

From: Cesar Clavijo <[REDACTED]>
Sent: Wednesday, May 20, 2015 11:57 AM
To: Alleyne Eric
Subject: 30242 Maintenance

Track and Balance exact date was sunday the 03/8/15 performed by kris and ran out of time for last check after adjustment.

So I performed the last check or reading that was necessary on monday 03/9/15 with a result of .13 and + of track. well within limits.

Also as mentioned in our conversation this morning, I replaced the belt tensioning actuator gear motor 03/10/15.

thanks

Cesar

From: Cesar Clavijo <[REDACTED]>
Sent: Friday, May 22, 2015 8:40 PM
To: Alleyne Eric
Subject: Re: 30242 Maintenance

That was wayne fuoco.

Sent from my iPhone

On May 22, 2015, at 7:09 PM, Alleyne Eric <[REDACTED]> wrote:
Hey Cesar who flew it for the test flight?

Eric

From: Cesar Clavijo [mailto:cesar@[REDACTED]]
Sent: Friday, May 22, 2015 4:11 PM
To: Alleyne Eric
Subject: Re: 30242 Maintenance

Both the gear motor change and the track and balance test flights were done 03.11.15.

There was not a workorder for this internal job.

Sent from my iPhone

On May 22, 2015, at 9:03 AM, Alleyne Eric <alleyne@ntsb.gov> wrote:
Hey Cesar after the Track and Balance and the gear motor change was the helicopter test flown?

Eric

From: Cesar Clavijo [mailto:cesar@[REDACTED]]
Sent: Thursday, May 21, 2015 3:46 PM
To: Alleyne Eric
Subject: Re: 30242 Maintenance

There was not a log entry made in the case of the gearmotor as it was meant to be a loaner and was going to be changed so I was waiting for the new one to do a log entry.

And with the track and balance i was under the impression that i had inputted one but it appears i did not put the log entry in the book.

I have gone through the logs to ensure these were the only items performed which were not put in the log books of the aircraft.

Thanks

Cesar

Sent from my iPhone

On May 20, 2015, at 4:47 PM, Alleyne Eric <alleyne@[REDACTED]> wrote:

Thanks Cesar, can you send me the logbook entry for these two maintenance items that were performed. I just need a copy of the logbook page with your sign off.
Thanks

Eric Alleyne
Air Safety Investigator
National Transportation Safety Board
Office of Aviation Safety
Eastern Regional Office (ERA)
45065 Riverside Parkway
Ashburn, Virginia 20147



<image001.gif>

From: Cesar Clavijo [mailto:cesar@[REDACTED]]
Sent: Wednesday, May 20, 2015 11:57 AM
To: Alleyne Eric
Subject: 30242 Maintenance

Track and Balance exact date was sunday the 03/8/15 performed by kris and ran out of time for last check after adjustment.

So I performed the last check or reading that was necessary on monday 03/9/15 with a result of .13 and + of track. well within limits.

Also as mentioned in our conversation this morning, I replaced the belt tensioning actuator gear motor 03/10/15.

thanks

Cesar

From: Cesar Clavijo <cesar[REDACTED]>
Sent: Thursday, May 21, 2015 3:46 PM
To: Alleyne Eric
Subject: Re: 30242 Maintenance

There was not a log entry made in the case of the gearmotor as it was meant to be a loaner and was going to be changed so I was waiting for the new one to do a log entry. And with the track and balance i was under the impression that i had inputted one but it appears i did not put the log entry in the book.

I have gone through the logs to ensure these were the only items performed which were not put in the log books of the aircraft.

Thanks

Cesar

Sent from my iPhone

On May 20, 2015, at 4:47 PM, Alleyne Eric [REDACTED]:
Thanks Cesar, can you send me the logbook entry for these two maintenance items that were performed. I just need a copy of the logbook page with your sign off. Thanks

Eric Alleyne
Air Safety Investigator
National Transportation Safety Board
Office of Aviation Safety
Eastern Regional Office (ERA)
45065 Riverside Parkway
Ashburn, Virginia 20147
[REDACTED]

<image001.gif>

From: Cesar Clavijo [mailto:cesar[REDACTED]]
Sent: Wednesday, May 20, 2015 11:57 AM
To: Alleyne Eric
Subject: 30242 Maintenance

Track and Balance exact date was sunday the 03/8/15 performed by kris and ran out of time for last check after adjustment. So I performed the last check or reading that was necessary on monday 03/9/15 with a result of .13 and + of track. well within limits. Also as mentioned in our conversation this morning, I replaced the belt tensioning actuator gear motor 03/10/15.

thanks

Cesar

From: Chris Bull <[REDACTED]>
Sent: Monday, May 25, 2015 9:24 AM
To: Alleyne Eric
Subject: Re: Accident investigation inquiry (Journey Log)

Yes that's correct.

Sent from my iPhone

On May 25, 2015, at 9:20 AM, Alleyne Eric <[REDACTED]> wrote:
Ok I see, so the pilot knows the type of maintenance flight prior to testing the aircraft correct?

From: Chris Bull [mailto:chris.[REDACTED]]
Sent: Monday, May 25, 2015 9:18 AM
To: Alleyne Eric
Subject: Re: Accident investigation inquiry (Journey Log)

Hi Eric,

There is no difference between MX and MTX. The pilot is the only person who signs the journey log therefore its entered by the pilot and not the mechanic.

Best,

Chris

Sent from my iPhone

On May 25, 2015, at 9:16 AM, Alleyne Eric <[REDACTED]> wrote:
Hey Chris,
Is there a difference between MX and MTX? And does the pilot or mechanic enter that into the Log?

Eric

From: Chris Bull [mailto:chris.[REDACTED]]
Sent: Monday, May 25, 2015 8:54 AM
To: Alleyne Eric
Subject: Re: Accident investigation inquiry (Journey Log)

Good morning Eric,

MX or MTX refers to a maintenance flight performed. These flights are flown post any maintenance carried out on the aircraft.

Kind regards,

Chris

Sent from my iPhone

On May 25, 2015, at 8:36 AM, Alleyne Eric <[REDACTED]> wrote:

Good morning Chris, I had a chance to look over some more of the information you sent me and I had a couple of questions for you.

- * What do the entries (MX or MTX) mean?
- * Who enters those abbreviations into log?

Eric Alleyne
Air Safety Investigator
National Transportation Safety Board
Office of Aviation Safety
Eastern Regional Office (ERA)
45065 Riverside Parkway
Ashburn, Virginia 20147



<image001.gif>

CONFIDENTIALITY NOTICE - THIS E-MAIL TRANSMISSION MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, PROPRIETARY, SUBJECT TO COPYRIGHT, AND/OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IT IS FOR THE USE OF INTENDED RECIPIENTS ONLY. If you are not an intended recipient of this message, please notify the original sender immediately by forwarding what you received and then delete all copies of the correspondence and attachments from your computer system. Any use, distribution, or disclosure of this message by unintended recipients is not authorized and may be unlawful.

From: Cesar Clavijo <cesar[REDACTED]m>
Sent: Monday, May 18, 2015 2:06 PM
To: Alleyne Eric
Subject: Track and Balance N30242

Good afternoon Eric, here's the statement from our conversation this morning.
Track and Balance was performed at around two to three weeks prior to the accident during the weekend by Kris (mechanic) and I finished it on monday. The final IPS vibration level was around .13 and track was + both well within limits specific by robinson. Also the leading edge near the outer 3 ft of the main rotor blades had been touch up painted.

Regards,

Cesar

From: Kristopher Kirchoff <k[REDACTED]m>
Sent: Thursday, May 21, 2015 3:50 PM
To: Alleyne Eric
Subject: Track and Balance

Eric Alleyn,

I, Kris Kirchoff ([REDACTED]), performed track and balance of the Main Rotor in accordance with R44 Robinson Maintenance Manual section 10.230, the Tail Rotor in accordance with R44 Maintenance Manual 10.240 and the Fan in accordance with R44 Maintenance Manual Section 6.240 on aircraft N30242. The above mentioned track and balance was performed on the approximate date of March 8, 2015. Refer to the Aircraft Airframe Logbook for more information.

Kris Kirchoff May 21, 2015
[REDACTED]