

## KQ Connect

### Q&A with Evans Kihara Acting Technical Director at KQ

#### Blurb

What goes into aircraft maintenance at KQ? Do we handle everything in-house? Evans Kihara, Acting Technical Director at Kenya Airways tells us more.

#### **Define aircraft maintenance?**

Aircraft maintenance is really the process of restoring aircraft systems and components to their original condition. It includes aligning critical requirements such as technical literature, equipment, machinery, and most importantly, qualified team members. In the industry, maintenance activities are often referred to as “maintenance events”.

#### **Give a brief overview of KQ's maintenance approach and what needs to be in place on order to carry out effective aircraft maintenance?**

Aircraft maintenance is driven by aircraft flying hours *or* calendar days – whichever comes first. Maintenance events are guided by an approved regulatory document referred to as the **Approved Maintenance Programme** which stipulates a number of things including: the time interval between maintenance events, the particular tasks to be undertaken, and the required skills and labour needed to carry out the task. The document also stipulates the necessary equipment and machinery, as well as the spares and materials that will be needed. Maintenance involves inspections, repair, replacement, modifications and overhaul tasks as guided by the programme.

#### **Kenya Airways is a Maintenance Repair and Overhaul (MRO) service provider approved by Kenya Civil Aviation Authority and European Union Aviation Safety Agency. If that is the case, why are some KQ aircraft maintained outside of Kenya from time to time?**

As stated above, aircraft maintenance is driven by flight hours and calendar days. Depending on how particular aircrafts operate and accumulate hours, multiple maintenance events may occur at the same time. This means we need to engage other MROs in locations such as Dubai and Jordan. It is worth noting that we offload maintenance events to other MROs while at the same time onboarding other operators' planes when we have spare capacity.

#### **What proportion of our fleet do we maintain elsewhere?**

All maintenance activities on the Boeing 737 and the Embraer 190 aircraft are performed in-house unless we are slot-restricted. Maintenance for the B787 is undertaken internally, apart from the major investment-heavy events that occur every three years. For example, 12 out of 13 maintenance events of a typical B787 aircraft are performed internally in a three-year cycle. The heavier “13<sup>th</sup>” event is undertaken by select MROs after extensive cost negotiations. Roughly 93% of all B787 maintenance is performed locally while 100% are carried out internally for the B737NG and E190.

**We also provide MRO services for external parties. How does this benefit KQ and the broader African aviation industry?**

Kenya has a significant number of planes requiring maintenance beyond the types that KQ operate. We offer various maintenance services to local operators who may not have the capacity to undertake the maintenance investment KQ has already made. Within the region we offer maintenance services to African operators of the B737NG and Embraer fleets. We also offer support services to for new operators starting aircraft operations by seconding our staff to run their operations while coaching local staff to take over. This has gone a long way to foster growth of quality maintenance within Africa through sharing of resources and knowledge

**There was a recent concern via social media about the use of what appeared to be "duct tape" on parts of one of our aircraft. Please demystify this practice.**

Maintenance is a restorative process. In certain instances, the restorative actions may require extensive work on non-critical systems. In such instances, interim remedial actions provide for interim solutions. I'd like to stress that these solutions are guided by approved maintenance documents. In the case referred to, pressure sensitive tape referred to as high speed tape was applied to an area of the external engine intake where a scratch had been observed during routine inspection.

The tape can withstand the external air pressure during flight without debonding or coming off. The approved documentation stipulates the interval for inspecting the interim repair solution as well as interval for refreshing the tape. The processes of releasing an aircraft for flight have rigorous checks that quickly and easily identify situations that are "NO GO" (situations of no release). Release of any aircraft to fly is strongly regulated globally and does not differ across operators.