TASKEM
CORPORATION

Multifunction Electronic Flight Instrument
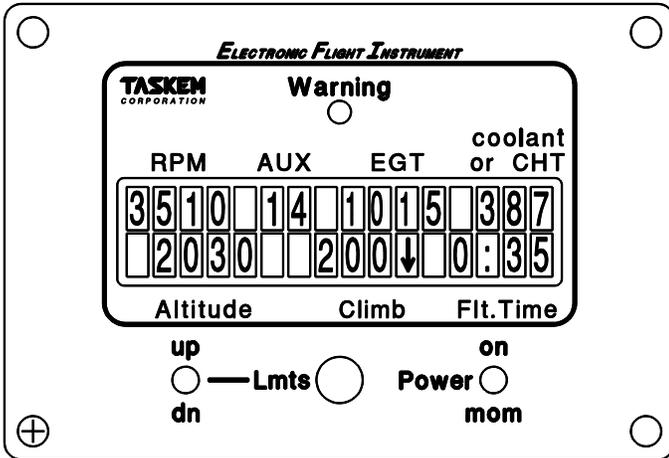
The Electronic Flight Instrument (EFI) is available in a small rectangular format and a larger round package that includes magneto test switches. The round package is shown on the reverse. Both units simultaneously display all of the following data on a large, two-line liquid crystal display (LCD). Engine RPM, AUX(iliary), two exhaust gas (EGT) temperatures, two cylinder head (CHT) or one Coolant temperature, Altitude, Climb rate and Flight Time. The unit also displays total accumulated engine time (Hobbs) at the push of a button. The LCD contrast can be adjusted from the normal seating position and provides a clearly readable display over a wide range of viewing angles. In addition, the LCD is backlighted for night viewing. The AUX function is extremely versatile in that it can be used to display volts, fuel level, oil pressure, oil temperature, outside air temperature or any other desired parameter.

The top four functions each have a REDLINE associated with them, and the redline settings can easily be displayed and changed. REDLINE settings, Flight Time and Hobbs time are retained in permanent memory which does not need power, so no data is ever lost due to a battery failure. Exceeding a REDLINE setting causes the high intensity, red WARNING light to flash and the associated LCD value to blink. Pressing the Lmts switch stops the WARNING light, but the LCD characters still blink until the situation is corrected.

The unit can be powered from either of two DC sources selected by the three position, on-off-mom(entary) Power switch. The on position is typically used to operate the instrument from 12V and the momentary position from two optional 9V alkaline batteries. If running a basic craft with only a rectifier/regulator (no 12V battery), the 9V batteries can be used to power the instrument when the engine is not running. This allows the user to observe the last flight time, total engine time or other settings without having to start the engine. The spring-loaded momentary position insures that the switch is turned off when done to conserve 9V battery life.

The altimeter can be zeroed for field altitudes up to 6000 feet above sea level directly from the front panel. The setting is retained in permanent memory so it doesn't have to be readjusted each time the instrument is turned on.

When first turned on the unit displays; 1) an introduction, 2) an option to adjust the contrast, 3) a preflight checklist, 4) the measurement units, 5) an option to view and set the REDLINES and 6) the normal instrument functions. The first word of the introduction rolls in one character at a time. You can get directly into the instrument functions by pressing the Lmts pushbutton while this first word is rolling in.

If the introduction is not interrupted, the CONTRAST ADJUST feature is displayed followed by the preflight checklist. The operator must press the Lmts button to advance through various preflight checks. After the last check, the unit temporarily displays the units in use then proceeds to normal instrument functions.

SPECIFICATIONS:

GENERAL
- Size. 6 3/8” dia. or 4 x 5 7/8" rectangle. 2 3/4” deep.
- Operating voltage. 11 to 28VDC.
- Current drain. Less than 50mA @ 13.8VDC.
- Backlighted for night viewing.
- LCD Contrast. Adjustable in normal seating position.
- Memory. Redlines, timers & other critical functions retained in permanent memory.
- Tach & Timer Accuracy. Better than 0.04% of reading.

TACHOMETER
- 0 to 9990 RPM in 10 RPM steps.

AUX INPUT
- Two digit resolution. Zero to +X volts displays as 0 to 99. "X" is adjustable from <1 volt to >100 volts.

TEMPERATURES
- EGT. 0 to 1800°F in 5° steps. Type K thermocouple.
- CHT. 0 to 700°F in 1° steps. Type J thermocouple.
- COOLANT. 7 to 340°F in 1° steps. VDO sender.

ALTITUDE
- Range. -1,000 to +30,700 feet in 10 foot increments.
- Accuracy. Better than ±50 feet once zeroed or set to actual field altitude.
- Barometric reference. Adjustable over a wide range. Allows zeroing for field altitudes to +6000 MSL.

CLIMB RATE
- 0 to ±8000 feet per minute in 100 fpm steps.
- Proprietary smoothing filter removes excessive jitter.

TIMER FUNCTIONS
- Flight time. 0 to 9:59 in one minute steps.
- Total time. 0 to 9999.9 hours in 0.1 hour steps.

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Taskem Corporation
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Top Drawing (Round Instrument)

5 3/8" DIA VIEWABLE
(PANEL CUTOUT)

6 3/8" DIAMETER

TASKEM CORP.
WESTPORT, MA

#1   MAGNETOS   #2
Press one to test - both to stop engine.

Warning

RPM	AUX	EGT	coolant or CHT
5 3 7 0	1 4	1 0 6 5	1 7 2
1 2 8 1 0	4 0 0 ↑		1 : 3 2

Altitude   Climb   Flt.Time

up   on
◎ —Lmts ◯ Power ◎
dn   mom

ELECTRONIC FLIGHT INSTRUMENT

FOUR 8-32 LOCKING CAPTIVE
INSERTS EQUALLY SPACED ON
6.0" DIA. MATING TRUSS HEAD
SS SCREWS SUPPLIED.

OPTIONAL
9V BATTERY
POWER

15 PIN
D CONNECTOR

TASKEM
CORPORATION

12 TICKLE'S ROAD
WESTPORT, MA 02790
PHONE 508-679-9339

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Bottom Drawing (Rectangular Instrument)

4" X 5 7/8" OVERALL

3.5" X 5.0" PANEL CUTOUT
CENTERED ON 3.5" X 5.375"
MOUNTING HOLES.

ELECTRONIC FLIGHT INSTRUMENT

TASKEM
CORPORATION

Warning

RPM	AUX	EGT	coolant or CHT
3 5 1 0	1 4	1 0 1 5	3 8 7
2 0 3 0	2 0 0 ↓		0 : 3 5

Altitude   Climb   Flt.Time

up   on
◎ —Lmts ◯ Power ◎
dn   mom

FOUR 8-32 LOCKING CAPTIVE
INSERTS. MATING TRUSS HEAD
SS SCREWS SUPPLIED.

OPTIONAL
9V BATTERY
POWER

15 PIN
D CONNECTOR

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