



SUPPLEMENT No. 4

AIRCRAFT DESCRIPTION

Registration mark: **N810EV**

Serial number: **2006 0810**

This Supplement must be contained in the Aircraft Operating Instructions during operation of the aircraft of S/N 2006 0810.

Information contained in this Supplement add or replace information from the basic Aircraft Operating Instructions in the further mentioned parts only.

Limitations, procedures and information not mentioned in this Supplement are contained in the basic Aircraft Operating Instructions.



RECORD OF REVISIONS

Rev. No.	Affected Pages	Description/Validity	Approved / Date	Incorporated by / Date



AIRCRAFT DESCRIPTION

Section 1 - GENERAL

This Supplement adds information necessary for airplane operation with equipment installed in the aircraft SPORTSTAR^{PLUS} of S/N 2006 0810

Section 2 - LIMITATIONS

2.6 MISCELLANEOUS INSTRUMENT MARKING

There are following instruments colour marking on the EMS display:

Instrument	Units	Red arc	Green arc	Yellow arc	Red arc
		Lower limit	Normal operation range	Caution range	Upper limit
RPM indicator	RPM	-	1400 - 5500	5500 - 5800	5800
Oil temperature indicator	°F	-	190 - 230	120 - 190 230 - 266	266
Oil pressure indicator	PSI	12	29 - 73	12 - 29 73 - 102	102
Cylinder head temperature	°F	-	120 - 275	-	275
Fuel pressure indicator	PSI	2.2	-	-	5.8
Manifold air pressure	in.Hg	-	0 - 35	-	-
Exhaust gas temperature	°F	-	570 - 1620	-	1620
Voltmeter	V	10	12.4 - 15.1	10 - 12.4	15.1
Ammeter	A	-	-20 - 0	0 - 60	-

NOTE

Red arc is marked from lower (upper) limit up to scale start (end).

Sign “-” means battery charging on the ammeter, sign “+” means battery discharging.



Section 3 - EMERGENCY PROCEDURES

Not affected

Section 4 - NORMAL PROCEDURES

4.5.2 Engine starting

CAUTION

AFTER ENGINE STARTING AND EFIS SWITCHING-ON IT IS NECESSARY TO MATCH EFIS ALTIMETER WITH ANALOG ALTIMETER (SEE EFIS MANUAL - SETUP - ALT ADJ). IT IS RECOMMENDED TO ON THE INTERCOM EVEN FOR SOLO FLIGHTS. THIS IS BECAUSE THE EMS D-120 ENGINE MONITORING SYSTEM AUDIO ALARMS OUTPUT IS CONNECTED THROUGH THE INTERCOM AND WITH THE INTERCOM OFF, THE PILOT WOULD NOT HEAR THE ALARMS IN CASE OF EXCEEDING ENGINE LIMITS. THIS MAY REDUCE SAFETY OF FLIGHT.

Section 5 - PERFORMANCE - Not affected

Section 6 - WEIGHT AND BALANCE - Not affected



Section 7 - AIRPLANE AND SYSTEM DESCRIPTION

7.3.4 Elevator trim tab control

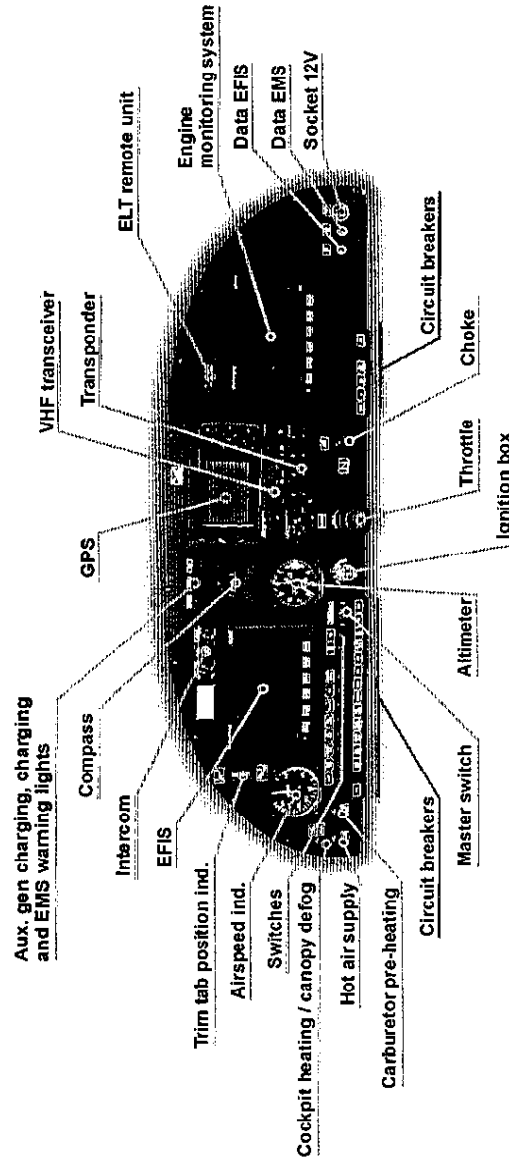
Elevator trim tab control is electric. Control elements are located on the top of the left and right stick. Trim tab position indicator is located on the instrument panel.

7.4 CONTROLS IN COCKPIT

Pos. 14 is cancelled. Elevator trim tab control is electric. Control elements are located on the top of the left and right stick.



7.5 INSTRUMENT PANEL





Switches from the left - See Instrument panel

SOCKET - if switched on, the socket is under electric power
FUEL PUMP - switches on/off the fuel pump
COCKPIT LIGHT - switches on/off the cockpit light
LDG LIGHT - switches on/off the landing light
POS LIGHTS - switches on/off the position lights and instrument lighting
BEACONS - switches on/off the beacons
EFIS - switches on/off the EFIS
AVIONICS SWITCH - switches on/off avionics
AUX GEN - switches on/off the auxiliary generator
GEN - switches on/off the generator
MASTER SWITCH

Circuit breakers from the left - See Instrument panel

Left side of the instrument panel:

TRIM	circuit breaker of electric trim tab position control
FUEL PUMP	circuit breaker of electric auxiliary fuel pump
LDG LIGHT	circuit breaker of landing light
COCKPIT LIGHT	circuit breaker of cockpit light
INSTR LIGHTING	circuit breaker of instrument lighting
POS LIGHTS	circuit breaker of position lights
BEACONS	circuit breaker of beacons
SIGNAL	circuit breaker of EMS alerting
EFIS	circuit breaker of EFIS
EMS	circuit breaker of the engine monitoring system (EMS)
AUX GEN FIELD	circuit breaker of auxiliary electric generator field
AUX GEN	circuit breaker of auxiliary electric generator
GEN	circuit breaker of electric generator
ACCU	circuit breaker of accumulator

Right side of the instrument panel:

COMM	circuit breaker of radiostation
IC	circuit breaker of intercom
XPDR	circuit breaker of transponder
ALT ENCOD	circuit breaker of altitude encoder
GPS	circuit breaker of GPS



7.5.1 Instruments

No. of installed	Instrument	Type
1	Airspeed indicator	UI 8000
1	Altimeter	5904 P-3
1	VSI	UI 7000
1	Compass	C2300L4
1	EFIS	DYNON D-100

NOTE

For EFIS operating instructions see manual delivered with instrument.

7.5.2 Navigation and communication equipment

No. of installed	Equipment	Type
1	Communication transceiver	KY 97A
1	Transponder	KT 76A with A-30 alt. enc.
1	Intercom	PM 1000 II
1	GPS	GARMIN 396 MAP
1	Emergency locator transmitter	AK-450

NOTE

For GPS operating instructions see manual delivered with instrument.

7.11 POWER UNIT

7.11.3 Engine instruments

The Engine Monitoring System DYNON D-120 is installed instead of analog instruments on this aircraft.

NOTE

For EMS operating instructions see manual delivered with instrument.

**7.11.5 Engine lubrication system**

Oil thermostat is added to lubrication system to stabilize oil temperature.

7.13 ELECTRICAL SYSTEM

The auxiliary generator SD 20 is installed on this aircraft.

7.13.1 Lighting

The instruments with internal lighting and cockpit light are installed on this aircraft.

7.15 SUPPLEMENTARY EQUIPMENT**7.15.3 Ventilation and heating system**

The cockpit heating system is equipped with canopy defog system.

Other airplane equipment

There is installed following equipment in the airplane:

- auxiliary electric fuel pump
- double brake system with parking brake
- electric trim tab control with control on the both sticks
- adjustable rudder control pedals
- position lights with beacons Whelen A 600
- landing light Whelen A715
- aerodynamic wheel covers
- cap for oil level check on the upper engine cowling
- upholstered instrument panel cover and baggage compartment
- sun shield in the cockpit

Section 9
Aircraft Description
S/N 2006 0810

SportStar^{plus}
AIRCRAFT OPERATING INSTRUCTIONS
Doc. No. SP2006AOIUSS04



**Section 8 - AIRPLANE HANDLING, SERVICING
AND MAINTENANCE**
Not affected