



Lesson 3

Becoming PIC

Meghan Rice CFI/CFII

Girls Love to Fly

Print out: delta comms
Radio cheat sheet



WHAT IS PIC?

Pilot in Command, it's a mindset & an attitude.

WHAT DOES IT MEAN?

You fly the airplane, it does not fly you.
aviate, navigate, communicate

we'll be reviewing airspace, communications & flight deck management.

PIC is a mindset, there's a level of confidence that is required to adopt it. that confidence comes from studying, asking questions, & flying as often as possible. and chair flying!

flying the airplane requires understanding it, which again, requires repetition. stay ahead of the aircraft by anticipating what it'll do aerodynamically, making decisions to address any issues that come up using calm decision making, also developing flows from the checklists. and proper flight deck management!

FLIGHT DECK MANAGEMENT PA.II.B

INCLUDES:

1. Pax Briefings
2. Checklists
3. Organization
4. Avionics

MISTAKES

- Distractions
- Uncertainty
- INOP
- Complacency

proper pax briefings:

SAFETY

sterile cockpit

who is PIC

checklists: chair fly, be familiar, develop a flow, keep it handy

organization: kneeboard, mount, charts out of the way, checklist out of the way, nothing flying around the cabin, secure items. two pens!

avionics: foreflight, navigation data on the GPS, understand how the systems, autopilot if applicable, operate & all the resources at your disposal.

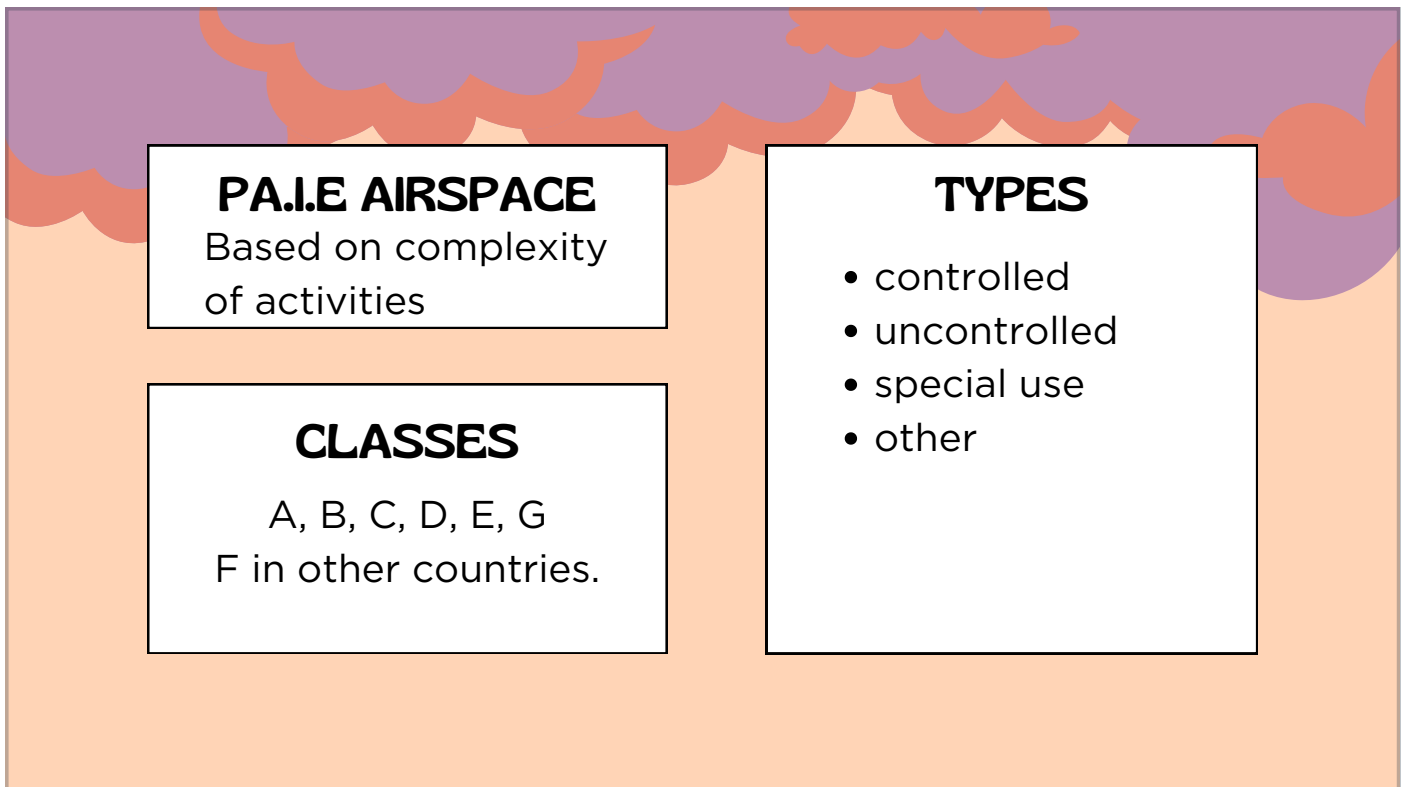
distractions: lack of situational awareness, talking at inappropriate times, being afraid to say sterile cockpit, not knowing how the avionics work

uncertainty: being unsure with the systems, how to use or operate things, unfamiliar with plane

INOP: flying with anything INOP without properly placarding it or understanding if it is a safety issue. feeling unsafe.

complacency: maybe you're too comfortable and forget to tie down your items or you forget to remove your phone from the top of the panel, or you end up allowing more distractions when

flying with friends or another pilot. you let things slip



The categories and types of airspace are dictated by the complexity or density of aircraft movements, nature of the operations conducted within the airspace, the level of safety required, and national and public interest

controlled: ATC service is provided, and if you fly IFR, you have to be on an ifr flight plan. doesn't mean there's a tower at every airport in the airspace.

Classes ABCDE

each airspace has its own weather minimums and equipment requirements based on how busy the airspace is and what it's used for

uncontrolled: G, no atc services, no ifr flight plan

special use: designation for airspace in which certain activities must be confined, or where limitations may be imposed on aircraft operations that are not part of those activities, usually military

MOAs, restricted, prohibited, warning, alert, controlled firing areas.

CLASS A AIRSPACE

RULES & DIMENSIONS

No VFR Flights
All IFR
FL180 - FL600

WEATHER MINS:

- IFR Only
- Altimeters 29.92

CLASS B

“BUSY”

RULES & DIMENSIONS

- ADS B, Transponder, & Communication
- Shelves up to 10,000' MSL

WEATHER MINS:

- 3 statute mile vis
- clear of clouds

Everyone's talking to ATC, so separation is provided.

CLASS C

“CONGESTED”

WEATHER MINS:

- 3 statute miles
- 1,000' above
- 500, below
- 2000' in between

RULES & DIMENSIONS

- Outer shelf & inner shelf up to 4,000' AGL
- ADS-B, Mode C & Communication inside.
- ADS-B, Mode C over top
- 20 nm wide

CLASS D

“DIALOGUE”

RULES & DIMENSIONS:

4nm radius, 2500 AGL
usually.
2-Way Comms

WEATHER MINS:

- 3 statute miles
- 1,000' above
- 500' below
- 2000' in between

CLASS E

“EVERYBODY”

RULES & DIMENSIONS:

SFC, 700' AGL, 1200'
AGL, FL600
“transition areas”

WEATHER MINS:

- Below 10,000' MSL:
“3 152s”
- above 10,000' MSL:
5sm, 1000' above,
1000' below, 1 sm
between

CLASS G

“GIDDYUP”

RULES & DIMENSIONS:

91.119, 91.13
SFC up to 700' AGL, 1200' AGL,
14,500 MSL

WEATHER MINS:

- Different for day & night & altitude
- Uncontrolled airspace

91.155, AIM CH.3

Class A		None	None	
Class B		3 statute miles	clear of clouds	
Class C		3 statute miles	500 feet below 1,000 feet above 2,000 feet horizontal	
Class D		3 statute miles		
Class E	less than 10,000 MSL	3 statute miles	1,000 feet below, 1,000 feet above 1 statute mile horizontal	
	at or above 10,000 MSL	5 statute miles		
Class G	1,200 feet or less AGL	Day	1 statute mile	clear of clouds
		Night	3 statute miles	
	more than 1,200 AGL, but less than 10,000 MSL	Day	1 statute mile	500 feet below 1,000 feet above 2,000 feet horizontal
		Night	3 statute miles	
more than 1,200 AGL, and at or above 10,000 MSL		5 statute miles	1,000 feet below, 1,000 feet above 1 statute mile horizontal	

SPECIAL USE AIRSPACE

ALERT AREAS:

- high volume of pilot training
- unusual aerial activities

WARNING AREAS:

- 3nm outward from the coast.
- hazardous activity

Special use airspace consists of airspace wherein activities must be confined because of their nature.

Or limitations are imposed on aircraft that are not part of those activities, or both.

SPECIAL USE AIRSPACE

RESTRICTED:

- Regulatory.
- unusual, often invisible, hazards
- artillery firing, aerial gunning, guided missiles.
- need permission.

PROHIBITED:

- Regulatory.
- established for security or reasons associated with the national welfare.
- cannot fly through.

SPECIAL USE AIRSPACE

MOA

Military Operation Areas

- Military training activities.
- separate from IFR traffic.
- air combat tactics, aerobatics, formation training, low altitude tactics.
- exercise extreme caution

CFA

Controlled Firing Areas

- Activities could be hazardous
- not charted.
- Spotters will suspend activities when an aircraft is approaching the area.

PA.III. A COMMUNICATIONS

AGENDA:

1. ATC Facilities
2. Frequencies
3. Radios
4. Lost comms

EQUIPMENT

- Radios
- ADS-B
- Transponder

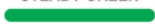





FOREFLIGHT DEMO

LOST COMMS

7600

1. Check volume
2. Check frequency
3. Check plugin
4. Try COM 2
5. Try passenger side

ATC LIGHT GUN SIGNALS FOR AIRCRAFT

COLOR & TYPE	GROUND	AIR
STEADY GREEN 	Cleared for takeoff	Cleared to land
FLASHING GREEN 	Cleared for taxi	Return for landing (to be followed by steady green)
STEADY RED 	STOP!	Give way to other aircraft and continue circling
FLASHING RED 	Taxi clear of runway in use	Airport unsafe, do not land
FLASHING WHITE 	Return to starting point on airport	N/A
ALTERNATING RED/GREEN 	Exercise extreme caution	

RUNWAY STATUS LIGHTS

REL

Runway Entrance Lights:
signal to aircraft
crossing or entering the
runway from
intersecting taxiways

THL

Takeoff Hold Lights,
provide signal to
aircraft in position
for takeoff.

Runway Status Lights is a fully automatic, advisory system designed to reduce the number and severity of runway incursions and prevent runway accidents while not interfering with airport operations. It is designed to be compatible with existing procedures





EXPECTATION BIAS

Having a strong belief or mindset towards a particular outcome.

POOR COMMUNICATION

Keep it clear, keep it concise. When in doubt, talk in plain English.

DECLARE

Get whatever help you need to make it on the ground safely.

If a pilot expects the runway to be clear and in good condition, they may unconsciously overlook potential hazards or obstacles on the runway, such as debris or wildlife.

Using terms like log pile or bald hill, repeat what ATC said, build trust with ATC

If you're ever at risk or ever question whether you're going to live or die, you declare