1/28/18 [redacted]

Paul Stutsman

Air Evac Lifeteam [redacted]

[redacted]

Jackson, TN 30301

RE: N894GT Pilot statement

After landing, at idle, collective popped up and the aircraft became airborne in a nose down right roll. Aircraft climbed to around five feet. I turned the twist grip to fly and leveled the aircraft and landed. I didn't feel it had hit the ground that hard however, it did set off the ELT. I was surprised when the Nurse said that there was damage to the sheet metal.

Paul Stutsman

[redacted]

Paul James Stutsman II

Air Evac Lifeteam [redacted]

Jackson, TN 38301

[redacted]

RE: N894GT Statement

01/29/2018

On 01/28/2018 shortly before 1400 CST I executed an approach to land on a heading of approximately 040 degrees. On a long final, I had to reduce collective friction three times to be able to move the collective as fast as I felt I needed to. This was because I had a little of a left wind component. Came to a hover then turned the aircraft to the right and landed at 1359. Started the after landing portion of the checklist. Turned twist grip from fly to idle. Thought I had the collective lock engaged. Turned the horn mute switch to mute. Grabbed the cyclic with me left hand and reached for the clock start button with my right hand. As I was reaching for the clock button, the collective popped up. The aircraft became airborne. I immediately grabbed the cyclic with my right hand and the collective with my left and twisted the twist grip to fly and landed the aircraft hard.

Paul James Stutsman II

From: Randy Rushing
Sent: Tuesday, January 30, 2018 12:37 PM
To: Tom Baldwin [redacted]
Cc: Jonathan Wood [redacted]
Subject: Final Statement

To whom it may concern:

This statement is for the incident that occurred on January 28, 2018. While making a standard approach to Regional One Health, normal safety check list was read by pilot and acknowledged by flight crew, and a challenge response was read to flight crew and acknowledge by pilot. At 1359 N894GT landed on Regional One Health helipad without any incident, seat belts and helmets remained on at this time. While I was assessing my patient I noted out of the corner of my eye the pilot grab the checklist form its storage spot and began going over it. Noted the engine to idle down, and the pilot to reach for what I'm unsure of due to me still assessing my patient, when the aircraft unexpectedly lifted from the helipad. The pilot stated " oh [redacted]' , at this time I was looking out the window . Unsure what the pilot did to put the aircraft on the ground, but we experience a hard landing. Seatbelts and helmets were still secured at this time. After reassessing my patient noted the pilot reading the checklist aloud at this time. Aircraft was shut down in normal sequence at this time with no issue, I asked the pilot after shut down what just happened and he stated he was unsure. Patient onboard was not hurt during this event and was taken downstairs for transfer of care.

Randy Rushing RN,CEN,NR-P

Randy Rushing RN,CEN,NR-Paramedic
Air Evac [redacted]
Base [redacted]
Cell [redacted]

1/30/18 [redacted]

| Personal Information | | | |
|---|---|---|---|
| Name | Andrew Reed | Company | Air Evac Lifeteam |
| Address | [redacted] | Job Title | Flight Nurse |
| City, State and Zip | Jackson, TN 38305 | Base | [redacted] |
| Date of Birth | 4/16/1990 | Location | Jackson, TN |

| Event Information | |
|---|---|
| Date of event | 1/28/2018 |
| Time of event | 1359 CST |
| Location of event | Regional One Hospital Helipad |

## Event Information

Detailed Description of Event: During this flight I was seated in seat 3 (fig. 1) with lap and shoulder belts fastened and tightened, wearing a company approved and inspected helmet. Just prior to landing at Regional One Hospital's rooftop helipad a sterile cockpit was assumed by everyone onboard N894GT. After approach the aircraft was brought to a low hover, I looked out the left window and stated verbal confirmation the left side of the aircraft was clear and then the tail of the aircraft was turned left and the aircraft was landed on the center of the "H" of the helipad. At this time I saw the pilot begin his post-landing checklist procedures and I turned my head to the right to obtain the time from the clock located on the medical panel of the back wall between seats 3 and 4 (fig. 1). After obtaining the time I began to write the time down on the medical record when I felt movement and saw in my periphery the landscape outside the aircraft shift. I immediately looked up and saw that the aircraft was no longer on the helipad. I saw that the aircraft had rose about 5 ft off of the helipad and was moving in the direction of the elevator shaft and another brick wall of adjacent building (fig. 2); or in the aircraft's 1-2 o'clock direction. I also saw in my periphery the pilot was reaching with his right hand to touch the timer located on the flight control panel. I noticed all of this in the span of approx 1-2 seconds. I then saw the pilot move his arm from where he was reaching for the timer and the aircraft quickly returned to the deck of the helipad making for the second and what would be final landing. At this point I heard the pilot state that the collective lock is engaged but that he will not be taking his hand off of the collective until the rotor blades had completely stopped spinning and then I heard him restart the post-landing checklist aloud. During the shutdown sequence I assessed the situation and quickly confirmed that nobody onboard had been injured and proceeded to provide verbal reassurance of the situation to the patient. When the aircraft was shutdown and the blades had stopped spinning I opened the left door and stepped out of the aircraft. As soon as I stepped out I noticed the distance from the initial landing spot and the final landing spot was 20-25 ft. I then proceeded around to the right side of the aircraft to unload the patient.

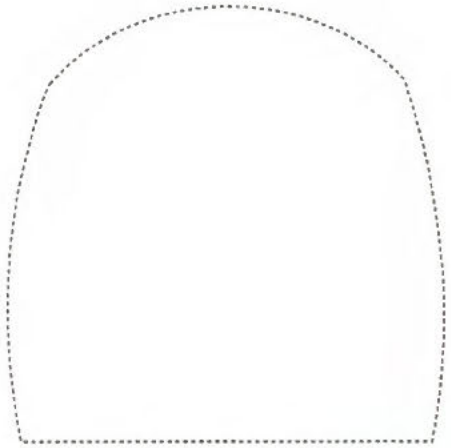

Fig. 1

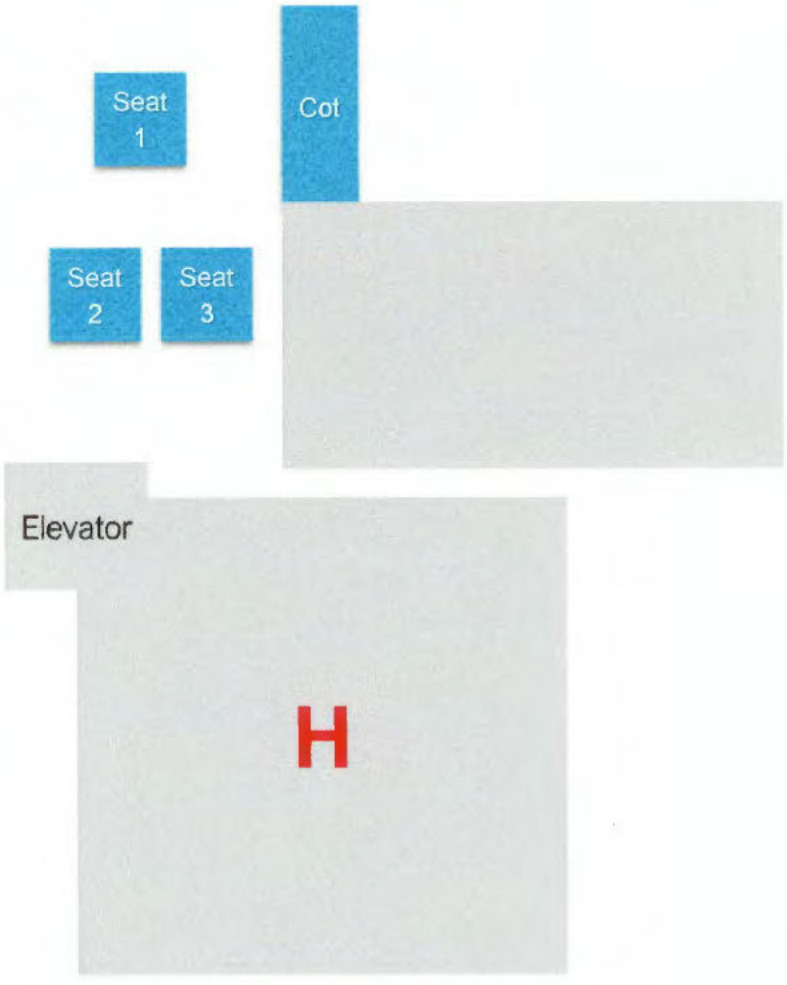


Fig. 2

**MEMORANDUM FOR RECORD**

**Todd Gunther**
**Air Safety Investigator**
**Eastern Region**

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**Date: January 31, 2018**
**Subject: Information Provided by Inspector David D. Hays (FAA)**
**NTSB Case Number: ERA18IA078**

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On January 31, 2018, Inspector Hays, traveled to Air Evac's Jackson Tennessee helicopter operations base in support of the incident investigation of N894GT, where the helicopter had suffered a hard landing on top of the Regional One Medical Center in Memphis, Tennessee on January 28, 2018.

The specific purpose of his visit was to verify if the collective system had been properly balanced in accordance with AMM 67-10-00 5-1 prior to the incident. Mr. Donald Pearson was the mechanic who was to perform this verification.

During Inspector Hays visit, Mr. Pearson did not seem to be completely familiar with this procedure, as evidenced by the need for manufacture technical assistance for clarification throughout the procedure as it was being performed.

Once the helicopter was configured for completion of this check, per AMM 67-10-00 5-1, Mr. Pearson checked the current balancing forces applied to the collective control stick. The collective control stick was placed in the full down position in preparations to attach a spring scale to the twist grip to measure the forces to pull it though its upward travel.

Once Mr. Pearson removed his hand from the collective control stick prior to attaching the spring scale; it immediately climbed unassisted to approximately the mid-travel position. This indicated that the collective control stick was improperly balanced after being taken from the dual configuration to the single configuration.

It was determined that the spring force was much greater (approximately twice that was required) than it should have been in the upward direction.

Prior to the incident on top of the Regional One Medical Center, the helicopter had arrived at Air Evac's Jackson Tennessee helicopter operations base on January 24, 2018. Two days prior to the

incident, Mr. Pearson had reconfigured the helicopter by removing the right-hand controls taking it to the single configuration.

RECORD OF ☐ VISIT ☐ CONFERENCE OR ☒ TELEPHONE CALL

TIME: 1:10 PM

DATE: 01/31/2018

NAME (S) OF PERSON (S) CONTACTED OR IN CONFERENCE AND LOCATION

Mike May (Airbus Technical Representative)Grand Prairie, Texas .

ROUTING

| SYMBOL | INITIALS |
|---|---|
| | |
| | |
| | |

SUBJECT

Airbus EC-130 T2 Helicopter Collective stick balancing procedure.

DIGEST

Received call back from Mr. Mike May in reference to the procedure for balancing the collective stick after the dual configuration is brought to a single configuration. I discussed with him the findings I had from overseeing the performance of this procedure 01/31/2018 on aircraft N894GT, EC-130 T2 at a Air Evac maintenance base in Jackson, Tennessee by Mr. Donald Pearson, Air Evac mechanic. This aircraft had a hard landing on 1/28/2018 and is the reason I had this procedure completed by Air Evac mechanics as part of my accident investigation. I explained to Mr. May once we had the system prepared per AMM 67-10-00 5-1, that the collective stick, once pushed to the full down position, instantly sprang up to the mid travel position with no outside assistance. Mr. May instantly replied "Thats not good!" indicating that the balance was incorrect. He further stated that balancing the collective stick in accordance with AMM 67-10-00 5-1, is to eliminate the stick from raising up under normal operating conditions with or without the collective lock being applied. **********Call ended shortly afterwards.**********

CONCLUSION, ACTION TAKEN, OR REQUIRED

| DATE | TITLE | SIGNATURE |
|---|---|---|
| 02/01/2018 | Aviation Saftey Inspector (ASI) | David D Hays [redacted] |

**MEMORANDUM FOR RECORD**

**Todd Gunther**
**Air Safety Investigator**
**Eastern Region**

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**Date: January 31, 2018**
**Subject: Telephone Conversation with Donald Pearson**
**NTSB Case Number: ERA18IA078**

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As Approximately 1430 on this date, FAA Inspector Donald D. Hays, spoke to Mr. Pearson, the mechanic who had reconfigured the helicopter prior to the incident by telephone.

The reason for the call was to ask why the controls had been removed and replaced so many times from January 22, 2018, to January 26, 2018. Mr. Pearson stated that different interior medical configurations were swapped out for various reasons.

Inspector Hays also asked him as a follow-up from his visit earlier in the day, if he knew why the collective control stick had sprung to the mid-travel position, and he stated that he thought it might be because the balance spring may not have been repositioned for the single control configuration.

Inspector Hays further discussed this with Mr. Pearson and Mr. Pearson agreed that the reason that the collective control stick had sprung up, was that when the dual controls were reconfigured to a single control configuration on the helicopter, that the collective stick was not balanced as required by AMM 67-10-00 5-1.