

- 8. Spatial disorientation is one of the serious challenge and hazard during poor visibility conditions. Be familiar about it.
- Know the terrain and route safety altitudes well and plan your levels accordingly. Check, recheck and double check.
- 10. Know the obstructions in your area of operations. Pylons, communication/chimney towers, electric/telephone cables, trolley cables particularly in hilly areas pose a major hazard and knowledge of these is important for helicopter pilots.
- 11. Trolley cables (cable cars) come up in hilly areas to cart goods from one hillock to other and vigilance is required to look for the same. Kindly intimate other operators in your areas of operations about the existence of such hazards and mark them on maps.
- 12. Operations in snow bound areas require special skill levels.
- 13. Before take off at high altitudes, ensure that the main, tail rotor blades and other surface areas are free of ice formation. Check the manufacturer's instructions about adding anti-icing additives in the fuel and use proper additive as required.
- 14. Helicopter batteries need to be maintained properly and protected during night from extreme cold temperatures by wrapping in blankets, etc.
- 15. Cracking of various seals can take place and must be checked periodically.
- 16. Check the manufacturer's instructions about adding anti-icing additives in the fuel and use proper additive as required. Low light conditions during winter months may result in minor cracks or other small defects getting overlooked. Ensure adequate lighting for servicing and maintenance work.
- 17. Maintenance staff should be careful while climbing on the helicopter for maintenance work since surface may be slippery due to frost, icing, etc.
- 18. Never take chances with the poor weather conditions and don't be overconfident. Overconfidence has taken the lives of many pilots.

For Suggestion:

Mail to: safety@manangair.com.np

19. There may be occasions when frustration may set in because of the delays and postponement of departure timings/dates and long wait on ground due prolonged bad weather spells. Number of pilots have taken chances with weather under such conditions and have met with serious/fatal accidents. Please be aware of the grave danger under such conditions and take very considered decisions. involvement of CEO's senior supervisors, ops managers etc. in close monitoring of operations can go a long way in ensuring safety of operations.

Although efforts have been made to include as many hazards of winter flying as possible yet the list is not exhaustive. Airlines may like to add other aspects which may be typical to their area of operations.

Airlines should always endeavor to match the man with the machine, mission and weather conditions. Adequate instrument flying practice, simulator flying, currency, recency in area of operations, comprehensive briefing covering the entire spectrum of the various aspects of the operations and monitoring performance are key to the successful conduct of the operations. Respecting the weather and courage of conviction to say no if the safety of the flight is likely to be compromised must be impressed upon the pilots.

Editorial Board

Mr. Raju Neupane
-Safety Manager
Mr. Prakash Adhikari
-SMS & Safety Auditor
Ms. Sabita Pandey
-Jr. IT Officer

If you are in trouble anywhere in the world, an airplane can fly over and drop flowers, but a helicopter can land and save your life

- Igor Sikorsky Aeronautics Engineer, Russia

THANK YOU!!!

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MANANG ATR SAFETY BULLETIN

January 2017 Issue I

Safety Bulletins

- Abstract
- Message From Chairman
- Safety Activities By Manang Air
- Safety Tips
- Maintenance Tips
- Winter Precautions for Helicopter Operation

1. Winter Precautions $\star\star\star\star\star\star\star\star\star$

MESSAGE FROM CHAIRMAN

It is a matter of pride to see Manang air to come with the first issue of "Safety Bulletin" on the special occasion of English new year 2017. A.D. I would like to wish all the readers a wonderful and safe aviation era ahead.

With the gradual development in Safety promotion it is noteworthy that Manang air is by all means of its available resources has been striving hard to achieve the optimum level of safety and continued airworthiness standard. We assure that we will work with all vigor and enthusiasm to resolve and address the raised hazards and their consequent risk.

-Mr. Satis Pd. Pradhan Accountable Manager

Abstract:

This report documents the basic research & the safety concerned issues, news, affairs and articles which are required to achieve a dramatic improvement in helicopter safety. The purpose of issuing this safety bulletin is to identify the safety tips, issues, hazards which helps in the safety improvements by reducing the accidents and crash hazards.

Hopefully, this will help in meeting the safety requirements.

MAINTENANCE TIPS

A number of fatal accident have occurred during flight immediately following maintenance in several cases, the cause was incorrect or incomplete reassembly of the Helicopter, the error would have been detectable during a careful pre-flight inspection.....(Cont. on Pg. 2)

WINTER PRECAUTIONS FORHELICOPTER OPERATION

Flyling Hazards are associated with the winters. Manang Air management considers its duty to disseminate certain precautions which should be taken during winter flying to prevent any incident/accident. Fog is a major flight safety hazard during winter months.....(Cont. on Pg. 3)



Contact:

Manang Air Pvt. Ltd

106 N.K Singh Marga
Minbhawan, Kathmandu
Ph: +977-4115985/86
Cell: 9801180502/9751093440
Email:marketing@manangair.com.np
operation@manangair.com.np
Web: www.manangair.com.np

For Safety Issues:

safety @manangair.com.np



Safety Activities By Manang Air

Besides regular training as required by the regulations to the pilots, engineers, ground operations and maintenance personnel Manang Air conducted extra safety activities as below in 2016.

As a safety tools in Helicopter operations dispatcher orientation class room training was conducted in January 2016 to all the personnel directly involved for flight dispatch.

Ramp safety and fire drill exercise to all passenger and cargo handling staffs working at airport was conducted in September 2016.

Operations and Safety Briefing for Helicopter Pilot class room training conducted on October 2016.

Sling Flight Ground Training to the Sling Flight Handling Ground Staffs were conducted by qualified personnel (Mr. Roberto Fontanari and Mr. Andri Senn) on December 2016.

Maintenance Tips

A number of fatal accident have occurred during flight immediately following maintenance in several cases, the cause was incorrect or incomplete reassembly of the Helicopter , the error would have been detectable during a careful pre-flight inspection.

Even the best maintenance personnel can become distracted and make a mistake. Pilots should conduct an especially thorough preflight inspection after maintenance has been performed. If possible, speak to the technicians who performed the work, find out exactly what was done, and pay special attention to those areas. Professional maintenance personnel will appreciate the pilots commitment to safety and will welcome an additional check of their work.

Any work done on the flight control system deserves special attention because a flight control disconnect is almost always catastrophic. During track and balance work, always climb up to the rotor head for a close inspection of the pitch link and control tube fasteners after each adjustment. Never rush or skip preflight steps. Gist: Use of extra caution during Post- Maintenance

SAFETY TIPS

- 1. Keep seat belts fastened.
- Do not throw any objects from the helicopter through flight.
- 3. Do not smoke in helicopter.
- 4. Do not change from your allocated seats.
- Do not Switch ON electronic devices like mobile, computer, etc. during the flight.
- Do not try to stand during the flight, remain in brace position.
- Open and exit from the helicopter as per the instruction in use of an emergency.
- 8. Use oxygen as per the instructions if you find difficult to breathe.
- Use the emergency equipments like Oxygen, fire fighting etc, from the location as per the instruction in case of emergency.
- 10. Keep the baggage tied down to the places or hold the baggage tightly.

Let the pilot see you! Always enter & exit the Helicopter to the side or front.

हेलिकप्टरमा जाँदा वा आउँदा सधैँ पाइलटले देख्ने गरी अगांडि वा दायाँबाट प्रवेश गर्नहोस् ।

IMPORTANT MESSAGE

1. Keep helipad clear of loose articles-water, tins, ground sheets etc. Secure other gear from effects of rotor wash.



2. Proceed towards the Helicopter after complete rotor stops.



3. Carry tools, etc. horizontally below waist lever. Never upright or on the shoulder.



4. On sloping ground, always approach or leave on the down slope side for maximum rotor clearance.



5. If blinded by swirling dust or grill, STOP crouch lower or sit down and await for assistance.





WINTER PRECAUTIONS (HELICOPTER OPERATIONS)

A. Flying Hazards are associated with the winters. Manang Air management considers its duty to disseminate certain precautions which should be taken during winter flying to prevent any incident/ accident.

Following needs to be kept in mind by all pilots, engineers, technician and associated personnel to ensure safe and efficient conduct of helicopter operations during winter months:

- Fog is a major flight safety hazard during winter months.
 Awareness about the phenomenon of fog is very essential for the pilots in particular. Pilots must be aware about the timings, extent, duration and severity of fog. Hence, it is very important for all operators to keep the hazards of winter flying in mind while planning for the flight.
- 2. All the pilots should have undergone special VFR and recurrent training.
- 3. Thorough weather briefing must be obtained before undertaking any flying. Met office and internet are the sources which should be complemented with the experience of operating in particular area or region.
- 4. Special precautions need to be taken while flying during night, dawn/ dusk. Night flying during winters should be undertaken with extra caution since poor visibility during night flying is a serious hazards.
- 5. Fuel planning is of great importance since one may be forced to divert due to poor visibility conditions and most of the time a diversion may not be easily available due to widespread fog.
- 6. It is always advisable to land at a suitable site if unable to proceed rather than persisting on hoping to find clear areas. This can be fatal at times.
- 7. Ground contact flying should be the rule for the helicopter pilots.
 - Spatial disorientation is one of the serious challenge and hazard during poor visibility conditions. Be familiar about it.
 - 2. Know the terrain and route safety altitudes well and plan your levels accordingly. Check, recheck and double check.

Experience Your Flight With Us...... Safety is our Priority

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