This instruction implements AFPD 48-1, Aerospace Medicine Enterprise, and provides further information and guidance. It implements and expands upon the Airsickness Management Program (AMP) and Aircrew Rotational Training (ART) described in AFI 11-403, Aerospace Physiological Training Program, AETCI 48-102, Medical Management of Undergraduate Flying Training Students, AETCI 36-2605V1, Formal Flying Training Administration and Management, and AETCI 26-2605V4, Formal Flying Training Administration and Management - T1A, T6A, and T38C. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at https://www.my.af.mil/afrims/afrims/afrims/rims.cfm.

**SUMMARY OF CHANGES**

This revision substantially reorganizes the previous version of this instruction and must be reviewed in its entirety. The OPR for this document is transferred to the 47 MDG/SGP. This document synchronizes more closely with HHQ guidance and clarifies the roles/responsibilities of applicable agencies and their specific interaction with student pilots who experience airsickness episodes.
1. INTRODUCTION. IAW AETCI 48-102, Medical Management of Undergraduate Flying Training Students, the purpose of the Airsickness Management Program (AMP) is to prevent and treat airsickness through a structured protocol that includes education, training and, if necessary, pharmacological and physiological intervention.

1.1.1. Airsickness, to a great extent, can be managed by the affected individuals; however, if AMP is to be successful, close coordination is required between the Operations Group (OG) by way of the assigned flying squadron supervision, the Flight Medicine Clinic (FMC) and associated Flight Surgeons (FS), Mental Health (MH), and the Aerospace and Operational Physiology Training Flight (AOPTF).

2. DEFINITIONS.

2.2. Airsickness. IAW AETCI 48-102, paragraph 15, “Airsickness is an active (vomiting) or significant passive (disabling or disruptive nausea) maladaptive coping response to specific environmental conditions that can differ from individual to individual. In most cases, airsickness is brief in duration and is related to multi-axial accelerations, pulling positive or negative Gs’, and unfamiliar factors (looking for new landmarks, new flight patterns, new flight profiles, etc.).”

2.3. Airsickness Management Program (AMP). IAW AETCI 48-102. The overall program guides flying squadron supervision, FSs, MH, and AOPTF in the management of student pilot (SP) airsickness when episodes occur during formal training.

2.3.1. AMP includes several phases starting with academics and progressing through consecutive episodes of airsickness experienced by an SP.

2.3.2. A subset of AMP, incorporated into the AMP phases as determined by an FS and MH is Aircrew Rotational Training (ART).

2.4. Aircrew Rotational Training (ART). IAW AFI 11-403. Also referred to as airsickness desensitization or adaption training. ART, by way of the Barany Chair, is generally the last, not the first, step of the AMP protocol.

2.4.1. ART consists of two components:

2.4.1.1. Initial adaptation training (3-day protocol)

2.4.1.2. Refresher spin training.

2.4.2. The Barany Chair provides a ground-based stimulus that allows for a controlled environment in which the SP can practice the techniques taught by FSs and MH.

3. RESPONSIBILITIES.

3.2. Flight Surgeons (FS). Reference AETCI 48-102 for further guidance on FS responsibilities and options regarding airsickness treatment. Diagnose and treat all airsickness cases. Medically evaluate SPs experiencing airsickness, conduct initial and follow-up airsickness awareness briefings, and provide preventative airsickness training.

3.2.1. As an SP progresses through AMP, FSs may authorize variations in the overall AMP flow to include the Aircrew Rotational Training (ART) protocol (see paragraph 5.) based on the unique needs of the SP. FSs who determine that ART is appropriate, will reference SPs to Mental Health (MH) prior to the SP beginning the ART protocol.
3.2.2. IAW AFI 36-2605V1, Formal Flying Training Administration and Management, as requested by an SP’s flying flight commander (Flt/CC) or squadron commander (SQ/CC), be prepared to initiate evaluation of an SP for Manifestation of Apprehension (MOA) to include subsequent referral to MH.

3.3. **Mental Health (MH)**. Provide psychoeducation and skills training in SUPT Phase 1 (academic phase) as part of AMP Phase 0 (see paragraph 4.2.2.).

3.3.1. When SPs are referred to MH by an FS during AMP, offer applicable SPs one-on-one or small group training sessions involving stress management, sleep conditioning and cognitive skills enhancement, as appropriate for the needs of the SP.

3.3.2. As referred by an FS, evaluate SPs for the underlying mental health conditions and/or fears/phobias that contribute to MOA (reference MOA guidance in AFI 36-2605V1).

3.3.3. SPs referred by an FS for ART, either for initial adaptation training (3-day protocol) and/or refresher spin training, must also be approved by MH prior to beginning the ART protocol.

3.4. **Aerospace and Operational Physiology Training Flight (AOPTF)**. Upon referral from an FS and MH, execute the ART protocol. As much as practical within the ART protocol, reinforce the airsickness preventative education provided by FSs and help the student implement the relaxation and breathing techniques taught by MH. Be prepared to tailor ART to the individual SP. Be available to provide ART within normal clinic hours (0700 – 1600).

3.5. **SP’s Flying Squadron Flt/CC**. Manage assigned SPs active and passive airsickness IAW AFI 36-2605V4, Formal Flying Training Administration and Management – T1A, T6A, and T38C. Maintain active communication with FSs and AOPTF on SP progress through AMP. Give AMP participation priority, so as not to simply “add on” AMP training after all of the SPs other daily tasks are completed. As desired, applicable Flt/CCs and/or the SP’s assigned IP(s) are encouraged to participate in the SP’s adaption training. Participation with applicable SPs may help assigned Flt/CCs and/or IPs gain a deeper appreciation for the specific high stress events in each flight that may contribute to the SP’s airsickness.

3.6. **SPs Enrolled in AMP**: Attend all scheduled training sessions regardless of whether further airsickness episodes occur.

3.6.1. Work with the assigned flying squadron Flt/CC to scheduled adaption training Monday - Wednesday to avoid gaps in training and/or the need for weekend training.

3.6.2. If referred by an FS and MH to attend ART, make every attempt to contact the applicable AOPTF instructor from 0700 - 1600 to ensure instructor availability and coordinate a training time. After-hours training may be requested, but must be coordinated as far in advance as possible directly with AOPTF.

3.6.3. To maximize opportunity for AMP success, make every effort to practice and implement the tips and techniques from FSs, MH, and AOPTF.

4.1. **AMP PROCEDURES**
4.2. **Preemptive Airsickness Management Program**. Those individuals who were identified during Initial Flight Training (IFT) as high risk candidates for airsickness during SUPT (or who self-identify as being prone to airsickness) have the option to be entered into a Preemptive Airsickness Program prior to Phase II of SUPT. This action requires FS direction. Students will then schedule with Aerospace Physiology and will be entered into a standard three-day Adaptation Training program.

4.3. **AMP Scheduling**. IAW AETCI 36-2605V4, AMP does not interrupt flight line training, but is integrated into training by the flying squadron Flt/CC. Once an SP moves into Phase I or greater of AMP, the SP’s flying squadron Flt/CC will make every effort to schedule the SP in the first period of flying to allow for an FS and potential MH visit after flying in the event of a follow-on airsickness episode.

4.4. **AMP Phases**. The phases of AMP are IAW AETCI 48-102 with the following highlights. Reference also AETCI 36-2605V4, Chapter 5, for information on administrative management of students going through AMP.

4.4.1.1. **Pharmacological Intervention**. At any phase of AMP, if pharmacological intervention is used, ensure adherence to AETCI 48-102, paragraph 15, and AETCI 36-2605V4 regarding medication time and sortie restrictions/limitations. Applicable SPs and/or any of the SP’s supervision can contact the FMC, or the on-call FS if after-duty hours, with any medication administration questions.

4.4.1.2. IAW AETCI 48-102, Pharmacological therapy is given 1-2 hours prior to flight for three consecutive flights.

4.4.1.3. If any of the SP’s flights will take off three or more hours after medication is taken, or if the three consecutive flights are interrupted for any reason (e.g., SP forgot to take the medication, but flew anyway) the SP shall contact the FMC to speak with an FS for further instructions.

4.4.1.4. The SP’s flying squadron supervision shall make every effort to maximize IP continuity as well as providing the SP the opportunity for three straight days of flying (e.g., to the maximum extent possible, not scheduling the SP just prior to a weekend or extended break).

4.4.2. **AMP Phase 0**. - Academics (reference AETCI 48-102, paragraph 15.2.1.). Conducted during SUPT Phase 1 (academic phase). APOTF will provide required briefings as encompassed in AETC Instructor Guide P-V4A-A-JP-IG, Aerospace Physiology by Aerospace and Operational Physiology on the prevention of airsickness. MH will be prepared to provide support and hands-on relaxation and breathing technique training during the briefing time periods.

4.4.3. **AMP Phase I - First Episode of Airsickness** (reference AETCI 48-102, paragraph 15.2.2.). IAW AETCI 36-3605V4, paragraph 5.2.1.1., SPs experiencing airsickness (active or passive) will be sent to be reviewed by an FS, “as soon as practical but before the next aircraft or sortie.” Document all interactions and results on AETC Form 4293 in the SP’s TIMS gradebook.

4.4.4. **AMP Phase II - Second Episode of Airsickness** (reference AETCI 48-102, paragraph 15.2.3.). In addition to the requirement for evaluation by an FS, FSs should
interview SPs for MOA (reference AETCI 36-2605V1, paragraph 3.3.2. and AETCI 48-102, paragraph 21.). Refer SPs to MH for further evaluations of the underlying conditions that contribute to MOA as well as relaxation training. MH will focus on the following areas: breathing techniques, muscle tensing exercise, autogenic and imagery skills, proper diet, thought management and behavioral sleep techniques.

4.4.5. **AMP Phase III - Third and Greater Episodes of Airsickness** (reference AETCI 48-102, paragraph 15.2.4.). If not already accomplished, and unless there are compelling reasons not to, FSs will consider pharmacological intervention. Also, it is usually at this phase that SPs are referred by the FS and MH to AOPTF for airsickness desensitization or Aircrew Rotational Training (ART), i.e. the Barany Chair.

5.1. **AIRCREW ROTATIONAL TRAINING (ART).**

5.2. **Overview**. Reference AFI 11-403, Aerospace Physiological Training Program, Attachment 5, for a complete description of ART to include objectives/goals, personnel requirements/responsibilities, and training protocol.

5.3. **Preemptive ART Entry**. At FS direction those individuals who were identified during Initial Flight Training (IFT) as high risk candidates for airsickness, or who self-identify as being prone to airsickness, have the option to be entered into ART after AMP Phase 0 (academics), but prior to SUPT Phase II (T-6 flight training). Designated SPs will be entered into initial adaptation training (3-day protocol) with documentation via AETC Form 4293 in TIMS.

5.4. **ART Scheduling**. For SPs to have the best opportunity to gain maximum benefit from ART, flying squadron supervisors will make every effort to schedule three consecutive days of flying and spinning (i.e. start on Monday with flying in the morning and spinning in the afternoon, continuing through Wednesday). Reference AFI 11-403 for guidance on handling single or multi-day breaks during ART.

5.4.1. Once an SP is enrolled in ART (3-day protocol), flying squadron Flt/CCs will continue to make every effort to schedule the SP for flying in the first period of the day in order to provide maximum opportunity for the student to fulfill the 3-day adaptation training protocol successfully.

5.4.1.1. Make every effort to facilitate the SP’s participation in adaptation training from 0700 - 1600 to maximize the SP’s ability to get proper sleep and recovery after each ART session.

5.4.1.2. In the event that the student is unable to fly during the first period, the SP’s flight scheduler, to the maximum extent possible, will coordinate with AOPTF as early as practical from 0700 - 1600 to ensure ART instructor availability.

5.4.2. IAW AFI 11-403, ART trainees are not allowed to fly after spinning until having had the opportunity for at least 12 hours crew rest. This does not prohibit ART trainees from attending academics or doing simulator training immediately following ART sessions; however, to the maximum extent possible Flt/CCs will quality control the SP’s scheduled to allow for at least a one-hour recovery period for re-hydration and breathing/relaxation technique practice.

5.5. **SP Illness.**
5.5.1. Duties Not Including Flying (DNIF). If an SP is put on DNIF status during AMP and subsequently referred to AOPTF for ART, AOPTF will neither start nor continue the ART protocol until the SP has been Returned to Flying Status (RTFS).

5.5.1.1. SPs must be off all medications for 24 hours prior to participating in ART, to include any airsickness medications.

5.5.1.2. If the SP has already started ART (3-day protocol) and gets put on DNIF status, the protocol must be restarted as soon as the SP is RTFS.

5.5.1.3. If an SP is undergoing Refresher Spin Training and gets put on DNIF status, AOPTF will not spin the student until cleared by an FS.

5.5.2. Non-DNIF Illness. Any SP who experiences an airsickness episode (active or passive), but has not fully recovered prior to attending the next syllabus sortie or next day of ART is encouraged to present to Sick Call for FS evaluation.

5.6. Refresher Spin Training. Reference also AFI 11-403, paragraph A5.3.6.4.

5.6.1. SPs cannot self-refer for refresher spin training nor can the SP’s flying squadron Flt/CC direct an SP to get refresher spin training without the SP first seeing an FS and MH.

5.6.2. Prior to AOPTF conducting any refresher spin training, it must be verified that the SP has first seen an FS and MH and received the necessary referral. If an FS and MH assess that refresher spin training is warranted, the SP is responsible for scheduling the training directly with AOPTF.

5.6.3. Documentation of all refresher spin training is on AETC Form 4293 via TIMS.

CHARLES M. VELINO, Colonel, USAF
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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References
AFI 33-360, Publications and Forms Management, 01 December 2015
AFI 11-403, Aerospace Physiological Training Program, 30 November 2012 (incorporating Change 1, 25 March 2015)
AETCI 48-102, Medical Management of Undergraduate Flying Training Students, 5 November 2013
AETCI 36-2605V1, Formal Flying Training Administration and Management, 16 February 2016
AETCI 36-2605V4, Formal Flying Training Administration and Management - T1A, T6A, and T38C, 23 August 2016
AETC Syllabus P-V4A-J, T-6A Primary Pilot Training, October 2016

Adopted Forms
AF Form 847, Recommendation for Change of Publication
AETC Form 4293, Student Activity Record

Abbreviations and Acronyms
AMP — Airsickness Management Program
AOPTF — Aerospace and Operational Physiology Training Flight
ART — Aircrew Rotational Training
DNIF — Duty Not Including Flying
FS — Flight Surgeon
FMC — Flight Medicine Clinic
HHQ — Higher Headquarters
IFT — Initial Flight Training
IP — Instructor Pilot
MOA — Manifestation of Apprehension
MH — Mental Health
MIF — Maneuver Item File
SUPT — Specialized Undergraduate Pilot Training
RTFS — Return to Flying Status
SP — Student Pilot
TIMS— Training Integration Management System