



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

June 17, 2021

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. ACCIDENT: WPR20LA130; Mesa, AZ

Date and time: April 24, 2020, 1600 local

Injuries: 1 fatal; 1 serious

B. GROUP IDENTIFICATION

No group was formed for the medical evaluation in this accident.

C. DETAILS OF INVESTIGATION

1. Purpose

This investigation was performed to evaluate the pilots for medical conditions, the use of medications/illicit drugs, and the presence of toxins.

2. Methods

The FAA medical case review, autopsy report, toxicology findings, and the investigator's reports were reviewed. Relevant regulation and medical literature were reviewed as appropriate.

Pilot

FAA Medical Case Review

According to the FAA medical case review, the 55 year old male pilot had reported 11,550 total flight hours as of his last medical exam, dated 12/16/2019. At that time, he was 73 inches tall and weighed 190 pounds. In 2013, a hotline complaint was placed to the FAA, indicating that the pilot had had delusional behavior, a psychiatric hospital admission, and an arrest a number of non-traffic related offenses. Investigation by the FAA verified this information and led initially to the revocation of the pilot's recent medical certificates and ATP rating (due to his failure to report). In

addition, the pilot was evaluated and placed in the Human Intervention Motivational Study (HIMS) program to continue his recovery from alcohol and cocaine addiction. With continued evaluation and treatment, the pilot eventually obtained a special issuance first class medical certificate in 2016. He remained in this program (which requires periodic evaluations and drug testing) until 10/29/2019. The pilot had reported no other chronic conditions and only reported the use of sildenafil (Viagra) at his last exam. No significant abnormalities were identified on the physical exam and he was issued a first class medical certificate limited by a requirement he have available glasses for near vision.

Autopsy

According to the autopsy performed by the Maricopa County Office of the Medical Examiner, the cause of death was blunt force injuries and the manner of death was accident. No internal examination was undertaken; as a result no comment on any underlying natural disease was made.

Toxicology

Toxicology testing performed by NMS Labs at the request of the medical examiner identified oxycodone at 140 ng/ml and its psychoactive metabolite oxymorphone at 10 ng/ml in femoral blood.

Medication Descriptions

Oxycodone is an opioid pain medication available by prescription as a Schedule II controlled substance (high potential for addiction and abuse). It is often sold as a combination product with acetaminophen (Tylenol) under the names Percocet, Roxicet, and Endocet. When sold as a solo drug, the most common name is Oxycontin. In all these forms, it carries a boxed warning about the potential for addiction, abuse, and misuse, and a specific warning that the drug, “may impair the mental or physical abilities needed to perform potentially hazardous activities such as driving a car or operating machinery. Warn patients not to drive or operate dangerous machinery unless they are tolerant to the effects of oxycodone and acetaminophen tablets and know how they will react to the medication.”¹ In novice users, usual drug levels where desired effects are likely but toxic effects are unlikely are between 13 and 99 ng/ml.² However, with regular use, patients become tolerated to the effects and may appear to be functioning at much higher blood levels.

¹ National Institute of Health. US National Library of Medicine. DailyMed. Oxycodone and acetaminophen. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=205be197-5ad5-4849-bc78-5fda9927b531> Accessed 6/17/2021.

² Federal Aviation Administration. CAMI Forensic Drug Information. Oxycodone. <https://jag.cami.jcabi.gov/toxicology/DrugDetail.asp?did=94> Accessed 6/17/2021.

Copilot

FAA Medical Case Review

According to the FAA medical case review, the 23 year old male copilot had reported 337 total flight hours as of his last medical exam, dated 3/20/2018. At that time, he was 73 inches tall and weighed 153 pounds. He had reported no chronic medical conditions and no use of medications to the FAA. No significant abnormalities were identified and he was issued a second class medical certificate limited by a requirement he wear corrective lenses.

The copilot survived. No toxicological or other medical information was obtained regarding him.

D. SUMMARY OF MEDICAL FINDINGS

The 55 year old male pilot had reported 11,550 total flight hours as of his last medical exam, dated 12/16/2019. In 2013, a hotline complaint had been placed to the FAA, indicating that the pilot had had delusional behavior, a psychiatric hospital admission, and an arrest a number of non-traffic related offenses. Investigation by the FAA verified this information and led initially to the revocation of the pilot's recent medical certificates and ATP rating (due to his failure to report). In addition, the pilot was evaluated and placed in the Human Intervention Motivational Study (HIMS) program to continue his recovery from alcohol and cocaine addiction. With continued evaluation and treatment, the pilot eventually obtained a special issuance first class medical certificate in 2016. He remained in this program (which requires periodic evaluations and drug testing) until 10/29/2019. The pilot had reported no other chronic conditions and only reported the use of sildenafil (Viagra) at his last exam. No significant abnormalities were identified on the physical exam and he was issued a first class medical certificate limited by a requirement he have available glasses for near vision.

According to the autopsy performed by the Maricopa County Office of the Medical Examiner, the cause of death was blunt force injuries and the manner of death was accident. No internal examination was undertaken; as a result no comment on any underlying natural disease was made.

Toxicology testing performed by NMS Labs at the request of the medical examiner identified oxycodone at 140 ng/ml and its metabolite at 10 ng/ml in femoral blood.

The 23 year old male copilot had reported no chronic medical conditions and no use of medications to the FAA. The copilot survived. No toxicological or other medical information was obtained regarding him.