This month's safety report is a bit interesting in that the NTSB reported what may have been a drone strike with a two place experimental airplane near Safford, Arizona. The experimental STOL airplane was cruising at approximately 80 mph at 1,200 AGL when the engine started a severe and instantaneous vibration, and was shut down, and an emergency landing was made. The pilot rated passenger had spotted a black object, which he thought was a drone, striking the prop before the vibration started. Parts of the broken prop blade were recovered, and there was no evidence (Blood or feathers) indicating the object that hit the prop was a bird. See the January Accident Summary for all the details, and you can be the judge. Was it a drone, or what was it?

# EAA CHAPTER 1445 JANUARY AVIATION ACCIDENT SUMMARY by Jim Timm Arizona Pilots Association

The following are the NTSB reports of aviation accidents that have occurred in Arizona from late November, thru late December. APA will use this detailed accident information to develop safety programs, briefings, and posters/flyers that would help pilots learn from the mistakes being made by others, and take the action necessary to prevent them from having similar accidents.

Aviation safety in this past reporting period was not good in that we had two fatalities out of the four accidents that had occurred. As of this writing, we don't have any information from the NTSB on the two accidents that had one fatality in each of them. The first fatal accident is very unusual because it's unknown when it occurred, and apparently they seem to be have difficulty contacting the next of kin and releasing any information, other than the fact it was a Mooney M20C airplane, and there was only one deceased occupant. The other fatal accident occurred on December 21, near Goodyear Airport, it was a Cessna 182, and only one person was involved. The other two accidents in the reporting period did not involve any injuries, and unfortunately, one of the two didn't have a detailed accident report released by the NTSB. Only the accident notification

At the end of this report are four previously reported accidents that have had their detailed reports released in this past reporting period.

The following are the details of what is presently available.

#### **ACCIDENTS IN THIS REPORTING PERIOD**

Accident Date: November 13, 2019

Preliminary Report Dated: December 2, 2019

Title 14 CFR Part 91 Location: Red Rock

Aircraft Type: Cessna 150 Injuries: 1 Uninjured

#### INFLIGHT LOSS OF POWER

On November 13, 2019 at 0015 MST, a Cessna 150 airplane executed a forced landing following a total loss of engine power shortly after departing the Pinal Airpark (MZJ), Marana. The private pilot, sole occupant, was not injured and the airplane sustained substantial damage. Visual meteorological conditions prevailed for the personal flight, and no flight plan was filed. The flight originated from the Glendale Municipal Airport (GEU) at about 2230, with a touch and go landing at MZJ, and an intended destination of GEU.

The pilot reported that he recently purchased the airplane and the purpose of the flight was to get used to how it handled. The pilot took off from GEU, conducted some light maneuvers, and conducted an uneventful touch and go landing at MZJ. However, during the initial climb the pilot noticed that the airplane shook when he tried to climb too abruptly. Therefore, he continued a shallow climb, and about 1,500 feet above the ground, the engine quit. He attempted to restart the engine several times, but to no avail. He landed the airplane in a nearby field, during which it struck an object he could not see because it was dark, and it came to rest in a nose low attitude.

Accident Date: 11, 2019 Location: Phoenix (DVT)

Aircraft Type: Piper Seminole PA44

Injuries: UNK

The NTSB has not issued an accident notice. Only media information is available.

Accident Date: UNK

Location: Prescott (Eastern Yavapai County)

Aircraft Type: Mooney M20C

Injuries: 1 Fatal

The NTSB has not issued an accident notice. Only media information is available.

Accident Date: December 21, 2019

Location: Goodyear

Aircraft Type: Cessna 182

Injuries: 1 Fatal

The NTSB has not issued an accident notice. Only media information is available.

# THE FOLLOWING REPORTS WERE ALSO RELEASED IN THE PAST REPORTING PERIOD

Accident Date: July 19, 2019

Factual Report Dated: December 4, 2019

Title 14 CFR Part 91

Location: Phoenix (DVT) Aircraft Type: Cessna 170

Injuries: 2 Uninjured

## LOSS OF CONTROL LANDING

The pilot in the tailwheel-equipped airplane reported that, on the downwind for runway 25R, "the tower told us that there was a crosswind." During the landing roll, the airplane veered to the left and exited the left side of the runway, and the right wing collided with the ground. When the airplane came to rest, the pilot exited the airplane and determined that there was "no wind."

The METAR at the accident site reported that, about the time of the accident, the wind was from 25° at 08 kts.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no pre accident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

Accident Date: September 12, 2019

Factual Report Dated: November 25, 2019

Title 14 CFR Part 91

Location: Phoenix (DVT) Aircraft Type: Cessna 172

Injuries: 1 Uninjured

## LOSS OF CONTROL ON TAKEOFF

The solo student pilot reported that, during takeoff, the airplane drifted left off the runway. Concerned the takeoff was unsafe, he decided to abort the takeoff and landed the airplane in the gravel field adjacent to the runway. He used the brakes to slow down and attempted to maneuver the airplane back on the runway. The right main landing gear impacted a runway sign, and the airplane veered right. The airplane continued to veer right, crossed the runway, and impacted a second runway sign. The airplane came to rest in a gravel field.

The airplane sustained substantial damage to the fuselage aft of the nose wheel and the right horizontal stabilizer.

The student pilot reported that there were no pre accident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The airport's automated weather observation station reported that, about the time of the accident, the wind was calm. The airplane was departing from runway 07.

Accident Date: September 14, 2019

Factual Report Report Dated: December 11, 2019

Title 14 CFR Part 91 Location: Chandler

Aircraft Type: Mooney M20M

Injuries: 2 Uninjured

## LOSS OF CONTROL ON TAKEOFF

The pilot reported that, during a familiarization flight with a flight instructor in a recently purchased, retractable landing gear-equipped airplane, while demonstrating a soft field takeoff, the tower controller cleared him for takeoff "with no delay." He quickly taxied the airplane to the runway centerline, applied power, and pulled back on the yoke. He added that, in retrospect, the back pressure used was too abrupt. The airplane entered ground effect about 10 knots slower than normal and was unable to maintain flight in ground effect and he was struggling to maintain runway heading. The airplane touched down "abruptly several times." The airplane drifted to the left and he thought he had a positive rate of climb, so he retracted the landing gear. Additionally, he was "too aggressive" with control inputs and "caused a stall." The left wing struck the taxiway and the airplane came to rest on the ramp. The pilot reported that the instructor did not take the flight controls.

The flight instructor did not provide a statement to the NTSB.

The airplane sustained substantial damage to the left wing.

The pilot reported that there were no pre accident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The airport's automated weather observation station reported that, about 5 minutes after the accident, the wind was from 090° at 13 knots. The pilot was departing on runway 04L.

Accident Date: October 19, 2019

Factual Report Report Dated: December 17, 2019

Title 14 CFR Part 91 Location: Safford

Aircraft Type: Zenair CH701

Injuries: 2 Uninjured

## IN FLIGHT CONTACT WITH UNKNOWN OBJECT

The pilot reported that, while returning to the departure airport about 1,200 ft above the ground, the airplane's engine developed a severe and instantaneous vibration. He reduced power and searched for an emergency landing spot. The pilot selected a road, but the airplane landed about 40 ft short in soft, rough sand, and the main landing gear separated from the airplane.

The pilot reported that his pilot-rated passenger saw "something black streaking from the right, into the prop" before the vibration started. He suspected it was a drone but was not sure. The pilot added that there was no blood or feathers on the airplane or propeller.

The airplane sustained substantial damage to the fuselage and right wing. Additionally, a portion of one propeller blade was not located at the accident site.

The pilot further reported that, using a handheld GPS, he returned to the area of the presumed inflight propeller strike and found pieces of the propeller. He further reported that there were numerous motorcycle tracks and footprints, but no drone fragments were located.

The pilot reported that there were no pre accident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported as a safety recommendation that he suspected the airplane would have not sustained as much damage if he had landed in "one of the clear areas in the desert." He added that he "overestimated glide performance."