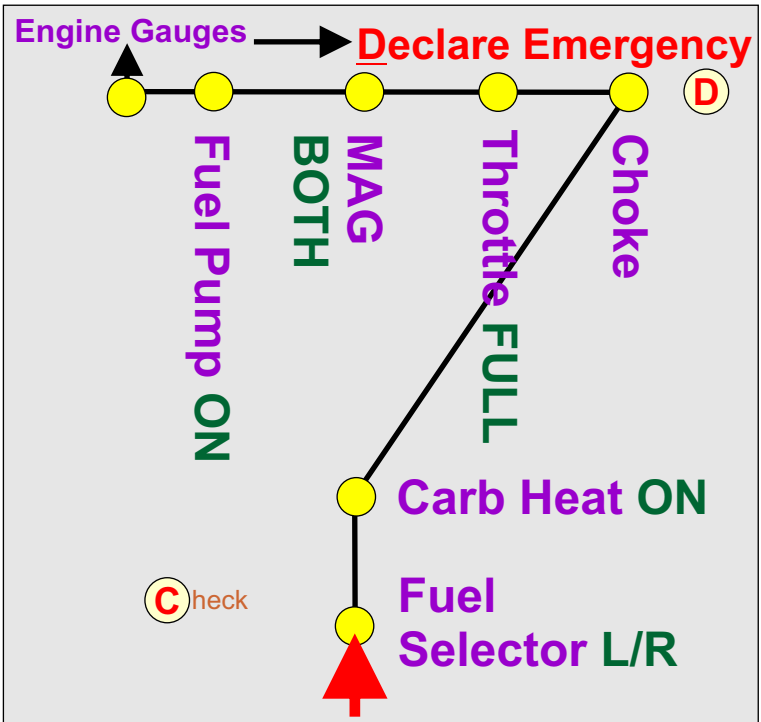
$V_{L/D}$ Airspeed **59 KIAS**

B towards Best landing



ENGINE FAILURE

$V_{L/D}$	**59 KIAS**
ALT	CHECK **>1000ft**

Fuel Pump	**ON**
Electr. equipm. not needed	**OFF**
Fuel Selector	**best**
Choke	if needed
Throttle	idle/increase
MAG (Vglide **108** KIAS)	**START**

EMERGENCY LANDING

squak	**7700**
freg.	**121.5**

ENGINE START AT FLIGHT

towards landing spot

Fuel Selector	**OFF**
Throttle (*burn remaining fuel*)	**FULL**
Air vents (cold, warm)	**CLOSE**
MAG (when engine has stopped)	**OFF**

Spiral down (a bit below V_{NO}, *kill fire*, watch landing spot)

fire killed: $V_{L/D}$ **59 KIAS**

ATC	**declare**
Master Switch	**OFF**
Unlock door/canopy	**before down**
Extinguisher (on ground)	**use**

EMERGENCY LANDING

squak	**7700**
freg.	**121.5**

ENGINE FIRE

$V_{L/D}$	59 KIAS
identify electr. cause	source
Master	OFF
Extinguisher	use
Cockpit/Window	OPEN
Circuit breaker (faulty)	OFF

leave faulty unit/system OFF

EMERGENCY LANDING

squak	7700
freg.	121.5

COCKPIT FIRE

Radio:
check freq.
check volume
check squelch

CIRCLE

check COM no.
check MON/MIC
check MIC pos.

Talk Button:
check mute/noise
check second button
check '*stuck MIC*'

***switch* talk button**

Headset:
check intercom
listen ATIS (check Rx, 'ident')
check plugs

switch headset
change to SPKR
switch plugs

Other:
check circuit breakers
check Voltage/AMmeter/Alternator/Master (on/power)

power cycle

Tx blindly (intentions)
fly usual, predictable route
look for tower lights, traffic

squak **7600**
freg. **121.5**

RADIO FAILURE

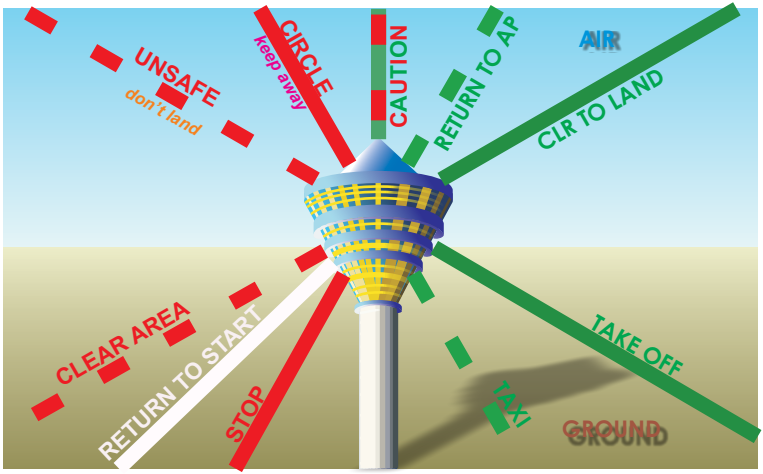
Fuel Pump + CH	**ON**
ALT	save/>1500 AGL
Clearing Turns	2x90 or 180
Wind dir. (enter w/ tail wind)	know dir.

A irplane config.	
C lear airspace	**clr. turns**
R eference	**HDG**
S peed	
E ntry	

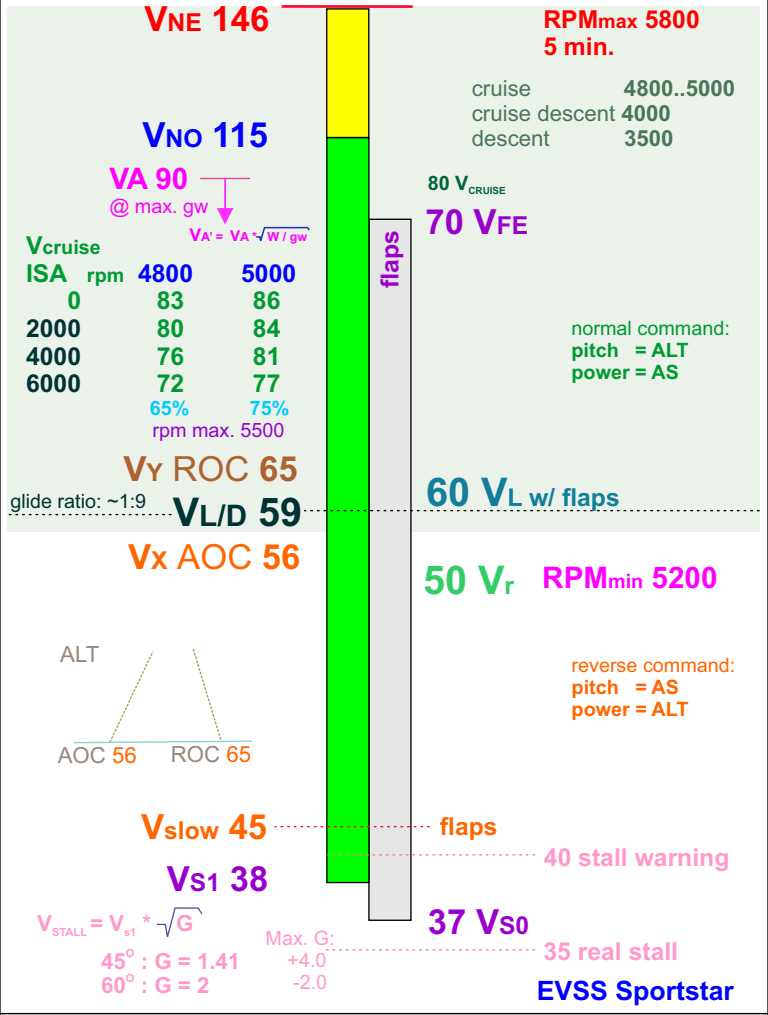
***El Toro Traffic*:** **123.5**

<a/c> <loc> <hdg> <intention>

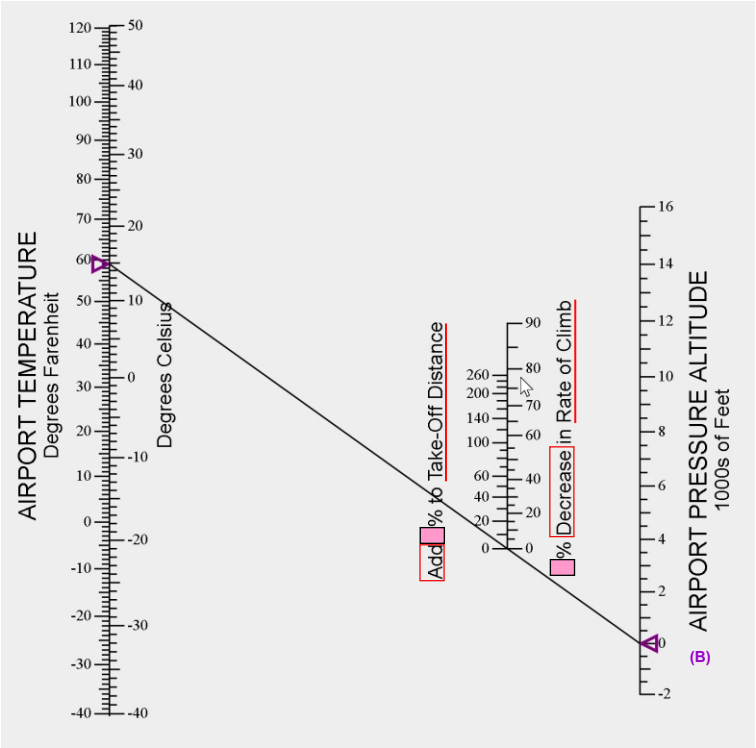
El Toro



TOWER LIGHTS


VNE 146
RPMmax 5800
5 min.
cruise 4800..5000
cruise descent 4000
descent 3500
VNO 115
VA 90
@ max. gw
VA' = VA * √(W / gw)
80 VCRUISE
70 VFE
flaps
Vcruise
ISA rpm 4800 5000
0 83 86
2000 80 84
4000 76 81
6000 72 77
65% 75%
rpm max. 5500
normal command:
pitch = ALT
power = AS
VY ROC 65
glide ratio: ~1:9
VL/D 59
60 VL w/ flaps
VX AOC 56
50 Vr
RPMmin 5200
ALT
AOC 56
ROC 65
reverse command:
pitch = AS
power = ALT
Vslow 45
flaps
40 stall warning
VS1 38
VSTALL = VS1 * √G
45° : G = 1.41
60° : G = 2
Max. G:
+4.0
-2.0
37 VS0
35 real stall
EVSS Sportstar

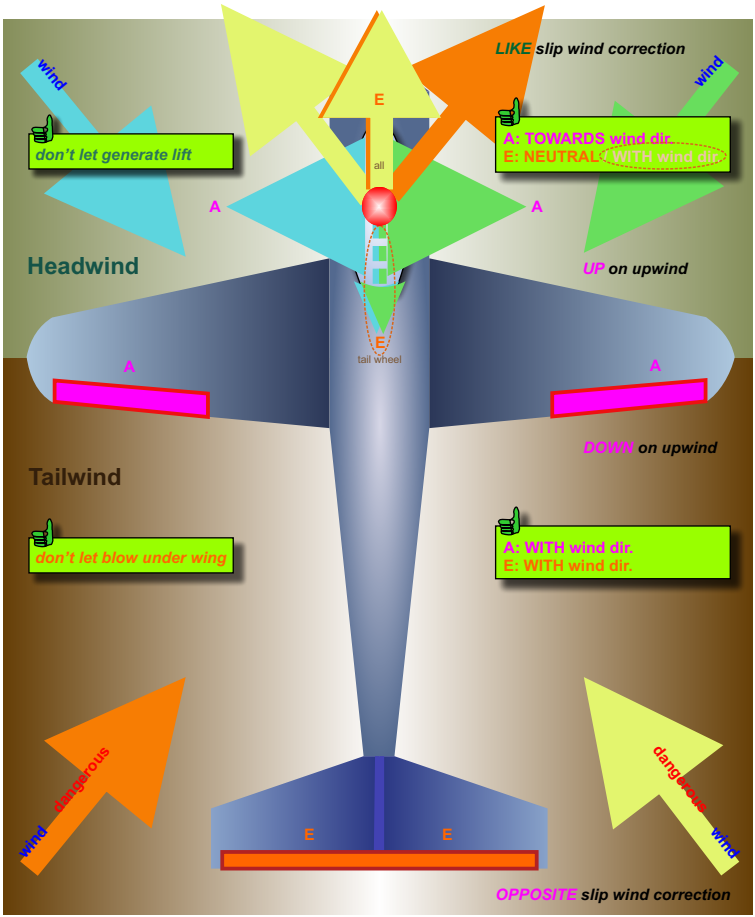
AIRSPEED

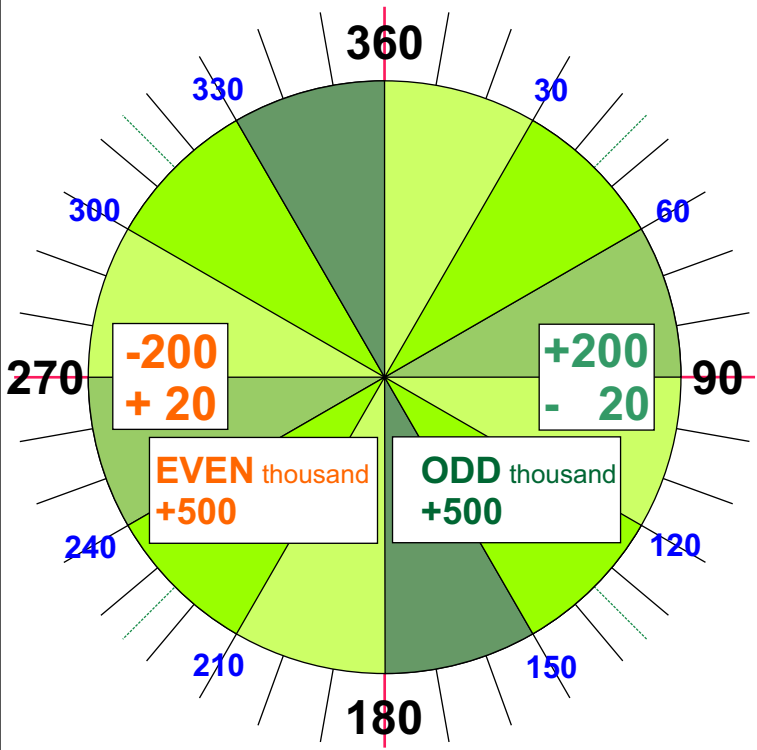


Example: ISA
15° C (59° F), 0 ft pressure altitude

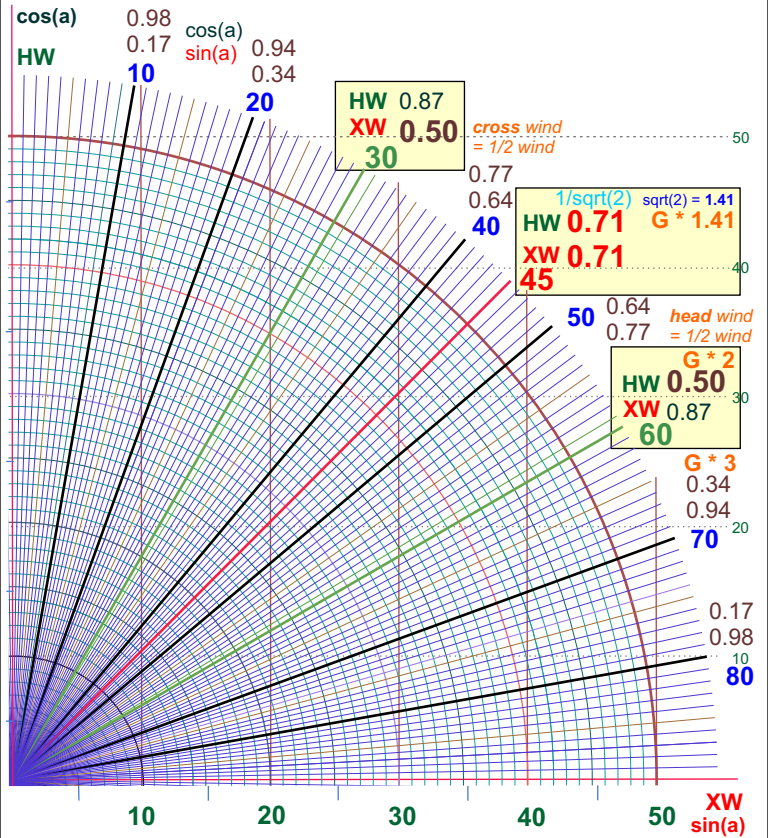
Calculate Pressure Altitude first:
baro:
- ISA: **29.92**
= x **1000** ft
= (A)
AGL airport:
- (A)
= **(B)**

KOCH DIAGRAM

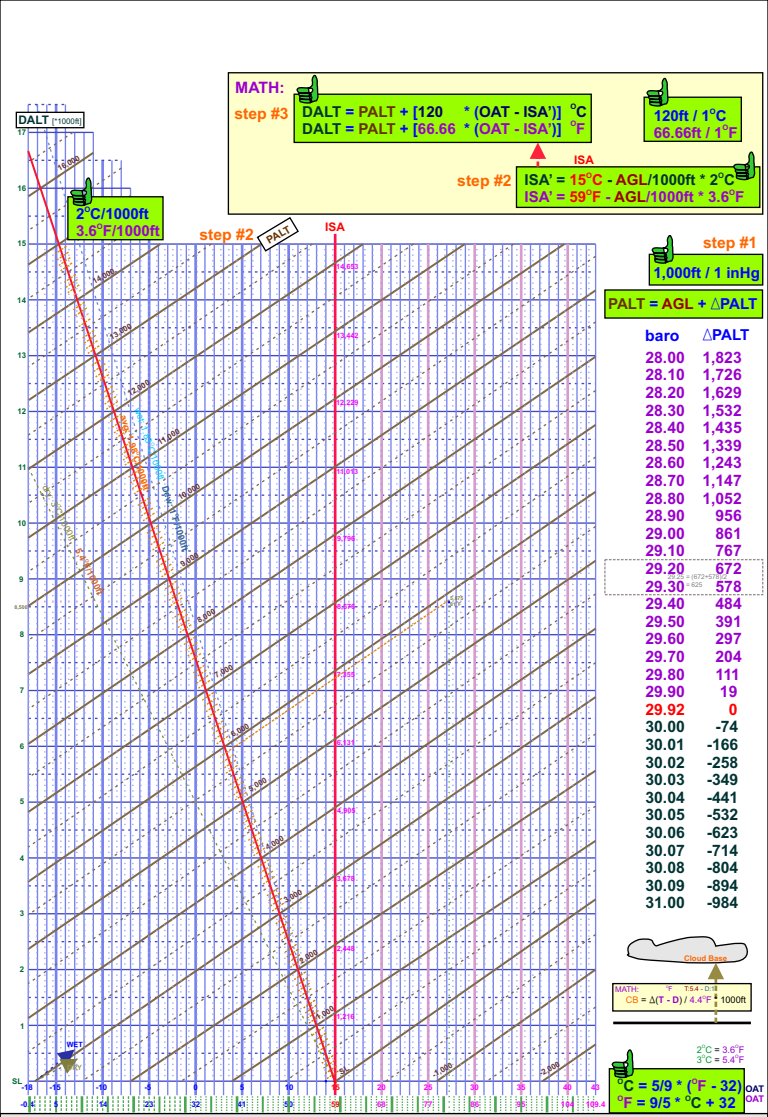

wind
don't let generate lift
E
LIKE slip wind correction
wind
A: TOWARDS wind dir.
E: NEUTRAL/WITH wind dir.
all
A
A
Headwind
UP on upwind
E
tail wheel
A
A
DOWN on upwind
Tailwind
don't let blow under wing
A: WITH wind dir.
E: WITH wind dir.
wind
dangerous
dangerous
wind
E
E
OPPOSITE slip wind correction


360
30
60
90
120
150
180
210
240
270
300
330
-200
+ 20
+200
- 20
EVEN thousand
+500
ODD thousand
+500

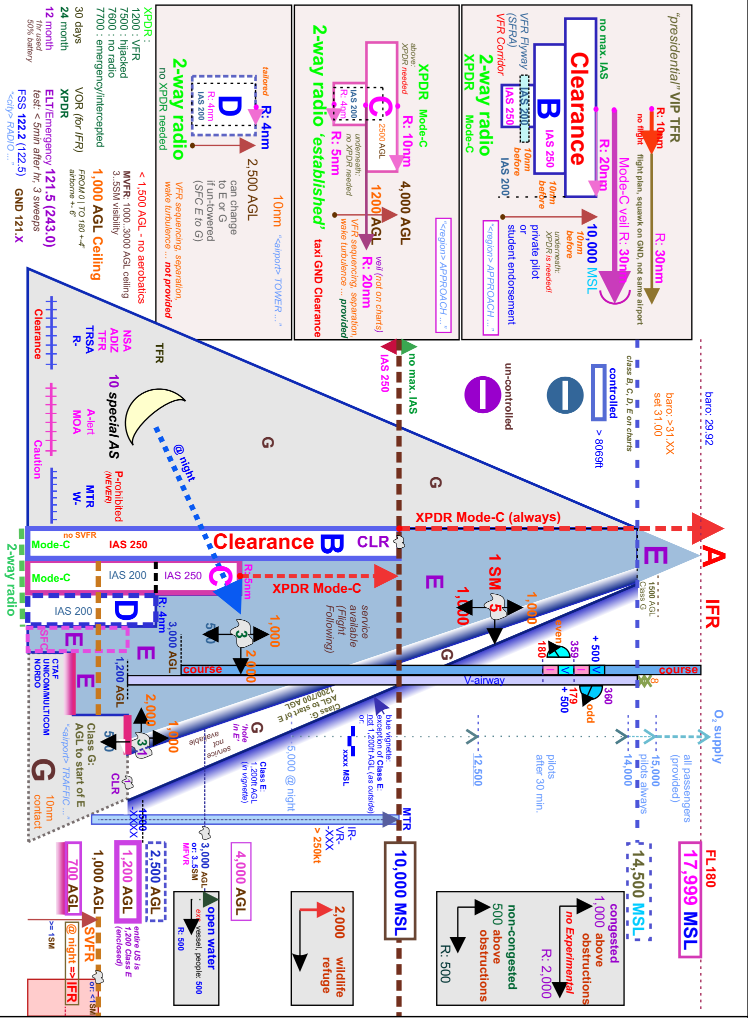
HEADING



XW COMPONENT



DENSTIY ALTITUDE



"presidential" VIP TFR
R: 10nm
no flight
flight plan, squawk on GND, not same airport
R: 30nm
Mode-C veil R: 30nm
no max. IAS
Clearance
R: 20nm
B
IAS 250
IAS 200
IAS 250
VFR Flyway
(SFRA)
VFR Corridor
10nm before
2-way radio
XPDR
Mode-C
10,000 MSL
10nm before
underneath: XPDR is needed!
private pilot or student endorsement
"<region> APPROACH ..."
XPDR Mode-C
above: XPDR needed
R: 10nm
C
2500 AGL
IAS 200
R: 4nm
R: 5nm
underneath: no XPDR needed
4,000 AGL
1200 AGL
R: 20nm
veil (not on charts)
2-way radio 'established'
VFR sequencing, separation, wake turbulence ... provided
taxi GND Clearance
"<region> APPROACH ..."
tailored
R: 4nm
D
R: 4nm
IAS 200
2,500 AGL
can change to E or G
if un-towered (SFC E to G)
10nm "<airport> TOWER ..."
2-way radio
no XPDR needed
VFR sequencing, separation, wake turbulence ... not provided
XPDR:
1200 : VFR
7500 : hijacked
7600 : no radio
7700 : emergency/intercepted
30 days VOR (for IFR)
24 month XPDR
12 month ELT/Emergency 121.5 (243.0)
1hr used 50% battery
test: < 5min after hr, 3 sweeps
FROM 0 | TO 180 +-4° airborne +-6°
1,000 AGL Ceiling
MVFR: 1000..3000 AGL ceiling 3..5SM visibility
< 1,500 AGL - no aerobatics
FSS 122.2 (122.5) GND 121.X
"<city> RADIO ..."
baro: 29.92
baro: >31.XX set 31.00
class B, C, D, E on charts
controlled
> 8069ft
un-controlled
no max. IAS
IAS 250
TFR
NSA
ADIZ
TFR
TRSA
R-
Clearance
10 special AS
A-lert
MOA
Caution
P-rohibited (NEVER)
MTR
W-
@ night
G
XPDR Mode-C (always)
A
IFR
E
1500 AGL Class G
Clearance B CLR
no SVFR
Mode-C
IAS 250
Mode-C
IAS 200
IAS 250
C
R: 5nm
XPDR Mode-C
IAS 200
D
R: 4nm
3,000 AGL
SFC
E
1,200 AGL
CTAF UNICOM/MULTICOM NORDO
2-way radio
1 SM
5
1,000
1,000
1,000
2,000
service available (Flight Following)
even
+500
359
180
course
V-airway
360
179
+500
odd
1200/700 AGL
Class G: AGL to start of E
'hole in E'
service not available
Class E: 1,200ft AGL (in vignette)
blue vignette: exception of Class E: not 1,200ft AGL (as outside) or:
xxxx MSL
5,000 @ night
12,500
pilots after 30 min.
14,000
15,000
pilots always
O2 supply
all passengers (provided)
Class G: AGL to start of E
"<airport> TRAFFIC ..."
10nm contact
CLR
1500
-XXXX
MTR
IR-
VR-
-XXX
> 250kt
FL180
17,999 MSL
14,500 MSL
10,000 MSL
4,000 AGL
3,000 AGL
or: 3..5SM MFVR
2,500 AGL
1,200 AGL
entire US is 1,200 Class E (enclosed)
700 AGL
1,000 AGL
SVFR
>= 1SM
@ night => IFR
or: <1SM
open water
vessel, people: 500
R: 500
2,000
wildlife refuge
congested
1,000 above obstructions
no Experimental
R: 2,000
non-congested
500 above obstructions
R: 500

AIRSPACE