

U.S. Department of Transportation

Federal Aviation Administration

Subject: NOTICES TO AIRMEN (NOTAMS)Date: 1/2FOR AIRPORT OPERATORSInitiated

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Advisory

Circular

**1. PURPOSE.** This advisory circular (AC) provides guidance on using the NOTAM system for airport condition reporting.

**2.** FOCUS. This material is intended primarily for airport operators, or their agents, who monitor and manage the day-to-day operation of the airport and who may also have operational responsibility for certain airport-related facilities.

**3.** CANCELLATION. AC 150/5200-28C, *Notices to Airmen (NOTAMS) for Airport Operators*, dated July 24, 2006, is canceled.

**4. BACKGROUND.** In the National Airspace Review (NAR) conducted by the Federal Aviation Administration (FAA) for government and industry airspace users, it was agreed that airport operators, as frequent contributors to the NOTAM system, should be provided with an AC to assist them in formulating NOTAM material. The goal expressed by the group was twofold: to promote effective use of the NOTAM system by airport operators and to reduce the need for FAA specialists to recast NOTAM submissions into systems-compatible language and format. The airport operator and pilot group members of the NAR, in particular, expressed confidence that better NOTAM submissions from airport operators would require less recasting for systems acceptance and would reduce the chance of inadvertent alteration of the message during processing.

FAA policy changes have resulted in significant changes to the format of Distant (D) and Local (L) NOTAMs:

- Prior civil "L" NOTAMs will be reclassified as "D" NOTAMs (Military L series will remain unchanged).
- All D NOTAMs must have one of the following keywords as the first part of the text: RWY, TWY, RAMP, APRON, AD, OBST, NAV, COM, SVC, AIRSPACE, (U), or (O) (see Paragraph 13 for an explanation of keywords).
- For the purpose of NOTAMs, the term Movement Area includes Runways, Taxiways, Ramps, Aprons, and Helipads.
- The United States NOTAM Office (USNOF) is the authority ensuring NOTAM formats. To ensure that the NOTAMs issued are consistent with NOTAM Policy, submitters must comply with USNOF personnel directions.
- All NOTAMs will be processed, stored and distributed by the United States NOTAM System (USNS).

**5. RELATED CODE OF FEDERAL REGULATIONS (CFRs).** The related CFRs are 14 CFR Part 139, *Certification of Airports*, and Part 157, *Notice of Construction, Alteration, Activation, and Deactivation of Airports.* 

6. RELATED REFERENCE MATERIAL. The following are FAA regulations and publications (see current versions) from which material has been extracted for the preparation of this AC. They will continue to be the authoritative source of revisions to this AC. These references also contain additional resource material that may be useful in special situations, but their immediate availability to airport operators is not considered necessary to accomplish the basic operational purpose of this AC. Technical terms and contractions used in this AC are explained in Appendices A through C. Electronic versions of these documents are available online. Electronic CFRs are available at Tecfr.gpoaccess.gov. Air Traffic publications are available at www.faa.gov/airports\_airtraffic/air\_traffic/publications/. Airport ACs (150 series) are available at www.faa.gov/airports\_airtraffic/airports/. The Airport/Facility Directory (A/FD) is available at naco.faa.gov. AC 70/7460-1, Obstruction Lighting and Marking, is available at wireless.fcc.gov/antenna/index.htm?job=documentation faa.

- **a.** 14 CFR Part 139, *Certification of Airports*.
- b. 14 CFR Part 157, Notice of Construction, Alteration, Activation, and Deactivation of Airports.
- c. 47 CFR Part 17, Construction, Marking, and Lighting of Antenna Structures.
- d. 49 CFR Part 1542, Airport Security.
- e. 49 CFR Part 1544, Aircraft Operator Security: Air Carriers and Commercial Operators.
- f. FAA Order 7110.10, Flight Services.
- g. FAA Order 7110.65, Air Traffic Control.
- h. FAA Order 7210.3, Facility Operation and Administration.
- i. FAA Order 7340.1, Contractions.
- j. FAA Order 7350.7, Location Identifiers.
- k. FAA Order 7930.2, Notices to Airmen (NOTAMS).
- I. FAA Notice N JO 7930.2L, Notice to Airmen (NOTAMs).
- m. Aeronautical Information Manual (AIM).
- **n.** *Airport/Facility Directory (A/FD).*
- o. AC 70/7460-1, Obstruction Lighting and Marking.
- **p.** AC 150/5200-30, Airport Winter Safety and Operations.
- **q.** AC 150/5370-2, Operational Safety on Airports during Construction.
- **r.** *Pilot/Controller Glossary (P/CG).*

**7. USE OF THIS AC.** The NOTAM system discussed in this AC is tailored to airport condition reporting needs. Further information can be found in the references listed in paragraph 6 above. This AC provides guidance as follows:

**a.** Paragraphs 8 through 11 introduce basic characteristics of the NOTAM system and responsibilities of the participants concerned.

**b.** Paragraphs 12 through 14 provide guidance for the NOTAM initiating process with example NOTAMs.

**c.** Paragraph 15 discusses special reporting considerations for conditions, such as braking action, winter conditions, runway light obscuration, and obstacle lights with example NOTAMs.

d. Paragraph 16 provides guidance and examples for Personnel and Equipment Working NOTAMs.

**e.** Paragraph 17 provides guidance and examples for Certificated Airport Rescue and Fire Fighting NOTAMs.

f. Paragraph 18 provides information about dissemination of NOTAMs.

g. Paragraph 19 discusses extended period NOTAMs.

h. Paragraph 20 provides suggestions for NOTAM control and record keeping.

**i.** Appendix A contains definitions and usage, plus contractions where applicable, of technical terms to understand this AC and participate in the NOTAM system.

j. Appendix B lists authorized contractions and abbreviations.

- **k.** Appendix C lists airport facility condition descriptions and contractions.
- **I.** Appendix D is a sample NOTAM form.

**8. FUNCTION OF THE NOTAM SYSTEM**. The NOTAM system provides essential information to personnel concerned with flight and airport operations. NOTAMs provide timely information on unanticipated or temporary changes to components of or hazards in the National Airspace System (NAS). Component changes may pertain to facilities, services, procedures, or hazards in the NAS. A NOTAM provides information that becomes available too late to publicize in the associated aeronautical charts and related publications.

The NOTAM system is not intended to be used to impose restrictions on airport access for the purpose of controlling or managing noise, or to advertise data already published or charted.<sup>1</sup>

**9. AIRPORT MANAGEMENT RESPONSIBILITY.** The management of a public use airport is expected to make known, as soon as practical, any condition on or in the vicinity of the airport, existing or

<sup>&</sup>lt;sup>1</sup> After October 1, 1990, noise restrictions for airports must be cleared through the FAA's notice and review process, as required by the Airport Noise and Capacity Act of 1990. The process for compliance with this law is set forth in 14 CFR Part 161, *Notice and Approval of Airport Noise and Access Restrictions*. Contact the local Airports District Office for guidance on complying with 14 CFR Part 161.

anticipated, that will prevent, restrict, or present a hazard during the arrival or departure of aircraft.<sup>2</sup> Airport management is responsible for observing and reporting the condition of airport movement areas.

Normally notification should be made not more than 3 days before the expected condition is to occur. Public notification is usually accomplished by the NOTAM system. This same notification system should be used when the condition has been corrected or otherwise changed. Airport operators are also responsible for canceling NOTAMS that are no longer applicable to airport facilities.

Some facilities components; such as pavements, runway lights, and airport guidance sign systems; are always the responsibility of the airport operator. Others, such as navigation facilities and approach lights, are usually the responsibility of the FAA. To avoid confusion, airport operators should initiate a NOTAM on a facility only when its operation and maintenance are clearly within their area of responsibility. However, airport operators should make every effort to alert the responsible party when outages/discrepancies are observed in facilities that fall outside their area of responsibility.

Specific airport management responsibilities are outlined in 14 CFR Part 139, *Certification of Airports*, and 14 CFR Part 157, *Notice of Construction, Alteration, Activation, and Deactivation of Airports*. Airport managers of Certificated Airports are required to abide by applicable provisions of these Parts and pertinent regulations referenced in this AC.

Airport operators and pilots should also be aware of Temporary Flight Restrictions (TFR) that may affect airport operations. TFR information is available at <u>www.faa.gov/pilots/flt\_plan/notams/</u> or by calling any flight service station for a pilot briefing.

**10. CERTIFICATED AIRPORTS.** Airports certificated under 14 CFR Part 139 have certain requirements set by regulation for disseminating information about conditions on and in the vicinity of their airports that may affect the safe operation of aircraft. For detailed information, see 14 CFR Part 139 and the airport's *Airport Certification Manual*.

**11. AIR TRAFFIC CONTROL (ATC) RESPONSIBILITIES.** Air Traffic personnel must accept all airmen information regardless of the source or subject matter, provided the occurrence is no more than 3 days in the future.

**NOTE:** Situations that present an immediate hazard should be reported to the ATC facility most concerned. Other situations should be reported on a first priority basis to the Flight Service Station (FSS).

Air Traffic then obtains the name, title (if appropriate), address, and telephone number of the person furnishing the information. The data is then forwarded to the appropriate tie-in FSS. FSS specialists are responsible for the classification, accuracy, format, dissemination, and cancellation of NOTAM information. All information submitted by FSS specialists is subject to verification with the US NOTAM Office (1-877-4US-NTMS (877-487-6867)) before distribution as a NOTAM. Flight Data Center (FDC) NOTAMs are issued by the US NOTAM Office/National Flight Data Center and pertain to changes such as navigational facilities, instrument approaches, and flight restrictions. FDC NOTAMs refer to information that is regulatory in nature.

 $<sup>^{2}</sup>$  Local coordination with airport users such as air carriers and other commercial operations should be conducted as far in advance as possible to minimize the impact construction projects, planned surface closures, or other conditions have on the operation of the airport.

**NOTE:** FSSs are no longer responsible for TFR notifications to ATC facilities, except in Alaska. The System Operations Support Center (SOSC) through the respective service centers is now performing these duties.

**12. AUTHORITY TO INITIATE NOTAM.** Airport management is responsible for observing and reporting the condition of:

- Runways applies to landing, take-off surfaces, and associated lighting and signage.
- Taxiways Conditions pertaining to single or multiple taxiways. Include lighting (centerline; edge lights) status if applicable.
- Ramps
- Aprons
- Helipads
- Snow, ice, slush, and water that affects the movement areas
- Aircraft Rescue and Fire fighting (ARFF)
- Any obstruction more than 200 feet above ground level (AGL) and located within 5 statute miles (SM) (4.3 nautical miles (NM)) radius. Any obstruction that is 200 feet AGL or less and more than 5 SM from an airport does not constitute a hazard.
- Obstruction light outages located within 5 SM (4.3 NM) radius of an airport regardless of height or located outside a 5 SM (4.3 NM) radius and exceeds 200 feet AGL.
- Services (fuel availability)

In addition, airport management is also responsible for providing an up to date list of airport employees who are authorized to issue NOTAMs to the FSS air traffic manager at the FSS listed in the Airport/Facility Directory (A/FD)). At public airports without an airport manager, the FSS air traffic manager will coordinate with the appropriate operating authority to obtain a list of persons delegated to provide NOTAM information. Using authorized airport personnel will help to expedite the NOTAM processing because information obtained from unauthorized personnel must be confirmed by the FSS before a NOTAM will be issued.

Authorized airport personnel submit information for NOTAMs to Flight Service Stations (FSS) that receive and manage it.

Letters of agreement should be executed between airport management and ATC facilities outlining procedures to be used for originating NOTAMs. For example, at some controlled airports, the Airport Traffic Control Tower (ATCT) might ask to be in the NOTAM origination loop with the airport management and the FSS.

**NOTE:** Although the airport operator has primary NOTAM origination responsibilities for the movement areas, the ATC facility managing the NOTAM system is responsible for, and has the authority to ensure the systems compatibility of the format and content of the proposed NOTAM message.

## **13. INITIATING A NOTAM.**

**a.** Composing the NOTAM. Wherever possible, NOTAMs must use official contractions and abbreviations. Official contractions are in FAA Order 7930.2, *Notices to Airmen (NOTAM)*, and in Appendices A through  $C^3$ . They should be inserted during the process and it is best if airport personnel know and use them when working with the NOTAM system. Most required airport NOTAM terms are described in this AC. If the terms described below do not fit a specific situation, use clear and concise plain language for the text of the message, or consult with the FSS for preferred terminology. A NOTAM must always state the abnormal condition – do not state a normal condition. The only exception to the preceding is for data that is already published and is being replaced; for example, a runway that was previously closed and is now open.

**NOTE:** For illustrative purposes only in this AC, XYZ is used where an accountability or location identifier would normally appear in a NOTAM message.

NOTAMs must contain the following elements in left to right order:

- (1) ADP code. This will be an exclamation point "!".
- (2) Three letter identifier code, XYZ, for the accountability location.
- (3) Three letter identifier code, XYZ, for the affected facility or location.

**NOTE:** Location identifiers used in the NOTAM system are in FAA Order 7350.7, Location Identifiers.

(4) One of the following twelve keywords as the first part of the text:

#### **Keywords and definitions:**

**NOTE:** See Section 13b for examples of typical airport employee authored NOTAMs.

#### • AD (Aerodrome)

Applies to any hazard to aircraft operations on or within 5 statute miles (SM) of an aerodrome which encompasses airport, heliport, helipad, and movement areas that are not under runways, taxiways, ramps, aprons, obstructions, NAVAIDs, services, communications or airspaces.

## • AIRSPACE

Applies to hazards associated with special use airspace, Central Altitude Reservation Facility (CARF), aircraft operations, aerial refueling, unmanned rockets, balloons, fireworks, parachute jumping/skydiving, and high altitude balloons.

<sup>&</sup>lt;sup>3</sup> FAA Order 7930.2 is the authority for contractions used in this AC. Any contraction changes in FAA Order 7930.2 supersede the contractions used in this AC.

# • APRON

Applies to hazards associated with defined surface areas on an aerodrome. The terms "ramp" and "apron" are synonymous.

Definition of ramp/apron: a defined area on a land aerodrome intended to accommodate aircraft for purposes of loading or unloading passengers, mail/cargo, fueling, parking, or maintenance.

**NOTE:** *Ramps and aprons may be identified by a name specific to them.* 

• **COM** (Communications)

Applies to communication outlet commissioning, decommissioning, outage, unavailability, and Air Traffic Control frequency status.

• **NAV** (Navigation Aids)

Applies to navigation aid status: VORs, ILS, WAAS, NDB, TACAN, etc.

• **OBST** (Obstructions, including obstruction lighting outages)

Applies to obstructions, including obstruction lighting outages, moored balloons, kites, towers, cranes, smoke stacks, etc.

- **RAMP** (synonymous with **APRON**)
- RWY (Runway)

Applies to landing and take-off surfaces, and associated lighting and signage. Identify runways with the prefix RWY followed by the magnetic bearing indicator, e.g., RWY 12/30, RWY 12, or RWY 30. Where the magnetic bearing indicator has not been assigned, identify the runway to the nearest eight points of the compass, e.g., RWY NE/SW, RWY N/S N 200 CLSD.

## • TWY (Taxiway)

Applies to single or multiple taxiways. Identify taxiways with the prefix TWY followed by the taxiway identifier letter or letter/number as assigned. For multiple taxiways, preface the initial taxiway identifier with TWY, and separate additional taxiway identifiers by commas, or specify "all." If not identified, describe as adjacent to a runway or direction from the runway. Some examples are: TWY C, B3 CLSD, TWY ADJACENT RWY 9/27 CLSD.

• SVC (Services)

Applies to facilities and services.

- (U) (Unverified Aeronautical Information):
  - Conditions pertaining to the movement area or other information received that meets NOTAM criteria and has not been confirmed by the Airport Manager (AMGR) or their designee.
  - For use only where authorized by Letters of Agreement.
  - If Flight Service is unable to contact airport management, Flight Service must forward (U) NOTAM information to USNS. Subsequent to USNS distribution of a (U) NOTAM, Flight Service will inform airport management of the action taken as soon as practical. Any such NOTAM will be prefaced with '(U)' as the keyword and followed by the appropriate keyword contraction, as set forth in this Policy, following the Location Identifier.
- (**O**) (Other)

Aeronautical information received from any authorized source that may be beneficial to aircraft operations and does not meet defined NOTAM criteria. Any such NOTAM will be prefaced with '(O)' as the keyword following the Location Identifier.

**NOTE:** Personnel and Equipment Working (PAEW) is <u>not</u> a keyword. PAEW must be associated with a keyword: RAMP/APRON, TWY, or RWY, and a direction from the affected movement area.

(5) After the keyword, enter the Surface Identification (optional - this must be the runway identification for runway-related NOTAMs, the taxiway identification for taxiway-related NOTAMs, or the ramp/apron identification for ramp/apron-related NOTAMs).

Example: !XYZ XYZ RWY 12/30

XYZ XYZ **TWY** A,A1

If a facility component has not been given a specific identifying designation, such as an unnumbered or unlettered parking apron, associate it with a component that does have a positive identification.

**Example:** !XYZ XYZ **APRON** PARKING APRON ADJ TWY B

Describe the condition that prompted the NOTAM. See Appendix C for listings of facilities conditions and their contractions that are eligible for NOTAM dissemination.

Example !XYZ XYZ RWY 12/30 CLSD or !XYZ XYZ RWY 12/30 RCLL OTS

(6) Furnish the year, month, day, and the time for the beginning and end of the condition or the effective time (i.e. with effect from (WEF), or effective from). NOTAMs are issued in Coordinated Universal Time (UTC) time only. In addition to listing the outage time, NOTAMs should specify an expected time of return to service or previous condition. If you are not sure of the UTC time, confirm the time with the appropriate FSS. Absence of a return to service time will mean that the condition will continue until further notice.

Example: !XYZ XYZ RWY 12/30 CLSD WEF 0705041300-0705041700

**Translation:** *runway 12/30 closed effective May 4, 2007, at 1300 hours UTC until May 4, 2007, 1700 hours UTC.* 

**b.** Keyword Usage and Examples. The following examples show typical NOTAMs that might be issued by an airport using keywords (shown below in bold text).

**NOTE:** All keywords are in bold and underlined text for reference only. Keywords are not to be underlined or in bold text for NOTAMs.

## (1) **RWY**

## **Examples:**

- !STL STL <u>**RWY</u>** 12L/30R CLSD EXC TXG</u>
- !PRC SJN **<u>RWY</u>** 13/31 NOW RWY 14/32

## (2) **TWY**

## **Examples:**

- !LNS LNS <u>**TWY</u>** A LGTS OTS</u>
- !DSM DSM <u>**TWY</u>** P1, P3 CLSD</u>

#### (3) APRON

#### **Examples:**

- !ATL ATL APRON NORTH TWY L3 APRON CLSD
- IBNA BNA <u>APRON</u> NORTH APRON CLSD

## (4) RAMP

#### **Example:**

• !DSM DSM <u>**RAMP**</u> SOUTH CARGO RAMP CLSD

#### (5) AD

#### **Examples:**

- !LAL LAL <u>AD</u> GRASS LDG STRIP LCTD 400 S RWY 9R/27L 1700 X 55 AVBL VMC DALGT PPR SUN N FUN WEF 0804151100-0804232359
- !CDB AK05 <u>AD</u> CLSD PERM
- !RIU O88 <u>AD</u> HELI DCMSND

- !AOO PA06 <u>AD</u> CLSD TSNT
- !BET BET <u>AD</u> CLSD EXC SKI
- !AOO 29D AD CLSD EXC PPR 0330-1430 MON-FRI
- !BUF D67 AD CLSD EXC HI-WING ACFT
- !CEW CEW <u>AD</u> CLSD WEF 0709041400-0709041800
- !CDB AKA <u>AD</u> OPEN
- !CLE 15G AD NOW PUBLIC

(6) OBST

#### **Examples:**

- !MIV N52 <u>OBST</u> TOWER 580 (305 AGL) 7 SW LGTS OTS (ASR NUMBER) TIL 0712302300
- PIE CLW <u>OBST</u> CRANE 195 (125 AGL) .25 NE (2755N08241W) TIL 0711032000

**NOTE:** Insert latitude/longitude (if known) immediately after cardinal direction per format shown above.

(7) SVC

#### **Examples:**

- !MIV MIV <u>SVC</u> FUEL UNAVBL TIL 0709301600
- !MSP MSP <u>SVC</u> MU OTS
- !FTW FTW <u>SVC</u> ARFF NOW INDEX A TIL 0709072300
- (8) Using PAEW

#### **Examples:**

- !CHO CHO <u>RWY</u> 23 PAEW FIRST 500 ALONG SE SIDE
- !SBY SBY <u>**TWY</u>** E PAEW SOUTH SIDE BTN RWY 5/TWY G</u>
- !MEM MEM **<u>RAMP</u>** PAEW FEDEX CARGO RAMP EAST SIDE

**c.** Submitting the NOTAM. Airport operators are to submit NOTAM material to their local air traffic facility (see (1) below). This method is appropriate for material that becomes available after Flight Information Publication (FLIP) cut-off. See inside front cover of Airport/Facility Directory (A/FD) for FLIP cut-off dates. See Appendix D for a sample NOTAM form.

(1) Filing with the Local ATC Facility. Enter the message into the Air Traffic Control (ATC) system in accordance with a local letter of agreement if there is one in effect. Otherwise, contact the appropriate Air Traffic facility for your airport. This is normally the associated FSS identified in the A/FD. If you encounter difficulty in contacting the FSS identified in the A/FD, you may call the US NOTAM Office at 877-4US-NTMS (877-487-6867). The US NOTAM Office will route the call to the proper flight service center. FSS facility managers are required to ensure that lists of airport employees authorized to issue NOTAMs are available and kept current. To avoid delays in NOTAM dissemination, you should assist the FSS in keeping your airport's list of authorized personnel up to date.

**d.** Allowing Verification. When using the above filing method, be sure that you provide the air traffic facility receiving your NOTAM submission with the name, position, title (if appropriate), address, and telephone number of a responsible airport official who the FSS should contact if confirmation of the NOTAM information is required. If you phone in your message, you should ask for the operating initials of the FSS specialist who receives your call and the number assigned to the NOTAM. Allow a minimum of thirty minutes for the FSS specialist to format and input the NOTAM into the NOTAM system. Call the FSS back to get the current NOTAM and NOTAM number. Each specialist is officially identified in the facility by operating initials. Knowing the initials and NOTAM number will make follow-up or other reference easier. Airport personnel can review their NOTAMs on the FAA website at: <a href="http://www.faa.gov/airports airtraffic/air\_traffic/publications/notices/">http://www.faa.gov/airports airtraffic/air\_traffic/publications/notices/</a>.

**e.** Airport operators are responsible for canceling NOTAMS that are no longer applicable to airport facilities.

**14. PUBLISHING CRITERIA FOR AIRPORT NOTAMS.** The following conditions or categories of information are the basis for NOTAMs:

**a.** FAA ATC facilities. Commissioning, decommissioning, or changes in hours of operation.

**b.** Surface areas/airspace. Changes in hours of operations, hazards such as pavement issues, wildlife, snow, surface conditions, etc.

c. Weather reporting stations. Commissioning, decommissioning, failure, non-availability or unreliable operations.

d. Public airports. Commissioning, decommissioning, openings, closings, and abandonments.

e. Aircraft rescue and fire fighting (ARFF) capability. Restrictions to air carrier operations.

f. Changes to runway identifiers, dimensions threshold placements, and surface compositions.

g. NAS lighting systems. Commissioning, decommissioning, outages, change in classification or operation.

- (1) Approach Lighting System (ALS)
- (2) Runway Lights/Runway Edge Lights (RWY LGT)
- (3) Touchdown Zone Lighting (TDZ LGT)
- (4) Runway Center Line Lights (RCLL)

- (5) Runway End Identifier Lights (REIL)
- (6) Visual Approach Slope Indicator (VASI)
- (7) Precision Approach Path Indicator (PAPI)
- (8) Boundary Lights

#### **Reference:**

Aeronautical Information Manual (AIM) FAA Order 7930.2, Notices to Airmen (NOTAMS)

15. SPECIAL REPORTING CONSIDERATIONS FOR CONDITIONS, SUCH AS BRAKING ACTION, WINTER CONDITIONS, RUNWAY LIGHT OBSCURATION, OBSTRUCTIONS, AND OBSTRUCTION LIGHTS. The following conditions require special care when composing NOTAM messages to ensure that they provide the maximum benefit to the NOTAM system user and do not include misleading statements.

#### **NOTE:** All keywords are in bold and underlined text for reference only.

**a.** Friction Measurement.<sup>4</sup> If friction-measuring equipment is used, friction value (MU) readings are issued for each third for all active runways. Do not combine runways into a single NOTAM. NOTAMs are not issued if all readings are above 40. If a NOTAM was previously issued and the airport manager finds that readings are above 40, the previous NOTAM must be cancelled. Include the abbreviation of the name of the FAA approved friction measuring device and the effective time.

#### **Friction Measuring Equipment Abbreviations:**

- BOW Bowmonk Decelerometer (Bowmonk Sales)
- BRD Brakementer–Dynometer
- ERD Electronic Recording Decelerometer (Bowmonk)
- GRT Griptester (Findlay, Irvine, LTD)
- MUM Mark 6 Mu Meter (Douglas Equipment LTD)
- RFT Runway friction tester (K.J. LAW Engineers)
- SFH Surface friction tester (high pressure tire) (SAAB, Airport Surface Friction Tester AB)
- SFL Surface friction tester (low pressure tire) (SAAB, Airport Surface Friction Tester AB)
- SKH Skiddometer (high pressure tire) (AEC, Airport Equipment Co.)
- SKL Skiddometer (low pressure tire) (AEC, Airport Equipment Co.)

<sup>&</sup>lt;sup>4</sup> Either MU Value and/or braking action reports are acceptable for reporting pavement conditions to the NOTAM system. However, there is no correlation between the two. **THEY ARE NOT INTERCHANGEABLE.** 

- TAP Tapley Decelerometer (Tapley Sales)
- VER Vericom (VC3000)

## (1) Example:

#### !DCA DCA <u>**RWY</u>** 1/19 BOW MU 20/20/20 WEF 0712121000</u>

(2) If the equipment used to obtain these readings becomes unserviceable, a NOTAM should be issued until the equipment is restored to service.

#### Example: !DCA DCA <u>SVC</u> MU OTS

**b.** Braking Action.<sup>5</sup> When reported by airport management, braking action is described as "fair," "poor," and "nil." Classify braking action according to the most critical term used. "Good" braking action is not a reportable condition. When reporting braking action, do not give the type of vehicle making the report. Include the observed time of the braking action in the NOTAM.

## (1) Example:

#### !ANC ANC <u>**RWY</u>** 14/32 BA POOR WEF 0702061500</u>

## (2) Example:

## !ANC Z15 **<u>RWY</u>** 1/19 BA NIL WEF 0709041100

The FSS should process a braking action report from a landing aircraft as a pilot report (PIREP). Combining airport management and PIREP information is appropriate only with airport management authorization.

**c.** Winter Conditions. When reporting winter conditions, use the following sequence to assist the FSS in formatting the NOTAM: runway affected, coverage, depth, and condition. These terms are defined in Appendix A.

**d. Depth of Snow.** When reporting the depth of snow, frozen slush, etc. on the runway or taxiway, express it in terms of thin (less than 1/4 inch), 1/4 inch, 1/2 inch, and 1 inch. After 1 inch, report additional accumulation in whole inches and discontinue the use of fractions. If a variable depth is encountered, such as 3 to 5 inches, report the greater depth. After a snow depth of 35 inches is reached, report additional amounts in whole feet only.

**NOTE:** *The term "BARE" is not to be used in NOTAMs.* 

#### (1) Example:

!FAI INR **<u>RWY</u>** 16/34 18 IN LSR WEF 0711250900

**Translation:** McKinley Park's runways 16 and 34 have 18 inches of loose snow covering the runways.

<sup>&</sup>lt;sup>5</sup> Either MU Value and/or braking action reports are acceptable for reporting pavement conditions to the NOTAM system. However, there is no correlation between the two. **THEY ARE NOT INTERCHANGEABLE.** 

e. Plowed Runways. When reporting a portion of a runway plowed (PLW), give the width plowed in feet and its condition if not entirely cleared. Describing the plowed portion in terms of percentages or fractions of the surface is likely to be misleading and should be avoided. A plowed report is used only if a portion of the surface is plowed. If the whole surface has been plowed, PLW is not used although the surface condition (such as Snow and Ice on Runway (SIR)) might still be appropriate. PLW/Swept is used when indicating that a portion of a surface is plowed or swept and is either bare or has depth, coverage, and conditions different than the surrounding area. When known, the surrounding area will be specified as RMNDR and listed after the plowed information. Plowed/Swept is omitted when the entire runway, taxiway, ramp, or apron has been plowed. For example, a 150 foot wide runway that has been plowed for the center 100 feet along its entire length and that inside 100-foot strip is covered with 1/2 inch of packed snow and ice, would be reported as the following:

## (1) Example:

!OQU OQU <u>RWY</u> 16/34 PLW 100 WIDE RMNDR 1/2 IN SIR WEF 0711132112

**Translation:** Quonset State's runway is wider than 100 feet and the area inside the center 100 feet is bare. The  $\frac{1}{2}$ -inch of packed or compacted snow and ice (SIR) is outside the plowed area.

#### (2) Example:

IMOT MOT TWY ALL PLW 50 WIDE RMNDR 6 IN LOOSE SN WEF 0712202200

#### (3) Example:

IMEM MEM **RAMP** FEDEX FEEDER RAMP PTCHY THN ICE WEF 0712202000

#### (4) Example:

IBNA BNA APRON AIR CARGO APRON EAST 1000 PLW WEF 0712201200

**f. Runway Sanding or Deicing.** When reporting a runway treated by sanding or deicing, the entire published dimensions of the surface are assumed to be treated unless qualifying length/width information is also given. When deicing is reported, also report the material used as either solid or liquid, as this may have operational significance to the pilot. An example of an icy runway sanded for a portion of its surface is:

#### (1) Example :

MGW MGW <u>**RWY</u>** 18/36 1/2 IN IR SA WEF 0712061530</u>

**Translation:** 1/2 inch of ice on the runway 18/36 with the entire runway sanded.

#### (2) Example:

YAK YAK <u>RWY</u> 11/29 THN SIR SA 80 WIDE RMNDR BA POOR WEF 0712231100

**Translation:** Less than the full width of the runway is sanded, and the condition outside of the sanded area has poor braking action.

(3) An example of a full runway deicing is:

## IAD IAD <u>**RWY</u> 12/30 DEICED LIQUID WEF 0712251700**</u>

## IAD IAD <u>**RWY</u>** 12/30 DEICED SOLID WEF 0712251700</u>

**g.** Snowbanks. When reporting snowbanks, indicate when the depth is greater than 12 inches and location of the snow bank. Remember that unless specified otherwise, it is assumed that snowbanks are at the edge of the movement area or, when PLW is used, at the edge of the plowed area.

#### (1) Example:

#### !BTV BTV <u>**RWY**</u> 15/33 3 IN SN 24 IN SNBNK WEF 0712251700

## (2) Example:

BTV BTV <u>**RWY</u> 15/33 3 IN LSR PLW 100 WIDE 24 IN SNBNK WEF 0712251700</u>** 

**h.** Continuous Snow Removal Operations on Multiple Runways. A single NOTAM may be issued for continuous snow on alternating runways when all of the following conditions are met:

- (1) The air traffic control tower is in operation during the valid period of the NOTAM.
- (2) Anticipated alternating closure time for each runway is two hours or less.
- (3) Maximum valid time is limited to the period of continuous alternating snow removal.
- (4) Operations are based on a Letter of Agreement between airport management and the FSS and Air Traffic Control Tower.

#### **Examples:**

- !DEN DEN <u>**RWY</u>** ALL RWYS ALTNLY CLSD SNOW REMOVAL WEF 0710231500</u>
- ISLC SLC <u>**RWY</u>** INST RWYS ALTNLY CLSD SNOW REMOVAL WEF 0711241600</u>
- !DEN DEN <u>**RWY</u>** ALL RWYS ALTNLY CLSD ICE REMOVAL WEF 0712251700</u>
- !SLC SLC <u>**RWY</u>** INST RWYS ALTNLY CLSD ICE REMOVAL WEF 0711261800</u>

**i. Runway Light Obscuration.** When reporting runway light obscuration due to snow and ice, report only the lights that are completely obscured. Lights that are partially obscured should not be reported. Be specific about which lights are affected, such as the last 2000 feet of Runway 9. Do not report the reason for the obscuration; it is assumed from the context of the report.

Example: !BTV BTV <u>RWY</u> LGTS OBSC WEF 0710131300-0710132000

- j. Runway Lights.
  - (1) Runway Centerline Lights (RCLL).

Example: !ATL ATL <u>RWY</u> 8R/26L RCLL OTS

(2) Touchdown Zone Lights (TDZ LGT).

Example: !ATL ATL <u>RWY</u> 8R TDZ LGT OTS

(3) **Runway Edge Lights.** Once commissioned and published, runway edge lights must only be shown as RWY LGTS.

**Example:** !ATL ATL RWY 8R/26L RWY LGTS OTS

(4) Airport total runway power failure. Note the use of the keyword, AD.

Example: !SPA SPA AD LGT OTS

(5) **Pilot controlled lighting (PCL).** When used for controlling runway or approach lights. Note the use of keywords.

#### **Examples:**

- **!SBY SBY <u>SVC</u> PCL OTS**
- !SBY SBY <u>SVC</u> NOW 122.8
- !BFD 8G5 <u>**RWY**</u> 18/36 RWY LGTS PCL OTS

#### k. Runway Cracks and Ruts.

(1) Example:

!ORT TSG **<u>RWY</u>** 12/30 NMRS 6 IN CRACKS WEF 0712251700

#### (2) Example:

!TAL TAL **RWY** 6/24 4 IN RUTS W 1000 WEF 0712251700

#### I. Lighted Signage.

#### **Examples:**

- !ABQ ELP <u>**RWY</u>** 4 TWY M SIGN UNLGTD</u>
- !SEA SEA RWY 16R STOP BAR LGT OTS

m. Taxiway and taxiway centerline lights.

## Examples:

- !SHD SHD <u>**TWY</u>** ALL TWY LGTS OTS</u>
- !ROA ROA **TWY** A CNTRLN LGTS OTS FRM A TO D

**n. Runway Thresholds.** When reporting the relocation or displacement of a threshold, avoid language that confuses the two. Standard NOTAM phraseology includes a temporary threshold displacement. Report threshold relocation as closure of a portion of the runway until the actual physical appearance is altered so the closed runway segment no longer looks like a landing area. If appropriate, request the FSS to insert a reopening date, and remember that you are obligated to track that date and revise or cancel it as necessary.

Example: !ALS ALS <u>RWY</u> 20 THR DSPLCD 600 NONSTD MARKING

**Translation:** The first 600 feet of runway 20 is closed to landing aircraft. Aircraft departing on runway 20 or landing or departing runway 2 may use the full length. The threshold displacement is marked by nonstandard markings.

**o. Obstructions and Obstruction Lights.** Types of obstructions are towers, cranes, stacks, etc. Height is identified as MSL (when known) and AGL. LGTS OTS refers to a top light or flashing obstruction light regardless of its position. Cranes marked by a flag or when the boom is lowered during the night hours do not require the issuance of a NOTAM. Obstruction lights on terrain (hills) are identified as MSL only. When reporting an obstruction or obstruction light(s) failure located within the airport boundaries, identify the outage per the following:

- (1) Height (see Appendix A, paragraph d, Altitude and Height),
- (2) Distance from the Airport Reference Point (ARP) (nautical miles), and
- (3) Direction from the Airport Reference Point (ARP) (16 point compass: N; NNE; NE; ENE; E; ESE; SE; SSE; S; SSW; SW; WSW; W; WNW; NW; NNW).
- (4) Tower registration number or ASR number (if applicable). The tower registration number can be found at: <u>wireless2.fcc.gov/UlsApp/AsrSearch/asrRegistrationSearch.jsp</u>

Obstruction light outages that meet one or more of the following criteria must include a return-to-service time:

(5) All obstruction light outages within a 5-statute mile (4.3 nautical miles) radius of an airport, or obstruction light outages outside a 5-statute mile radius that exceed 200 feet above ground level (AGL).

## **Examples:**

• !MIV N52 <u>OBST</u> TOWER 580 (195 AGL) 1.44 SW LGTS OTS (ASR NUMBER) TIL 0811302300

- !GSP GSP <u>OBST</u> TOWER 1528 (564 AGL) 12 E LGTS OTS (ASR NUMBER) TIL 0810291930
- PWK PWK <u>OBST</u> TOWER 1049 (330 AGL) OBK014007 LGTS OTS (ASR NUMBER) TIL 0809301915
- (6) Location is within 500 feet either side of the centerline of a charted helicopter route. Use a fix-radial-distance as the reference point with the affected location being the nearest public-use airport in your flight plan area.

## **Examples:**

• !MIV 2N6 <u>OBST</u> TOWER 314 (231 AGL) 4.3 NNW LGTS OTS (ASR 1055889) TIL 0711302300

The ASR number should be obtained from the tower owner when the outage is called in, and will be put in the text of the NOTAM. The ASR number may also be obtained from the FCC website at: wireless2.fcc.gov/UlsApp/AsrSearch/asrRegistrationSearch.jsp.

See AC 70/7460-1, *Obstruction Lighting and Marking*, for additional guidance about obstruction light failure notification requirements.

## Example:

!MIV 06/001 2N6 <u>OBST</u> TOWER 314 (231 AGL) 4.3 NNW LGTS OTS (ASR 1055889) TIL 0712302300

**p. Off-airport Obstructions.** Persons or organizations that operate an obstruction must report the improper functioning of any obstruction light or lights immediately by telephone to the nearest local FSS or by calling the US NOTAMS Office at 877-4US-NTMS (877-487-6867). The US NOTAM Office will route the call to the appropriate FSS. Callers should be prepared to provide the tower registration number (ASR number) and the name of the nearest airport.

**q.** Reporting the operating status of obstruction lights on communication towers is the responsibility of the communication tower operator (47 CFR § 17.48).

**r.** If there is a report of an obstruction light outage on a tower outside the airport, airport personnel with the responsibility of initiating NOTAMs should first check that for any existing Flight Safety NOTAMs via the FSS or at: <u>https://pilotweb.nas.faa.gov</u>. If a NOTAM is not found, contact and advise the tower operator about the outage. If the tower operator is not known, the information can be found at the FCC website: <u>wireless2.fcc.gov/UlsApp/AsrSearch/asrRegistrationSearch.jsp</u>.

**16. Personnel and Equipment Working.** Any NOTAM associated with Personnel and Equipment Working (PAEW) on or adjacent to a runway, taxiway, ramp, or apron must begin with one of the following keywords: RWY, TWY, RAMP, or APRON. Additionally, the appropriate direction should be specified. This criteria is used for runway checks and other events of short durations. Otherwise the runway should be closed.

## Examples:

- !IAD IAD RWY 1L/19R PAEW
- !IAD IAD RWY 1L/19R PAEW ADJ
- !CHO CHO RWY 23 PAEW FIRST 500 ALONG SE SIDE
- !SBY SBY TWY E PAEW SOUTH SIDE BTN RWY 5 / TWY G
- !MEM MEM RAMP WEST FEDEX FEEDER RAMP PAEW TIL 0712260400
- !BNA BNA APRON AIR CARGO APRON PAEW TIL 0712232000

**17. Certificated Airport Aircraft Rescue and Fire Fighting.** NOTAM (D) for airports (not runways) certificated under 14 CFR Part 139 is required when ARFF equipment is inoperative/unavailable and replacement equipment is not available. Except as indicated in Part 139.319(c), airport management has 48 hours to replace or substitute equipment before the index changes. Air carriers and others must be notified that ARFF equipment is out of service. Airport management is responsible for providing an ending time for each NOTAM. If airport management does not furnish an ending time, the specialist at the FSS will add 48 hours to the time of receipt and advise.

**a. ARFF Index.** The ARFF Index for each certificated airport is published in the AF/D. Legend item 16 in the AF/D lists indicates Index and ARFF equipment requirements. ARFF Index Limited is not a NOTAM. At certificated airports listed in the AF/D, the certificate holder (airport management) is required to notify air carriers by NOTAM when required ARFF equipment is inoperative/unavailable and replacement equipment is not available immediately. If the required Index level of capability is not restored within 48 hours, airport management is required to limit air carrier operations to those compatible with the index corresponding to the remaining operative rescue and firefighting equipment.

**b.** Permanent changes to the ARFF Index occurring during publication cycles are issued as FDC NOTAMs.

Examples (note the use of the keyword, <u>SVC</u>):

• !FTW FTW <u>SVC</u> ARFF VEHICLE OTS INDEX

UNCHANGED TIL 0710242100

• !FTW FTW <u>SVC</u> ARFF VEHICLE OTS INDEX

#### UNCHANGED TIL 0709072200

**c.** If the ARFF vehicle is still out of service after 48 hours, the airport manager must notify the AFSS/FSS of a temporary index change and approximate duration time.

#### Example:

!FTW FTW **SVC** ARFF NOW INDEX A TIL 0709072300

**Translation:** Though the ARFF Index is now A, four or less Index B aircraft may still operate into Fort Worth.

d. If the ARFF Index is listed in the AF/D as A and the ARFF vehicle is out of service:

Example: ISTS STS STC ARFF UNAVBL/AP CLSD TO ACR MORE THAN 30 PAX

**18. DISSEMINATION OF NOTAMS.** While airport operators are not responsible for determining how a NOTAM is disseminated, they should be aware of the criteria that the FSS must apply in making that determination. As a general rule, the actual circulation that an airport condition report receives results from the nature of the reported item and the NOTAM service qualification of the airport (see Appendix A, NOTAM Subject Categories). Exceptions to this rule are noted in subparagraphs (1) and (2) below.

**a.** (**D**) **Distant NOTAMs.** NOTAM (D) information is distributed for all public use airports, seaplane bases, and heliports listed in the Airport/Facility Directory (A/FD) and all navigational facilities that are part of the NAS. NOTAM (D) is distributed automatically. However, distribution to designated civil airport authorities is accomplished through Air Traffic Control or the tie-in FSS via letters of agreement. Air traffic facilities, primarily FSSs, have access to the entire database of NOTAMs. These NOTAMs remain available for the duration of their validity or until published.

The complete file of all NOTAM (D) information is maintained in a computer database at the Weather Message Switching Center (WMSC) located in Atlanta, Georgia, and the Master US NOTAM System (USNS) database located in Herndon, Virginia.

- (1) Airports listed in the Alaskan and Pacific supplements are not qualified for NOTAM (D) dissemination except for those annotated with a symbol. Conditions on non-NOTAM (D) airports, listed in these supplements, are transmitted one time to adjacent FSS facilities.
- (2) Exceptions to the rule involve FDC NOTAMs and Special Data NOTAMs. These NOTAMs are used primarily to advertise NAS changes and regulatory material. The origination and processing of these items are normally within the purview of FAA personnel, and the applicable procedures in FAA instructions are not repeated here. Operators of airports affected by 14 CFR Part 139, *Certification of Airports*, 49 CFR Part 1542, *Airport Security*, and 49 CFR Part 1544, *Aircraft Operator Security: Air Carriers and Commercial Operators*, may, however, have special reporting responsibilities covered by instructions contained in those regulations and the Airport Certification Manual.
- **b.** Local NOTAMs. NOTAM (L) information is now classified as NOTAM (D) information.

**19. EXTENDED PERIOD NOTAMS.** To reduce data circuit congestion, the FAA publishes NOTAM information that is expected to remain in effect for extended periods (more than 7 calendar days) in the *Notices to Airmen Publication (NTAP)* issued every 28 days. The most recently published NTAP is available on the FAA web site at <u>www.faa.gov/airports\_airtraffic/air\_traffic/publications/notices/</u>.

**20. AIRPORT RECORDS AND CONTROLS.** You should keep and maintain a log of NOTAMs that you originate so that at all times you are aware of how your airport is represented to the aviation public. You should make the NOTAM status of your airport a regular checklist item in the daily routine. Also, you should arrange to obtain a copy of the NOTAM as transmitted for future reference and to demonstrate regulatory compliance where this is a factor. The provision of transmitted NOTAMs is not a routine FSS function and will have to be arranged through a mutually acceptable local agreement. Current NOTAMs

are available on the FAA web site. Additionally, airports certificated under 14 CFR Part 139 may have requirements for maintaining records.

21. QUESTIONS AND COMMENTS. If you have questions about this AC, contact:

Federal Aviation Administration Office of Airport Safety and Standards Airport Safety and Compliance Division, AAS-300 800 Independence Avenue, SW Washington, DC 20591 Telephone (202) 267-3085

Comments and suggestions for changing or improving this AC should be submitted in writing.

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Wayne T Heibeck Acting Director of Airport Safety and Standards

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#### APPENDIX A. TECHNICAL TERMS—DEFINITIONS AND USAGE.

1. EXPLANATION AND REFERENCES. Technical terms and contractions used in this AC, and needed for the preparation of NOTAM material, have been extracted from several sources. Some of the sources are internal FAA directives or technical publications not always readily available to airport personnel. For optimum utility of this AC, the most critical and/or most frequently used terms and contractions are explained in this appendix. The source of the term or contraction is shown in brackets and italics following the explanation. While every effort will be made to update this listing, there may be times when a new or revised term or contraction is published in one of the reference sources before this appendix can be changed. In the event of an apparent conflict, the user should compare the dates of the reference document and the appropriate page(s) of this appendix and follow the latest version.

#### **REFERENCES:**

Pilot/Controller Glossary (P/CG) Aeronautical Information Manual (AIM) FAA Order 7110.10, Flight Service FAA Order 7340.1, Contractions FAA Order 7350.7, Location Identifiers FAA Order 7930.2, Notices to Airmen (NOTAMS)

## 2. **DEFINITIONS.**

**a. AIR NAVIGATION FACILITY (ANF).** Any facility used in, available for use in, or designed for use in, aid of air navigation, including landing areas; lights, any apparatus or equipment for disseminating weather information, for signaling, for radio-directional finding, or for radio or other electrical communication, and any other structure or mechanism having a similar purpose for guiding or controlling flight in the air or the landing and take-off of aircraft. *[AIM, FAA Order 7110.10]* 

**b. AIRPORT/FACILITY DIRECTORY, UNITED STATES (A/FD).** A publication designed primarily as a pilot's operational manual containing all airports, seaplane bases, and heliports open to the public including communications data, navigational facilities, and certain special notices and procedures. This publication is issued in seven volumes according to geographical area. It can be purchased by subscription from the National Ocean Service (NOS). A copy is normally available in the FSS for reference. These volumes have green covers. See Supplement-Alaska and Pacific. *[AIM, FAA Orders 7110.10 and 7930.2]* 

c. AIRPORT REFERENCE POINT (ARP). The approximate geometric center of all usable runway surfaces. It is the latitude and longitude of the approximate center of the airport.

**d. ALTITUDE AND HEIGHT.** Vertical distance expressed as feet above mean sea level (MSL) through 17,999 feet and flight levels (FL) for 18,000 feet and above. Feet and MSL are not written in the NOTAM. When MSL is not known, specify by writing AGL (above ground level); e.g., 1304 AGL, etc.

Format:

2500 = 2,500 feet above mean sea level. FL 250 = 25,000 feet above mean sea level. 2500 AGL = 2,500 feet above ground level.

#### e. CERTIFICATED AIRPORT. An airport certificated under 14 CFR Part 139 serving:

- (1) Scheduled passenger-carrying operations of an air carrier operating aircraft designed for more than 9 passenger seats, and
- (2) Unscheduled passenger-carrying operations of an air carrier operating aircraft designed for at least 31 passenger seats.

# f. COORDINATED UNIVERSAL TIME (UTC). See Time.

**g. FLIGHT SERVICE STATION (FSS).** Air traffic facilities which provide pilot briefing, en route communications, and visual flight rules (VFR) search and rescue services; assist lost aircraft and aircraft in emergency situations; relay ATC clearances; originate NOTAMs; broadcasts aviation weather and NAS information; receive and process IFR flight plans; and monitor NAVAIDS. In addition, at selected locations, FSSs provide En Route Flight Advisory Service (Flight Watch), issue airport advisories, and advise Customs and Immigration of trans-border flights. In the A/FD airport listings, the associated FSS is shown under the COMMUNICATIONS heading along with its local or toll-free telephone number. [FAA Order 7110.10]

**h. LOCATION IDENTIFIERS.** Sets of characters composed of letters, or letters and numbers that take the place of the name and location of an airport, navigational aid, weather station, or manned ATC facility. Identifiers are used in air traffic control, telecommunications, computer programming, weather reports, and related services. Airports are assigned location identifiers according to specified criteria. Identifiers are composed of three letters, one number and two letters, one letter and two numbers, or two letters and two numbers. Identifiers are published in FAA Order 7350.7, *Location Identifiers*. In the A/FD airport listings, the airport identifier is set in parentheses following the airport name. *[FAA Order 7350.7]* 

i. MILES (MI). Nautical miles unless otherwise stated. [FAA Order 7930.2]

**j.** NATIONAL AIRSPACE SYSTEM (NAS). The common network of U.S. airspace; air navigation facilities, equipment, and services; airports or landing areas; aeronautical charts, information, and services; rules, regulations, and procedures; technical information; and manpower and material. Included are system components shared jointly with the military. *[FAA Order 7110.10]* 

**k.** NATIONAL FLIGHT DATA CENTER (NFDC). A facility in Washington, DC, established by the FAA to operate a central aeronautical information service for the collection, validation, and dissemination of aeronautical data in support of the activities of government, industry, and the aviation community. The NFDC monitors the NOTAM system for compliance with established criteria and procedures. [FAA Orders 7110.10 and 7930.2]

**I.** NAVIGATIONAL AID (NAVAID). Any visual or electronic device airborne or on the surface that provides point-to-point guidance information or position data to aircraft in flight. *[FAA Order 7110.10]* 

**m. NOTAM DISSEMINATION CLASSIFICATIONS.** Classifications into which NOTAMs are grouped according to the dissemination they receive. *[FAA Order 7930.2]* 

(1) **Distant Dissemination (D).** A NOTAM given distant dissemination beyond the area of responsibility of the Flight Service Station. These NOTAMs are stored and available until cancelled. Local Dissemination (L) NOTAMs are now classified as (D) NOTAMs.

(D) NOTAMS must use one of twelve keywords (see Appendix B for [FAA Orders 7110.10 and 7930.2]

(2) Flight Data Center (FDC) Dissemination. Accomplished by the National Flight Data Center (NFDC) to give system wide dissemination. *[FAA Order 7110.10]* 

**n. NOTAM SUBJECT CATEGORIES.** Categories into which NOTAMs are divided according to their subject area. They are as follows:

- (1) Movement Area NOTAMs.
- (2) Lighting Aid NOTAMs.
- (3) Air Navigation Aid (NAVAID) NOTAMs.
- (4) Communications Outlets NOTAMs.
- (5) Services NOTAMs.
- (6) Special Data NOTAMs.
- (7) Flight Data Center (FDC) NOTAMs. [FAA Order 7930.2]

**o. NOTICE TO AIRMEN (NOTAM).** A notice containing information (not known sufficiently in advance to publicize by other means) concerning the establishment, condition, or change in any component (facility, service, or procedure) of, or hazard in, the National Airspace System (NAS); the timely knowledge of which is essential to personnel concerned with flight operations. *[AIM, FAA Order 7930.2]* 

**p. PATCHY** (**PTCHY**). Reported condition of a landing area not completely covered should be described as having patches of snow, ice, etc. The term is used in conjunction with the description for the surface contaminant and depth. Example: PTCHY 1/2 IN SN. *[FAA Order 7930.2]* 

**q. PILOT REPORT (PIREP).** A report of a meteorological phenomena encountered by aircraft in flight and on the ground.

**r. PUBLIC USE.** Refers to an airport that is available for use by the general public without a requirement for prior approval of the owner or operator.

#### s. SNOW, ICE, SLUSH, AND WATER CONDITIONS

- (1) **Measurement.** The depth is always expressed in terms of thin (less than 1/4 inch), 1/4 inch, 1/2 inch, and 1 inch. When 1 inch is reached, additional reports should be in multiples of 1 inch and the use of fractions discontinued. If a variable amount is reported, such as 3 to 5 inches, show the greater depth. When a snow depth of 35 inches is reached, additional reports should be in multiples of feet only. If a report is halfway between two reportable values, roundoff to the next higher reportable value.
- (2) **Coverage.** Do not express the condition in terms of percentage of coverage. A surface not completely covered should be described as having patches of snow, ice, etc.; e.g., PTCHY 1/2 IN SN (surface). The absence of a described surface indicates the entire landing area. *[FAA Order 7930.2]* Also see Patchy.

t. SUPPLEMENT-ALASKA AND PACIFIC. Joint civil military flight information publications similar to the Airport/Facility Directory in purpose, format, and content. The Alaska Supplement has a salmon colored cover and the Pacific Supplement has a blue cover. The issuing authority agreements include the Department of Defense. *[FAA Order 7930.2]* 

**u. TIME.** FAA uses Coordinated Universal Time (UTC) for all operations. UTC is stated in 10digits (year, month, day, hour and minute). Four digits represent the hour and minutes. The word "local" or the time zone equivalent is used to denote local when local time is given during radio and telephone communications. When written, a time zone designator is used to indicate local time; e.g. "0205M" (Mountain). The local time may be based on the 24-hour clock system. For NOTAM system purposes the day begins at 0000 and ends at 2359. **NOTE:** *The end-of-day time expressed as 2400 may be encountered in other, non-NOTAM, contexts in aviation communications. The terms sunrise and sunset are not used as expressions of time in reporting NOTAM data.* 

Format:

0612251630 = 4:30 pm, December 25, 2006. (UTC)

0611080700 = 7:00 am, November 8, 2006

[P/CG, FAA Orders 7110.10 and 7930.2]

- v. VIRGULE(/). Read as the word "and" when used in NOTAM text.
- w. WEEKDAYS (WKDAYS). Monday through Friday. [FAA Order 7930.2]
- x. WEEKEND (WKEND). Saturday and Sunday. [FAA Order 7930.2]

#### APPENDIX B. AUTHORIZED CONTRACTIONS AND ABBREVIATIONS.

1. FACILITIES AND THEIR CONTRACTIONS. In NOTAM composition, authorized contractions and abbreviations are to be used to minimize message length and maximize clarity. The Facilities listed in this appendix have been extracted from various reference sources. This listing is not intended to be all-inclusive but should satisfy most of the needs of airport operators who originate NOTAMs. The facilities are grouped according to the NOTAM Subject Categories shown in Appendix A. While every effort will be made to update this listing, there may be times when a new or revised term or contraction is published in one of the reference sources before this appendix can be changed. In the event of an apparent conflict, you should compare the dates of the reference document and the appropriate page(s) of this appendix and follow the latest version.

#### **REFERENCES:**

Pilot/Controller Glossary (P/CG) FAA Order 7340.1, Contractions FAA Order 7930.2, Notices to Airmen (NOTAMS).

#### 2. MOVEMENT AREA.

a. Airport Surfaces.

Aerodrome (keyword)	AD
Airport	AP
Apron (keyword)	APRON
Safety Area <sup>6</sup>	
Ramp (keyword)	RAMP
Runway (keyword)	RWY
Taxiway (keyword)	TWY

#### b. Surface Composition.

Asphalt/tar	ASPH
Concrete	CONC
Gravel	GRVL
Turf <sup>7</sup>	TURF

<sup>&</sup>lt;sup>6</sup> Use plain language or consult with FSS for preferred terminology.

# 3. LIGHTING AIDS.

Airport Beacon	ABN
Approach Lighting System	ALS
Approach Lighting System with Sequenced Flashers in ILS Cat-I	ALSF-1
Approach Lighting System with Sequenced Flashers in ILS Cat-II. The ALSF-2 may operate as an SSALR when weather conditions permit.	ALSF-2
Approach Lighting System, Medium Intensity	MALS
Approach Lighting System, Medium Intensity with Sequence Flashers	MALSF
Approach Lighting System, Medium Intensity with Runway Alignment Indicator Lights	MALSR
Light	LGT
Obstruction	OBST
Obstruction Light	OBST LGT
Omnidirectional Approach Lighting Systems	ODALS
Pilot Controlled Lighting	PCL
Precision Approach Path Indicator	PAPI
Runway Alignment Indicator Lights	RAIL
Runway Center Line Lights	RCLL
Runway End Identifier Lights	REIL
Runway Lead-in Light System	RLLS
Runway Lights, High Intensity	HIRL
Runway Lights, Low Intensity	LIRL
Runway Lights, Medium Intensity	MIRL
Sequenced Flashing Lights	SFL
Simplified Short Approach Lighting with Sequenced Flashers	SSALF

Simplified Short Approach Lighting with Runway Alignment Indicator Lights	SSALR
Simplified Short Approach Lighting System	SSALS
Touchdown Zone Lights	TDZ LGT
Visual Approach Slope Indicator	VASI

# 4. AIR NAVIGATION AIDS.

Azimuth	AZM
Compass Locator at ILS Middle Marker	LM
Compass Locator at ILS Outer Marker	LO
Distance Measuring Equipment	DME
Elevation	ELEV
Fan Marker	FAN MKR
Glide Path	GP
Global Positioning System	GPS
Inner Marker	IM
Instrument Landing System	ILS
Localizer	LLZ
Localizer Type Directional Aid	LDA
Microwave Landing System	MLS
Middle Marker	ММ
Nondirectional Radio Beacon	NDB
Outer Marker	ОМ
Runway Visual Range	RVR
Simplified Directional Facility	SDF
Tactical Air Navigational Aid (Azimuth and DME)	TACAN

VHF Omnidirectional Radio Range	VOR
VHF Omnidirectional Radio Range	VOR

# 5. COMMUNICATIONS AND SERVICES.

Aeronautical Advisory Station	UNICOM
Aircraft Rescue and Firefighting	ARFF
Airport Traffic Control Tower	TWR
Automatic Terminal Information Service	ATIS
Common Traffic Advisory Frequency	CTAF
Automated/Flight Service Station	FSS
Low Level Wind Shear Alert Systems	LLWAS

# 6. SPECIAL DATA FACILITIES, SITUATIONS.

Balloon Release	BLN RLS
High Altitude Balloon	HIBAL
Parachute Jumping Exercise	PJE
Weather Reporting Service (includes AWOS and other systems associated with an instrument approach)	WX REP

## APPENDIX C. FACILITY CONDITION DESCRIPTIONS AND CONTRACTIONS.

1. FACILITY CONDITIONS AND THEIR CONTRACTIONS. Facility condition descriptions and their contractions listed in this appendix are authorized for NOTAM composition. They have been extracted from various reference sources. The facility conditions are grouped in the same NOTAM Subject Categories as are the facilities themselves in Appendix B. This listing is not intended to be all-inclusive but should satisfy most of the needs of airport operators who originate NOTAMs. If the listed conditions do not seem to cover a particular situation, consult with the FSS. While every effort will be made to update this listing, there may be times when a new or revised term or contraction is published in one of the reference sources before this appendix can be changed. In the event of an apparent conflict, the user should compare the dates of the reference document and the appropriate page(s) of this appendix and follow the latest version.

#### **REFERENCES:**

Pilot/Controller Glossary (P/CG) FAA Order 7340.1, *CONTRACTIONS* FAA Order 7930.2, *NOTICES TO AIRMEN (NOTAMS), Appendix 5* 

## 2. LANDING AREA.

Bird Activity, Landing Area or Approaches <sup>7</sup>	BIRDS ON AND IN VC ARPT
Braking Action Fair	BA FAIR
Braking Action Nil	BA NIL
Braking Action Poor	BA POOR
Closed Commissioned	CLSD
Decommission	DCMSN
Decommissioned	DCMSND
Displaced	DSPLCD
Except	EXC
Runway Friction Value	MU
Friction Measuring Equipment Out of Service	MU OTS
Frozen	FRZN
Ice On Runway(s)	IR
Inches	IN
Light	LGT
Lighted	LGTD
Loose Snow on Runway(s)	LSR

<sup>&</sup>lt;sup>7</sup> Use plain language or consult with FSS for preferred terminology.

Obscured, Obscure or Obscuring	OBSC
Over	OVR
Packed Snow on Runway	PSR
Packed or Compacted Snow/Ice on Runway(s)	SIR
Patchy	РТСНҮ
Personnel and Equipment Working	PAEW
Plow, Plowed	PLW
Rough	RUF
Rubber Accumulation	RUBBER ACCUM
Sand or Sanded	SA
Slush on Runway(s)	SLR
Snow	SN
Snowbank(s) Containing Earth/Gravel	BERM
Snowbank(s) Caused by Wind Action	DRFT
Snowbank(s) Caused by Plowing (Windrow/s)	SNBNK
Takeoff	TKOF
Thin	THN
Unlighted	UNLGTD
Water on Runway(s)	
Water on Ranway(5)	WTR

# 3. LIGHTING AIDS.

Commissioned	CMSND
Decommission	DCMSN
Decommissioned	DCMSND
Obscured, Obscure or Obscuring	OBSC
Out of Service	OTS
Return to Service	RTS
Unlighted	UNLGTD

# 4. AIR NAVIGATION AIDS, COMMUNICATIONS AND SERVICES.

Commissioned	CMSND
Decommission	DCMSN

Decommissioned	DCMSND	
Operating Normally	OK	
Out of Service	OTS	
Return to Service	RTS	
Unavailable	UNAVBL	
Unmonitored	UNMNT	
Unusable	UNUSBL	

# 5. SPECIAL DATA FACILITIES, SITUATIONS.

Avoid	AVOID
Except	EXC
Temporary	TEMPO
Unavailable	UNAVBL
Unreliable	UNREL
With Effect From or Effective From	WEF

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# APPENDIX D. SAMPLE NOTAM.

AIRPORT					
A NOTAM #		DATE:			
PORT I.D. #	PORT I.D. #		TIME:		
TAM TEXT:					
TIFICATION:					
# # # # TOWER					
PHONE #	INITIALS	TIME	CALLED IN BY		
# # # # AFSS					
PHONE #	INITIALS	TIME	CALLED IN BY		
		AIRLINES			
ICELLED:					
TIFICATION:					
# # # # TOWER					
PHONE #	INITIALS	TIME	CALLED IN BY		
# # # # AFSS					
PHONE #	INITIALS	TIME	CALLED IN BY		

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