

EU OPS SUB PART Q

Flight and Duty Time Limitations and Rest Requirements for Flight Crew and Cabin Crew

Changes to 05/10/2001 AEA/ERA/IACA paper following Joint Discussion on 9/10 JAN 2002

A. OBJECTIVE AND SCOPE

1. An operator shall establish a flight and duty time limitations and rest scheme (FTL) for crew members.
2. An operator shall ensure that for all its flights:
 - 2.1 The flight and duty time limitations and rest scheme is in accordance with both
 - (a) the provisions of the present Sub Part, and
 - (b) any supplementary provisions that are applied by the responsible Civil Aviation Authority for the purpose of maintaining safety.
 - 2.2 Flights are planned to be completed within the allowable flight and duty period taking into account the time necessary for pre-flight duties the flight and turn-around times and the nature of the operation.
 - 2.3 Duty rosters will be prepared and published sufficiently in advance to provide the opportunity for crew members to plan adequate rest.

3. Operators responsibilities

- 3.1 An operator shall nominate a home base for each crew member.
- 3.2 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.
- 3.3 Operators shall allocate 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 pattern occurs.
- 3.4 Operators shall plan local days free of duty and notify crew members in advance.
- 3.5 Operators shall ensure that rest periods provide sufficient time to enable crew to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.
- 3.6 Operators shall ensure flight duty periods are planned to enable crew members to remain sufficiently free from fatigue so they can operate to a satisfactory level of efficiency and safety under all circumstances.

4. Crew Members' responsibilities

- 4.1 A crew member shall not operate an aeroplane if he/she knows that he/she is suffering from or is likely to suffer from fatigue or feels unfit, to the extent that the flight may be endangered.
- 4.2 Crew members should make optimum use of the opportunities and facilities for rest provided, and plan and use their rest periods properly.

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5. Responsibilities of Civil Aviation Authorities

- 5.1 The Civil Aviation Authority responsible for granting the Air Operator's Certificate shall ensure compliance with this Sub Part.
- 5.2 The responsible Civil Aviation Authority will consult with all interested parties when considering interpretations of or variations to this Sub Part.
- 5.3 Variations
 - 5.3.1 Subject to the common review procedure, the responsible Civil Aviation Authority may grant variations to the requirements in this Sub Part for special types of operations or to meet specific operational needs in accordance with applicable laws and procedures within the country and in consultation with interested parties.
 - 5.3.2 Each operator will have to demonstrate to the responsible Civil Aviation Authority, using operational experience and current scientific knowledge, that its request for a variation produces an equivalent level of safety. Such variations will be accompanied with suitable mitigation measures where appropriate.
- 5.4 The responsible Civil Aviation Authority in considering a request for granting a variation will operate within common guidelines as agreed by the Civil Aviation Authorities.

B. STRUCTURE

The provisions in this Sub Part will include:

- 1. Definitions (see Section 1. below)
- 2. Flight and Duty Limitations (see Section 2. below)
- 3. Rest (see Section 3. below)
- 4. Flight Duty Extensions with Augmented Flight Crew (see Section 4. below)
- 5. Unforeseen circumstances in actual flight operations - Commanders Discretion (see Section 5. below)
- 6. Standby (see Section 6. below)
- 7. Nutrition (see Section 7. below)
- 8. Flight duty, duty and rest period records (see Section 8. below)

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1. Definitions

1.1 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/her post and be replaced by another appropriately qualified flight crew member.

1.2 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 and/or until all engines are stopped.

1.3 BREAK

A period free of all duties, which counts as duty, being less than a rest period.

1.4 DUTY

Any task that a crew member is required to carry out associated with the business of an AOC holder.

1.5 DUTY PERIOD

A period which starts when a crew member is required by an operator to report for a duty and ends when the crew member is free from all duties.

1.6 FLIGHT DUTY PERIOD

A Flight Duty Period (FDP) is any time during which a person operates in an aircraft as a member of its crew. The FDP starts when the crew member is required by an operator to report for a flight or a series of flights; it finishes at the end of the last flight on which he/she is an operating crew member or other time as specified by the responsible Civil Aviation Authority.

1.7 HOME BASE

The location* 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 where, under normal conditions, the operator is not responsible for the accommodation of the crew member concerned.

1.8 LOCAL DAY

A 24 hour period commencing at 00:00 local time.

1.9 LOCAL NIGHT

A period of 8 hours falling between 22:00 hours and 08:00 hours local time.

1.10 A SINGLE DAY FREE OF DUTY

A single day free of duty shall include two local nights. A rest period may be included as part of the day off.

1.11 OPERATING CREW MEMBER

A crew member who carries out his/her duties in an aircraft during a flight or during any part of a flight.

1.12 POSITIONING

The transferring of a non-operating crew member from place to place, at the behest of the operator, excluding travelling time. Travelling time being defined as:

- time from home to a normal reporting place;
- time for local transfer from a place of rest to the commencement of duty.

1.13 REST PERIOD

An uninterrupted and defined period of time during which a crew member is free from all duties.

1.14 STANDBY

A defined period of time during which a crew member is required by the operator to be available to receive an assignment for a flight, positioning or other duty without an intervening rest period.

* Reference is made to EU Regulation 2408/92, Article 2, paragraph m) on "Airport Systems"

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1.15 WINDOW OF CIRCADIAN LOW (WOCL)

The Window of Circadian Low (WOCL) is the period between 02:00 hours and 06:00 hours. Within a band of three time zones the WOCL refers to home base time. Beyond these three time zones the WOCL refers to home base time for the first 48 hours after departure from home base time zone, and to local time thereafter.

2. Flight and Duty Limitations

2.1 Cumulative Limits on Flying Hours

An operator shall ensure that the total block times of the flights on which an individual crew member is assigned as an operating crew member does not exceed 900 block hours in a calendar year spread as evenly as practicable throughout the year.

2.2 Cumulative Duty Hours

An operator shall ensure that the total duty periods to which a crew member is assigned do not exceed:

- (a) 190 duty hours in any 28 consecutive days.
- (b) 60 duty hours in any 7 consecutive days.

2.3 Maximum Daily Flight Duty Period (FDP)

2.3.1 An operator shall specify reporting times that realistically reflect the time for safety related ground duties as approved by the responsible Civil Aviation Authority.

2.3.2 The maximum basic daily FDP is 13 hours.

2.3.3 These 13 hours will be reduced by 30 minutes for each sector from the third sector onwards with a maximum reduction for sectors of two hours.

2.3.4 When the FDP starts in the WOCL, the maximum stated in 2.3.2 and 2.3.3 will be reduced by 100% of its encroachment up to a maximum of two hours. When the FDP ends in or fully encompasses the WOCL, the maximum FDP stated in 2.3.2 and 2.3.3 will be reduced by 50% of its encroachment (see Appendix 1).

2.3.5 Extensions:

- (a) The maximum daily FDP can be extended by up to one hour.
- (b) Extensions are not allowed for a basic FDP of 6 sectors or more.
- (c) Where an FDP encroaches on the WOCL by up to two hours extensions are limited to up to four sectors.
- (d) Where an FDP encroaches on the WOCL by more than two hours extensions are limited to up to two sectors.
- (e) The maximum number of extensions is two between two periods of weekly rest.
- (f) Where an FDP is planned to use an extension pre and post flight minimum rest is increased by two hours or post flight rest only is increased by four hours. Where the extensions are used for consecutive FDPs the pre and post rest between the two operations shall run concurrently.

2.3.6 Cabin Crew

For Cabin Crew members assigned to the same flight or series of flights as flight crew members the maximum FDP may be exceeded by up to one hour the FDP of the flight crew members up to a maximum FDP of 14:00 hours. The operator may base the allowable flight duty period upon the flight crew's reporting time.

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2.3.7 Operational Robustness

Planned schedules must allow for flights to be completed within the maximum permitted flight duty period. To assist in achieving this operators will take action to change a schedule or crewing arrangements where the operation fails to achieve 66% regularity within the maximum FDP.

2.4 Positioning

2.4.1 All time spent on positioning is counted as duty.

2.4.2 Positioning after reporting but prior to operating shall be included as part of the FDP but shall not count as a sector.

3. Rest

3.1 Minimum rest

3.1.1 The minimum rest which must be provided before undertaking a flight duty period starting at home base shall be at least as long as the preceding _duty period or 12 hours whichever is the greater.

3.1.2 The minimum rest period which must be provided before undertaking a flight duty period starting away from home base shall be at least as long as the preceding _ duty period or 10 hours whichever is the greater; when on minimum rest away from base, the operator must allow for an 8 hours' sleep opportunity taking due account of travelling as well as other physiological needs.

3.1.3 Notwithstanding 3.1.2, and recognising the requirements of Section A. 5.2 and provided that the responsible Civil Aviation Authority is satisfied that an adequate level of safety is demonstrated, it will grant reduced rest arrangements based on existing national legal provisions.

3.2 Rest Periods

An operator shall ensure that the minimum rest provided outlined above is increased to at least one 36 hour period including two local nights; there must be no more than 168 hours between successive weekly rest periods.

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4. Flight Duty Period Extension

4.1 Flight Crew Augmentation

4.1.1 Augmentation 1.

On aircraft where the standard crew is only two pilots and is augmented with an additional single qualified flight crew member (see EU OPS Sub Part N, Appendix 1, EU OPS 1.940):

- (a) The operator must provide a comfortable reclining seat separated and screened from the flight deck and the passenger.
- (b) The maximum FDP is 16 hours irrespective of encroachment of the WOCL.

4.1.2. Augmentation 2

On aircraft where the standard crew is only two pilots and is augmented with an additional single qualified flight crew member (see EU OPS Sub Part N, Appendix 1, EU OPS 1.940):

- (a) The operator provides a bunk screened from the flight deck and passengers,
- (b) The maximum FDP is 18 hours irrespective of encroachment of the WOCL.

4.1.3 Augmentation 3

On aircraft where the standard crew is only two pilots and is augmented with two additional qualified flight crew member (see EU OPS Sub Part N, Appendix 1, EU OPS 1.940):

- (a) The operators must provide bunks separated and screened from the flight deck and passengers.
- (b) The maximum FDP is 20 hours irrespective of encroachment of the WOCL

4.1.4 General

In all cases where the flight crew are augmented the sharing of time away from task by crew members leaving their posts should be kept in balance.

With reference to the provisions of dedicated crew rest facilities, as defined in 4.1.1, 4.1.2 and 4.1.3 above, these will be progressively introduced in conjunction with the acquisition of new aircraft types.

4.2 Cabin Crew

An Operator will agree with the responsible Civil Aviation Authority the legal minimum in-flight rest required by cabin crew member(s) when the FDP goes beyond the limitations of 2.3. above. The Civil Aviation Authority must take into account the crew rest facilities provided on board the aircraft in reaching their decision.

Cabin Crew carried in excess of the minimum necessary to meet safety requirements may be counted as augmented crew for the purposes of calculating the maximum permitted FDP and in-flight rest requirements.

In the case where Cabin Crew are augmented crew members leaving their posts should be kept in balance.

4.3 Extended FDP (Split Duty)

Provided that an adequate level of safety is demonstrated, an operation based on an extended FDP including a break will be granted by the respective Civil Aviation Authority based on existing national legal provision.

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5. Unforeseen Circumstances in actual Flight Operations - Commander's Discretion

- 5.1 Taking into account the need for careful control of these instances implied in 5.3.2 underneath, during the actual flight operation, which starts at the reporting time, the limits on flight duty, duty and rest periods prescribed in this Sub Part 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:
- 5.1.1 The allowable flight duty period may not be increased by more than two hours unless:
- (a) The flight crew has been augmented, in which case the allowable flight duty period may be increased by not more than 3 hours;
 - (b) For Cabin Crew as augmented in accordance with paragraph 4.2 of this Sub Part, the allowable flight duty period may be extended by not more than 3 hours.
- 5.1.2 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
- 5.1.3 The rest period may be reduced but never below the minimum rest defined in paragraph 3.1 of this Sub Part.
- 5.2 The commander shall, in case of special circumstances, which could lead to severe fatigue, and after consultation with the crew members affected, reduce the actual flight duty time and/or increase the rest time in order to eliminate any detrimental effect on flight safety.
- 5.3 An operator shall ensure that:
- 5.3.1 The Commander submits a report to the operator whenever a flight duty period is increased by his/her discretion or when a rest period is reduced in actual operation; and
- 5.3.2 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 relevant Civil Aviation Authority no later than 28 days after the event.

6. Standby

6.1 Airport Standby

- 6.1.1 A crew member is on Airport Standby from reporting at the normal report point until to the end of the notified standby period.
- 6.1.2 Airport Standby duty will count in full for the purposes of cumulative duty hours.
- 6.1.3 Airport Standby duty must be followed at least by a minimum rest period.
- 6.1.4 The relationship between Airport Standby and any assigned Flight Duty resulting from the Airport Standby shall be defined by the responsible Civil Aviation Authority.
- 6.1.5 While on Airport Standby the operator will provide to the crew member a quiet and comfortable place not open to the public.

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6.2 Other Forms of Standby (Including standby at hotel)

All other forms of Standby must be regulated by the responsible Civil Aviation Authority taking into account the following:

- 6.2.1 All activity will be rostered and/or notified in advance;
- 6.2.2 The start and end time of the standby shall be defined and notified in advance;
- 6.2.3 The maximum length of any standby will be determined;
- 6.2.4 Taking into account facilities available for the crew member to rest and other relevant factors, the relationship between the standby and any assigned Flight Duty resulting from the standby shall be defined;
- 6.2.5 The need to be rested for an assigned flight duty from standby is a common responsibility between Crew Member and Operator;
- 6.2.6 The accounting of standby duty times with respect to paragraph 2. section B.

7. Nutrition

Crew members and operators should be aware that a lack of sustenance could prove detrimental to an individual's performance and level of vigilance.

A Meal opportunity must occur in order to avoid any detriment to a crew member's performance, especially when the FDP exceeds 6 hours.

8. Flight duty, duty and rest period records

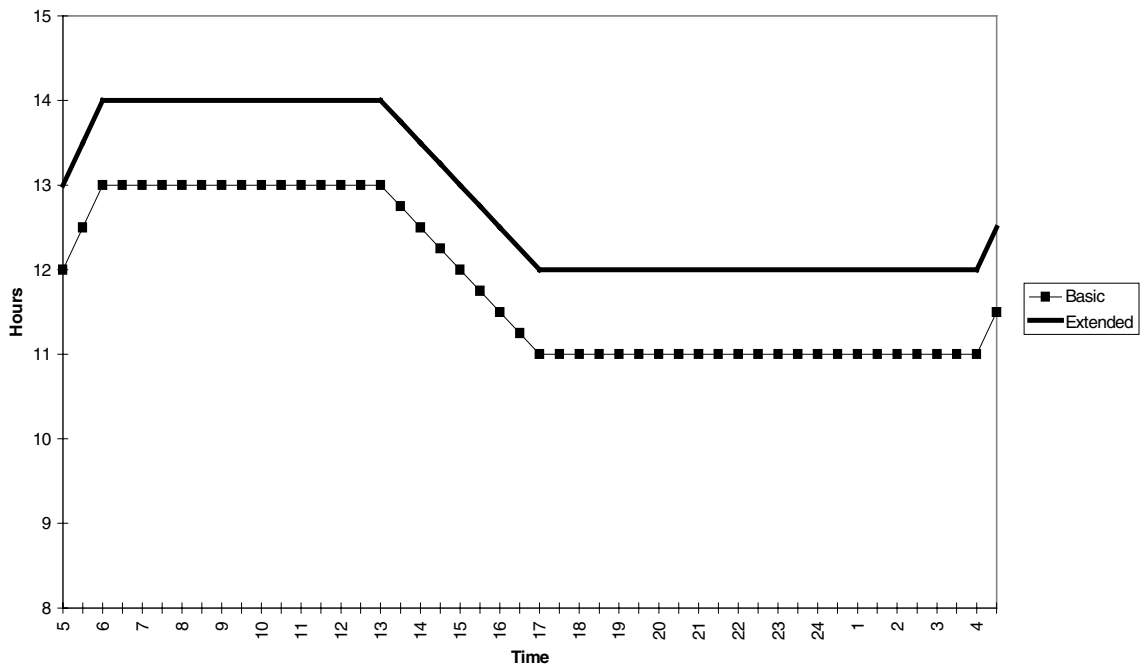
- 8.1 An operator shall ensure that crew members' records include:
 - (a) Block Times;
 - (b) Start, duration and end of each duty or flight duty periods;
 - (c) Rest periods and days free of all duties;and are maintained to ensure compliance with the requirements of this Sub Part.
- 8.2 Copies of these records will be made available to the crew member upon request.
- 8.3 All crew members shall maintain an individual record, as appropriate of their:
 - (a) Block times;
 - (b) Flight Duty Periods;
 - (c) Duty Periods;
 - (d) Rest periods and local days free from all duties;which must be presented to any operator who employs his/her services before he/she commences a flight duty period.
- 8.4 Records shall be preserved for at least 12 calendar months from the date of the last relevant entry or longer if required in accordance with National laws.
- 8.5 Additionally, operators shall separately retain all aircraft commanders' discretion reports of extended flying duty periods, extended flying hours and reduced periods of at least six months after the event.

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Appendix 1 / 1

1 and 2 SECTOR FDP

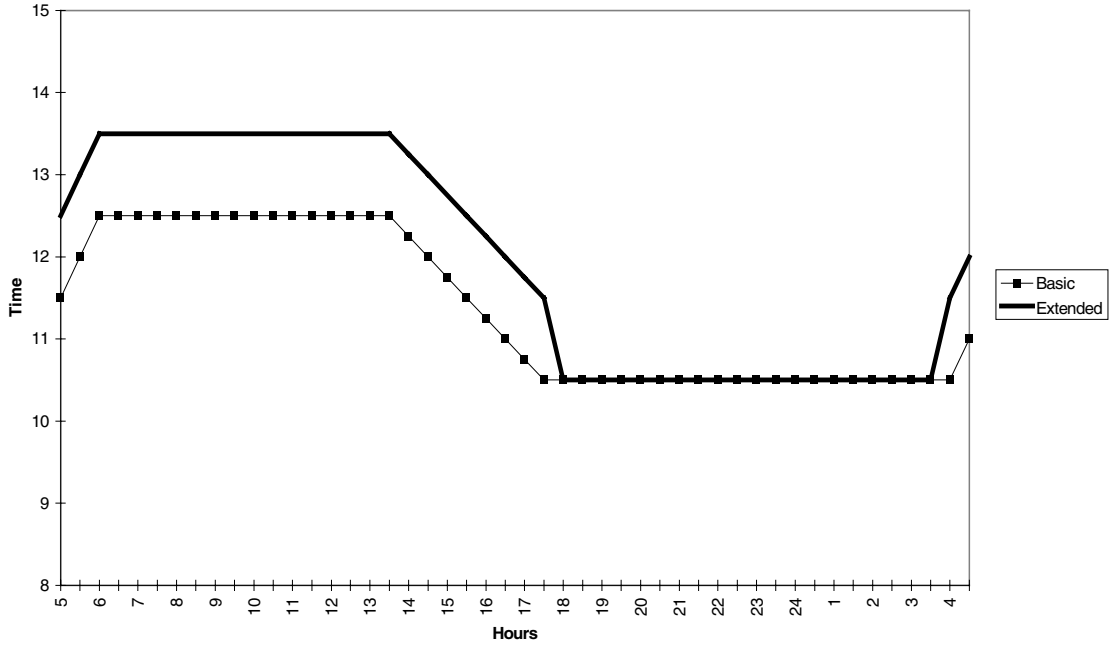


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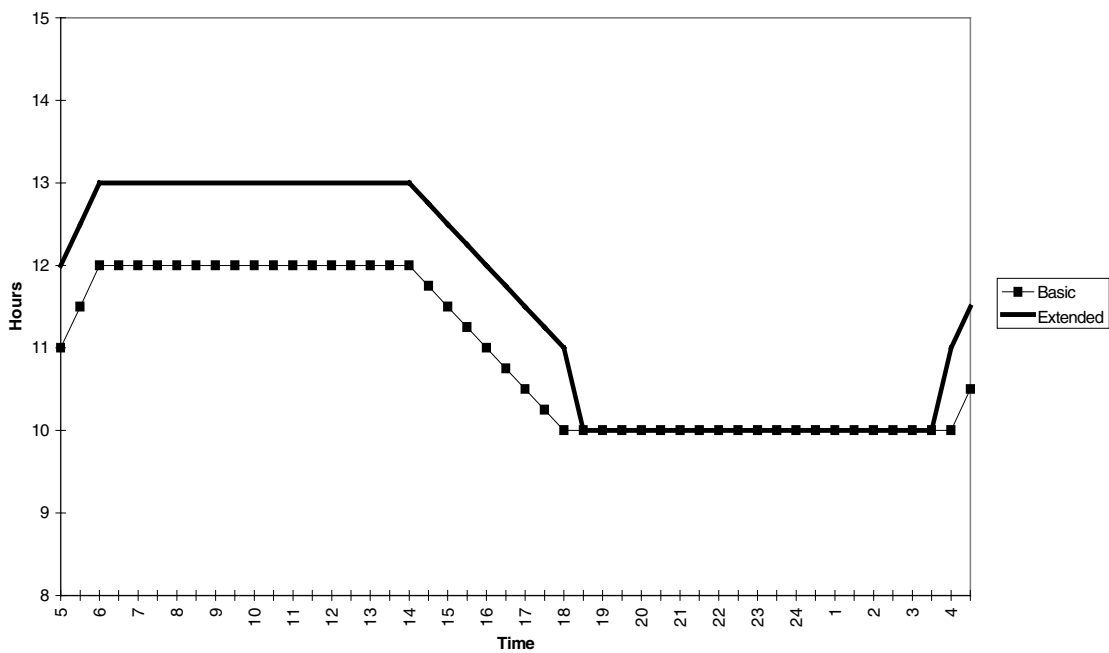
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Appendix 1 / 2

3 SECTOR FDP



4 SECTOR FDP

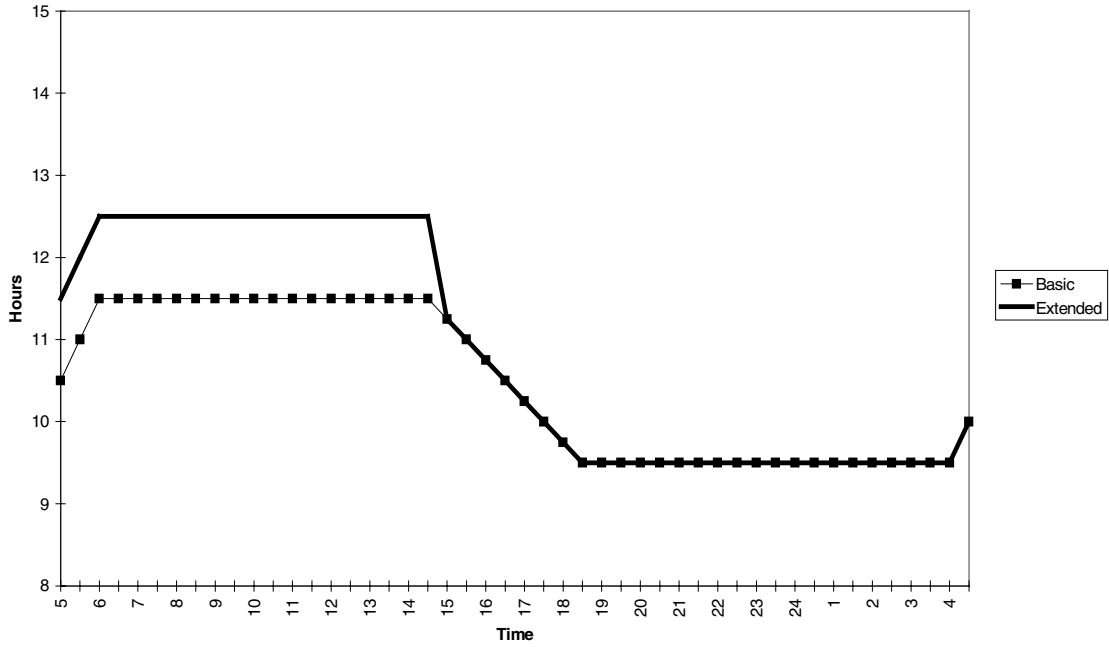


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Appendix 1 / 3

5 SECTOR FDP



6 SECTOR FDP

