P.A.V.E. Checklist before you fly!

Pilot/Passenger

IMSAFE

Illness
- Sinus
- Middle Ear
- Cold
- Sore throat
- Disqualifying conditions who can I ask? AME
- What are the consequences and why?

Prescription Medication or over the the counter medications
- Approved by FAA AME, FAA does not have an approved list, AOPA does but will the approved drug interact with another?
- check with your AME

Stress
- Stressed at work on in personal life
- Financial stress
- External Pressures (Time limits, promises etc.)

Alcohol
- No alcohol in the least 8 hours
- Below 0.04% limit
- No hangover, no impairment, no drugs

Fatigued
- Are you rested?

Eating
- Did you eat? are you hydrated
- Healthy food will help you feel better.
All Aeromedical factors considered

**Scuba Diving**
Have you been scuba diving? What can happen and Why?
- For non-controlled ascent wait 12 hours to 8000 feet
- For controlled ascent or flights above 8000 ft wait at least 24 hours

**Currency**
Check my logbook
Have I had the required flight review? (Wings, new rating,)
Do I have all my endorsements and training? Complex, High performance, tailwheel, pressurized aircraft,
Do I have the rating required to fly this aircraft? Multiengine, seaplane, glider etc.
Did I do 3 takeoff/landings in the last 90 days to carry passengers?
Are we flying at night?
  - Did I do 3 full stop takeoff/landings at night in the last 90 days?
Are we flying a tail dragger?
  - Did I do 3 full stop takeoff/landings with tail dragger in the last 90 days?
Check my Wings Program

**Documents**
Medical certificate valid
Government photo ID
Pilot Certificate

**MY PRIVILEGES AND LIMITATIONS**
What can I fly? What can't I fly? What do I need to do?
Can I receive money
Aircraft/Airworthiness

ARROW
Airworthiness Certificate
Registration
Radio stations license (international)
Operation Limitations- AFM/POH, Placards, Instrument markings
Weight and Balance data current

AVIATES
Annual (12 calendar month) out of date annual? Special flight permit?
VOR check (30 days) (IFR)
Inspection 100 hour (Aircraft operated for hire or airplane provided by flight instructor or school) (renting is not for hire)
Altimeter and Static (24 calendar month) IFR
Transponder (24 calendar month) If you have one.
ELT (12 calendar month test and replace battery when half the battery life used or 1 hour of use)
AD Compliance

ATOMATO FFLAMES
Anti-Collision Lights (1996) (91.209)
Tachometer
Oil Pressure
Manifold Pressure
Altimeter
Temperature Gauge
Oil Temperature
Fuel Gauge
Flotation (hire)
Landing Gear Indicator
Airspeed Indicator
Magnetic Direction Indicator
ELT
Seatbelt's/Shoulder harnesses

**FLAPS (Night flight)**
Fuses/Circuit breakers
Landing Light  (hire)
Anti-Collision Light
Position Light
Source of Power

**AIRCRAFT SYSTEMS**
Fuel, Oil and Hydraulics
Electrical
Pitot-Static, Vacuum/Pressure and associated flight Instruments
All systems that your aircraft has required by PTS
Possible failures and what to do for each system?

**EMERGENCIES**
Engine failure after takeoff
Loss of oil pressure during flight

**CAN I FLY WITH INOPERATIVE EQUIPMENT?**
Do you have an MEL, if not what do I do? 91.213D
Is it part of 91.205
Is it required by equipment list or kinds of operations required equipment list?
No equipment list! is it required by your type certificate data sheet?
Does an AD require that equipment?
Does a regulation require the use of it? like(91.209)
Is it safe to fly? ADM? I need to think about the flight Im making!
If I decide its legal and safe! what do I do?
Deactivate and placard or remove and placard cockpit control if maintenance is required a logbook entry must be recorded.
enVironment. Things to consider when planning!

Density Altitude - how it affects the airplanes performance?

Effects of temperature and pressure on altimeter readings? CFIT
- Calculate for all planned airports
- Is it safe to land and take off?
- performance greatly reduced since the airplane was new?

Do I need oxygen? WHY = Hypoxia, reduced vision, symptoms?
Recommended: Vision
- Night flight above 5000 feet?
- Daytime over 10000 feet?

- Above 12500 feet for more than 30 min
- Above 14000 feet all the time for pilot and crew
- Above 15000 feet for passengers as well

If using the heater?
Think about Carbon Monoxide poisoning and recognize the symptoms
- Light headed
- Loss of muscle power
- Headache
- Drowsiness
- Tingling in fingers and toes
- Blue fingernails and lips

Are we flying at night?
Know your runway and airport lighting
- Night vision
- 30 min to 1 hour to get eyes used to the dark
- Avoid looking into bright light
- Use peripheral vision and don’t look at a fixed object for longer times
  - Rods (Black and white only)
  - Cones (Blind spot at night)
  - night illusions
- Flying over terrain? Watch out below.
- Consider emergencies when planning your route
- Emergency survival gear, first aid kit, water, food, clothing that will keep you alive etc

CFIT (Controlled flight into terrain)
- There may be Clouds you cant see, Mountain obscuration
- Watch out for false horizons, illusions?
- Are we flying over high terrain? Check altitudes and keep altimeter updated.

Airport concerns
How do we avoid runway incursions?
What are hot spots?
Is there LAHSO in operation?
Do I know my runway signs and markings?
Do I know my light gun signals or have them on my lap board?

Are we landing, taking off or close to a heavy aircraft?
Does your destination have large aircraft operations?
  - Wake Turbulence - how do we avoid?
    - Don't fly below the flight path.
    - Wait for heavy aircrafts wake to dissipate

Weight and Balance
- Are we close to the weight limit?
- Do we need to move bags around? What is the best way to load CG
- How much fuel can we carry?
  Over gross, aft CG, Forward CG? Concerns?

Crosswind factor
- Are we going to be within or close to the limits?
- Best runway to use
- How do we do a crosswind landing and take off?

Airspace
- What airspace are we flying through? A,B,C,D,E,G, and special use airspace?
- What PROCEDURE is required to enter, weather requirements and equipment requirements for all airspaces
  - Remember to get clearance before entering B, establish communications before entering C, D,
  - Stay out if flying close. Find terrain markings to help stay out or use GPS if you have one!
  - Do we have the required equipment on board?
- Any restricted airspace, Warning areas, Prohibited areas, on the route?
- MOA or other dangerous areas?
  - Times and frequencies
    All Airspace weather and equipment requirements, special VFR and risks

Weather
- Airmets
  - Tango (moderate turbulence, High surface winds above 30 kts, low level wind shear) why do we care about winds? What do we do?
Sierra (IFR, mountain obscurement)

Zulu (Icing, freezing levels)

- Convective Sigmets
  
  Convective (thunderstorm related weather)
  
  Severe Icing
  
  Severe Turbulence
  
  winds at the surface more than 50 kts
  
  Thunderstorm related weather.
  
  tornadoes.
  
  Hail

- Sigmets (non thunderstorm related)
  
  severe turbulence or winds at the surface more than 50 kts
  
  severe icing
  
  sand storms, dust storms
  
  volcanic ash
  
  not thunderstorm related

- Charts
  
  Surface Analysis Chart
  
  High/Low Pressure, What weather is possible?
  
  Cold/Warm fronts, What weather is possible?
  
  Stationary/Occluded Fronts,
  
  Squall Line,
  
  Ridge,
  
  trough

- Weather Depiction Chart

- Radar Summary Charts
  
  Precipitation
  
  Direction and speed
  
  Does not show clouds.

- Satellite Pictures= Clouds
- Low level Significant weather prognostic charts
- Winds and Temperatures aloft
- Severe Weather outlook charts

Watch out for special VFR conditions
- Wire-strike
- Tower strike
- Scud running
- CFIT

TFR’s
- Any TFR’s on the route?
- Ceiling and times

What causes a Stall and Spin? Recovery from spin- PARE
- Power to idle
- Ailerons neutral
- Rudder full opposite of rotation
- Elevator forward to break stall
- Spin stops rudders neutral
- Easy Pull to straight and level! and watch limitations
  (OR SPIN RECOVERY AS REQUIRED BY POH OR AFM)

External Pressures
See P