Flight-Resource

A Division of McFarlane

World's Largest MT-Propeller Distributor

Cessna 170, 172 & 175

MT Propeller Performance Test Results

STC # SA02245CH

1955 C170B Engine: Lycoming 0-360-A1A, 180+HP @ 2700 rpm

Ambient conditions: 1000 MSL and 75F aircraft at #2450 lbs

Propellers Tested:

- MT 2-Blade 83" Composite (Expedition)
- MT 2-Blade 80" Composite (Ultra)
- MT 3-Blade 78" Composite (Ultra)
- Hartzell 2-Blade 76" Aluminum
- Hartzell 2-Blade 80" Composite (Trailblazer)

Weight:

• MT 2-Blade 80" w/ Spinner (Ultra)	42 pounds
• MT 2-Blade 83" Composite (Expedition)	45 pounds
• Hartzell 2-Blade 80" Comp (Trailblazer)	46 pounds
• MT 3-blade 78" w/ Spinner (Ultra)	54 pounds
• Hartzell 2-Blade 76" Aluminum	64 pounds

Static Thrust @ 2700rpm:

• MT 2-Blade 80" Composite (Ultra)	785 pounds
• MT 3-blade 78" Composite (Ultra)	775 pounds
• MT 2-Blade 83" Composite (Expedition)	770 pounds
• Hartzell 2-Blade 80" Comp (Trailblazer)	764 pounds
• Hartzell 2-Blade 76" Aluminum	672 pounds

Rate of Climb: (Timed full power climb at 80mph IAS to 8000')

• MT 2-Blade 80" Composite (Ultra)	1086 avg FPM
• Hartzell 2-Blade 80" Comp (Trailblazer)	1034 avg FPM
• MT 2-Blade 83" Composite (Expedition)	1025 avg FPM
• MT 3-blade 78" Composite (Ultra)	1000 avg FPM
• Hartzell 2-Blade 76" Aluminum	910 avg FPM

NOTE:
The MT 3-blade had the shortest ground roll to 'wheels off' by 20' of all props tested even though the ROC for the Ultra was higher overall.

Max Power Cruise: (24" MAP, 8000' DA, 2400 RPM 10.2 GPH)

•MT 2-Blade 80" Composite (Ultra)	143 MPH TAS
•Hartzell 2-Blade 80" Comp (Trailblazer)	142 MPH TAS
•MT 2-blade 83" Composite (Expedition)	139 MPH TAS
•MT 3-blade 78" Composite (Ultra)	135 MPH TAS
•Hartzell 2-Blade 76" Aluminum	127 MPH TAS

No RPM Restricted Ranges with the MT Propellers!!

mt-propeller