

PART 1.5 – RECOMMENDATIONS

OUTLINE

1. This section recommends measures in order to prevent the potential for recurrence of an accident and to improve safety in aviation operations.

IMPROVING ORGANISATION INFLUENCES

2. **HLS Management.** CJO should review HLS management in theatre to ensure:

a. That for established HLSs in theatre:

(1) Each HLS is considered against the criteria detailed in ATP49E. For HLSs that do not meet the ATP49E criteria, they clearly annotate the MSC inside the HLS for a CH47, or specify which ac can use the HLS – e.g. 'unfit CH47, fit Sea King but with only 15ft MSC'. Part 1.4 Para 11

(2) A review of dust suppression in each is undertaken to determine which HLSs require additional work, with a detailed timeline provided to JHF(A) for the completion of this work. Part 1.4 Para 13

(3) Each HLS has a nominated, suitably qualified and experienced owner who is responsible for HLS day to day management, including dust suppression measures, and the timely notification to JHF(A) of any changes or proposed changes to the size, shape, surroundings or surface of the HLS. Part 1.4 Para 13

(4) A risk assessment on the alert state and dress of personnel in the vicinity of any active HLS during flying operations takes place, including whether accommodation in the immediate vicinity should be vacated during the helicopter operations. Part 1.4 Para 21

b. That SOPs and TTPs are in place to ensure the requirement for dust suppression is considered from inception when new HLSs are established. Part 1.4 Para 14

c. That HLS controllers, Landing Point Commanders and Helicopter Handling Instructors are issued with an **(S26)** for night helicopter operations. Part 1.4 Para 50

3. **HLS Directory.** CJO should ensure that:

a. Deployed commanders maintain a register of all established HLSs that ensures that the status, hazards and planned alterations are identified in good time to operating crews. Part 1.4 Para 15

b. COMJAG ensures that the JHF(A) HLS Directory imagery and data is regularly cross-checked with other sources to ensure accuracy. Part 1.4 Para 8

c. COMJAG establishes a JHF(A) HLS Directory audit trail, detailing the individuals who have conducted HLS inspections and the individuals who have compiled HLS Directory inserts. It should have a formal amendment Part 1.4 Para 8

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process.

4. MAOT.

a. CJO should review the JHF(A) MAOT establishment to ensure there are sufficient MAOTs to meet the HLS management, deliberate operations support and other tasks, with a robust supervisory structure. Part 1.4 Para 8

b. Comd JHC should establish and implement measures to ensure that CHF and JHSS become fully interoperable to the point that there is common capability to the user, notwithstanding the endorsed specialities of each unit. Part 1.4 Para 8

5. Service Support. CJO should ensure that:

a. **Accommodation.** Aircrew are accommodated in accommodation to a Tier 2 standard, to afford the aircrew the best chance of gaining sufficient crew rest in an operational setting. Part 1.4 Para 10

b. **Nutrition.** Aircrew are provided with access to 24 hour catering within reasonable proximity to the flight line at Camp Bastion, using either JFSp(A) or other coalition facilities. Part 1.4 Para 10

c. **MT Provision.** COMJAG and Comd JFSp(A) should mitigate aircrew cumulative fatigue through the provision of vehicles/drivers or other service support for line operations. Part 1.4 Para 10

ENHANCING SUPERVISION

6. Risk Management. CJO should ensure that:

a. COMJAG reassesses the Operational Risk Management section of the JAG FOB, with a view to ensuring that the correct balance between flight safety, including the risks associated with night operations, against the insurgent threat are in place and understood by all concerned parties. Part 1.4 Para 48

b. COMJAG incorporates the risk to aviation operations from dust at any landing sites in the Op HERRICK Theatre into future 'launch or abort' conditions check risk matrices. Part 1.4 Para 47

c. COMJAG establishes a rigorous assessment and approval process utilizing JAG subject matter experts for the introduction of new established HLSs in the Op HERRICK Theatre. Part 1.4 Para 13

7. **Supervision of Deployed Flt Commanders.** CJO should ensure, irrespective of the pressures on the Op HERRICK airbridge, that Aviation Duty Holders are able, within reason, to execute their supervisory functions through visits to Theatre when required. Part 1.4 Para 19

8. Supervision of 1310 Flt.

a. **OC 1310 Flt Position.** Comd JHC should consider whether OC 1310 Flt is deployed as a supernumerary to the declared number of Chinook crews deployed to Op HERRICK. Part 1.4 Para 19

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- b. **1310 Flt Location.** CJO should assess whether 1310 Flt should be located in its entirety at Camp Bastion in order to reduce the supervisory burden of a split location. Part 1.4 Para 17
9. **Fatigue Management.**
- a. CJO should direct that a risk assessment takes place on the repeated reverse cycling of Chinook aircrew crew-days, with special attention paid to the resulting cumulative fatigue of the aircrew. Part 1.4 Para 17
- b. DGMS(RAF) should ensure that enhanced Human Factors training for all military aircrew in the UK takes place to reinforce the requirement for robust fatigue management on operations. Part 1.4 Para 17
10. **PIDAT.** CJO should, on a best endeavour basis, ensure PIDAT facilities are available in Theatre. Part 1.4 Para 42
11. **Temazepam.** DGMS(RAF) should consider a review into the use of Temazepam by aircrew in operational Theatres. Part 1.4 Para 18

PREVENTING UNSAFE ACTS

12. **Dust Hazards.**
- a. **Low-visibility Landings.** DCDS(Cap) should investigate the progress made on the requirement for the research, development and introduction of a low visibility landing aid for use by UK helicopter aircrew in dusty environments and at night and provide Comd JHC with an update. Part 1.4 Para 59 & 60
- b. **Dust Training.** Comd JHC should ensure that aircrew conduct environmental training in a dust environment sufficiently representative of that found in Afghanistan prior to deployment. Part 1.4 Para 69
- c. **DNVG Training.** Comd JHC should ensure that all pilots deploying to Op HERRICK are qualified to use DNVG, if available. Part 1.4 Para 33
13. **Chinook SOP 21 – Dust Landings.** Comd JHC should ensure that:
- a. **Dust USL Landing.** SH STANEVAL clarify the procedures for dust USL operations, in particular with reference to the procedures for confined sites. Part 1.4 Para 52
- b. **References.** SH STANEVAL consider providing greater clarity regarding the current guidance that an overshoot should occur if references cannot be maintained. Part 1.4 Para 60
- c. **Crew Communications.** SH STANEVAL consider revising SOP 21 to improve the communications between crew members, with the aim of establishing quickly when references have been lost by any crew member. Part 1.4 Para 60
14. **Chinook USLs – use of Emergency Release Handle.** Comd JHC should ensure that:
- a. SH STANEVAL remind the Chinook Force that Hot Poop 9/09 is Part 1.4 Para 70

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extant and states that the Chinook emergency manual release should only be used in the event of an emergency and that following its use, it should be considered unserviceable until technical advice is sought.

b. Consideration is given to establishing procedures in theatre for engineers to quickly determine the serviceability of the hook that has had the emergency release handle used so as not to overly delay tasking. Part 1.4 Para 70

15. **Land Forces Training.** Comd FDT should ensure that:

a. **HLS Management.** Enhancements to pre-deployment training are considered to reinforce the importance of minimising obstructions on or around HLSs. Part 1.4 Para 12

b. **Dust Suppression.** Land Forces pre-deployment training highlights the risks of dust on HLSs and how the frequent use of vehicles across HLSs can be a significant risk to aviation operations. Part 1.4 Para 13

16. **Radalt Serviceability.** Head MAAIB monitors to conclusion the recommendations made by RNFSAIC within the technical report of Annex C. Part 1.4 Para 29

POST ACCIDENT SURVIVAL

17. **Aircrew Clothing. (S26).** Part 1.3 Para 19

18. **Communication Equipment. (S26).** Part 1.3 Para 22

19. **Crewman Crash Survival. (S26).** Part 1.3 Para 15

20. **NVDs. (S26).** Part 1.4 Para 70

21. **Personal Protective Equipment. (S26).** Part 1.4 Para 70

22. **Landing Site Management. (S26).** Exhibit 57