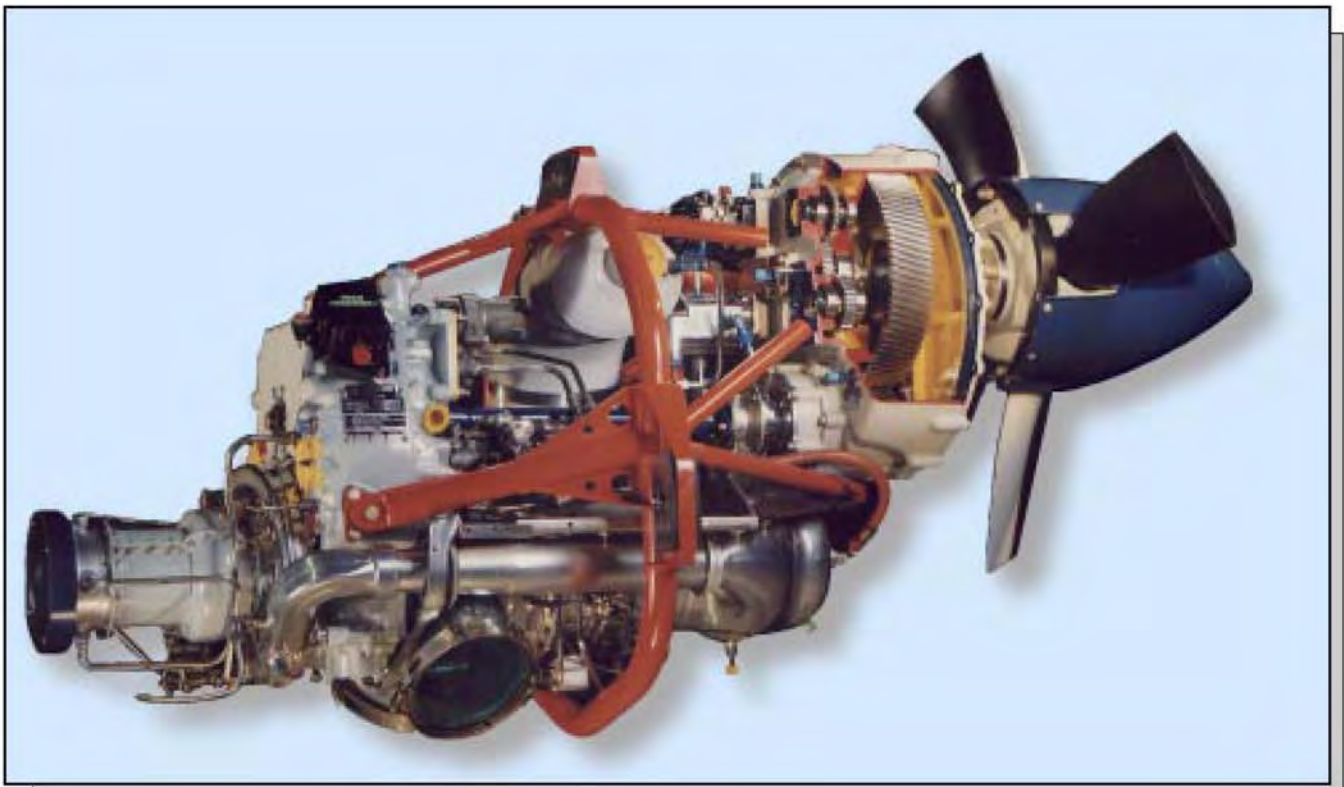


SOLOY TURBINE PAC

418 SHP TURBOPROP POWERPLANT



450 PAT KENNEDY WAY SW
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DESCRIPTION

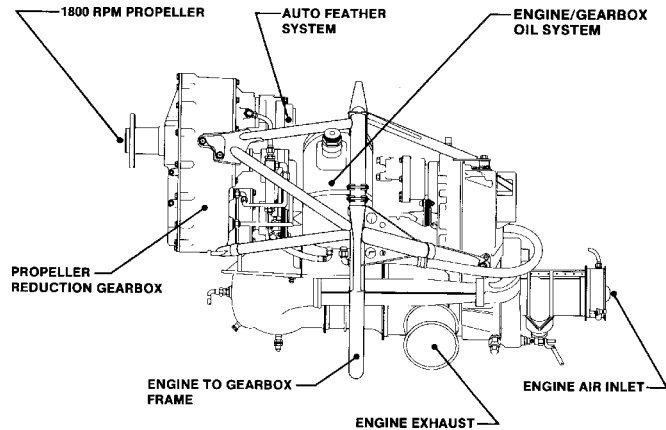
The Soloy Turbine Pac is an STC approved turboprop powerplant designed for quiet operation, durability and F.O.D. resistance. A low propeller RPM of 1810 maximum results in low external noise. An aft facing compressor inlet allows maximum protection against F.O.D.

The Turbine Pac utilizes an Allison 250-C20S 420 shp, free turbine engine combined with Soloy's propeller reduction gearbox. The gearbox and engine are within a tubular steel frame, connected by a coupling shaft. The assembly includes a propeller governor, an overspeed governor, and an engine gearbox lubrication system with oil reservoir, screens and chip detectors.

The Turbine Pac STC number SE2352NM covers only the model 780-1000-1. However the system lends itself to custom configuration using other Allison Turboshaft engines including exhaust up models in tractor or pusher configuration. Soloy's propeller gearbox was designed for up to 700 hp to accommodate higher horsepower engines.

Model: TURBINE PAC, 780-1000-1

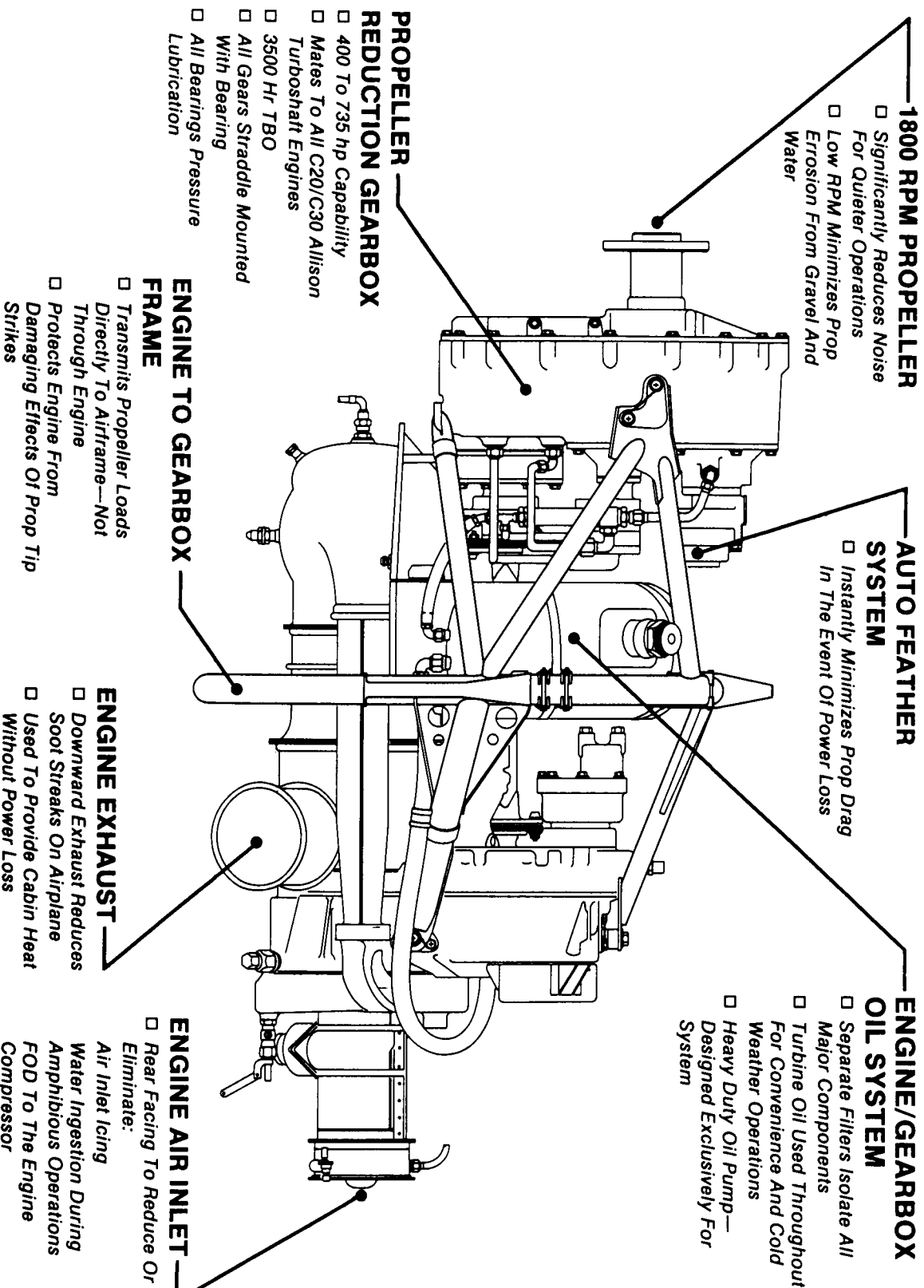
Engine: Allison 250-C20S



SPECIFICATIONS

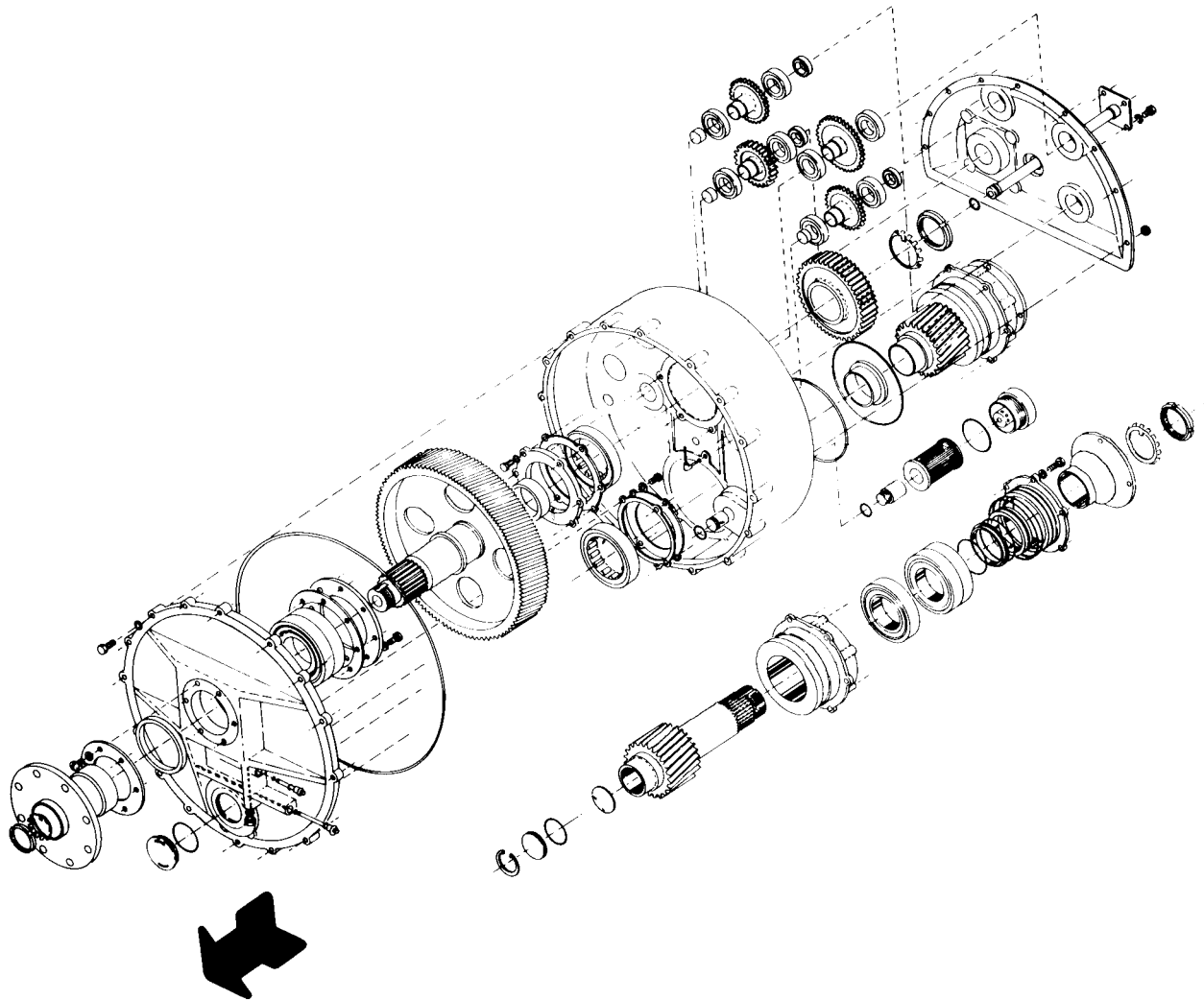
<u>Propeller Drive Ratio:</u>		---	3.323:1
<u>Ratings:</u>			
<u>Maximum continuous:</u>	Shaft Horsepower	---	398 hp
	Propeller Drive Speed	---	1,810 rpm
<u>Takeoff:</u>	Shaft Horsepower	---	418 hp
	Propeller Drive Speed	---	1,810 rpm
<u>Principal Dimensions:</u>			
	Length overall, inches	---	48.04"
	Width, inches	---	29.70"
	Height, inches	---	29.72"
<u>Center of Gravity (CG):</u>			
	CG location, aft of propeller flange face	---	22.10"
	CG location, below propeller axis	---	8.70"
	CG location, right of propeller axis	---	0.10"
<u>Weight:</u>			
	Basic Turbine Pac dry, lbs.	---	317.3
<u>Propeller Drive:</u>			
	N Type Flanged, eight 9/16" holes on 4-1/4" bolt circle plus 2 dowel holes		
<u>Fuel:</u>			
	Refer to Type Certification Data Sheet Number E4CE for fuels approved for the Allison 250-C20S engines.		
<u>Oil:</u>			
	MIL-L-7808G or MIL-L-23699B and subsequent revisions thereto.		
<u>Control System:</u>			
	Bendix Gas Producer Fuel Control	---	DP-P2
	Bendix. Power Turbine Governor (Turbine Overspeed Protection only)	---	AL-AA1
	Soloy Corporation Propeller Governor	---	780-3356-5
	Soloy Corp. Propeller Overspeed Governor	---	780-3360-1

basic turbine pac





ISOLATED PROPELLER GEARBOX - EXPLODED VIEW



The Turbine Pac Reduction Gearbox

- **400 - 735 h.p. capability -- with one gearbox**
- **Mates to all C20 and C30 series Allison Turbo-Shaft Engines**
- **1800 R.P.M.**
- **Absorbs major force of propeller strikes**
- **3500 hr T.B.O.**
- **Completely field maintainable**
- **Minimizes propeller vibration transmitted to engine**
- **Auxiliary power for accessories**