

**About the Commentary:** The Commentary addresses selected issues within the Code of Conduct to elaborate on their meaning, provide interpretive guidance, and suggest ways of adopting the Code of Conduct. It is intended primarily for implementers, policy administrators, aviation association management, and pilots who wish to explore the Code in greater depth, and will be updated from time to time. Please send your edits, errata, and comments to <[PEB@secureav.com](mailto:PEB@secureav.com)>. Terms of Use are available at <<http://secureav.com/terms.pdf>>.

## COMMENTARY TO AMCC II.b - PASSENGERS AND PEOPLE ON THE SURFACE

### **b. Manage and Avoid Unnecessary Risks to Passengers and to People and Property on the Surface and in Other Aircraft.**

A pilot's primary safety responsibilities are to protect the lives of passengers, people on the surface,<sup>1</sup> and persons in other aircraft<sup>2</sup> and to prevent damage to property on the surface and to the aircraft.<sup>3</sup> Some urge that people on the surface should be protected first, since they have neither agreed to participate in a flight nor assumed any corresponding risks.<sup>4</sup> Also, pilots should avoid populated areas during higher-risk operations.<sup>5</sup> "Pilots in particular have an ethical or moral responsibility that expands somewhat when one is carrying passengers, operating over populated areas, etc. It's a great value to be able to risk your own neck, but quite different if you risk someone else's."<sup>6</sup>

Pilots should not undertake maneuvers that are likely to frighten or discomfort passengers, except when required to maintain flight safety. Certain actions that pilots might otherwise take may be inappropriate when passengers are aboard (such as intentional stalls and unusual attitudes), as passengers may neither understand the attendant risks nor be capable of knowingly (and knowledgeably) consenting to them. Thus, to avoid unnecessary risks, pilots carrying passengers should not "show off" or "flathat,"<sup>7</sup> and should exercise great discretion if inducing stalls, entering unusual attitudes, doing aerobatics<sup>8</sup> or formation flying.<sup>9</sup> Planes manufactured before shoulder harnesses were required should be duly retrofitted to enhance passenger safety. Pilots also should consider the cumulative effect of discrete risks on passengers and others.<sup>10</sup>

#### **DRAFTING CONSIDERATIONS:**

- ✓ *Material Risks:* Some reviewers maintained that it is infeasible, unnecessary and unfair to expect pilots to prevent *all* risks to passengers, including all miniscule, improbable and theoretical risks. Therefore, it was argued that "risks" required some qualification, such as limiting applicable risks to *material* or *unusual* risks. Other reviewers urged that qualifying the type of risks that a pilot should prevent might endanger passengers, irresponsibly constrain the scope of risks to which a pilot had a duty to protect passengers, and create an intractable debate about what constitutes materiality.

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<sup>1</sup> Certain national and international rules have adopted the term “*third parties* on the surface” such as the Convention on Damage Caused by Foreign Aircraft to Damage to Third Parties on the Surface (Rome Convention 1952), available at < <http://www.iasl.mcgill.ca/airlaw/private/other/rome1952.pdf> > (emphasis added). Notwithstanding, the term “third parties” was frequently noted as confusing to AMCC reviewers and therefore not adopted in favor of “people.” Also, the FARs adopt “people” rather than “parties.” FAR 91.137(a)(1), available at < <http://www.risingup.com/fars/info/part91-137-FAR.shtml> > (TFRs to protect “persons and property on the surface”).

Perhaps the extreme (unusual) case of the breach of a pilot’s duty to protect persons on the surface occurred when President Reagan’s E-4B aircraft allegedly closed thousands of garage doors near San Bernadino, Cal. due to its “volume of broad spectrum electronic transmissions.” TOM FORESTER & PERRY MORRISON, *COMPUTER ETHICS* 73 (MIT Press 1990). How many children and others were in harms’ way near these remotely controlled garage doors?

See The General Aviation Revitalization Act of 1994 (GARA), 49 U.S.C. § 40101 note (liability of aircraft manufacturers not limited with regard to parties on the surface); *Lawson v. Management Activities, Inc.*, 81 Cal. Rptr. 2d 745, 758-68 (Cal. App. 1999) (aircraft owner’s duty did not extend to spectators of an airplane crash who claimed emotional injuries for having viewed the crash).

<sup>2</sup> Some focus group participants reviewing the draft AMCC urged the following prioritization of pilot responsibilities: (1) to preserve life and assist persons in distress: *first to persons on the surface*; then to passengers, and finally to crew; then (2) preserve property on the ground, and equipment in the air; then (3) minimize losses for the benefit of one’s insurance company and ultimately for the benefit of all pilots. Focus Group of CFIs, West Valley Flying Club, in Palo Alto, Cal. (Jan. 8, 2003).

It has been urged that in the event of an emergency, a PIC will remain at the controls of his aircraft (so as to provide a stable platform) until such time as he can reasonably be assured that no harm will come to any persons who might be in the path of falling debris or wreckage, and all passengers and crew have successfully evacuated. In the event of a passenger medical emergency, a PIC will seek to coordinate with ATC and safely deviate from the planned route in such a manner that the patient may obtain expeditious medical assistance without endangering the other passengers. Should a PIC become involved in a search and rescue (SAR) operation, he must not place himself or his passengers at undue risk.

<sup>3</sup> “If physical harm to land or to persons or chattels on the ground is caused by the ascent, descent or flight of aircraft, or by the dropping or falling of an object from the aircraft, (a) the operator of the aircraft is subject to liability for the harm, even though he has exercised the utmost care to prevent it, and (b) the owner of the aircraft is subject to similar liability if he has authorized or permitted the operation.” RESTATEMENT (SECOND) OF TORTS § 520A (1977).

<sup>4</sup> “In most pilots’ minds, the unwritten code is that it’s ok to kill yourself; it is less ok to kill your family and less ok to kill passengers; and less ok to kill someone on the ground.” Interview with Drew Steketee, Pres./CEO, The BE A PILOT Program, in Phila., Pa. (Nov. 1, 2003).

<sup>5</sup> See FAA, AC 431.35-1, *Expected Casualty Calculations For Commercial Space Launch And Reentry Missions* (Aug. 30, 2000), available at < <http://ast.faa.gov/files/pdf/Ac4311fn.pdf> > (presenting an “acceptable methodology for estimating the value, or upper limit of the value, of Expected Casualty Ec for commercial space launch and reentry missions” that provides insight into corresponding aircraft risks to persons on the surface).

<sup>6</sup> Interview with Gary W. Allen, Esq., Dir., Aviation & Admiralty Litigation, Torts Branch, U.S. Dept. of Justice, Lawyer-Pilots Bar Ass’n Winter Meeting, in Tucson, Ariz. (Jan. 16, 2004). For consideration of corresponding pilot legal obligations to people and property on the surface, see *Crosby v. Cox Aircraft Co.*, 746 P.2d 1198 (Wash. 1987), available at < <http://www.mrsc.org/mc/courts/supreme/109wn2d/109wn2d0581.htm> > (holding that the standard of liability governing ground damage caused by owners and operators of flying aircraft is simple negligence).

<sup>7</sup> Flying close to the ground and at a high or dangerous speed.

<sup>8</sup> See FAA, AC 91-48 *Acrobatics – Precision Flying with a Purpose* (June 27, 1977), available at < <http://www.faa.gov/fsdo/orl/files/advcir/AC91-48.DOC> >. Aerobatics are (possibly extremely) strenuous and may exacerbate medical conditions both known or unknown.

See also FAA, AC 91-61 *A Hazard in Aerobatics: Effects of G-Forces on Pilots* (Feb. 28, 1984) (considering G-induced loss-of-consciousness), available at < <http://www.faa.gov/fsdo/orl/files/advcir/AC91-61.TXT> >. “Despite almost 100 years of flying and studying the effects of flying on human beings, we know precious little about the effects of g forces on people. We know a little bit about the effects of positive g exposure [and] something about the effects of zero g . . . . We know almost nothing about negative g exposure, and transitions between the two are completely off the map.” Scott Poehlmann, M.D., *G Tolerance Inside and Out: Part 1*, SPORT AEROBATICS, Mar. 2002, at 11.

<sup>9</sup> Operating two or more aircraft in close proximity increases risk. Proper training will lessen these risks, however, the incremental risk cannot be eliminated. See FAR 91.111(c) *Operating near other aircraft*, available at < <http://risingup.com/fars/info/part91-111-FAR.shtml> >. Formation flying is not defined explicitly in the FAR — pilot discretion is therefore required.

Separately, some aviation veterans urge that maneuvers such as practice touch and go’s are inappropriate when passengers are aboard; others urge that GA pilots should minimize take-offs and landings (including touch and go operations) with passengers aboard because such flight operations are the most risky of all phases of flight.

<sup>10</sup> See, e.g., *Voohries-Larson v. Cessna*, 241 F.3d 707 (9th Cir. 2001), available at < <http://laws.findlaw.com/9th/9915916.html> > (“The combination of the consumption of alcohol, fatigue, the disregard of FAA regulations and the apparent insistence that the women join them despite the risks involved, support the conclusion that at least one of the decedents acted with reckless indifference towards the safety of others.”) (emphasis added).

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