9/13/2023 **FOR YOUR INFORMATION** 2023-142/3-9

2021488

To: Mooney International Corporation, FAA (AFS-100)

Info: FAA (AVP-1, AVP-200, AFS-260, AFS-800, AFS-200, AIR-360, AIR-780, MKC-AEG, ANM-100), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA, TWU

From: Becky L. Hooey, Director
NASA Aviation Safety Reporting System

Re: Mooney M20C Control Yoke Failure

We recently received ASRS reports describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at becky.l.hooey@nasa.gov.

Aviation Safety Reporting System
P.O. Box 189 | Moffett Field, CA | 94035-0189

ACN 2021488

DATE / TIME	
Date of Occurrence	202307
Local Time Of Day	1801 to 2400
PLACE	
Locale	ZZZ.Airport
State	US
Altitude - AGL	5
ENVIRONMENT	
Flight Conditions	VMC
AIRCRAFT / EQUIPMENT X	
ATC / Advisory - Tower	ZZZ
Make Model Name	M-20 B/C Ranger
Operating Under FAR Part	91
COMPONENT 1	
Aircraft Component	Elevator Control Column
PERSON 1	
Function - Flight Crew	Instructor
Function - Flight Crew	Pilot Flying
ASRS Report Number	2021488
EVENTS	
Anomaly	Aircraft Equipment Problem - Critical
Anomaly	Inflight Event / Encounter - Loss Of Aircraft Control
Detector - Person	Flight Crew
Result - Flight Crew	Overcame Equipment Problem
Result - Flight Crew	Regained Aircraft Control

NARRATIVE 1

On approach into ZZZ my student requested I take the controls as he was apprehensive about making a night landing at an unfamiliar airport in a new-to-him airplane. I obliged and assumed the controls as we entered the downwind for Runway XX. With landing assured, I began to ease the power back while rounding out into a flare. At about 5 ft. AGL, the right control yoke came loose in my hand and the aircraft immediately pitched down toward the runway. My student grabbed the left control yoke and stabilized the plane for a normal landing. Once on the ramp, we inspected the right control yoke (which had come completely loose of the shaft) to find several fatigue cracks in and around the yoke socket. I'm aware of the AD for shaft inspection, however it doesn't mention the yoke itself. I also suspect the former owner might have switched the left and right yokes as there were no signs of fatigue on the left yoke which is the one most often used while flying.

SYNOPSIS

Flight Instructor reported the control yoke of the M20C aircraft separated from the control column while in the landing flare. The student was able to take control with the opposite yoke and complete the landing. Upon inspection, fatigue cracks were discovered around the control yoke's socket. The reporter also stated this failure mode may not be addressed by the existing AD.