
Staying Safe and Keeping Your Wings with Medications, Alcohol, and Substances of Abuse

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About me

- Born in Michigan
- Trained as a computer scientist
- Went into medicine due to a medical information error
- Trained as an anesthesiologist and critical care physician
- Research in applying computing to medicine
- Became a pilot, PPL, IFR, Commercial
- Selected as Chief Health Information Officer at University of Iowa
- Wanted to support general aviation, became AME
- Saw a big problem with medications, alcohol, became HIMS
- Designated a Senior AME

Staying Safe with Medications

- Medications are no joke
 - Highly associated with increased risk of an incident or accident
 - Many of the problems are over-the-counter medications
 - Can result in a substantial finding against your medical or even your certificate if found to be flying on the meds

Staying Safe with Medications

Review 14 CFR 61.53 if it is not familiar to you and always follow it. Not only is it a requirement, but it is for your safety and that of your passengers. When in doubt, safety first - do not fly.

- Do one more check of your condition before considering flying.**
- Get well before considering return to flight status ... do not push it.**
- OTC medications help reduce the symptoms of an illness, but do not cure it.**
- Even though a medication has been determined to be safe for use by the Food and Drug Administration (FDA), this does not mean that the medication is compatible with flying or even driving.**

https://www.faa.gov/sites/faa.gov/files/licenses_certificates/medical_certification/medications/OTCMedicationsforPilots.pdf

FAA Medication Classes

- DO NOT ISSUE
 - If you are on these medications, we can't issue you a medical certificate
 - Will result in a deferral and having to deal with FAA either in Oklahoma City or Washington DC
- DO NOT FLY
 - You can be on these medications, but you cannot take them while flying
 - Time to “washout” is considerable

https://www.faa.gov/ame_guide/pharm/dni_dnf

FAA Medication Classes

- FAA cares that you are taking the medication, not why
 - If you take a medication on the list, AME must defer
 - The diagnosis does not matter
 - Example: anti-seizure medication for migraines
- That does not mean the FAA does not care about your diagnosis
 - Logic of “If I stop taking my seizure medication for my seizures, I’m good to fly” does not work

DO NOT ISSUE Medication Classes

- Cardiac and Blood Pressure Medications
 - Chest pain – nitroglycerine, isosorbide dinitrate
 - Blood pressure – centrally acting (clonidine, guanabenz, reserpine, etc)
- Neurologic medication
 - Anti-seizure medications – regardless of reason
 - Parkinson’s treatment – dopamine agonists (bromocriptine, ropinirole, etc)
- Cancer treatments
- Malaria – most allowed, but mefloquine is not permitted
- Diabetic medications – most allowed, but not pramlintide
- Steroids - > 20mg prednisone or equivalent
- Bladder medications (anti-cholinergics)

https://www.faa.gov/ame_guide/media/DNI_DNF_tables.pdf

DO NOT ISSUE Medication Classes

- Controlled Substances
 - If prescribed and used chronically must defer
 - Opiates, benzodiazepines
 - Schedule 1 medications including marijuana must defer
- Psychiatric medications (more to come)
 - Antidepressants (Prozac and other SSRIs, Wellbutrin, lithium)
 - Antipsychotics (Haldol, olanzapine, etc)
 - ADHD (Ritalin)
 - Really any psych medication

https://www.faa.gov/ame_guide/media/DNI_DNF_tables.pdf

DO NOT FLY Medication Classes

- Allergy medications
 - Benadryl, Chlorpheniramine, Zyrtec (wait time up to 5 days!)
 - CAN TAKE Allegra
- Anti-anxiety
 - Ativan, temazepam
- Muscle relaxants
 - Flexeril (cyclobenzaprine), Soma (carisoprodol)
- Pain medications
 - Opiates (oxycodone, hydrocodone, codeine)
 - Ultram (tramadol)
- Anti-diarrheal
- Sleep aids

https://www.faa.gov/ame_guide/media/DNI_DNF_tables.pdf

DO NOT FLY Medication Classes

Trade Name	Generic Name	Required minimum waiting time after last dose before resuming pilot duties
Ambien	zolpidem*	24 hours
Ambien CR	zolpidem (extended release)	24 hours
Edluar	zolpidem (dissolves under the tongue)	36 hours
Intermezzo	zolpidem (for middle of the night awakening)	36 hours
Lunesta	eszopiclone	30 hours
Restoril	temazepam	72 hours
Rozerem	ramelteon	24 hours
Sonata	zaleplon	12 hours
Zolpimist	zolpidem (as oral spray)	48 hours

https://www.faa.gov/ame_guide/pharm/sleepaids

How to calculate how long to wait

- 5-times the half-life of the medication
- To determine half-life:
 - Look at prescribed medication
 - Take longest duration between doses
 - Multiple that time by 5
- Example:
 - Benadryl, take 25mg every 12 hours
 - $12 \times 5 = 60$ hours

Over-the-Counter Medications

Type of medication	Commonly found in	Medication or active ingredient generally safe to fly GO	Avoid these medications or ingredients* NO GO	Rationale
Antihistamines	Allergy products Cough/cold products Pain products	Non-sedating products: fexofenadine (Allegra) loratadine (Claritin)	Sedating products: brompheniramine (Dimetapp) cetirizine (Zyrtec) chlorpheniramine (Chlor-Trimeton) diphenhydramine (Benadryl) levocetirizine (Xyzal)	Histamines affect not only your allergies, but your sleep wake cycle. Sedating antihistamines can cause drowsiness, impaired thinking and judgement.
	Sleep aid products	Melatonin (not an antihistamine)	diphenhydramine (such as Zzzquil) . Same ingredient in Benadryl) Doxylamine (such as Unisom)	"Hang-over effect" morning after safety concern. NOTE: taking melatonin at the wrong time can actually worsen "jet-lag" and cause daytime drowsiness.
Nasal steroid	Allergy products	fluticasone (Flonase), triamcinolone (Nasacort)	None	
Nasal decongestants	Nasal congestion Sinus pressure Cough/cold products	oxymetazoline (Afrin), phenylephrine (Sudafed PE), pseudoephedrine (Sudafed)	(Considered safe in recommended dosages)	Caution: Sudafed-like medications can speed up your heart rate; therefore, use caution if you have an underlying heart condition. Be very cautious of an extra cup of coffee or two when feeling sub-par. This has caused more than one pilot to end up in the emergency room for a racing heart rate.
		Less convenient, but safer, are the nasal salt water lavages such as saline nasal sprays Neti-pots		

https://www.faa.gov/sites/faa.gov/files/licenses_certificates/medical_certification/medications/OTCMedicationsforPilots.pdf

Over-the-Counter Medications

<p>Cough</p>	<p>Cough/cold products</p>	<p>Coricidin (allowed if no chlorpheniramine)</p> <p>guaifenesin (found in Mucinex and Robitussin) Mucinex fast-max severe congestion and cough (liquid)</p> <p>Identify combo vs isolated</p>	<p>dextromethorphan (Delsym)</p> <p>Dayquil (contains dextromethorphan)</p> <p>Most “night-time” or “PM” medications contain a sedating antihistamine:</p> <ul style="list-style-type: none"> - Coricidin HBP cough & cold (contains chlorpheniramine) - Nyquil (contains doxylamine) 	<p>Most cough medications are safe for flight, but caution for combination products with sedating antihistamines. If the label states PM (for nighttime use) or DM (containing dextromethorphan), you should not fly for at least 5 half-lives after the last dose (see above).</p>
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https://www.faa.gov/sites/faa.gov/files/licenses_certificates/medical_certification/medications/OTCMedicationsforPilots.pdf

Over-the-Counter Medications

Urinary Tract Infections	Pain reliever	phenazopyridine (AZO standard)	None	Generally allowed after adequate ground trial to monitor for side effects. Symptoms should be resolved other than slight residual irritation.
Aches and Pains	NSAIDs (non-steroidal anti-inflammatory drugs) and analgesics	acetaminophen (Tylenol) aspirin (Bayer's) ibuprofen (Advil/Motrin) naproxen (Naprosyn)	Advil PM, Tylenol PM (Most "PM" medications contain diphenhydramine)	Most OTC pain meds are safe to fly as long as the underlying condition is acceptable.
	Other options for headaches	caffeine (commonly found in Excedrin)	Read the label.	Caution. Some OTC meds are combined with a sedating antihistamine, which can cause drowsiness (see above for examples).
	Topical pain relief	lidocaine patch (Lidoderm) muscle rub	(Considered safe in recommended dosages)	Lidocaine-Caution with application, avoid getting on hands or open wound as this can drop blood pressure or absorb faster.
Skin Rash	Emollients and mild corticosteroid creams	almost all are allowed	Stay within the dosage to not exceed an acceptable risk	Ensure the underlying condition is not an issue with safe flight.

https://www.faa.gov/sites/faa.gov/files/licenses_certificates/medical_certification/medications/OTCMedicationsforPilots.pdf

Over-the-Counter Medications

Gastrointestinal Illness: nausea, vomiting, diarrhea	Anti-emetics anti-motility drugs	bismuth subsalicylate (Kaopectate, Pepto-Bismol)	loperamide (Imodium)	Loperamide can cause sedation & dizziness. Be careful not to mask the underlying symptoms. GI illness can cause dehydration, cramps & pain with increase in altitude.
	Proton Pump Inhibitors (PPI)	eomeprazole (Nexium) lansoprazole (Prevacid) omeprazole (Prilosec) pantoprazole (Protonix) rabeprazole (Aciphex)	None	Be careful not to mask the underlying symptoms.
Gastrointestinal Illness: indigestion	H2 blockers	cimetidine (Tagamet) famotidine (Pepcid) nizatidine (Axid) rantedine (Zantac)	None	
	Antacids	aluminum hydroxide (Maalox) calcium carbonate (Tums) magnesium hydroxide (Milk of Magnesium)	None	

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AOPA Medications Database



LICENSING & CAREER ▾ AIRCRAFT & OWNERSHIP

NEWS & MEDIA ▾ TRAINING & SAFETY ▾ PLAN A TRIP ▾ EVENTS

PILOT RESOURCES

Pilot Information Center

Aircraft & Ownership ▾

Medical Resources ▲

BasicMed Pilot Resources

Airman Medical Certification

Health Conditions

Submitting to the FAA

Medications Database

Search FAA Medication Database

Special Issuance Certification

MEDICATIONS DATABASE

AOPA offers a list of FAA allowed/disallowed medications for pilots who hold FAA-issued medical certificates. Under BasicMed, your physician will discuss the medications you are taking and their potential to interfere with the safe operation of an aircraft. Please read more below.



scroll to more content

AOPA Medications Database

SEARCH FAA MEDICATION DATABASE

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Medication	FAA Allowed	Classification	Medical Condition	FAA Allowed based on
Lipitor atorvastatin	YES	lipid regulating agent	lipid reduction	status report and no adverse side effects
Caduet amlodipene/atorvastatin	YES	dual therapy antihypertensive/cholesterol reducing agent	high blood pressure	hypertension evaluation
Liptruzet ezetimibe and atorvastatin	YES	antihyperlipidemic combinations	hypercholesterolemia	Current Status Report (CSR)

scroll to more content

AOPA Medications Database

SEARCH FAA MEDICATION DATABASE

albuterol| x SEARCH

Medication	FAA Allowed	Classification	Medical Condition	FAA Allowed based on
Proventil albuterol	YES	bronchodilator	pulmonary disease	pulmonary function studies detailed status report with no adverse side effectsn
Pentolin albuterol	YES	bronchodilator	pulmonary disease	pulmonary function studies detailed status report with no adverse side effectsn
Xopenex levalbuterol	YES	selective beta 2-adrenergic receptor agonist		status report and no adverse side effects

scroll to more content

How to Avoid Trouble with Medications

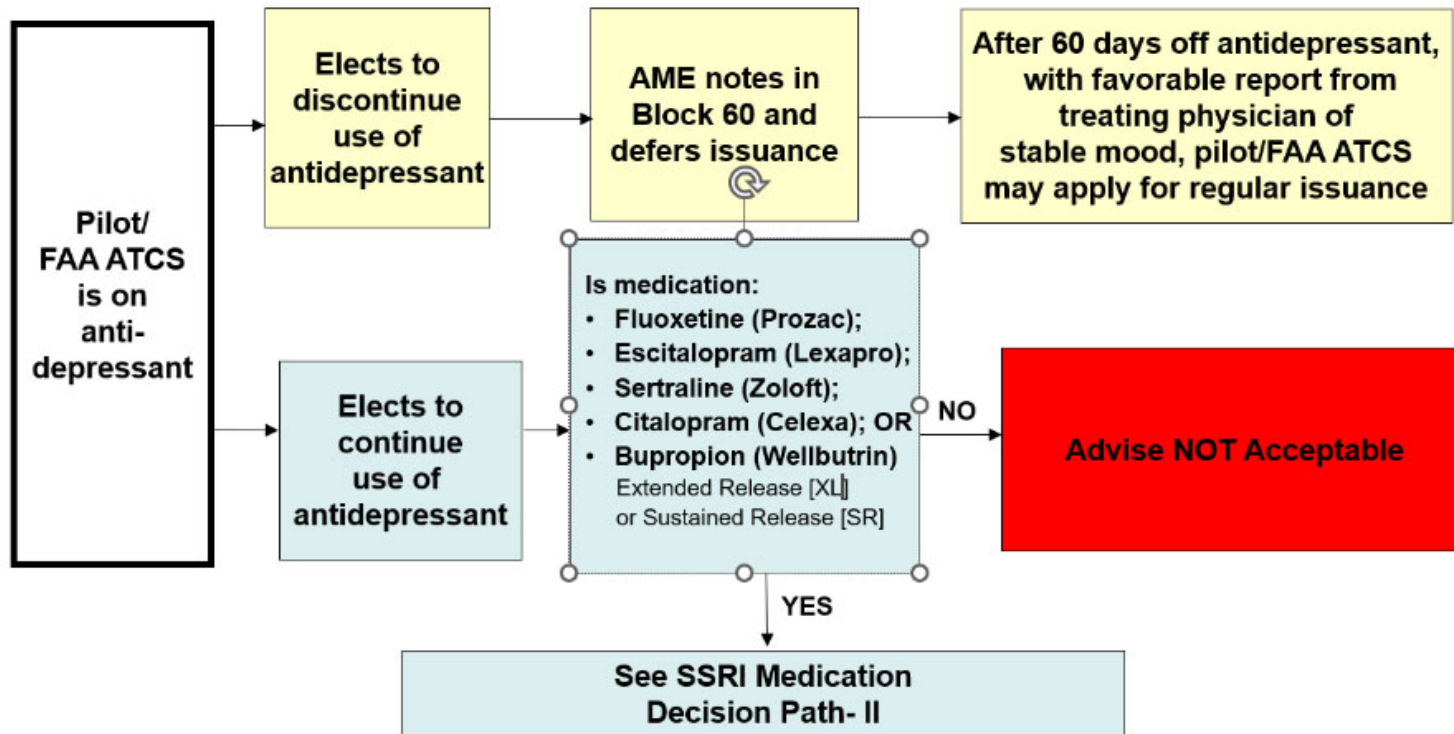
- Understand your diagnosis
- Make sure your doctor knows you are a pilot
- Before having your doctor write a prescription in a non-urgent/non-emergent situation, see if the medication may be one of concern
 - AOPA database
 - FAA AME guide

SSRIs

- Understand why you are on them
 - Adjustment disorder is very different from bipolar disorder is very different from overactive bladder
- Depending on your diagnosis, you may be able to come off them
- Don't stop them without talking with your **prescribing** doctor

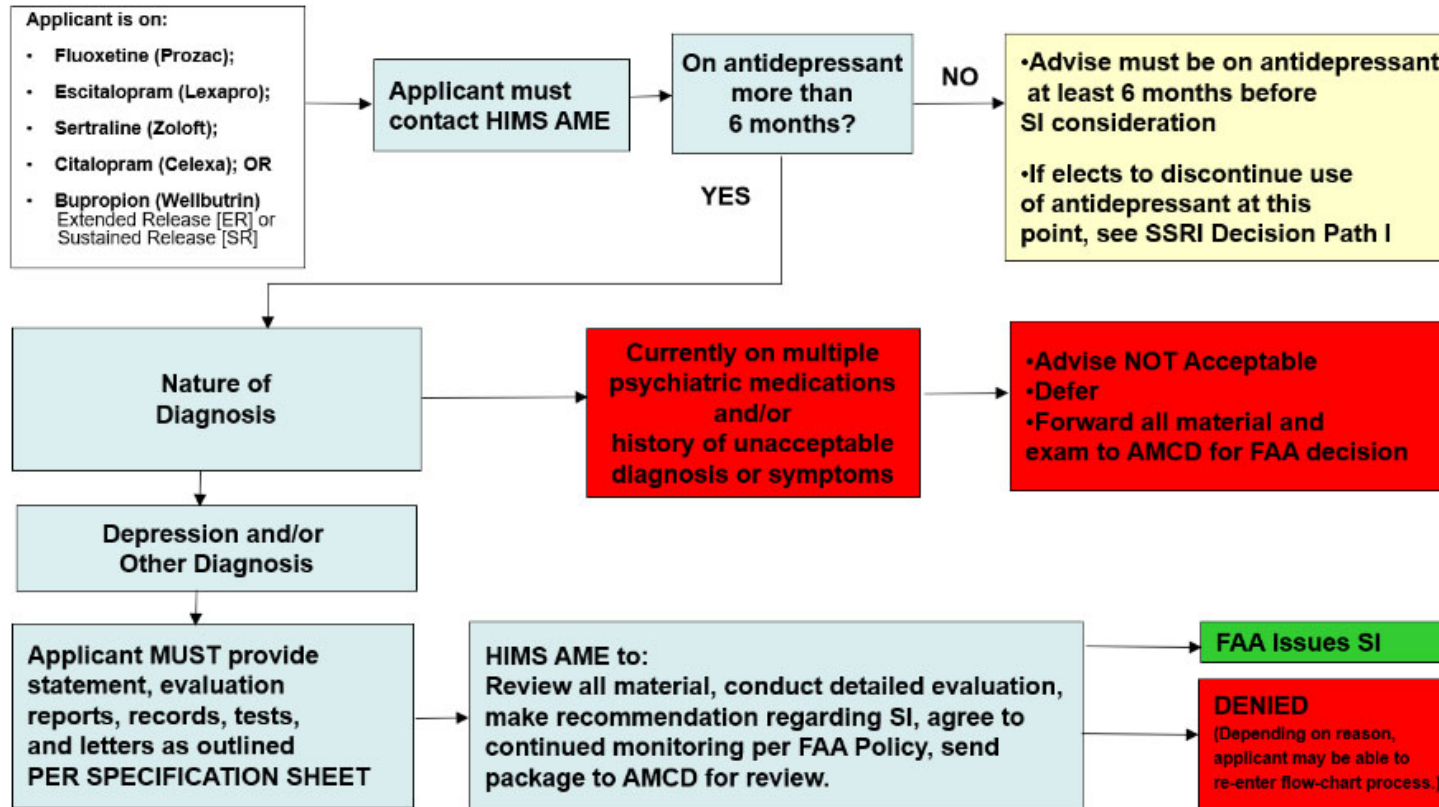
SS

SSRI Decision Path - I



SS

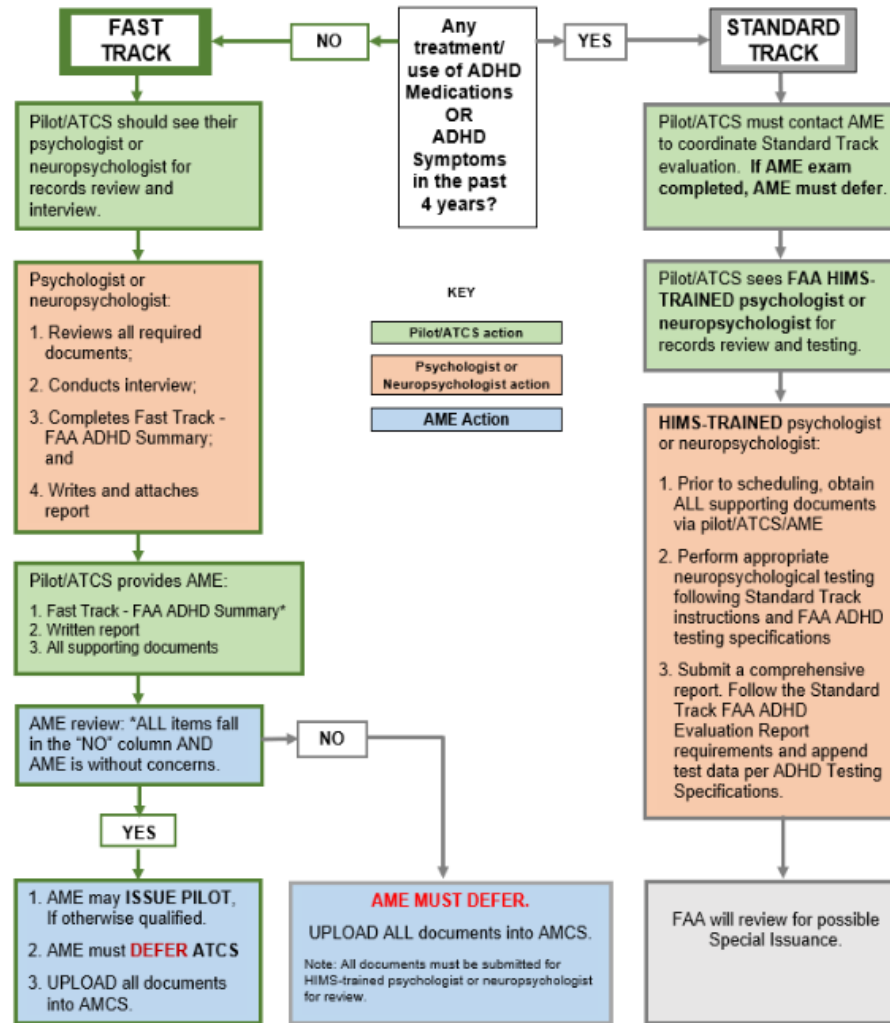
SSRI Decision Path – II (HIMS AME – INITIAL Certification/Clearance)



ADHD

- Historically, an ADHD diagnosis was very difficult to get a medical
 - Required exam from HIMS trained neuropsychologist or psychologist
 - Did not depend on how long ago one had the diagnosis or his/her current state
- This is no longer the case for all, but
 - You still CANNOT be on medications

ADHD



https://www.faa.gov/ame_guide/media/ADHD_fast_track_eval_general_info.pdf

Substances of Abuse

- Substances of abuse are a problem in pilots just like the rest of society
- ~10% of the population will have some issue with a substance sometime in their life
- Pilots are simply better at hiding it!

Alcohol

- Most common problem in pilots
- Usually identified with a DUI
 - Under 14 CFR 61.15, **all pilots must send a Notification Letter to the FAA within 60 calendar days of the effective date of an alcohol and/or drug related conviction or administrative action.**
- FAA's first question:
 - Is this a problem or just "one-time stupid"

Big Problem, Bigger Problem or “One Time Stupid” Examples

- “One Time Stupid”
 - Holiday party with subsequent traffic stop
 - BAL on breathalyzer was 0.09
 - No history of DUI or other issues
- Abuse
 - 2nd DUI and
 - BAL on breathalyzer was 0.12
- Dependence
 - 1st DUI
 - BAL on breathalyzer was 0.22 or refused

“One Time Stupid”

- Likely possible to issue
- Possible FAA will require following with a HIMS AME
- Possible FAA need for continuous monitoring

1. List DATE(s) of any arrest, conviction or administrative action here: _____

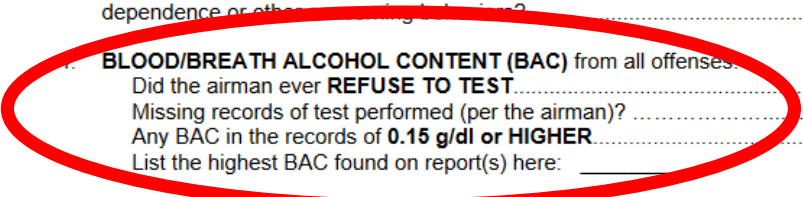
2. Number of alcohol related events in the airman's lifetime?

One Two or more

3. **AIRMAN'S STATEMENT** Do you find any evidence of current or previous alcohol abuse, dependence or other concerning behavior?

No Yes

4. **BLOOD/BREATH ALCOHOL CONTENT (BAC)** from all offenses.



Did the airman ever **REFUSE TO TEST**

No Yes

Missing records of test performed (per the airman)?

No Yes

Any BAC in the records of **0.15 g/dl or HIGHER**

No Yes (.15 or higher)

List the highest BAC found on report(s) here: _____

5. **COURT RECORD(s) AND ARREST RECORD(s)**: (including military records)

Did the airman **fail to provide** a copy of the narrative police/investigative report from all offenses and complete copies of all court records associated with the offense(s) including court-ordered education?

No Yes

6. **DRIVING RECORD**: AME must review a complete Department of Motor Vehicles (DMV) record. List all states the airman held a driver's license for the past 10 years.

- 1. _____ 3. _____
- 2. _____ 4. _____

Any additional driving offenses involving alcohol or other concerns not listed in #1?

No Yes

7. **EVIDENCE OF TREATMENT**: Did the airman attend any inpatient or outpatient rehabilitation or treatment? (Do not include court-ordered education programs.)

No Yes

8. Is there any history or evidence of any DRUG (illicit, Rx, etc.) offense at any time?

No Yes

9. Do you have ANY concerns regarding this airman? If yes, notate in Block 60.

No Yes

AME Signature

Date of evaluation

If ALL items fall into the clear column, the AME may issue with notes in Block 60 but must submit all documents to the FAA.

If ANY SINGLE ITEM falls into the SHADED COLUMN, or the actual records are not available to review, the AME MUST DEFER. The AME report should note what aspect caused the deferral and explain any answers in the shaded column.

Remind the airman to report any new event to [Security](#).

https://www.faa.gov/ame_guide/media/AlcoholStatusReportforAME.pdf



Abuse

- Abstinence 1-3 years
 - Required testing
- Need following with a HIMS AME
- 1 or more evaluations by:
 - Psychiatrist
- Can return to general eligibility with warning

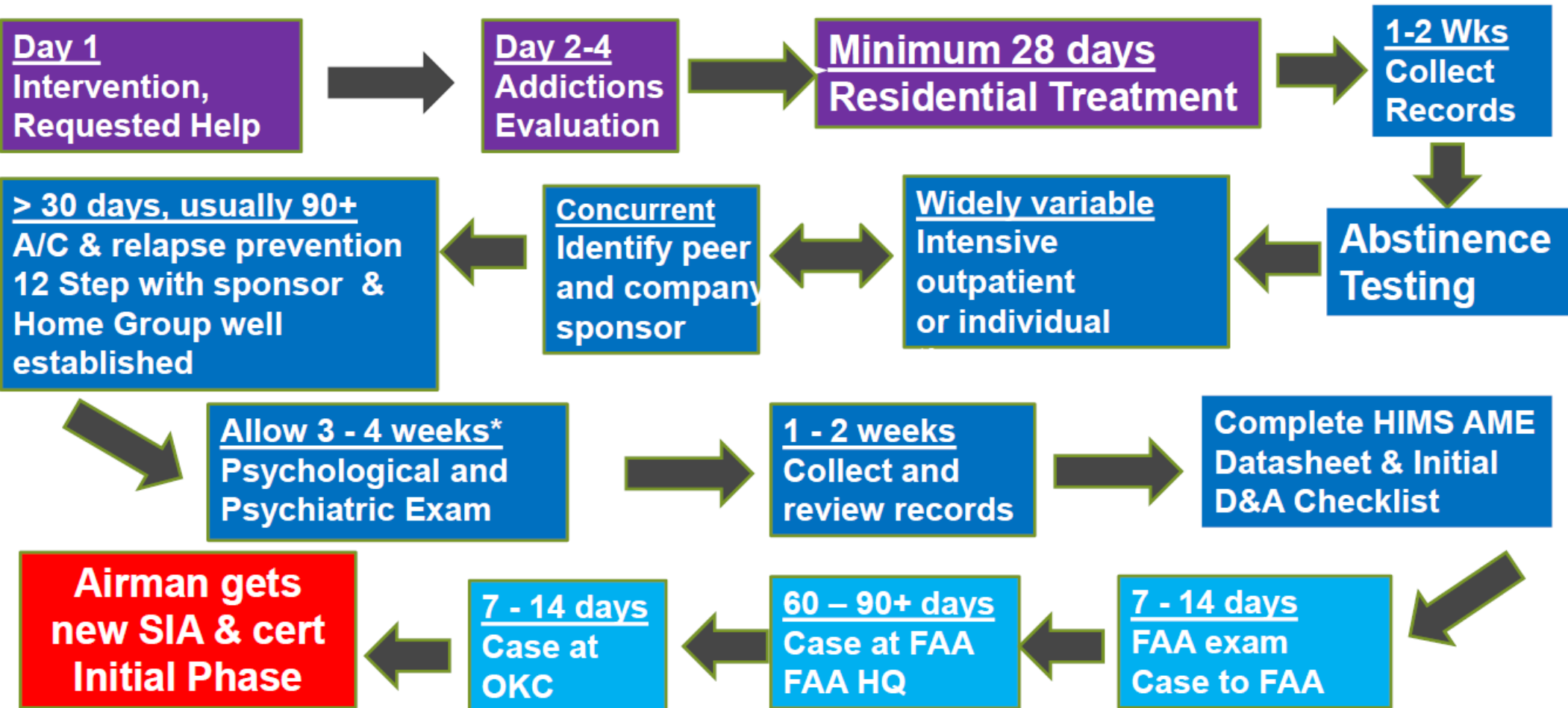
Dependence – regardless of substance

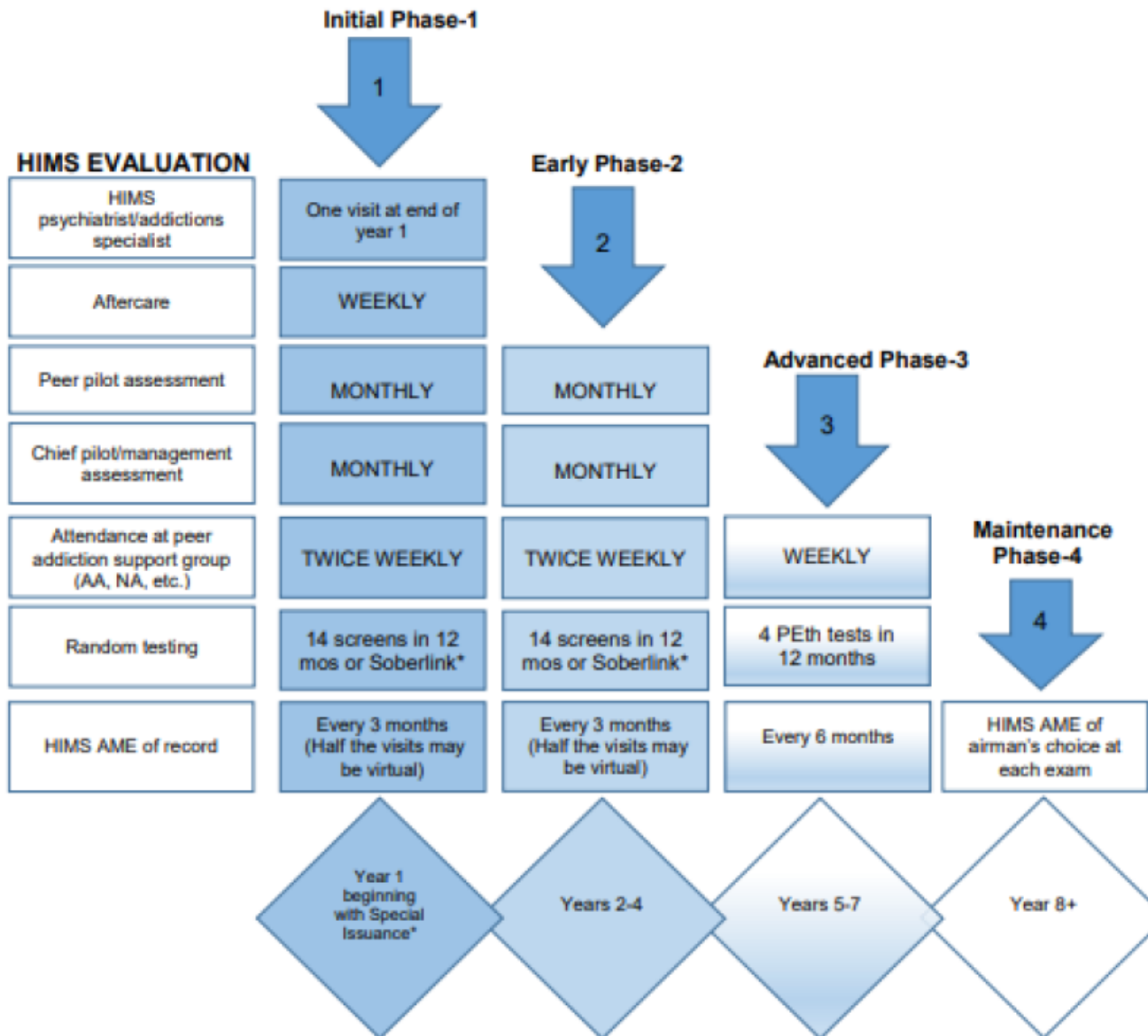
- Defined by:
 - Increased Tolerance
 - For alcohol BAL > 0.2
 - Withdrawal
 - Impaired control of use
 - Use despite damage to health or social/personal/occupational functioning

Dependence

- Lifetime abstinence
- Continuous monitoring for years
- Need following with a HIMS AME
- 1 or more evaluations by:
 - HIMS psychiatrist
 - HIMS neuropsychologist
- Long-term evaluations:
 - Chief pilot
 - Peer pilot
- Engagement with
 - AA
 - NA
 - Other support group
- On SI for life

HIMS Certification Flow Sheet





HIMS AME and FAA Goals

- Make sure the airspace is safe
- Get the airman in the air again...SAFELY
- Understand addiction is a disease
 - FAA is limited in medications for treatment
 - Unlimited relapses under FAA guidance
- 85% of pilots in HIMS will receive a SI



MENTALLY SHATTERED?
REACHED YOUR LAST HOPE?
FEEL AS IF YOUR WINGS HAVE BEEN CLIPPED?
LET US HELP YOU SOAR AGAIN,
ONE DAY AT A TIME...

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A wide-angle, low-perspective shot of an asphalt runway. The runway is marked with white dashed lines and large white numbers. The runway stretches far into the distance, leading the eye towards a horizon line. In the background, there are some airport buildings and a clear sky.

Starting down the recovery path

Pilots, flight attendants, mechanics, ground crew ...they're all just people too, and yes, they can have addictions. We all seem to hold people in aviation positions to a higher standard of conduct, but do not consider that they are just as human as you or I, and susceptible to



Aviation Family Fund (AFF)

**Aviation Family Fund
APPLICATION FOR ASSISTANCE**

CONTACT INFORMATION

Name:		
Street Address:		
City:	State:	Zip:
Home Telephone:	Fax:	
Cell Phone:	E-mail:	
Preferred method of contact: <input type="checkbox"/> Home <input type="checkbox"/> Cell		
Date of Birth:	SSN: - - -	
Emergency Contact Name:		
Telephone:	Relationship: <input type="checkbox"/> Spouse/Partner <input type="checkbox"/> Parent <input type="checkbox"/> Sibling <input type="checkbox"/> Friend <input type="checkbox"/> Adult Child	

INSURANCE INFORMATION

<u>Primary</u> Insurance Provider:	
Please list the name of the insurance holder:	
ID Number:	Group Number:
Telephone Number:	
<u>Secondary</u> Insurance Provider:	
ID Number:	Group Number:
Telephone Number:	
Please list the name of the insurance holder:	

GENERAL QUESTIONS

What is the best time to reach you?
What other finances are available to you?
What is the primary purposes of this grant if you qualify?
Are you currently employed? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have a treatment plan / Are you following a program (brief description):
Please list three references in your quest for assistance:
Name: Telephone/Cell:
Name: Telephone/Cell:
Name: Telephone/Cell:



Questions?

James M. Blum, MD, FCCM, Senior AME(HIMS)

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