

Helicopter Operational Considerations

Feedback from helicopter operators

Operational Consideration	Policy Advice Summary			Safety Committee Recommendation
	Civilian Turbine Operator	Civilian Piston Operator	Military Turbine Operator	
Should we allow both piston and turbine powered helicopters or just turbine?	I think either are fine assuming they are airworthy and capable of carrying whatever load is required. My perception is that most incidents are a function of pilot error or component failure other than engine failure.	As the owner of a piston helicopter (Bell 47G-2), I will say that a piston engine is pretty reliable if properly maintained. We have never had an in-flight problem or even a hint of one with ours in over 1,100 hours of operation. Do you trust a single-engine piston fixed-wing to keep flying? If so, I can see no reason not to place similar trust in a well-maintained piston helicopter engine.	I don't think this should be a show stopper if someone is trying to fly a piston helicopter. Robinsons are very good aircraft and they have their own rules they have to follow in the FAR/AIM. There are many more available because they are more cost efficient which would be beneficial to Angel Flight.	Allow both piston and turbine.
Would practical considerations require us to allow only helicopters with more than two seats?	I think the specific mission might require more than two however if it is transporting a load of one person or other cargo (blood?) I don't see any reason to limit.	If the patient would need any attention from the pilot aside from verbal, then yes you would want someone else on board to provide that, and therefore would require more than two seats.	That would be more preferable because you might have a nurse onboard or a family member. I would think the pilot would want to focus on flying and not have to worry about a medical situation happening next to them in the helicopter while he/she flies.	Allow only helicopters with four or more seats.
Our requirement to act as PIC on an Angel Flight mission is 250 hours of PIC time. Should it be the same or more for helicopters?	That is probably a reasonable limit for helicopters too.	250 hours for basic ops to airports only. 500 for other operations.	250 sounds like a good amount of time to be proficient in a helicopter. Limiting these pilots to airports would be responsible maybe until they had experience landing at a hospital pad and had 500 (maybe 1000) hours of flight time.	250 hours min PIC time.
We allow both VFR and IFR flight (by qualified and current pilots) in fixed wing aircraft. Would there be any reason to restrict or prohibit IFR helicopter flights?	I don't see any reason to restrict however there are relatively few IFR equipped helicopters so most flights would be VFR.	Two qualified pilots for IFR flight.	Suggest you follow similar guidelines as the CG. Two qualified pilots for IFR flight.	Allow both VFR and IFR (for properly equipped aircraft and properly certified and current pilots). Note our strong encouragement of two pilot operations (as with fixed wing aircraft).

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Helicopters can theoretically land on hospital helipads. Aside from the likely hospital restrictions on such landings, should we prohibit them for safety reasons (given the presumably higher precision required in such landings)?	Helicopters have to be flown precisely, if someone can't land within a few inches of the intended touchdown point it would be due to the incompetence of the pilot. That person probably would not have gotten their rotorcraft license or even be signed off for a check ride.	I would qualify this as a commercial-pilot-only operation. You might allow it for private pilots if they had, say, military training in this kind of op, or have 1,000+ hours and log book proof of similar operations. This is inherently much higher risk, and should only be allowed for pilots that have appropriate training and experience.	I would be very cautious with this because of the inherent risk of landing on a building. There are pads that are on the ground that would be better options. Suggest you limit to airport to airport operations. Note that off airport (or off heliport) operations are very difficult in urban, suburban, and even rural areas. There are many safety issues (primarily obstructions) as well as regulatory and prior permission hurdles.	Allow only airport to airport operations at this time. Potentially reevaluate in the future. Although this reduces the inherent utility of this category of aircraft, it really seems like the prudent thing to do from a safety standpoint.
Should we have a special disclosure process for informing passengers when a helicopter would be used for their flight?	Absolutely, I would think you would disclose the aircraft type to all recipients	Yes. Some patients probably would not fly in a helicopter if they knew that was their mode of transport.	Yes. Many people are scared of helicopters because every movie shows one crashing.	Revise our disclosure process as necessary to be sure people understand they will be flying on a helicopter. They should be given the option to opt out.
Helicopters are fundamentally more complex to operate than fixed wing aircraft. Having passengers on board that may require attention during the flight may inject further challenges into an already task-saturated environment. With this in mind, should we require a second qualified pilot on board? Or at least a second licensed pilot to handle comms and pax issues?	I would only think this a problem if you had a passenger who requires assistance or attention during the flight then it would be prudent to have a second crew. As for being more complex to fly I would offer that isn't necessarily so, the machinery is more complex, costs more to maintain however the concentration when landing is probably no more so than landing fixed wing however a helicopter almost never has to make a cross wind landing!	Anything other than limited verbal attention needed by the pax would necessitate a second person who could put the patient first. I think that for day VFR, airport-to-airport operations, one pilot is sufficient as long as the patient either doesn't need more than scant attention.	I think this is a good idea. It might limit you on the distance that a helicopter can travel because you are now transporting three people, at a minimum. I think this should be included in your ORM (Operational Risk Management) process.	This one probably could use more discussion. It isn't totally clear if this is more of an issue in helicopters than in fixed wing aircraft. Requiring a pilot qualified in category and class would severely restrict the usability of helicopters. However, requiring either a mission assistant or a companion might be worth considering.

Policy Recommendation:

Allow helicopters to fly missions for Angel Flight West with the following provisions:

- Allow both turbine and piston helicopters.
- All provisions and requirements that apply to fixed wing aircraft and pilots will also apply to helicopters, including 250 hour PIC requirement.
- Only helicopters with four or more seats may be used.
- Provide disclosure to passengers regarding helicopter use.
- Off airport takeoffs and landings with Angel Flight passengers on board are not authorized.
 - Helicopters may only operate at public use airports or public use heliports when transporting passengers.