## **Pre-Buy Inspection Report**

AIRCRAFT: 1980 Cessna T210N SN: Tach: 2882.4 ATT: 2882.4 ENGINE: Continental TSIO-520-R SN: TTSN: 2882.4 SMOH: 1258.9 PROPELLER: McCauley D3A34C402 SN: TTSN: 2882.4 TSMOH: 1079.4



www. So Cal Air craft In spections. com

This report represents the findings of a pre-buy inspection performed at KRAL on 02/25/2021. Information was obtained through a physical inspection of the aircraft and logbooks provided by the seller.

- -Annual Inspection due 09/2021
- -Compression Test results: #1/70 #2/70 #3/76 #4/60 #5/68 #6/58
- -Pitot Stat due in 2022
- -Maintenance records generally do not comply with requirements of CFR 91.417
- -No record of compliance with the following airframe Airworthiness Directives:

AD 2011-10-09 (Recurring)

AD 2008-10-02

AD 2000-06-01

AD 98-05-14

AD 93-13-09

AD 88-22-07

AD 86-19-11

-No record of compliance with 23 engine Airworthiness Directives (numbers available upon request)

- -No record of compliance with propeller AD 2005-14-11. Stickers on propeller indicate most recent OH performed by Southern California Propeller Service
- -AD 96-12-22 most recently complied with in 2005. Compliance with this AD is required every 100 hours TIS and at each oil filter change
- -AD 71-09-07 was repeatedly complied with until 2005. A 2005 logbook entry states this AD "is not required on Knisley exhaust system installed on this aircraft." There is no record of Knisley exhaust system installation. Confirmed Knisley system is installed
- -Pilot outboard seat rail and copilot inboard seat rail exceed wear limits defined in AD 2011-10-09 Par. (g)(3)(i). Did not inspect other parts targeted in the AD
- -Pilot outboard and copilot outboard and inboard seat rails show damage in forward section
- -No record of compliance with AD 2016-16-12. While there is no maintenance record of ECI cylinders being installed, the existence of undocumented maintenance and installations suggests further investigation (specifically a physical inspection of the cylinders as outlined in Par. (e)(4) of the AD) is required before confidently addressing the disposition of this AD
- -Unable to locate 337 form for Rosen visor installation (2004)
- -Unable to locate 337 form for JPI EDM-700 installation (1999)
- -Unable to locate documentation of vertical card compass installation (Date stamped on compass is August 2019)
- -Error in calculating engine SMOH time. In a 2006 engine logbook entry SMOH time was recorded as 275.7 when actual SMOH was 775.9. This 500 hour error was perpetuated by same IA for several years, and additional errors were made. Error was actually corrected in 2019 logbook entry, yet a similar error was inexplicably reinstated in 2020 entry. Engine had a major overhaul in 1994 at Tach Time 1623.5. Current TT is 2882.4. TSMOH is 1258.9
- -Engine exceeds manufacturer's recommended calendar TBO by 15 years per TCM SIL98-9, Rev. C, Table 1, dated 7/17/2013. Hour TBO due in 141.9 hours
- -McCauley propeller SN originally installed with aircraft. A 1996 propeller logbook entry documents an overhaul and installation of propeller SN . This propeller was continuously signed off in the logbook provided. Pulled spinner and confirmed SN is in fact still installed on this aircraft. The reasonable inference is the 1996 OH entry included a typographical error that was perpetuated until now
- -Propeller manufacturer's recommended calendar TBO time has been exceeded by 19 years per McCauley SB137W dated 5-15-2002, Note 4. Hourly TBO time due in 920.6 hours

- -Logbook entry dated 8/7/20 at TT 2879.9 states "serviceable magnetos" were installed. Unable to determine total TIS or TSMOH of said magnetos
- -Most recent observable test stamp on oxygen bottle is 1999. Most recent logbook entry documenting hydro testing is in 1999 and states testing is next due in 2004
- -Flatspot present on right MLG tire
- -Damage to cooling fins on top #1 cylinder
- -Play evident in cowl flap doors, suspect hinges
- -Evidence of oil leaks throughout engine, typical of this vintage, but most noticeable below #6 push rod tubes. Engine is otherwise notably clean
- -Presumably unapproved repair on induction tube aft and below of #1 cylinder
- -Right brake rotor warped, left brake rotor presents with noticeable lip
- -Cracks present on heat muff
- -Light surface corrosion noted throughout wings. Established surface corrosion noted in left and right bulkhead areas near wing attach bolts. Surface corrosion noted in left, IB and OB elevator tip. Existing corrosion does not appear to be an airworthy item. Recommend full aircraft corrosion inhibitor treatment at next annual
- -Factory installed foam inside elevators still present. Only evidence of slight corrosion observed on the exterior surfaces
- -Metal nose gear spring guide installed. No record of installation
- -Unpainted, plastic elevator tips installed using lock nuts. No record of installation or elevator balancing subsequent to installation
- -Ducting beyond repair in various locations, but notably under copilot side panel and left and right aft cabin bulkhead (rear seat air vents)

## **See Pictures Below**

## Pilot and copilot seat rails









**Elevator corrosion and wingtips** 









Corrosion at bulkhead (both sides similar)



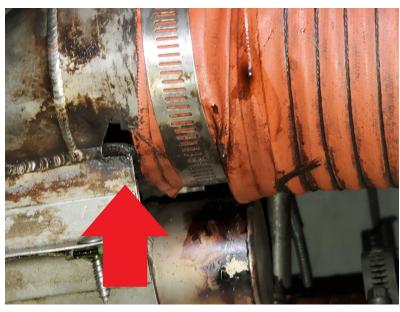
## **Ducting (various)**





**Heat muff cracks** 





Damaged fin #1 cylinder



Repair on induction tube



McCauley Sticker on propeller blade



**END OF REPORT**