Interagency Aviation Lessons Learned

Subject: Flight Safety

Area of Concern: Run-On Landing Due to Downwind Approach and Distraction

Distribution: All Aviation Operations

Discussion: This lessons-learned review examines a recent event involving an unintended downwind landing, highlighting the operational factors, environmental cues, and cockpit crew coordination. Particular attention is given to how situational awareness and cockpit judgment influenced decision-making during a rapidly evolving landing sequence.

Event Summary

A helicopter pilot conducting a first-time landing at a municipal airport unintentionally approached downwind while flying parallel to Runway 12. The tower cleared the type II helicopter to land and provided the wind, 250° at 12 knots, gusting to 26 knots. While trying to visually identify the FBO ramp, the pilot became distracted, reducing awareness of wind direction and airport layout. As the aircraft slowed and attempted to hover, the tailwind degraded lift and rapidly reduced power margins. The pilot recognized the impending loss of power and transitioned to a run-on landing to maintain control. No damage or injuries occurred. The approach was later reviewed using cockpit recording video to confirm the pilot's actions.

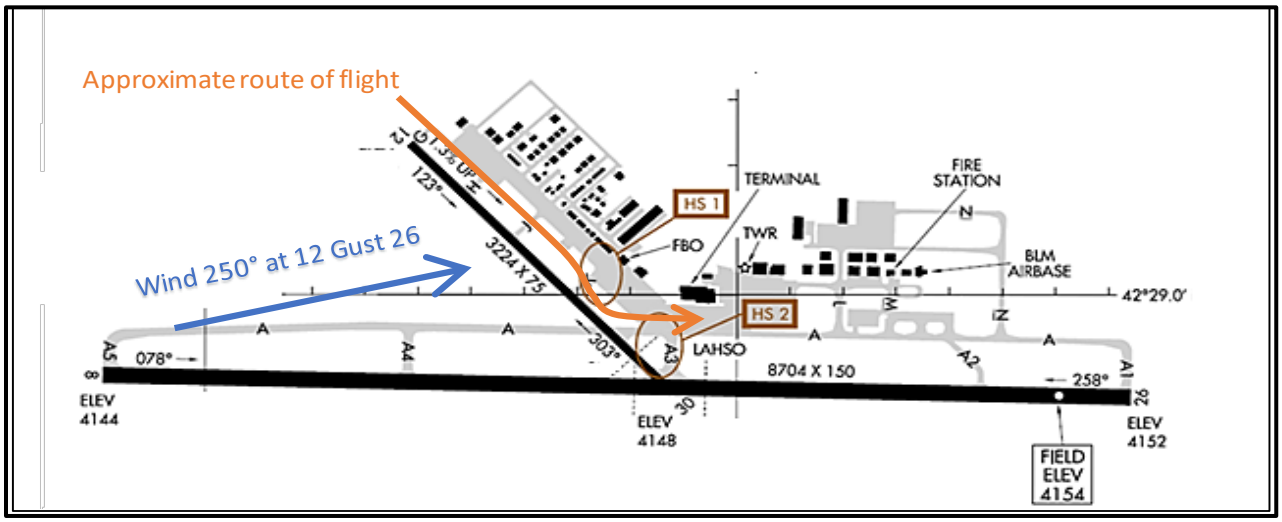

Figure 1. Airport Diagram, Route of Flight, and Wind.

Since they were flying to an airport, rather than to a helispot in the mountains, the approach appeared routine to the helicopter manager who was onboard. Therefore, during the approach, the manager had

shifted focus to postflight actions (i.e., communicating with dispatch) rather than assisting the pilot, which inadvertently reduced the crew's overall situational awareness.

Crewmembers should maintain active participation during approach, landing, and hover operations by confirming wind direction, monitoring aircraft performance, rotor clearance and promptly communicating any concerns.

Key Findings

- Unrecognized downwind approach
- Pilot distraction while searching for FBO location
- Reduced power margins during deceleration
- First-time landing at the airport
- Limited situational awareness of wind indicators and ramp layout

Key Takeaways

- Downwind approaches can sharply reduce hover performance and increase risk.
- Distraction during approach can degrade situational awareness and decision-making.
- Run-on landings are an appropriate mitigation method when power margins deteriorate.
- Cockpit video review is valuable for validating lessons learned and improving future approaches.

Best Practices & Recommendations

- At unfamiliar airports, land safely first—then request progressive taxi instructions.
- Use windsocks, AWOS, ATC, and other cues to verify wind direction before committing to an approach.
- Identify ramps, FBOs, and landing areas early, before entering the final approach.
- Maintain sterile cockpit discipline during approach; avoid nonessential tasks.
- Even when an approach appears routine, all crewmembers should remain fully engaged to support the pilot and help prevent task saturation, distractions, or loss of situational awareness.
- Conduct a high recon or wide pattern entry when unfamiliar with airport layout.
- Because approaching a landing site in an airport environment can be just as challenging as in mountainous terrain, always maintain an "out" and adopt a "set up for a go-around with the option to land" mindset. This ensures a go-around or run-on landing can be safely executed if power margins decrease.

This event reinforces that even routine approaches demand disciplined attention to wind, workload management, and situational awareness, especially at unfamiliar airports. By recognizing early cues, reducing distractions, and applying established best practices, pilots can maintain safe margins and prevent minor challenges from escalating into safety incidents. Continual review, including cockpit video analysis, strengthens pilot proficiency and enhances operational safety across the fleet.

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