NIGERIA CIVIL AVIATION AUTHORITY

## CORPORATE HEADQUARTERS

Nnamdi Azikiwe Int'l Airport, Domestic Wing, Abuja, Nigeria

**CL:0-AWS020B**

### AIRCRAFT FUELLING OPERATORS OPERATIONS MANUAL COMPLIANCE CHECKLIST

The purpose of the Aircraft Fuelling Operators Operations Manual Compliance Checklist is to assist owners / operators with a view to ensuring that all manuals concerning aircraft fuelling submitted to the CAA for approval are standardized and include all items that are required by Nig.CARs, applicable AOL and Advisory Circulars. This checklist, when completed, should be submitted with the draft manuals.

This checklist should clearly show either compliance (yes) & location of the compliance in the notes section or not applicable (no) & the reason in the notes section.

The specific tasks and the relevant procedures shall be included as specified in the Manuals of the operator / organization. The relevant cross-references (subsection number and page number) shall be specified in the note's column at the appropriate paragraphs and the correct term that refers to specific manuals shall be used (e.g.: "QM" for Quality Manual or "OM" for Operations Manual or "HSE" for Health Safety and Environment Manual). It is not acceptable to simply enter the QM or OM as the cross-reference.

The checklist is provided to ensure the minimum required items are contained in the Manuals. It should be enhanced as necessary to suit the organization's operations.

<b>Fuel Farm Approval Number (if applicable):</b>	
<b>Owner / Operator's Name:</b>	
<b>Owner / Operators Manual/ reference:</b>	
<b>Amendment Status:</b>	

1. GENERAL REQUIREMENTS					
S/N	Manual Basic Information	Compliance		NOTE: Compliance location in Manual: Or Reason for "No" Compliance	NCAA's Assessments
		YES	NO		
1.1	Does the Manual contain the name and address of the owner/operator?				
1.1.1	Does the Manual include:				
1.1.2	The Company name (and logo), manual reference, issue number, rev number, and rev date (on every page)?				
1.1.3	A Contents list/Table of Content?				
1.1.4	A List of effective pages?				
1.1.5	Revision status?				
1.1.6	An Amendment Procedure and control?				
1.1.7	A distribution list including a procedure to ensure that all manual holders promptly receive revised pages and insert the same in the manuals?				
1.1.8	Acronyms and definitions?				
1.2	Does the Manual contain the organization's description and structure that includes?				

1.2.1	Roles and accountabilities/responsibilities of key personnel, appropriately qualified, knowledgeable and experienced.				
1.2.2	An "accountable" executive who has overall accountability and authority for the organization's policies, objectives, procedures, implementation and products.				
1.2.3	Relevant managers with the authority to establish and modify processes; and				
1.2.4	A Brief description of the organization ?				
1.2.5	Organization chart?				
1.2.6	A procedure to ensure the continuity of tasks and safety or quality programs during the absence of a post-holder who is specified as having the primary responsibility for that task or programme;				

<b>2. FACILITY REQUIREMENTS</b>					
S/N		Compliance		<b>NOTE:</b> Compliance location in Manual: Or Reason for "No" Compliance	NCAA's Assessments
		YES	NO		
2.1	Are storage areas close to the aircraft fuelling area while maintaining safe clearances?				
2.2	Is there separate storage for different fuel types using dedicated pipelines and tanks?				
2.3	Are clear "NO SMOKING" and hazard signs around fuel storage and handling zones installed and maintained?				
2.4	Are explosion-proof electrical setups and adequate fire extinguishers used at storage and unloading/loading stations?				
2.5	<b>Tanks and Pumps</b>				
2.5.1	Do tanks have a minimum slope of 1:30 for horizontal tanks and cone-down bottoms for vertical tanks with a minimum 1:30 slope to a centre sump?				
2.5.2	Are free vent devices for Jet A-1 storage tanks and pressure/vacuum relief valves for Avgas tanks used unless underground?				
2.5.2	Are storage tanks positioned such that hydrocarbon vapours diffuse into the atmosphere to a safe concentration before reaching hazardous areas?				
2.5.2	Are tanks accessible for firefighting?				
2.5.2	Are positive displacement pumps equipped with a by-pass relief valve?				
2.6	<b>Filter Specifications</b>				
2.6.1	Are filters installed on both bowsers and storage tanks?				
2.6.2	Do filters meet the specifications outlined in industry standards (e.g., EI 1581, EI 1583)?				
2.6.3	Are specified micron filters used for incoming and outgoing fuel?				

2.7	<b>Filters on Tanks:</b>				
2.7.1.	Are AVGAS tank input and output lines fitted with 80-micron filters and 5-micron filters on the output line?				
2.7.2	Do aviation turbine fuel installations have 5-micron micro filters or filter separators on tank input lines and filter separators on output lines?				
2.7.3	Do filter separators have a nominal rating of 5 microns for solid particles and a maximum of 15 parts per million for water?				
2.8	<b>Filters on Bowers and Vehicles:</b>				
2.8.3	Are AVGAS vehicles fitted with a 5-micron filter?				
2.8.3	Do Jet A-1 vehicles have a filter separator or monitor with a 5-micron rating?				
2.9	<b>Documentation and Labelling</b>				
2.9.1	Are all storage tanks properly labelled with the product type and other relevant information?				
2.9.2	Are safety data sheets (SDS) for all stored products available and up to date?				
2.9.3	Are all pipelines and transfer points clearly labelled and colour coded as per industry standards?				
2.9.4	Are all emergency shut-off valves clearly marked and accessible?				
2.9.5	Is all delivery documentation complete and includes a Certificate of Conformity or Release Note?				
2.9.6	Are detailed records of fuel receipts, testing, maintenance, cleaning, and fuel dispensing activities maintained?				
2.9.7	Are storage tanks and pipelines properly labelled and colour-coded to identify fuel grades?				
2.9.8	Are fuel inlet and outlet point clearly marked with labels indicating the type of fuel and relevant safety information?				
2.9.9	Is a log kept of all fuel deliveries and movements, with details of quantity, type, and batch references?				

**3. OPERATIONAL PROCEDURES**

S/N		Compliance		<b>NOTE:</b> Compliance location in Manual: Or Reason for “No” Compliance	NCAA’s Assessments
		YES	NO		
3.1	<b>Fuelling Operations:</b>				
3.1.2	Are stringent protocols for aircraft fuelling, including supervision and ensuring no ignition sources are present, followed?				
3.1.3	Are all storage tanks and pipes clearly labelled with fuel grades and safety warnings				
3.1.4	Are tanks properly grounded and bonded during fuel transfers to prevent static electricity build-up?				
3.2	<b>Receipt and Storage</b>				
3.2.1	Are clear procedures for receipt of products into storage tanks established?				

3.2.2	Are dip hatches for manual gauging of tanks opened only when necessary?				
3.2.3	Is there a procedure to Confirm the correct grade and quantity of fuel upon delivery				
3.2.4	Does the procedure Ensure the Certificate of Quality is presented and includes details like fuel type, origin, and batch references?				
3.2.5	Does the procedure Ensure that Designate and maintain separate tanks for different fuel grades to prevent cross-contamination?				
3.2.6	Is a minimum of 30 minutes allowed between commencement of gauging and end of tank filling operations?				
3.2.7	Does the procedure ensure the integrity of seals and the accuracy of the vehicle grade plate indicator are checked and confirmed before fuel transfer?				
3.2.8	The Check for adequate storage capacity in the receiving tanks prior to delivery.				
a.	<ul style="list-style-type: none"> <li>water checks are conducted to ensure fuel in the receiving tanks is free of contamination.</li> </ul>				
b.	<ul style="list-style-type: none"> <li>Ensure the delivery vehicle stands on level ground for sample collection.</li> </ul>				
3.3	<b>Loading</b>				
3.3.1	Is there a loading procedure documented ?				
3.4	<b>Storage</b>				
3.4.1	Is there a documented Into storage procedure?				
3.4.2	Does the procedure ensure that tanks are inspected and cleaned at least once every 12 months				
3.4.3	Are microbial test carried out on storage tanks at least once every 12 months?				
3.4.4	Does the procedure allow for Settling Time?				
3.5	<b>Into plane services</b>				
3.5.1	Is there a documented Into plane services procedure?				
3.5.2	Does the procedure Implement and verify proper grounding of tanks and bonding during fuel transfers to prevent static electricity build-up?				
3.5.3	Does the procedure Use specified micron filters for incoming and outgoing fuel?				
3.5.4	Does the procedure Equip with adequate firefighting gear and ensure quick access to aerodrome fire services?				
3.5.5	Is there a procedure for handling aircraft misfuelling?				
3.5.6	Does the procedure Ensure that Tank fuellers and hydrant dispensers should have a clear exit path at all times?				
3.5.7	Does the procedure Ensure that Suitable fire extinguishers should be provided and readily accessible?				
3.5.8	Does the procedure Ensure that Ground Power Unit's (GPU's) should not be positioned within 6				

	meters of fuelling equipment and vent points?				
3.5.9	Does the procedure Ensure that Photographic flash equipment shall not be used within 6 meters of fuelling equipment and vent points?				
3.5.10	Does the procedure ensure a visual inspection of the aircraft fuelling equipment (Hoses, gauges, meters etc.) is carried out?				
3.5.11	Does the procedure ensure that water checks are carried out on samples from the Aircraft tanks and the bowser ?				
3.5.12	Does the procedure require that the aircraft operator's personnel i.e. Engineer/Pilot ensure that fuel sample is tested for water and other contaminants before fuelling?				
3.5.13	Does the procedure ensure that the test carried out above is documented?				
3.5.14	<b>Fuelling in special conditions</b>				
a.	Does the manual contain procedures for fuelling in special conditions i.e.?				
i.	• Fuelling With Passengers On Board Or Embarking/Disembarking				
ii.	• Fuelling With Aircraft Engines Running				
iii.	• Fuelling Aircraft During Thunderstorm				
iv.	• Fuelling While Power Units Are In Operation				
v.	• Fuelling During Operation Of Anti-Collision Strobe Light System				
vi.	• Fuelling In Hangars				
3.6	<b>Tank to tank transfer</b>				
3.6.1	Are all requirements for intra-depot tank-to-tank petroleum products transfer met satisfactorily?				
3.6.2	Are products quality compatibility and pipeline content quality verified before tank-to-tank transfers?				
3.6.3	Are storage tanks nominated for loading only after fiscalisation and sampling on the loading day?				
3.6.4	Are alternative storage tanks nominated if there are contradictions in test results?				
3.6.5	Are transfers to loading arms only performed when tanks are properly nominated?				
3.6.6	Are loading arms and related equipment inspected for leaks and functionality before commencement of loading?				
3.7	<b>Spillage Control</b>				
3.7.1	Does the manual have a documented Spillage control procedure?				
3.7.2	Does the Procedure:				
a.	Ensure that all dispensers/refuelers are equipped with a spill care kit?				
b.	Ensure a clear protocol for cleaning minor spills of jeta-1 with soak mats?				
c.	Assign responsibility for the management of major and minor spills?				
d.	Include clear guidelines for handling fuel spills over 2 meters in any direction or of a continuous nature?				

e.	Ensure that refuelling of the aircraft is discontinued immediately in the event of a major spill?				
f.	Ensure that engines of ground power supply units are stopped without touching electrical circuits and switches (except for stopping the power unit)?				
g.	Include a process for switching off running engines and towing the vehicle out of the area?				
h.	Procedure ensure measures are in place to prevent accidental spillage from the aircraft air vent from falling on refuelling equipment when the refuelling vehicle is parked under the aircraft?				
i.	Ensure a speed limit of 5km/hr for ground equipment/vehicles within 15 meters of the spillage area?				
j.	Ensure that embarkation/disembarkation of passengers or loading/unloading of cargo is immediately stopped in the event of a spill?				
k.	Include a protocol to immediately inform the fire service head and the location in-charge about any fuel/oil spillage within the airside?				
l.	Ensure that refuelling only recommences after the spillage has been adequately cleaned?				

Completed By (Name):	
Position/Title	
Signature:	
Date:	

<b>NCAA OFFICIAL USE</b>	
The Operations Manual along with this compliance checklist has been evaluated and found to be <b>SATISFACTORY/UNSATISFACTORY</b> . I recommend the manual to be <b>APPROVED/NOT APPROVED</b>	
Comments:	
Reviewed By Inspector(s):	
Signature	
Date:	

<b>NCAA OFFICIAL USE</b>	
The Operations Manual is hereby <b>APPROVED/NOT APPROVED</b>	
Comments:	
Name of General Manager:	
Signature	
Date:	