

United States | Canada | Europe

Honeywell

Authorized Service
Center



TPE331 Engine Program and Engine Maintenance Training Overview

Experience. Knowledge. Commitment.

Preserve. Prolong. Protect

Turboprop
TPE331-1
through -12 series



Auxiliary Power Units
GTCP36-6, GTCP
36-100 & 150 series



Turbofan
TFE731-2 / -3/ -5,
-20, -40, -60 series



CD AVIATION
SERVICES



FAA APPROVED

TPE331

Engine Maintenance Training (EMT)

Presented by

Mike Straus

CD Aviation Services

CDAS is dedicated to training, service and support. CDAS offers TPE 331 Engine Maintenance Training (EMT) programs all over the world, empowering you with knowledge that saves you time and money by greatly improving engine reliability and reducing cost of ownership.

The EMT 1-Day and 5-Day Courses are now FAA Approved, offering IA Refresher Training Credit Courses as well as WINGS and AMT credits.

Each course provides technical information from a design and maintenance perspective. This benefits owners, operators, pilots and maintenance personnel.

EMT is provided by instructor Mike Straus, Customer Training Manager for CDAS, with nearly 40 years of TPE331 experience.

1- Day Course

- Overview of the TPE 331 Engine
- Benefits/Limitations
- Preventive Maintenance
- Pilot, Mechanic, Owner/Operator

\$150 PER ATTENDEE

FAA Approved

5- Day Line Course

- Five day course
- Operational/Rigging Procedures
- Trouble Shooting
- System Knowledge and Capability
- Mechanic

\$150 PER ATTENDEE, PER DAY

FAA Approved

Custom Course

- Flexible Locations
- Customized Training
- Live Demonstrations
- Specific Material
- Pilot, Mechanic, Owner/Operator



TPE331 FAA Approved EMT Maintenance Training Provided by CD Aviation Services

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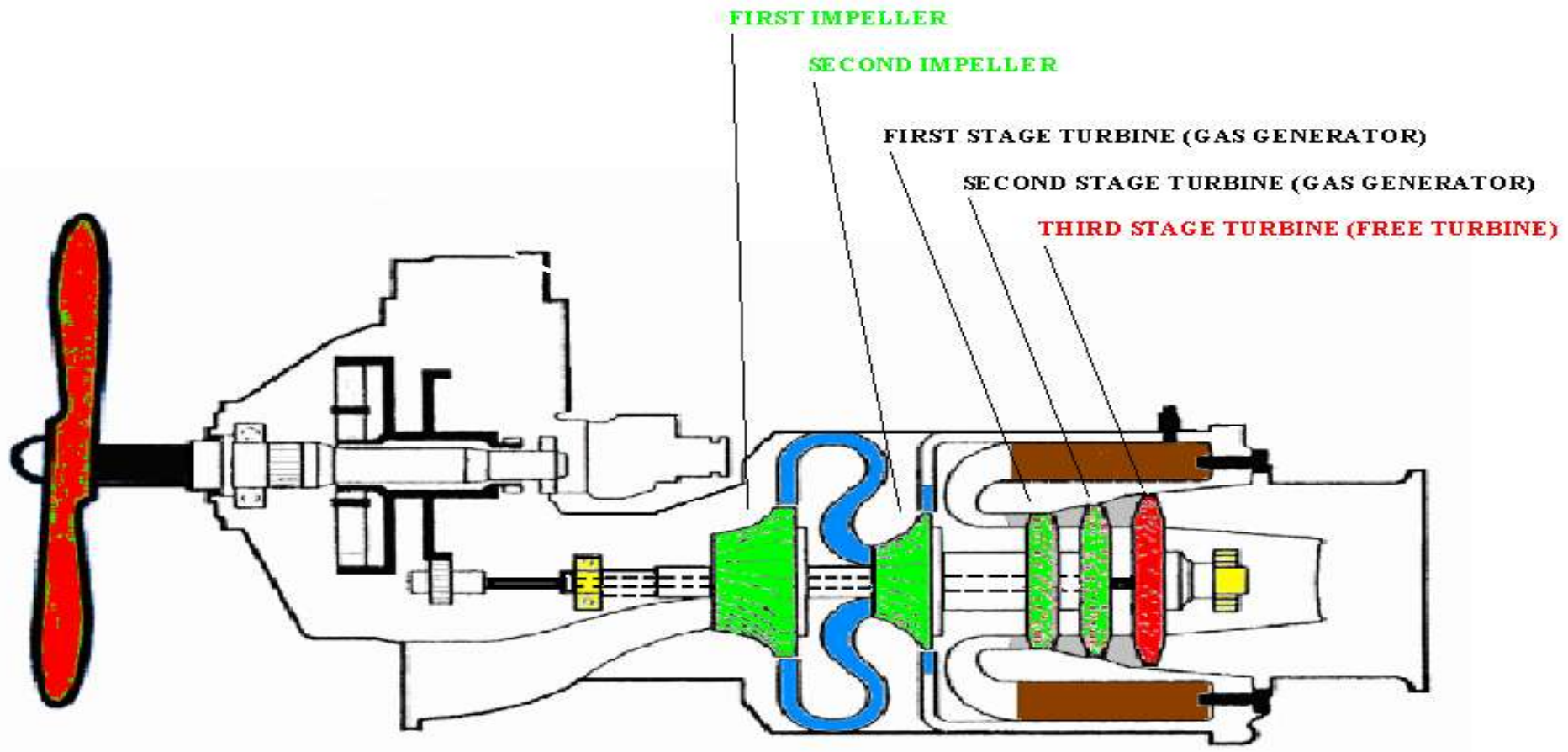
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Free Turbine Design (DRAWING ONLY)

FREE OR POWER TURBINE DESIGN



Engine Power

TPE 331-5 flat rate Limited 715 HP Engine

AIRCRAFT INDICATION

OAT 59°F (standard day)

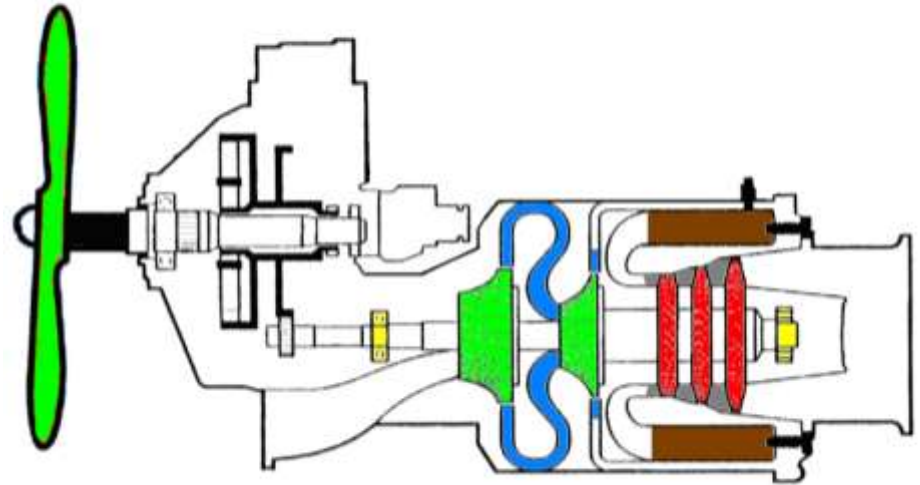
PA SL

HP 715

PPH 455

EGT 865°C

(T4) below the limit



Engine Power

OAT AND ALTITUDE EFFECT ON HP

- Normally on cold days at low altitude the HP limit will be reached first and the EGT / ITT will be below the limit.
- Normally on hot days or high altitude the EGT / ITT limit will be reached first and the HP will be below the limit.
- The attached chart illustrates the OAT and altitude where a sample flat rated and non flat rated engine may be limited.

-10 FLAT RATED TO 635 HP (WITH THERMODYNAMIC LIMIT OF 1000 HP)

OAT	STD	STD	STD	STD	STD	STD
ALTITUDE	0	5000	10000	15000	<u>20000</u>	<u>25000</u>
HP	635	635	635	635	635	620
EGT	355	375	395	415	435	450

Engine Description

Compressor Section

The engine has two centrifugal (radial) flow titanium compressor impellers that each together with a face shroud and diffuser form a complete stage of compression within the 2-stage compressor section.

The 3 stage turbine wheel section extracts turbine gas pneumatic energy and converts it into a mechanical energy (twisting force) which drives the 2-stage compressor section.

The compressor impellers convert the mechanical energy from the turbine to draw air into the compressor section and increase the pneumatic energy of this air by discharging the high velocity air into the diffusers.

In each diffuser the high velocity air flow is converted to a lower velocity and higher pressure air flow, due to the diffuser's divergent (area increase) designs.

OLD STYLE COMBUSTOR

