## PAVE Preflight Checklist

|                |                    | Pilot/Passenger   |
|----------------|--------------------|---|
| IMSAFE         | Illness / Injury   | <ul> <li>Sinus</li> <li>Middle Ear</li> <li>Cold</li> <li>Sore Throat</li> <li>Disqualifying conditions (ask AME)</li> <li>Injury that could affect operational capability</li> </ul>   |
|                | Medication         | - Must be approved by FAA AME   |
|                | Stress / Emotion   | - Are you stressed at work or in your personal life?  |
|                | Alcohol            | - No alcohol in the last 8 hours  |
|                |                    | - Below 0.04% limit   |
|                |                    | - No hangover, no impairment, no drugs  |
|                | Fatigue            | - Are you well rested?  |
|                | Eating             | - Did you eat? Are you hydrated?  |
| Scuba Diving   | Recent scuba?      | <ul> <li>For non-controlled ascent wait 12 hours to 8000 ft</li> <li>For controlled ascent or flights above 8000 ft wait at least 24 hours</li> </ul>   |
| Currency       | Check your logbook | <ul> <li>Flight review?</li> <li>Endorsements and training?</li> <li>Required ratings?</li> <li>3 takeoffs / landings in the last 90 days to take passengers?</li> <li>Night flying? 3 takeoffs / full stop landings in the last 90 days?</li> <li>Tail dragger? 3 takeoffs / full stop landings in the last 90 days?</li> <li>Wings program credits</li> </ul> |
| Documents      | Must be on board:  | <ul> <li>Pilot certificate</li> <li>Valid medical certificate</li> <li>Valid government photo ID</li> </ul>   |
| Privileges and |                    | - What can I fly?   |
| Limitation     |                    | - Can I receive money or compensation of any kind?  |

| Aircraft/Airworthiness   |                       |  |  |
|--------------------------|-----------------------|--|--|
| ARROW                    | Airworthiness         | Does not expire if all required maintenance, inspections and Airworthiness Directives are complied with and logged   |  |
|                          | Registration          | Renewed every 7 years  |  |
|                          | Radio Station License | International flights only   |  |
|                          | Operating Limitations | AFM/POH, placards, instrument markings   |  |
| <b>W</b> eight & Balance |                       | Current data   |  |
| AV1ATES                  | Annual                | Preceding 12 calendar months   |  |
|                          | <b>V</b> OR check     | Preceding 30 days (IFR)  |  |
|                          | 100-hour Inspection   | Aircraft operated for hire or airplane provided by flight instructor or school   |  |
|                          | AD Compliance         | One-Time and Recurring   |  |
|                          | Transponder           | Preceding 24 calendar months   |  |
|                          | ELT                   | Preceding 12 calendar months function test. Additionally, replace / recharge battery when half the useful battery life used or more than 1 hour of cumulative use. |  |
|                          | Static System         | Preceding 24 calendar months (IFR)   |  |

| ATOMATO          | Day VFR                      | Airspeed indicator   |
|------------------|------------------------------|--|
| FFLAMES          |                              | Tachometer   |
|                  |                              | Oil Pressure Gauge   |
|                  |                              | Manifold Pressure Gauge for Altitude Engines                           |
|                  |                              | Altimeter  |
|                  |                              | Temperature Gauge (liquid cooled engines)                              |
|                  |                              | Oil Temperature Gauge  |
|                  |                              | Fuel Gauges for each tank  |
|                  |                              | Flotation Devices (for hire, needed if beyond power off glide distance |
|                  |                              | from shore)  |
|                  |                              | Landing Gear Position Indicator (if retractable)                       |
|                  |                              | Anti-Collision Lights (if aircraft certificated after 3/11/96)         |
|                  |                              | Magnetic Direction Indicator   |
|                  |                              | ELT  |
|                  |                              | Seat Belts/Shoulder harnesses  |
| FLAPS            | Night VFR                    | Fuses (one spare set or 3 of each kind)                                |
|                  |                              | Landing Light (for hire)   |
|                  |                              | Anti-Collision Light   |
|                  |                              | Position Lights  |
|                  | ,                            | Source of Power (alternator/generator)                                 |
| Aircraft Systems | Fuel, oil and hydraulics     |  |
|                  | Electrical                   |  |
|                  | Pitot-Static,                |  |
|                  | Vacuum/Pressure and          |  |
|                  | associated flight            |  |
|                  | instruments                  |  |
|                  | All systems that your        |  |
|                  | aircraft has required by     |  |
|                  | ACS                          |  |
|                  | Possible failures and        |  |
|                  | what to do for each          |  |
| Furnameter       | system                       |  |
| Emergencies      | Engine failure after takeoff |  |
|                  | Loss of oil pressure         |  |
|                  | during flight                |  |
| Inoperative      | Is it required by            | MEL  |
| Equipment        | is it required by            | Equipment List / Kinds of Operations List                              |
| Equipment        |                              | Type Certificate Data Sheet  |
|                  |                              | Airworthiness Directives   |
|                  |                              | Regulation – 91.205, 91.209?   |
|                  |                              | Safety? Even if it's legal, is it safe?                                |
|                  |                              | Legality? Even if it's safe, is it legal?                              |
|                  | V s i                        | Leganty. Even in it 3 said, is it legan.                               |

|                         |                            | EnVironment  |
|-------------------------|----------------------------|--|
| <b>Density Altitude</b> |                            | How to determine   |
|                         |                            | Effects of temp & pressure on aircraft performance                               |
| Oxygen                  | <b>Aeromedical Factors</b> | Hypoxia - causes and symptoms  |
|                         | Regulation                 | Above 12,500 for more than 30 min for pilots                                     |
|                         |                            | Above 14,000 all the time for pilots and crew                                    |
|                         |                            | Above 15,000 for passengers  |
| Heater                  | Aeromedical Factors        | Carbon Monoxide poisoning symptoms   |
|                         |                            | - Light-headed   |
|                         |                            | - Loss of muscle power   |
|                         |                            | - Headache   |
|                         |                            | - Drowsiness   |
|                         |                            | - Tingling in fingers and toes   |
|                         |                            | - Blue fingernails and lips  |
| Night Flying            | Night Vision               | - 30-60 min for eyes to get used to the dark                                     |
|                         |                            | - Avoid looking into bright light  |
|                         |                            | - Use peripheral vision and don't look at a fixed object                         |
|                         |                            | - Rods = black and white only  |
|                         |                            | - Cones = blind spot at night  |
|                         |                            | - Night illusions  |
| CFIT                    | Controlled Flight Into     | - Accidental flight into IMC conditions  |
|                         | Terrain                    | - Mountain obscurations  |
|                         |                            | - False horizons/No horizon/illusions  |
|                         |                            | <ul> <li>Over high terrain check altitude and keep altimeter updated.</li> </ul> |
|                         |                            | - TAA: Technically Advanced Aircraft - Over-reliance on technology               |
| Airport Concerns        | Runway Incursion           | How do we avoid runway incursion?  |
|                         | Hotspots                   | What are hot spots? Where do we find them? Where do we find their                |
|                         |                            | explanations of what to avoid?   |
|                         | LAHSO                      | Land And Hold Short Operations (see KAPC)  |
|                         | Runway signs and           | Know them!   |
|                         | markings                   |  |
|                         | Light gun signals          | Keep on kneeboard  |
|                         | Wake turbulence            | How do we avoid wake turbulence?   |
|                         |                            | - Don't fly below the flight path  |
|                         |                            | - Wait for heavy aircraft's wake to dissipate.                                   |
|                         | Weight & 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?  |
|                         |                            | - Concerns with:   |
|                         |                            | • Over gross   |
|                         |                            | Aft CG / Forward CG  |
|                         | Crosswind factor           | - Within or close to limits?   |
|                         |                            | - Best runway to use   |
|                         |                            | - Crosswind takeoff and landing procedure  |
| Airspace                | Types                      | What type of airspace are we flying through? Know your cloud                     |
|                         |                            | clearances, procedures, and special use airspace.                                |
|                         | Procedures                 | - Clearance before entering Class B  |
|                         |                            | - Establish communication before entering Class C, D                             |
|                         |                            | - Stay out if flying close!  |
|                         |                            | - Required equipment on board?   |

|                | Restrictions           | - Restricted areas   |  |  |
|----------------|------------------------|--|--|--|
|                |                        | - Warning areas  |  |  |
|                |                        | - Alert areas  |  |  |
|                |                        | - Prohibited areas   |  |  |
|                | MOAs                   | - Times and frequencies  |  |  |
| Weather        | AIRMETS                | Tango – moderate turbulence, sustained surface winds above 30 kts, |  |  |
| weather        | AlkiviE13              | low level wind shear   |  |  |
|                |                        | Sierra – IFR, mountain obscuration                                 |  |  |
|                |                        | Zulu – Icing, freezing levels                                      |  |  |
|                | SIGMETS                | Convective SIGMETS (Thunderstorm related weather)                  |  |  |
|                | SIGIVIETS              | - Severe icing   |  |  |
|                |                        | - Severe turbulence  |  |  |
|                | 1                      | - Winds at the surface more than 50 kts                            |  |  |
|                |                        | - Tornadoes  |  |  |
|                |                        | - Hail   |  |  |
|                |                        |  |  |  |
|                |                        | SIGMETS (Not thunderstorm related)                                 |  |  |
|                |                        | - Severe icing   |  |  |
|                |                        | - Severe turbulence  |  |  |
|                |                        | - Winds at the surface more than 50 kts                            |  |  |
|                |                        | - Sand storms, dust storms, volcanic ash                           |  |  |
|                | Weather Charts         | Surface Analysis Chart   |  |  |
|                |                        | - High/Low pressure  |  |  |
|                |                        | - Cold/Warm fronts   |  |  |
|                |                        | - Stationary/Occluded Fronts                                       |  |  |
|                |                        | - Squall Line  |  |  |
|                |                        | - Ridge  |  |  |
|                |                        | - Trough   |  |  |
|                |                        | Weather Depiction Chart  |  |  |
|                |                        | Radar Summary Charts   |  |  |
|                |                        | - Precipitation  |  |  |
|                |                        | - Direction and Speed  |  |  |
|                |                        | - Does not show clouds   |  |  |
|                |                        | Satellite Pictures   |  |  |
|                |                        | - Clouds   |  |  |
|                | 4                      | Low Level Significant Weather prognostic chart                     |  |  |
|                | 1                      | Winds and Temperatures Aloft                                       |  |  |
|                |                        | Severe Weather Outlook Charts                                      |  |  |
|                | Special VFR conditions | What are the minimums?   |  |  |
|                | Special VFK conditions | Hazards: Wire-strike, tower strike, scud running, CFIT             |  |  |
| TFRs           | Any TFR's en route?    | Where can you find altitudes and active times?                     |  |  |
| 11,42          | Ally IFR 5 ell loute:  | What happens if you fly through a TFR?                             |  |  |
| Stalle 9 Spins | Spin Recovery          | P – Power to Idle  |  |  |
| Stalls & Spins | Spill necovery         | A – Ailerons to neutral  |  |  |
|                |                        |  |  |  |
|                |                        | R – Rudder full opposite the direction of rotation                 |  |  |
|                |                        | E – Elevator briskly forward to break stall                        |  |  |
|                |                        | When spin stops – rudder neutral                                   |  |  |
|                |                        | Easy pull to straight and level                                    |  |  |

| External Pressures |                    |   |  |
|--------------------|--------------------|---|--|
| Purpose of the     | Deadlines          | - | Have you given yourself an allowance for delays?                 |
| Flight             |                    | - | How critical is it to maintain the schedule                      |
|                    | Promise to         | - | Have you briefed your friends/family that a diversion or         |
|                    | friends/family     |   | cancellation may be necessary?                                   |
|                    |                    | - | Is the trip worth the risks?                                     |
| Trip Planning      | Diversions or      | - | Have you given yourself a window of time?                        |
|                    | Cancellations      | - | Have you arranged for alternate transportation?                  |
|                    | Unplanned Weather  | - | Have you factored in headwinds that may delay you?               |
| Alternate Plans    | Personal Equipment | - | Do you have funds for alternate plans or transportation?         |
|                    |                    | - | In the event of an unexpected stay do you have extra clothing ar |
|                    |                    |   | an overnight kit?  |