

C O P Y

DEPARTMENT OF COMMERCE  
CIVIL AERONAUTICS ADMINISTRATION

In Reply Address  
Regional Administrator  
Civil Aeronautics Administration  
Federal Building  
New York International Airport  
Jamaica, New York

Attn: NY-245

August 11, 1954

Sensenich Corporation  
Lancaster, Pa.

Attention: Mr. M. K. Allen  
Supervisor of Sales & Service

Gentlemen:

This is in reply to your letter of June 15 in which you request approval for a list of aircraft with Sensenich metal propellers installed, based upon approvals granted several different installations of engines and aircraft.

We have several reports approving metal propeller installations and they demonstrate that the metal propellers are more efficient than the corresponding wood propellers and that they produce more cooling air flow to the engine cylinders.

This office now has sufficient data to enable us to approve the installations requested in your letter of June 15, 1954.

A fixed pitch metal propeller may be substituted for fixed pitch wood propeller on aircraft that have been previously approved with fixed pitch wood propellers, if it is rated for the horsepower and maximum r.p.m. of the engine and is approved vibration-wise with the engine. The r.p.m. and diameter limits of the wood propeller should be used for the metal propeller unless your company or the installer desires to determine wider limits. This may be done for any model aircraft by checking in flight that the propeller installed does not permit engine overspeeding in full throttle climb at best rate-of-climb speed and does not cause the engine to exceed 110% of its maximum approved speed in power off glide at placard maximum dive speed.

Sincerely yours,

/s/ S. M. Ross  
for: E. C. Marsh, Chief  
Aircraft Engineering Division

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