

Appendix F Fatigue Management Scheme

Prescriptive Limits

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The Scheme

1 Introduction

- 1.1 This Section sets out the prescriptive limits for flight time, flight duty period, duty period limitations and rest period requirements of rest for flight crew and cabin crew, employed by holders of a Territory Air Operator's Certificate.
- 1.2 The Section contains provisions that are applicable to both flight crew and cabin crew of all aircraft; however, where the nature of the work involved requires the application of other rules then those differences are stated in separate paragraphs. Helicopter flying is covered in paragraph 20 and the rules concerned with the work pattern of cabin crew in paragraph 21.

2 Definitions

Unless otherwise defined below all words, phrases, definitions, and abbreviations, have identical meanings to those in OTAR Part 1.

Acclimatised means when a crew member has spent 3 consecutive local nights on the ground within a time zone which is 2 hours wide, and is able to take an uninterrupted night's sleep. The crew member will remain acclimatised thereafter until a duty period finishes at a place where local time differs by more than 2 hours from that at the point of departure.

Contactable means a short period of time during the day, other than on a 'day off', during which the company requires a crew member to be at an agreed location for the purpose of giving notification of a duty period which will commence not less than ten hours ahead. The contactable period will be between [*] and [*] local time and shall not exceed 2½ hours.

* Times to be defined by the operator within the approved scheme.

Crew/Flight Crew/Cabin Crew are as defined in the AN(OT)O. Note: "Crew" includes a task specialist(s) who is assigned by the operator to perform specialist tasks on board or from the aircraft

Days Off means periods available for leisure and relaxation free from all duties. A single day off shall include 2 local nights, and be of not less than 34 hours. Consecutive days off shall include a further local night for each additional consecutive day off. A rest period may be included as part of a day off.

Dispatch Crew means a fully qualified and current flight/cabin crew member authorised to carry out preflight duties as defined by an operator.

Duty means any task that a crew member is required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.

Duty Period means a period which starts when a crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.

Early Start Duty means a duty that commences in the period 0600 to 0659 hours local time.

Flight Duty Period (FDP) A Duty period that contains a sector on which a crew member operates. It starts when a crew member is required by the operator to report for any Duty and finishes not later than when the aircraft comes to rest and the engines are shut down or on chocks on the final parking position, whichever is the latter.

Late Finish Duty means a duty that finishes in the period 2200 to 2359 hours local time.

Local Night means a period of 8 consecutive hours falling between 2000 and 0600 hours local time.

Night Duty means a duty where any part of that duty falls within the period 0000 to 0559 hours local time.

Positioning means transferring a non-operating crew member from place to place as a passenger in surface or air transport at the behest of an operator.

Regular, when applied to duties that are Late Finishes, Night or Early Starts, means a run of 4 or 5 consecutive duties, not broken by a period of 34 hours free from such duties, contained in a single 7 consecutive day period.

Reporting Time means the time at which a crew member is required by an operator to report for any duty.

Rest Period means a continuous and defined period of time subsequent to and/or prior to duty, during which crew members are free from all duties.

Rostered/Planned Duty means a duty period, or series of duty periods, with stipulated start and finish times, notified by the operator to crew in advance.

Rostering Period means a number of consecutive weeks, usually 4, but defined by the operator.

Scheduled Duty means the allocation of a specific flight or flights or other duties to a crew member within the pre notified rostered/planned series of duty periods.

Sector means the time between an aircraft first moving under its own power until it next comes to rest after landing, on the designated parking position.

Split Duty means a flight duty period which consists of two or more sectors, separated by less than a minimum rest period.

Standby Duty means a period during which an operator places restraints on a crew member who would otherwise be off duty. However, it shall not include any time during which an operator requires a crew member to be contactable for the purpose of giving notification of a duty which is due to start 10 hours or more ahead.

Suitable Accommodation means a well furnished bedroom which is subject to minimum noise, is well ventilated, and has the facility to control the levels of light and temperature.

Travelling means time spent by a crew member transiting between the place of rest, and the place of reporting for duty.

Unforeseen Operational Circumstance means the arising or occurrence of a particular event or situation which could not have been anticipated or predicted.

Week means a period of 7 consecutive days starting at [*]hours local time on [*]day, at the crew member's normal operating base.

* time/day to be defined by the operator within the approved scheme.

Window of Circadian Low (WOCL) means the period between 0200 and 0559 hours local time, in the time zone to which the crew member is acclimatised.

3 Calculation of a Flight Duty Period

The FDP, in hours and fractions of hours, shall be in accordance with paragraph 10, Table A or B (2 or more flight crew, aeroplanes), Table C or D (single flight crew aeroplanes) or paragraph 20, Table E (helicopters). The times extracted from the tables may be extended by use of in-flight relief, split duty and pilot-in-command's discretion, under the terms of paragraphs 12, 13 and 15. Where an aeroplane flight crew consists of two pilots only, any FDP involving a sector which is planned to exceed 7 hours must be calculated in accordance with the provisions of paragraph 11.

4 Additional limits on flying

4.1 Late Finishes/Early Starts

The conditions set in this paragraph only apply when a crew member is acclimatised.

Sleep deprivation, leading to the onset of fatigue, can arise if a crew member is required to report early for duty, or finishes a duty late, on a number of consecutive days. Therefore, not more than 3 consecutive duties that occur in any part of the period 2200 to 0659 hours local time can be undertaken, nor may there be more than 4 such duties in any 7 consecutive days. Any run of consecutive duties (Late Finish Duties, Night Duties or Early Start Duties) can only be broken by a period of not less than 34 consecutive hours free from such duties. This 34 consecutive hours may include a duty that is not an Early Start Duty, Late Finish Duty or Night duty.

Should a crew member be scheduled for duty that occurs during any part of the period 0000 to 0459 hours local time, for a minimum of 2 and a maximum of 3 consecutive nights, then crew members must be free from all duties by 2000 hours local time before covering the block of consecutive night duties, such that the crew members can take a rest period during a local night.

4.2 Interrupted Rest - Air Taxi/Sole Use Charter

If, prior to the start of an FDP, a crew member's rest period is interrupted for operational reasons between 2200 and 0600 hours local time, the following shall apply:

If the disturbance happens earlier than 1 hour before the planned departure from the crew member's place of rest, the time elapsed between that disturbance and the departure time from the place of rest minus 1 hour, shall count as part of the subsequent FDP.

NOTES:

1. The phrase 'operational reasons' applies to such actions as contacting the customer, checking weather, liaison with ATC or any action pertaining to the planned flight. It is anticipated that operators with a 24 hour support organisation will provide these services for crew, leaving their crew members undisturbed.
2. The term air taxi/sole use charter applies when the operator utilises an aircraft which contains 19 or less passenger seats, flights are confined to an area within which the local time does not vary by more than 2 hours, and the application of in-flight relief to extend an FDP is not used.

5 Mixed duties

5.1 When a crew member is required to report for duty in advance of the stipulated report time for a scheduled flight, to carry out a task at the behest of an employer, then the time spent on that task shall be part of the subsequent FDP.

5.2 Aeroplane and Helicopter Flying

When both aeroplane and helicopter flying is carried out the more restrictive flight and duty time limitations shall apply.

5.3 Mixed Simulator and Aircraft Flying – Flight Crew

When a flight crew member flies in the simulator, either on a check or training flight, or as a Training Captain or Instructor, and then within the same duty period flies as a flight crew member on a commercial air transport flight, all the time spent in the simulator shall count in full towards the subsequent flying duty, and for helicopters towards the daily flying hour maxima. Simulator flying does not count as a sector, but the FDP allowable is the more limiting of the simulator report time or the reporting time obtained from the appropriate FDP Table.

6 Travelling time

6.1 Travelling time, other than that time spent on positioning, shall not be counted as duty.

6.2 Travelling time from home to departure aerodrome, if long distances are involved, is a factor influencing any subsequent onset of fatigue. If the journey time from home to the normal operating base is usually in excess of 90 minutes, crew members shall consider making arrangements for temporary accommodation nearer to base.

6.3 When crew members are required to travel from their home to an aerodrome other than their normal operating base, any travelling time in excess of the journey time from home to the normal operating base, shall be classed as positioning.

7 Delayed Reporting Time in a single FDP

7.1 When a crew member is informed of a delay to the reporting time due to a changed schedule, before leaving the place of rest, the FDP shall be calculated as follows:

- (a) When the delay is less than 4 hours, the FDP allowed shall be based on the original report time and the FDP shall start at the actual report time.
- (b) Where the delay is 4 hours or more, the FDP shall be based on the more limiting time band of the planned and the actual report time and the FDP starts 4 hours after the original report time.

7.2 When an operator informs a crew member before leaving the place of rest of a delay in reporting time of 10 hours or more ahead, and that crew member is not further disturbed by the operator until a mutually agreed hour, then that elapsed time is classed as a rest period. If, upon the resumption of duty, further delays occur, then the appropriate criteria in this paragraph and paragraph 7.1 above shall be applied to the re-arranged reporting time.

8 Positioning

- 8.1 All time spent on positioning at the behest of an operator shall count as duty, but positioning does not count as a sector when calculating the FDP. In these circumstances the FDP commences not later than the time at which the crew member reports for the positioning journey, or positions in accordance with paragraph 6.3.
- 8.2 If a positioning journey is followed by less than a minimum rest period, and then an FDP is carried out, the positioning must be counted as a sector, if a split duty is claimed, when calculating the allowable FDP. If it is not, then a split duty FDP cannot be used. On occasion, and when agreed by the OTAA an operator may recover a crew member from an overseas airfield on a positioning flight on the eighth consecutive day of duty (See paragraph 17 – Days Off).

9 Standby Duty

- 9.1 The time of start, end and nature of the standby duty must be defined and notified to crew members prior to the preceding rest period. The time a standby duty starts determines the allowable FDP, except when the actual FDP starts in a more limiting time band when that FDP limit will apply. However, when standby is undertaken at home, or in suitable accommodation provided by the operator, during the period 2000 to 0600 hours local time and a crew member is given 2 hours or less notice of a report time, the allowable FDP starts at the report time for the designated reporting place.
- 9.2 When a crew member is on standby duty on immediate readiness at an airport, then the allowable FDP is calculated using the start time of the standby duty.
- 9.3 If a crew member is called out from standby, the standby duty will cease when that individual reports at the designated reporting point..

9.4 The following limits apply:

Duration of Duties

Duty	Maximum Duration
Standby Duty (all cases)	12 hours
Standby Duty followed by an FDP	As in case A and B below

Case A

If a crew member is called out from standby to conduct an FDP before completing 6 hours standby duty then the allowable FDP is that obtained from the appropriate FDP Table.

Case B

If a crew member is called out from standby to conduct an FDP after completing 6 or more hours standby duty, then the allowable FDP is the more limiting FDP of either the Standby Duty start time or the Report Time obtained from paragraph 10, reduced by the amount of standby worked in excess of 6 hours.

NOTE: The method of adding time spent on standby to cumulative totals is stated in paragraph 19.

- 9.5 When any period of standby finishes, during which a call-out has not occurred, at least 12 hours rest must follow prior to the next duty period. Similarly, following the end of a contactable period or periods, at least 10 hours must elapse prior to the next duty period.

10 FDP - Aeroplanes

- 10.1 Pre-flight duties are part of the FDP. Standard reporting times prior to flight must be specified (in minutes) by an operator and be appropriate for the type of operation.
- 10.2 Post flight duties are not part of the FDP. Duty time for completion of post flight activities must be specified (in minutes) by an operator and be appropriate for the type of operation.

Table A – FDP - Two or more flight crew - acclimatised

Local time of start	Sectors							
	1	2	3	4	5	6	7	8 or more
	Length of FDP in hours							
0600-0759	13	12 ^{1/4}	11 ^{1/2}	10 ^{3/4}	10	9 ^{1/2}	9	9
0800-1259	14	13 ^{1/4}	12 ^{1/2}	11 ^{3/4}	11	10 ^{1/2}	10	9 ^{1/2}
1300-1759	13	12 ^{1/4}	11 ^{1/2}	10 ^{3/4}	10	9 ^{1/2}	9	9
1800-2159	12	11 ^{1/4}	10 ^{1/2}	9 ^{3/4}	9	9	9	9
2200-0559	11	10 ^{1/4}	9 ^{1/2}	9	9	9	9	9

Table B – FDP - Two or more flight crew – NOT acclimatised

Length of preceding rest in hours	Sectors							
	1	2	3	4	5	6	7	8 or more
	Length of FDP in hours							
18 or less, or 30 and more	13	12 ^{1/4}	11 ^{1/2}	10 ^{3/4}	10	9 ^{3/4}	9	9
More than 18 but less than 30	11 ^{1/2}	11	10 ^{1/2}	9 ^{3/4}	9	9	9	9

NOTES:

1. Report times must not be reduced in order for crew members to achieve their required rest prior to an FDP.
2. The practice of inserting a short duty into a rest period of between 18 and 30 hours in order to produce a rest period of less than 18 hours, thereby taking advantage of the longer FDP contained in Table B, is not permitted.

Table C – FDP - Single flight crew – IFR operations

Local time of start	Sectors				
	4 or less	5	6	7	8 or more
	Length of FDP in hours				
0600-0659	10	9 ^{1/4}	8 ^{1/2}	8	8
0700-1259	11	10 ^{1/4}	9 ^{1/2}	8 ^{3/4}	8
1300-1759	10	9 ^{1/4}	8 ^{1/2}	8	8
1800-2159	9	8 ^{1/4}	8	8	8
2200-0559	8	8	8	8	8

NOTE: Report times must not be reduced in order for crew members to achieve their required rest prior to an FDP.

Table D – FDP - Single flight crew – VFR operations

Local time of start	Single Pilot	
	Length of FDP in hours	Max. flying time in hours
0600-0659	10	6
0700-0759	11	7
0800-1359	11	7
1400-2159	10	6
2200-0559	9	5

NOTE: Report times must not be reduced in order for crew members to achieve their required rest prior to an FDP.

10.3 Additional Limits on Flying

10.3.1 Repetitive Short Sectors

Crew flying repetitive short sectors shall have a break of at least 30 minutes away from the aeroplane within any continuous period of 3 hours.

10.3.2 After 3 hours of short sector shuttle operations, a rest of 30 minutes free of all duty shall be allowed.

11 Limits on two flight crew long range aeroplane operations

11.1 When an aeroplane flight crew is only two pilots, the allowable FDP shall be calculated as follows. A sector scheduled for more than 7 hours is considered as a multi-sector flight, as below:

Scheduled sector	Sectors	
	Acclimatised	NOT Acclimatised
Over 7 hours but not more than 9 hours	2	4
Over 9 hours but not more than 11 hours	3	4
Over 11 hours	4	Not applicable

The appropriate table in paragraph 10 is then entered with the start time of the duty period and the 'modified' number of sectors, to determine the allowable FDP.

11.2 When an additional, current, type rated pilot is a crew member, then these limits do not apply and the permissible FDP is determined by entering Table A or B in paragraph 10 with time of start and the actual sectors planned.

12 Extension of Flight Duty Period by in-flight relief

12.1 When any additional crew member is carried to provide in-flight relief with the intent of extending an FDP, that individual shall hold qualifications which are equal or superior to those held by the crew member who is to be rested. To take advantage of this facility the division of duty and rest between crew members must be kept in balance. It is unnecessary for the relieving crew member to rest in between the times relief is provided for other crew members.

12.2 When in-flight relief is utilised there must be, for the crew members resting, a comfortable reclining seat, or bunk, separated and screened from the flight deck and passengers.

12.3 A total in-flight rest of less than three hours does not allow for the extension of an FDP, but where the total in-flight rest, which need not be consecutive, is three hours or more, then the permitted FDP may be extended as follows:

If rest is taken in a bunk	If rest is taken in a seat
A period equal to one half of the total rest taken, provided that the maximum FDP permissible shall be 18 hours ; 19 hours in the case of cabin crew.	A period equal to one third of the total rest taken, provided that the maximum FDP permissible shall be 15 hours ; 16 hours in the case of cabin crew.

- 12.4 Where a flight crew member undertakes a period of in-flight relief and after its completion is wholly free of duty for the remainder of the flight, that part of the flight following completion of duty may be classed as positioning and be subject to the controls on positioning detailed in paragraph 8.

13 Extension of Flight Duty Period by Split Duty

- 13.1 When an FDP consists of two or more sectors - of which one can be a positioning journey counted as a sector - but separated by less than a minimum rest period, then the FDP may be extended by the amounts indicated below.

Consecutive Hours Rest	Maximum Extension of the FDP
Less than 3	NIL
3 or more but less than 11	A period equal to half the consecutive hours rest taken

- 13.2 The rest period shall not include the time allowed for immediate post-flight duties and pre-flight duties. When the rest period is 6 hours or less it will suffice if a quiet and comfortable place, not open to the public, is available. If the rest period is more than 6 consecutive hours, then suitable accommodation must be provided.
- 13.3 When rest is taken in the aircraft on the ground, the minimum standards of noise, temperature, light and ventilation are to be specified in the Operations Manual. Such arrangements will only be permitted when the crew have adequate control of the temperature and ventilation within the aircraft, and passengers are not on board.

14 Rest Periods

- 14.1 The aircraft operator must notify all crew members in good time of a flight duty period so that sufficient and uninterrupted pre-flight rest can be obtained. When away from base the operator must provide the crew with the opportunity and the facilities for adequate pre-flight rest. The operator must provide suitable accommodation. When flights are carried out at such short notice that it is impracticable for an operator to arrange suitable accommodation, then this responsibility devolves to the pilot-in-command of the aircraft.
- 14.2 The minimum rest period which must be provided before undertaking a flight duty period shall be:
- (a) at least as long as the preceding duty period, or
 - (b) 12 hours
- whichever is the greater.

14.3 When away from base, in the case when the rest period earned by a crew member is 12 hours, and suitable accommodation is provided by the operator, then the company may assign a rest period of 11 hours. In such circumstances, if the travelling time between the aerodrome and the accommodation is more than 30 minutes each way then the rest period must be increased by the amount the total time spent travelling exceeds one hour. The room allocated to the crew member must be available for occupation for a minimum of 10 hours.

NOTE: This sub-paragraph does not apply to rest periods that exceed 12 hours.

14.4 Exceptionally at home base, individual crew members may be asked to exercise their discretion to reduce the rest period by up to a maximum of one hour but only to a minimum of 12 hours for flight crew and 11 hours for cabin crew. If discretion is used, it is the responsibility of the operator and the crew member to inform the pilot-in-command of the flight, immediately following the rest period, that a reduced rest period has been taken.

14.5 If the preceding duty period, which includes any time spent on positioning, exceeded 18 hours, the ensuing rest period must include a local night.

14.6 The rest period following a sequence of reduced rest and then an extended FDP cannot be reduced.

14.7 After being called out from a standby duty, the length of minimum rest shall be determined by the length of the Duty.

14.8 Crew members who inform an operator that they are having difficulty in achieving adequate pre-flight rest must be given the opportunity to consult an aviation medical specialist.

15 Pilot-in-Command's discretion to extend a Flight Duty Period

15.1 A pilot-in-command may, at their discretion, and after taking note of the circumstances of other members of the crew, extend an FDP beyond that permitted in the appropriate FDP Table, provided he is satisfied that the flight can be made safely. The extension shall be calculated according to what actually happens, not on what was planned to happen. An extension of 3 hours is the maximum permitted, except in cases of emergency (see Note 1).

15.2 The operator's scheme shall include guidance to pilots-in-command on the limits within which discretion may be exercised, and shall include specific limits to which a pilot-in-command may extend the flight duty period. In a Flight Duty Period involving 2 or more sectors, up to a maximum of 2 hours discretion may be exercised prior to the first and subsequent sectors. On a single sector flight and immediately prior to the last sector on a multi-sector flight, a pilot-in-command may utilise the full amount of discretion authorised by the operator.

15.3 A pilot-in-command may exercise discretion to extend an FDP following a reduced rest period, only exceptionally, and then only to the extent necessary to allow for unforeseen operational circumstances that become apparent during the last sector.

15.4 Whenever a pilot-in-command extends an FDP, it shall be reported to their employer on a Discretion Report Form, in the format of Appendix A. If the extension is greater than 2 hours, or when exercised after any reduced rest period, then the operator shall submit the pilot-in-command's written report, together with the operator's comments to the OTAA, within 14 days of the event.

NOTES:

1. In respect of an extension of a flight duty period, an emergency is a situation which in the judgement of the pilot-in-command presents a serious risk to the health or safety of crew and passengers, or endangers the lives of others.
2. Discretion reports may be used by the OTAA to assess the realism of particular schedules.

16 Pilot-in-Command's discretion to reduce a rest period

16.1 The pilot-in-command of an aircraft may, at his discretion, and after taking note of the circumstances of other members of the crew, reduce a rest period but only insofar as the room allocated to the crew member must be available for occupation for a minimum of 10 hours. The exercise of such discretion shall be considered exceptional and must not be used to reduce successive rest periods. If the preceding FDP was extended, the rest period may be reduced, provided that the subsequent allowable FDP is also reduced by the same amount. In no circumstances may a pilot-in-command exercise discretion to reduce a rest period below 10 hours at accommodation.

16.2 Whenever a pilot-in-command reduces a rest period, it shall be reported to the employer on a Discretion Report Form, in the format of Appendix B. If the reduction is more than 1 hour, then the operator shall submit the pilot-in-command's written report together with the operator's comments, to the OTAA, within 14 days of the event.

17 Days Off – aeroplane operations

17.1 A single day off shall include 2 local nights and shall be of at least 34 hours duration.

17.2 A planned rest period may be included as part of a day off.

17.3 Crew members shall:

- (a) not be on duty more than 7 consecutive days between days off, but may be positioned, as a passenger, to the usual operating base on the eighth day, provided they are then allocated at least 2 consecutive days off (see paragraph 8.2 – Positioning); and
- (b) have 2 consecutive days off in any consecutive 14 days following the previous 2 consecutive days off; and
- (c) have a minimum of 7 days off in any consecutive 4 weeks; and
- (d) have an average of at least 8 days off in each consecutive 4 week period, averaged over 3 such periods.

18 Absolute limits on flying hours – aeroplane operations

A person shall not act as a member of the flight crew of an aircraft if at the beginning of the flight the aggregate of all previous flight times:

- (a) during the period of 28 consecutive days expiring at the end of the day on which the flight begins exceeds 100 hours. (This means that on the 28th day a flight crew member may depart on a single sector flight, and may complete that sector, even though at the end of the flight the total flying hours completed in 28 days will exceed 100 hours. Consequently, the flight crew member cannot then continue to operate as a flight crew member on any subsequent sectors during that day); or
- (b) during the period of 12 months, expiring at the end of the previous month exceeds 900 hours.

19 Cumulative Duty Hours – aeroplane operations

19.1 The maximum duty hours for flight crew, shall not exceed:

- (a) 55 hours in any 7 consecutive days, but may be increased to 60 hours, when a rostered duty covering a series of duty periods, once commenced, is subject to unforeseen delays; and
- (b) 95 hours in any 14 consecutive days; and
- (c) 190 hours in any 28 consecutive days.

19.2 When away from base and where an individual crew member separates from the crew, or the crew as a whole splits up, then any use of discretion to reduce rest becomes a decision for an individual crew member. The decision to continue with the next flight and the submission of an associated discretion report is the responsibility of the relevant pilot-in-command after the crew member, and operator if in a position to do so, has informed the pilot-in-command that a reduced rest period has been taken.

19.3 When a crew member is not rostered for either standby or flying duties for 28 or more consecutive days then any duty hours worked need not be added to cumulative totals. However, when a crew member is anticipated to return to either standby or flying duties the duty hours worked in the 28 days preceding that duty must be recorded. Before allocating a flying duty to a crew member the operator must be satisfied that that crew member is in compliance with the scheme.

19.4 Calculation of Cumulative Duty Hours

Duty hours shall be added to cumulative totals in accordance with the following:

- (a) To count in full:
 - (i) Duty periods and flight duty periods, plus subsequent post-flight duties
 - (ii) All standby duty, except that specified in b) (i) and (ii) below
 - (iii) The time spent on positioning.

- (b) To count as half the time on duty:
- (i) The standby duty, when the period of notice given to the crew member by the operator before reporting for duty, is treble or more than the specified minimum report time.
 - (ii) The standby duty when undertaken at home, or in suitable accommodation provided by the operator, takes place during the period 2200 to 0600 hours, and the crew member can take undisturbed rest and is not called out for duty.

20 Rules Relating to Helicopter Operations

- 20.1 Pre-flight duties are part of the FDP. Standard reporting times prior to flight must be specified (in minutes) by an operator and be appropriate for the type of operation.
- 20.2 Post flight duties are not part of the FDP. Duty time for completion of post flight activities must be specified (in minutes) by an operator and be appropriate for the type of operation.

Table E – FDP - Helicopters

Local time of start	Single Pilot		Two pilots	
	Length of FDP in hours	Max. flying time in hours	Length of FDP in hours	Max. flying time in hours
0600-0659	9	6	10	7
0700-0759	10	7	11	8
0800-1359	10	7	12	8
1400-2159	9	6	10	7
2200-0559	8	5	9	6

NOTE: Report times must not be reduced in order for crew members to achieve their required rest prior to an FDP.

20.3 Additional Limits on Flying

20.3.1 Repetitive Short Sectors

Crew flying repetitive short sectors, for example pleasure flying, offshore short sector shuttles, at an average rate of 10 or more landings per hour, shall have a break of at least 30 minutes away from the helicopter within any continuous period of 3 hours.

20.3.2 When carrying out the more demanding roles of helicopter flying, for example, winching and external load carrying, operators shall specify maximum periods of continuous operation. The limits set shall not exceed the maximum allowed in subparagraph 20.3.1, but depending on the nature and circumstances of a particular operation may need to be more restrictive.

20.3.3 After 3 hours shuttle operations between offshore installations in conditions other than day VMC, a rest of 30 minutes free of all duty shall be allowed.

20.3.4 Survival Suits

The wearing of survival suits can prove an irritant and be uncomfortable. Therefore:

- (a) a flight crew member should not participate in moving freight or baggage, or any other activity requiring excessive physical effort. Their role should be supervisory.
- (b) Schedules which involve continuous flying in excess of 4½ hours must include provisions for a break free of all duty of at least 30 minutes, not including a total of 30 minutes for immediate post-flight duties and pre-flight duties. The break must be scheduled prior to exceeding a total of 6 hours flying.

20.3.5 Interrupted Rest

- (a) If, prior to the start of an FDP, a crew member's rest period is interrupted for operational reasons between 2200 and 0700 hours local time, the following shall apply:
- (b) If the disturbance happens earlier than 1 hour before the planned departure from the crew member's place of rest, the time elapsed between that disturbance and the departure time from the place of rest minus 1 hour, shall count as part of the subsequent FDP.

NOTE: The phrase 'operational reasons' applies to such actions as contacting the customer, checking weather, liaison with ATC or any action pertaining to the planned flight. It is anticipated that operators with a 24 hour support organisation will provide these services for crew, leaving their crew members undisturbed.

20.4 Days Off

20.4.1 Wherever possible, and if required by the crew member, days off should be taken in the home environment. A single day off for helicopter crew shall include two local nights, and shall be of at least 36 hours duration. A planned rest period may be included as part of a day off.

20.4.2 Crew members shall:

- (a) not work more than 7 consecutive days; and
- (b) have 2 consecutive days off following a period of 7 consecutive days duty; and
- (c) have 2 consecutive days off in any consecutive 14 days, and have at least 3 days off in any consecutive 14 days; and
- (d) have a minimum of 7 days off in any consecutive 4 weeks; and
- (e) have an average of at least 8 days off in each consecutive 4 week period averaged over 3 such periods.

NOTE: A single day off can only be allocated when 6 or less consecutive days duty have been worked.

20.5 Absolute Limits on Flying Hours

The maximum flying hours for flight crew will be 90 in any 28 consecutive days, and 800 in any period of 12 months.

20.6 Cumulative Duty Hours

20.6.1 Maximum duty hours for flight crew shall not exceed:

- (a) 60 hours in any 7 consecutive days; and
- (b) 200 hours in any 28 consecutive days.

20.7 Calculation of Cumulative Duty Hours

Duty hours shall be added to cumulative totals in accordance with the following:

- (a) To count in full:
 - (i) Duty periods and flight duty periods, plus subsequent post-flight duties
 - (ii) All standby duty, except that specified in b) i) and ii) below
 - (iii) The time spent on positioning.
- (b) To count as half the time on duty:
 - (i) The standby duty, when the period of notice given to the crew member by the operator before reporting for duty, is treble or more than the specified minimum report time.
 - (ii) The standby duty when undertaken at home, or in suitable accommodation provided by the operator, takes place during the period 2200 to 0600 hours, and the crew member can take undisturbed rest and is not called out for duty.

20.8 Maximum Flying Hours

The Maximum number of Flying Hours which a pilot may be permitted to undertake are:

Single day	Table E
Any 3 consecutive days	18 hours
Any 7 consecutive days	30 hours
Any 3 consecutive 28 day periods	240 hours

21 Rules relating to cabin crew

21.1 The requirements detailed in this paragraph shall be applicable to all cabin crew employed as crew members and are not intended to apply only to those cabin crew carried to meet the provisions of the Air Navigation (Overseas Territories) Order.

- 21.2 The limitations which shall be applied to cabin crew are those applicable to flight crew members contained in paragraphs 3 to 20, but with the following differences:
- (a) A flight duty period can be 1 hour longer than that permitted for flight crew. The FDP and limits set on early starts for cabin crew shall be based on the time at which the flight crew report for their flight duty period, but that FDP will start at the report time of the cabin crew.
 - (b) For cabin crew the minimum rest period which will be provided before undertaking a flight duty period shall be:
 - (i) at least as long as the preceding duty period less 1 hour; or
 - (ii) 11 hourswhichever is the greater.
 - (c) The combined sum of standby time and subsequent FDP can be 1 hour longer than that permitted to flight crew.
 - (d) The maximum duty hours for cabin crew shall not exceed:
 - (i) 60 hours in any 7 consecutive days, but may be increased to 65 hours when a rostered duty covering a series of duty periods, once commenced, is subject to unforeseen delays.
 - (ii) 105 hours in any 14 consecutive days.
 - (iii) 210 hours in any 28 consecutive days.
 - (e) The annual and 28 day limits on flying hours appertaining to flight crew need not be applied.
 - (f) The limits relating to two pilot flight crew long range operations do not apply.

22 Records to be maintained

22.1 Records for the duty and rest periods of all flying staff must be kept. These records shall include:

- (a) For each crew member:
 - (i) The beginning, end and duration of each duty and flight duty period, and function performed during the period.
 - (ii) The duration of each rest period prior to a flight duty period or standby duty.
 - (iii) Dates of days off.
 - (iv) 7 consecutive day totals of duty.

With the agreement of the OTAA, operators employing more than 100 cabin crew need only record the information required above for a percentage of cabin crew. The size of the percentage and the rate of sampling will be agreed by the assigned Inspector and the operator.

- (b) For each flight crew member, Daily and 7 consecutive day flying hours.

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- 22.2 Records shall be preserved for the period required by Subpart K (Fatigue Management) of OTARs 121 and 135.
- 22.3 Additionally, operators shall retain all discretion reports of extended flight duty periods, extended flying hours, and reduced rest periods for the period required by Subpart K (Fatigue Management) of OTAR Parts 121 and 135.

Part C Pilot in Command's Report

Signed

Date

Part D Operator's Remarks/Action Taken

Signed

Date

Forwarded to OTAA

Filed

