

# NOTAM DATA QUALITY REQUIREMENTS FOR LIDAR OPERATIONS

# **NOTAM Data Quality Requirements for LiDAR Operations**

**C-MAN0281**

**Version 3**

**Effective 09 February 2021**

Prepared: Air Traffic Management Information Specialist

Endorsed: AIS Quality & Service Improvement Mngr

Approved: AIS

## Change summary

Version	Date	Change description
3	09 February 2021	Nil change bars applied due to extent of changes

## Table of contents

<b>1</b>	<b>Purpose</b> .....	<b>4</b>
<b>2</b>	<b>NOTAM Office Contact Details</b> .....	<b>4</b>
2.1	Advice of Errors .....	4
2.2	Email, Telephone and Fax.....	4
2.3	Mailing Address .....	4
<b>3</b>	<b>NOTAM Promulgation</b> .....	<b>5</b>
3.1	Circumstances for NOTAM Promulgation .....	5
3.2	Circumstances Not to be Promulgated by NOTAM.....	5
<b>4</b>	<b>NOTAM Authorised Persons</b> .....	<b>5</b>
4.1	NOTAM Authorised Persons Verification .....	6
<b>5</b>	<b>Requesting a NOTAM</b> .....	<b>6</b>
5.1	Notification Times .....	6
5.2	Verifying Information.....	7
5.3	Checking NOTAM.....	7
<b>6</b>	<b>NOTAM Conventions</b> .....	<b>7</b>
6.1	Abbreviations .....	7
6.2	Latitude and Longitude .....	7
6.3	Units of Measurement.....	8
6.4	Cross Referencing .....	8
6.5	Distribution Criteria .....	8
6.6	Timing Conventions .....	8
<b>7</b>	<b>NOTAM Types</b> .....	<b>9</b>
7.1	NOTAMN .....	9
7.2	NOTAMR .....	9
7.3	NOTAMC .....	10
7.4	Determining Correct NOTAM Type .....	10
<b>8</b>	<b>NOTAM Locations</b> .....	<b>11</b>
8.1	Aerodromes .....	11
8.2	FIR (e.g. YBBB, YMMM).....	11
8.3	Dual FIR (e.g. YMMM/YBBB) .....	11
8.4	Multiple FIR.....	11
<b>9</b>	<b>NOTAM Request Form</b> .....	<b>12</b>
9.1	Contact Details.....	12
9.2	Item A) – Location.....	12
9.3	NOTAM Type (Form Only).....	12

---

9.4	Mandatory Fields .....	12
9.5	Item B) – Start Period .....	12
9.6	Item C) – End Period .....	13
9.7	Item C) – Estimated End Period .....	13
9.8	Item D) – Hours of Activation.....	13
9.9	Item E) – NOTAM Text .....	14
9.10	Item F) – Lower Limit and Item G) – Upper Limit .....	14
<b>10</b>	<b>NOTAM Examples .....</b>	<b>14</b>
<b>11</b>	<b>Definitions .....</b>	<b>14</b>
<b>Appendix A</b>	<b>Time Conversion Chart .....</b>	<b>16</b>

# 1 Purpose

The purpose of this document is to establish the aeronautical data and information exchange protocols between *NOTAM authorised* persons and the *NOTAM Office* for the issuance, replacement and cancellation of NOTAM as part of the Integrated Aeronautical Information Package (IAIP).

This document forms part of the data product specification (DPS) that Airservices must provide to all aeronautical data originators (ADO) under [CASR Part 175](#), and is designed to assist NOTAM authorised persons with providing aeronautical information and data that is published via NOTAM in a controlled and standardised manner.

## 2 NOTAM Office Contact Details

### 2.1 Advice of Errors

Due to the volume of correspondence received by the NOTAM Office, users are urged to notify us of corrections or suggestions to this specification via email to: [nof@airservicesaustralia.com](mailto:nof@airservicesaustralia.com).

### 2.2 Email, Telephone and Fax

Email (preferred): [nof@airservicesaustralia.com](mailto:nof@airservicesaustralia.com)

Telephone: 02 6268 5063

Fax: 02 6268 5044

### 2.3 Mailing Address

ATTN: NOTAM Office

Airservices Australia Network Coordination Centre

GPO BOX 367

Canberra ACT 2061

## 3 NOTAM Promulgation

A NOTAM should be originated and issued promptly whenever the information to be distributed is of a temporary nature and of short duration, or when operationally significant permanent changes or temporary changes of long duration are made at short notice, except for extensive text and/or graphics which is to be included in an [AIP SUP](#).

A NOTAM authorised person should request the issuance, review or cancellation of a NOTAM when:

- the request meets any of the circumstances mentioned in Annex 15 to the Chicago Convention (refer [3.1 Circumstances for NOTAM Promulgation](#))
- required by Australian law
- it is deemed necessary in the interest of aviation safety.

### 3.1 Circumstances for NOTAM Promulgation

As per ICAO document Annex 15 to the Convention on International Civil Aviation, NOTAM should be originated and issued when concerning the following:

- presence of hazards which affect air navigation (including obstacles, military exercises, displays, fireworks, sky lanterns, rocket debris, races and major parachuting events outside promulgated sites)
- planned laser emissions, laser displays and search lights if pilots' night vision is likely to be impaired.

### 3.2 Circumstances Not to be Promulgated by NOTAM

The following information shall not be notified by NOTAM:

- limitations to airport facilities or general services with no operational impact
- national regulations not affecting general aviation
- announcement or warning about possible/potential limitations, without any operational impact
- general reminders on already published information
- information about laser emissions without any operational impact and fireworks below minimum flying heights
- other non-operational information of a similarly temporary nature.

## 4 NOTAM Authorised Persons

NOTAM which meet the criteria specified in [3.1 Circumstances for NOTAM Promulgation](#) may only be requested by NOTAM authorised persons.

A person is considered a NOTAM authorised person for an ADO if their [NIS](#) User ID is added as a member of the appropriate NOTAM Group within NIS by the NOTAM Group Manager.

## 4.1 NOTAM Authorised Persons Verification

NOTAM Group management has been established in [NIS](#) as a method for Airservices to confirm that a NOTAM request has been received from a NOTAM authorised person.

All individuals who are to be listed as NOTAM authorised persons for an ADO are required to register a [NIS](#) User Name which must be added to the appropriate NOTAM Group by the NOTAM Group Manager.

This [NIS](#) User Name and NOTAM Group must be annotated on all NOTAM Request Forms emailed to the NOTAM Office to ensure that the NOTAM Office can perform the required cross check procedure.

NOTAM submitted via the NOTAM Web Service (NWS) are automatically linked to the NOTAM Group from which it was submitted and only require the contact details of the NOTAM authorised person requesting the NOTAM in the Originating Authority section.

## 5 Requesting a NOTAM

NOTAM Requests are to be submitted via the NOTAM Web Service (NWS) through the [NAIPS Internet Service \(NIS\)](#) (preferred method), or on the latest version of the NOTAM Request Form available on the Airservices website:  
<http://www.airservicesaustralia.com/wp-content/uploads/NOTAM-Request-Form.pdf>..

NOTAM will only be accepted over the phone when the matter is urgent, or in an emergency.

**Note:** Access to the NWS is to be arranged with the NOTAM Office.

### 5.1 Notification Times

When requesting a NOTAM, the following times should be allowed (where practicable) for the NOTAM to be processed and issued by the NOTAM Office:

- immediately in emergency situations
- eight hours for airspace published in [DAH](#) and by [AIP Sup](#) e.g. military exercises
- 48 hours from receipt by the NOTAM Office for information regarding scheduled maintenance or changes to a facility, service or aerodrome.

**Note:** Non-urgent NOTAM will be processed in order of effective time (see [9.5 Item B\) - Start Period](#)). This may at times result in delays during periods of high workload in the NOTAM Office. If your NOTAM has not been issued within 24 hours since submission, contact the NOTAM Office to confirm the status of the request.

## 5.2 Verifying Information

The NOTAM Office will contact the NOTAM originator in the following situations:

- if a NOTAM is to be published with substantive differences from the way it was requested. This does not include minor changes such as abbreviations or changing the order of the information for standardisation purposes.
- where the information or the intent of a NOTAM request differs from or cannot be verified within an official document
- when the request comes from an unauthorised originator
- when a NOTAM with an estimated (EST) end time has reached that time without further notification from the originator about whether it should be extended or cancelled
- when there are errors in the NOTAM request, including but not limited to; incorrect abbreviations, lack of detail, mismatched time periods, duplicated information, and typos.

**Note:** It is the responsibility of the originating NOTAM authorised person to be available to verify the above information if required.

## 5.3 Checking NOTAM

It is the responsibility of the originating NOTAM authorised person to ensure that information promulgated by the NOTAM Office is correct. All NOTAM will be available via [NIS](#) after publication and any discrepancies must be raised with the NOTAM Office, by phone, as soon as the error has been discovered.

# 6 NOTAM Conventions

## 6.1 Abbreviations

A list of permitted abbreviations to be used in NOTAM is available in [AIP GEN](#). Abbreviations marked with ‘•’ must not be used in NOTAM which are promulgated internationally. If you are unsure of your aerodrome’s distribution status please contact the NOTAM Office.

The [AIP GEN](#) abbreviations are updated every three months and should be checked on a regular basis.

## 6.2 Latitude and Longitude

Any latitude and longitude positions used in a temporary or permanent NOTAM are required in degrees, minutes and if required, seconds, followed by a cardinal point.

**Example:** 324620S 1382405E.

If more precision is required, such as for ICAO data accuracy and resolution requirements, seconds will be followed by a decimal and tenths or hundredths of seconds. **Example:** 324620.2S 1382405.1E or 324620.27S 1382405.15E.



## 6.3 Units of Measurement

Units of Measurement commonly required in NOTAM are as follows:

- Horizontal Distance:
  - Nautical Miles (NM) - for distances greater than 2NM
  - Shorter distances: meters (M)
- Vertical distance (altitudes, elevations and heights): feet (FT)
- Bearings (from an AD or navaid): degrees magnetic (MAG)
- Weight (Mass): Metric tonnes or kilograms (KG)

## 6.4 Cross Referencing

To avoid the publication of erroneous information, a NOTAM will not be issued containing a reference to another NOTAM number. This is to avoid situations where the original NOTAM is reviewed or cancelled, which amends the NOTAM number, resulting in the referring NOTAM referencing the incorrect NOTAM number. Where cross-referencing between NOTAM is deemed necessary, the phrase 'SEPARATE NOTAM REFERS' will be used.

## 6.5 Distribution Criteria

All domestic NOTAM issued will be held in the Australian NOTAM database and can be accessed via [NIS](#). Some NOTAM will also be distributed to international NOTAM Offices and accessed by international pilots flying to or through Australian airspace.

NOTAM will be sent internationally if the operations affect:

- international aerodromes or international alternate aerodromes (as per [AIP](#)), or
- controlled airspace or airspace within 10NM of an international aerodrome or international alternate aerodromes (as per [AIP](#)).

## 6.6 Timing Conventions

All NOTAM are published in UTC (Zulu) time. UTC is the preferred convention as it decreases the likelihood of errors during the conversion process.

UTC is the only time convention available in the NWS. Local time can be converted to UTC using the [Time Zone Converter](#), available within the NOTAM form on the NWS.

If an emailed NOTAM request is made using local time (not preferred), this must be clearly marked on the NOTAM Request Form, including which time zone has been used. If a different time convention has been used on the form, the NOTAM Office will convert it to UTC before issuing.

Extra care should be taken during daylight savings periods (refer [Appendix A Time Conversion Chart](#)).

## 6.6.1 Time Format

In Australia the format for all times in NOTAM is as a 10-figure date/time group YYMMDDHHMM, where YY is the year, MM is the month, DD is the date and HHMM is the time (hour and minute) in 24 hour UTC format.

Days of the week are referenced in Australian NOTAM as the 'Local Day'. E.g. MON-WED 2300-0900 means the NOTAM is active for three days (MON, TUE and WED) from 2300z in the morning until 0900z in the afternoon on each day.

**Note:** The use of the times xx59 and xx01 in NOTAM can create an anomaly within the Air Traffic Control systems. For example; a NOTAM that finishes at 2359 will be removed from the ATC systems at 2359 and 01 second, not at 2359 and 59 seconds. Where possible, the times xx59 and xx01 should be avoided, and rounded up/down to xx00.

## 6.6.2 Maximum Time

The maximum time that a NOTAM may be issued is for three months. If it is expected that a NOTAM will be needed for longer than three months, it should be issued with an estimated finish time. If the time is expected to go significantly beyond three months, consideration should be given to the issuance of an [AIP SUP](#) or incorporating the details into the [IAIP](#). Contact the NOTAM Office for further guidance.

## 6.6.3 Daylight Saving Time

Daylight Saving Time is observed in the Australian summer in some Eastern and Central time zones. Care must be taken to ensure that times are correct for NOTAM that will be active over the time change.

A Head Office (YSHO) NOTAM will be issued prior to the changeover to Daylight Saving Time to notify of the exact date and time (in UTC) that it will come into effect.

# 7 NOTAM Types

The different types of NOTAM are identified by the following suffix; 'N' (New), 'R' (Replacement) and 'C' (Cancellation).

## 7.1 NOTAMN

A NOTAMN is when a NOTAM is first issued. A NOTAMN should be requested if the NOTAM is regarding an event for which there is no current NOTAM.

## 7.2 NOTAMR

A NOTAMR (Replace) allows an existing NOTAM to be amended. A NOTAMR immediately replaces the previous NOTAM.

When requesting an NOTAM, the following conditions apply:

- if the condition described in an active NOTAM is to remain valid for a period before being changed, then a NOTAMR shall be issued for the period up to the intended date and time of the change. This NOTAMR shall immediately replace the existing NOTAM and shall notify the same conditions but with a changed finish time. A

NOTAMN detailing the intended change in condition shall then be issued with a future date and time in Item B).

- if the NOTAM to be replaced is not active at the time of replacement, the NOTAM is to be cancelled WIE and a NOTAMN is to be issued with amended information and commencement time.

For further guidance, refer to [7.4 Determining Correct NOTAM Type](#).

## 7.3 NOTAMC

NOTAMC (Cancel) allows an existing NOTAM to be cancelled. Any NOTAM which is no longer required must be cancelled with a NOTAMC.

A NOTAM can only be cancelled with immediate effect. If you require a NOTAM to be cancelled at a future time, a NOTAMR should be originated with a confirmed finish time in Item C).

## 7.4 Determining Correct NOTAM Type

The below table should be used to determine the correct procedure and NOTAM type required for the following circumstances:

Circumstances	Required action
NOTAM is currently active with the conditions to cease now and resume in the future	The current NOTAM is to be cancelled with immediate effect and a new NOTAM issued with the amended start time
NOTAM is currently active with conditions to stay in effect but change in the future	The current NOTAM is to be reviewed to amend the finish time and a new NOTAM is to be issued specifying the new conditions
NOTAM is not yet in effect but conditions are now commencing at a different time (including WIE)	The current NOTAM is to be cancelled and a new NOTAM issued with the amended commencement time
NOTAM not yet in effect, subject and start time remain the same but conditions change (e.g. RWY WIP changes to RWY NOT AVBL)	The current NOTAM is to be cancelled and a new NOTAM issued with the new conditions
NOTAM within the current period of activity, conditions to cease now and resume in the future	The current NOTAM is to be cancelled and a new NOTAM issued with the amended start time
Any changes to a NOTAM which has already been in effect but is outside of a period of activity	The current NOTAM is to be cancelled and a new NOTAM issued with the amended conditions or timings
Changes to a NOTAM that is outside a period of activity and has not yet been in effect	The current NOTAM is to be cancelled and a new NOTAM issued with the amended conditions or timings
NOTAM is currently active with the conditions to cease now and resume in the future	The current NOTAM is to be cancelled with immediate effect and a new NOTAM issued with the amended start time

## 8 NOTAM Locations

NOTAM referring to LIDAR operations shall be issued on the appropriate FIR only, and not on an aerodrome within the vicinity of the flight **unless** the laser activity directly affects operations at that aerodrome.

### 8.1 Aerodromes

#### 8.1.1 Certified/Registered Aerodromes

A NOTAM service is provided for certified aerodromes, registered aerodromes, military aerodromes, certain other aerodromes regulated under [CASR Part 139.D](#) and specialised helicopter operations with published terminal instrument flight procedures under [CASR Part 173](#).

A NOTAM will be issued on an aerodrome if it is about a facility, event or hazard that has a direct effect on aerodrome operations (within 5NM of a full NOTAM service aerodrome), on the ground or within the airspace associated with that aerodrome.

#### 8.1.2 Uncertified Aerodromes

Limited information is published in [ERSA](#) for some aircraft landing areas (ALAs) and a NOTAM service is not provided except for changes to:

- changes to NAVAID, CTAF or ATS frequencies when requested by the service provider or CASA
- changes to special procedures when requested by Airservices Australia or CASA.

### 8.2 FIR (e.g. YBBB, YMMM)

A NOTAM will be issued on a single FIR if it refers to a:

- hazard occurring more than 5NM from an aerodrome
- hazard for which an aerodrome NOTAM has already been issued, but the hazard extends to a height or distance from the aerodrome which may affect pilots overhead or nearby not using the aerodrome. This is generally determined by CASA or Airservices.

### 8.3 Dual FIR (e.g. YMMM/YBBB)

A NOTAM will be issued as a dual FIR NOTAM if the conditions for an FIR NOTAM are fulfilled, and the hazard or facility extends across the FIR boundary and the affected QNH areas are shared by the boundary.

### 8.4 Multiple FIR

A NOTAM will be issued on both FIRs (YMMM and YBBB) if the conditions for an FIR NOTAM are fulfilled, and the hazard or facility extends across the FIR boundary, but the affected QNH areas are not shared by the boundary.

## 9 NOTAM Request Form

### 9.1 Contact Details

These are essential for circumstances in which the NOTAM Office is required to contact the originator prior to issuing a NOTAM.

If a NOTAM is submitted via email the [NIS](#) User Name and NOTAM Group name of the originating NOTAM authorised person must be included on the request form.

Refer to [5.2 Verifying Information](#) and [4 NOTAM Authorised Persons](#) for further information.

### 9.2 Item A) – Location

This is the location under which the NOTAM will be issued.

Refer [8 NOTAM Locations](#) for more information.

### 9.3 NOTAM Type (Form Only)

NOTAMN, NOTAMR or NOTAMC.

Refer [7 NOTAM Types](#) for more information on which type of NOTAM is required, depending on the desired outcome.

**Note:** If NOTAMR or NOTAMC is selected, include the NOTAM number that is to be replaced or cancelled.

### 9.4 Mandatory Fields

NOTAM type	Mandatory fields
NOTAMN	Items A), B), C) and E)
NOTAMR	Items A), B), C) and E)
NOTAMC	Items A), B) - WIE, and E)

### 9.5 Item B) – Start Period

Item B) in a NOTAM is the 10 digit date/time group (YYMMDDHHMM) at which the NOTAM comes into effect. The time in Item B) must be WIE or in the future. NOTAM cannot be issued retrospectively.

If a NOTAM is required immediately or as soon as possible, WIE may be selected on the NOTAM Request Form instead of a future start time. The NOTAM Office will issue the NOTAM as soon as practicable, and the published NOTAM will list the publication time in Item B).

In rare circumstances, advance notice is required when the occurrence will become effective at a time in the future. In this case, Item B) will be the publication time (WIE) and Item E) will commence with the abbreviation WEF (with effect from), followed by the implementation date/time e.g. WEF 1805181600.

**Note:** Item B) for NOTAMR and NOTAMC will have a default time stamp of the date/time group that the NOTAMR or NOTAMC was created. Refer [7.2 NOTAMR](#) for more information.

## 9.6 Item C) – End Period

Item C) is the 10 digit date/time group (YYMMDDHHMM) at which the NOTAM will cease. If the end time of the NOTAM is known, this should be entered into Item C), which will be a confirmed finish time unless 'Estimated' (EST) is specifically required.

If the end time of the NOTAM is not known, or the NOTAM validity is for a period of more than three months, an end time within three months must still be entered in Item C) and 'EST' should be selected (refer [6.6.2 Maximum Time](#)). The NOTAM will be published with the 10-figure date/time group in Item C) followed by 'EST'.

Refer [9.7 Item C\) – Estimated End Period](#) for more information regarding NOTAM with an estimated finish time.

## 9.7 Item C) – Estimated End Period

NOTAM with an estimated (EST) end period must be replaced or cancelled prior to the finish time. It is the originating ADO's responsibility to contact the NOTAM Office to extend or cancel an EST NOTAM, and a minimum of one hour notice is appreciated.

If a NOTAM is not replaced or cancelled prior to the estimated finish time, the originating authority's details will be forwarded to CASA for record of non-compliance.

Refer below to determine if the dates specified in Item D) are permitted to have an EST finish time:

- If you have specific dates in Item D) (i.e. 1808150100 to 1808150200), an EST finish time is not permitted.
- If you have daily periods in Item D) (i.e. DAILY 0100/0200, HJ, HN), an EST finish time is permitted.

## 9.8 Item D) – Hours of Activation

This field will only be used if the NOTAM will not be active continuously from the start time to the end time e.g. if the NOTAM will only apply during daylight hours (HJ).

These periods of activity could be in any of the following formats:

- date/time periods in the format YYMMDDHHMM e.g. 1808020200 to 1808021400
- the same time each day e.g. DAILY 0200/0400 for the period of the NOTAM
- night-time hours (HN) for the period of the NOTAM
- daytime hours (HJ) for the period of the NOTAM

**Note:** The term 'EXC' is not to be used in Item D).

## 9.9 Item E) – NOTAM Text

This field is used for the content of the NOTAM.

For guidance on NOTAM formatting requirements, refer to [10 NOTAM Examples](#).

Refer to [3 NOTAM Promulgation](#) for guidance on circumstances that can and cannot be notified by NOTAM.

## 9.10 Item F) – Lower Limit and Item G) – Upper Limit

These fields are used to indicate the lower and upper limits of airspace affected by the NOTAM and are mandatory for LIDAR NOTAM.

## 10 NOTAM Examples

The following are examples of how to format Item E) of a NOTAM.

TEMPLATE
<p><b>E)</b> OCULAR HAZARD ASSOCIATED WITH LIDAR LASER USE DURING AERIAL SURVEY OPS IN THE **** AREA</p> <p>THE HAZARD EXISTS WI: ****FT BLW SURVEY ACFT WHEN LASER ACTIVATED. LIVE RUN BROADCASTS WILL BE MADE</p> <p>ACFT TYPE: **** CALLSIGN: VH-***</p> <p>FOR FURTHER INFO CTC: ****</p> <p>LATERAL LIMITS: OPERATING AREA IS ****</p> <p><b>F)</b> ****FT AMSL <b>G)</b> ****FT AMSL</p>

EXAMPLE
<p><b>E)</b> OCULAR HAZARD ASSOCIATED WITH LIDAR LASER USE DURING AERIAL SURVEY OPS IN THE VCY OF MANGALORE AD (YMNG)</p> <p>THE HAZARD EXISTS WI: 1400FT BLW SURVEY ACFT WHEN LASER ACTIVATED. LIVE RUN BROADCASTS WILL BE MADE</p> <p>ACFT TYPE: PA31 CALLSIGN: VH-***</p> <p>FOR FURTHER INFO CTC: ****</p> <p>LATERAL LIMITS: OPERATING AREA IS WI 30NM WEST OF YMNG</p> <p><b>F)</b> 2000FT AMSL <b>G)</b> 4000FT AMSL</p>

## 11 Definitions

Within this document, the following abbreviations will be used:

Term	Definition
NOTAM	Notice to Airmen
IAIP	Integrated Aeronautical Information Package
DPS	Data product specification
ADO	Aeronautical data originator

<b>Term</b>	<b>Definition</b>
CASR	Civil Aviation Safety Regulations
AIP	Aeronautical Information Package/Publication
AIP SUP	AIP Supplement
ICAO	International Civil Aviation Organisation
NIS	NAIPS Internet Service
NWS	NOTAM Web Service
DAH	Designated Airspace Handbook
EST	Estimated
AIP GEN	AIP General
UTC	Universal Coordinated Time
ATC	Air Traffic Control
NOTAMN	New NOTAM
NOTAMR	Replacement NOTAM
NOTAMC	Cancellation NOTAM
NAIPS	National Aeronautical Information Processing System
LiDAR	Light Detection and Ranging
ERSA	En-Route Supplement Australia
NAVAID	Navigation Aid
CTAF	Common Traffic Advisory Frequency
ATS	Air Traffic Service
CASA	Civil Aviation Safety Authority
ALA	Aircraft landing area
FIR	Flight Information Region
WIE	With Immediate Effect
WEF	With Effect From
HJ	Hours of Day (sunrise to sunset)
HN	Hours of Night (sunset to sunrise)
EXC	Except



## Appendix A Time Conversion Chart

STANDARD TIME				DAYLIGHT SAVINGS		
	EST	CST	WST		EDT	CDT
UTC	QLD, NSW VIC, ACT TAS	NT, SA	WA	UTC	NSW, VIC, ACT, TAS	SA
0000	1000	0930	0800	0000	1100	1030
0100	1100	1030	0900	0100	1200	1130
0200	1200	1130	1000	0200	1300	1230
0300	1300	1230	1100	0300	1400	1330
0400	1400	1330	1200	0400	1500	1430
0500	1500	1430	1300	0500	1600	1530
0600	1600	1530	1400	0600	1700	1630
0700	1700	1630	1500	0700	1800	1730
0800	1800	1730	1600	0800	1900	1830
0900	1900	1830	1700	0900	2000	1930
1000	2000	1930	1800	1000	2100	2030
1100	2100	2030	1900	1100	2200	2130
1200	2200	2130	2000	1200	2300	2230
1300	2300	2230	2100	1300	0000	2330
1400	0000	2330	2200	1400	0100	0030
1500	0100	0030	2300	1500	0200	0130
1600	0200	0130	0000	1600	0300	0230
1700	0300	0230	0100	1700	0400	0330
1800	0400	0330	0200	1800	0500	0430
1900	0500	0430	0300	1900	0600	0530
2000	0600	0530	0400	2000	0700	0630
2100	0700	0630	0500	2100	0800	0730
2200	0800	0730	0600	2200	0900	0830
2300	0900	0830	0700	2300	1000	0930