



# AVIATION MEDICATION GUIDELINES

**RT** RPAS  
TRAINING

As RPAS Training Academy is not a quailed Medical Practitioners and give this advice obtainable from SA-CATS-MR67 as per South African Civil Aviation Authority Regulation within the DAME (Designated Aviation Medical Examiner), we still strongly advise that the appropriate medical examiner be consulted for professional advice and feedback.

## **Aviation Medical – Medication Guidelines**

- (1) The medical condition is the primary concern, and a clinical assessment of being unfit to exercise aviation-related tasks will determine the period of unfitness.
- (2) The class of medical fitness determines which medical conditions will be allowable for the exercise of the aviation license, or how it may be waived.
- (3) Knowledge of existing criteria and protocols as produced by SACAA is mandatory for the proper interpretation of aviation medical fitness.
- (4) All drugs not published in the SA-CATS 67 need to be verified by SACAA before prescribing.
- (5) Central acting drugs generally are unacceptable and unsafe as medication for aviation personnel.
- (6) The side effect profile needs careful attention to determine acceptability.
- (7) The applicant's co-morbidities may cause medical unfitness.

(8)

The applicant's possible adverse reactions to the medication must be monitored before a decision regarding fitness may be made. The period of being unfit after the use of unacceptable medications largely depends on the manner and time of elimination of the drug.

<b>Central Nervous System</b>			
<b>Central nervous system stimulants: All pharmacological in this group are unacceptable. The disease condition per se does preclude aviation-related activity.</b>			
<b>Name</b>	<b>Acceptable</b>	<b>Unacceptable</b>	<b>Comments</b>
Benzodiazepines	Temazepam		No flying within 72 hours; this drug is addictive and should not be used with alcohol at the same time
Other	Zopiclone Zolpidem Zaleplon		Applicants must wait 24-48 hours after these medications have been taken before flying. These drugs must not be used more than twice a week to avoid habituation
Food supplement		Melatonin (not generally recommended for flight crew and cabin crew)	If considered, it should be given a 'ground trial' during a period when the crew member will not be engaged in flying duties and any unwanted side effects can be assessed.
SSRI	Fluoxetine Sertraline Citalopram, or Escitalopram Paroxetine		Selected non-sedating selective serotonin reuptake inhibitors (SSRI) require a minimum of three (3) months grounding period. The Authority will evaluate affected applicants on a case-by case basis and will issue medical certificates based on medical findings, refer to the protocol
Barbiturates		These agents are unacceptable	
Anxiolytics		These agents are unacceptable	
Anti-psychotics		These agents are unacceptable	
Anti-epileptics		These agents are unacceptable to Pilots & ATC Including Gabapentin which is used for conditions other than epilepsy	These medications may be considered for cabin crew, case-case presentation. A 3 month stabilisation period is required. Refer to Protocol.
Anti-Parkinson agents		These agents are unacceptable	
Anti-vertigo and anti-emetics		These agents are unacceptable	
Anti-migraine agents		Maxalt  Triptans	The underlying condition is disqualifying. The Authority will evaluate affected applicants on a case - by case basis and will issue medical certificates based on the medical findings.  Applicants allowed on these medications may not fly for 24 hours after being

			treated with these medications. Beta blockers may be considered acceptable for prophylaxis. Refer to Protocol
Alzheimer's disease		These agents are unacceptable	
Anaesthetics	Acceptable		A minimum of 24 hours following local or regional (including dental) anaesthetics. (The condition for which the anaesthetic has been administered must also be considered prior to returning an individual to flying or controlling duties). A minimum of 72 hours following general, spinal or epidural anaesthetic. This proscription includes drug-induced sedation. (The condition for which the anaesthetic has been administered must also be considered prior to returning an individual to flying or controlling duties).
<b>ANALGESICS &amp; ANTI-INFLAMMATORIES</b>			
	Acceptable	Unacceptable	
Central Nervous System		Morphine Codeine Codethyline Cocaine Cannabis	Central acting, analgesics and narcotics /opioid, analgesics are strictly incompatible with flying status.
		Doxylamine Promethazine Meprobamate Orphenadrine Propoxyphene Diphenhydramine Tramadol	
NSAIDS Peripheral analgesics	Acetyl Salicylic Acid		
Non-Selective Cox-Inhibitors	Acceptable	Unacceptable	These substances, prescribed for short periods at moderate doses, may be compatible with flying status if the condition which justifies their prescription is itself compatible with flying status.
Acetaminophen	Paracetamol	Sulindac Phenlybutazone	
Salicylates	Acetyl Salicylic Acid		
Propionic acid derivatives	Ibuprofen Naproxen Fenoprofen Ketoprofen Flurbiprofen Indomethacin		
Acetic acid derivatives	Ketorolac		
Enolic acid (Oxicam)	Diclofenac Nabumetone Piroxicam Meloxicam		

	Tenoxicam Lornoxicam Mefenamic acid		
Fenamic acid derivatives	Meclofenamic acid Flufenamic acid Tolfenamic acid		
COX Inhibitors	Meloxicam		
Selective COX2 inhibitors	Celecoxib Etoricoxib Parecoxib		
<b>Musculoskeletal Agents</b>			
Anti-Gout	Allopurinol	Colchicine	This medication may be acceptable, each application will be considered on a case-by-case basis  Flying prohibited while on colchicine. Stable GIT must be demonstrated after discontinuation of colchicine.
Topical agents	These agents are acceptable		
Gold		These agents are unacceptable	
Osteoporosis	Bisphosphonates Alendronate Risedronate Calcium and Vit D supplements Other drugs: Selective oestrogen receptor Modulators -Raloxifene Parathyroid hormone Teriparatide		Reserved on a case-by-by case basis
Autonomic		Sympathomimetics Sympatholytics Cholinergic Anti-cholinergics	All centrally acting agents are unacceptable
<b>Autacoids</b>			
Antihistamines	Ebastine Loratadine Desloratadine Acrivastine Fexofenadine		Sedating oral antihistamines are not authorised for flying personnel and incompatible with flying status. New generation, non-sedating oral (e.g. fexofenadine) and topical antihistamines may be acceptable.
Serotonin antagonists		All agents in this group are unacceptable Methysergide, Cyproheptadine Pizotifen	

		Ondansetron Grinesatron	
Neurokinin1 (NK1) Antagonists		All agents in this group are unacceptable  Aprepitant Casopitant	Novel class of medications that possesses unique antidepressant, anxiolytic, and antiemetic properties
<b>Cardio-Vascular Agents</b>			
Positive Inotropic Agents		All agents in this group are unacceptable	
Anti-Arrhythmic			Case-by case presentation, individual medical may be considered
Anticoagulants	Rivaroxabin Dabigatran		The underlying condition should be assessed on a case by case basis
<b>Anti-Hypertensives</b>			
Central acting sympathetic nervous system inhibitors		All agents in this group are unacceptable	
Alpha-receptor blockers	Tamsulosin - e.g. Tamsul	All other agents in this group are unacceptable	All L.U.T.S cases -cases presentation, individual medication will be considered.  An applicant on Tamsulosin shall be monitored for postural hypotension with every medical as per underlying condition protocol requirements
Beta-receptor blockers	Atenolol Metoprolol Bisoprolol	Non-selective drugs are unacceptable	Cardio-selective beta blockers are acceptable, but no longer first line or choice.
Sympathetic nervous blockers		These drugs are unacceptable as they may impair alertness.	
Direct-acting vasodilators		Dihydralazine Prazosin -Urapidil	These drugs are unacceptable because they frequently have adverse side effects such as orthostatic hypotension.
Calcium channel blockers	Diltiazem Verapamil Nicardipine Nitrendipine Long-acting  Nifedipine	Short acting Nifedipines are unacceptable.	These medications may be compatible with flying status. They may induce peripheral oedema or headache, but they are generally well tolerated. Preference shall be given to medications with the most flexible use.  If used for angina these medications are not compatible with flying status.
ACE inhibitors	Captopril Enalapril Lisinopril Benazepril Fosinopril Perindopril Quinapril Ramipril		

Angiotensin receptor antagonists	Candesartan Eprosartan Irbesartan Losartan Telmisartan Valsartan		
Anti-anginal agent			Angina pectoris per se is disqualifying.
Diuretics	Hydrochlorothiazide (< 25 mg/day)  Potassium/ magnesium sparing diuretics such as amiloride and spironolactone	Furosemide Bumetanide  Torasemide Acetazolamide Eplerenone	Low dose diuretics are acceptable.  High dose kaliuretic diuretics (> 25 mg hydrochlorothiazide or equivalent) are unacceptable.
Other vasodilators			The indications for use are disqualifying.
Vasoconstrictors			The indications for use are disqualifying.
<b>Hypolipidaemic agents</b>			
<b>Dyslipidaemia in flying personnel should be treated in conjunction with an appropriate diet and weight reduction if appropriate.</b>			
Fibrates			Treatment with fibric acids (e.g. fenofibrate or gemfibrozil) should be discontinued in the case of gastrointestinal side effects or elevated transaminase concentration
Statins	All except exclusions	Fluvastatin Lovastatin Combined formulas e.g. Ezetimibe & Statins	HMG-CoA reductase inhibitors are acceptable with preference for hydrophilic molecules such as pravastatin rather than lipophilic substances such as simvastatin which may induce sleep disorders.
Others	Acipimox (niacin derivative) used in low doses and accepted on a case-by-case basis.		
<b>Plasma expanders</b>			
Plasma expanders		All agents in this group are unacceptable	
Blood and Haemopoetic	Anticoagulants – Warfarin – refer to the protocol-acceptable	Haemostatics, the indications for use are disqualifying	
Fibrinolytics		All agents in this group are unacceptable	
Haematological agents inhibitors, Injectables	Disprin/Aspirin in low-dose ( $\leq 100\text{mg/day}$ ) acceptable	All agents in this group are unacceptable	
Sclerosing		All agents in this group are unacceptable	
Haematinics	Prophylactics in pregnancy are acceptable		Anaemia has to be corrected before consideration.

Haemoglobin-based Oxygen carrier		This medication is not considered	
<b>Respiratory System</b>			
Coughs and cold	Drugs containing only carbocysteine, guaifenesin or acetyl cysteine without an alcohol base are accepted	Tripolidine Pseudoephedrine Ephedrine Codeine & modified Theophylline Dextromethorphan Diphenhydramine Promethazine Noscapine Phenyltoloxamine Methadone	
Bronchodilators	Spiriva		Sympathomimetics: The use of Short-acting Beta Agonists (SABA) /Long-acting Beta Agonists (LABA) should be restricted to eight (8) hours or more prior to flying, but may be used in an unusual asthmatic attack in flight to allow the safe completion of the flight.
Methylxanthines and combinations		All agents in this group are unacceptable	
Anticholinergic		All other agents in this group are unacceptable	
Combinations	Only acceptable combinations are Salmeterol with Fluticasone and Budesonide and Formoterol.		
Mucolytics	Carbocysteine Acetylcysteine Bromhexidine		
Anti-asthmatics	Inhaled Glucocorticoids Leucotrine receptor antagonists		
Chromones	Cromolyn sodium  Nedocromil sodium		The drugs are also called cromoglycates. They are alternative choices when initiating regular controller therapy in patients with mild asthma, although inhaled corticosteroids (ICS) are the preferred agents. They have the advantage of having a lower side effect profile than ICS.
Other anti-asthmatics		All agents in this group are unacceptable	
Surfactants		This medication is not compatible with flying.	

<b>Ear, Nose and Throat</b>			
Topical nasal preparations	These medications are acceptable.		
Ear drops and ointments	These medications are acceptable.		
Mouth and Throat preparations	These medications are acceptable.		
<b>Gastro-Intestinal tract</b>			
Digestants	These medications are acceptable.		
Appetite suppressants		All agents in this group are unacceptable	
Anti-spasmodics	Mebeverine Alverine  Peppermint Oil	Hyoscine Diphenhydramine Alcohol substrates Belladonna Chlordiazepoxide Propentheline  Methixene	Antimuscarinics (e.g. dicyclomine, mepenzolate, pipenzolate, poldine and propentheline) are used to reduce smooth muscle spasm in non-ulcerative dyspepsia, irritable bowel syndrome and diverticular disease.  They all have atropine-like side-effects of confusion, dry mouth, reduced power of accommodation, difficulty with micturition and constipation, which preclude their use.
<b>Acid reducers</b>			
Antacids		Magnesium as a single drug is unacceptable.	
Antacids and combinations		Dicyclomine Magnesium dominant drugs Oxethazaine	
H2 receptor antagonists	Cimetidine allowable if taken more than 8 hours before aviation activity. Ranitidine allowable if taken more than 12 hours before aviation activity		
Proton pump inhibitors	Omeprazole		
Cycloprotective		Misoprostol	
Motility enhancers		All agents in this group are unacceptable	
Laxatives		Magnesium salts	
Antidiarrheal	Loperamide not to be taken less than 6 hours before aviation activity.	Codeine phosphate Co phenotrope Morphine Atropine (Lomotil)	

		Aminopentamide	
Liver, gall bladder and bile		These agents are unacceptable due to disease profile	Treatment for the dissolution of gallstones is not compatible with flying status as it may cause diarrhoea and cholecystitis.
Suppositories and anal ointments	These agents are acceptable		Soothing preparations containing bismuth subgallate, zinc oxide and haemamelis often mixed with a small dose of corticosteroid may be acceptable in short courses for topical application.
Others	Sulfasalazine enteric coated may be used with 6 monthly ophthalmology reporting, FBC, UKE, and urinalysis	Sibutramine Budesonide Infliximab Orlistat	
Anti-inflammatory agents for Bowel Disease	Mesalazine  Asacol: (5-aminosalicylic acid)	Humira  Salofalk	<p>Case-by case presentation, individual medication may be considered</p> <p>Sulfasalazine enteric coated may be used with 6 monthly ophthalmology reporting, FBC, UKE. and urinalysis</p> <p>The use of sulfasalazine in inflammatory bowel disease has declined due mainly to the fact that it yields the metabolite sulfapyridine which gives rise to side-effects such as agranulocytosis and hypospermia. However, the other metabolite of sulfasalazine, 5-aminosalicylic acid (5-ASA) is credited with causing the drug's therapeutic effect. Therefore, 5-ASA and other derivatives of 5-ASA, are now usually preferred and given alone (as mesalazine), despite their increased cost, due to their more favourable side-effect profile.</p> <p>Sulfasalazine, and its metabolite 5-ASA, are poorly absorbed from the small intestine. Its main mode of action is therefore believed to be inside the intestine. Approximately one third of a dose of sulfasalazine is absorbed from the small intestine. The remaining two thirds pass into the colon where it is split by bacteria into 5-ASA and SP. SP is well absorbed from the colon (estimated bioavailability 60%); 5-ASA is less well absorbed (estimated bioavailability 10% to 30%)</p>
<b>Antihelmintics</b>			
Antihelmintics	Mebendazole Albendazole Praziquantel	Piperazine	
<b>Dermatological</b>			
Anti-bacterial antiseptic agents	These medications are acceptable.		
Anti-parasitics	These medications are acceptable.		

Fungicides	These medications are acceptable.		
Cortico-steroids	These medications are acceptable.		
Psoriasis		Systemic Etretnate  Acitretin	Systemic etretinate for psoriasis may cause serious drying of the skin and mucosa and particularly of the conjunctival tissues, intensified by flying conditions. It is not recommended for aircrew.
Acne		Tretinoin Isotretinoin Cyproterone acetate Minocycline	
Melanin inhibitors and stimulants		These medications are unacceptable	
Emollients and Protectives	These medications are acceptable		
Others		Imiquimod Minoxidil	
<b>OPHTHALMICS</b>			
<b>Aviation activities only to commence once all visual normality is regained</b>			
Anti-infective and antiviral	Chloramphenicol Ciprofloxacin Ofloxacin Oxytetracycline Fusidic Acid Moxyfloxacin Acyclovir		Anti-infective and anti-inflammatory eye preparations are usually not compatible with flying status due to the underlying condition. The SACAA should be consulted if there is any doubt
Corticoids	These medications are acceptable		
Combinations		All treatment containing Aminoglycosides are unacceptable	
Decongestants		These medications are unacceptable.	
Mydriatics		These agents are unacceptable	
Others		Injectables Verteporfin	
<b>Urinary System</b>			
Anti-diuretics		This medication is not compatible with flying	
Urinary alkalinizes		The chronic use of this medication is not compatible with flying	
Urinary antiseptics	Tamsulosin	Pipemidic acid Nalidixic acid Lanthanum Flavoxate	

Others	Tamsulosin	Lanthanum Flavoxate	
<b>Genital System</b>			
Contraceptives	These medications are acceptable		
Vaginal Preparations	These medications are acceptable		
Oxytocics		These agents are unacceptable	
Uterine antispasmodics		These agents are unacceptable	
Sexual dysfunction			Temporary colour vision disturbance have been reported after the use of phosphodiesterase-type-5 inhibitors (e.g. vardenafil, sildenafil). 72 hours should elapse after use prior to flying.

<b>Anti-Microbials</b>			
Anti-Microbials	Beta-lactams, Erythromycin(short course) Azithromycin (short course) Other Macrolides, Chloramphenicols Sulphonamides and combinations Quinolones Clindamycin(short course) Na-Fusidate Fosfomycin Doxycycline	Telithromycin Roxithromycin  Aminoglycosides	All antibiotics should be used for 48 hours without any side effects before commencing aviation activities. Injectables are not acceptable.
Anti-viral agents	Acyclovir		Anti-Retroviral to be considered on a case-by-case basis
<b>Anti-fungal agents</b>			
Anti-fungal agents	Fluconazole Itraconazole Nystatin Terbinafine Griseofulvin Ketoconazole		
<b>Anti-protozoa agents</b>			
Anti-protozoa agents	Metronidazole Atovaquone Chloroquine	Pirimethamine Tinidazole Halofantrine Mefloquine	
<b>Anti-retroviral agents</b>			

Nucleoside Reverse Transcriptase Inhibitors (NRTI's)	Zizovudine Retrovir Lamivudine Didanosine Abacavir Emtricitabine Tenofovir	Efavirenz	Initially-monthly FBC for 6 months
Non-Nucleoside Reverse Transcriptase Inhibitors	Nevirapine		Initially-ALT & AST - 2 weeks, 6 weeks
Protease Inhibitors (PI)	Atazanavir Lopinavir/Ritonavir Saquinavir Nelfinavir	Indinavir	
Others	Raltegravir Darunavir Etravirine Maraviroc Amprenvir	Tipranavir	
	Fosamprenavir		
Fusion Inhibitors	Fuzeon		

Endocrine System					
Anti-diabetic agents	Oral Metformin Thiazolidenediones Pioglitazone Rosiglitazone  Acarbose:	Insulin Glargine Detemir  Glulisine Lispro	Oral Glipizide Tolbutamide Gliclazide Glibenclamide Glimepiride Chlorpropamide Repaglinide Nateglinide Galvus Janumet Victoza	Insulin Neutral protamine Hagedorn Premix  analogues (biphasic)	Refer to Diabetic Protocol
Thyroid	Thyroxine Carbimazole				Refer to Protocol
Parathyroid	Corticosteroids, only low dose Prednisone is acceptable		Calcitonin,		Refer to Protocol
Hormones					
Androgens and  Anabolic steroids	Testosterone Mesterolone Oestrogens Progestogens Tibolone	Metenolone  Nandrolone			

Tropic Hormones	Clomiphene	Injectables and implants	
Hormone Inhibitors	Tamoxifen Anastrozole		Case-by-case basis and 3 months stabilisation period required.
<b>Vitamins, Tonics, Minerals and Electrolytes</b>			
Vitamins	These agents are acceptable.		In general, pilots, cabin crew, and ATC shall not exceed the Recommended Daily Allowances for these products.
Tonics		Alcohol based combinations unacceptable	
Minerals and electrolytes	These agents are acceptable		In general, pilots, cabin crew, and ATC should not exceed the Recommended Daily Allowances for these products
Amino-Acids	These agents are acceptable		In general, pilots, cabin crew, and ATCs should not exceed the Recommended Daily Allowances for these products
<b>Cytostatics</b>			
Immunological Immunosuppressant's Immunostimulants			
<b>Chelating agents, Ion exchange Preparations</b>			
Chelating agents, Ion exchange Preparations		These agents are unacceptable	
<b>Biological</b>			
Biological	Immunisation regimens are acceptable		No aviation-related duties for 24 hours after receiving the following vaccinations (primary and boosters): Adult diphtheria and tetanus Poliomyelitis Hepatitis A & B Measles, mumps, rubella Yellow fever Typhoid Tuberculosis (Mantoux Test or Bacille Calmette-Guerin); Influenza Varicella Meningococcal Pneumococcal Cholera. After receiving the following immunisations (primary and boosters) there should be no aviation-related duties for a

			minimum of 72 hours: Japanese Encephalitis.
Biologics		Revellex Humira	
<b>Enzymes</b>			
Enzymes		These agents are unacceptable	
<b>Poison Antidotes</b>			
Poison Antidotes		Bupropion is unacceptable	
<b>Others</b>			
Others	Nicotine adjuvants are acceptable	Bupropion is unacceptable	
Biological	Immunisation regimens are acceptable		<p>No aviation-related duties for 24 hours after receiving the following vaccinations (primary and boosters):</p> <ul style="list-style-type: none"> <li>Adult diphtheria and tetanus</li> <li>Poliomyelitis</li> <li>Hepatitis A &amp; B</li> <li>Measles, mumps, rubella</li> <li>Yellow fever</li> <li>Typhoid</li> <li>Tuberculosis (Mantoux Test or Bacille Calmette-Guerin);</li> <li>Influenza</li> <li>Varicella</li> <li>Meningococcal</li> <li>Pneumococcal</li> <li>Cholera.</li> </ul> <p>After receiving the following immunisations (primary and boosters) there should be no aviation-related duties for a minimum of 72 hours: Japanese Encephalitis.</p>

[Table substituted by SA-CATS 1/2017 w.e.f. 1 June 2017.]