

## Chapter 5 Summary

### Points to prevent accidents

#### —Complying with rules and adhering to the basics—

Based on the content of Chapters 3 and 4, the points to prevent accidents have been summarized below. We hope this will be useful as a reference for safe flight operations.

##### ◎ Pilot's operations

- Compliance with manuals and standards that have been established to ensure safety
- Go-around training for appropriate decisions and responses when a bounce occurs and re-confirmation of response methods, etc.
- Correct operations using checklists and confirmation of the aircraft's proper conditions for each phase of flight
- Sufficient understanding of control operation methods, etc., before flying an aircraft that is unfamiliar
- Ensuring of safety margins according, for example, to the surrounding environment, aircraft performance, and pilot experience

##### ◎ Safety management

- Maintenance of sound communication between trainees and instructors
- Clarification of training procedures and the provision of training environment
- Clear explanation to trainees about the purpose and implementation procedures of instructor assistance
- Compliance with prescribed procedures in conducting skill confirmation for solo flights
- Clarification of the division of roles between pilots and among occupants

##### ◎ Weather

- Advance consideration of responses to weather conditions and sharing among crew members
- Active acquisition of weather information and careful decision
- Active performance of a go-around maneuver when the aircraft behaves differently from its expected behavior

##### ◎ Manuals

- Understanding of and compliance with operation manuals and standards

##### ◎ Aircraft

- Compliance with manuals on maintenance and proper performance of maintenance and checks

Accidents and incidents related to ARC often involve less severe aircraft damage and occupant injuries compared with other accidents, and their causes are largely attributable to pilots' skills, and therefore, especially for private aircraft, preventive measures are rarely considered as an organizational issue, and in some cases, the primary accident-prevention measure is considered to be pilots' repeated training to improve their skills. However, since these accidents occur at a low altitude near the runway, there is little room for avoidance in terms of time, and they could lead directly to a serious accident due to a collision with the ground surface if one wrong step is taken, which is extremely dangerous.

As we have seen in this digest, there are many cases that could have been prevented if supervisors and others had properly monitored and assisted in flight training, and if checks and preparations before flights had been carried out without fail in normal operations. Therefore, systematic safety measures and risk management that are not left to individuals are required. On top of this, it is important for individual pilots to improve their skills in a safe and secure manner in an environment where systematic safety management is conducted.

With reference to this digest, we hope that all aircraft operators will recognize once again the importance of implementing basic operating procedures in accordance with the manuals for normal flights, and make efforts to acquire knowledge and experience in safe operations that can flexibly respond to unusual changes in the surrounding environment, such as weather conditions and air traffic conditions, in addition to improving pilots' flying skills.

## References

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The reports related to the ARC accidents covered in this digest can be viewed at the URLs below:

[ARC accidents that occurred during the 10 years from 2014 to 2023](#)

[ARC serious incidents that occurred during the 10 years from 2014 to 2023](#)

In addition, there have been many accidents since then. Recent reports are as follows:

[Recent ARC accidents \(published in 2024\)](#)

### For prevention of aircraft accidents

Other than the Digests, please refer to investigation reports on accidents and serious incidents announced by the JTSB for your case study. Moreover, the Civil Aviation Bureau uploads information on the safety of small aircraft. For more details, please see the following information.

Safety information of small aircraft, Ministry of Land, Infrastructure, Transport and Tourism

[https://www.mlit.go.jp/koku/15\\_bf\\_000061.html](https://www.mlit.go.jp/koku/15_bf_000061.html)

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