

# **MEMORIAL**

Journal Officiel du Grand-Duché de Luxembourg



# **MEMORIAL**

Amtsblatt des Großherzogtums Luxemburg

# RECUEIL DE LEGISLATION

A — N° 151 6 octobre 2008

Sommaire

# LIMITATIONS DES TEMPS DE VOL ET DE SERVICE



Règlement grand-ducal du 19 août 2008 portant modification du règlement grand-ducal du 18 mars 1995 concernant les limitations des temps de vol et de service et fixant les exigences en matière de repos applicables aux membres d'équipage de conduite des aéronefs exploités sous licence d'exploitation luxembourgeoise.

Nous Henri, Grand-Duc de Luxembourg, Duc de Nassau,

Vu la loi modifiée du 31 janvier 1948 relative à la navigation aérienne;

Vu la loi modifiée du 19 mai 1999 ayant pour objet a) de réglementer l'accès au marché de l'assistance en escale à l'aéroport de Luxembourg b) de créer un cadre réglementaire dans le domaine de la sûreté de l'aviation civile, et c) d'instituer une Direction de l'Aviation Civile;

Vu le règlement (CE) n° 1899/2006 du Parlement européen et du Conseil du 12 décembre 2006 modifiant le règlement (CEE) n° 3922/91 du Conseil relatif à l'harmonisation de règles techniques et de procédures administratives dans le domaine de l'aviation civile, et notamment la sous-partie Q de son annexe;

Vu l'article 2 (1) de la loi du 12 juillet 1996 portant réforme du Conseil d'Etat, et considérant qu'il y a urgence;

Vu les avis de la Chambre de Commerce, de la Chambre des Employés privés et de la Chambre du Travail;

Sur le rapport de notre Ministre des Transports et après délibération du Gouvernement en Conseil;

#### Arrêtons:

Art. 1er. A l'article 1er, le paragraphe 2 est remplacé par le paragraphe libellé ci-après:

«2. Les limitations et les exigences mentionnées au paragraphe précédent sont celles énoncées dans le code JAR-OPS 1, sous-partie Q, sections 1 et 2, élaboré par les Autorités conjointes de l'aviation (JAA: Joint Aviation Authorities) et dénommé «sous-partie Q» ci-après. La sous-partie Q figure en annexe au présent règlement dont elle fait partie intégrante.»

Art. 2. Il est inséré un article 1 bis libellé comme suit:

«<u>Art. 1 bis.</u> Le directeur de l'aviation civile peut accorder des dérogations aux limitations et aux exigences énoncées à la sous-partie Q en cas de circonstances opérationnelles imprévues et urgentes ou pour des besoins opérationnels d'une durée limitée.

Nonobstant les dispositions du paragraphe précédent, le directeur de l'aviation civile peut accorder une dérogation aux limitations et aux exigences énoncées à la sous-partie Q dans les cas où un niveau de sécurité équivalent à celui atteint par l'application des règles précitées peut être garanti.

Les entreprises de transport aérien concernées, aux fins de bénéficier desdites dérogations, soumettent un catalogue de mesures détaillées à la Direction de l'aviation civile contenant toutes les données justificatives sur lesquelles elles se fondent, notamment une analyse économique, scientifique et médicale démontrant les incidences sur la sécurité aérienne. Ce catalogue doit recueillir au préalable l'avis écrit de la délégation du personnel de l'entreprise concernée.»

- **Art. 3.** Au paragraphe 3 de l'article 1<sup>er</sup>, l'expression «par le projet de code JAR-OPS» est remplacée par l'expression «par la sous-partie Q».
- **Art. 4.** Aux paragraphes 3 et 4 de l'article 1<sup>er</sup> et au paragraphe 2 de l'article 2, les références au «Ministère des Transports» sont remplacées par une référence à la «Direction de l'aviation civile».
  - Art. 5. L'article 5 est remplacé par le libellé suivant:

«<u>Art. 5.</u> Notre Ministre des Transports est chargé de l'exécution du présent règlement qui sera publié au Mémorial.»

Art. 6. Notre Ministre des Transports est chargé de l'exécution du présent règlement qui sera publié au Mémorial.

Le Ministre des Transports, Lucien Lux Château de Berg, le 19 août 2008.

Henri



# ANNEXE Sous-partie Q

SECTION 1 JAR-OPS 1 Subpart Q

### SUBPART Q - FLIGHT AND DUTY TIME LIMITATIONS AND REST REQUIREMENTS

# JAR-OPS 1.1075 General

(See IEM OPS 1.1075)

- (a) An operator shall establish a flight and duty time limitations and rest scheme for crew members.
- (b) An operator shall ensure that:
- 1. The flight and duty time limitations and rest scheme is in accordance with the provisions of this Subpart;
- 2.Flights are planned to be completed within the allowable flight duty period taking into account the time necessary for pre-flight duties, the flight and the turnaround times and the nature of operation (See IFM OPS 1.1075(b)(2)); and
- 3.Duty rosters are prepared and published (See IEM OPS 1.1075(b)(3)).
- (c) An operator may elect to adopt one, or more as appropriate, of the Appendices to this Subpart which give variations to the basic requirements for specific types of operation. An operator shall ensure that, if such an option is chosen, the Appendix is applied in its entirety.
- (d) A crew member shall not operate on an aeroplane if he knows or suspects that he is suffering from or is likely to suffer from fatigue, or feels unfit to the extent that the flight may be endangered.
- (e) An operator shall nominate a home base for each crew member.

# **JAR-OPS 1.1080 Terminology**

- (a) Actual flight operation Actual flight operation starts at the reporting time and ends when the crew goes off duty.
- (b) Adequate facilities A quiet and comfortable place not open to the public.
- (c) Augmented flight crew A flight crew which comprises more than the minimum number required for the operation of the aeroplane and in which each flight crew member can leave his post and be replaced by another appropriately qualified flight crew member.

- (d) Block time The time between an aeroplane first moving from its parking place for the purpose of taking off until it comes to rest on the designated parking position or until all engines are stopped.
- (e) *Break* A period free of all duties, which counts as duty, being less than a rest period.
- (f) Day A 24 hour period commencing at 0000 UTC.
- (g) Duty Any task that a crew member is required to carry out and which is associated with the business of an AOC holder.
- (h) Duty period A period which starts when the crew member is required by an operator to report for a duty and ends when the crew member is free from all duties.
- (i) Flight duty period (FDP) A period which commences when an operating crew member is required to report for a duty period that includes a flight and which finishes at the end of the block time on the final flight on which the crew member is an operating crew member.
- (j) Home base The place nominated by the operator to the crew member from where the crew member normally starts and ends a duty period or a series of duty periods and at which place, under normal conditions, the operator is not responsible for the accommodation of the crew member concerned.
- (k) Local day A 24 hour period commencing at 0000 local time.
- (I) Notification time The period of time that an operator allows between the time a crew member on standby receives a call requiring him to report for duty and the time he is required to report for that duty.
- (m) Operating crew member A crew member who carries out his duties in an aeroplane during the flight or during any part of the flight.



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- (n) Option of the Authority The right of the Authority to choose an alternative prescribed in the requirements on a general, country-wide, basis or on a non-discriminatory basis for individual operators.
- (o) Positioning The transferring of a crew member from place to place, excluding "travelling" as defined in sub-paragraph (v) below, at the behest of an operator.
- (p) Reporting time The time at which a crew member is required by an operator to report for any duty.
- (q) Rest period An uninterrupted and defined period of time during which a crew member is free of all duties and/or standby.
- (r) Split duty A flight duty period which consists of two duties separated by a break.
- (s) Standby A defined period of time during which a crew member has not been assigned to any duty, but during which he is required by the operator to be available to receive an assignment for duty without an intervening rest period.
- (t) Suitable accommodation A suitably furnished bedroom, with single occupancy if required by the crew member, which is subject to minimum noise, is well ventilated and should have the facility to control the levels of light and temperature.
- (u) *Time difference* The number of hours separating local standard time at two locations (disregarding "daylight saving time").
- (v) Travelling All reasonably planned travelling time spent by a crew member in transit between his place of rest provided by the operator and the place of duty and vice versa.

## JAR-OPS 1.1085 Limitations - Flight Crew

# (a) Block times

(1) An operator shall ensure that the total block times of the flights on which an

individual flight crew member is assigned as an operating crew member do not exceed:

- (i) 900 hours in any 12 consecutive months: and
- (ii) 100 hours in any 28 consecutive days.
- (2) An operator shall ensure that the maximum uninterrupted block time to which a flight crew of two is assigned in one flight duty period does not exceed the following:

Reporting time between	Max. interrupted block time
0700-1359	11 hrs
1400-1759	10 hrs
1800-0459	9 hrs
0500-0659	10 hrs

Table 1 - Maximum uninterrupted block times - Flight crew of 2

### (b) Duty periods

- (1) An operator shall ensure that the total duty periods to which a flight crew member is assigned do not exceed:
  - (i) 1800 hours in any 12 consecutive months:
- (ii) 190 hours in any 28 consecutive days; and
- (iii) 55 hours in any 7 consecutive days. However, this figure can be increased to 58 hours when a rostered duty consisting of a series of duty periods has commenced and is subject to unforeseen delays.
- (2) Crew members not primarily engaged on flying duties are exempt from the limitations prescribed in sub-paragraph (b)(1) above other than for the 7 days prior to and during an FDP or series of FDPs.

# (c) Flight duty periods

(1) The allowable flight duty period, depending on the reporting time and the number of landings, is given in the following Tables. The reporting time is expressed in the local time at the reporting place.



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Reporting time	Number of landings as operating flight crew member							
_	1 - 2	3	4	5	6	7	8	>=9
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
0700 – 1159	1400	1315	1230	1145	1100	1015	0930	0900
1200 – 1359	1330	1245	1200	1115	1030	0945	0900	0900
1400 – 1559	1300	1215	1130	1045	1000	0915	0900	0900
1600 – 1759	1230	1145	1100	1015	0930	0900	0900	0900
1800 – 0359	1200	1115	1030	0945	0900	0900	0900	0900
0400 - 0459	1230	1145	1100	1015	0930	0900	0900	0900
0500 - 0559	1300	1215	1130	1045	1000	0915	0900	0900
0600 - 0659	1330	1245	1200	1115	1030	0945	0900	0900

Table 2 - Allowable flight duty periods - Multi-pilot operations

Reporting time	Numbe	Number of landings as operating flight crew member				
	1 - 4	5	6	>=7		
	(a)	(b)	(c)	(d)		
0700 – 1159	1000	0915	0830	0800		
1200 – 1359	0930	0845	0800	0800		
1400 – 1559	0930	0815	0800	0800		
1600 – 1759	0830	0800	0800	0800		
1800 - 0359	0800	0800	0800	0800		
0400 - 0459	0830	0800	0800	0800		
0500 - 0559	0900	0815	0800	0800		
0600 - 0659	0930	0845	0800	0800		

Table 3: Allowable flight duty periods - Single Pilot Operations

- (2) The reporting times in Tables 2 and 3 may be shifted, as a whole, earlier or later by one whole hour at the option of the Authority.
- (3) At the option of the Authority, a third landing may be permitted within the flight duty period calculated in accordance with column (a) of Table 2 subject to a maximum of two occasions within any 7 consecutive days.
- (4) The figures derived from Table 2 may be increased by the use of either:
- (i) Split duty as prescribed in JAR-OPS 1.1105; or
- (ii) Augmented flight crew as prescribed in sub-paragraph (e) below.
- (5) The figures derived from Table 3 may be increased by the use of split duty.

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(6) For flights operated by a single pilot and conducted wholly under VFR, allowable flight duty periods must be derived from column (a) of Table 3 although, in this case, there is no limit to the number of landings. However, where the number of landings exceeds an average of 4 per hour a break of at least 30 minutes must be taken within any period of 3 consecutive hours.

## (d) Mixed flying/types of operation

- (1) Aeroplanes and Helicopters When a flight crew member operates on both aeroplanes and helicopters, an operator must submit a flight and duty time limitations and rest scheme based upon Subparts Q in JAROPS Parts 1 and 3 for approval by the Authority.
- (2)Flight simulator and conversion/recurrent training flights - An operator shall ensure that, where a flight crew member carries out either flight simulator or training flights prior to a commercial air transportation flight within the same flight duty period, then the duration of flight simulator or training flights must be doubled for the purpose of calculating flight duty accordance period limits in sub-paragraph (c) above. The number of landings during flight simulator and training flights need not be taken into account.
- (3) Single pilot/multi pilot operations Where a pilot flies both a single pilot operation and a multi-pilot operation in one flight duty period then the more restrictive limits in Tables 2 or 3 above apply.
- (e) Augmented Flight Crew An operator shall ensure that:
  - (1) Irrespective of the reporting time;
- (i) If a flight crew comprising at least 2 pilots is augmented in order to increase the flight duty period derived from Table 2, above, in such a way that every flight crew member can leave his post for at least 50% of the total block time of all flights within the flight duty period, the flight duty period does not exceed 18 hours (See IEM OPS 1.1085(e)(1)); or
- (ii) If flight crew augmentation is less than in sub-paragraph (1) above, the flight duty period does not exceed 16 hours;

- (2) An augmented flight crew is scheduled to carry out no more than 2 landings within a flight duty period or, at the option of the Authority 3 landings, provided that at least the following conditions are met:
- (i) The block time for one sector is 2 hours or less; and
- (ii) The rest period immediately following this flight duty period, initially calculated in accordance with JAR-OPS 1.1110, is increased by 6 hours; and
- (3) Rest facilities are available on board for resting flight crew members (See AMC & IEM OPS1.1085(e)(3)/1.1090(c)(1)(i)).

## JAR-OPS 1.1090 Limitations - Cabin Crew

## (a) Duty periods

- (1) An operator shall ensure that the total duty periods to which a cabin crew member is assigned do not exceed:
- (i) 1800 hours in any 12 consecutive months;
- (ii) 190 hours in any 28 consecutive days; and
- (iii) 60 hours in any 7 consecutive days. However, this figure can be increased to 63 hours when a rostered duty consisting of a series of duty periods has commenced and is subject to unforeseen delays.
- (2) Crew members not primarily engaged on flying duties are exempt from the limitations prescribed in sub-paragraph (1) above other than for the 7 days prior to and during an FDP or series of FDPs.

### (b) Flight duty periods

(1) The allowable flight duty period, depending on the reporting time and the number of landings, is given in the following Table. The reporting time is expressed in the local time at the reporting place.



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Reporting time	Number of landings as operating cabin crew member							
	1 - 2	3	4	5	6	7	8	>=9
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
0700 - 1159	1400	1315	1230	1145	1100	1015	0930	0900
1200 – 1359	1330	1245	1200	1115	1030	0945	0900	0900
1400 – 1559	1300	1215	1130	1045	1000	0915	0900	0900
1600 – 1759	1230	1145	1100	1015	0930	0900	0900	0900
1800 – 0359	1200	1115	1030	0945	0900	0900	0900	0900
0400 - 0459	1230	1145	1100	1015	0930	0900	0900	0900
0500 - 0559	1300	1215	1130	1045	1000	0915	0900	0900
0600 - 0659	1330	1245	1200	1115	1030	0945	0900	0900

Table 4 - Allowable flight duty periods - Cabin Crew

- (2) The reporting times in Table 4 may be shifted, as a whole, earlier or later by one whole hour at the option of the Authority.
- (3) At the option of the Authority, a third landing may be permitted within the flight duty period calculated in accordance with column (a) of Table 4 subject to a maximum of two occasions within any 7 consecutive days.
- (4) The figures derived from Table 4 may be increased by the use of either:
- (i) Split duty as prescribed in JAR-OPS 1.1105; or
- (ii) Extension of the allowable flight duty period as prescribed in subparagraph (c) below.
- (5) If the reporting time for the cabin crew is up to 1 hour earlier than that for flight crew members assigned to the same flight or series of flights within the same flight duty period, the operator may base the allowable flight duty period and subsequent rest period upon the flight crew's reporting time.
- (6) If the difference between the reporting time for a cabin crew member and a flight crew member starting a flight duty period for the same flight is more than one hour, the flight duty period must be based upon the cabin crew member's reporting time and calculated in accordance with Table 4 above.

- (c) Extension of allowable Flight Duty Periods An operator shall ensure that, if extending the allowable flight duty periods for cabin crew:
- (1) Irrespective of the reporting time, the flight duty period does not exceed 18 hours, provided that:
- (i) Rest facilities are available on board for resting cabin crew members (See IEM OPS 1.1085(e)(3)/1.1090(c)(1)(i); and
- (ii) Each cabin crew member is relieved of all tasks during a part of the flight (See AMC OPS 1.1090(c)(1)(ii)); and
- (2) No more than 2 landings are carried out within a flight duty period or, at the option of the Authority 3 landings.

# JAR-OPS 1.1095 Positioning

An operator shall ensure that all time spent on positioning is counted as duty.

# **JAR-OPS 1.1100 Reporting Times**

An operator shall specify reporting times that realistically reflect the time required for pre-flight duties of not less than 60 minutes prior to the beginning of the planned block time unless otherwise approved by the Authority.



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# JAR-OPS 1.1105 Split Duty (See IEM OPS 1.1105)

(a) When a flight duty period consists of 2 duties separated by a break defined and notified to the crew member in advance, an operator may increase the allowable planned flight duty period prescribed in Tables 2 and 3 in JAR-OPS 1.1085 or Table 4 in JAR-OPS 1.1090, as appropriate, in accordance with Table 5 below, subject to the conditions prescribed in sub-paragraphs (b), (c) and (d) below.

Consecutive hours	Increase in FDP
Break (a)	(b)
0 – 2 hrs 59 mins	NIL
3 hrs – 6 hrs 59 mins	½ length of break
7 hrs – 10 hrs 59 mins	2/3 length of break or 1
	½ length of break if at
	least 7 hours of the
	break fall between
	2000-0800 local time
	where the break occurs

Table 5 - Split duty credit

- (b) An operator shall ensure that the parts of the flight duty period before and after the break do not exceed 10 hours, and the total flight duty period, as increased in accordance with Table 5 above, does not exceed 20 hours.
- (c) An operator shall ensure that split duty is not combined with augmented flight crew or, for cabin crew, extension of the allowable flight duty period.
- (d) An operator shall ensure that:
- (1) If the break is 6 hours or more, or covers 3 hours or more of the period 2200 0600 local time at the place where it occurs, suitable accommodation is provided. In all other circumstances adequate facilities must be provided;
- (2) With regard to the cumulative duty periods prescribed in JAR-OPS 1.1085(b) and 1.1090(a), if the break is less than 8 hours, the full period of the break is accountable. If the break is 8 hours or more, 50% of the period of the break is accountable:

- (3) Only one break is used within one flight duty period;
- (4) If the total travelling time in both directions between the place of duty and the adequate facilities or suitable accommodation exceeds one hour, any travelling time in excess of the 1 hour total is deducted from the break for the purposes of calculating the increased flight duty period; and
- (5) The time difference between the place of the beginning of the duty and the place at which the break is taken is not greater than two hours.

# JAR-OPS 1.1110 Rest Requirements

- (a) An operator shall ensure that:
- (1) Before the start of a flight duty period a crew member has completed a rest period at least as long as the preceding duty period, or 11 hours, whichever is the greater (See IEM OPS 1.1110(a)); and
- (2) The minimum rest period following a flight duty period in which split duty credit has been used is at least as long as the total flight duty period including the break, except that, if suitable accommodation was provided, the duration of the break need not be included in the rest period calculation.
- (b) An operator may reduce the rest period calculated in accordance with sub-paragraph (a)(1) above by not more than 3 hours but to not less than 11 hours except as provided for in sub-paragraph (f) below, subject to the following conditions:
- (1) The previous rest period must have been completed in accordance with sub-paragraph (a)(1) above;
- (2) The amount by which the rest period is reduced must be added to the next rest period which cannot be reduced;
- (3) The amount of time by which the rest period is reduced must be deducted from the subsequent allowable Flight Duty Period; and
- (4) Reduced rest must not be used prior to or following split duty.

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to at least:

- (c) An operator shall ensure that the minimum rest periods prescribed in sub-paragraphs (a) and (b) above are increased
- (1) One 36 hour period within 7 consecutive days: or
- (2) One 60 hour period within 10 consecutive days (See IEM OPS 1.1110(c)).
- (d) An operator shall ensure that a crew member is given days free of all duty and standby, which are notified in advance, as follows (See IEM OPS 1.1 110(d)):
- (1) 7 local days in each calendar month which may include required rest periods; and
- (2) At least 24 local days in each calendar quarter which may include required rest periods.
- (e) An operator shall provide suitable accommodation when rest periods are required away from the home base.
- (f) An operator shall ensure that:
- (1) If the total travelling time in both directions between the place of duty and suitable accommodation provided by the operator exceeds 2 hours, then any excess is added to the minimum rest period; or
- (2) If the total travelling time in both directions between the place of duty and suitable accommodation provided by the operator is less than 1 ½ hours, then the time difference may be deducted from the minimum rest period but the time at the accommodation shall not be less than 10 hours.
- (g) An operator shall ensure that if, during any period of 7 consecutive days:
- (1) Any part of three or more planned duty periods falls within 0100 0659 local time at the reporting place, which at the option of the Authority may be shifted earlier by one whole hour; and
- (2) The time difference between any two places at which crew rest was taken is less than 4 hours, the 36 hour rest period

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option prescribed in sub-paragraph (c)(1) above is increased to 48 hours although the additional 12 hours which increases the rest period to 48 hours need not fall within the 7 day period.

(h) If sub-paragraph (g) above applies, an operator shall not apply the 60 hour rest period option prescribed in sub-paragraph (c)(2) above.

## JAR-OPS 1.1115 Intentionally blank

# JAR-OPS 1.1120 Time difference (See AMC OPS 1.1120)

When the time difference between the places where a duty period begins and ends is 4 hours or more, an operator shall take into account the effects this may have on crew members by specifying increased rest.

# JAR-OPS 1.1125 Standby

- (a) When an operator elects to place crews on standby, he shall:
- (1) Apply the following limits on standby periods for crew members;

Notification time	Maximum standby
(a)	(b)
0 - 5 hrs 59 mins	12 hrs
6 hrs or more	18 hrs

Table 6 - Standby limits

- (2) Ensure that suitable accommodation is provided if:
- (i) A crew member is required to be on standby away from the homebase; or
- (ii) Standby is undertaken at an airport;
- (3) Notify the crew member of the time of start and end of standby period, and the minimum notification time;

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- (4) Ensure that the following are counted towards the total duty periods prescribed in JAR-OPS 1.1085(b) or JAR-OPS 1.1 090(a), as appropriate:
- (i) 50% of the amounts of standby undertaken by each crew member (excluding the first 4 hours of any standby undertaken at home): and
- (ii) If notified for duty, 50% of any notification time of less than 10 hours;
- (5) Ensure that if a crew member is assigned standby immediately after a duty period and without intervening rest, the duty and the subsequent time on standby are totalled and are included in:
- (i) A n y i m m e d i a t e I y subsequent flight duty period; or
- (ii) A n y i m m e d i a t e l y subsequent duty period; and
- (6) Ensure that when a crew member completes standby without being called for duty he completes a rest period of at least 10 hours before commencing a subsequent duty or standby period.
- (b) An operator shall ensure that if a flight is delayed on the day of operation before a crew member leaves his place of rest, the crew member is considered to be on standby from the originally scheduled reporting time. In such an event, the operator must specify a notification time.

# JAR-OPS 1.1130 Unforeseen circumstances in actual flight operations

- (a) During the actual flight operation, which starts at the reporting time, the limits on flight duty, duty and rest periods prescribed in this Subpart may be modified in the event of unforeseen circumstances. Any such modifications must be acceptable to the commander after consultation with all other crew members and must, in all circumstances, comply with the following:
- (1) The allowable flight duty period may not be increased by more than 2 hours unless:

- (i) The flight crew has been augmented, in which case the allowable flight duty period may be increased by not more than 3 hours: or
- (ii) For cabin crew, the allowable flight duty period has been extended in accordance with JAR-OPS 1.1090(c), in which case the allowable flight duty period may be extended by not rnore than 3 hours;
- (2) If on the final sector within a flight duty period unforeseen circumstances occur after take-off that will result in the permitted increase being exceeded, the flight may continue to the planned destination or alternate; and
- (3) The rest period may be reduced by a maximum of 2 hours but to not less than 10 ½, hours provided that a crew member's previous rest period was not reduced. The amount by which a rest period is reduced must be added to the next rest period which must not be reduced.
- (b) If after the start of a flight duty period an unforeseen situation arises, as a result of which the operator requires a crew member to take a break, the crew member(s) concerned must be informed before the break commences and the split duty requirements prescribed in JAR-OPS 1.1105 applied accordingly.
- (c) An operator shall ensure that when, due to unforeseen circumstances, a duty period which was planned outside the period 0100 0659 local time at the reporting place falls more than 1 hour within that period, the requirements prescribed in JAR-OPS 1.1110 (g) and (h) are applied accordingly.
- (d) An operator shall ensure that:
- (1) The commander submits a report to the operator whenever a flight duty period is increased or when a rest period is reduced in actual flight operation; and
- (2) Where the increase of a flight duty period or reduction of a rest period exceeds one hour, a copy of the report, to which the operator must add his comments, is sent to the Authority no later than 28 days after the event.



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# JAR-OPS 1.1135 Flight duty, duty and rest period records (See AMC OPS 1.1135)

- (a) An operator shall ensure that sufficiently detailed records of crew member's:
  - (1) Block times;
  - (2) Flight duty periods;
  - (3) Duty periods; and
- (4) Rest periods and local days free of all duties.

are maintained to ensure compliance with the requirements of this Subpart.

- (b) A crew member who is self-employed and/or working on a freelance or private basis shall maintain an individual record, as appropriate, of his:
  - (1) Block times;
  - (2) Flight duty periods;
  - (3) Duty periods; and
- 4) Rest periods and local days free of all duties,

which must be presented to any operator who employs his services before he commences a flight duty period (See AMC OPS 1.1135(b)).

# APPENDIX A TO JAR-OPS 1 SUBPART Q Air Taxi Operations

When conducting air taxi operations, an operator shall not make use of the variations contained within this Appendix unless the Authority has accepted the relevant entry in the Operations Manual. Flight crew members operating in accordance with this Appendix may not operate to any other flight and duty time limitations and rest requirements contained in JAR-OPS without complying with transition periods acceptable to the Authority.

#### **SECTION 1**

# JAR-OPS 1 Subpart Q

# AR-OPS 1.1075 General

(See IEM OPS 1.1075)

- (a) An operator shall establish a flight and duty time limitations and rest scheme for crew members.
- (b) An operator shall ensure that:
- (1) The flight and duty time limitations and rest scheme is in accordance with the provisions of this Subpart;
- (2) Flights are planned to be completed within the allowable flight duty period taking into account the time necessary for pre-flight duties, the flight and the turnaround times and the nature of operation; and
- (3) Duty rosters are prepared and published (See IEM OPS 1.1075(b)(3)).
- (c) An operator shall ensure that, if he elects to adopt this Appendix, the Appendix is applied in its entirety.
- (d) A crew member shall not operate on an aeroplane if he knows or suspects that he is suffering from or is likely to suffer from fatigue, or feels unfit to the extent that the flight may be endangered.
- (e) An operator shall nominate a home base for each crew member.

### JAR-OPS 1.1080 Terminology

- (a) Actual flight operation Actual flight operation starts at the reporting time and ends when the crew goes off duty.
- (b) Adequate facilities A quiet and comfortable place not open to the public.
- (c) Augmented flight crew A flight crew which comprises more than the minimum number required for the operation of the aeroplane and in which each flight crew member can leave his post and be replaced by another appropriately qualified flight crew member.

- (d) Block time The time between an aeroplane first moving from its parking place for the purpose of taking off until it comes to rest on the designated parking position or until all engines are stopped.
- (e) *Break* A period free of all duties, which counts as duty, being less than a rest period.
- (f) Day A 24 hour period commencing at 0000 UTC.
- (g) *Duty* Any task that a crew member is required to carry out and which is associated with the business of an AOC holder.
- (h) Duty period A period which starts when the crew member is required by an operator to report for a duty and ends when the crew member is free from all duties.
- (i) Flight duty period (FDP) A period which commences when an operating crew member is required to report for a duty period that includes a flight and which finishes at the end of the block time on the final flight on which the crew member is an operating crew member.
- (j) Home base The place nominated by the operator to the crew member from where the crew member normally starts and ends a duty period or a series of duty periods and at which place, under normal conditions, the operator is not responsible for the accommodation of the crew member concerned.
- (k) Local day A 24 hour period commencing at 0000 local time.
- (I) Notification time The period of time that an operator allows between the time a crew member on standby receives a call requiring him to report for duty and the time he is required to report for that duty.

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#### **SECTION 1**

### JAR-OPS 1 Subpart Q

- (m) Operating crew member A crew member who carries out his duties in an aeroplane during the flight or during any part of the flight.
- (n) Option of the Authority The right of the Authority to choose an alternative prescribed in the requirements on a general, country-wide, basis or on a non-discriminatory basis for individual operators.
- (o) Positioning The transferring of a crew member from place to place, excluding "travelling" as defined in sub-paragraph (v) below, at the behest of an operator.
- (p) Reporting time The time at which a crew member is required by an operator to report for any duty.
- (q) Rest period An uninterrupted and defined period of time during which a crew member is free of all duties and/or standby.
- (r) Split duty A flight duty period which consists of two duties separated by a break.
- (s) Standby A defined period of time during which a crew member has not been assigned to any duty, but during which he is required by the operator to be available to receive an assignment for duty without an intervening rest period.
- (t) Suitable accommodation A suitably furnished bedroom, with single occupancy if required by the crew member, which is subject to minimum noise, is well ventilated and should have the facility to control the levels of light and temperature.
- (u) Time difference The number of hours separating local standard time at two locations (disregarding "daylight saving time").
- (v) Travelling All reasonably planned travelling time spent by a crew

member in transit between his place of rest provided by the operator and the place of duty and vice versa

(w) Air Taxi Operations - An operation of aeroplanes with a maximum approved passenger seating configuration of not more than 19, or MTOM of less than 10 tonnes, in which an operator provides an on-demand service to customers.

# JAR-OPS 1.1085 Limitations - Flight Crew

- (a) Block times
  - (1)
- (i) 800 hours in any 12 consecutive months; and
- (ii) 80 hours in any 28 consecutive days.
- (2) An operator shall ensure that the maximum uninterrupted block time to which a flight crew of two is assigned in one flight duty period does not exceed the following:

Reporting time between	Max. uninterrupted block time
0700 - 1359	11 hrs
1400 - 1759	10 hrs
1800 - 0459	9 hrs
0500 - 0659	10 hrs

Table 1 - Maximum uninterrupted block times - Flight crew of 2

# (b) Duty Periods

- (1) An operator shall ensure that the total duty periods to which a flight crew member is assigned do not exceed:
- (i) 1800 hours in any 12 consecutive months;



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- (ii) 190 hours in any 28 consecutive days: and
- (iii) 65 hours in 7 consecutive days. However, this figure can be increased to 68 hours when a rostered duty consisting of a series of duty periods has commenced and is subject to unforeseen delays.
- (2) Crew members not primarily engaged on flying duties are exempt from the

limitations prescribed in sub-paragraph (b)(1) above other than for the 7 days prior to and during an FDP or series of FDPs.

# (c) Flight Duty Periods

(1) The allowable flight duty period, depending on the reporting time and the number of landings, is given in the following Tables. The reporting time is expressed in the local time at the reporting place.

Reporting time	Number of landings as operating flight crew member					
	1 - 4	5	6	7	8	>=9
	(a)	(b)	(c)	(d)	(e)	(f)
0700-1159	1400	1300	1200	1100	1000	0900
1200-1359	1330	1230	1130	1030	0930	0900
1400-1559	1300	1200	1100	1000	0900	0900
1600-1759	1230	1130	1030	0930	0900	0900
1800-0359	1200	1100	1000	0930	0900	0900
0400-0459	1230	1130	1030	0930	0900	0900
0500-0559	1300	1200	1100	1000	0900	0900
0600-0659	1330	1230	1130	1030	0930	0900

Table 2 - Allowable flight duty periods - Multi-pilot operations

Reporting time	Number of landings as operating flight crew member				
-	1 - 4	5	6	>=7	
	(a)	(b)	(c)	(d)	
0700-1159	1000	0915	0830	0800	
1200-1359	0930	0845	0800	0800	
1400-1559	0900	0815	0800	0800	
1600-1759	0830	0800	0800	0800	
1800-0359	0800	0800	0800	0800	
0400-0459	0830	0800	0800	0800	
0500-0559	0900	0815	0800	0800	
0600-0659	0930	0845	0800	0800	

Table 3: Allowable flight duty periods - Single Pilot Operations

- (2) (Not applicable to air taxi operations)
- (3) (Not applicable to air taxi operations)
- (4) The figures derived from Table 2 may be increased by the use of either:
- (i) Split duty as prescribed in JAR-OPS 1.1105; or
- (ii) Augmented flight crew as prescribed in sub-paragraph (e) below.
- (5) The figures derived from Table 3 may be increased by the use of split duty.

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- (6) For flights operated by a single pilot and conducted wholly under VFR, allowable flight duty periods must be derived from column (a) of Table 3 although, in this case, there is no limit to the number of landings. However, where the number of landings exceeds an average of 4 per hour a break of at least 30 minutes must be taken within any period of 3 consecutive hours.
- (d) Mixed flying/types of operation
- (1) Aeroplanes and Helicopters When a flight crew member operates on both aeroplanes and helicopters, an operator must submit a flight and duty time limitations and rest scheme based upon Subparts Q in JAR-OPS Parts 1 and 3 for approval by the Authority.
- (2)Flight simulator conversion/recurrent training flights - An operator shall ensure that, where a flight crew member carries out either flight simulator or training flights prior to a commercial air transportation flight within the same flight duty period, then the duration of flight simulator or training flights must be doubled for the purpose of calculating flight duty period limits in accordance sub-paragraph (c) above. The number of landings during flight simulator and training flights need not be taken into account.
- (3) Single pilot/multi pilot operations Where a pilot flies both a single pilot operation and a multi-pilot operation in one flight duty period then the more restrictive limits in Tables 2 or 3 above apply.
- (e) Augmented Flight Crew An operator shall ensure that:
  - (1) Irrespective of the reporting time;
- (i) If a flight crew comprising at least 2 pilots is augmented in order to increase the flight duty period derived from Table 2, above, in such a way that every flight crew member can leave his post for at least 50% of the total block time of all flights within the flight duty period, the flight duty period does not exceed 18 hours (See IEM OPS 1.1085(e)(1));
- (ii) If flight crew augmentation is less than in sub-paragraph (1) above, the flight duty period does not exceed 16 hours;

- (2) An augmented flight crew is scheduled to carry out no more than 3 landings within a flight duty period or, at the option of the Authority 4 landings, provided that at least the following conditions are met.
- (i) The block time for one sector is 2 hours or less: and
- (ii) The rest period immediately following this flight duty period, initially calculated in accordance with JAR-OPS 1.1110, is increased by 6 hours; and
- (3) Rest facilities are available on board for resting flight crew members (See AMC & IEM to App. A & B to Subpart Q, JAR-OPS 1.1085(e)(3)).

#### JAR-OPS 1.1090 Limitations - Cabin Crew

(Not applicable to air taxi operations)

# **JAR-OPS 1.1095 Positioning**

An operator shall ensure that all time spent on positioning is counted as duty.

### JAR-OPS 1.1100 Reporting times

An operator shall specify reporting times that realistically reflect the time required for pre-flight duties of not less than 30 minutes prior to the beginning of the planned block time unless otherwise approved by the Authority.

# JAR-OPS 1.1105 Split duty (See IEM OPS 1 1105)

(a) When a flight duty period consists of 2 duties separated by a break defined and notified to the crew member in advance, an operator may increase the allowable planned flight duty period prescribed in Tables 2 and 3 in JAR-OPS 1 .1085 in accordance with Table 4 below, subject to the conditions prescribed in sub-paragraphs (b), (c) and (d) below.

# JAR-OPS 1 Subpart Q

Consecutive hours break (a)	Increase in FDP (b)
0 – 2 hrs 59 mins	NIL
3 hrs – 6 hrs 59 mins	½ length of break
7 hrs – 10 hrs 59 mins	2/3 length of break or 1 ½ length of break if at least 7 hours of the break fall between 2000 – 0800 local time where the break occurs

Table 4 - Split duty credit

- (b) An operator shall ensure that the parts of the flight duty period before and after the break do not exceed 10 hours, and the total flight duty period, as increased in accordance with Table 4 above, does not exceed 20 hours.
- (c) An operator shall ensure that split duty is not combined with augmented flight crew or, for cabin crew, extension of the allowable flight duty period.
- (d) An operator shall ensure that:
- (1) If the break is 6 hours or more, or covers 3 hours or more of the period 2200 0600 local time at the place where it occurs, suitable accommodation is provided. In all other circumstances adequate facilities must be provided;
- (2) With regard to the cumulative duty periods prescribed in JAR-OPS 1.1085(b), if the break is less than 8 hours, the full period of the break is accountable. If the break is 8 hours or more, 50% of the period of the break is accountable:
- (3) No more than two breaks are used within one flight duty period;
- (4) If the total travelling time in both directions between the place of duty and the adequate facilities or suitable accommodation exceeds one hour, any travelling time in excess of the 1 hour total is deducted from the break for the purposes of calculating the increased flight duty period; and
- (5) The time difference between the place of the beginning of the duty and the place at which the break is taken is not greater than two hours.

# JAR-OPS 1.1110 Rest requirements

- (a) An operator shall ensure that:
- (1) Before the start of a flight duty period a crew member has completed a rest period at least as long as the preceding duty period, or 11 hours, whichever is the greater (See IEM OPS 1.1110 (a)); and
- (2) The minimum rest period following a flight duty period in which split duty credit has been used is at least as long as the total flight duty period including the break, except that, if suitable accommodation was provided, the duration of the break need not be included in the rest period calculation.
- (b) An operator may reduce the rest period calculated in accordance with sub-paragraph (a)(1) above by not more than 3 hours but to not less than 11 hours except as provided for in sub-paragraph (f) below, subject to the following conditions:
- (1) The previous rest period must have been completed in accordance with sub-paragraph (a)(1) above;
- (2) The amount by which the rest period is reduced must be added to the next rest period which cannot be reduced;
- (3) The amount of time by which the rest period is reduced must be deducted from the subsequent allowable Flight Duty Period; and
- (4) Reduced rest must not be used prior to or following split duty.
- (c) An operator shall ensure that the minimum rest periods prescribed in subparagraphs (a) and (b) above are increased to at least one 36 hour period within 7 consecutive days (See IEM to App A & B to Subpart Q, JAR-OPS 1.1110(c)).
- (d) An operator shall ensure that a crew member is given days free of all duty and standby, which are notified in advance, as follows (See IEM OPS 1.1110(d)):
- (1) 7 local days in each calendar month which may include required rest periods: and
- (2) At least 24 local days in each calendar quarter which may include required rest periods.

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- (e) An operator shall provide suitable accommodation when rest periods are required away from the home base.
- (f) An operator shall ensure that:
- (1) If the total travelling time in both directions between the place of duty and suitable accommodation provided by the operator exceeds 2 hours, then any excess is added to the minimum rest period; or
- (2) If the total travelling time in both directions between the place of duty and suitable accommodation provided by the operator is less than 1 ½ hours, then the time difference may be deducted from the minimum rest period but the time at the the accommodation shall not be less than 10 hours.
- (g) An operator shall ensure that if, during any period of 7 consecutive days:
- (1) Any part of three or more planned duty periods falls within 0100 0659 local time at the reporting place, which at the option of the Authority may be shifted earlier by one whole hour; and
- (2) The time difference between any two places at which crew rest was taken is less than 4 hours,
- the 36 hour rest period option prescribed in sub-paragraph (c)(1) above is increased to 48 hours although the additional 12 hours which increases the rest period to 48 hours need not fall within the 7 day period.
- (h) If sub-paragraph (g) above applies, an operator shall not apply the 60 hour rest period option prescribed in sub-paragraph (c)(2) above.

# JAR-OPS 1.1115 Intentionally blank

# JAR-OPS 1.1120 Time difference

When the time difference between the places where a duty period begins and ends is 4 hours or more, an operator shall take into account the effects this may have on crew members by specifying increased rest.

# JAR-OPS 1.1125 Standby

- (a) When an operator elects to place crews on standby, he shall:
- (1) Apply the following limits on standby periods for crew members;

Notification time	Maximum standby
(a)	(b)
0 – 5 hrs 59 mins	12 hours
6 hrs or more	18 hours

Table 5 - Standby limits

- (2) Ensure that suitable accommodation is provided if:
- (i) A crew member is required to be on standby away from the homebase; or
- (ii) Standby is undertaken at an airport;
- (3) Notify the crew member of the time of start and end of standby period, and the minimum notification time:
- (4) Ensure that the following are counted towards the total duty periods prescribed in JAR-OPS 1.1085(b):
- (i) 50% of the amounts of standby undertaken by each crew member (excluding the first 4 hours of any standby undertaken at home): and
- (ii) If notified for duty, 50% of any notification time of less than 10 hours:
- (5) Ensure that if a crew member is assigned standby immediately after a duty period and without intervening rest, the duty and the subsequent time on standby are totalled and are included in:
- (i) Any immediately subsequent flight duty period; or
- (ii) Any immediately subsequent duty period; and



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- (6) Ensure that when a crew member completes standby without being called for duty he completes a rest period of at least 10 hours before commencing a subsequent duty or standby period.
- (b) An operator shall ensure that if a flight is delayed on the day of operation before a crew member leaves his place of rest, the crew member is considered to be on standby from the originally scheduled reporting time. In such an event, the operator must specify a notification time.

# JAR-OPS 1.1130 Unforeseen circumstances in actual flight operation

- (a) During the actual flight operation, which starts at the reporting time, the limits on flight duty, duty and rest periods prescribed in this Subpart may be modified in the event of unforeseen circumstances. Any such modifications must be acceptable to the commander after consultation with all other crew members and must, in all circumstances, comply with the following:
- (1) The allowable flight duty period may not be increased by more than 2 hours unless the flight crew has been augmented, in which case the allowable flight duty period may be increased by not more than 3 hours; or
- (2) If on the final sector within a flight duty period unforeseen circumstances occur after take-off that will result in the permitted increase being exceeded, the flight may continue to the planned destination or alternate; and
- (3) The rest period may be reduced by a maximum of 2 hours but to not less than 10  $\frac{1}{2}$  hours provided that a crew member's previous rest period was not reduced. The amount by which a rest period is reduced must be added to the next rest period which must not be reduced.

- (b) If after the start of a flight duty period an unforeseen situation arises, as a result of which the operator requires a crew member to take a break, the crew member(s) concerned must be informed before the break commences and the split duty requirements prescribed in JAR-OPS 1.1105 applied accordingly.
- (c) An operator shall ensure that when, due to unforeseen circumstances, a duty period which was planned outside the period 0100 0659 local time at the reporting place falls more than 1 hour within that period, the requirements prescribed in JAR-OPS 1.1110 (g) and (h) are applied accordingly.
- (d) An operator shall ensure that:
- (1) The commander submits a report to the operator whenever a flight duty period is increased or when a rest period is reduced in actual flight operation; and
- (2) Where the increase of a flight duty period or reduction of a rest period exceeds one hour, a copy of the report, to which the operator must add his comments, is sent to the Authority no later than 28 days after the event.

# JAR-OPS 1.1135 Flight duty, duty and rest period records (See AMC OPS 1.1135)

- (a) An operator shall ensure that sufficiently detailed records of crew member's:
  - (1) Block times;
  - (2) Flight duty periods;
  - (3) Duty periods; and
- (4) Rest periods and local days free of all duties,

are maintained to ensure compliance with the requirements of this Subpart.



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- (b) A crew member who is self-employed and/or working on a freelance or private basis shall maintain an individual record, as appropriate, of his:
  - (1) Block times;
  - (2) Flight duty periods;
  - (3) Duty periods; and
- (4) Rest periods and local days free of all duties.

which must be presented to any operator who employs his services before he commences a flight duty period (See AMC OPS 1.11 35(b)).

# APPENDIX B TO JAR-OPS 1 SUBPART Q Emergency Medical Service operations

When conducting Emergency Medical Service (EMS) operations, an operator shall not make use of the variations contained within this Appendix unless the Authority has accepted the relevant entry in the Operations Manual. Flight Crew members operating in accordance with this Appendix may not operate to any other flight and duty time limitations and rest requirements contained in JAR-OPS without complying with transition periods acceptable to the Authority.

# **JAR-OPS 1.1075 General** (See IEM OPS 1.1075)

- (a) An operator shall establish a flight and duty time limitations and rest scheme for crew members.
- (b) An operator shall ensure that:
- (1) The flight and duty time limitations and rest scheme is in accordance with the provisions of this Subpart:
- (2) Flights are planned to be completed within the allowable flight duty period taking into account the time necessary for pre-flight duties, the flight and the turnaround times and the nature of operation; and
- (3) Duty rosters are prepared and published (See IEM OPS 1.1075(b)(3)).
- (c) An operator may elect to adopt one, or more as appropriate, of the Appendices to this Subpart which give variations to the basic requirements for specific types of operation. An operator shall ensure that, if such an option is chosen, the Appendix is applied in its entirety.
- (d) A crew member shall not operate on an aeroplane if he knows or suspects that he is suffering from or is likely to suffer from fatigue, or feels unfit to the extent that the flight may be endangered.
- (e) An operator shall nominate a home base for each crew member.

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#### **SECTION 1**

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# JAR-OPS 1.1080 Terminology

- (a) Actual flight operation Actual flight operation starts at the reporting time and ends when the crew goes off duty.
- (b) Adequate facilities A quiet and comfortable place not open to the public.
- (c) Augmented flight crew A flight crew which comprises more than the minimum number required for the operation of the aeroplane and in which each flight crew member can leave his post and be replaced by another appropriately qualified flight. crew member.
- (d) Block time The time between an aeroplane first moving from its parking place for the purpose of taking off until it comes to rest on the designated parking position or until all engines are stopped.
- (e) Break A period free of all duties, which counts as duty, being less than a rest period.
- (f) Day A 24 hour period commencing at 0000 UTC.
- (g) Duty Any task that a crew member is required to carry out and which is associated with the business of an AOC holder.
- (h) Duty period A period which starts when the crew member is required by an operator to report for a duty and ends when the crew member is free from all duties.

- (i) flight duty period (FDP) A period which commences when an operating crew member is required to report for a duty period that includes a flight and which finishes at the end of the block time on the final flight on which the crew member is an operating crew member.
- (j) Home base The place nominated by the operator to the crew member from where the crew member normally starts and ends a duty period or a series of duty periods and at which place, under normal conditions, the operator is not responsible for the accommodation of the crew member concerned.
- (k) Local day A 24 hour period commencing at 0000 local time.
- (I) Notification time The period of time that an operator allows between the time a crew member on standby receives a call requiring him to report for duty and the time he is required to report for that duty.
- (m) Operating crew member A crew member who carries out his duties in an aeroplane during the flight or during any part of the flight.
- (n) Option of the Authority The right of the Authority to choose an alternative prescribed in the requirements on a general, country-wide, basis or on a non-discriminatory basis for individual operators.

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- (o) Positioning The transferring of a crew member from place to place, excluding "travelling" as defined in sub-paragraph (v) below, at the behest of an operator.
- (p) Reporting time The time at which a crew member is required by an operator to report for any duty.
- (q) Rest period An uninterrupted and defined period of time during which a crew member is free of all duties and/or standby.
- (r) Split duty A flight duty period which consists of two duties separated by a break.
- (s) Standby A defined period of time during which a crew member has not been assigned to any duty, but during which he is required by the operator to be available to receive an assignment for duty without an intervening rest period.
- (t) Suitable accommodation A suitably furnished bedroom, with single occupancy if required by the crew member, which is subject to minimum noise, is well ventilated and should have the facility to control the levels of light and temperature.
- (u) Time difference The number of hours separating local standard time at two locations (disregarding "daylight saving time").
- (v) Travelling All reasonably planned travelling time spent by a crew member in transit between his place of rest provided by the operator and the place of duty and vice versa
- (w) Air Taxi Operations An operation of aeroplanes with a maximum approved passenger seating configuration of not more than 19, or MTOM of less than 10 tonnes, in which an operator provides an on-demand service to customers

- (x) Emergency Medical Service operations -Operations in which the purpose of the flights is to provide air transportation directly connected with:
- (1) Seriously ill or injured persons, together with their relatives and medical personnel, to a place where facilities urgently needed for their treatment can be provided;
- (2) Medical personnel required to provide urgently needed services connected with their professional skills;
- (3) Medical supplies such as equipment, blood, organs and drugs that are urgently needed.

## JAR-OPS 1.1085 Limitations - Flight Crew

# (a) Block times

- (1) An operator shall ensure that the total block times of the flights on which an individual flight crew member is assigned as an operating crew member do not exceed:
- (i) 900 hours in any 12 consecutive months; and
- (ii) 80 hours in any 28 consecutive days.
- (2) An operator shall ensure that the maximum uninterrupted block time to which a flight crew of two is assigned in one flight duty period does not exceed the following:

Reporting time between	Max. uninterrupted block time
0700-1359	11 hrs
1400-1759	10 hrs
1800-0459	9 hrs
0500-0659	10 hrs

Table 1 - Maximum uninterrupted block times - Flight crew of 2



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# (b) Duty Periods

- (1) An operator shall ensure that the total duty periods to which a flight crew member is assigned do not exceed:
- (i) 1800 hours in any 12 consecutive months;
- (ii) 190 hours in any 28 consecutive days; and
- (iii) 65 hours in any 7 consecutive days. However, this figure can be increased to 68 hours when a rostered duty consisting of a series of duty periods has commenced and is subject to unforeseen delays.
- (2) Crew members not primarily engaged on flying duties are exempt from the limitations prescribed in sub-paragraph (b)(1) above other than for the 7 days prior to and during an FDP or series of FDPs.

# (c) Flight Duty Periods

(1) The allowable flight duty period, depending on the reporting time and the number of landings, is given in the following Tables. The reporting time is expressed in the local time at the reporting place.

Reporting time	Number of landings as operating flight crew member					
	1 - 4	5	6	7	8	>=9
	(a)	(b)	(c)	(d)	(e)	(f)
0700-1159	1400	1300	1200	1100	1000	0900
1200-1359	1330	1230	1130	1030	0930	0900
1400-1559	1300	1200	1100	1000	0900	0900
1600-1759	1230	1130	1030	0930	0900	0900
1800-0359	1200	1100	1000	0930	0900	0900
0400-0459	1230	1130	1030	0930	0900	0900
0500-0559	1300	1200	1100	1000	0900	0900
0600-0659	1330	1230	1130	1030	0930	0900

Table 2 - Allowable flight duty periods - Multi-pilot operations

Reporting time	Number of landings as operating flight crew member			member
	1 - 4	5	6	>=7
	(a)	(b)	(c)	(d)
0700-1159	1000	0915	0830	0800
1200-1359	0930	0845	0800	0800
1400-1559	0900	0815	0800	0800
1600-1759	0830	0800	0800	0800
1800-0359	0800	0800	0800	0800
0400-0459	0830	0800	0800	0800
0500-0559	0900	0815	0800	0800
0600-0659	0930	0845	0800	0800

Table 3: Allowable flight duty periods - Single Pilot Operations

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- (2) (Not applicable to EMS operations)
- (3) (Not applicable to EMS operations)
- (4) The figures derived from Table 2 may be increased by the use of either:
- (i) Split duty as prescribed in JAR-OPS 1.1105; or
- (ii) Augmented flight crew as prescribed in sub-paragraph (e) below.
- (5) The figures derived from Table 3 may be increased by the use of split duty.
- (6) (Not applicable to EMS operations)
- (7) Subject to JAR-OPS 1.1110(g), the figures in Table 1 (column (a)) may be increased by 3 hours.

## (d) Mixed flying/types of operation

- (1) Aeroplanes and Helicopters When a flight crew member operates on both aeroplanes and helicopters, an operator must submit a flight and duty time limitations and rest scheme based upon Subparts Q in JAR-OPS Parts 1 and 3 for approval by the Authority.
- Flight simulator and (2)conversion/recurrent training flights - An operator shall ensure that, where a flight crew member carries out either flight simulator or training flights prior to a commercial air transportation flight within the same flight duty period, then the duration of flight simulator or training flights must be doubled for the purpose of calculating flight duty period limits in accordance with subparagraph (c) above. The number of landings during flight simulator and training flights need not be taken into account.
- (3) Single pilot/multi pilot operations Where a pilot flies both a single pilot operation and a multi-pilot operation in one flight duty period then the more restrictive limits in Tables 2 or 3 above apply.

- (e) Augmented Flight Crew An operator shall ensure that:
  - (1) Irrespective of the reporting time;
- (i) If a flight crew comprising at least 2 pilots is augmented in order to increase the flight duty period derived from Table 2, above, in such a way that every flight crew member can leave his post for at least 50% of the total block time of all flights within the duty period, the flight duty period does not exceed 18 hours; or
- (ii) If flight crew augmentation is less than in sub-paragraph (1) above, the flight duty period does not exceed 16 hours;
- (2) An augmented flight crew is scheduled to carry out no more than 3 landings within a flight duty period or, at the option of the Authority 4 landings, provided that at least the following conditions are met:
- (i) The block time for one sector is 2 hours or less; and
- (ii) The rest period immediately following this flight duty period, initially calculated in accordance with JAR-OPS 1.1110. is increased by 6 hours; and
- (3) Rest facilities are available on board for resting flight crew members (See AMC & IEM to Appendix A & B to Subpart Q, JAR-OPS 1.1085(e)(3)).
- (4) Subject to JAR-OPS 1. 1110(9), a maximum of 3 hours may be added to the flight duty periods derived in accordance with sub-paragraph (1) above.

JAR-OPS 1.1090 Limitations - Cabin Crew (Not applicable to EMS operations)

# JAR-OPS 1.1095 Positioning

An operator shall ensure that all time spent on positioning is counted as duty.

### JAR-OPS 1 Subpart Q

# JAR-OPS 1.1100 Reporting times

An operator shall specify reporting times that realistically reflect the time required for pre-flight duties of not less than 30 minutes prior to the beginning of the planned block time unless otherwise approved by the Authority.

# JAR-OPS 1 .1105 Split duty (See IEM OPS 1.1105)

(a) When a flight duty period consists of 2 duties separated by a break defined and notified to the crew member in advance, an operator may increase the allowable planned flight duty period prescribed in Tables 2 and 3 in JAR-OPS 1.1085 in accordance with Table 4 below, subject to the conditions prescribed in sub-paragraphs (b), (c) and (d) below.

Consecutive hours break (a)	Increase in FDP (b)
0 – 2 hrs 59 mins	NIL
3 hrs – 6 hrs 59	½ length of break
mins	
7 hrs – 10 hrs 59 mins	2/3 length of break or 1 ½ length of break if at least 7 hours of the break fall between 2000 – 0800 local time where the break occurs

Table 4 - Split duty credit

- (b) An operator shall ensure that the parts of the flight duty period before and after the break do not exceed 10 hours, and the total flight duty period, as increased in accordance with Table 4 above, does not exceed 20 hours.
- (c) An operator shall ensure that split duty is not combined with augmented flight crew or, for cabin crew, extension of the allowable flight duty period.

# (d) An operator shall ensure that:

- (1) If the break is 6 hours or more, or covers 3 hours or more of the period 2200 0600 local time at the place where it occurs, suitable accommodation is provided. In all other circumstances adequate facilities must be provided;
- (2) With regard to the cumulative duty periods prescribed in JAR-OPS 1.1085 (b), if the break is less than 8 hours, the full period of the break is accountable. If the break is 8 hours or more, 50% of the period of the break is accountable:
- (3) Only one break is used within one flight duty period;
- (4) If the total travelling time in both directions between the place of duty and the adequate facilities or suitable accommodation exceeds one hour, any travelling time in excess of the 1 hour total is deducted from the break for the purposes of calculating the increased flight duty period; and
- (5) The time difference between the place of the beginning of the duty and the place at which the break is taken is not greater than two hours.

## JAR-OPS 1.1110 Rest requirements

- (a) An operator shall ensure that:
- (1) Before the start of a flight duty period a crew member has completed a rest period at least as long as the preceding duty period, or 11 hours, whichever is the greater (See IEM OPS 1.1110(a)); and
- (2) The minimum rest period following a flight duty period in which split duty credit has been used is at least as long as the total flight duty period including the break, except that, if suitable accommodation was provided, the duration of the break need not be included in the rest period calculation.



# JAR-OPS 1 Subpart Q

- (b) An operator may reduce the rest period calculated in accordance with sub-paragraph (a)(1) above by not more than 3 hours but to not less than 11 hours except as provided for in sub-paragraph (f) below, subject to the following conditions:
- (1) The previous rest period must have been completed in accordance with sub-paragraph (a)(1) above;
- (2) The amount by which the rest period is reduced must be added to the next rest period which cannot be reduced;
- (3) The amount of time by which the rest period is reduced must be deducted from the subsequent allowable Flight Duty Period; and
- (4) The extension of the maximum flight duty periods as prescribed in JAR-OPS 1.1085(c)(7) and/or JAR-OPS 1.1085(e)(1), (e)(2) and (e) (5) are used.
- (c) An operator shall ensure that the minimum rest periods prescribed in sub-paragraphs (a) and (b) above are increased to at least one 36 hour period within 7 consecutive days (See IEM to Appendix A & B to JAR-OPS 1 Subpart Q, JAR-OPS 1.110 (c)).
- (d) An operator shall ensure that a crew member is given days free of all duty and standby, which are notified in advance, as follows (See IEM OPS 1.1110(d)):
- (1) 7 local days in each calendar month which may include required rest periods; and
- (2) At least 24 local days in each calendar quarter which may include required rest periods.
- (e) An operator shall provide suitable accommodation when rest periods are required away from the home base.
- (f) An operator shall ensure that:
- (1) If the total travelling time in both directions between the place of duty and suitable accommodation provided by the operator exceeds 2 hours, then any excess is added to the minimum rest period; or

- (2) If the total travelling time in both directions between the place of duty and suitable accommodation provided by the operator is less than 1 ½ hours, then the time difference may be deducted from the minimum rest period but the time at the the accommodation shall not be less than 10 hours
- (g) An operator shall ensure that if, during any period of 7 consecutive days:
- (1) Any part of three or more planned duty periods falls within 0100 0659 local time at the reporting place, which at the option of the Authority may be shifted earlier by one whole hour; and
- (2) The time difference between any two places at which crew rest was taken is less than 4 hours, the 36 hour rest period option prescribed in sub-paragraph (c)(1) above is increased to 48 hours although the additional 12 hours which increases the rest period to 48 hours need not fall within the 7 day period.
- (h) If sub-paragraph (g) above applies, an operator shall not apply the 60 hour rest period option prescribed in sub-paragraph (c)(2) above.
- (i) If the extension of the maximum flight duty periods, as prescribed in JAR-OPS 1.1085(c)(7) and/or JAR-OPS 1.1085(e)(1), (e)(2) and (e)(5) are used, the minimum rest periods prescribed in (a) above shall be increased by the extension of the flight duty period multiplied by a factor of 4.

### JAR-OPS 1.1115 Intentionally blank

# JAR-OPS 1.1120 Time difference (See AMC OPS 1.1 120)

When the time difference between the places where a duty period begins and ends is 4 hours or more, an operator shall take into account the effects this may have on crew members by specifying increased rest.



# JAR-OPS 1.1125 Standby

- (a) When an operator elects to place crews on standby, he shall:
- (1) Apply the following limits on standby periods for crew members;

Notification time (a)	Maximum standby (b)
0 – 5 hrs 59 mins	12 hours
6 hrs or more	18 hours

Table 5 - Standby limits

- (2) Ensure that suitable accommodation is provided if:
- (i) A crew member is required to be on standby away from the homebase; or
- (ii) Standby is undertaken at an airport;
- (3) Notify the crew member of the time of start and end of standby period, and the minimum notification time;
- (4) Ensure that the following are counted towards the total duty periods prescribed in JAR-OPS 1.1085(b):
- (i) 50% of the amounts of standby undertaken by each crew member (excluding the first 4 hours of any standby undertaken at home): and
- (ii) If notified for duty, 50% of any notification time of less than 10 hours;
- (5) Ensure that if a crew member is assigned standby immediately after a duty period and without intervening rest, the duty and the subsequent time on standby are totalled and are included in:
- (i) Any immediately subsequent flight duty period; or
- (ii) Any immediately subsequent duty period; and

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- (6) Ensure that when a crew member completes standby without being called for duty he completes a rest period of at least 10 hours before commencing a subsequent duty or standby period.
- (b) An operator shall ensure that if a flight is delayed on the day of operation before a crew member leaves his place of rest, the crew member is considered to be on standby from the originally scheduled reporting time. In such an event, the operator must specify a notification time.

# JAR-OPS 1.1130 Unforeseen circumstances in actual flight operations

- (a) During the actual flight operation, which starts at the reporting time, the limits on flight duty, duty and rest periods prescribed in this Subpart may be modified in the event of unforeseen circumstances. Any such modifications must be acceptable to the commander after consultation with all other crow members and must, in all circumstances, comply with the following:
- (1) The allowable flight duty period may not be increased by more than 2 hours unless the flight crew has been augmented, in which case the allowable flight duty period may be increased by not more than 3 hours;
- (2) If on the final sector within a flight duty period unforeseen circumstances occur after take off that will result in the permitted increase being exceeded, the flight may continue to the planned destination or alternate;
- (3) Ensure that any extension of the Flight Duty Period to complete an EMS operation is strictly limited to the purely emergency part of that operation; and
- (4) The rest period may be reduced by a maximum of 2 hours but to not less than 10 ½ hours provided that a crew member's previous rest period was not reduced. The amount by which a rest period is reduced must be added to the next rest period which must not be reduced.



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- (b) If after the start of a flight duty period an unforeseen situation arises, as a result of which the operator requires a crew member to take a break, the crew member(s) concerned must be informed before the break commences and the split duty requirements prescribed in JAR-OPS 1.1105 applied accordingly.
- (c) An operator shall ensure that when, due to unforeseen circumstances, a duty period which was planned outside the period 0100 0659 local time at the reporting place falls more than 1 hour within that period, the requirements prescribed in JAR-OPS 1.1110(g) and (h) are applied accordingly.
- (d) An operator shall ensure that:
- (1) The commander submits a report to the operator whenever a flight duty period is increased or when a rest period is reduced in actual flight operation; and
- (2) Where the increase of a flight duty period or reduction of a rest period exceeds one hour, a copy of the report, to which the operator must add his comments, is sent to the Authority no later than 28 days after the event.

# JAR-OPS 1.1135 Flight duty, duty and rest period records (See AMC OPS 1.1 135)

- (a) An operator shall ensure that sufficiently detailed records of crew member's:
  - (1) Block times;
  - (2) Flight duty periods
  - (3) Duty periods; an
- (4) Rest periods and local days free of all duties

are maintained to ensure compliance with the requirements of this Subpart.

- (b) A crew member who is self-employed and/or working on a freelance or private basis shall maintain an individual record, as appropriate, of his:
  - (1) Block times;
  - (2) Flight duty periods;
  - (3) Duty periods; and
- (4) Rest periods and local days free of all duties.

which must be presented to any operator who employs his services before he commences a flight duty period (See AMC OPS 1.1135(b)).



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#### AMC/IEM Q - FLIGHT AND DUTY TIME LIMITATIONS AND REST REQUIREMENTS

IEM OPS 1.1075 General See JAR-OPS 1.1075

- 1 Operators are expected to appreciate the relationship between the frequency and pattern of flight duty periods and rest periods and give due consideration to the cumulative effects of undertaking long duty hours interspersed with minimum rest.
- 2 Other factors that should be considered by operators when planning duty periods include:
- a. The allocation of duty patterns which avoid such undesirable practices as alternating day/night duties or the positioning of crew members so that a serious disruption of established sleep/work patterns occurs; and
- b. Planning local days free of duty and notifying crew members in advance.

IEM OPS 1.1075(b)(2) Planned operations See JAR-OPS 1.1075(b)(2)

If maximum permitted flight duty periods are exceeded in practice on more than 25% of occasions on a particular route then the planning is considered unrealistic.

IEM OPS 1.1075(b)(3) Duty rosters See JAR-OPS 1.1057(b)(3)

Duty rosters, taking account of the effect of disturbing circadian rhythms and sleep deprivation, should be published sufficiently in advance to provide the opportunity for crew members to plan adequate rest.

IEM OPS 1.1085(e)(1)
Augmented flight crew - division of time away from controls
See JAR-OPS 1.1085(e)(1)

The sharing of time away from controls between those flight crew members leaving their posts should be kept in balance.

AMC OPS 1.1085(e)(3) Augmented flight crew See JAR-OPS 1.1085(e)(3)

1 If the planned flight duty period of the augmented flight crew exceeds 16 hours then bunks for the resting flight crew members, separated and screened from the flight deck and the passengers, should be available.



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- 2 If the planned flight duty period of the augmented flight crew is between 14 and 16 hours, a comfortable reclining seat for the resting flight crew member(s), separated from the flight deck and screened from the passengers, should be available.
- If the planned flight duty period of the augmented flight crew is 14 hours or less, a comfortable reclining seat for the resting flight crew member(s), separated and screened from the passengers, should be available.

AMC to Appendices A & B, JAR-OPS 1.1085(e)(3) Augmented flight crew See Appendix A or B (as appropriate), JAR-OPS 1.1085(e)(3)

If the flight duty period is extended by augmenting the flight crew, a comfortable reclining seat for the resting flight crew member(s), separated and screened from the passengers, should be available.

IEM OPS 1.1085(e)(3) and 1.1090(c)(1)(i) On board rest facilities See JAR-OPS 1.1085(e)(3) and 1.1090(c)(1)(i)

If possible, on board rest facilities for crew members should be located well away from designated smoking areas.

AMC OPS 1.1090(c)(1)(ii) Extension of allowable flight duty periods See JAR-OPS 1.1090(c)(1)(ii)

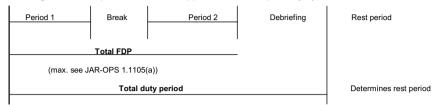
- 1 When allocating flight duty periods above 16 hours for cabin crew members, an operator should ensure that the following conditions are met:
- a. Each cabin crew member is free of duties for a period of time equal to one third of the period calculated by subtracting one hour for each planned block time from the total block time in the flight duty period; and
- b. For at least one third of the number of cabin crew members, bunks for the resting cabin crew members, separated and screened from the flight deck and the passengers, are available.
- When allocating flight duty periods above 14 hours, but not exceeding 16 hours, for cabin crew members, an operator should ensure that the following conditions are met:
- a. Each cabin crew member is free of duties for a period of time equal to one quarter of the period calculated by subtracting one hour for each planned block time from the total block time in the flight duty period; and.
- b. For at least one quarter of the number of cabin crew members, comfortable reclining seats for the resting cabin crew members, separated from the flight deck and screened from the passengers, are available.
- When allocating flight duty periods for cabin crew members, which are above the maximum flight duty periods prescribed in JAR-OPS 1. 1090, but not exceeding 14 hours, an operator should ensure that each cabin crew member is free of duty for one hour.
- 4 The periods free of duty should preferably be consecutive.



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IEMOPS 1.1105 Split duty See JAR-OPS 1. 1105

The following three examples illustrate the application of the split duty system:



### Example 1:

Period 1 1400-2100 = 7 hrs

Break 2100-0400 = 7 hrs, all falling between 2000-0800

 Period 2
 0400-1100
 = 7 hrs

 Total FDP
 = 21 hrs

 Debriefing
 1100-1130
 = 30 mins

 Total duty period
 = 21:30 hrs

Normal maximum FDP is 13 hrs for 1400 reporting time and 2 landings.

JAR-OPS 1.1105(a), Table 5: Max. FDP in this case is:  $13 + (1^{1/2} \times 7) = 23:30$ 

JAR-OPS 1.1105(b): Max. FDP is 20 hrs, therefore this schedule is not permissible.

# Example 2:

Period 1 2200-0230 = 4:30 hrs

Break 0230-1030 = 8 hrs, 5:30 falling between 2000-0800

 Period 2
 1030-1430
 = 4 hrs

 Total FDP
 = 16:30 hrs

 Debriefing
 1330-1400
 = 30 mins

 Total duty period
 = 17 hrs

Normal maximum FDP is 12 hrs for 2200 reporting time and 2 landings.

JAR-OPS 1.1105(a), Table 5: max. FDP in this case is:  $12 + ((2/3 \times 8) = 17:20 \text{ hrs})$ 

JAR-OPS 11.1105(d)(1) requires suitable accommodation to be provided as the break is 6 hrs or more and covers 3 hrs or more of the period 2200-0600 local time. The minimum rest period required by JAR-OPS 1.11 10(a)(2) in this example is:

17 (total time) - 7 (break) = 10 hrs, however minimum is 11 hrs (JAR-OPS 1.1110(a)(1)).

In accordance with JAR-OPS 1.1105(d)(2), 4hrs of the break are accountable and are added to the total period actually spent on duty (See JAR-OPS 1.1085(b) or 1.1090(a), as appropriate).



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#### Example 3:

Period 1 0800-1800 = 10 hrs

Break 1800-2200 = 4 hrs, no suitable accommodation

 Period 2
 2200-2400
 = 2 hrs

 Total FDP
 = 16 hrs

 Debriefing
 2400-0030
 = 30 mins

 Total duty period
 = 16:30 hrs

Normal maximum FDP is 14 hrs for 0800 reporting time and 2 landings.

JAR-OPS 1.11105(a), Table 5: max. FDP in this case is:  $14 + (1/2 \times 4) = 16$  hrs.

JAR-OPS 1.11110(a)(1); minimum rest period at least as long as the preceding duty period = 16:30 hrs.

In accordance with JAR-OPS 1.11105(d)(2), 4hrs of the break are accountable and are added to the total period actually spent on duty (See JAR-OPS 1.1085(b) or 1.1090(a), as appropriate).

IEM OPS 1.1110(a) Rest requirements See JAR-OPS 1. 1110(a)

Crew members should make optimum use of the opportunities and facilities for rest provided, and plan and use their rest periods properly.

IEM OPS 1. 1110(c) Rest requirements See JAR-OPS 1. 1110(c)

The 7 or 10 consecutive day periods start at 0000 hrs on the day following that on which the crew member first reports for duty having completed a rest period of at least 36 hours or 60 hours as appropriate.

IEM to Appendices A & B, JAR-OPS 1. 1110(c). Rest requirements See Appendix A or B (as appropriate), JAR-OPS 1. 11100(c)

The 7 consecutive day periods start at 0000 hrs on the day following that on which the crew member first reports for duty having completed a rest period of at least 36 hours.

IEM OPS 1. 1110(d) Rest requirements See JAR-OPS 1. 1110(d)

- Days free of all duties, as prescribed in JAR-OPS 1.1110(d) should be included in the planned roster and published in advance, as prescribed in JAR-OPS 1.1075(b)(3). Days free of all duties may be altered to take account of disruption to the plan that occurs after publication of the roster but should be notified at least 24 hours in advance.
- 2 Days free of all duties should be allocated so that they may be taken at the home base.



# AMC OPS 1.1120 Time difference See JAR-OPS 1.1120

- 1 An operator should ensure that when the time difference between the beginning and the end of a duty period is 4 hours or more and:
- a. The time difference between the places at which a Flight Duty Period begins and ends is 6 hours or less, the subsequent rest period is at least as long as the preceding duty period or 14 hours, whichever is the greater; or
- b. The time difference between the places at which a Flight Duty Period begins and ends is more than 6 hours, the subsequent rest period is at least as long as the preceding duty period or 16 hours, whichever is the greater.
- An operator should ensure that, for a crew member who has carried out one or more duty periods in which the time difference between the places at which the duties began and ended was 4 hours or more (as in paragraph 1 above), and who ends a Flight Duty Period at a place with a time difference of no more than 1 hour from his home base, the rest period is calculated as follows:
- a. When the time away from home base was 42 hours or less, rest is calculated in accordance with sub-paragraph 1 (a) or 1 (b) above as applicable.
- b. When the time away from home base was more than 42 hours but less than 60 hours, the time difference between the home base and the place with the greatest time difference at which a rest period was taken (up to 12 hours maximum), should be multiplied by the factor 4 and applied as the minimum rest period.
- c. When the time away from home base was 60 hours or more, the time difference, between the home base and the place with the greatest time difference at which a rest period was taken (up to 12 hours maximum), should be multiplied by the factor 8. However, if the last rest period before returning to home base was 48 hours or more, and was taken at a place separated by less than 4 hours time difference from the home base, the factor 8, used to calculate the rest period above, may be reduced to 4.
- If the end of the Flight Duty Period mentioned in paragraph 2 above is not at the home base, the crew member is permitted to undertake only one single FDP ending at the home base before commencing a rest period calculated in accordance with sub-paragraphs 2a to 2c above as applicable.
- Where 2 successive rotations are undertaken in the same east or west direction, the rest period following the first rotation (covered by sub-paragraphs 2b and 2c above) may be reduced to 14 or 16 hours in accordance with sub-paragraphs la and lb above. However, this rest period should include at least 8 hours between 2200 and 0800 local time at the place of rest. Following the second rotation, the minimum rest should be 8 times the maximum time difference between home base and the place at which a rest period was taken and should include at least two periods of 8 hours between 2200 and 0800 local time at the place of rest.

Note: For the purposes of paragraph 4 above, "Rotation" means a trip involving no more than 2 FDPs which starts and finishes at a place where there is no time difference with the home base.



# AMC OPS 1.1135 Flight duty, duty and rest period records See JAR-OPS 1.1135

- 1 The records of crew member's flight duty, duty and rest periods should contain:
- a. For flight crew members: Daily, 28 consecutive day, and 12 consecutive month block times.
- b. For crew members:
- i. The start, duration and end of each duty or flight duty period.
- ii. The duration of each rest period.
- iii. Dates of days off.
- iv. Total of duty for 7 consecutive day, 28 consecutive day, and 12 consecutive month periods.
- 2 The above mentioned records should include copies of all reports of increased flight duty and reduced rest periods following unforeseen circumstances in actual flight operations.

AMC OPS 1.1135(b) Accountable flying See JAR-OPS 1.11135(b)

The expression "working on a private basis" encompasses all work and flying for which a professional pilot's licence is required, but which is not confined to the business of any specific AOC holder.

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