#### U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION



## National Policy



Effective Date: January 10, 2019

# SUBJ: Notices to Airmen (NOTAM)

This Order prescribes direction used to format and distribute information regarding unanticipated or temporary changes to services, components of, or hazards in, the National Airspace System (NAS). Authorized personnel assigned to facilities that collect, originate, and/or disseminate NOTAMs must be familiar with the provisions of this order that pertain to their operational responsibilities. The Notices to Airmen (NOTAM) system does not advertise published or charted data and information.

Danieles-

Steven Villanueva Director of Flight Services Air Traffic Organization

# Notices to Airmen (NOTAM)

## **Explanation of Changes**

# Effective: January 10, 2019

Subject: Replaced controllers with personnel who are required to be familiar with the provisions of the order.

Subject: Modified the language regarding the Notices to Airmen system by removing the phrase does not advertise data already published or charted and replaced with does not advertise published or charted data and information.

GLOBAL: In all NOTAM examples numbers were removed and replaced with YYMMDDHHMM.

GLOBAL: In most examples years were replaced with YY.

GLOBAL: In all instances where there was a 3 day requirement, now changed to 7 days.

GLOBAL: The term OUT OF SERVICE is replaced with the ICAO contraction U/S, meaning unserviceable.

GLOBAL: In all instance where it referred to Airport/Facility directory, now changed to Chart Supplement.

**1–1–1. Purpose.** Modified the language regarding the Notices to Airmen system by removing the phrase does not duplicate data already published or charted with does not advertise published or charted data and information.

**1–1–2.** Audience. Rewritten to read: Audience for this order is any office responsible for originating NOTAMs and those who use aeronautical information.

#### 1-1-4. Cancellation.

1-1-7. Recommendation for procedural changes. Added NAS Messaging Replacement (NMR).

**1–1–9. Related Publications.** Mission added to the following language: Military units issue NOTAMs pertaining to their mission.

1-1-9. Related Publications. Added FAA Order 8260.19, Flight Procedures and Airspace.

**1–2–1.a. Purpose.** Language modified to: The United States NOTAM Office (USNOF) is the final authority on NOTAM formatting. Candidate NOTAMs submitted through the NS (NOTAM System) must be in the proper format. To ensure NOTAMs are issued in accordance with NOTAM policy, submitters must comply with USNOF personnel directions.

**1–2–1.b. Purpose.** NOTAM System changed to NS as it is spelled out in 1–2–1.a.

**1–2–1c.5. Obstructions.** Modified language to: Such hazards may include, (but are not limited to). Wind turbine added to the list.

**1–2–1c.7.** Communications. Definition reworded to a hazard caused by or related to communication outlets and air–to–ground frequencies due to commissioning, decommissioning, outage or unavailability.

**1–2–1c.8.** Services. Added to the description: In the NOTAM System, "SVC" is a keyword which means "Services," but is not the ICAO approved contraction. Always spell out the word SERVICE as described in 3-3-1 a.1.

**1–2–1c.9.** Airspace. Added to the description: Such restrictions and activities may include (but are not limited to), parachute jumping, unmanned aircraft, etc.

1–2–1c.18. Route. ATS spelled out: Air Traffic Services.

**1–3–1a. Air Traffic Organization.** All air traffic employees changed to read: all air traffic organization, Federal Contract Tower (FCT), and Federal Contract Flight Service Station (FCFSS) employees.

**1–3–1b.** Air Traffic Organization. Air traffic personnel changed to read: air traffic organization, FCT, and FCFSS personnel.

1-3-1.h.1 and 2. Air Traffic Organization. Language removed: And forwarding them for transmittal.

**1–3–2.b. Technical Operations.** Flight Inspection Services changed to: Aircraft Operations Group, Flight Inspection Team.

1-4-1. Word Use in this Order. I. that referenced time show in UTC was removed.

**1–4–6.c. Definitions. AFTN added:** Aeronautical Fixed Telecommunication Network (AFTN). This interface will be used to support the exchange of Aeronautical Fixed Telecommunications Network (AFTN) formatted messages between NADIN and a common set of external TCP/IP users utilizing the Communications, Flight Service and Weather Engineering Group's (CFWG) Common Message Handling Protocol (CMHP).

1-4-6.f. Certified Airport changed to Certificated Airport.

1-4-6.h. Now reads: Chart Supplement (Alaska, Pacific, U.S.)

**1–4–6.h.1. Alaska chart supplement** – World Aeronautical Charts replaced with Terminal Area Charts and Alaska VFR Wall Planning Chart.

**1–4–6.h.3.** In addition to the U.S. chart supplement for the contiguous United States, was added Puerto Rico and U.S. Virgin Islands.

**1–4–6.p. Definitions. NADIN added:** The National Airspace Data Interchange Network (NADIN) Message Switch Network (MSN), also referred to as NMR (NAS Messaging Replacement), receives, processes, and distributes domestic and international flight planning, flight movement, weather observation/forecast, Notice to Airmen (NOTAM), and search and rescue messages between the NAS, commercial/general aviation, U.S. Government agencies, aviation information service providers, and international Civil Aviation Authorities.

1-4-6.r. Definitions. NMR added: NAS Messaging Replacement also known as NADIN.

1-4-6.v. Definitions. Out of Service. Added: Unserviceable "U/S" to OUT OF SERVICE definition.

**1–4–6.w. Definitions. Pointer NOTAM.** Modified definition: NOTAM D issued to point to additional aeronautical information. When pointing to another NOTAM, the keyword in the pointer NOTAM must match the keyword in the original NOTAM. If the NOTAM is pointing to a publication, choose the most appropriate keyword for the situation. For example, a pointer NOTAM at a specific airport is used to highlight or "point out" an FDC NOTAM, or additional aeronautical information from the NTAP or Chart Supplement. At the request of an Air Traffic facility, a NOTAM originator, or as deemed necessary by FSS issue Pointer NOTAMs to highlight events of significance. Pointer NOTAMs should be issued for, but are not limited to, TFRs, Airshows, Temporary SUA, major NAS system interruptions, etc.

1-4-6.ab. Unusable. Does not meet flight inspection requirements was removed from the definition.

**2–1–2.a.2/3. VFR Charts.** Alaska Terminal and World Aeronautical Charts were removed. Added Helicopter Route Charts, Caribbean Charts and Wall Planning Charts.

2-1-7. Addressing Correspondence. Address updated.

**2–1–8. NFDC Organization.** Phone number and email address updated.

**3–1–1.d. NOTAM Responsibilities.** Language added from Notice 7930.108: Inform the controlling facility of all Obstruction Light Outage NOTAMs that meet one of the following criteria:

- 1. The obstruction is located 6 NM or less from an airport.
- 2. The obstruction is more than 400 feet AGL.

- 3. Identified by the terminal facility as one not meeting the criteria stated in d1 or d2 above; however, has been deemed necessary for the safety of operations (for example, depicted on the radar video map).
- **3–2–2. Filing NOTAM Information with the FSSs.** 3 days changed to 7 days.

**3–3–2.b. Expression of Time in the NOTAM System.** As in the body of Temporary Flight Restrictions added to explanation of UTC.

**3–3–2.c. Expression of Time in the NOTAM System.** Language added to description of a daily schedule allowing Sunrise – Sunset: may be used following the day(s) or "DLY".

3-3-2. Expression of Time in the NOTAM System. Example changed to all one line.

**3–3–3. Units of Measurement.** Examples added:

6.2NM

305DME

**3–3–5.e. Runway Identification.** Language added to spell out L (left), R (right), and C (center). Runway descriptions changed to Runway designators.

**3–3–6.a.1. Taxiway Identification.** Example added:

...TWY EAST/WEST TWY CLSD...

3-3-6.a.3. Taxiway Identification. Example changed to: ... TWY HELIPAD 3...

**3–3–6.c. Taxiway Identification.** Language changed to: For multiple taxiways, use a comma between each designator. Do not add "TWY" prior to each individual taxiway identifier. Examples modified and clarity on Taxiway segmentations was included. Multiple segments (Single Taxiway). Indicate multiple segments of a single taxiway with each portion beginning with TWY.

3-3-7.a. Apron Identification. Replaced prefix with keyword. Replaced taxiway with APRON.

Example modified: ... APRON MAIN TXL C ... (Where the name is Main)

...APRON ALL...

...APRON HELIPAD A1...

Note changed to read: NOTE- This example describes a helipad (A1) that resides on a ramp. Only this helipad (A1) has an abnormal condition.

**4–2–1.b.5. NOTE. NOTAM Composition.** Language added to the note: For example, a surface designator is RWY 14/32, TWY A, APRON FedEx Ramp.

**4–2–1.b.9.(c) NOTAM Composition.** Language modified to read: Include heights AGL when required (obstacle NOTAMs).

4-2-1.b.13. NOTAM Composition. Replaced "should" with "must".

4-2-1.b.13. NOTAM Composition. Added graphic and the following example:

!GNV 12/018 F95 AIRSPACE MIL ACT WI AN AREA DEFINED AS 3NM RADIUS OF F95 SFC-14000FT DLY 2200–0045 YY05152200 – YY05170045

This military activity occurs Sunday (May 14) between 2200UTC and 0045UTC, again on Monday and again on Tuesday at 2200UTC then ends on Wednesday (May 17) at 0045UTC.

**4-2-1.b.14(a) NOTAM Composition.** Reference removed: (Reference FAA Order 8260.19, Chapter 2, Section 6.)

**4–2–1.b.14(b) NOTAM Composition.** b language re–lettered to c.

New b language: The NOTAM Originator is responsible for validating that any NOTAM that is coming to its End of Validity time can auto-expire. If the condition is still valid, the NOTAM must be canceled and reissued with a new Start/Stop time, PRIOR to the NOTAM reaching its End of Validity time.

#### 4-2-1.b.14(c) NOTAM Composition. c language re-lettered to d.

**4–2–1.b.14(e) NOTAM Composition.** Added: For an uncontrolled airport, when a NOTAM originator submits a candidate NOTAM to the NOTAM System to advertise an Airport or Runway condition with a Start of Activity less than 30 minutes before the beginning of an activity that impacts/closes a runway or an airport, the activity must be reported to the Air Traffic Control (ATC) facility that has control jurisdiction.

5-1-3.a. Movement Area Information. "HELIPORT" changed to "HLP".

5–1–3.d. Movement Area Information. Do not refer to the Airplane Design Group in the NOTAM.

**5–1–3.j.2. Movement Area Information.** "SFC CONDITIONS NOT REPORTED" changed to "SFC COND NOT REP". Updated language.

5-1-4. Field Conditions (FICON) Reporting. HELIPORT changed to HLP in example.

**5–1–4. Field Conditions (FICON) Reporting. Runway.** Modified sentence structure and added example: ...RWY 04/22 FICON 3/3/3 SLIPPERY WHEN WET...

**5–1–4.b.4. Field Conditions (FICON) Reporting.** Conditions. Added language: For taxiways and aprons, do not express the condition in terms of percentage of coverage. Use the word "PATCHY" to describe a contaminant that covers 25 percent or less of the reported portion of the surface of a taxiway, apron, heliport or airport.

**5–1–4.b.4(c) Field Conditions (FICON) Reporting.** Moved language and tables 5–1–1, 5–1–2, and 5–1–3 from 5–1–4.b.9.c.2 and titled it Reportable values.

**5–1–4.b.5(a) Field Conditions (FICON) Reporting. Action.** Graphic added for illustration of Cleared and Remaining Width.

**5–1–4.b.5(e)(1) Field Conditions (FICON) Reporting. Action.** Inclusion of when applicable added to treatment of DRIFTS. Added language defining DRIFT: snowbank caused by wind action and changed definition of WINDROW: snowbank caused by wind.

**5–1–4.b.5(e)(1) and (2): One and two were deleted and combined with e to read:** Includes ridges (when applicable) to describe the accumulation at the edge of the movement area or of the treated area when the surface has been plowed/swept. Ridges include SNOWBANKS, BERMS (containing earth/gravel), WINDROWS (snowbank caused by wind), SN PILES and DRIFTS (snowbank caused by wind action). Use the term "DRIFTS" (snowbank caused by wind action) after any treatments (when applicable) to describe one or more drifts. When the drifts are variable in depth, report the greater depth.

Graphic added depicting the distance of a snowbank from runway edge.

#### 5-1-4.b.6(a) Field Conditions (FICON) Reporting. Braking Action. Added note:

#### NOTE-

A "NIL" braking action NOTAM can be issued at airports not receiving federal money and non-part 139 airports on taxiway or apron surfaces only. No aerodrome can issue a runway NIL braking action.

**5–1–4.b.6(d) Field Conditions (FICON) Reporting. Braking Action. Added note:** A braking action report from a landing aircraft should be processed as a PIREP.

**5–1–4.b.8. Field Conditions (FICON) Reporting. Conditions not monitored.** "CONDITIONS NOT MNT" changed to "COND NOT MNT".

**5–1–4.b.9. Field Conditions (FICON) Reporting. Start of activity/end of validity.** "CONDITIONS NOT MNT" changed to "COND NOT MNT."

**5–1–4.c.2. Field Conditions (FICON) Reporting. Start of activity/end of validity.** Added language to Slippery when wet stand alone NOTAM: where a friction survey (conducted for pavement maintenance) indicates the averaged Mu value at 40 mph on the wet pavement surface failed to meet the minimum friction level classification.

Added reference: Reference: AC 150/5200–30, Airport Field Condition Assessments and Winter Operations Safety.

**5–1–5.f.** Added: **Airplane Design Group.** For those airports capable of permitting Group VI (A–380, B747–8) aircraft but have a limit on the capacity, issue a NOTAM when the capacity is reached so other aircraft won't attempt to land. Do not refer to the Airplane Design Group in the NOTAM.

REFERENCE-

AC 150/5300-13, Airport Design

**5–2–2. Figure. Lighting Aids.** Added graphic and language for illustration. Lights that are partially obscured are not reported as a NOTAM.

5-2-2.d.3. Obstacles. "BUILDINGS" changed to "BLDG".

**5-3-4. NAVAID Maintenance Shutdown.** 3 days changed to 7 days.

**5–3–7. NAVAID Conditions.** This section now includes content directly from the Flight Inspections Order, 8200.1, U.S. Standard Flight Inspection Manual, in addition to the content already there. The addition of Flight Inspection goes towards having all NOTAM content in a single governing order.

**5–3–8.a.1. Satellite Based Systems.** NOTAM System replaced USNOF. When these NOTAMs get distributed internationally, the NOTAM System changes the designator "KNMH."

**5–3–8.a.2. Satellite Based Systems.** Language changed to: Candidate GPS testing NOTAMs must be properly formatted when received from Technical Operations ATC Spectrum Engineering Services, Spectrum Assignment and Engineering Services. The USNOF will issue NOTAMs under the accountability "GPS" with a location identifier of the associated center.

5–3–8.b. Satellite Based Systems. Updated WAAS information.

**5–3–8.d. Satellite Based Systems. Language changed to:** Originate NOTAMs when the GBAS is unserviceable or predicted to be unserviceable.

**Chapter 5, Section 4:** Section title changed from COMMUNICATIONS OUTLETS NOTAMS to COMMUNICATIONS NOTAMS.

**5–5–3.c.** Hours of Operation. Added new language: At times, air traffic facilities temporarily extend their hours of operation. When this occurs, substitute "OPN" as the condition and include, if requested, the available services "CLASS X SERVICE AVBL" as shown in the examples.

**6–1–1.a.8.(c)** Airspace NOTAM Format Added language: Certificate of Authority, when requested by the proponent.

6-1-1.a.8.(a) Airspace NOTAM Format. Removed language: versus FL150.

**6–1–2. Special Activity Airspace.** Added: permanent or temporary to the following : A NOTAM must be entered through Special Use Airspace Management System to activate permanent or temporary special use airspace.

**6–1–3.b. Airspace and Altitude Reservations.** Stationary Altitude Reservation changed to STNR ALT RESERV.

6–1–5. Other Airspace NOTAMs. Addition of commercial space launched and reentries.

6-1-5.a. Other Airspace NOTAMs. 3 days changed to 7 days.

6-1-5. Other Airspace NOTAMs. Table 6-1-1. Changed LGT OUT TRAINING to LGT OUT TRG.

**6–1–5.b. Other Airspace NOTAMS.** Added the following language: Controlled Firing Area (CFA) does not require a NOTAM as the activity is suspended immediately when a nonparticipating aircraft approaches the area.

**Reference**-FAA Order 7400.2, Procedures for Handling Airspace Matters. **6–1–5.b.** and **c.** re–lettered to c and d.

6-1-7. Area Impacted Tables. New section depicting polygon, circular shape, circle sector, and corridor.

**a.** Polygon: Points defining lateral limits of an area must be enumerated in clockwise order. The last and the first points of the list must be the same (TO POINT OF ORIGIN). Latitude/longitude must be followed by plain language location between parentheses.

**b.** Circle: Define a circular shape as "WI AN AREA DEFINED AS XNM RADIUS" followed by the location of the center of the circle.

**c.** Corridor: A corridor is a type of polygon defined by a line between points and a lateral distance on either side of the line. The lateral limits are at the end points connected by arcs of circle.

**7–1–3.c.6. Instrument IFR Flight Procedures.** Requirement for hard/electronic copy of permanent NOTAM changed to: must be stored with the current amendment and maintained with the procedure filed by AIS specialists.

7-1-8.d. Laser Light Activity. Changed LASER LIGHT ACTIVITY to LASER LGT ACT.

Appendix A. Examples.

5-1-3.1. Movement Area. Heliport changed to HLP.

5-1-3.3. Movement Area. Note. First changed to FST.

**5–1–3.3. Movement Area.** Note. Added frequency to PPR example.

**5–1–3.4. Movement Area.** Example. Height changed to HGT.

5–1–3.4. Movement Area. Conditions not reported changed to COND not REP.

5-1-3.9. Movement Area. Example. Removed ALL from example: ... AD AP SIGNS OBSC...

5-1-3.10. Movement Area. Example. MOVEMENT changed to MOV.

**5–1–4. Field conditions reporting.** PRCT changed to PCT. Observed changed to OBS. Conditions changed to COND.

**5–1–4. Field conditions reporting. Added Example and Note:** ... TWY A FICON PATCHY COMPACTED SN...NOTE–Taxiway A has 25% or less coverage of compacted snow. The depth of the compacted snow is not reported.

**5–1–5.4.f. Airport Design Group.** Example. Added: AD AP CLSD TO ACFT WINGSPAN MORE THAN 214FT AND TAIL HGT MORE THAN 66FT...

**5–2–1.e.1. Lighting Aids. Examples.** Added: ...RWY 02 VASI NOW 2 BOX (TIME–TIME) ...For a temporary change...RWY 02 VASI CHANGED TO 2 BOX (YYMMDDHHMM–PERM).

5-2-1.1.5. Lighting Aids. Examples. ALL removed: ...TWY ALL LGT OBSC...

**5–2–1.1.5. Lighting Aids. Note.** Language added to the NOTE: In this example all of the taxiways have the two types of taxiway lighting obscured.

5-3-7. NAVAID Conditions. Examples. CH77 added to: NAV VOR/DME 113.0/CH77 COMMISSIONED...

**5–3–7. NAVAID Conditions. Note.** Changed to read: A DME–only facility or the DME portion of the VOR/DME, or the DME of an NDB is out of service. The VOR or NDB portion is still functioning.

**5–3–7. NAVAID Conditions.** And azimuth added to the note: When the DME portion of a VORTAC fails or is removed from service for maintenance, the TACAN and azimuth automatically becomes inoperative.

**5–3–7. NAVAID Conditions. LOM.** Added: NOTE 1–In these examples, both the NDB and the marker beacon are out of service. EXAMPLES–...JOSIE LOM NDB U/S

NOTE-In this example, the NDB is not operational, but the marker beacon is operational.

EXAMPLES-...JOSIE MKR BCN U/S

NOTE-In this example, only the marker beacon is out of service; the NDB is operational.

5-3-8.b. Satellite based systems. Example. Estimated changed to EST.

**5–3–8.b. Satellite based systems. Example.** AUTOMATIC DEPENDENT SURVEILLANCE BCST changed to: ADS–B. TRAFFIC INFORMATION changed to TFC INFO.

**5–3–8.d. Ground Based Augmentation System.** Language change to: Originate NOTAMs when the GBAS is unserviceable or predicted to be unserviceable.

**5–4–3. Communication Outlet Conditions.** Examples. Clearance changed to CLR.

5-4-3. Communication Outlet Conditions. COMMON TFC ADVISORY FREQ changed to CTAF.

5–5–2. Changed to published services. Examples. Automatic changed to AUTO.

**5–5–4.a.6.d. Weather and Weather Reporting Equipment.** Note removed: The failure of the telephone line and/or circuit used for connection to WMSCR must not be the basis for a NOTAM.

**5–5–5. Microburst/Wind Shear Detection System. Examples.** Microburst changed to MBST. Added: SVC WX RADAR BEYOND 60NM RADIUS OF SJU VOR U/S.....SVC WX RADAR U/S...

**5–5–6. Radar Services.** Example added: !CLE ZOB SVC WX RADAR U/S. ENR WX ADVSIORIES MAY NOT BE AVBL IN SW PA NW OH...

6-1-2. Special Activity Airspace. Examples. Training changed to TRG. Advised changed to ADZ..

6-1-3. Airspace and Altitude Reservations. Examples. Advised changed to ADZ. Vicinity changed to VCY.

**6–1–5. Other Airspace NOTAMS. Examples.** Intensity changed to INTST. Training changed to TRG. Advised changed to ADZ. LIGHT WI AREA changed to LGT WI AN AREA.

7–1–3.i. IFR Flight Procedures. DVA added to the title.

**7–1–3.i. IFR Flight Procedures. Examples.** Added: !FDC x/xxxx MYF DVA MONTGOMERY FIELD, SAN DIEGO, CA. DIVERSE VECTOR AREA ORIG... RWY 5 REQUIRES MINIMUM CLIMB OF 338 FT PER NM TO 2200. ALL OTHER DATA REMAINS AS PUBLISHED. XX02241549–XX08241549EST REASON: TEMPORARY CRANE FOR 180 DAYS. 2017–AWP–1234–OE.

**7–1–6. Air Defense Emergency. Example.** Advised changed to ADZ. Operated changed to OPR. Aircraft changed to ACFT. Military changed to MIL. Clearance changed to CLR.

7-1-8. Laser Light Activity. Examples. Degrees from changed to DEG FM.

**7–2–2.b.1. FDC NOTAM List. Military Facilities.** Removed: receive dissemination in the civil system in addition to dissemination in the military system and replaced with disseminated.

#### Appendix D.

**3–1–4.** FDC PRESIDENTIAL, SPECIAL SECURITY INSTRUCTIONS, OR EMERGENCY AIR TRAFFIC RULES TFRs became section 3–1–2. And section 3–1–3 became NOTAM LOG.

**4–1–1. Accepting NOTAM D Information.** 3 days changed to 7 days.

7-2-2.b.5. Example. Changed (M0719/13 NOTAMN to NOTAMN M0719/13.

#### Appendix G.

Added section titled Technical Operations Reference Chart.

# **Comments/Corrections**

Comments or corrections concerning this publication may be submitted on this form and submitted electronically to: 9-AJV-8-HQ-Correspondence@faa.gov

# Notice to Editor

The following comments/corrections are submitted concerning the information contained in:

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# Chapter 1. General Section 1. Introduction

#### 1-1-1. PURPOSE

This order prescribes direction used to format and distribute information regarding unanticipated or temporary changes to services, components of, or hazards in, the National Airspace System (NAS). The Notices to Airmen (NOTAM) system does not advertise published or charted data and information. Originators of airmen information are expected to inform the National Flight Data Center (NFDC) in sufficient time before the effective dates of changes to permit publishing of aeronautical data on the various charts or in the appropriate publications. When time does not allow for publication of a change or an outage and if the subject matter meets NOTAM criteria, issue a NOTAM until published.

#### 1-1-2. AUDIENCE

Audience for this order is any office responsible for originating NOTAMs and those who use aeronautical information.

#### 1-1-3. WHERE TO FIND THIS ORDER

This order is available on the Federal Aviation Administration (FAA) website at http://faa.gov/air\_traffic/ publications and http://employees.faa.gov/tools\_resources/orders\_notices/.

#### 1-1-4. CANCELLATION

FAA Order JO 7930.2R, Notices to Airmen (NOTAM) dated January 5, 2017 is canceled.

#### 1-1-5. EXPLANATION OF CHANGES

The significant changes to the basic order will be published and included in the Explanation of Change page(s). It is advisable to retain the page(s) throughout the duration of the basic order. If further information is desired, direct questions through the appropriate facility/service area staff to System Operations Services, Flight Services, U.S. NOTAM Governance and Operations Group.

#### 1–1–6. DISTRIBUTION

This order is distributed to selected offices in Washington headquarters, service area offices, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, and air traffic operations field offices and facilities.

#### 1-1-7. RECOMMENDATION FOR PROCEDURAL CHANGES

**a.** The contents of this order will be periodically reviewed and updated, as required by National Airspace Data Interchange Network (NADIN) or NAS Messaging Replacement (NMR), General Notices (GENOTs), and order changes. Changes/orders are published on the publications cycle.

**b.** Any changes to this order must be submitted to the Air Traffic Procedures Correspondence mailbox at 9–AJV–8–HQ–Correspondence@faa.gov.

1. Personnel should submit recommended changes in procedures to facility management.

**2.** Recommendations from other sources should be submitted through appropriate FAA, military, or industry/user channels.

#### 1-1-8. EFFECTIVE DATE

This order is effective January 10, 2019.

#### 1-1-9. RELATED PUBLICATIONS

• Military units issue NOTAMs pertaining to their mission based on the guidelines set forth in Air Force Instruction Interservice Publication 11-208/AR 95-10/OPNAVINST 3721.20, DoD Notice to Airmen (NOTAM) System.

- FAA Order 5010.4, Airport Data and Information Management
- JO 7110.10, Flight Services
- JO 7210.3, Facility Operations and Administration
- JO 7400.2, Procedures for Handling Airspace Matters
- JO 7400.8, Special Use Airspace
- Technical Operations
  - 6000.15, General Maintenance Handbook for NAS Facilities
  - 8200.1, U.S. Standard Flight Inspection Manual.
  - 6750.24, Instrument Landing System and Ancillary Electronic Component Configuration and Performance Requirements
- FAA Order 5010.4, Airport Safety Data Program
- 14 CFR Parts
  - 77, Safe, Efficient Use, and Preservation of the Navigable Airspace
  - 139, Certification of Airports
  - 157, Notice of Construction, Alteration, Activation and Deactivation of Airports
  - 171, Non-Federal Navigation Facilities
- FAA Order 8260.19, Flight Procedures and Airspace
- Advisory Circular (AC) 150/5200-28, Notices to Airmen (NOTAMs) for Airport Operators
- AC 150/5200-30, Airport Field Condition Assessments and Winter Operations Safety
- AC 150/5300–18B, General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards
- ICAO Annex 15

# Section 2. Scope

#### 1-2-1. PURPOSE

Authorized personnel assigned to facilities that collect, originate, and/or disseminate NOTAMs must be familiar with the provisions of this order that pertain to their operational responsibilities.

**a.** The United States NOTAM Office (USNOF) is the final authority on NOTAM formatting. Candidate NOTAMs submitted through the NS (NOTAM System) must be in the proper format. To ensure NOTAMs are issued in accordance with NOTAM policy, submitters must comply with USNOF personnel directions.

b. All NOTAMs will be processed, stored, and distributed by the NS.

**c.** NOTAMs must have one of the following keywords as the first part of the text. A keyword is used to make it easier to sort and locate the specific data needed: RWY, TWY, APRON, AD, OBST, NAV, COM, SVC, AIRSPACE, ODP, SID, STAR, CHART, DATA, DVA, IAP, VFP, ROUTE, SPECIAL or SECURITY.

#### NOTE-

*Examples of keywords (RWY, TWY, APRON, AD, OBST, NAV, COM, SVC) are shown in chapter 5; AIRSPACE in chapter 6; (IAP, ODP, SID, STAR, DVA, ROUTE, and SPECIAL) relating to instrument flight procedures in chapter 7.* 

1. RWY (Runway). Keyword used to describe a temporary change or hazard associated with landing and takeoff surfaces to include runway lighting, markings, signage, and other airport services or attributes associated with a specific runway.

**2.** TWY (Taxiway). Keyword used to describe a temporary change or hazard associated with a taxiway, taxiway lighting, markings, helipads, signage and other attributes associated with a specific taxiway.

**3.** APRON (Apron/Ramp). Keyword used to describe a temporary change or hazard associated with an apron, ramp, or taxilane, lighting, markings, helipad, signage and other attributes associated with a specific apron.

4. AD (Aerodrome). Keyword used to describe a temporary change or hazard or potential hazard on or within 5 statute miles of an airport, heliport, or maneuvering area that is not associated with a specific movement area surface. Such hazards may include, (but are not limited to), aerodrome closures, lighting not associated with a specific movement area surface, aerodrome services (fuel, customs, ARFF), helicopter platforms, wildlife hazards, and meteorological equipment (wind indicators) or services.

**5.** OBST (Obstructions). Keyword used to describe a temporary change or hazard. Such hazards may include, (but are not limited to), moored balloon, kite, tower, crane, stack, obstruction, wind turbine, obstruction lighting outage, obstruction status, or telecommunication tower light outage.

**6.** NAV (Navigation Aids). Keyword used to describe a temporary change or hazard caused by the changes in the status of ground-based radio navigational aids and Global Navigation Satellite Systems (GNSS) (except for area navigation (RNAV) approach anomalies).

7. COM (Communications). Keyword used to describe a temporary change or hazard caused by or related to communication outlets and air-to-ground frequencies due to commissioning, decommissioning, outage, or unavailability.

**8.** SVC (Services). Keyword used to describe a temporary change or hazard associated with change in service levels, such as operating hours, air traffic management services, or airport services. In the NOTAM System, "SVC" is a keyword which means "Services," but is not the ICAO approved contraction. Always spell out the word SERVICE as described in 3-3-1 a.1.

**9.** AIRSPACE (Airspace). Keyword used to describe an airspace restriction or activity warning which impacts, restricts, or precludes use of airspace. Such restrictions and activities may include, (but are not limited to), parachute jumping, unmanned aircraft, etc.

**10.** ODP (Obstacle Departure Procedure). Keyword used when a NOTAM applies to a textual or graphic obstacle departure procedure.

**11.** SID (Standard Instrument Departure). Keyword used when a NOTAM applies to a published standard instrument departure.

**12.** STAR (Standard Terminal Arrival). Keyword used when a NOTAM applies to a published standard terminal arrival.

**13.** CHART (Chart). Keyword used to describe a U.S. Government chart correction, followed by name of chart and word "CORRECT" that becomes effective before the next publication cycle.

**14.** DATA (Data). Keyword used to describe a temporary change or hazard associated with a data set change followed by the name of the data set to be changed; for example, U.S. DOD DAFIF, DACS, or NFD.

**15.** IAP (Instrument Approach Procedure). Keyword used when a NOTAM applies to a published instrument approach procedure.

**16.** VFP (Visual Flight Procedure). Keyword used when a NOTAM applies to visual flight procedures such as Charted Visual Flight Procedure and RNAV Visual Flight Procedure.

**17.** DVA (Diverse Vector Areas). Keyword used to describe a temporary change or hazard associated with a Diverse Vector Area.

**18.** ROUTE (Route). Keyword used to describe a temporary change or hazard or change associated with published Air Traffic Services (ATS) routes and related information.

19. SPECIAL (Special). Keyword used when a NOTAM applies to a special instrument flight procedure.

**20.** SECURITY (Security). Keyword used for Department of State advisories, Special Federal Aviation Regulations (SFARs), advisories of national emergency, national security actions, special security instructions, Air Defense Identification Zone (ADIZ) procedures.

#### NOTE-

Keyword SECURITY is not used for NOTAMs that describe a defined restricted area or TFR. Such NOTAMs would use keyword AIRSPACE.

**d.** (U) – Unverified. (U) is used preceding a keyword as described in paragraph 5-1-2.

**e.** The United States Department of Defense (DOD) will append the keywords IAP, SPECIAL, ODP, SID, and STAR with "U. S. DOD" to indicate that a published procedure is for military use only (not for civil use). For example, STAR U. S. DOD, SID U. S. DOD, IAP U. S. DOD.

#### 1-2-2. PROCEDURAL APPLICATIONS

Apply the procedures in this order except when other procedures are contained in a Letter of Agreement or other appropriate FAA documents, provided they only supplement this order and that any standards they specify are not less than those in this order. FAA Order JO 7210.3, Facility Operation and Administration, contains administrative procedures for developing and executing those letters and documents.

#### 1-2-3. AVOIDANCE OF DUPLICATION

Before issuing a NOTAM on any NOTAM criteria data, check all appropriate charts and publications to assure the information does not duplicate the published data. Do not issue a NOTAM on information that duplicates published data unless a NOTAM is required by a Certificate of Waiver or Authorization from Title 14, Code of Federal Regulations (CFR) issued by the FAA.

# Section 3. Accountable Organizations

#### 1-3-1. AIR TRAFFIC ORGANIZATION (ATO)

**a.** All air traffic organization, Federal Contract Tower (FCT), and Federal Contract Flight Service Station (FCFSS) employees, regardless of position, must immediately report any situation or condition considered hazardous to flight to an air traffic facility for appropriate action.

#### NOTE-

Situations that present an immediate hazard should be reported to the air traffic control (ATC) facility most concerned. Other situations should be reported on a first priority basis to the flight service station or appropriate accountable organization.

**b.** Air traffic organization, FCT, and FCFSS personnel must accept all aeronautical information regardless of source or subject matter, provided the occurrence is no more than seven days in the future. Obtain the name, title (if appropriate), address, and telephone number of the person furnishing the information and forward all data to the appropriate FSS for NOTAM issuance, if appropriate.

#### NOTE-

Forwarding the NOTAM data to the tie-in FSS does not relieve the forwarding facility from the responsibility of coordinating the information with other affected ATC facilities.

**c.** The party that originates the NOTAM on behalf of the accountable organization is responsible for the accuracy, origination, and cancellation of the NOTAM. FSS personnel receiving NOTAM information that requires action by another FSS must forward the information to that FSS for appropriate action.

**d.** The certified source is responsible for the correct classification and format of the NOTAM and for ensuring that facilities affected by the NOTAM are aware of the new NOTAM.

**e.** FSS specialists are responsible for issuing NOTAMs that are not covered in any example in FAA Order JO 7930.2. If, after consulting with your management, a format cannot be determined, have management contact USNOF for assistance.

**f.** System Operations Services, Flight Services, has the responsibility to ensure that data submitted complies with the policies, criteria, and formats contained in this order. This responsibility is delegated to the U.S. NOTAM Governance and Operations Group.

**g.** Service Areas originate NOTAMs for certain FDC criteria, including Laser activities and Temporary Flight Restrictions that are issued by the USNOF through NS.

**h.** Mission Support Services, Aeronautical Information Services (AIS) is responsible for originating Flight Data Center (FDC) NOTAMs for revisions to standard instrument approach procedures (SIAP), air traffic service (ATS) routes, textual and graphic departure procedures (both ODPs and SIDs), charting (CHART) corrections, and special instrument flight procedures. AIS may originate NOTAMs regarding navigational aid (NAVAID) restrictions in accordance with FAA Order 8200.1, United States Standard Flight Inspection Manual. AIS is responsible for:

**1.** Formulating Instrument Flight Procedures (IFP) and ATS route NOTAMs for procedures for which they have responsibility-

**2.** Formulating FDC PERM NOTAMs used to correct aeronautical chart printing and compilation errors related to all U.S. Government aeronautical charting products.

**3.** Designating an office to develop specific internal guidance for NOTAM preparation, quality control, transmittal, cancellation, and follow-up actions for FDC NOTAMs issued by AIS. This guidance must be developed in concert with the NFDC and the USNOF. As a minimum, the guidance must include the following:

(a) Procedures to ensure that the airport manager at the affected location is notified whenever possible.

(b) Procedures to ensure all NOTAMs are reviewed for accuracy, completeness, content, etc. prior to submission.

(c) Procedures to ensure the NFDC is provided information copy of all NOTAMs and cancellations.

(d) Procedures to ensure non-FAA service providers are provided an information copy of all NOTAMs and cancellations at those locations non-FAA service providers are allowed. This will ensure non-FAA service providers are aware of the condition requiring the NOTAM.

**4.** The NFDC is responsible for ensuring a hard/electronic copy of each PERM NOTAM is stored with the current amendment and maintained in the procedures archive file.

**i.** Mission Support Services, Airspace Services, is responsible for the development of policy guidance regarding standard terminal arrival routes (STAR). STAR NOTAMs are originated by the Air Route Traffic Control Center (ARTCC) (See paragraph 7–1–4f).

**j.** USNOF executes the operational compliance function. When operational personnel of the USNOF determine that NOTAM information submitted is not in compliance with the criteria or procedures as prescribed, they must call this to the attention of the transmitting party. USNOF will forward unresolved issues to the Flight Services Program Operations for clarification and further action. The USNOF is responsible for operating the NOTAM system. USNOF originates NOTAMs, as needed. *(See paragraph 4–1–1, National NOTAM Office Relationships for more detail)* 

#### NOTE-

NOTAM office phone numbers: (888) 876-6826; (540) 422-4262. FAX number is (540) 422-4298.

#### 1-3-2. TECHNICAL OPERATIONS

a. Operations Control Center (OCC) and Service Operations Center (SOC).

The Technical Operations Services, Operations Center manager, or representative, is responsible for:

1. Originating and canceling NOTAM information for shutdown, restoration, or any condition that affects the operations of NAVAIDs, frequencies, or other electronic aids that affect safety of flight. This includes forwarding data of programmed changes in the NAS, such as frequency changes, commissioning/ decommissioning, etc.

2. Coordinating with appropriate air traffic facilities prior to shutdown or changes that affect safety of flight.

**3.** When possible, approval should be obtained sufficiently in advance of the proposed shutdown time to allow dissemination of a NOTAM at least 5 hours before a shutdown will occur. A routine maintenance shutdown request must not be denied because of an inability to issue a NOTAM 5 hours in advance of the shutdown.

b. Aircraft Operations Group, Flight Inspection Team

Flight Inspection Services under FAA Order 8200.1, United States Standard Flight Inspection Manual, initiate NOTAMs regarding radio and lighting NAVAID restrictions. Facility classification based on flight inspection results is the responsibility of the flight inspector.

**REFERENCE**– FAA Order 5010.4, Airport Safety Data Program, and 14 CFR Parts 139 and 157

#### 1-3-3. FLIGHT STANDARDS SERVICE

**a.** Flight Technologies and Procedures Division, AFS-400, is responsible for development of policy guidance and procedures for the origination, tracking, and cancellation of NOTAMs relating to instrument flight procedures. This policy applies to the following: SIAPs, ATS routes, textual and graphic ODPs, SIDs, and special instrument flight procedures (*see paragraph 1-3-1 for procedures addressing STAR NOTAMs*). AFS-400 is responsible for oversight of non-FAA service providers authorized to maintain SIAP and/or special instrument flight procedures. Maintenance includes issuance of FDC NOTAMs.

**b.** AFS-400 is responsible for coordinating non-FAA service provider NOTAM authority and access to the FAA NOTAM system with ATO Mission Support Services, Aeronautical Information Services. The division is

also responsible for ensuring that specific guidance for NOTAM preparation, quality control, transmittal, cancellation, and follow–up actions are developed for NOTAMs applicable to public and Special IFPs developed by non–FAA service provider and not under the purview of AIS. As a minimum, the guidance must ensure the non–FAA service provider NOTAM originators include the following:

**1.** Procedures to ensure that all affected ARTCC facilities are provided notification of NOTAMs at the time of submission. The NOTAM issuing authority must also attempt to notify the airport manager at the affected location whenever possible.

2. Procedures to ensure all NOTAMs are reviewed for accuracy, completeness, content, etc. prior to submission.

3. Procedures to ensure the NFDC is provided an information copy of all NOTAMs and cancellations.

**4.** Procedures to ensure that AIS is aware of those locations where non–FAA service provider procedure development is allowed.

**5.** Procedures to ensure that AIS is provided an information copy of all NOTAMs and cancellations issued by other non–FAA service providers. This will ensure FAA procedure developers are aware of the condition requiring the NOTAM.

**c.** AFS-400 serves as the approval authority for requests that temporary NOTAMs be allowed to extend beyond the 224–day timeframe.

#### 1-3-4. OFFICE OF AIRPORT SAFETY AND STANDARDS

Though not an accountable organization, the Office of Airport Safety and Standards is responsible for enforcing the airport management responsibilities as outlined in the Code of Federal Regulations (CFR).

#### 1-3-5. AIRPORT MANAGEMENT

Specific airport management responsibilities are outlined in 14 CFR Parts 139 and 157. Airport managers are required to abide by applicable provisions of these and pertinent regulations regardless of application of any procedure in this order.

#### 1-3-6. NON-FEDERAL FACILITIES

**a.** NOTAMs on non–Federal facilities covered by FAAO 6700.20, *Non–Federal Navigation Aids, Air Traffic Control Facilities, and Automated Weather Systems* are distributed through the FAA NOTAM system.

#### REFERENCE-

14 CFR Part 171 outlines owner/operation responsibilities.

**b.** NOTAMs on non–Federal facilities that are not part of the NAS are not distributed in the FAA NOTAM system. FSSs receiving data on these facilities must notify Aeronautical Information Services.

#### 1–3–7. DEPARTMENT OF DEFENSE AIRFIELD MANAGEMENT

Specific military airport management responsibilities are outlined in Air Force Instruction Interservice Publication 11–208/AR 95–10/OPNAVINST 3721.20, DoD Notice to Airmen (NOTAM) System.

# Section 4. Terms of Reference

#### 1-4-1. WORD USE IN THIS ORDER

As used in this order:

- **a.** "Must" means a procedure is mandatory.
- b. "Should" means a procedure is recommended.
- c. "May" or "need not" means a procedure is optional.
- d. "Must not" means a procedure is prohibited.
- e. Singular words include the plural.
- **f.** Plural words include the singular.
- g. Miles means nautical miles unless otherwise stated.
- h. Feet means mean sea level unless otherwise stated.

#### 1-4-2. NOTES

Statements of fact of an introductory or explanatory nature and relating to the use of directive material have been identified and worded as NOTE.

#### 1-4-3. EXAMPLES

An illustration which serves to explain subject material is identified as an EXAMPLE which represents the format discussed in each section and is used as an aid to support policy. Not all components of the NAS will be illustrated with an example. The examples throughout Appendix A contain the keyword and the subject of the NOTAM. All other data is assumed from the NOTAM sentence structure and is eliminated from examples.

#### 1-4-4. REFERENCES

When another paragraph of this order is referenced in the text, the referenced paragraph number will be printed out in full. When a paragraph is referenced in a Reference subparagraph, the referenced paragraph's title, followed by its number, will be printed in regular type. When other documents and directives are referenced in a Reference subparagraph, the document/directive and the paragraph number will be printed in regular type. All references to other FAA orders reflect the current edition of the order.

#### 1-4-5. MANUAL CHANGES

When revised, reprinted, or additional pages are issued, they will be marked as follows:

a. Each revised or additional page will show the change number and effective date of the change.

**b.** Vertical lines in the margin of the text will mark the location of substantive procedural, operational, or policy changes; that is, when material which affects the performance of duty is added, revised, or deleted.

#### 1-4-6. DEFINITIONS

The terms below as used in this order are defined in this section.

**a.** Accountable Organization. The accountable organization is responsible for accurately reporting the condition considered to be a hazard or potential hazard to flight operations. Reporting the condition must be

accomplished by ensuring that procedures are developed to establish NOTAM origination and coordination responsibilities.

**b.** Accountability Location. This is the location identifier of the location in the NOTAM computer that keeps track of the NOTAM numbering.

**c.** Aeronautical Fixed Telecommunication Network (AFTN). This interface will be used to support the exchange of Aeronautical Fixed Telecommunications Network (AFTN) formatted messages between NADIN and a common set of external TCP/IP users utilizing the Communications, Flight Service and Weather Engineering Group's (CFWG) Common Message Handling Protocol (CMHP).

**d.** Aeronautical Information. Any information concerning the establishment, condition, or change in any component (facility, service, or procedure of, or hazard) of the NAS. This information is published and/or disseminated by means of aeronautical charts, publications, and/or NOTAMs.

e. Airport Operating Certificate. A certificate issued by the FAA, pursuant to 14 CFR Part 139, to airports serving or expected to serve scheduled air carrier operations in aircraft with a seating capacity of more than thirty passengers. These airports are maintained and operated in accordance with an Airport Certification Manual (ACM) prepared by airport management and approved by the FAA.

**f.** Certificated Airport. An airport certificated under 14 CFR Part 139. These airports are identified in the Chart Supplement.

g. Certified Source. The party who enters/submits a NOTAM to the NOTAM System (NS) using an approved direct entry tool or interface

h. Chart Supplement (Alaska, Pacific, U.S.).

1. Alaska. This chart supplement is a joint civil-military flight information publication designed for use with other flight information publications, en route charts, Alaska Terminal publication, USAF TACAN charts covering Alaska and portions of southwestern and northwestern Canada, and sectional aeronautical charts, Terminal Area Charts and Alaska VFR Wall Planning Chart. The Supplement contains an airport/facility directory of all airports (including certificated (14 CFR Part 139) airports shown on en route charts and those required by appropriate agencies), communications data, navigational facilities, special notices, and procedures applicable to the area of chart coverage.

2. Pacific. This chart supplement is a civil flight information publication, designed for use with flight information publications, en route charts and the sectional aeronautical chart covering the State of Hawaii and those areas of Pacific served by U.S. facilities. The Supplement contains an airport/facility directory of all airports (including certificated (14 CFR Part 139) airports open to the public and those requested by appropriate agencies), communications data, navigational facilities, special notices and procedures applicable to the Pacific area.

**3.** U.S. The chart supplement (formerly known as Airport/Facility Directory) for the contiguous United States, Puerto Rico and the U.S. Virgin Islands.

i. Distribution. Forwarding of NOTAM information from the NS to NADIN.

**j.** Fix/Radial/Distance (F/R/D). Is a VOR identifier followed by 3-digit degrees magnetic and minimum of a 3-digit distance in nautical miles with no spaces between characters (AML360020.1 would be 360-degree radial, 20.1 NM from AML VOR/DME).

**k.** Flight Data Center (FDC) NOTAM. The classification of NOTAMs containing flight information that is normally regulatory in nature including, but not limited to, changes to IFR charts, procedures, and airspace usage. FDC NOTAM numbers are assigned consecutively by the NS, beginning with 0001 each year. The year of issuance and the serial number are separated by a forward slash; for example, Y/1323.

**I. International NOTAM**. The classification of NOTAMs received from other counties and stored in the NS. These NOTAMs are numbered consecutively by accountability, location, and series beginning with S0001 each

year, where S stands for a generic series a country may have. The NOTAM number and year of issuance are separated by a forward slash; for example, S0211/YY, S0002/YY.

**m.** Location Identifier. Used to designate an affected airport, air route traffic control center (ARTCC), or facility.

**n. Military NOTAM**. The classification of NOTAMs issued by the U.S. Air Force, Army, Marine Corps, Navy, and Coast Guard against navigational aids and airports. Military units issue NOTAMs pertaining to their bases and airspace based on the guidelines set forth in Air Force Instruction Interservice Publication 11–208/AR 95–10/OPNAVINST 3721.20, DoD Notice to Airmen (NOTAM) System. These NOTAMs are numbered consecutively by accountability, location, and series beginning with S0001 each year, where S stands for a generic series the military may have. The NOTAM number and year of issuance are separated by a forward slash; for example, S0211/15, S0002/15.

**o.** Movement Area. The term Movement Area as used for the purpose of NOTAMs, include Runways, Taxiways, Ramps, Aprons, helipads, heliports and maneuvering areas.

**p.** NADIN. The National Airspace Data Interchange Network (NADIN), also referred to as NMR (NAS Messaging Replacement), Message Switch Network (MSN) receives, processes, and distributes domestic and international flight planning, flight movement, weather observation/forecast, Notice to Airmen (NOTAM), and search and rescue messages between the NAS, commercial/general aviation, U.S. Government agencies, aviation information service providers, and international Civil Aviation Authorities.

**q.** NAVAID. Any visual or electronic device airborne or on the surface which provides point-to-point guidance information or position data to aircraft in flight.

r. NMR. NAS Messaging Replacement also known as NADIN.

**s. NOTAM D**. The classification of NOTAMs containing information concerning the establishment, condition, or change in any aeronautical facility, en route navigational aids, services, procedures, hazards and civil public–use airports listed in the Chart Supplement. NOTAM Ds are numbered consecutively each month by the NS starting with 001 for each accountability, for example: DAY 01/001 would be the first NOTAM in the month of January for Dayton Accountable Location.

**t. NOTAM Originator**. The party (airport, Tech Ops, AIS/Service Provider, FSS, etc.) who submits a NOTAM to the NS using an approved interface and is accountable for the NOTAM coordination.

**u.** NOTAM System. A safety-critical system that collects, maintains and distributes NOTAMs for the aviation community.

v. Out of Service/Unserviceable (U/S). When a piece of equipment, a NAVAID, a facility or a service is not operational, certified (if required) and immediately "available" for air traffic or public use.

w. Pointer NOTAM. NOTAM D issued to point to additional aeronautical information. When pointing to another NOTAM, the keyword in the pointer NOTAM must match the keyword in the original NOTAM. If the NOTAM is pointing to a publication, choose the most appropriate keyword for the situation. For example, a pointer NOTAM at a specific airport is used to highlight or "point out" an FDC NOTAM, or additional aeronautical information from the NTAP or Chart Supplement. At the request of an Air Traffic facility, a NOTAM originator, or as deemed necessary by FSS issue Pointer NOTAMs to highlight events of significance. Pointer NOTAMs should be issued for, but are not limited to, TFRs, Airshows, Temporary SUA, major NAS system interruptions, etc.

**x. Prior Permission Required (PPR)** means prior permission required to have full operational use of a runway, taxiway, apron, or airport facility/service. Means of communication to the airport can be telephone and/or radio.

**y. Radio Navigation Aid**. As used in this policy, the word radio is added further describe those navigation aids such as ILS, LOC, VOR or other NAVAID that is used in assisting the pilot with approaches, departures, and enroute operations.

**z.** Taxilanes (TXL). Designed for low speed and precise taxiing. Taxilanes usually provide access (to and) from taxiways (usually an apron taxiway) to (and from) aircraft parking positions and other terminal areas.

**aa. Tie–In Station**. A flight service station designated to provide prescribed services for civil, military, national and international facilities; for example, NOTAM purposes and flight information messages.

**ab.** Unusable. The NAVAID is not available for operational use because it may provide potentially unsafe or erroneous signals, or signals of unknown quality.

ac. Virgule (/). For US NOTAM purposes – a diagonal symbol used to separate similar alternatives.

**ad. Visual Navigation Aid.** As used in this policy, the word visual is added to further describe those navigation aids such as PAPI, ALS, VASI, etc., or any other lighting aid that is used in assisting the pilot with approaches or departures.

**ae. WMSCR** – Weather Message Switching Center Replacement is one of the FAA's gateway for the receipt and distribution of weather within the National Airspace System (NAS).

# Chapter 2. Aeronautical Information Services Section 1. Aeronautical Information System

#### 2-1-1. GENERAL

The system for disseminating aeronautical information is made up of two subsystems, the Aeronautical Information System (AIS) and the NOTAM System. The AIS consists of charts and publications. The NOTAM system is discussed in later paragraphs.

#### 2-1-2. DISSEMINATION OF AIRMEN INFORMATION

Airmen information is disseminated by the following methods:

- a. Aeronautical charts depicting permanent baseline data:
  - 1. IFR Charts:
    - (a) Enroute High Altitude Conterminous U.S.
    - (b) Enroute Low Altitude Conterminous U.S.
    - (c) Alaska Charts
    - (d) Pacific Charts
  - 2. U.S. Terminal Procedures:
    - (a) Departure Procedures
    - (b) Standard Terminal Arrivals (STARs)
    - (c) Standard Instrument Approach Procedures (SIAPs)
  - 3. VFR Charts:
    - (a) Sectional Aeronautical Charts
    - (b) Terminal Area Charts
    - (c) Helicopter Route Charts
    - (d) Caribbean Charts
    - (e) Wall Planning Charts
- **b.** Flight information publications outlining baseline data:
  - 1. Notices to Airmen Publication (NTAP)
  - 2. U.S. Chart Supplement (formally Airport/Facility Directive)
  - 3. Pacific Chart Supplement
  - 4. Alaska Supplement
  - 5. Aeronautical Information Manual (AIM)

#### 2-1-3. PUBLICATION CRITERIA

The following conditions or categories of information should be forwarded to the National Flight Data Center (NFDC) for inclusion in the flight information publications and charts. Time critical delays, corrections, or

changes to previously published data that cannot be republished before occurrence must be issued as a NOTAM, providing they meet the criteria set forth in this order.

**a.** NAVAIDs. Commissioning, decommissioning, shutdown, restrictions, frequency changes, changes in monitoring status and monitoring facility used in the National Airspace System (NAS). NAVAID outage NOTAMs must remain active until the NAVAID is returned to service or decommissioned.

b. Commissioning, decommissioning, changes in hours of operation of FAA air traffic control facilities.

c. Surface areas/airspace. Changes in hours of operations.

**d.** Remote Communication Outlets and Remote Communication Air Ground. Commissioning, decommissioning, changes in voice control or monitoring facility.

e. Weather reporting stations. Commissioning, decommissioning, failure, nonavailability or unreliable operations.

f. Public airports. Commissioning, decommissioning, openings, closings, and abandonment.

g. Airport Rescue Fire Fighting (ARFF) capability. Restrictions to air carrier operations.

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

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

#### 2-1-4. NOTICES TO AIRMEN PUBLICATION

NTAP is published by Mission Support Services, Standards and Procedures Support, every 28 days. See Appendix D for further information.

#### 2-1-5. CHART/PUBLICATION ERRORS OR OMISSIONS

**a.** Managers must review each edition of the Notices to Airmen Publication, the Chart Supplement, and other publications and charts to ensure that all required data is included and correct. Inform NFDC promptly of errors or omissions in any publication or chart. Notification of errors in the NTAP parts three and four should be sent to ATC Products and Publications.

**b.** Managers must review all current NOTAMs issued by their facility on a quarterly basis for currency.

**c.** When NOTAMs are published, or more than 30 days old, contact the accountable organization for possible cancellation.

#### 2–1–6. FORWARDING DATA

**a.** When notice is received of a temporary condition which is expected to be corrected before information can be published, issue a NOTAM if it meets criteria.

**b.** NOTAM or aeronautical information concerning an extended (more than 30 days) shutdown or closure affecting components of the NAS must be forwarded in advance of the occurrence to the NFDC. NFDC must publish data received in accordance with existing policies, criteria, and publication cutoff deadlines. The schedule of publication cutoff dates is contained in the Chart Supplement.

**c.** When time does not permit notification to NFDC by mail, forward the data via administrative message, FAX, or contact the appropriate NFDC section by telephone during administrative hours.

**d.** Information received by NFDC for publication that meets publication criteria and will be current on the effective date of the next available Chart Supplement publication or aeronautical chart will be published.

#### 2–1–7. ADDRESSING CORRESPONDENCE

Federal Aviation Administration Aeronautical Information Services National Flight Data Center 1305 East–West Hwy. Room 4400 Silver Spring, MD 20910

#### 2-1-8. NFDC ORGANIZATION

The NFDC is divided into the following sections. Refer questions and data to: Toll Free: (301) 427–5000 or website: https://www.faa.gov/air\_traffic/flight\_info/aeronav/aero\_data/

- **a.** Airports and NAVAIDs
- b. Procedures and Airspace

#### 2-1-9. THE NATIONAL FLIGHT DATA DIGEST (NFDD)

The NFDD is used to transmit data from NFDC to chart and publication producers. It may be used to update records. However, it must not be used as a basis to cancel NOTAMs.

#### 2-1-10. COMPUTER PRINTOUTS

Computer printouts listing all navigational aids and public use civil landing areas by flight plan area may be obtained from Aeronautical Information Services.

# Chapter 3. General Operating Procedures

# Section 1. General

#### 3-1-1. NOTAM RESPONSIBILITIES

**a.** The party that enters the NOTAM data is responsible for classifying, formatting, canceling, and informing the controlling facility and other facilities/offices affected by the aid, service, or hazard contained in the new NOTAM. Flight Service Stations are exempt from the requirement to inform the controlling facility when an alternate means of coordination is approved by the Flight Service Safety and Operations Group, AJR–B1.

**b.** Any office which receives information is responsible for the accuracy, currency, and validity of the NOTAM. When an office receives information that is outside their area of responsibility, they will inform the accountable organization.

**c.** FSSs must accept all aeronautical information. Information obtained from other than authorized personnel must be confirmed before issuance. NOTAM data received from state inspectors or state contracted inspectors must be confirmed by airport managers or appropriate authority before issuance of NOTAMs except in case of data that presents an immediate hazard to aircraft operations. If a NOTAM is issued without confirmation, advise the airport manager as soon as possible. In case of conflict between airport management and the named state airport inspector, contact FAA regional airports personnel for resolution. Conditions requiring a NOTAM should be coordinated with the appropriate air traffic facilities.

#### REFERENCE-

FAA Order JO 7930.2, Para 5-1-2, Handling Reported Aerodrome Conditions

**d.** Inform the controlling facility of all Obstruction Light Outage NOTAMs that meet one of the following criteria:

1. The obstruction is located 6 NM or less from an airport.

2. The obstruction is more than 400 feet AGL.

**3.** Identified by the terminal facility as one not meeting the criteria stated in d1 or d2 above; however, has been deemed necessary for the safety of operations (for example, depicted on the radar video map).

**e.** A Domestic NOTAM will auto reject if it is over 20 lines. Ensure the NOTAM meets AFTN capability prior to originating NOTAM.

**f.** When a NOTAM is rejected, it is not distributed. It will not be stored in the NOTAM master file, and it will not be available by request–reply. Error messages are not stored in the master file.

**g.** ARTCCs are responsible for forwarding FDC and special activity airspace (SAA) NOTAM information to the affected terminal facilities.

# 3-1-2. FDC PRESIDENTIAL, SPECIAL SECURITY INSTRUCTIONS, OR EMERGENCY AIR TRAFFIC RULES TFRs

See appendix D for further information.

**a.** The NS must send NOTAMs referencing Title 14 CFR, Part 91, Section 139, Emergency Air Traffic Rules; Section 141, Flight Restrictions in the Proximity of the Presidential and Other Parties; Part 99, Section 7, Special Security Instructions; and any revisions, modifications, or cancellations, directly to all flight service stations via NADIN (NMR) using the flight service group address of "KXXXAFSS."

# Section 2. Coordination

#### 3-2-1. COORDINATION WITH OTHER FACILITIES

When a shutdown or an outage/closure of a component of the NAS will affect another facility's operation, the facility serving as the approval/ controlling authority must coordinate with other facilities concerned.

#### 3-2-2. FILING NOTAM INFORMATION WITH FSSs

NOTAM information should not be filed with an FSS (1–877–4–US–NTMS or 1–877–487–6867) prior to 7 days before the expected condition is to occur. A NOTAM must be transmitted as soon as practical but not more than 7 days before the expected condition is to occur.

# Section 3. Use of Terms

## 3-3-1. USE OF CONTRACTIONS AND ABBREVIATIONS

**a.** Contractions and abbreviations designated for ICAO usage as specified in FAA Order JO 7340.2, Contractions, must be used in the NOTAM system.

**1.** Though SER is an ICAO contraction, SERVICE must always be spelled out so that it is not confused with the "services" keyword (SVC).

**2.** When an ICAO–usage contraction is not available, plain text is required, except for the list of differences in Appendix C.

**b.** For indicating abbreviated days of the week, use a hyphen to indicate successive days or each day can be specified individually separated by a single space; for example, MON–FRI means Monday through Friday, whereas MON WED FRI means Monday, Wednesday, and Friday.

c. Use the Pilot/Controller Glossary to define terms in the NOTAM system.

**d.** Location identifiers used in the NOTAM system are those contained in FAA Order JO 7350.9, Location Identifiers.

**e.** Use applicable contractions and abbreviations published on instrument flight procedure charts in the text of FDC NOTAMs relating to approach and departure procedures.

f. Contractions written in the singular form decode to mean both the singular and plural.

#### 3-3-2. EXPRESSION OF TIME IN THE NOTAM SYSTEM

a. The day begins at 0000 and ends at 2359.

**b.** Times used in the NOTAM system are Coordinated Universal Time (UTC/Zulu) unless otherwise stated, as in the body of Temporary Flight Restrictions, and must be stated in 10 digits for the year, month, day, hour, and minute (YYMMDDHHMM).

c. When describing a daily schedule, Sunrise-Sunset (SR-SS) may follow the day(s) or "DLY".

EXAMPLES-MON-FRI SR-SS DLY SS-SR DLY SR-1800 TUE 2300-SR

#### 3-3-3. UNITS OF MEASUREMENT

Specify the unit of measurement in distance, height, altitude, or weight. When using an abbreviation, do not add a space between the measurement and the unit of measurement. At a minimum, latitude must be 6 digits and longitude must be 7 digits.

#### EXAMPLES-

500FT 12500LB 5NM 6.2NM 20MIN 1HR 330DEG 305DME 402646N0795856W 402646.25N0795856.95W

# 3-3-4. USE OF VIRGULE (/)

The use of virgules should be limited to separate runway pairs (RWY 03/21), combining positions and affected frequencies (LOCAL CTL/CD), and equipment, affected components and frequencies (ILS GP/OM/MM, VOR/DME 111.0/CH77).

# 3-3-5. RUNWAY IDENTIFICATION

a. Specify the runway identification as it is published, including the leading zero (0).

b. List the runway identifications in clockwise order beginning from the 1 o'clock position.

c. Use runway pair when applicable.

d. Identify runways with the prefix RWY followed by magnetic bearing indicator.

EXAMPLES-RWY 03/21 RWY 03 RWY 21

**e.** Differentiate parallel runways by using the runway designators followed by L (left), R (right), and C (center). Use L, R, and C with runway designators only.

EXAMPLES-RWY 03L RWY 03C RWY 03R

**f.** Where the magnetic bearing indicator has not been established, identify the runway to the nearest eight points of the compass.

#### EXAMPLE-

 $\dots RWYNE/SW\dots$ 

# 3-3-6. TAXIWAY IDENTIFICATION

**a.** Identify taxiways with the prefix TWY followed with the taxiway designator letter or letter/number as assigned.

**1.** Describe a taxiway that does not have an assigned designator as adjacent to a runway or direction from runway.

EXAMPLES-

...TWY PARL TWY ADJ RWY 09/27... ...TWY PARL TWY... ...TWY EAST/WEST TWY CLSD...

**2.** When a cardinal direction is used to describe a taxiway condition, the word describing the direction must be spelled out in full to ensure that the cardinal direction is not mistaken for a taxiway designator; for example, "EAST," "WEST," "SOUTHWEST."

**3.** Describe a helipad located on a taxiway as: ...*TWY HELIPAD 3*...

**b.** Keyword TWY may be followed by designator "ALL" to indicate every taxiway at an airport, even if there is only one taxiway as: (Can be used as "TWY ALL EXC TWY X" if needed.) ... *TWY ALL*...

**c.** For multiple taxiways, use a comma between each designator. Do not add "TWY" prior to each individual taxiway identifier.

#### EXAMPLE-

...*TWY B3*, *C*...

1. Taxiway segments may be identified using geographic points, cardinal directions or by feet.

(a) Geographic. Identify geographic segments using "BTN" and "AND".

#### EXAMPLE-

...TWY A BTN TWY B AND RWY 01/19...

(b) Cardinal Direction. Identify directional segments using a cardinal direction.

#### EXAMPLE-

...TWY C NORTH OF RWY 09/27...

(c) Dimension. Identify the amount of a taxiway affected by feet.

#### EXAMPLES-

...TWY DD NORTHEAST 500FT...

... TWY A BTN TWY L AND 300FT WEST OF TWY L...

(d) Multiple taxiways. Indicate a series of taxiways using a hyphen between the first and last descriptors.

#### EXAMPLE-

...*TWYA1*-A6...

#### NOTE-

The example includes taxiways A1, A2, A3, A4, A5 and A6.

(e) Multiple segments. Indicate all taxiway segments by starting with the contraction "TWY", and then add the segment description separated by commas.

#### EXAMPLES-

...TWY A BTN TWY C AND TWY G, TWY B NORTH 100FT, TWY ALL NORTH OF RWY 09/27... ...TWY A BTN RWY 01L/19R AND RWY 01R/19L, TWY B BTN RWY 01L/19R AND RWY 01R/19L, TWY C BTN RWY 01L/19R AND RWY 01R/19L CLSD...

(f) Multiple segments (Single Taxiway). Indicate multiple segments of a single taxiway with each portion beginning with TWY.

#### EXAMPLE-

... TWY A EAST OF RWY 01L/19R, TWY A WEST 100FT...

**2.** Full taxiways and taxiway segments separated by commas share the same condition for example: CLSD, NOT MARKED, WIP SN REMOVAL, etc.

#### NOTE-

Snow removal must only be issued when snow removal is actually occurring.

# EXAMPLES-

...TWY B1, B2, F, TWY B BTN TWY B10 AND TWY B8 WIP SN REMOVAL... ...TWY C BTN APCH END RWY 04R AND APCH END RWY 04L CLSD...

# NOTE-

The originator may always issue multiple NOTAMs to ensure clarity.

# 3-3-7. APRON IDENTIFICATION

**a.** Identify aprons with the keyword APRON followed with the apron designator. There is no requirement for RAMP or APRON to be part of the name of the surface. Keyword may be followed by designator "ALL" to indicate every APRON at an airport, even if there is only one APRON as: ("APRON ALL" or "APRON ALL EXC WEST APN" if needed.)

#### EXAMPLES-

... APRON TERMINAL APN... (Where the name is Terminal Apron)

...APRON MAIN TXL C... (Where the name is Main) ...APRON ALL...

...APRON HELIPAD A1...

# NOTE-

This example describes a helipad (A1) that resides on a ramp. Only this helipad (A1) has an abnormal condition.

**b.** SPOTS, GATES, HARDSTANDS, etc., can be used as geographical reference points to delineate a section on aprons or taxiways, but do not meet NOTAM criteria as its own "attribute".

## EXAMPLE-

...APRON TERMINAL RAMP BTN GATE 3 AND SPOT 4...

# 3-3-8. STANDARD NOTAM PHRASES

The following are a listing (not inclusive) of standard terms used in NOTAMs.

UNL (unlimited)	TO POINT OF ORIGIN	OBSC (obscured)	UNREL (unreliable)	
AVBL or NOT AVBL	CENTERED AT	UNUSABLE	CLSD	
IRREGULAR SFC (lips, dips, bumps, holes, ruts, breaks, etc.)	NOW (temporary)	CHANGED TO (permanent)	UNSAFE	
ТО	EXC	NEAR	BTN and AND	
PLUS SEE	NOT STD	NOT LGTD	FLAGGED	
FOR/AT (RWY)	WI AN AREA DEFINED AS	LGTD	USABLE (Used in conjunction with a restriction; not by itself)	
U/S (Out of Service/Unser- viceable	FLAGGED AND LGTD	ADJ (adjacent)	NONMOVEMENT AREA	
BARRICADED (means any type of barricade)	LGTD AND BARRICADED	OPN or CLSD	MARKED or NOT MARKED	

#### *TBL 3-3-1* NOTAM Phrases

# 3-3-9. CARDINAL DIRECTIONS

Cardinal directions (excluding TAXIWAY usage) is in abbreviation format. This includes N, NNE, NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW, and NNW. Also included are directions for high altitude balloons – northbound – NB, northeast bound – NEB; eastbound – EB; southeast bound – SEB; southbound – SB, southwest bound – SWB; westbound – WB; northwest bound – NWB.

# Chapter 4. NOTAM D Procedures

# Section 1. General

# 4-1-1. NATIONAL NOTAM OFFICE RELATIONSHIPS

**a.** The USNOF is charged with monitoring the NS. The USNOF must monitor the NOTAM system for compliance with the criteria and procedures set forth in this order. When questions arise on NOTAM dissemination, formats, contractions, or other aspects of the distribution system, the USNOF should be consulted. The authority for NOTAM formats is the USNOF, who will ensure that issued NOTAMs are consistent with FAA policy. NOTAM originators and certified sources must comply with USNOF personnel guidance. Discrepancies in procedures or format must be recorded, and Aeronautical Information Services must forward a list of the discrepancies to Flight Services, Safety and Operations Support, Operational Procedures, and the service area office.

**b.** Editing:

1. The USNOF may edit any NOTAM (except FDC NOTAMs relating to instrument flight procedures) that does not conform to the formats and/or examples contained in this order. The contents of a NOTAM must not be changed without notifying the originating facility.

#### NOTE-

FDC NOTAMS relating to instrument approach and departure procedures are originated by the Mission Support Services – Aeronautical Information Services under the Flight Standards Service policy. ARTCCs must ensure the origination of NOTAMs pertaining to a Standard Terminal Arrival (STAR).

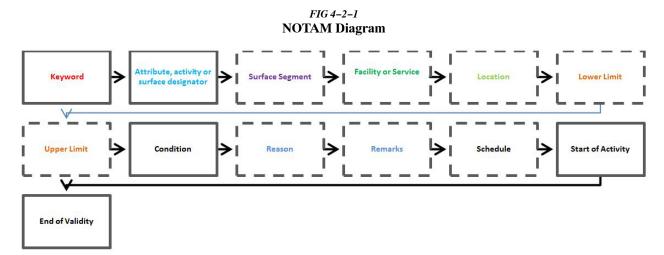
**2.** Should the USNOF edit a NOTAM and change the intent, the NOTAM must be canceled by the issuing facility and reissued as a new NOTAM, after consultation with the USNOF.

# Section 2. Preparing NOTAMs for Dissemination

# 4-2-1. NOTAM COMPOSITION

#### NOTE-

For FDC NOTAM examples, see Appendix A.



Where the solid lines indicate mandatory and the dashed lines indicate as needed or optional.

**a.** The purpose of the NOTAM diagram is to provide a basic outline of what constitutes a NOTAM. Not all NOTAMs will contain all of the elements. For detailed explanation, consult the applicable paragraph sections for further NOTAM composition assistance.

**b.** NOTAMs may contain these elements from left to right in the following order:

1. An ADP code/exclamation point (!).

2. Accountability (the identifier of the accountability location; for example, JFK, FDC, CARF).

**3.** Location identifier {the affected facility or location (airport, NAVAID, or ARTCC) appears AFTER the NOTAM number}. Approach controls or airspace located within multiple ARTCC must have a separate NOTAM for each ARTCC.

(a) The nearest public use airport when the full activity is completely within a 5 NM Radius of the airport.

(b) The nearest VOR when any of the activity is more than 5 NM from the nearest public use airport but completely within 25 NM Radius of a VOR

(c) When the activity doesn't fall within either (a) or (b), use the ARTCC.

4. Keyword.

5. Attribute, activity, or surface designator(s) (when needed).

#### NOTE-

A surface designator is required with keywords RWY, TWY, and APRON. For example, a surface designator is RWY 14/32, TWY A, APRON FedEx Ramp.

**6.** Surface segment (when needed).

- 7. Facility, feature, service, system, and/or components thereof (when needed).
- **8.** Location description (when needed).

9. Lower limit then upper limit, or height, (when needed). Limits must be specified, as:

(a) For SFC, or 1 to 17,999FT with the unit of measurement (AGL or MSL). 50FT, 1275FT AGL, 10500FT.

(b) For 18,000FT and above, express in flight levels (FL), FL180, FL550, FL850, or UNL (altitudes greater than 99,900FT).

(c) Include heights AGL when required (obstacle NOTAMs) or when MSL is not known, for example, SFC-450FT AGL.

(d) The term UNKNOWN may be used in lieu of the MSL or AGL altitudes if not known; however, one altitude must be identified.

**10.** Condition. The changed condition or status being reported, when needed. When the conditions include a limitation or an exception, follow the condition with "TO" or "EXC"; such as, "CLSD EXC SKI" or "CLSD TO TRANSIENT" or "CLSD EXC TAX BTN APCH END RWY 10 AND TWY C."

**11.** Reason (when needed).

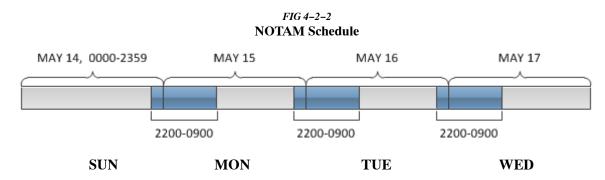
12. Remarks (when needed). Other information considered important; for instance, a frequency (134.72), or an expected altitude for unmanned free balloons (NEB TO 150000FT)

13. Schedule, (when needed). A NOTAM may be originated for a scheduled condition/activity that will occur during the period. Specify the schedule between the condition/activity and the valid time string. The days of the week must be specified before the scheduled time. The term "DLY" (daily) indicates the event will occur each day at the same time during the stated time period. The start time of the schedule must correspond to the start of activity time.

#### EXAMPLES-

DLY 1200–2000 YYMMDD1200–YYMMDD2000 MON WED 0900–1300 YYMMDD0900–YYMMDD1300 TUE THU 0900–2000 YYMMDD0900–YYMMDD2000

If the active time of a NOTAM corresponds to sunrise or sunset, the actual times of sunrise on the first day of validity and of sunset on the last day of validity must be used.



!GNV 12/018 F95 AIRSPACE MIL ACT WI AN AREA DEFINED AS 3NM RADIUS OF F95 SFC-14000FT DLY 2200-0900 YY05142200 - YY05170900

This military activity occurs Sunday (May 14) between 2200UTC and 0900UTC, again on Monday and again on Tuesday at 2200UTC then ends on Wednesday (May 17) at 0900UTC.

14. Start of Activity/End of Validity. This is a 10-digit date-time group (YYMMDDHHMM) used to indicate the time at which the NOTAM comes into force (the date/time a condition will exist or begin) and the time at which the NOTAM ceases to be in force and becomes invalid (the expected return to service, return to normal status time, or the time the activity will end). These times must be separated by a hyphen "-." For example, ...RWY 15 CLSD YY12031400-YY12051359...indicates that runway 15 will close at 1400UTC on December 3rd. It is expected to reopen at 1359 UTC on December 5<sup>th</sup>.

(a) If the NOTAM duration is expected to return to service prior to the End of Validity time, express the time by using a date-time group followed immediately by "EST" (estimate). Any NOTAM that includes an "EST" must be canceled or replaced before the NOTAM reaches its End of Validity time. If the NOTAM is not canceled or replaced, it will expire at the end of validity time regardless of EST. FDC NOTAMs relating to instrument flight procedures must not be canceled and reissued.

(b) The NOTAM Originator is responsible for validating that any NOTAM that is coming to its End of Validity time can auto-expire. If the condition is still valid, the NOTAM must be canceled and reissued with a new Start/Stop time, PRIOR to the NOTAM reaching its End of Validity time.

(c) When a NOTAM is originated to advertise a permanent condition that will be published in a publication, chart or database "PERM" should be inserted as the expiration date in lieu of a 10-digit date-time group. PERM is also used as the end of validity for certain NOTAMs that 1) pertain to or support national security, law enforcement, and aviation security requirements, and 2) contain flight prohibitions for U.S. operators and U.S. airmen regarding operations in particular areas of non-U.S. controlled airspace due to weapons related hazards or other hostile threats to civil aviation. The NOTAM originator is responsible for canceling the NOTAM upon publication, as PERM will not auto-expire.

(d) All NOTAMs will auto-cancel at their End of Validity time, except PERM.

(e) For an uncontrolled airport, when a NOTAM originator submits a candidate NOTAM to the NOTAM System to advertise an Airport or Runway condition with a Start of Activity less than 30 minutes before the beginning of an activity that impacts/closes a runway or an airport, the activity must be reported to the Air Traffic Control (ATC) facility that has control jurisdiction.

**c.** NOTAMs issued when the condition of a number of facilities, NAVAIDs, services, or landing areas/runways are related to the same event (for example, date/time, facility closing, part-timing, runway closures, etc.) must be issued as separate NOTAMs.

**d.** Each NOTAM concerning a specific aid, service, or hazard must be a complete report including all deviations unless reference is made to other restrictions already published.

**e.** If information is published elsewhere and is still valid, reference must be made to that publication with the statement, "PLUS SEE (publication)." A NOTAM issued not stating "PLUS SEE (publication)" indicates the NOTAM replaces previously published similar data.

**f.** NOTAMs must state the abnormal status of a component of the NAS and not the normal status. Exception – Temporarily extending hours of use beyond published times, for example: RWY 09/27 OPN.

# 4-2-2. NOTAM ACCOUNTABILITY

Maintain separate accountability (NOTAM file) for each location whose weather report is disseminated via WMSCR and for the location of the tie-in FSS.

**a.** Issue NOTAMs for an FAA-monitored weather reporting location whose report is disseminated via WMSCR under the location identifier of the weather report.

**b.** Issue all other NOTAMs under the location identifier of the tie–in FSS. This includes NOTAMs for weather reporting locations whose report is not disseminated via WMSCR.

#### REFERENCE-

FAA Order JO 7930.2, Chapter 2, Aeronautical Information Services

**c.** Make NOTAM accountability changes by mail, email or other electronic means when known sufficiently in advance. Issue all subsequent NOTAMs under the corrected accountability. If there are any current NOTAMs for the location, cancel and reissue those NOTAMs under the new accountability after the NS tables have been changed. Notify Aeronautical Information Services of any NOTAM accountability changes.

# Section 3. Canceling/Extending NOTAMs

# 4-3-1. EXTENDING NOTAM VALIDITY

When there is a need to extend an existing NOTAM time validity, cancel the original NOTAM, and reissue the data as a new NOTAM with the new time.

# 4-3-2. CANCELLATION OF NOTAMS

**a.** Stations canceling NOTAMs must check the NOTAM data to ensure the NOTAM's deletion. Retransmit cancellations where no action was taken.

**b.** Cancel NOTAMs containing erroneous information, and reissue. Originate a new NOTAM when data is received amending a current NOTAM, and cancel the previous NOTAM.

# 4-3-3. CANCELING PUBLISHED NOTAM DATA

a. When data appearing in a NOTAM is printed correctly in a publication or on a chart, cancel the NOTAM.

**b.** NOTAMs must remain current until the data is published in one or more of the following, with the exception of NAVAID NOTAMs, which must remain in effect until the NAVAID is returned to service or decommissioned:

- 1. Chart Supplement
- 2. Enroute low altitude charts
- 3. Enroute high altitude charts
- 4. Terminal procedures publications

#### NOTE-

FDC NOTAMs relating to instrument approach and obstacle departure procedures and airways must remain current until published in the Terminal Procedures Publication or applicable enroute chart.

- 5. Supplements (Alaska and Pacific).
- 6. VFR Charts:
  - (a) Sectional charts
  - (b) Terminal area charts

**c.** The NTAP conveys NOTAMs to the public until printed correctly on publications listed in subparagraph b above. The NTAP does not cancel NOTAMs but may supplement briefings. The NTAP must not be used as a basis to cancel NOTAMs.

**d.** NOTAMs concerning Army airfield operations, in addition to the above listed sources, must be researched in the Army Aviation Flight Information Bulletin, if applicable.

# Chapter 5. NOTAM Criteria

# Section 1. Movement Area NOTAMs

# 5-1-1. ORIGINATORS OF AERODROME NOTAMS

**a.** Airport management is responsible for observing and reporting the condition of the aerodrome services, facilities, and movement area. The FSS air traffic managers must coordinate with appropriate airport managers to obtain a list of airport employees who are authorized to originate NOTAMs.

**b.** At public airports without an airport manager, the FSS air traffic manager must coordinate with the appropriate operating authority to obtain a list of persons delegated to provide NOTAM information.

#### NOTE-

Letters of agreement should be executed between airport management and ATC facilities outlining procedures to be used for originating NOTAMs.

# 5-1-2. HANDLING REPORTED AERODROME CONDITIONS

**a.** Copy any information received verbally, and record the name, title (if appropriate), address, and telephone number of the person submitting the information. Information obtained from other than an authorized airport or FAA employee must be confirmed before issuance. If you are informed of or observe a condition that affects the safe use of a movement area, relay the information to the airport management for action.

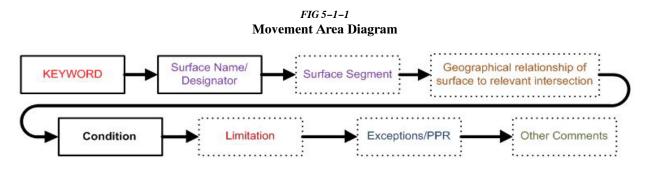
#### NOTE-

This includes data received from airport inspectors.

**b.** If unable to contact airport management, classify and issue a NOTAM publicizing the unsafe condition always stating the condition and including the word "UNSAFE;" for example, RWY number or TWY letter or letter/number "UNSAFE DISABLED ACFT." Inform airport management of the action taken as soon thereafter as practical.

**c.** (U) – Unverified aeronautical information (for use only where authorized by letters of agreement). Movement area or other information received that meets NOTAM criteria and has not been confirmed by the airport manager or designee. If Flight Service is unable to contact airport management, Flight Service must forward (U) NOTAM information to the NS. Subsequent to NS distribution of a (U) NOTAM, Flight Service will inform airport management of the action taken as soon as practical. Any such NOTAM will preface the keyword with "(U)" and must include the condition and cause.

# 5-1-3. MOVEMENT AREA INFORMATION



...AD AP CLSD EXC PPR MON-FRI 0330-1430 YYMMDD0330-YYMMDD1430

See Appendix A for examples.

Originate a NOTAM D for:

**a.** Aerodrome conditions. Use the keyword "AD" immediately followed by the facility: "AP", "HLP", or "SEAPLANE BASE", followed by the condition. When the condition includes a limitation, follow the condition with "TO" or "EXC;" for example, "CLSD EXC SKI" or "CLSD TO TRANSIENT."

**b.** Commissioning of a movement area or portions thereof. State the type of surface, length and width of the surface, lighting status, and declared distances.

1. Lighting status; for example, LGTD, NOT LGTD.

2. Length and declared distances required for only runway commissioning.

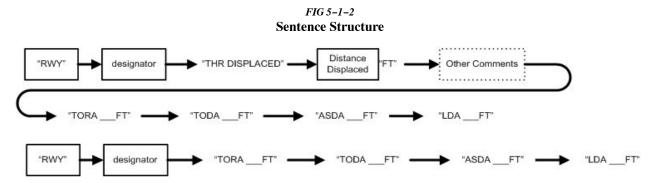
c. Closure of a movement area or portion thereof. Partial runway closures must be indicated by feet, for example, E 500FT.

**1.** Permanent closure (decommissioning). State the surface description and the condition "CLSD" with expiration time "PERM."

**2.** Temporary Nonmovement Area. Use this feature when a taxiway is temporarily designated as Non Movement in a NOTAM.

**d.** Operational limitations on the use of any portion of a runway, a taxiway, a ramp, an apron or a waterway. Weight bearing capacity of a runway can be changed only by authorization of the Manager, Airports Division (appropriate region). Include reference to ACFT when describing limitations associated – wing, weight, tail, engine, taxi speed, etc. Do not refer to the Airplane Design Group in the NOTAM.

e. Changes to usable runway length and declared distances.



1. When a runway condition restricts or precludes the use of any portion of a runway resulting in a change to the declared distances, include the published take-off run available (TORA), take-off distance available (TODA), accelerate- stop distance available (ASDA), and landing distance available (LDA) in the NOTAM. Ensure that a second NOTAM is originated for the reciprocal runway with all declared distances if any value has changed. Declared distances can only be authorized by the FAA Office of Airport Safety and Standards, Airport Design Division, AAS-100.

2. In the event the published TORA, TODA, ASDA, and LDA need to be reported without reference to the runway condition that caused the change, report declared distances or changes to published declared distances. For example, when the published runway length is changed, report the declared distances, or erroneous declared distances that were published and need to be corrected.

f. Change of runway identification.

g. Change of traffic pattern.

**h.** Runway Visual Range (RVR). When originating a NOTAM on RVR, RVR touchdown (RVRT), RVR midpoint (RVRM), and RVR rollout (RVRR), specify the single runway affected. When all the RVRs are unserviceable, issue a NOTAM using the keyword AD.

i. Surface Markings and Signage. Follow 4–2–1 b 1–3, including:

1. Keyword. Specify the keyword for the type of surface on which the sign/marking is located.

2. Surface designator. Specify the designator of the surface on which the sign/marking is located.

3. Geographical Relationship of surface from relevant intersection/point of reference, (N OF, E OF), if needed.

4. Name of sign/surface marking. Signs follow runway identification guidance.

5. Sign/ marking location from users' perspective (LEFT/RIGHT SIDE; FOR RWY; AT RWY), when needed.

6. Condition. For example, NOT STD, NOT LGTD, OBSC, MISSING, NOT MARKED

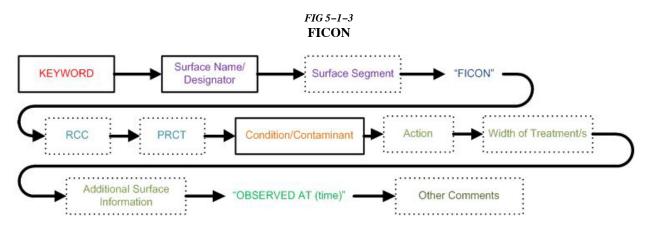
7. Follow 4-2-1 b 11-14 to complete the NOTAM.

**j.** Other reportable conditions. The airport operator must ensure that a NOTAM is submitted for conditions considered to be hazardous or potentially hazardous to the aircraft operator. Permanent changes in surface conditions must be coordinated for publication in accordance with Paragraph 2–1–3, Publication Criteria.

**1.** When SNOWBANKS, BERMS, DRIFTS, WINDROWS and SN PILES are not on the movement areas, issue them without the FICON descriptor.

2. When it is determined that no surface condition reports will be taken and no current observation exists, issue a single NOTAM (Keyword AD) for the entire time-period. Use the phrase "SFC COND NOT REP", as this differs from Conditions Not Monitored.

# 5-1-4. FIELD CONDITIONS (FICON) REPORTING



...RWY 33 FICON 4/4/4 100 PRCT COMPACTED SN PLOWED 100FT WID 24IN BERMS...

See Appendix A for examples.

Report surface conditions on runways, taxiways, and aprons using the FICON NOTAMs. The keyword AD must not be used with descriptor FICON, except for heliport.

...AD HLP FICON 4IN DRY SN...

# ...AD HLP FICON 2IN DRY SN PLOWED 50FT WID 4FT SNOWBANKS...

#### Runway

Takeoff and Landing Performance Assessment (TALPA) FICONs are reported in thirds of the landing runway. Runways are described using the RWY keyword followed by a single runway direction designator, FICON and condition, except when reporting Slippery When Wet use the dual runway designator. ...RWY 04/22 FICON 3/3/3 SLIPPERY WHEN WET...

...RWY 04 FICON...

#### Taxiway

Taxiways are described using the TWY keyword followed by a surface name/designator, FICON and condition. Depth is required and a width is optional.

...TWY A FICON 1/2IN WET SN...

...TWY A FICON 1/2IN WET SN 50FT WID REMAINDER COMPACTED SN...

## Apron

Aprons are described using the APRON keyword followed by a surface name/designator, FICON and condition. Depth is required and a width is optional.

...APRON MAIN RAMP BTN RWY 13/31 AND TWY C FICON 1IN DRY SN...

#### Helipad

Helipads are described using TWY or APRON keywords followed by HELIPAD (surface designator) FICON and condition.

... APRON HELIPAD H1 FICON 2IN DRY SN...

...TWY HELIPAD C FICON DRY PLOWED 50FT WID REMAINDER COMPACTED SN...

**a.** Airport operators use the Runway Condition Assessment Matrix (RCAM – See Table 5–1–4) to create the Runway Condition Code (RwyCC) for Paved Surfaces, which include asphalt, asphalt–concrete, concrete, and porous friction course. Non–paved surface NOTAMs do not include the RwyCC. The NS generates the RwyCC based on airport operator input of the contaminants present. Per AC 150/5200–30, *Airport Field Condition Assessments and Winter Operations Safety*, airport operators have the capability, in accordance with specific action and protocols, to downgrade or upgrade the runway condition code.

**b.** Each field of the NOTAM is described below. Follow the NOTAM composition in 4–2–1 a 1–4 to include:

1. Surface Designator (RWY 04)

2. FICON. Insert "FICON" after the surface designator and before the field condition.

**3. RwyCC.** When generated, it will be illustrated as values between 0 and 6 and look similar to this for runway thirds (3/4/2). The RwyCC will only be provided for paved runways when the percentage coverage of the full runway that is contaminated is greater than 25 percent.

**4.** Condition. Report the contaminants per Table 5-1-2, including the percentage of coverage for runways, in thirds. For taxiways and aprons, do not express the condition in terms of percentage of coverage. Use the word "PATCHY" to describe a contaminant that covers 25 percent or less of the reported portion of the surface of a taxiway, apron, heliport or airport.

Use Value	To Report
1/8IN	1/8 inch or less
1/4IN	>1/2 inch to and including 1/4 inch
1/2IN	> <sup>1</sup> / <sub>4</sub> inch to and including <sup>1</sup> / <sub>2</sub> inch
3/4IN	$>\frac{1}{2}$ inch to and including $\frac{3}{4}$ inch
1IN	> <sup>3</sup> / <sub>4</sub> inch to and including 1 inch

TBL 5–1–1			
<b>Reportable Depth Measurements</b>			

Wet (includes damp and ½ inch depth or less of water)	Compacted snow		
Water* (greater than 1/2 inch depth)	Water* over compacted snow		
Frost	Wet snow* over compacted snow		
Slush*	Dry snow* over compacted snow		
Ice	Slush* over Ice		
Wet ice	Slippery When Wet		
Wet snow*	Ash		
Wet snow* over ice	Rubber (taxiways only)		
Dry snow*	Oil		
Dry snow* over ice	Sand		
	Mud* (See AC 150/5200-30)		

TBL 5-1-2 Reportable Contaminants

TBL 5–1–3
Percent Coverage of a Contaminant

10	10% or less
20	11% – 20%
25	21% - 25%
30	26% - 30%
40	31% - 40%
50	41% - 50%
60	51% - 60%
70	61% - 70%
75	71% - 75%
80	76% - 80%
90	81% - 90%
100	91% - 100%

(a) Runways, including ski strip and waterlane.

(1) RWY: Each third (touchdown, midpoint, and rollout) will include percentage, depth (when required), and type of contaminant. Up to two separate contaminants can be reported per runway third.

(2) A runway is dry when it is neither wet, nor contaminated. A FICON NOTAM must not be originated for the sole purpose of reporting all thirds of a runway are dry. A dry surface must be reported only when there is need to report conditions on the remainder of the surface. When describing a <u>dry</u> surface, it is considered the full length and width of the runway third. DRY can be reported in two thirds and the remaining third have a different contaminant.

#### EXAMPLE-

...RWY 04 FICON 10 PCT 1IN WET SN, 10 PCT 1/8IN DRY SN OVER ICE AND 10 PCT 1/8IN DRY SN, DRY...

(3) A runway is wet when there is any visible dampness or water that is 1/8 inch or less in depth. When describing a <u>wet</u> surface, include the percentage.

(4) If all three thirds are identical percentage, depth (when required) and type of contaminant, it is shown in the NOTAM once.

## EXAMPLE-

...RWY 03 FICON 4/4/4 75 PCT COMPACTED SN...

(b) Taxiways and Aprons. The condition includes depth and type of contaminant.

#### NOTE-

Free-form is an acceptable means of entering FICONs for TWY and APRONs.

(c) Reportable values

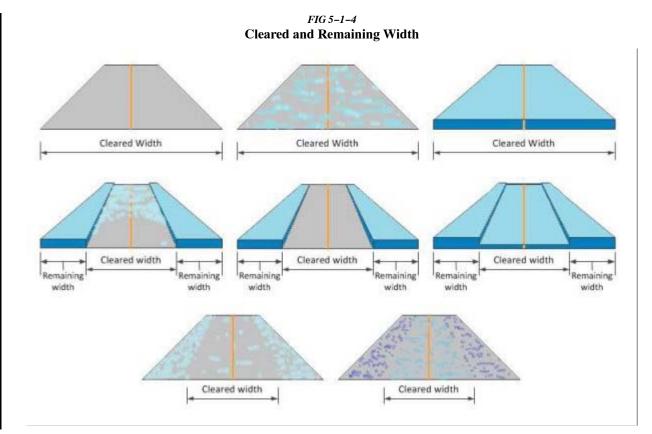
(1) Report depths in measurement of fractions as indicated in TBL 5-1-1 above. When 1 inch is reached, report values in multiples of 1 inch and discontinue the use of fractions. When a snow depth of 35 inches is reached, report values in multiples of feet only. Round depths greater than 1 inch to the next higher reportable depth.

(2) Report the highest depth of the contaminant along the reported portion of the surface.

(3) The only reportable contaminants and contaminant combinations authorized for use are found in TBL 5-1-2 above. These contaminants marked by an "\*" must be accompanied by a depth for all Part 139/Federally obligated airports. For all other airports, the depths on taxiways and aprons is optional.

5. Action. Action taken to treat the contaminated surface.

(a) Includes the treatment method (Up to three treatments permitted for full length of runway/taxiway/apron.) Treatment includes plowed, swept, sanded, deiced liquid, deiced solid, scarified (for runways, each third must be contaminated with only ice and the total surface coverage must be >25%). A treatment width of 50FT is considered 25ft on each side of the centerline.

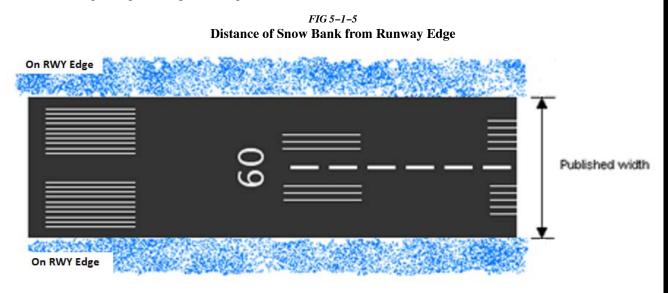


(b) Includes width of PLOWED or SWEPT treatment if not the full width. The treatment is omitted when the entire surface has been plowed or swept.

(c) Includes SANDED when a surface has been treated with sand.

(d) Includes DEICED LIQUID or DEICED SOLID or both to report the presence of liquid or solid deicing material, as this can have operational significance to the pilot.

(e) Includes ridges (when applicable) to describe the accumulation at the edge of the movement area or of the treated area when the surface has been plowed/swept. Ridges include SNOWBANKS, BERMS (containing earth/gravel), WINDROWS (snowbank caused by wind), and DRIFTS (snowbank caused by wind action). Use the term "DRIFTS" after any treatments (when applicable) to describe one or more drifts. When the drifts are variable in depth, report the greater depth.



#### EXAMPLE-

...FICON 5IN DRIFTS...

(f) Includes "Remainder" (see example above that refers to cleared and remaining width) to describe the non-treated depth and type of contaminant for full length of runway/taxiway/apron to provide additional information about the surface condition. For example, a runway has been treated, resulting in differing field conditions on the untreated parts of the surface.

#### EXAMPLES-

...FICON 4/4/4 50 PCT COMPACTED SN PLOWED 75FT WID REMAINDER 1/2IN DRY SN... ...FICON 25 PCT COMPACTED SN AND 10 PCT ICE, 25 PCT 2IN DRY SN, DRY PLOWED 75FT WID REMAINDER 1/2IN DRY SN...

**6.** Braking Action (BA). (APRONs, TWYs and Non–Paved RWYs). Report braking action on movement areas as good, good to medium; medium; medium to poor; poor; or nil, as received from airport management. The worst runway braking action is shown by contaminant type and RwyCC.

(a) Reporting of a "NIL" braking condition is not permissible by Federally Obligated Airports or those airports certificated under 14 CFR part 139. A "NIL" braking condition at these airports must be mitigated by closure of the affected surface.

#### NOTE-

A "NIL" braking action NOTAM can be issued at airports not receiving federal money and non-part 139 airports on taxiway or apron surfaces only. No aerodrome can issue a runway NIL braking action.

- (b) Paved surfaced runways cannot have a stand-alone BA NOTAM.
- (c) Non-Paved surfaced runways can have BA, but as a stand-alone NOTAM.
- (d) TWY/Apron can have BA as stand-alone or appended to field condition NOTAM.

#### NOTE-

A braking action report from a landing aircraft should be processed as a PIREP.

# EXAMPLES-

...TWY A FICON BA GOOD TO MEDIUM... ...TWY A FICON 1/8IN WET SN BA MEDIUM...

7. Observation Time. The time airport management observed the conditions.

**8.** Conditions Not Monitored (when applicable). When an airport operator cannot monitor the condition of the movement area or airfield surface, this information is issued as a NOTAM. Usually necessitated due to staffing, operating hours or other mitigating factors associated with airport operations. When the field conditions will not be monitored, follow the most recent observation with the words "COND NOT MNT (date/time) (date/time)." The time parameters specified must fall within the start of activity/end of validity times.

**9.** Start of Activity/End of Validity. FICON NOTAMs are considered temporary, therefore the End of Validity time for FICON NOTAMs must not exceed 24 hours from the Start of Activity time, except:

(a) When the reported contaminant is ASH, MUD, OIL RUBBER (taxiway only), or SAND.

(b) When appended with remarks "COND NOT MNT."

c. Rubber as a contaminant/Slippery When Wet.

1. Rubber is used on Taxiways only to describe the accumulation of rubber.

#### EXAMPLE-

...TWYA FICON RUBBER...

**2.** Slippery When Wet is a stand-alone NOTAM, used only on runways, where a friction survey (conducted for pavement maintenance) indicates the averaged Mu value at 40 mph on the wet pavement surface failed to meet the minimum friction level classification. This is the only FICON that is described using both runway ends.

#### REFERENCE-

AC 150/5200-30, Airport Field Condition Assessments and Winter Operations Safety

#### EXAMPLE-

...RWY 02/20 FICON 3/3/3 SLIPPERY WHEN WET...

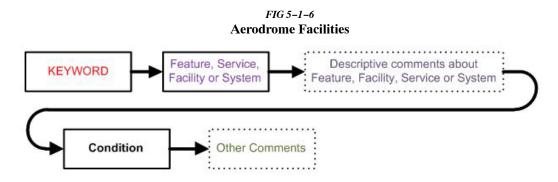
#### NOTE-

May be downgraded to 2/2/2 or 1/1/1 with all numbers matching.

TBL 5-1-4 Runway Condition Assessment Matrix

Runway Condition Assessment Matrix (RCAM)						
Assessment Criteria			Downgrade Assessment Criteria			
Runway Condition Description		<mark>М</mark> и (µ)		Deceleration Or Directional Control Observation	Pilot Reported Braking Action	
• Dry			Π			
<ul> <li>Frost</li> <li>Wet (Includes Damp and 1/8" depth or less of Water)</li> <li>1/8" (3 mm) depth or less of:</li> <li>Slush</li> <li>Dry Snow</li> <li>Wet Snow</li> </ul>	5	39	40 or Higher	Braking deceleration is normal forthe wheel braking effort applied AND directional control is normal.	Good	
5° F (-15°C) and Colder outside air temperature: • Compacted Snow	4			Braking deceleration OR directional control is between Good and Medium.	Good to Medium	
<ul> <li>Slippery When Wet (wet runway)</li> <li>Dry Snow or Wet Snow (Any depth) over Compacted Snow</li> <li>Greater than 1/8" (3 mm) depth of:</li> <li>Dry Snow</li> <li>Wet Snow</li> <li>Wet Snow</li> <li>Warmer than 5° F (-15°C) outside air temperature:</li> <li>Compacted Snow</li> </ul>	3	to 30	29	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium	
Greater than 1/8" (3 mm) depth of: • Water • Slush	2		to	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor	
• Ice	1	20 0	21	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor	
Wet Ice     Slush over Ice     Water on top of Compacted Snow     Dry Snow or Wet Snow over Ice	0	20 or Lower		Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil	

# 5-1-5. AERODROME FACILITIES



#### ...AD AP CLSD EXC PPR MON-FRI 0330-1430 YYMMDD0330 - YYMMDD1430

See Appendix A for examples.

Issue a NOTAM if any aerodrome service availability has changed from that which is published.

a. Certified Aircraft Rescue and Fire Fighting (ARFF).

1. Issue a NOTAM D on airports (not runways) certificated under 14 CFR Part 139, when notified by airport management that required ARFF equipment is inoperative/unavailable and replacement equipment is not available. Except as indicated in paragraph 5-1-5a 3, 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 unserviceable. Each NOTAM must have an expiration time as obtained from airport management. If unable to obtain an expiration time, add 48 hours to the time of receipt and advise airport management.

#### NOTE-

The ARFF Index for each certificated airport is published in the U.S. Chart Supplement, which lists indices and ARFF equipment requirements.

2. At certificated airports listed in the U.S. Chart Supplement, 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.

#### REFERENCE-

Title 14 CFR Part 139

**3.** If the ARFF vehicle is still unserviceable after 48 hours, the airport manager must notify the FSS of a temporary index change and approximate duration time.

**4.** If the ARFF Index is listed in the U.S. Chart Supplement, as A and the ARFF vehicle is unserviceable, the NOTAMs must indicate that index A is not available and the airport is closed to air carrier operations.

b. Fuel Services.

c. Custom Services.

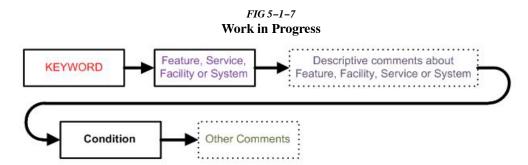
**d.** Aerodrome Beacon (ABN). Describe the beacon status as accurately as possible. For example, ABN NOT ROTATING; ABN NOT STD GREEN ONLY

e. Wind direction equipment, including wind cones, wind direction indicator, wind sock, etc.

**f.** Airplane Design Group. For those airports capable of permitting Group VI (A–380, B747–8) aircraft but have a limit on the capacity, issue a NOTAM when the capacity is reached so other aircraft won't attempt to land. Do not refer to the Airplane Design Group in the NOTAM.

**REFERENCE –** AC 150/5300–13, Airport Design

# 5–1–6. WORK IN PROGRESS



#### ...TWY C WIP TRENCHING ADJ EAST SIDE ...

See Appendix A for examples.

**a.** Work in Progress (WIP) describes any work being done on the airport surface, including construction, mowing, snow/ice removal, etc. WIP does not close a movement area; therefore, if the movement area is restricted, another NOTAM identifying that restriction is needed. For example, a WIP with snow removal requires a closure NOTAM with 15 minute PPR in order to use the surface.

**b.** WIP (reason) is mandatory for describing construction and snow/ice removal NOTAMs. Other WIP reasons are optional.

c. Any NOTAM associated with work in progress on or adjacent to a runway, taxiway, apron/ramp, or aerodrome must be formatted as follows 4-2-1 b 1-3, including:

1. Keyword. RWY, TWY, APRON, or AD.

2. Surface name/designator. Specify the name/ designator of the surface on which the work is being conducted.

**3.** Surface segment description must be specified in feet or from a specific point to point; for example, TWY A SOUTH 76FT or TWY A BTN TWY B AND TWY C.

#### NOTE-

A surface segment differs from the optional plain language description of the work areas in that the surface segment description can be captured and depicted graphically in a digital environment. The optional plain language comments will be delivered in text form only.

4. Condition or activity; "WIP."

#### NOTE-

Airport operators must ensure this NOTAM remains active only when actual snow and ice removal operations are taking place.

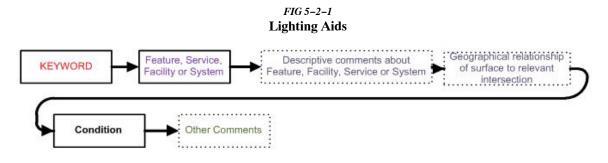
5. Reason or purpose.

**6.** Remarks. The work area may be described in plain language text after the reason by specifying the area by cardinal direction in relationship to the work area, by an intersection, or distance from an intersection.

7. Follow 4-2-1 b 13 and 14 to complete the NOTAM.

# Section 2. Lighting Aid and Obstruction NOTAMs

# 5-2-1. LIGHTING AIDS



....RWY 27 RTHL U/S...

See Appendix A for examples.

Originate NOTAMs on operational status of lighting aids for public use civil landing areas listed in the U.S. Chart Supplement. Each type of lighting requires separate NOTAMs. Technical Operations must be made aware of any runway lighting outages, as this is the office that maintains the equipment. When describing restrictions, use Runway Centerline (RCL) with visual navigational aids. NOTAMS regarding lighting aids are originated as follows:

a. Approach light systems (ALS). Only use the runway direction for which the equipment pertains.

**1.** When commissioning approach light systems, indicate the exact type of system; for example, MALSR, MALSF, etc.

2. Once commissioned and published, approach light systems need only be shown as ALS.

**b.** Lead off /lead on lights. NOTAMs issued using keyword RWY. Lead off and lead on light will be the standardized verbiage for lead off/on lights, which are also referred to as turnoff lights.

- c. Runway status light system.
  - 1. Runway entrance lights. NOTAMs issued using keyword TWY
  - 2. Take-off hold lights.
- d. Sequence flashing lights/runway alignment indicator lights.
- e. Visual approach lighting.
  - 1. Visual approach slope indicator (VASI).
  - 2. Precision approach path indicator (PAPI).
  - 3. Runway end identifier lights.
  - 4. Threshold lights (RTHL).
- f. Runway edge lights (REDL).

**1.** When commissioning runway edge light systems, indicate the exact type of system; for example, LIRL, MIRL, HIRL, etc.

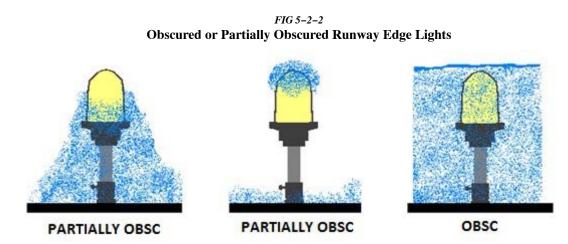
2. Once commissioned and published, runway edge lights must only be shown as REDL.

3. Runway lights obscured due to snow and ice.

- g. Runway centerline light (RCLL).
- **h.** Touchdown zone lights (RTZL).
- i. Runway lead-in lighting system (RLLS).
- **j.** Airport lighting total power failure.
- k. Pilot-controlled lighting (PCL) frequency when it controls approach lights or runway lights.

# I. Taxiway lighting.

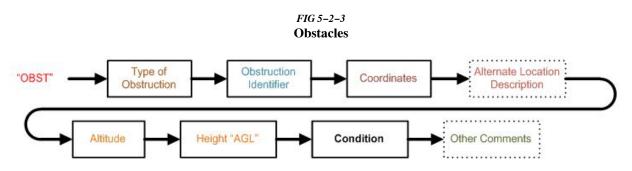
- 1. Taxiway edge lights.
- 2. Taxiway centerline lights.
- 3. Runway guard lights. NOTAM issued using keyword TWY.
- 4. Stop bar lights. NOTAM issued using keyword TWY.
- 5. Taxiway lights obscured due to snow and ice.



# NOTE-

Lights that are partially obscured are not reported as a NOTAM.

# 5-2-2. OBSTACLES



# ...OBST CRANE (ASN 20YY-ACE-5-NRA) 345140N0804506W (1.44NM SW N52) 580FT (195FT AGL) NOT LGTD...

See Appendix A for examples.

**a.** Obstructions to include telecommunications antenna tower lights, cranes, stacks, wind turbines, non–FCC towers, power lines, moored balloon, kites, natural growth/terrain, etc.

**b.** Any failure or malfunction which affects a top light or flashing obstacle light regardless of its position is a condition for a NOTAM.

**c.** Commercial tower light operators must report the operating status of tower lights and ensure that a NOTAM is originated via a direct entry tool or contacting FSS.

d. The NOTAM text for obstructions to air navigation must be formatted as follows 4–2–1 b 1–2, including:

1. Location Identifier: For wind turbine farms, use the ARTCC under which the farm falls.

2. Keyword "OBST."

**3.** Specify the attribute; for example, "TOWER LGT", "CRANE," "STACK," "ACFT TAIL," "BLDG," "MOORED BALLOON", "KITE" etc.

**4.** Assigned obstruction identifier.

(a) For FCC Towers, the Antenna Structure Registration (ASR), if known, in parentheses. If the ASR is not known, indicate by (ASR UNKNOWN) in the NOTAM.

(b) For Cranes, Stacks, etc., the Aeronautical Study Number (ASN), if known, in parentheses. If the ASN is not known, indicate by (ASN UNKNOWN) in the NOTAM. Do not include the ASN for wind turbine farm NOTAMs, see examples.

(c) For Moored Balloon, which requires a waiver to 14 CFR Part 101, the assigned obstruction identifier is not required.

**5.** For FCC Tower Obstructions, enter the location by latitude and longitude to the nearest one hundredth of a second. For wind turbine farms, if using latitude and longitude, provide the coordinates for the center point of the wind farm, or the coordinates for one of the turbines closest to the center. If the latitude and longitude is not known, use "UNKNOWN". For all other obstacles, use the latitude and longitude to the nearest second, or fix/radial/distance, or a nautical mile radius of a NAVAID.

6. Plain language location in parentheses.

(a) When the obstacle is within 5SM of an airport, describe the plain language location in feet or nautical miles using 16 points of compass from a specified location on the airport; for example, (.5NM E APCH END RWY 18) (2000FT SSE DEP END RWY 20) (2NM SSW ACY).

(b) When the obstacle is within 500 feet either side of the centerline of a charted helicopter route, or 5SM or more from an airport and more than 200 feet AGL, describe the plain language location by using the bearing, distance, and aerodrome designator of the nearest public–use airport; for example, (12NM SSW SPA).

**7.** Specify the altitude MSL with the unit of measurement (FT), if known. Otherwise state UNKNOWN. For wind turbine farms, use the tallest height of a turbine within the farm.

8. In parentheses, specify the height with the unit of measurement (FT) and reference datum (AGL).

#### NOTE-

Report the height of obstruction lights on terrain (hills) in MSL only, as the terrain is the obstacle, not the light on the terrain

9. Specify the condition:

(a) "U/S" for FCC obstructions. A light condition of unserviceable refers to a top light or flashing obstruction light is not operating, regardless of its position.

(b) "NOT LGTD," "LGTD," "FLAGGED" for non-FCC obstructions, for example. As used in a NOTAM, NOT LGTD refers to a facility (sign) that is installed, but the lights aren't lit.

10. Start of Activity/End of Validity. FCC receives notification upon ASR NOTAM issuance.

# Section 3. NAVAID NOTAMs

# 5-3-1. GENERAL

Technical Operations personnel must ensure the origination of NOTAM Ds concerning NAVAIDs for which they are responsible.

# 5-3-2. REPORTING NAVAID MALFUNCTIONS

Known or reported malfunctions of a navigational aid must be reported to Technical Operations or appropriate personnel.

# 5-3-3. UNPROGRAMMED EXTENDED SHUTDOWNS

Unprogrammed, extended facility shutdowns or other unanticipated outages that are expected to last more than 30 days must be promptly reported to NFDC. When possible, the expected duration of the shutdown is to be included in the message.

NOTE-

Except for emergency shutdowns, technical operations personnel are expected to give at least 1-hour notice.

# 5-3-4. NAVAID MAINTENANCE SHUTDOWNS

Information concerning maintenance shutdown of NAVAIDs that are part of the NAS must be handled as follows:

**a.** Routine maintenance shutdown. When possible, approval should be obtained sufficiently in advance of the proposed shutdown time to allow dissemination of a NOTAM at least 5 hours before a shutdown will occur. A routine maintenance shutdown request must not be denied because of an inability to issue a NOTAM 5 hours in advance of the shutdown.

**b.** Emergency shutdown. When possible, obtain at least 1-hour advance notice so that appropriate dissemination may be made before shutdown.

**c.** Extended maintenance shutdown. Notify the NFDC sufficiently in advance to permit publication of the information prior to the shutdown date. When this is not possible, disseminate a NOTAM no more than 7 days before the shutdown.

# 5-3-5. UNMONITORED NAVAIDs

**a.** All VOR, VORTAC, and ILS equipment in the NAS have automatic monitoring and shutdown features in the event of malfunction.

**b.** When a navigational aid's operational status cannot be monitored at the controlling or monitoring facility, but all indications or reports are the facility is operating normally, Technical Operations personnel must ensure the origination of a NOTAM placing the aid in an unmonitored status.

**c.** When issuing a NOTAM describing a facility as unmonitored, do not use the category of monitor, only the phrase "NOT MNT."

d. If the NAVAID is reported as being unserviceable, the unmonitored NOTAM must be canceled.

# 5-3-6. INSTRUMENT LANDING SYSTEM STATUS

**a.** Technical Operations issue NOTAMs related to outages or restrictions on NAVAID components of ILS approach systems, for which they own/maintain/certify. AIS 24/7 NOTAM Center is responsible for issuing any

procedural NOTAMs, such as flight data center (FDC) NOTAMs. Consult FAA Order 6750.24 to determine if any additional NOTAM Ds should be issued. Ideally, a NOTAM will allow authorized operators to continue, while notifying unauthorized operators that the specified approach procedure is not available. It is critical that required NOTAMs alert users of an inoperative facility or system. In some situations, an all–encompassing cancellation of specific minima (e.g., "CAT II/III Not Authorized") may not be necessary.

**b.** Category II and/or III approaches may not be authorized due to the failure of additional equipment, as specified in FAA Order 6750.24. The Technical Operations Control Center specialist in accordance with the guidance contained in FAA Order 6750.24 will make the determination of impact to Category II/III ILS operations, and a separate NOTAM request for loss of ILS category will be made if the equipment failures warrant this action.

**c.** When Technical Operations personnel issue a NOTAM suspending CAT II/III minimums, AIS must be notified. If the suspension will exist longer than 224–days or is permanent, AIS must submit a full or abbreviated procedure amendment prior to the 224–day suspense.

**d.** Special Authorization CAT II approaches. These Part 97 CAT II approaches are identified as "ILS RWY XX (SA CAT II)" and by an additional chart note saying "Reduced Lighting: Requires specific OpSpec, MSpec, or LOA approval and use of autoland or HUD to touchdown."

1. The aircraft operator is authorized to conduct CAT II IAP on certain ILS facilities that do not meet the equipment requirements of a U.S. Standard or ICAO Standard, for example when TDZ lighting or RCL become inoperative. These procedures have been specifically approved in accordance with FAA Order 8400.13, *Procedures for the Evaluation and Approval of Facilities for Special Authorization Category I Operations and All Category II and III Operations.* 

2. When TDZ and/or CL lighting become inoperative on a standard CAT II instrument approach, the certificate holder is authorized to conduct SA CAT II operations.

#### 5-3-7. NAVAID CONDITIONS

# ...NAV VOR 090–180 BEYOND 25NM SFC–5000FT, 270–300 BEYOND 25NM SFC–5000FT, 301–360 BEYOND 35NM SFC–4000FT UNUSABLE...

See Appendix A for examples.

**a.** Introduction. Facility status classification and NOTAM(s) will indicate restriction(s) to the expected use of these facilities. The NOTAM advises the user of any restriction to facility usage.

#### b. Facility Status Classification.

**Operational Status**. The legal facility status of Usable or Unusable is broken down as follows:

**1.** Usable. The facility is available for operational use and is either.

(a) Unrestricted. Providing safe, accurate signals-in-space conforming to established standards within the coverage area of the facility.

(b) Restricted. Providing signals-in-space not conforming to established standards in all respects or in all sectors of the coverage area, but safe for use excluding the restrictions defined.

**2.** Unusable. The facility is not available for operational use because it may provide potentially unsafe or erroneous signals, or signals of unknown quality. When describing visual aids, this term is used only by Flight Inspection.

#### c. NOTAM(s).

**1. General.** Originate a NOTAM D for commissioning, decommissioning, outages, or unmonitored status of radio navigation aids (60 minutes or more and 30 minutes or more for RADAR) that are part of the NAS. The NOTAM must be canceled by the originator. An exception is that Technical Operations will originate a NOTAM

for all Instrument Landing System Equipment and components for all associated outages regardless of duration. When a flight inspection necessitates NOTAM action, the flight inspector is responsible for initiating the NOTAM(s). The flight inspector must verify within 24 hours that the appropriate NOTAM(s) were issued, amended, or cancelled. The inspector must verify that NOTAM(s) are published in the appropriate agency publication.

**2. Facility NOTAM D.** The inspector must immediately initiate NOTAM action whenever a facility restriction is found or revised.

**3.** Initiating FDC NOTAM(s). FDC NOTAM(s) must be issued if a restriction affects instrument flight procedures, approach minimums, or category (CAT) II or III authorizations. Internal processes are in place between the Oklahoma City Service Center (OKC SC), the National Operations Control Center (NOCC), and Aeronautical Information Services (AIS) to ensure FDC NOTAM(s) resulting from reported facility outages, flight inspection results, or restriction changes are issued. The NOCC automatically notifies the AIS when there is a facility outage or restoration. The OKC SC will notify AIS when a flight inspection results in a new or canceled facility restriction.

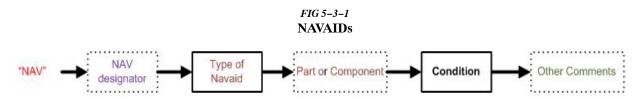
**4. Expanded Service Volume (ESV).** When a facility no longer supports a particular ESV, an FDC NOTAM must be issued for each published instrument flight procedure that requires that ESV.

#### 5. Preparation of NOTAM(s).

(a) NOTAM(s) must include facility name, type, component, and the unusable area/altitude. The absence of a specific altitude or distance denotes all altitudes and distances. It is important to include specific information to avoid confusion. The reason for the restriction (e.g., lack of signal, frequency interference, course structure, alignment, unlocks) serves no useful purpose and must not be included in the text of the NOTAM.

(b) Restrictions to VORTAC and TACAN facilities are issued via NOTAM D, including TACAN azimuth restrictions. The NOTAM preparation for the TACAN azimuth component of a VORTAC is identical to the VOR.

**6. Facility Restrictions.** Restrictions to NAVAIDs are normally published by segment: for example, 020–055 degree radials. To correct a given segment, cancel the original NOTAM and issue a completely new NOTAM. Every effort should be made to restrict rather than remove from service a facility, or instrument procedure, when out of tolerance conditions are found. Describe lateral restrictions in a clock–wise (CW) direction. The following illustrate the most common applications for Flight Inspection.



(a) General. When defining altitude restrictions, use the format, "SFC – XXXXFT," where "SFC" stands for surface and XXXXFT is the top of the restriction in MSL altitude. Altitude restrictions recorded on data sheets, Flight Inspection reports, Airport/NAVAID (AIRNAV) database, and in the Chart Supplement, will use the standard flight inspection format of, "unusable below (*altitude*), or "unusable above (*altitude*)," as appropriate. The listed *altitude* is the usable MSL altitude. Only NOTAM(s) will use the "SFC–XXXXFT" format. For example: a VOR found unusable below 3000FT MSL would result in a NOTAM that lists the restriction as unusable "SFC–2900FT." Use a 100FT increment from the "usable" altitude to describe the first "unusable" altitude.

(b) Excessive snow and ice accumulation near the glide slope antennas may affect facility performance to the extent that it is inoperative. When this occurs, Technical Operations personnel at the glide slope location are required to initiate appropriate NOTAM D action. Technical operations personnel must monitor snow conditions to determine when conditions permit use of the glide slope and initiate action to cancel the NOTAM.

Technical Operations and Aeronautical Information Services NOTAM Office make the determination when to issue an FDC NOTAM or NOTAM D, based on FAA JO 6750.49, *Maintenance of Instrument Landing System (ILS) Facilities.* Tech Ops issues the NOTAM D and AIS 24/7 NOTAM Center issues the FDC.

(c) VOR/ TACAN/DME/ VOT/ NDB/ DF. Describe radial/ bearing from the station in a clockwise direction, altitude in terms of above or below an MSL altitude, and distance in terms of beyond or within a nautical mile distance. When defining a restriction <u>adjacent</u> to another in azimuth, the same radial should not be contained in both restrictions. For example: don't state "020–090 and 090–110", but rather state either, "020–090 and 091–110", or "020–089 and 090–110."

(1) When describing restrictions to these kind of facilities:

**[a]** Describe the radials or bearings that are unusable.

**[b]** Describe the mileage point beyond which the facility is unusable.

[c] Describe any altitude restriction using the NOTAM format.

(2) Follow this guidance for identifying specific components:

[a] VOR/DME. Reference "VOR/DME" when the restriction simultaneously applies to both the VOR and DME performance. Just use "VOR" if the restriction only applies to the VOR component, and "DME" if it only applies to the DME component.

[b] VORTAC. Reference "VORTAC" when all components (VOR, TACAN AZM, and DME) are being restricted together. Reference the individual component if the restriction only applies to that component.

# NOTE-

When the DME portion of a VORTAC fails or is removed from service, the entire TACAN automatically becomes inoperative. However, the TACAN AZM can be unserviceable with the VOR and DME operational.

[c] VOT (VOR Test Facility).

[d] VOR Receiver Checkpoint. There are airborne receiver checkpoints (VOR AIRBORNE REC CHECKPOINT) and ground receiver checkpoints (VOR GND REC CHECKPOINT).

# NOTE-

If there is more than one ground checkpoint, describe the location also.

[e] TVOR (Terminal Class VOR).

[1] TVORs serving one airport, and not associated with airway structure, must have NOTAMs issued using the associated airport identifier as the affected facility.

[2] TVORs serving more than one airport, or associated with airway structure, must have NOTAMs issued using the TVOR identifier as the affected facility.

[f] NDB outages:

[1] Terminal NDBs. Those NDBs located on or serving only that airport must have NOTAMs issued using the associated airport as the affected facility.

[2] If an NDB serves more than one airport, or associated with an airway route structure, issue a NOTAM using the identifier of the NDB as the affected facility.

[g] LOM outages.

[1] LOM serving one airport must be issued with the three-letter identifier of the airport as the location identifier.

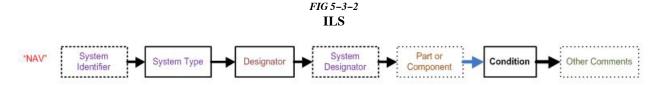
[2] LOM serving more than one airport must be issued under the three–letter identifier of each airport that it serves. This procedure may require coordination with other facilities.

[h] NAVAID identification change. (See example in Appendix A).

(d) Visual Glide Slope Indicator. Describe in terms of nautical miles from threshold and/or degrees left and right of runway centerline any areas of coverage where the facility is unusable.

(e) A DME can be a separate facility, or a facility associated with an ILS, LOC, LOC Type Directional Aid, Simplified Direction Finder, NDB and VOR. When a DME is a separate system (a DME–only facility), the only condition is unserviceable. Restrictions are not published for DME–only facilities.

(f) Instrument Landing Systems (ILS).



# ... NAV ILS RWY 12 LOC UNUSABLE BEYOND 4DEG RIGHT OF COURSE...

(1) Distinguish components of an ILS from non-precision approach NAVAIDs by preceding the component with "ILS" followed by "RWY" and the runway number (including single ILS airports). Use the term "COURSE" when describing radio navigation aid restrictions. Coupled approach restrictions (for ILS CAT I) are issued via FDC NOTAM

#### EXAMPLE-

#### ...NAV ILS RWY 14 LOC U/S...

(2) NOTAMS on a localizer backcourse (BC) may be issued for both outages and restrictions. A backcourse facility may be completely separate from front course operations.

#### EXAMPLES-

...NAV LOC RWY 16 BC UNUSABLE BEYOND 6DEG RIGHT OF COURSE... ...NAV LOC RWY 05 BC U/S...

# NOTE-

**1.** *Restrictions on instrument flight procedures caused by outages to a localizer backcourse will be issued separately as FDC NOTAMs.* 

2. When describing the back course, the runway designator is for the back course approach runway.

(3) Glide Slope Elevation. Describe in terms of degrees left or right of inbound course and nautical miles from threshold; Describe unusable altitudes in terms of surface to the lowest usable MSL altitude or as unusable above a highest usable MSL altitude. Ensure the restriction correctly reflects the service volume origin. Additional reference to DME distances may be used if the DME is part of the approach procedure.

(g) Localizer/LOC Directional Aid/Simplified Directional Facility Azimuth. There are runways equipped with a localizer facility without a glide slope, and are not designated an ILS.

#### EXAMPLES-

...NAV LOC RWY 08 U/S...

... NAV LOC RWY 08 UNUSABLE BEYOND 6DEG RIGHT OF COURSE...

(1) Lateral Restriction: Lateral restrictions are measured in degrees left or right of inbound course.

(2) Remaining Distance Restriction: Restriction occurs in the remaining distance to the runway, expressed in nautical miles from the runway threshold. For example, the localizer is unusable within 0.3 NM of the threshold.

(3) Usable Distance Restriction: Restrictions affecting the usable distance of the facility are measured in nautical miles from the antenna. For example, the localizer is unusable beyond 15 NM.

#### NOTE-

Additional reference to DME distances may be used for ease of correlating the restriction distance to the approach procedure, for those approach procedures with DME. However, DME distance will not be used to replace the distance from threshold/antenna.

**7.** Modifying an existing facility NOTAM. When a new facility restriction modifies an existing restriction, add "PLUS SEE *(publication)*" when other valid restrictions to the NAVAID are published. The absence of this statement from the NOTAM indicates that all other restrictions have been canceled.

# **Flight Inspection Work Flow Process:**

(a) Given a VOR/DME with the published (not NOTAMs) restrictions of: VOR Unusable: 005-040 BEYOND 27NM SFC-13000FT VOR Unusable: 325-040 BEYOND 20NM SFC-10500FT

(b) And during a subsequent flight inspection it is determined that the previous restriction of 005–040 BEYOND 27NM SFC-13000FT must be moved in and raised so it now reads 005–040 BEYOND 25NM SFC-14000FT. First, cancel the existing restriction:

[CANCEL:] VOR 005–040 BEYOND 27NM SFC–12900FT UNUSABLE.

(c) Next, issue the NOTAM with the new restriction with the addition of "PLUS SEE":

... VOR 005-040 BEYOND 25NM SFC-13900FT UNUSABLE PLUS SEE CHART SUPPLEMENT...

**8.** NOTAM Scenarios. The following are illustrations of conditions and prescribed NOTAM(s):

(a) All components of a VORTAC are unusable in a specific sector. For example, beyond 25NM and below 3500FT MSL due to out-of-tolerance VOR and TACAN course structure and unusable DME. NOTAM: ...NAV VORTAC 025-075 BEYOND 25NM SFC-3400FT UNUSABLE...

(b) The VOR and TACAN azimuth signals of a VORTAC are unusable in a specific sector. For example, beyond 25 NM and below 3500FT MSL due to out-of-tolerance conditions, and the DME is unaffected. Issue separate NOTAMs for each component.

NOTAM: ...NAV VOR 025-075 BEYOND 25NM SFC-3400FT UNUSABLE ...

NOTAM: ...NAV TACAN AZM 025-075 BEYOND 25NM SFC-3400FT UNUSABLE...

(c) A VOR does not provide adequate signal within the standard service volume at the required altitudes in various areas sectors. For example, the VOR is unusable 080° CW to 100° beyond 18 NM below 3500FT MSL, and is unusable from 101° CW to 200° beyond 30 NM below 4500FT MSL.

NOTAM: ...NAV VOR 080–100 BEYOND 18NM SFC–3400FT, 101–200 BEYOND 30NM SFC–4400FT UNUSABLE...

(d) A VOR is unusable in various areas below one altitude, and the DME is unusable in one sector. For example, the VOR is unusable below 1,700FT MSL in the following areas: 250° CW 265° beyond 17 NM; 266° CW 280° beyond 10 NM; and 281° CW 290° beyond 17 NM. DME unusable 225° CW 275° in the following areas: Beyond 15 NM below 2,400FT MSL and beyond 30 NM below 5,000FT MSL.

NOTAM: ...NAV VOR 250–265 BEYOND 17NM, 266–280 BEYOND 10NM, 281–290 BEYOND 17NM SFC–1600FT UNUSABLE...

NOTAM: ...NAV DME 225-275 BEYOND 15NM SFC-2300FT UNUSABLE...

NOTAM: ...NAV DME 225-275 BEYOND 30NM SFC-4900FT UNUSABLE...

(e) A Nondirectional radio beacon is not usable at all altitudes beyond a certain distance in a sector. For example, the signal is unusable in the SE quadrant beyond 15 NM.

NOTAM: ...NAV NDB 090-180 BEYOND 15NM UNUSABLE...

(f) Glide slope tolerances are exceeded at a specific point on the glidepath. Describe the restriction from the surface to the altitude specified in the flight inspection report. For example, an ILS glide slope is found unusable below 2900FT MSL.

#### NOTE-

Do not subtract 100 feet, rather use the altitude specified by flight inspection.

NOTAM: ...NAV ILS RWY 35 GP UNUSABLE SFC-2900FT...

(g) An ILS localizer exceeds tolerances at a point prior to the runway. For example, the localizer is unusable from 0.5 NM inbound.

NOTAM: ...NAV ILS RWY 25 LOC UNUSABLE WI .5NM...

#### NOTE-

(WI = within)

(h) An ILS localizer is restricted in usable distance. For example, the localizer is restricted beyond 12 NM from the facility.

NOTAM: ...NAV ILS RWY 33 LOC UNUSABLE BEYOND 12NM...

(i) A Cat II ILS ceases to meet CAT II criteria. Flight Inspection will coordinate with AIS to issue an FDC NOTAM to show "CAT II NA" for the associated ILS approach procedure.

(j) A CAT III ILS localizer exceeds CAT III tolerances in Zone 4. Flight Inspection will coordinate with AIS to issue an FDC NOTAM to show "CAT III NA" for the associated ILS approach procedure.

(k) A CAT II ILS localizer exceeds tolerances in Zone 4, (Zone 4 is not required for CAT II performance level II/T). A facility NOTAM (NOTAM D) is issued.

NOTAM: ... NAV ILS RWY 28 UNUSABLE INSIDE RWY THR...

(I) A CAT III ILS localizer exceeds tolerances in Zone 5, (Zone 5 is not required for CAT III performance level III/D). A facility NOTAM (NOTAM D) is issued.

NOTAM: ...NAV ILS RWY 10 UNUSABLE FOR ROLLOUT GUIDANCE...

(m) Glide slope does not meet change/reversal tolerances below a point on the glide path. For example, flight inspection determines the glide slope is not suitable for autopilot use below 1574FT MSL. Flight Inspection will coordinate with AIS to issue an FDC NOTAM with the following: AUTOPILOT COUPLED APPROACH NA BELOW 1574FT.

#### NOTE-

The facility is not considered restricted.

(n) Localizer does not meet tolerances in the vertical plane. NOTAM: ...NAV ILS RWY 22 LOC UNUSABLE BEYOND OM ABOVE 3500FT, AND AT THR ABOVE 500FT...

(o) An out-of-tolerance condition is determined for an ILS glide slope left or right of the localizer centerline. For example, flight inspection finds that beyond  $5^{\circ}$  left of LOC course, there are no glide slope clearances above path, and a glide path is not provided.

NOTAM: ...NAV ILS RWY 30 GP UNUSABLE BEYOND 5DEG LEFT OF COURSE...

(**p**) VGSI systems can have different conditions.

(1) A PAPI could be off the air for any reason and the NOTAM would read: U/S. But, if it was found Unsatisfactory by flight inspection, the NOTAM term "UNUSABLE" is more appropriate.

(2) When a PAPI is not visible out to the standard 10-degree lateral azimuth due to baffling or optical performance, the NOTAM should describe the unusable area referenced to the runway centerline. For example, the PAPI is not visible beyond 6 degrees left of centerline. NOTAM: ...RWY 18 PAPI BEYOND 6DEG LEFT OF RCL UNUSABLE...

(3) VGSI may also be restricted in usable distance for obstacle clearance. For example, the obstacle clearance plane is penetrated at some distance. NOTAM: ...RWY 32 PAPI BEYOND 2.8NM UNUSABLE...

# 5-3-8. SATELLITE BASED SYSTEMS

See Appendix A for examples.

a. Global Positioning System (GPS).

**1.** Candidate global positioning system pseudo-random noise (PRN) GPS satellite outages will be reported directly to the USNOF (must be properly formatted) by the Air Force Space Command (AFSPACECOM)

monitoring facility. The USNOF will issue NOTAMs under the accountability "GPS" with a location of "GPS." When these NOTAMs get distributed internationally, the NOTAM System changes the designator "KNMH." (Refer to 1–2–1a)

# NOTE-

GPS operations are included in the Aeronautical Information Manual.

**2.** Candidate GPS testing NOTAMs must be properly formatted when received from Technical Operations ATC Spectrum Engineering Services, Spectrum Assignment and Engineering Services. The USNOF will issue NOTAMs under the accountability "GPS" with a location identifier of the associated center.

**b.** Wide Area Augmentation System (WAAS). WAAS area-wide NOTAMs are originated when WAAS assets are out of service and impact the service area. The term "MAY NOT BE AVBL" indicates that due to ionospheric conditions, lateral guidance may still be available when vertical guidance is unavailable. Under certain conditions, both lateral and vertical guidance may be unavailable. The USNOF distributes these as FDC NOTAMs for WAAS unscheduled/scheduled loss or the degradation of the WAAS Signal-in-Space or as Center NOTAMs if all airports with RNAV approaches within a center's boundary do not have WAAS availability. USNOF utilizes templates provided by Technical Operations, WAAS Operations. All events must reflect an effective time and expiration time.

- 1. Unscheduled loss of signal or service.
- **2.** Ionosphere storm conditions.
- 3. Scheduled loss of signal or service.
- **4.** Operating under a single GEO
- 5. Extreme storm detector trips
- 6. Test
- 7. Emergency

**c.** Automatic Dependent Broadcast–Surveillance (ADS–B) and Wide–Area Multilateration (WAM). ADS–B and WAM NOTAMs are originated when assets are out of service and impact the service area. USNOF distributes ADS–B Service Impacts as FDC NOTAMs and WAM Service Interruptions as D–NOTAMs. USNOF uses templates provided by Technical Operations. All events must reflect an effective time and expiration time.

- 1. Unscheduled loss of signal or service.
- 2. Scheduled loss of signal or service.

**d.** Ground Based Augmentation System (GBAS). Originate NOTAMs when the GBAS is unserviceable or predicted to be unserviceable. GBASs are operated by non–federal service providers.

- **1.** Unscheduled loss of signal or service.
- **2.** Predicted loss of signal or service.

# 5-3-9. HOURS OF OPERATION

Changes in the hours of operation of a NAVAID due to other than seasonal daylight time changes.

## Section 4. Communications NOTAMs

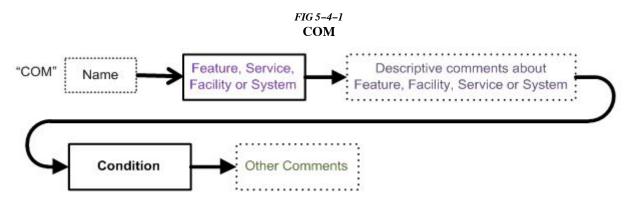
### 5-4-1. GENERAL

Technical Operations personnel must ensure the origination of NOTAM D concerning communication outlets for which they are responsible.

## 5-4-2. REPORTING COMMUNICATIONS OUTLET MALFUNCTIONS

Known or reported malfunctions of a communication outlet must be reported to Technical Operations or appropriate personnel.

## 5-4-3. COMMUNICATION OUTLET CONDITIONS



...COM REMOTE TRANS/REC 126.25, 131.25 U/S...

Originate a NOTAM for conditions pertaining to the operation of communications outlets that are part of the NAS when an outage occurs or when a scheduled shutdown is expected as follows:

**a.** Use a comma to separate multiple frequencies.

**b.** Commissioning, decommissioning, outage, or (un)availability of communications outlets for the following:

**1.** All published ATC frequencies and all communication frequencies will be issued with the affected frequency when unserviceable.

(a) Remote Communication Outlets associated with an airport or NAVAID.

(b) Remote Communication Outlets NOT associated with an airport or NAVAID.

**2.** If several frequencies are out, but one is still operating, issue the out-of-service frequencies in one NOTAM.

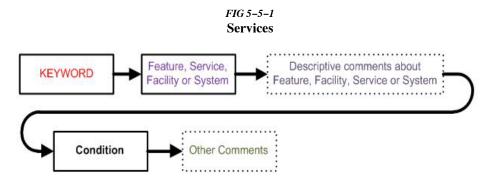
#### NOTE-

If the NAVAID is out of service or unmonitored, the VOICE is automatically out of service.

- (a) Remote Communication Outlets associated with an airport or NAVAID.
- (b) Remote Communication Outlets NOT associated with an airport or NAVAID.

## Section 5. Services NOTAMs

## 5-5-1. GENERAL



## ...SVC POTOMAC APP U/S. RICHMOND CLASS C SERVICE NOT AVBL. CTC XXXXXXX ON XXX.XX...

**a.** Technical Operations personnel must ensure the origination of NOTAM D concerning the malfunction or degradation of FAA maintained systems and/or equipment.

**b.** When notified, Technical Operations and Air Traffic personnel must ensure the origination of NOTAM D concerning changes to air traffic services and capabilities, for which they are responsible.

### 5-5-2. CHANGES TO PUBLISHED SERVICES

a. The party that issues the NOTAM is responsible for formatting the information correctly.

**b.** Originate a NOTAM for conditions pertaining to the following conditions:

**1.** Commissioning, decommissioning, or outage of TWRs, APPs, RAPCONs, FSSs, and ARTCCs that are part of the NAS.

**2.** Hazardous In flight Weather Advisory Service (HIWAS). HIWAS is considered a service because it is broadcast and not a two-way communication system.

(a) Outage of HIWAS service outlets must be advertised as a separate NOTAM for each outlet.

- (b) Commissioning or non-availability of a new HIWAS outlet.
- 3. Automatic Terminal Information Service (ATIS).

4. Automatic Flight Information Service.

**5.** Automated Universal Communication (AUNICOM). AUNICOMs have portions that are automatically broadcast along with the voice recordings. When these functions are unserviceable or not available, issue a NOTAM.

### 5-5-3. HOURS OF OPERATION

Disseminate the following conditions as NOTAMs:

**a.** Change in the hours of operation of an air traffic control facility or service. Tower hours of operation use the airport as the location identifier; for approach controls, since they cover a larger area, use the associated ARTCC(s). Approach controls located within multiple ARTCC airspace must have a separate NOTAM for each ARTCC. When needed, add which class of services is not available and whom to contact.

**b.** Establishment of a temporary air traffic control tower. Specify the frequency(ies) to be used and, if necessary, the type of service provided with each frequency.

**c.** At times, air traffic facilities temporarily extend their hours of operation. When this occurs, substitute "OPN" as the condition and include, if requested, the available services "CLASS X SERVICE AVBL" as shown in the examples.

**d.** Total failure of an air traffic facility (for example, loss of communications, NAVAID monitoring, etc.). Provide the class of service that are not available; the class of services to expect, and, if needed, who to contact for services.

1. Air Route Traffic Control Centers (ARTCC).

2. Approach control.

**3.** Flight service stations. FSS covering a large Flight Plan Area use the ARTCC as the location identifier; for FSS with a small Flight Plan Area use the airport as the location identifier. Flight Plan Areas located within multiple ARTCC airspace must have a separate NOTAM for each ARTCC.

(a) Covering a large Flight Plan area

- (b) Covering a small Flight Plan area of 5 NM or less.
- (c) Flight Plan area covering 2 or more centers

**4.** Air traffic control towers.

e. Traffic Management Program Alerts.

**1.** When requested by the associated arrival ARTCC TMU, issue an alerting NOTAM for each airport where an arrival/departure reservation is required. NOTAMs should be in the self-canceling format whenever possible.

2. When a flow control message (for example, arrival delays, ground stops, ground delays, airborne holding, etc.) is received from the Air Traffic Control System Command Center (ATCSCC), the tie–in FSS for the affected airport(s) must issue a NOTAM(s) in the self–canceling format.

### 5-5-4. WEATHER AND WEATHER REPORTING EQUIPMENT

**a.** Technical Operations personnel, responsible for system monitoring, must ensure the origination of NOTAMs on the Federal Automated Weather Observation System (AWOS) as follows:

1. Total system failure (which includes date-time code failures).

**2.** Altimeter setting is reported as "missing." AWOS weather reports will be disseminated with missing report elements including altimeter settings. The letter "M" will appear on the operator's terminal in place of any missing elements. No report will be disseminated when there is a total system failure.

3. Inaccurate/unreliable sensor readings.

**4.** When malfunctions or discrepancies are reported to a facility, they must be verified by any of the following methods:

(a) A certified observer, airport manager, or fixed base operator at the observation site.

(b) Reports regarding a given observation by two pilots within 2 miles of the airport prior to the observation.

(c) Technical operations personnel.

**5.** When verified, issue a NOTAM and notify the responsible technical operations office of the discrepancy, unless they reported the outage. If notified of system failure or other irregularity by other than a technical operations office that cannot be verified by the methods given above, forward the information to technical operations office for resolution. Accept NOTAM cancellation information only from the responsible technical operations office.

6. Disseminate the following conditions as NOTAM:

(a) Commissioning or decommissioning of weather reporting. When commissioning an automated system that has a frequency/telephone number, include that information in the NOTAM and specify the system nomenclature.

(b) When reporting a failure or unavailability of weather reporting, do not specify the system nomenclature.

(c) AWOS unreliable/inaccurate elements.

(d) The broadcast frequency of the AWOS is inoperative or returned to service.

**b.** Flight Service must accept NOTAM information on Automated Surface Observing System (ASOS) only from the NWS Weather Forecast Office. The person on duty, Meteorologist in Charge or Lead Forecaster, at the NWS Weather Forecast Office is responsible for requesting NOTAMs to be issued regarding ASOS system malfunctions. When malfunctions or discrepancies of an ASOS system are reported to a facility, they are reported to the NWS Weather Forecast Office. ASOS NOTAMs do not get issued using the same criteria as the AWOS systems, as they (ASOS) are monitored and maintained by the NWS and not the FAA. Accept NOTAM information on ASOS only from the NWS Weather Forecast Office, when the following conditions are reported. Accept ASOS NOTAM cancellation information only from the NWS Weather Forecast Office.

**1.** The entire ASOS observation is missing and no backup observation is available for long–line dissemination.

2. The altimeter setting is missing and is not backed–up.

**3.** The date/time group is erroneous and has not been corrected.

**c.** Juneau Airport Wind Service is a wind warning system which provides turbulence alerts based on real-time wind information from anemometers and wind profilers around hazardous terrain.

## 5-5-5. MICROBURST/WINDSHEAR DETECTION SYSTEM

Technical Operations personnel must ensure the origination of NOTAM D concerning microburst/windshear detection systems, such as low-level windshear alert system, Terminal Doppler Weather Radar and weather system processor.

## 5-5-6. RADAR SERVICES

The Technical Operations personnel must ensure the origination of NOTAM D concerning radar outages. List the service restrictions with reference to the nearest NAVAID.

**a.** Radar services for terminal facilities are described using the following terminology. Location identifiers used for the issuance of NOTAMs for terminal facilities must be the airport identifier.

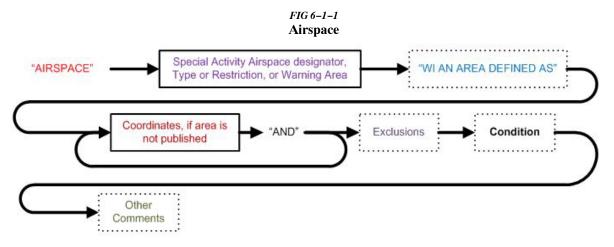
TBL 5-5-1		
<b>Types of Radar</b>		

SSR	SMR	TAR
(secondary surveillance radar)	(surface movement radar)	(terminal area surveillance radar)
GCA	PAR	PRECISION RWY MNT
(ground control approach)	(precision approach radar)	No contraction

**b.** The contraction phrase "RADAR SERVICE" must not be used. When describing the radar service, do not use the model number.

## Chapter 6. Airspace NOTAMs Section 1. Airspace

## 6-1-1. AIRSPACE NOTAM FORMAT



...AIRSPACE CRYPT NORTH MOA AND REVEILLE MOA ACT 5000FT-16000FT...

a. NOTAMs originated for Airspace items will be formatted following 4–2–1 b 1–2, including:

- 1. Location identifier may be AP, NAVAID, or ARTCC depending on NOTAM.
- 2. Keyword "AIRSPACE."
- **3.** Description of activity, if needed.

**4.** Description of area impacted; for example, the name of a published area, an airport, a nautical mile radius of a latitude/longitude, NAVAID or fix-radial-distance from a VOR-type NAVAID, or an area defined by latitude/longitude or NAVAID. When applicable, preface the description with this standard phrase: "WI AN AREA DEFINED AS..."

**5.** Plain Language location, when using all latitude/longitude. In parentheses, specify using nautical miles...direction...airport (5NM E IAD), or F/R/D from the nearest NAVAID.

- 6. Condition.
- 7. Lower limit/upper limit; for example, 5000FT-16000FT (as specified in 4-2-1).
- 8. Remarks (when needed). Other operational information.
  - (a) When identifying the expected height of a balloon trajectory, express it in FT, 150000FT.
  - (b) Identifying the frequency transmitting on is an acceptable remark.
  - (c) Certificate of Authority, when requested by the proponent.
- **9.** Follow 4–2–1 b 13–14 to complete the NOTAM.

**b.** If the area impacts more than one ARTCC, originate a NOTAM for each ARTCC.

## 6-1-2. SPECIAL ACTIVITY AIRSPACE (SAA)

A NOTAM must be entered through Special Use Airspace Management System to activate permanent or temporary special use airspace if activated by NOTAM only or at other than published times for those SAA that contain a NOTAM provision in their legal description, under the appropriate ARTCC(s):

**a.** SAA, for the purpose of this manual, includes Special Use Airspace (SUA) (restricted area, military operations area (MOA), warning area, and alert area airspace), instrument and visual military training routes, aerial refueling tracks and anchors.

1. A NOTAM must be in effect to activate SAA at other than published or charted times for those areas that contain a NOTAM provision ("BY NOTAM," "INTERMITTENT BY NOTAM," or "OTHER TIMES BY NOTAM") in their times of use legal description per FAA Order 7400.8, Special Use Airspace, Flight Information Publications, and related Government charting products, or if that SAA can only be activated by NOTAM. A NOTAM must not be used to make other changes to the charted lateral dimensions or which would exceed the lower or upper published altitude limits.

**2.** NOTAMs for SAA activation and cancellation for uncharted and unpublished times must be originated by the appropriate controlling agency, with the overlying ARTCC as the location identifier, using the appropriate accountability of SUAE, SUAC and SUAW, corresponding to the FAA service areas, east, central and west, respectively.

**b.** Issue the NOTAM in the format described in 6–1–1 above using the following items:

Accountability = SUA (E, C, W) Location identifier = ARTCC Condition = "ACT" (active)

**c.** Lights Out/Night Vision Goggle Operations in MOAs. Upon notification of a lights out/ Night Vision Goggle operation in an authorized MOA (as listed in FAA exemption 7960 and FAA exemption 3946), issue a NOTAM containing the description of activity information.

**d.** SUA NOTAMs are originated by the controlling agency, utilizing the SUA Management System. The type of activity included does not restrict movement into or out of the airspace. TFRs restrict movement. This is an advisory about unusual activity within the airspace. Do not use this to report increased flight movement.

## 6-1-3. AIRSPACE AND ALTITUDE RESERVATIONS

**a.** Central Altitude Reservation Function (CARF) airspace and altitude reservation NOTAMs must be transmitted by the USNOF, after receipt of the candidate NOTAM from the CARF office. The information will be stored in the NS database and available for request/reply. If the altitude reservation affects international airspace, it will be sent and stored as an international NOTAM.

**b.** Issue the NOTAM in the format described in 6–1–1 above using the following items:

1. Accountability = CARF Location identifier = ARTCC

2. Description of Activity = STNR ALT RESERVATION

c. Airspace and Altitude reservation involving a single ARTCC.

**d.** Missile firing and offshore airspace reservations. ARTCCs must issue as a NOTAM missile firing exercises and offshore airspace reservations. These NOTAMs must be transmitted as an international NOTAM to the USNOF.

## 6-1-4. SPECIAL AERIAL REFUELING

**a.** Where published tracks/anchors are inadequate for special mission/sortie, special track/anchor may be established. Special tracks/anchors must not be published in the DOD Flight Information Publications (FLIP) Planning document but may be described in Letters of Agreement.

**b.** NOTAM Ds will be used for special refueling tracks/anchors outside Class A airspace so as to define the refueling area as specifically as mission security will allow.

**c.** Issue the NOTAM in the format described in 6–1–1a above with:

1. Description of Activity = SPECIAL AERIAL REFUELING TRACK/ANCHOR

#### **2.** Condition = "ACT"

#### REFERENCE-

FAAO JO 7610.4, Special Operations, Para 10–6–6, Special Exercises, and para 10–6–7, Issue NOTAM

## 6-1-5. OTHER AIRSPACE NOTAMS

With the exception of hot air balloons and commercial space launches and reentries, FAA Authorization will consist of an approved waiver/authorization to 14 CFR Part 101.

#### NOTE-

14 CFR part 91 applies to hot air balloons

**a.** Upon receipt of appropriate notification/authorization, but not more than 7 days prior to the event, originate an AIRSPACE NOTAM using the format described in 6–1–1a above.

- **1.** Location Identifier =
  - (a) The nearest public use airport when the full activity is completely within a 5 NM Radius of the airport.

(b) The nearest VOR when any of the activity is more than 5 NM from the nearest public use airport but completely within 25 NM Radius of a VOR

(c) When the activity doesn't fall within either (a) or (b), use the ARTCC.

**2.** Description of activity = see table 6-1-1 for general types of activity.

#### TBL 6-1-1 Types of Activity

AIRSHOW ACFT	AEROBATIC AREA	РЈЕ
		(parachute jumping)
DEMONSTRATION ACFT	HOT AIR BALLOON	UNMANNED FREE
		BALLOON
UNMANNED ROCKET	UAS	GLD
	(unmanned aircraft system)	
HANG GLD	LGT OUT TRG	BALLOON LDG
	(lights-out training)	
PYROTECHNIC	BLASTING	CONTROLLED BURN
DEMONSTRATION		
(fireworks)		
AEROBATIC ACFT	SPACE LAUNCH	SPACE REENTRY

#### NOTE-

Unmanned rocket activities that will require airspace management such as Temporary Flight Restrictions will require the issuance of an FDC NOTAM.

**b.** Controlled Firing Area (CFA) does not require a NOTAM as the activity is suspended immediately when a nonparticipating aircraft approaches the area.

#### REFERENCE-

FAA Order 7400.2, Procedures for Handling Airspace Matters.

**c.** For unmanned free balloons the forecasted trajectory and cruising altitude or UNL (unlimited). For operations above FL999/UNL, place expected altitude in remarks. Include a landing area NOTAM, if requested by proponent.

(Pointer NOTAM)

... SEE MTU 12/045 UNMANNED ROCKET...

**d.** Authorizations and/or Air Traffic notifications are required by the proponent for the following activities; ensure the NOTAM Originator is aware of this. The information is not released in the NOTAM.

- 1. Airshows, Demonstrations, Aerobatic Areas.
- 2. Unmanned Aircraft Operations.
- 3. Parachute Jumping/Sky Diving

## 6-1-6. SURFACE AREA AIRSPACE

Originate an AIRSPACE NOTAM using the format described in 6–1–1a above.

**a.** A NOTAM D may be originated for permanent changes to part time surface area hours of operation only, under the following conditions:

1. The change in the surface area hours of operation is due to other than seasonal daylight time changes.

**2.** Only those surface areas identified as part time in the airspace section of the U.S. Chart Supplement as part time are subject to change by NOTAM. A continuous surface area "hours of operation" is changed only through rulemaking action.

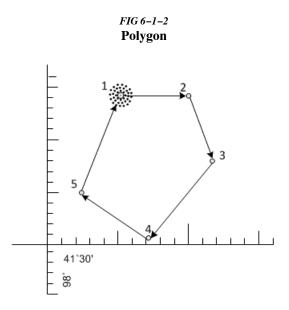
**3.** The change in the surface area hours of operation will thereafter be continuously published in the U.S. Flight Information Publication U.S. Chart Supplement, Chart Supplement Alaska, or the Chart Supplement Pacific.

**b.** For temporary changes to published part time surface area hours of operation, issue a Services NOTAM (SVC) in accordance with Paragraph 5–5–3, Hours of Operation. Do not issue an Airspace NOTAM.

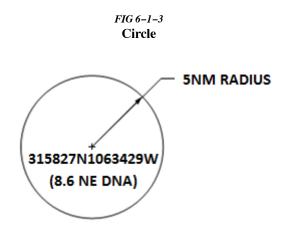
## 6-1-7. AREA IMPACTED TABLES

The graphs below depict the commonly used airspace areas.

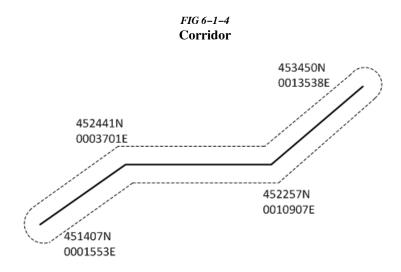
**a.** Polygon. Points defining lateral limits of an area must be enumerated in clockwise order. The last and the first points of the list must be the same (TO POINT OF ORIGIN). Latitude/longitude must be followed by plain language location between parentheses.



**b.** Circle. Define a circular shape as "WI AN AREA DEFINED AS XNM RADIUS" followed by the location of the center of the circle



**c.** Corridor. A corridor is a type of polygon defined by a line between points and a lateral distance on either side of the line. The lateral limits are at the end points connected by arcs of circle.



# Chapter 7. FDC NOTAMs

## Section 1. Transmitting FDC NOTAM Data

## 7-1-1. GENERAL

FDC NOTAMs refer to information that is normally regulatory in nature and includes, but is not limited to, the following:

- a. Interim IFR flight procedures.
  - 1. Air traffic service route changes.

2. Instrument flight procedure changes to include special instrument flight procedures, Standard Instrument Approach Procedures (SIAP), textual and graphic Obstacle Departure Procedures (ODP), Standard Instrument Departures (SID), and Standard Terminal Arrivals (STAR). Refer to FAA Order 8260.19, Flight Procedures and Airspace, for policy guidance and procedures for the issuance, tracking, and cancellation of FDC NOTAMs relating to instrument flight procedures.

**3.** Airspace changes in general. For FDC NOTAMs that are generated due to unforeseen events, use keyword/title "AIRSPACE...NOTICE".

b. Temporary flight restrictions.

- 1. Disaster/hazard areas.
- 2. Aerial Demonstrations.
- 3. Hijacking.
- 4. Flight restrictions in the proximity of the President and other parties.

#### NOTE-

Presidential aircraft includes the aircraft and the entourage of the President, the Vice President, or other public figures designated by the White House.

#### REFERENCE-

FAAO JO 7210.3, Chapter 5, Section 1. Presidential Aircraft

- c. 14 CFR Part 139 certificated airport condition changes.
- d. Air defense emergencies.
- e. Emergency flight rules
- **f.** Substitute airway routes.
- g. Special data.
- h. U.S. Government charting corrections
- **i.** Laser activity.

### 7-1-2. TEMPORARY OR PERMANENT FDC NOTAMS

**a.** Instrument flight procedure FDC NOTAMs may, at the direction of the Aeronautical Information Services and Flight Inspection Services Group personnel, be used for either temporary or permanent conditions.

**b.** NOTAMS for temporary conditions must be identified by the addition of "EST" following the expiration date/time group. NOTAMs for permanent conditions must be identified by inserting "PERM" in lieu of an expiration date/time group.

**c.** FDC NOTAMs of a permanent nature, relating to instrument approach and obstacle departure procedures and airways, must remain current until published in the Terminal Procedures Publication or applicable en route chart.

## 7-1-3. INSTRUMENT IFR FLIGHT PROCEDURES

**a.** Instrument Flight Procedure (IFP) NOTAMs. Changes to IFPs that have been charted and distributed, are processed as FDC NOTAMs and issued through the NS. Procedural NOTAMS are originated by FAA Flight Operations and FAA Flight Inspection and Procedures personnel. When these revisions cannot be published in advance of their effective date, the NOTAM is transmitted as an FDC NOTAM. The applicable keyword (ODP, SID, STAR, CHART, DATA, IAP, VFP, ROUTE, or SPECIAL) will be included immediately following the location identifier designator.

### NOTE-

### The USNOF is responsible for Quality Control on Interim IFR Flight Procedure NOTAMs.

**1.** Procedural minimums must not be lowered by NOTAM unless fully justified as a safety of flight issue or after returning the minimums to their previously published level at the end of the NOTAM.

**2.** Both temporary and permanent conditions may be promulgated via an FDC NOTAM at the direction of AIS.

**b.** Temporary conditions. NOTAMS for temporary conditions whose expiration time is uncertain and approximate, must be identified by the addition of "EST" following the NOTAM date/time group. The "EST" suffix may be used with all IFP T–NOTAMs.

**1.** When it is known that the condition requiring a NOTAM will be effective for more than four chart cycles (224 days), a procedure amendment [revised 8260–series form] or permanent NOTAM must be submitted as soon as possible to allow publication of the change within the 224–day timeframe.

2. When the timeframe for temporary conditions requiring NOTAM action is unknown or cannot be determined and the condition is beyond the control of the NOTAM issuing authority; e.g., airport construction, NAVAID restrictions, temporary obstructions, etc., the NOTAM issuing authority will ensure the line of business (LOB) approving the temporary condition is advised (copy the Flight Technologies and Procedures Division, AFS-400) of the procedural impact and the necessity of reconciling the condition as soon as possible so the temporary NOTAM can be canceled within the 224–day timeframe.

**3.** If the condition cannot be corrected within 224 days, the NOTAM issuing authority must obtain Flight Standards approval from AFS-400 for the NOTAM to remain in effect beyond the 224-day limitation. *It is important that NOTAMs not be allowed to remain active for excessive periods of time; therefore, an FDC IFP NOTAM must not be canceled and re-issued without Flight Standards approval.* 

#### NOTE-

Requests for Flight Standards approval must be coordinated with AFS-400 as soon as the requirement is known. For example, it is known that a temporary crane affecting an IFP(s) will be in place for 10 months as soon as it is erected; therefore, forward the approval request for extension immediately.

**c.** Permanent conditions. When the condition requiring NOTAM action is known to be permanent or is expected to be effective for more than four charting cycles (224 days), a permanent NOTAM is used to promulgate amended SIAPs and textual ODPs as well as correction information for U.S. Government aeronautical charts.

1. Identify permanent NOTAMs by inserting "PERM," meaning the condition is permanent, instead of an actual date/time group. Procedural amendments may be charted from the permanent NOTAM information and may also be used as a substitute for the abbreviated amendment process within the limitations specified in Order 8260.19.

2. IFP permanent NOTAMs contain information that is complete for charting purposes and are promulgated in the bi–weekly Transmittal Letter (TL) with a specified procedure amendment date that is coincidental with an international Aeronautical Information Regulation and Control (AIRAC) charting date.

**3.** Permanent NOTAMs may only be used for SIAPs, textual ODPs, and to correct U.S. Government charting printing and compilation errors. Permanent NOTAMs must *not* be used for changes to Special IFPs, ATS routes, graphic ODPs, SIDs, and STARs.

**4.** Permanent NOTAMs may be used to amend procedures without a complete review of the procedure. The amendment will be indicated by an alphanumeric identifier; e.g., Orig–A, Amdt 3B, Amdt 4C, etc.

**5.** Only one procedure may be addressed per Permanent NOTAM except that a single P NOTAM may be used for ILS CAT I/II/III and SA CAT I/II procedures to the same runway. A single Permanent NOTAM may also address multiple procedures at a single location when correcting a common printing error on U.S. Government charts.

**6.** A hard/electronic copy of each Permanent NOTAM must be stored with the current amendment and maintained with the procedure filed by AIS specialists.

7. Permanent NOTAMs must not be used for RNAV/database driven procedures when the change(s) will affect waypoint coordinates, course (track), distances, or bearings.

**8.** The Permanent NOTAM originator must coordinate a procedure amendment date with AIS for inclusion in the Transmittal Letter. This will ensure that all charting agencies publish the amended procedure on the same AIRAC chart cycle and with the same procedure amendment date.

**9.** Each AIRAC cycle is limited to no more than 150 Permanent NOTAMs, except for Flight Standards directed safety initiatives or national implementation processes. Whenever the 150 P NOTAM limit must be exceeded, AIS is responsible for coordinating with other charting agencies; e.g., Jeppesen, LIDO, etc., to ensure they can accommodate the necessary changes on the required AIRAC date.

10. Permanent NOTAMs must be canceled when the applicable procedural change has been published.

**11.** When a Permanent NOTAM is originated to permanently amend a SIAP or textual ODP, "PERM" must be inserted as the expiration date in lieu of a 10-digit date-time group. The NOTAM originator is responsible for cancelling the NOTAM upon publication.

12. A NOTAM will auto-expire at the expiration DTG unless "PERM" is used.

### d. NOTAM Procedures:

The applicable keyword (ODP, SID, STAR, CHART, DATA, IAP, VFP, ROUTE, DVA, or SPECIAL) will be included immediately following the location identifier designator.

1. Standard instrument approach procedure and special instrument flight procedure format:

(a) For SIDs and STARs serving multiple airports, a separate FDC NOTAM must be prepared for each airport affected by the procedure. Permanent NOTAMs must not be used as a source to effect charting changes for these procedures. Procedural NOTAMS are originated by FAA Flight Operations and FAA Flight Inspection and Procedures personnel and are transmitted to the NS. When these revisions cannot be published in advance of their effective date, the NOTAM is transmitted as an FDC NOTAM.

(b) Permanent procedural changes to graphic ODPs and SIDs must be made via a new or amended 8260–15 series form [see 8260–17 series forms for STARs] within 224 days of the issuance of the associated NOTAM.

**2.** Form 8260–17.1, Standard Terminal Arrival [and Form 8260–17.2, STAR (Data Record) for RNAV STARs] must be submitted for permanent charting changes. NOTAMs on STARs must not exceed 224 days [see paragraph 2–6–3.a].

**e. Instrument Flight Procedure NOTAMs.** A complete review and a new amendment are the preferred methodology for permanent procedure changes, particularly when applying new or revised Order 8260.3 criteria. However, it is recognized that this may not always be possible due to time constraints, workload, staffing level, etc. Abbreviated 8260–series forms and/or Permanent NOTAMs have proven to be an effective means of updating aeronautical charts and amending instrument flight procedures within the following guidelines:

1. Whenever the need for a NOTAM to a procedure arises, AIS, or the non-FAA service provider must review the procedure and ascertain that there is no other safety of flight changes required. If a Permanent NOTAM is required to amend a SIAP or textual ODP for safety reasons, other items may be included in the NOTAM to simultaneously update procedure charts.

**2.** Procedural minimums must not be lowered by NOTAM except when returning minimums to their previously published level at the end of a temporary condition. Refer to Order 8260.19, *Flight Procedures and Airspace*, chapter 8, for conditions pertaining to IFP NOTAMs when amending an instrument flight procedure.

**3.** Exercise caution in initiating or adding a NOTAM to a procedure when there is already a current NOTAM in effect for the procedure. In many cases close follow–up action, including canceling and reissuing NOTAMs, will be necessary to ensure there is no confusion for pilots and chart producers. All FDC NOTAMs must be issued against the *currently published* procedure.

**4.** When a NOTAM D is issued closing an airport permanently, an FDC NOTAM need not be issued denying use of an IFP. A routine procedure cancellation should be processed.

**5.** When a NOTAM D is issued to shut down a facility permanently, only routine cancellations of procedures predicated on that facility are required. FDC NOTAMs may be required for other procedures supported by the affected facility.

**6.** When a NOTAM D is issued closing a runway, an FDC NOTAM need not be issued denying approach or departure minimums to that runway. If the closing is permanent, routine procedure cancellations, including takeoff/departure procedures, must be processed immediately.

7. When a NOTAM D is issued for a facility shutdown or outage, an FDC NOTAM denying IFP use is not required for those IFPs using only that facility. However, other IFPs in the vicinity must be reviewed to determine if that facility supports courses or fixes; in such cases, those IFPs require an FDC NOTAM. Particular attention must be given to fixes supporting stepdown minimums and missed approach procedures, which are predicated on the out of service facility. It is not necessary to issue NOTAMs for fixes and terminal route segments that are related to unusable airway segments from the subject facility. Do not issue "Radar Required" NOTAMs on unusable or restricted ATS route segments. Also, see Order 8260.19, paragraph 4-3-3, for ILS CAT II/III NOTAM restrictions.

**8.** When a NOTAM D removes a localizer from service, the ILS approach is unusable. If the glide slope (GS) is out, the precision approach is unusable. If other ILS components are out, the inoperative table applies. In these instances, an FDC NOTAM for the ILS approach is not required.

**9.** When Final Approach Segment (FAS) data problems are reported and LPV minimums must be restricted, also restrict use of the WAAS VNAV. The NOTAM must read: "LPV MINIMUMS AND WAAS VNAV NA." *NOTE-*

Some avionics use the LPV FAS data information to establish the glideslope for the LNAV/VNAV. Baro VNAV is not affected.

**f. Chart correction NOTAMs.** FDC NOTAMs to correct U.S. Government chart printing or compilation errors are issued by AIS. If the NOTAM is used to correct an IFP, specify the location identifier of the airport affected by the procedure, the full procedure title and amendment number (if applicable). If the NOTAM is used to correct a chart; e.g., VFR sectional chart, IFR enroute chart, etc., use "FDC" as the location identifier. The first word in the NOTAM text should be "correct."

**g. RNAV substitution.** Properly equipped aircraft may substitute RNAV systems for inoperative ground NAVAIDs; however, RNAV systems must not be substituted for NAVAIDs providing final approach course guidance on instrument approach procedures.

1. When the use of an instrument approach procedure, departure procedure (SID or ODP), or STAR is restricted or prohibited by NOTAM because of a NAVAID (VOR, TACAN, NDB, compass locator, or DME) outage, the NOTAM does not apply to aircraft equipped with suitable global positioning system (GPS) RNAV. For clarification, state the reason for the restriction in the text of the procedural FDC NOTAM.

**2.** In certain circumstances, AFS-400 may determine that the use of RNAV systems that utilize DME/DME/inertial reference unit (IRU) inputs should be allowed [see Order 8260.19, paragraph 4–6–9, for additional information/requirements]. In these instances, AFS-400 will advise AIS by e-mail or memorandum to insert the phrase "OR DME/DME/IRU" after "SUITABLE RNAV SYSTEM WITH GPS." Include in the NOTAM any required DME facilities, as provided by AFS-400 to support DME/DME/IRU operations.

**h.** Air Traffic Service Route NOTAMs. Under 14 CFR Part 71.13, the term "ATS route" refers to a variety of routes, including airways, jet routes, and RNAV routes. When a restriction or a change to an ATS route requires a NOTAM, AIS must prepare and forward an FDC T–NOTAM following the procedures in paragraph 7–1–3. b.

**1.** ATS Route changes involving a single state and one or more ARTCCs must be issued with the ARTCC identifier followed by the two-letter state code. The two-letter state code must also follow all NAVAID and fix designators.

**2.** If the ATS Route NOTAM affects one, two, or three ARTCCs and multiple states, issue a separate NOTAM for each affected ARTCC. Do not include two–letter state codes if more than one state is involved.

3. If the NOTAM affects four or more ARTCCs, send one NOTAM using "FDC" as the facility identifier.

**4.** If the restriction will exceed the 224–day time limit, a procedure amendment (revised 8250–series form or permanent NOTAM) must be submitted as soon as possible to allow publication of the change within the 224–day timeframe.

**i. FDC NOTAMs for Special Instrument Approach Procedures (Specials).** FDC Temporary NOTAMs may also be used to promulgate safety of flight information relating to Specials provided the location has a valid landing area identifier and is serviced by the NS.

**1.** If the Special is maintained by AIS or a non–FAA service provider and the location is in the NS, then procedures for NOTAM processing will be similar to the procedures used for public, 14 CFR part 97 instrument approach procedures. When preparing the NOTAM for submission, include the keyword "Special" immediately following the three or four character location identifier. (!FDC PAJN SPECIAL)

**2.** AIS/non-FAA service providers will notify the Regional NextGen Branch (RNGB) as soon as practicable when a NOTAM has been issued.

#### NOTE-

For AIS maintained procedures, after duty hours, contact the stand-by AIS representative at (405) 954 8260.

**3.** If the Special procedure location is not in the NS, whoever is responsible for maintaining the procedure will notify the applicable RNGB of the change/outage. The RNGB must contact the user(s) of the procedure to disseminate appropriate action; (e.g., NA the procedure, raise applicable minimums, etc.)

**4.** Non-FAA service providers must notify Flight Inspection Services of the change/outage if flight inspection is responsible for conducting flight inspection/validation activities.

#### j. NOTAM content.

**1.** FDC SIAP and textual departure NOTAMs must identify the procedure being amended and the current amendment number. NOTAMs for graphic ODPs, SIDs, and STARs must reflect the current procedure identification, including number. The NOTAM must be as concise as possible.

2. The issuing authority must prepare the NOTAM using plain language text and those contractions found in Order JO 7340.2 and those contractions and abbreviations used on IFP charts. Specialists must keep in mind that the NOTAM is directed to the pilot, and should be worded so that the intended change will not be misinterpreted. Avoid the use of internal cartographic instructions that have no meaning to pilots. Spell out NAVAID names in clear text followed by the identifier. If it appears that the NOTAM length will exceed 20 lines, call the USNOF at (888)–876–6826 for assistance and guidance.

**3.** For temporary obstructions, include the type, elevation, distance, and direction from the airport or runway threshold, as appropriate, as the last line of the NOTAM text. Do not preface this information with "Chart"

**4.** Include a reason for the NOTAM following the NOTAM text. This information will not be transmitted as a part of the NOTAM text, but will inform the NFDC and the USNOF of the basis for the NOTAM. It will also ensure the data is retained in the NOTAM historical files.

## 7-1-4. HIGH BAROMETRIC PRESSURE WARNING

When requested by a Flight Standards District office, the USNOF will ensure an FDC NOTAM is issued.

**REFERENCE –** 14 CFR Part 91.144 and FAAO 7110.10, Flight Services, Chapter 4

## 7-1-5. TEMPORARY FLIGHT RESTRICTIONS

**a.** Through system interface, the NOTAM requestor must forward the NOTAM information directly to the USNOF for FDC NOTAM issuance and to the FSS nearest the incident site for coordination purposes. The NS disseminates FDC NOTAMs, and the FSS must act as "coordination facility" for preflight briefings for the ARTCC. The NOTAM must follow 4-2-1 b 1-2, including

1. ARTCC designator/location (mandatory) followed by the state(s) abbreviation; for example: ZDC VA.

2. Keyword "AIRSPACE."

**3.** City/Location(s), State(s) for each area; for example: Detroit, MI Ann Arbor, MI..; Beale AFB, CA..; Libby AAF, AZ..; Hibbing, MN..; Fargo, ND.

4. Description of activity: "TEMPORARY FLIGHT RESTRICTIONS."

**5.** Plain language effective date; for example, February 26, 2014 LOCAL (applicable to 14 CFR Sections 91.141 and 99.7 only).

**6.** The phrase "PURSUANT TO TITLE 14 CFR SECTION 9X.XXX...(the appropriate paragraph and sub-paragraph number) (plain language text, as needed). Include the phrase "PURSUANT TO 49 USC (section)..." as required for 14 CFR Sections 91.141 and 99.7 only.

7. Description of area or areas impacted; each area will contain:

(a) Stated as "WI AN AREA DEFINED AS..." and if appropriate "...TO POINT OF ORIGIN." The area is defined as a nautical mile radius of a latitude/longitude, or an area defined by latitude/longitude or fixes. As necessary, include an alternate description as a fix/radial/distance in parentheses, to help clarify the location. For example, X (alt X) TO Y (alt Y) TO Z (alt Z).

(b) Lower limit then upper limit, or height, (when needed). Limits must be specified, as:

(1) For SFC, or 1 to 17,999FT with the unit of measurement (AGL or MSL). 1275FT AGL, 10500FT MSL.

(2) For 18,000FT and above, express in flight levels (FL), FL180, FL250, FL850, or UNL (altitudes greater than 99,900).

(3) Heights AGL may be added, for example, SFC-450FT AGL.

(c) Schedule of individual area, if needed. For example, EFFECTIVE YY02271900 UTC (1400 LOCAL 2/27/YY) UNTIL YY02280200 UTC (2100 LOCAL 2/27/YY). If a daily (or MON WED FRI) time is required, DLY 1900–0200 (1400–2100 LOCAL).

## NOTE-

Repeat 7 (a)–(c), as necessary, for each defined area.

8. Reason or purpose (when needed).

9. The FAA coordination facility and commercial telephone number.

**10.** Remarks (when needed). Include other information that is required or considered to be important to the pilot. Do not use the 1–800–WX–BRIEF telephone number for the flight service stations.

**11.** Start of Activity/End of Validity.

**b.** Flight restrictions in the proximity of the President or other parties (14 CFR Section 91.141) or Special Security Instructions (14 CFR Section 99.7) will be issued by System Operations Services, System Operations Security, and System Operations Support Center (SOSC). Operational requirements may necessitate a change in format to Presidential and Special Security Instructions TFRs at any time.

1. Multiple areas may be specified in one NOTAM when the areas are in the same ARTCC airspace.

**2.** The requirement for one effective period per NOTAM is waived for NOTAMs advertising flight restrictions in the proximity of the President or other parties. See paragraph 4-1-1.

## 7-1-6. AIR DEFENSE EMERGENCY

When an air defense emergency is declared and Emergency Security Control of Air Traffic (ESCAT) has been implemented, an FDC NOTAM will be issued in accordance with procedures in FAA Order JO 7610.4, Special Operations, Chapter 6, Emergency Security Control of Air Traffic. NOTAMs advertising an air defense emergency must use accountability FDC, location identifier FDC, and be preceded by keyword "SECURITY."

REFERENCE-

FAAO JO 7610.4, Chapter 6, Emergency Security Control of Air Traffic (ESCAT), and Appendix 17, Emergency Security Control of Air Traffic (ESCAT).

## 7-1-7. SPECIAL DATA

When special data NOTAMs must be issued (for example, Department of State information and special air traffic programs for national security, aviation security, and law enforcement, etc.), an FDC NOTAM is issued by the USNOF using the keyword "SECURITY." Issue the NOTAM with PERM instead of a cancellation date and cancel the NOTAM only at the request of the originating office, System Operations Security.

NOTE-

See information on use of the System Operations Security KICZ Accountability/Location Code for United States International Security NOTAMs in chapter 9.

## 7-1-8. LASER LIGHT ACTIVITY

The service area office where the laser activity will occur must notify the USNOF via telephone (888) 876–6826 or email (9–AWA–NOTAMS@FAA.GOV) within 7 days of a proposed activity. Additionally, service area offices, when coordinated with their respective ATC facilities, may delegate notification responsibility. The USNOF will transmit the appropriate FDC NOTAM. If the event is canceled prior to the scheduled ending date/time, the service area office or their designee must notify the USNOF to cancel the NOTAM.

Follow 4–2–1 b 1–2, including:

- a. ARTCC designator (mandatory) followed by the state abbreviation.
- **b.** Keyword "AIRSPACE."
- c. City/state.
- **d.** Description of activity; for example, "LASER LGT ACT."
- e. Description of area impacted; describe the area using radius and latitude/longitude.
- f. Alternate description. In parentheses, specify area impacted in reference to a fix/radial/DME.
- g. Altitudes impacted. Must include lower limit and upper limit.
- **h.** Follow 4–2–1 b 11–14 to complete the NOTAM.

## Section 2. Cancellation/Expiration

## 7-2-1. FDC NOTAM EXPIRATION/CANCELLATION

**a.** The FDC NOTAM originator is responsible for canceling FDC NOTAM prior to end of validity; otherwise, the NOTAM cancellation is automatically processed.

**b.** When a new FDC NOTAM is issued to correct or in any way change a previously issued FDC NOTAM, a new NOTAM will be issued, and a separate cancellation NOTAM will be issued to cancel the old NOTAM.

## Chapter 8. International NOTAMs

## **Section 1. General Procedures**

## 8-1-1. INTERNATIONAL NOTAMs

**a.** Appendix B, International NOTAM (Q) Codes, contains the NOTAM codes used for international NOTAMs.

**b.** International NOTAM offices that provide NOTAMs to the U.S. NOTAM office are listed in ICAO DOC 7383.

**c.** International NOTAMs transmitted and received by the U.S. NOTAM Office are stored in the NS, and while current, may be retrieved by both Aeronautical Fixed Telecommunication Network subscribers and FAA facilities via request/ reply. All facilities must use their particular equipment's keyboard equivalent of the closed parenthesis or the equal symbol as appropriate.

**d.** The USNOF issues international NOTAMs concerning the GPS systems as well as certain special activity airspace for ARTCCs; that is, ARTCC and CARF altitude reservations (ALTRVs) and warning areas. Warning areas and ALTRVs are filed under the associated ARTCC ICAO location indicator (KZBW, KZHU, KZJX, KZLA, KZMA, KZNY, KZOA, KZSE, PAZA, PHZH, or TJZS). Information concerning permanent, long-term general data and selected foreign advisories are stored under KFDC location indicator. GPS information is stored under KNMH.

**e.** United States International Security NOTAMs are issued under the accountability/location identifier of "KICZ" by the USNOF, using the keyword "SECURITY" in item E) of the international NOTAM based on need by the requesting office, System Operations Security. Issue the NOTAM with PERM instead of a cancellation date and cancel the NOTAM only at the request of the originating office, System Operations Security.

## 8-1-2. INTERNATIONAL NOTAM DATA FORMAT

a. The format of international NOTAMs with set fields and information is shown in TBL 8–1–1.

Fields:								
181906	MYNNYNYX	(A0202/00)	NOTAMN	MYNN	YY11182315	YY11200200	2315- 0200 DAILY	RWY 05/23 CLSD
Explanation								
				А	В	С	D	Е
DTG of Issuance	Address of the Intl NOTAM Office	NOTAM number	Contract for a new NO- TAM	Affected Location	Effective Time	Expiration Time	Daily times	Conditions

#### *TBL 8–1–1* International NOTAM Format

#### NOTE-

NOTAMR (NOTAM replacement) and NOTAMC (NOTAM cancellation) are valid contractions and will be followed by another NOTAM number that is being replaced or canceled.

## Section 2. Procedures For Canadian NOTAMs

### 8-2-1. REQUEST FOR CANADIAN NOTAMS FROM THE CANADIAN NOTAM SYSTEM

**a.** The NS receives NOTAM data from Canada. The NS cannot confirm that they have all NOTAM data; therefore, you are urged to contact the Canadian Web site for the most current and up-to-date NOTAM data.

http://www.flightplanning.navcanada.ca

#### NOTE-

Altitude reservations will be input by Canada utilizing FIR ACCOUNTABILITIES.

TBL 8-2-1 FIRs				
EDMONTON	CZEG	GANDER	CZQX	
MONCTON	CZQM	MONTREAL	CZUL	
TORONTO	CZYZ	VANCOUVER	CZVR	
WINNIPEG	CZWG			

**b.** Canadian NOTAMs are available via the NADIN (NMR) system from the Canadian NOTAM System Computer for automated retrieval.

## **Appendix A. Examples**

Not all components of the NAS will be illustrated with an example, which are aids to support policy. The examples throughout Appendix A contain the keyword and the subject of the NOTAM. All other data is assumed from the NOTAM sentence structure and is eliminated from examples. Refer to the specific chapter for policy.

## 5-1-2. HANDLING REPORTED AERODROME CONDITIONS

5–1–2 b.

#### EXAMPLE-

!CLE CLE TWY L UNSAFE BREAKS IN ASPH YYMMDDHHMM –YYMMDDHHMM

NOTE-

As this is the first example, all elements are shown. Subsequent examples will begin with keyword and end prior to the schedule, unless it is deemed helpful for clarity.

...RWY 16/34 UNSAFE DISABLED ACFT SE END...

#### NOTE-

Only airport management can close any portion of an airport. **REFERENCE-**14 CFR Part 139

5–1–2 c.

EXAMPLE-

...(U) RWY 07/25 UNSAFE ABANDONED VEHICLE...

### 5-1-3. MOVEMENT AREA

#### 1. Aerodrome conditions

#### EXAMPLES-

...AD AP CLSD... ...AD AP CLSD TO TRANSIENT... ...AD AP CLSD EXC SKI... ...AD AP CLSD EXC 1HR PPR... ...AD AP CLSD EXC PPR MON-FRI 0330-1430 YYMMDD0330 - YYMMDD1430 ...AD AP CLSD EXC HI-WING ACFT... ...AD HLP CLSD... ...AD SEAPLANE BASE CLSD... ...AD AP OPN...

#### NOTE-

*OPN is only an acceptable condition when the airport is published as being closed. ...AD AP NOW PUBLIC...* 

NOTE-

*This airport is now open to the public as a public–use airport. …AD AP NOW PRIVATE…* 

#### NOTE-

This airport is now closed to the public and is no longer a public–use airport. The NFDC must contact the USNOF to have the airport deleted from the NOTAM tables after the NOTAM has been canceled.

#### 2. Commissioning

TBL 5–1–1 Contractions

Movement Area - Surface:		
ASPH	asphalt/tar/macadam	

CONC	concrete	
GRVL	gravel/cinders	
Movement Area - Lighting:		
LGTD	lighted	
NOT LGTD	unlighted	

#### EXAMPLES-

...RWY 01L/19R COMMISSIONED 10301FT X 150FT CONC LGTD. DECLARED DIST: RWY 01L TORA 10301FT TODA 10301FT ASDA 10301FT LDA 10301FT. RWY 19R TORA 10301FT TODA 10301FT ASDA 10301FT LDA 10301FT. .....

...TWY M8 COMMISSIONED 500FT X 75FT CONC LGTD...

#### 3. Closure of a movement area or portion thereof.

#### EXAMPLES-

...APRON ALL CLSD...

...APRON NORTH APN E 50FT CLSD...

... TWY A3, A4, A5, TWY A BTN TWY A2 AND TWY A3 CLSD...

...TWY ALL CLSD...

...TWY B, C, D, TWY P BTN TWY EL AND TWY B, TWY P BTN TWY A AND TWY ER, TWY ER BTN RWY 17C/35C AND TWY Q CLSD...

...TWY PARL TWY ADJ RWY 09/27 CLSD...

...TWY PARL TWY CLSD...

#### NOTE-

One unnamed parallel taxiway exists at this airport.

...RWY 36 CLSD...

...RWY 02 FST 1000FT CLSD EXC TAX...

#### NOTE-

The first 1000 feet for runway 02 is closed, except it is available for taxiing aircraft. This is used for single runway only. If both runways were affected, the NOTAM would state ...02/20 N 1000FT...

...RWY 06/24 CLSD EXC 1HR PPR 134.5/303-627-3001...

#### NOTE-

*Runways 06 and 24 are closed except by 1–hour prior permission from that frequency/telephone number during the times stated.* 

... APRON NORTH APN CLSD RESURFACING...

EXAMPLES-

...TWY C CLSD YYMMDDHHMM-PERM

...RWY 17/35 CLSD YYMMDDHHMM-PERM

...TWY Y BTN TWY Q AND RWY 10/28 NONMOVEMENT AREA...

#### 4. Operational limitations

#### EXAMPLE-

...RWY 18/36 CLSD TO JET...

## *NOTE-*

Runways 18 and 36 are closed to jet aircraft.

#### EXAMPLE-

...RWY 09/27 CLSD EXC ACFT MORE THAN 13500LB...

#### NOTE-

Runways 09 and 27 are closed to all aircraft weighing less than 13,500 pounds. Do not use class of aircraft when closing runways. Always use aircraft weight.

#### EXAMPLE-

...RWY 10/28 E 3800FT CLSD TO ACFT LESS THAN 12500LB...

#### NOTE-

Runways 10 and 28 east 3800 feet are closed to all aircraft weighing less than 12,500 pounds.

#### EXAMPLE-

...RWY 16/34 CLSD TO ACFT WINGSPAN MORE THAN 70FT AND TAIL HGT MORE THAN 49FT...

NOTE-

Runways 16 and 34 are closed to aircraft with a wingspan more than 70 feet and is also closed to aircraft with tail height more than 49 feet.

#### EXAMPLES-

...RWY 05 CLSD TO LDG...

...RWY 03 CLSD TO TKOF...

...RWY 08/26 CLSD TO TGL...

...RWY 01/19 CLSD EXC XNG...

#### 5. Changes to usable runway length and declared distances

#### EXAMPLES-

...RWY 19 THR DISPLACED 300FT MARKING NOT STD. DECLARED DIST: TORA 6827FT TODA 6827FT ASDA 6827FT LDA 6527FT. ....

...RWY 01 DECLARED DIST: TORA 6827FT TODA 6827FT ASDA 6527FT LDA 6527FT....

#### NOTE-

Runway 19 threshold is displaced 300 feet, therefore the Runway 19 landing LDA is shortened by 300 feet. The LDA and ASDA for Runway 1 are also shortened by 300 feet.

#### EXAMPLE-

...RWY 05/23 NE 500FT CLSD. DECLARED DIST: RWY 05 TORA 7002FT TODA 7002FT ASDA 7002FT LDA 7002FT. RWY 23 TORA 7002FT TODA 7002FT ASDA 7002FT LDA 7002FT. ...

#### NOTE-

Construction on Runway 05 requires 500 feet to be closed to protect a construction area thus changing declared distances to Runways 05 and 23.

#### EXAMPLE-

...RWY 08/26 CHANGED TO 10000FT X 150FT. DECLARED DIST: RWY 08 TORA 9000FT TODA 9500FT ADSA 9000FT LDA 9000FT. RWY 26 TORA 9000FT TODA 9000FT ASDA 9400FT LDA 10000FT....

#### 6. Change of runway identification.

#### EXAMPLE-

...RWY 13/31 CHANGED TO RWY 14/32...

#### NOTE-

Runway 13/31 is permanently changed to this new identify. If the change was temporary, NOW would have been used.

#### 7. Change of traffic pattern.

EXAMPLE-

...RWY 03L RIGHT TFC PATTERN...

#### 8. Runway Visual Range (RVR).

EXAMPLES-

...RWY 10 RVRT U/S ... ...AD AP RVR ALL U/S...

#### 9. Surface Markings and Signage

#### EXAMPLES-

...AD AP SIGNS OBSC...

...RWY 21 4000FT DIST REMAINING SIGN NOT LGTD...

...TWY U7 HLDG PSN SIGN FOR RWY 01L/19R NOT LGTD...

...TWY ALL SFC PAINTED HLDG PSN SIGNS NOT STD DUE TO REPAINTING...

...RWY 01/19 SFC MARKING NOT STD...

#### **10.** Other reportable conditions.

EXAMPLES-

...RWY 01/19 3FT SNOWBANKS ADJ...

... APRON MAIN RAMP 6FT SN PILES ADJ E SIDE...

...TWY A 3FT SNOWBANKS NORTH 500FT...

...AD AP SFC COND NOT REP...

...RWY 31C ENGINEERED MATERIAL ARST SYSTEM NOT STD...

...RWY 31C ENGINEERED MATERIAL ARST SYSTEM U/S...

...AD AP CARIBOU NEAR MOV AREAS S OF TERMINAL DLY SS-SR...

...AD AP BIRD ACT INCREASED NW SIDE...

...RWY 02R/20L S 2600FT FROST HEAVES...

...RWY 12/30 NUMEROUS 5IN CRACKS...

...RWY 01/19 SAFETY AREA BTN TWY C AND TWY B IRREGULAR SFC...

...RWY 01/19 SOFT...

#### NOTE-

Runway 01/19 is a turf runway that gets soft during the melting of snow or rainy seasons. ...RWY 06/24 W 1000FT IRREGULAR SFC 4IN DPT X 12IN WID X 24FT LEN...

#### NOTE-

In this example, the irregular surface affects the west 1000ft and is 4 inches deep, 12 inches wide and 24 feet long– within the surface itself. NOTAM format for temporary field conditions (FICON) caused by weather phenomena are covered in Paragraph 5-1-4, Reporting of Field Conditions.

### 5-1-4. FIELD CONDITIONS REPORTING

#### EXAMPLE-

!LGA LGA RWY 13 FICON 1/1/1 100 PCT WET ICE OBS AT YYMMDDHHMM. COND NOT MNT YYMMDDHHMM – YYMMDDHHMM. YYMMDDHHMM – YYMMDDHHMM

#### NOTE-

**1.** Runway 13 is the landing runway and is 95% covered by wet ice but the Runway Condition Code(RwyCC) has been upgraded to a 1 for all of the runway thirds. The field conditions are not monitored from January 4, 2017 0300UTC January 6, 2017 1045UTC. The airport operator expects to have a new NOTAM submitted by January 6, 2017 1115UTC.

**2.** This will be the only example reflecting times. All FICON NOTAMs have "OBS AT" and start of activity/end of validity times but not all have "COND NOT MNT".

**3.** The percentage of coverage described in the note after each example falls within the ranges found in TBL 5–1–4, Percent Coverage of a Contaminant.

#### EXAMPLE-

...RWY 31 FICON 25 PCT WET ICE...

#### NOTE-

Runway 31 is the landing runway and has 22% coverage of wet ice. The RwyCC is not displayed because there is  $\leq 25\%$  total surface coverage by the contaminant.

#### EXAMPLE-

...RWY 10 FICON 1/1/1 100 PCT 1/4IN DRY SN AND ICE...

#### NOTE-

Runway 10 is the landing runway and is completely covered by one-quarter inch of dry snow and ice and the RwyCC was upgraded to one for each third.

#### EXAMPLE-

...TWY C, C1, C6, TWY D BTN RWY 13/31 AND TWY C FICON 1/2IN DRY SN OVER ICE...

#### NOTE-

A number of taxiways have one half inch of dry snow over ice. The depth of the contaminant on an apron/ramp is not required when reporting the conditions of airports that are non-part 39 or not federally obligated.

#### EXAMPLE-

...RWY 16 FICON 1/1/1 75 PCT ICE...

#### NOTE-

Runway 16 is the landing runway and is 71% covered in ice. The depth of the ice is not reported.

#### EXAMPLE-

...TWY A FICON PATCHY COMPACTED SN...

#### NOTE-

Taxiway A has 25% or less coverage of compacted snow. The depth of the compacted snow is not reported. **EXAMPLE** 

## EXAMPLE-

...RWY 08 FICON 5/5/5 100 PCT 1/8IN WET SN...

#### NOTE-

Runway 08 is the landing runway and is 97% covered with one eighth inch (3mm) depth or less of wet snow.

#### EXAMPLE-

...RWY 28 FICON 3/3/3 100 PCT 2IN DRY SN OVER COMPACTED SN...

#### NOTE-

Runway 28 is the landing runway and is completely covered by two inches of dry snow over compacted snow. The depth of compacted snow is not reported.

#### EXAMPLE-

... APRON FEDEX FEEDER RAMP FICON 2IN DRY SN...

#### NOTE-

The FedEx Feeder ramp is covered by two inches of dry snow. The depth of the contaminant on an apron/ramp is not required when reporting the conditions of airports that are non-part 39 or not federally obligated.

#### EXAMPLE-

... APRON AIR CARGO APN FICON 1IN WET SN...

#### NOTE-

The Air Cargo apron has one inch of wet snow.

#### EXAMPLE-

...RWY 34 FICON 5/5/5 100 PCT WET PLOWED 50FT WID REMAINDER 4IN WET SN...

#### NOTE-

Runway 34 is the landing runway and is wider than fifty feet; the center fifty feet has been plowed leaving the plowed surface completely wet and the remaining surface outside of the plowed area is covered by 4 inches of wet snow.

#### EXAMPLE-

...RWY 01 FICON 4/4/3 25 PCT COMPACTED SN, 25 PCT COMPACTED SN, 100 PCT 8IN DRY SN SWEPT 75FT WID REMAINDER 8IN DRY SN...

#### NOTE-

Runway 01 is the landing runway and is one hundred feet wide, the center seventy five feet has been swept. The temperature is -15°C or colder. The first two thirds or the runway have 25% coverage of compacted snow. The final third of the runway is completely covered by eight inches of dry snow. The remaining area of the first two thirds of runway 01 is completely covered by eight inches of dry snow.

#### EXAMPLE-

...TWY ALL FICON DRY PLOWED 50FT WID REMAINDER 6IN DRY SN...

#### NOTE-

All taxiways are plowed 50 feet wide and are dry. The part that has not been plowed has 6 inches dry snow.

#### EXAMPLE-

...RWY 16 FICON 4/4/4 100 PCT COMPACTED SN PLOWED 75FT WID REMAINDER 1/2IN DRY SN OVER COMPACTED SN...

#### NOTE-

Runway 16 is the landing runway and is wider than seventy five feet; the center 75 feet has been plowed. The temperature is -15 °C or colder. The plowed portion is 95% covered by compacted snow. The area that has not been plowed has one half inch dry snow over compacted snow. The depth is not reported for compacted snow.

#### Snowbanks, Berms

#### EXAMPLE-

...RWY 16 FICON 3/3/3 100 PCT COMPACTED SN 12IN SNOWBANKS...

#### NOTE-

Runway 16 is the landing runway and has been plowed and swept in its entirety; therefore, neither "PLOWED" nor "SWEPT" is used. The temperature is warmer than -15°C. The runway is 100% covered with compacted snow and has 12–inch snowbanks.

#### EXAMPLE-

...RWY 33 FICON 4/4/4 100 PCT COMPACTED SN PLOWED 100FT WID 24IN BERMS...

#### NOTE-

Runway 33 is the landing runway and has been plowed 100 feet wide leaving 100% coverage of compacted snow on the runway. The temperature is -15°C or colder. The depth of the compacted snow is not reported, however 24-inch berms are also observed along the edges of the plowed area.

#### EXAMPLE-

...TWY ALL FICON WET 4FT SNOWBANKS...

#### NOTE-

All of the taxiways are wet with snowbanks reaching 4 feet in depth off the edge of the paved surface.

#### **Ice Contaminants**

#### EXAMPLE-

...RWY 01 FICON 1/2/2 100 PCT ICE, 100 PCT 1IN SLUSH, 100 PCT 1IN SLUSH...

#### NOTE-

Runway 01 is the landing runway and the first third is 92% covered with ice. The remaining two thirds are 100% covered in one inch of slush.

#### EXAMPLE-

...APRON FEDEX FEEDER RAMP FICON ICE...

#### NOTE-

The FedEx Feeder Ramp is covered with ice. The depth of ice is not reported.

#### EXAMPLE-

...RWY 25 FICON 5/5/5 75 PCT WET AND 25 PCT ICE, 100 PCT WET, 100 PCT WET...

#### NOTE-

Runway 25 is the landing runway and the first third of the runway is 71% percent wet and 21% ice covered. The remaining two thirds of the runway are completely covered by visible moisture, described as "WET."

#### Wet

#### EXAMPLE-

...RWY 10 FICON 5/5/5 100 PCT WET...

#### NOTE-

Runway 10 is the landing runway and is 100% covered by visible moisture with 1/8 inch (3mm) depth or less of water.

#### Frost

EXAMPLE-

...TWY ALL FICON FROST...

#### NOTE-

Frost is observed completely covering all taxiways.

#### **Slush Contaminants**

#### EXAMPLE-

... TWY ALL EXC TWY G FICON 3IN SLUSH...

#### NOTE-

All of the taxiways except taxiway G, are completely covered by three inches of slush. The depth of the contaminant is not required when reporting the conditions of airports that are non-part 139 or not federally obligated.

#### Drift

#### EXAMPLE-

...RWY 03R FICON 3/3/3 100 PCT 4IN DRY SN 9IN DRIFTS...

#### NOTE-

Runway 03R is the landing runway and is 95% covered with 4 inches of dry snow and 9inch snow drifts.

#### EXAMPLE-

...RWY 04 FICON 5IN DRIFTS...

#### NOTE-

Runway 04 is the landing runway and is contaminant free; however, there are five-inch snow drifts on the surface. The term DRIFTS means one or more snow drifts and is not considered a contaminant.

#### Sanded, as treatment of the surface

#### EXAMPLE-

...RWY 36 FICON 1/1/1 100 PCT ICE SANDED ...

#### NOTE-

Runway 36 is the landing runway and is 100% covered by ice and has been treated full length and width with sand. The depth of ice is not reported.

#### EXAMPLE-

...RWY 11 FICON 5/5/5 100 PCT 1/8IN DRY SN SANDED 80FT WID...

#### NOTE-

Runway 11 is wider than eighty feet, is the landing runway and is 98% covered with 1/8 inch (3mm) depth or less of dry snow and also has been treated with sand eighty feet wide.

#### Deiced, as treatment of the surface

#### EXAMPLE-

...RWY 30 FICON 5/5/5 100 PCT WET DEICED LIQUID ...

#### NOTE-

Runway 30 is the landing runway and is 91% wet and has also been treated with a liquid deicing chemical.

#### Miscellaneous (ash, mud, rubber, sand)

#### EXAMPLE-

... RWY 01R FICON 50 PCT 2IN MUD, DRY, DRY...

#### NOTE-

Runway 01R is the landing runway and the first third of the runway is 45% covered with 2 inches of mud. The remaining two thirds of the runway are contaminant free. When mud is listed as a contaminant there will be no RwyCC generated.

#### EXAMPLE-

...RWY 01L FICON 100 PCT ASH ...

#### NOTE-

Runway 01L is the landing runway and is 100% covered with volcanic ash.

#### **Slippery When Wet**

#### EXAMPLE-

...RWY 01/19 FICON 3/3/3 SLIPPERY WHEN WET...

#### NOTE-

The north 800 feet of runway 01/19 is covered by rubber. Although the rubber is only observed at the approach end of Runway 01, when rubber is on a runway surface, the entire surface is reported as slippery when wet. This is the only contaminant that is reported using both runway designators.

#### **Braking Action**

#### EXAMPLES-

...RWY 09/27 FICON BA MEDIUM TO POOR ... ...TWY AA FICON BA GOOD TO MEDIUM ... ... APRON MAIN APN FICON BA POOR ... NOTE-

This runway is a non-paved surface.

#### 5–1–5. AERODROME FACILITIES

#### a. Certified Aircraft Rescue and Fire Fighting (ARFF).

#### EXAMPLES-

...AD AP ARFF VEHICLE U/S INDEX UNCHANGED... ... AD AP ARFF NOW INDEX A...

#### NOTE-

Even though the ARFF index is now A, four or less Index B aircraft may still operate into the airport.

#### EXAMPLE-

...AD AP ARFF INDEX A NOT AVBL AND AP CLSD TO AIR CARRIER OPS...

#### b. Fuel services

#### EXAMPLES-

...AD AP 100LL FUEL NOT AVBL... ...AD AP MOBILE JET A FUEL NOT AVBL... ...AD AP HYDRANT MOGAS FUEL NOT AVBL... ...AD AP SELF SERVE 100LL FUEL NOT AVBL... ...AD AP FUEL NOT AVBL...

#### c. Custom Services

#### EXAMPLE-

...AD AP CUST PROCESSING DLA DUE TO CAPACITY, INTL CARRIERS MAY EXPERIENCE SIGNIFICANT DLA IN CLEARING CUST, CTC AP MANAGEMENT AT XXX–XXX–XXXX...

#### d. Aerodrome beacon (ABN)

#### EXAMPLES-

...AD AP ABN U/S... ...AD AP ABN NOT STD GREEN ONLY...

#### e. Wind direction equipment

#### EXAMPLES-

...AD AP WDI UNREL... ...AD AP WINDCONE LGT U/S... ...AD AP WINDCONE OBST LGT U/S... ...AD AP WINDCONE FOR RWY 17L LEFT SIDE U/S...

#### f. Airport Design Group

**EXAMPLE-**...AD AP CLSD TO ACFT WINGSPAN MORE THAN 214FT AND TAIL HGT MORE THAN 66FT...

### 5-1-6. WORK IN PROGRESS

#### EXAMPLES-

...RWY 01L/19R WIP...

... TWY E BTN RWY 05/23 AND TWY B WIP RESURFACING...

...TWY B BTN RWY 14/32 AND TWY A WIP TRENCHING ADJ EAST SIDE ...

...APRON FEDEX FEEDER RAMP W 1000FT WIP RESURFACING...

...RWY 03/21 NE 1000FT WIP LGT REPLACEMENT...

...RWY 01L/19R NE 500FT WIP MOWING ADJ...

...RWY 01L/19R SAFETY AREA WIP MAINT VEHICLES E SIDE ...

...AD AP ALL SFC WIP SN REMOVAL...

...RWY 01L/19R WIP SN REMOVAL...

...TWY D4, D5, D6, TWY B BTN RWY 13/31 AND TWY D, TWY D WEST OF RWY 05/23 WIP SN REMOVAL...

### 5–2–1. LIGHTING AIDS

a. Approach light systems (ALS). Only use the runway direction for which the equipment pertains.

**1.** When commissioning approach light systems, indicate the exact type of system; for example, MALSR, MALSF, etc.

#### EXAMPLE-

...RWY 12 MALSR COMMISSIONED...

2. Once commissioned and published, approach light systems need only be shown as ALS.

#### EXAMPLES-

...RWY 36 ALS DECOMMISSIONED...

...RWY 18 ALS U/S...

...RWY 22 CHANGE ALL REF ALSF-1 TO SSALR...

#### NOTE-

ALSF-1 is the type of approach lighting at that airport.

#### EXAMPLE-

...RWY 22 ALS U/S EXC MEDIUM INTST ON CONS...

#### b. Lead off /lead on lights. NOTAMs issued using keyword RWY

#### NOTE-

Lead off and lead on light will be the standardized verbiage for lead off/on lights, which are sometimes referred to as turnoff lights.

#### EXAMPLES-

...RWY 01C LEAD OFF LGT FOR TWY Y4 U/S... ...RWY 01C LEAD ON LGT FOR TWY Y9 OBSC...

#### c. Runway status light system.

#### EXAMPLES-

...RWY 18L RWY STATUS LGT SYSTEM U/S... ...AD AP RWY STATUS LGT SYSTEM U/S... ...RWY 18L/36R RWY STATUS LGT SYSTEM U/S...

#### 1. Runway entrance lights.

#### EXAMPLES-

...TWY ALL RWY ENTRANCE LGT FOR RWY 09L SOUTH SIDE U/S... ...TWY K5, K6, T RWY ENTRANCE LGT FOR RWY 09L U/S...

#### 2. Take-off hold lights.

#### EXAMPLE-

...RWY 28 TKOF HOLD LGT U/S...

#### d. Sequence flashing lights/runway alignment indicator lights.

#### EXAMPLES-

...RWY 18 SEQUENCED FLG LGT OBSC... ...RWY 18 RAI LGT U/S...

#### e. Visual approach lighting.

#### 1. Visual approach slope indicator (VASI).

#### EXAMPLES-

- ...RWY 05 VASI U/S...
- ...RWY 04 VASI UNUSABLE...

...RWY 13 VASI BEYOND 5DEG LEFT OF RCL UNUSABLE

...RWY 02 VASI NOW 2 BOX (TIME – TIME)...For a temporary change

...RWY 02 VASI CHANGED TO 2 BOX (YYMMDDHHMM-PERM)

...RWY 34 VASI BEYOND 3.0NM UNUSABLE ...

#### 2. Precision approach path indicator (PAPI).

#### EXAMPLES-

...RWY 01L PAPI U/S...

...RWY 01 PAPI UNUSABLE...

...RWY 10 PAPI BEYOND 5DEG LEFT OF RCL UNUSABLE...

...RWY 28 PAPI COMMISSIONED...

...RWY 30 PAPI COMMISSIONED GPA 3.15DEG...

...RWY 12 PAPI GPA CHANGED TO 3.2DEG... ...RWY 34 PAPI BEYOND 2.8NM UNUSABLE...

### 3. Runway end identifier lights.

#### EXAMPLE-

...RWY 18 RWY END ID LGT U/S...

#### 4. Threshold lights (RTHL).

EXAMPLE-

...RWY 27 RTHL U/S...

#### f. Runway edge lights (REDL).

**1.** When commissioning runway edge light systems, indicate the exact type of system; for example, LIRL, MIRL, HIRL, etc.

#### EXAMPLE-

...RWY 13/31 HIRL COMMISSIONED...

2. Once commissioned and published, runway edge lights must only be shown as REDL.

#### EXAMPLES-

...RWY 13/31 REDL U/S...

...RWY 01/19 REDL U/S EXC MEDIUM INTST ON CONS...

3. Runway lights obscured due to snow and ice.

EXAMPLE-...RWY 15/33 REDL OBSC...

NOTE-

**1.** All edge lights for runway 15/33 are completely obscured. The reason for the obscuration should not be reported.

2. Lights that are partially obscured should not be reported.

#### g. Runway centerline light (RCLL).

#### EXAMPLE-

....RWY 08R/26L RCLL U/S...

#### h. Touchdown zone lights (RTZL).

EXAMPLE-

....RWY 08R RTZL U/S...

i. Runway lead-in lighting system (RLLS).

#### EXAMPLE-

...RWY 18 RLLS U/S...

#### j. Airport lighting total power failure.

EXAMPLE-

...AD AP LGT ALL U/S...

k. Pilot-controlled lighting (PCL) frequency when it controls approach lights or runway lights.

#### EXAMPLES-

...SVC PCL ALL U/S...

...SVC PCL RWY 18/36 REDL U/S

...SVC PCL RWY 18 ALS U/S...

....SVC PCL RWY 18/36 MEDIUM/HIGH INTST U/S...

#### NOTE-

All the PCL services for runway 18/36 only have low intensity operating.

#### EXAMPLES-

... SVC PCL RWY 14/32 COMMISSIONED KEY FREQ 122.7 7 TIMES HIGH, 5 TIMES MEDIUM, 3 TIMES LOW

INTST...

...SVC PCL RWY 01/19 NOT STD KEY FREQ 122.7 5 TIMES HIGH, 3 TIMES MEDIUM, 2 TIMES LOW INTST...

NOTE-

The PCL frequency transmissions is not standard, and the new information is provided until it is back to standard. ...SVC PCL FREQ CHANGED TO 122.8...

NOTE-

PCL frequency need not be an ATC frequency.

## I. Taxiway lighting.

## 1. Taxiway edge lights.

### EXAMPLES-

...TWY K, L EDGE LGT U/S... ...TWY ALL EDGE LGT WEST OF RWY 16L/34R U/S... ...TWY ALL EDGE LGT U/S...

## NOTE-

ALL means every taxiway at an airport even if there is only a single taxiway. See Paragraph 4-2-1, NOTAM Composition.

## 2. Taxiway centerline lights.

EXAMPLE-

... TWY E CL LGT BTN TWY E1 AND RWY 15/33 U/S...

## 3. Runway guard lights. NOTAM issued using keyword TWY.

### EXAMPLES-

...TWY ALL RWY GUARD LGT U/S... ...TWY A4 RWY GUARD LGT FOR RWY 01L/19R U/S...

4. Stop bar lights. NOTAM issued using keyword TWY.

### EXAMPLE-

...TWY C STOP BAR LGT FOR RWY 16R/34L U/S...

## 5. Taxiway lights obscured due to snow and ice.

## EXAMPLES-

...TWY C EDGE LGT OBSC...

...TWY ALL LGT OBSC...

## NOTE-

**1.** OBSC can be used to describe the physical state of airport infrastructure, including signs and markings.

2. All taxiway C edge lights are completely obscured. The reason for the obscuration should not be reported.

3. Lights that are partially obscured should not be reported.

4. In this example all of the taxiways have the two types of taxiway lighting obscured.

## 5-2-2. OBSTACLES

#### EXAMPLES-

...OBST CRANE (ASN 2013–ACE–5–NRA) 345140N0804506W (1.44NM SW N52) 580FT (195FT AGL) NOT LGTD... !CLE ZOB OBST WIND TURBINE FARM WI AN AREA DEFINED AS 4NM RADIUS OF 411931N0822776W (17NM W LPR) 2820FT (410FT AGL) NOT LGTD...

...OBST TOWER LGT (ASR UNKNOWN) 420651.07N0875406.27W (12NM N PWK) 1049FT (330FT AGL) U/S... ...OBST TOWER LGT (ASR 1234567)345313.12N0815744.34W (3NM SSW SPA) 1528FT (564FT AGL) U/S... ...OBST MOORED BALLOON WI AN AREA DEFINED AS 1NM RADIUS OF SJT 2430FT (510FT AGL) FLAGGED...

## NOTE-

Moored balloons are not certified aircraft, nor operated by a certified pilot.

#### EXAMPLE-

...OBST KITE WI AN AREA DEFINED AS 1NM RADIUS OF ABQ020002 (10NM WSW ABQ) 5860FT (505FT AGL) FLAGGED...

## 5-3-6. INSTRUMENT LANDING SYSTEM (ILS) STATUS

#### EXAMPLES-

...NAV ILS RWY 08L CAT II NA... ...NAV ILS RWY 08L CAT III NA... ...NAV ILS RWY 08L CAT II/III NA... ...NAV ILS RWY 08L CAT II/III NA... ...NAV ILS RWY 22L REDUCED LGT SPECIAL AUTH CAT II AVBL...

## 5-3-7. NAVAID CONDITIONS

#### c. NOTAMs

## 6. Facility Restrictions

#### (b) Excessive snow and ice accumulation

EXAMPLE-

....NAV ILS RWY 18 GP U/S...

## (c) VOR/ TACAN/ DME/ VOT/ NDB/ DF.

## (2) [a] VOR/DME

### EXAMPLES-

...NAV VOR/DME 113.0/CH77 COMMISSIONED...

...NAV VOR/DME 020-140 BYEOND 28NM UNUSABLE...

...NAV VOR 045-060 SFC-2000FT UNUSABLE...

...NAV VOR 010-035 BEYOND 35NM SFC-2000FT UNUSABLE...

...NAV DME 010-035 BEYOND 30NM UNUSABLE...

...NAV DME 010-035 BEYOND 30NM SFC-17000FT UNUSABLE PLUS SEE CHART SUPPLEMENT...

...NAV VOR 090–180 BEYOND 25NM SFC–5000FT, 270–300 BEYOND 25NM SFC–5000FT, 300–360 BEYOND 35NM SFC–4000FT UNUSABLE...

...NAV VOR U/S...

#### NOTE-

Using "VOR U/S" means the VOR portion of the VOR/DME is out of service/unserviceable. The DME portion is still functioning.

#### EXAMPLE-

....NAV DME U/S...

#### NOTE-

A DME-only facility or the DME portion of the VOR/DME, or the DME of an NDB is unserviceable. The VOR or NDB portion is still functioning.

## (2) [b] VORTAC

#### EXAMPLES-

...NAV VORTAC 116.2/CH 109 COMMISSIONED...

....NAV VORTAC U/S...

...NAV VORTAC 010-035 BEYOND 30NM SFC-2800FT UNUSABLE ...

...NAV VOR U/S...

...NAV TACAN U/S...

#### NOTE-

When the DME portion of a VORTAC fails or is removed from service for maintenance, the TACAN and azimuth automatically becomes inoperative.

#### EXAMPLE-

....NAV TACAN AZM U/S...

## (2) [c] VOT (VOR Test Facility).

#### EXAMPLE-

....NAV VOT U/S...

## (2) [d] VOT Receiver Checkpoint.

#### EXAMPLES-

...NAV VOR AIRBORNE REC CHECKPOINT U/S... ...NAV VOR GND REC CHECKPOINT U/S... ...NAV VOR GND REC CHECKPOINT FOR TWY A U/S...

## NOTE-

There are two separate Ground Receiver Checkpoints for this airport.

## (2) [e] TVOR. (Terminal Class VOR).

### EXAMPLES-

!ILN ILN NAV MXQ VOR U/S !DAY XUB NAV VOR U/S

### NOTE-

For clarity, these examples show the accountability and location identifier.

### (2) [f] NDB

## EXAMPLES-

!DCA DCA NAV GTN NDB U/S !RKD SUH NAV NDB U/S

## NOTE-

For clarity, these examples show the accountability and location identifier.

## (2) [g] LOM

## EXAMPLES-

!SBY SBY NAV ILS RWY 32 COLBE LOM U/S... !SUS SUS NAV ILS RWY 08R SNOOP LOM U/S...

## NOTE-

1. In these examples, both the NDB and the marker beacon are unserviceable.

2. Except in Alaska, collocated LOMs are assigned five-letter names. All other NDBs are assigned three-letter identifiers.

## EXAMPLE-

...JOSIE LOM NDB U/S

## NOTE-

In this example, the NDB is not operational, but the marker beacon is operational.

#### EXAMPLE-

...JOSIE MKR BCN U/S

#### NOTE-

In this example, only the marker beacon is unserviceable; the NDB is operational.

## EXAMPLES-

!MCI MCI NAV ILS RWY 09 HUGGY LOM U/S... FLV FLV NAV HUGGY NDB U/S...

## NOTE-

In the above examples, Huggy NDB serves as a LOM to runway 9 at Kansas City Intl (MCI). It also serves Fort Leavenworth/Sherman AAF (FLV), Kansas, as an NDB.

## (2) [h] NAVAID identification change.

## EXAMPLE-

...NAV VORTAC ID CHANGED TO VHP...

## (d) Visual Glide Slope Indicator.

#### EXAMPLES-

...RWY 18 PAPI BEYOND 6DEG LEFT OF RCL UNUSABLE... ...RWY 32 PAPI BEYOND 2.8NM UNUSABLE...

## (f) Instrument Landing Systems (ILS). Precision.

## EXAMPLES-

...NAV ILS RWY 35L U/S...

...NAV ILS RWY 32 110.3 COMMISSIONED...

...NAV ILS RWY 08R SNOOP LOM U/S... ...NAV ILS RWY 05 DECOMMISSIONED...

- ...NAV ILS RWY 05 DECOMMIS ...NAV ILS RWY 18 DME U/S...
- ...NAV ILS RWY 18 DME U/S... ...NAV ILS RWY 02 FAN MKR U/S...
- ...NAV ILS RWY 18 GP UNUSABLE SFC-768FT ...
- ...NAV ILS RWY 02 GP/OM/MM U/S...
- ... NAV ILS RWY 30 GP UNUSABLE BEYOND 5DEG LEFT OF COURSE ...
- ...NAV HJT ILS RWY 04L U/S...

## NOTE-

Offset ILS are issued with the 3 letter ID (HJT) to the localizer after the Keyword NAV.

## EXAMPLE-

... NAV ILS RWY 30 FACILITY PER CLASSIFICATION CODE CHANGED TO CLASS IIIE...

## NOTE-

For runway 30, the ILS facility performance classification code has been changed from the previously published data.

## (g) Localizer/LOC Directional Aid/Simplified Directional Facility Azimuth.

## EXAMPLES-

...NAV ILS RWY 30 LOC RTS...

- ....NAV ILS RWY 35L U/S...
- ...NAV ILS RWY 12 LOC UNUSABLE BEYOND 4DEG RIGHT OF COURSE ...
- ...NAV ILS RWY 12 LOC UNUSABLE BEYOND RWY THR...
- ....NAV LOC RWY 27 U/S...
- ...NAV LOC RWY 33 LOC UNUSABLE WI .4NM ...

...NAV LOC RWY 16 BC UNUSABLE BEYOND 6DEG RIGHT OF COURSE...

...NAV LOC TYPE DIRECTIONAL AID U/S...

## NOTE-

The LDA at the airport, not a particular runway, is unserviceable. ...NAV VHW LOC TYPE DIRECTIONAL AID RWY 18 LOC U/S... ...NAV SIMPLIFIED DIRECTIONAL FACILITY RWY 23 U/S...

## 5-3-8. SATELLITE BASED SYSTEMS

## a. Global Positioning System (GPS).

## EXAMPLES-

!GPS GPS NAV PRN 16 U/S...

!GPS ZAB NAV GPS (NAFC GPS 15–01 E1) (INCLUDING WAAS, GBAS, AND ADS–B) MAY NOT BE AVBL WI AN AREA DEFINED AS A 468NM RADIUS CENTERED AT 330702N1062540W (TCS103044) FL400–UNL, 425NM RADIUS AT FL250, 360NM RADIUS AT 10000FT, 354NM RADIUS AT 4000FT AGL, 327NM RADIUS AT 50FT AGL DLY 0400–1000 YYMMDD0400–YYMMDD1000

## b. WAAS

## 1. Unscheduled loss of signal or service.

## EXAMPLES-

!FDC FDC NAV WAAS NOT AVBL... !FDC ZAN WAAS SIGNAL MAY NOT BE AVBL NORTH OF A LINE DEFINED AS XXXXXNXXXXXXW TO XXXXXXXXXXXXW. WAAS USERS SHOULD CONFIRM RAIM AVBL FOR IFR OPS IN THIS AREA. T–ROUTES IN THIS SECTOR NOT AVBL. ANY REQUIRED ALTN AP IN THIS AREA MUST HAVE AN APPROVED IAP OTHER THAN GPS THAT IS ANTICIPATED TO BE OPR AND AVBL AT THE EST TIME OF ARR AND WHICH THE ACFT IS EQUIPPED TO FLY...

## 2. Ionosphere storm conditions.

### EXAMPLES-

...NAV WAAS VNAV/LPV/LP MINIMA MAY NOT BE AVBL...

...NAV WAAS VNAV/LPV MINIMA NOT AVBL, WAAS LP MINIMA MAY NOT BE AVBL...

## 3. Scheduled loss of signal or service.

### EXAMPLES-

...NAV WAAS NOT AVBL...

!FDC ZAN NAV WAAS SIGNAL NORTH OF LINE DEFINED AS XXXXXXXXXXXW TO XXXXXXXXXXXX MAY NOT BE AVBL. WAAS USERS SHOULD CONFIRM RAIM AVBL FOR IFR OPS IN THIS AREA. T–ROUTES IN THIS SECTOR NOT AVBL. ANY REQUIRED ALTN AP IN THIS AREA MUST HAVE AN APPROVED IAP OTHER THAN GPS THAT IS ANTICIPATED TO BE OPR AND AVBL AT THE EST TIME OF ARR AND WHICH THE ACFT IS EQUIPPED TO FLY

c. Automatic Dependent Surveillance Broadcast (ADS-B) and Wide Area Multilateration Outage (WAM)

(a) ADS-B

### EXAMPLES-

...AIRSPACE ADSB TISB ADSR FISB SVC MAY NOT BE AVBL WI AN AREA DEFINED AS 84NM RADIUS OF 340000N1130000W. AIRPORT AIRSPACE AFFECTED MAY INCLUDE E25. SFC–UNL ...AIRSPACE ADSB TISB SVC MAY NOT BE AVBL WI AN AREA DEFINED AS 84NM RADIUS OF 340000N1180000W. AIRPORT AIRSPACES AFFECTED MAY INCLUDE LAX, BUR, ONT. SFC–UNL

### (b) WAM

## EXAMPLES-

!MTJ ZDV SVC WIDE AREA MULTILATERATION U/S... !CLT ZTL SVC WIDE AREA MULTILATERATION U/S... !LAX ZLA SVC WIDE AREA MULTILATERATION U/S...

**d.** Ground Based Augmentation System (GBAS). Originate NOTAMs when the GBAS is unserviceable or predicted to be unserviceable. GBASs are operated by non–federal service -providers, currently IAH and EWR.

1. Unscheduled loss of signal or service

## EXAMPLE-

...NAV GBAS U/S...

2. Predicated loss of signal or service

## EXAMPLE-

...NAV GLS RWY 04R, RWY 04L, RWY 11, RWY 22R, RWY 22L U/S...

NOTE-

When one or multiple GLS approaches are predicted to not be available.

## 5-3-9. HOURS OF OPERATION (NAVAID)

#### EXAMPLE-

...NAV ILS RWY 32 NOT MNT DLY 0200-0900...

## 5-4-3. COMMUNICATION OUTLET CONDITIONS

## b. Commissioning, decommissioning, outage, or (un)availability of communications outlets

EXAMPLES-

...COM ARINC CPDLC NOT AVBL... ...COM CPDLC NOT AVBL... ...COM CTAF 122.8 COMMISSIONED...

...COM UNICOM FREQ 122.8 U/S...

...COM LOCAL CTL 118.9, GND CTL 121.0 COMMISSIONED...

...COM CLR DELIVERY 121.7 U/S...

...COM GND COM OUTLET 135.075 U/S...

...COM LOCAL AP ADVISORY 121.3 U/S...

## NOTE-

Local Airport Advisory frequency unserviceable.

## EXAMPLES-

...COM REMOTE AP ADVISORY 123.65 U/S... ...COM REMOTE COM OUTLET 122.6 U/S...

### NOTE-

*The airport's other frequency 255.4 is still operating. If both were unserviceable, the NOTAM would be "…COM REMOTE COM OUTLET U/S…"* 

### EXAMPLES-

!JBR 1SH COM SOCIAL HILL REMOTE COM OUTLET U/S...
...COM VOR VOICE U/S...
...COM REMOTE TRANS/REC 126.25, 131.25 U/S...
...COM REMOTE COM A/G U/S...
...COM REMOTE COM OUTLET 122.5 U/S...
!DCA 2D2 COM FALLS CHURCH REMOTE COM OUTLET 122.6 U/S...

## 5-5-2. CHANGES TO PUBLISHED SERVICES

### EXAMPLES-

...SVC TWR COMMISSIONED...

... SVC HAZARDOUS INFLIGHT WX ADVISORY SERVICE OUTLET U/S...

...SVC HAZARDOUS INFLIGHT WX ADVISORY SERVICE OUTLET COMMISSIONED... ...SVC ATIS NOT AVBL...

#### NOTE-

When ATIS is not available for other than equipment malfunction, use NOT AVBL.

#### EXAMPLES-

....SVC ATIS 134.025 U/S... ...SVC ATIS 134.025 NOT AVBL...

## NOTE-

ATIS service from 134.025 is not available; however, ATIS service is being provided from another frequency.

#### EXAMPLES-

...SVC AUTO FLT INFO U/S... ...SVC AUTO FLT INFO SERVICE 134.95 U/S... ...SVC AUNICOM WX BCST NOT AVBL...

#### NOTE-

The Automated UNICOM weather broadcast is not available.

## EXAMPLE-

....SVC AUNICOM U/S...

#### NOTE-

The Automated UNICOM is unserviceable.

## 5-5-3. HOURS OF OPERATION

a. Changes in hours of operation

EXAMPLES-....SVC TWR CLSD... ...SVC TWR CLSD MON-FRI 0300-1215, SAT 2300-1430, SUN 0100-1600... ...SVC CLARKSBURG APP CLSD...

## NOTE-

Examples reflect service NOTAM publishing changes in hours of operation of an air traffic control facility that does not affect an associated airspace area.

### EXAMPLES-

...SVC TWR CLSD CLASS D SERVICE NOT AVBL CTC XXXXXXX AT XXX.XX... ...SVC TWR CLSD MON-FRI 0300-1215, SAT 2300-1430, SUN 0100-1600 CLASS D SVC NOT AVBL CTC XXXXXXX AT XXX.XX.....

...SVC PENSACOLA APP CLSD CLASS C SERVICE NOT AVBL CTC XXXXXXX AT XXX.XX...

## NOTE-

Examples reflect service NOTAM publishing changes in hours of operation of an air traffic control facility that affect an associated airspace area.

## EXAMPLE-

...SVC TEMPO TWR 121.0...

### NOTE-

Frequency 121.0 will be used to control aircraft on all movement areas and traffic patterns.

**b.** Establishment of temporary air traffic control tower

### EXAMPLE-

... TEMPO TWR LOCAL CTL 121.0, GND CTL 121.7...

### NOTE-

Frequency 121.0 will be used to control arriving and departing aircraft from the designated runway(s), and 121.7 will be used for controlling taxiing aircraft.

**c.** Total failure of a facility

#### EXAMPLES-

...SVC WASHINGTON ARTCC U/S...

...SVC POTOMAC APP U/S. RICHMOND CLASS C SERVICE NOT AVBL. CTC XXXXXX ON XXX.XX...

...SVC KENAI FSS U/S...

...SVC FSS U/S...

## NOTE-

Do not spell out the name of the facility as with large area FSS.

#### EXAMPLES-

...SVC FORT WORTH FSS U/S...

....*SVC TWR U/S*...

...SVC TWR U/S CLASS D SERVICE NOT AVBL CTC XXXXXXX AT XXX.XX...

#### d. Traffic Management Program Alerts

#### EXAMPLES-

...SVC TFC MANAGEMENT PROGRAM ALERT SEE NTAP RESERVATION REQUIRED...

...SVC TFC MANAGEMENT PROGRAM ALERT SEE TFC MANAGEMENT MSG RESERVATION REQUIRED...

#### NOTE-

Details of each traffic management program are published in Part 4 of the NTAP or included in a special traffic management program advisory message.

#### EXAMPLE-

...SVC TFC MANAGEMENT PROGRAM ALERT SEE ATCSCC MSG...

## 5-5-4. WEATHER AND WEATHER REPORTING EQUIPMENT

## **a.6.(a)**

EXAMPLES-

...SVC AWOS-3 COMMISSIONED 120.3/202-426-8000...

...SVC AWOS DECOMMISSIONED...

...SVC WX REPORTING DECOMMISSIONED...

...SVC AUTOMATED WX BCST SYSTEM ALTIMETER SETTING NOT AVBL...

#### NOTE-

*The AWOS–3 altimeter setting is being reported as "missing" on the weather report.* 

### **a.6.(b)**

#### EXAMPLE-

...SVC WX REPORTING NOT AVBL...

#### NOTE-

The non-automated weather reporting service provided by the FAA or the NWS is not available as published.

#### EXAMPLES-

...SVC AUTOMATED WX BCST SYSTEM ALTIMETER SETTING UNREL...

...SVC AUTOMATED WX BCST SYSTEM CEILING UNREL

...SVC AUTOMATED WX BCST SYSTEM WIND UNREL...

...SVC AUTOMATED WX BCST SYSTEM T UNREL...

### a.6.(c)

EXAMPLE-

...SVC AUTOMATED WX BCST SYSTEM CEILING AND VIS UNREL...

### NOTE-

An element (for example, ceiling, visibility, wind, temperature, dew point, and altimeter setting) disseminated in the weather report as unreliable and/or inaccurate will be described in the NOTAM as UNREL.

#### a.6.(d)

### EXAMPLES-

...SVC AUTOMATED WX BCST SYSTEM 120.3 U/S... ...SVC AUTOMATED WX BCST SYSTEM 119.075 RTS...

#### b.

#### EXAMPLES-

...SVC ASOS COMMISSIONED 134.725/352-799-5881... ...SVC WIND SYSTEM EAGLECREST NOT AVBL... ...SVC WIND SYSTEM RWY 08 NOT AVBL...

c.

EXAMPLE-

...SVC JUNEAU AP WIND SYSTEM NOT AVBL...

## 5-5-5. MICROBURST/WINDSHEAR DETECTION SYSTEM

#### EXAMPLES-

...SVC MBST/WS DETECTION SYSTEM NOT AVBL... ...SVC MBST /WS DETECTION SYSTEM FOR RWY 10/28 NOT AVBL... ...SVC WX RADAR BEYOND 60NM RADIUS OF SJU VOR U/S... ...SVC WX RADAR U/S...

## 5-5-6. RADAR SERVICES

#### EXAMPLES-

...SVC SMR U/S... ...SVC PRECISION RWY MNT U/S... !CLE ZOB SVC WX RADAR U/S. ENR WX ADVSIORIES MAY NOT BE AVBL IN SW PA NW OH...

## 6-1-2. SPECIAL ACTIVITY AIRSPACE (SAA)

## EXAMPLE-

FDC y/nnn ZLA CA AIRSPACE..NOTICE TWENTYNINE PALMS, CA. TEMPO RESTRICTED AREA R-2509W WI AN AREA DEFINED AS 343503N1163610W (HEC19414.5) TO 342225N116310W (HEC17125.5) TO 342738N1164034W (HEC19322.8) TO 342759N1164251W (HECXXXXX) TO 342944N1164251W (HECXXXXX) TO POINT OF ORIGIN. SFC-15000FT. LOS ANGELES CENTER 128.15 IS THE FAA COORDINATION FACILITY. USMC RANGE CONTROL 760-830-3737 FOR STATUS UPDATES. 1804070424-1805071200

## 6-1-2. b and c. SPECIAL ACTIVITY AIRSPACE (SAA)

## EXAMPLES-

...AIRSPACE CRYPT NORTH MOA ACT 5000FT–16000FT... ...AIRSPACE LGT OUT/NGT VISION GOGGLE TRG DESERT AND REVEILLE NORTH/SOUTH MOA ACT SFC–9000FT AVOIDANCE ADZ...

### NOTE-

NOTAMs for LIGHT OUT/NGT VISION GOGGLE operations are scheduled times only, identified 48 hours in advance. **EXAMPLE-**

...AIRSPACE DRUM MOA ACT 500FT AGL-4999FT...

## 6-1-3. AIRSPACE AND ALTITUDE RESERVATIONS

### EXAMPLES-

...AIRSPACE STNR ALT RESERVATION WI AN AREA DEFINED AS 100NM RADIUS OF FJC360020 5500FT-FL270...

...AIRSPACE STNR ALT RESERVATION WI AN AREA DEFINED AS XXXXXXXXXXXXW (Plain text) TO XXXXXXXXXXXW (Plain text) TO XXXXXXXXXXW (Plain text) TO XXXXXXXXXXW (Plain text) TO POINT OF ORIGIN, AND 52NM RADIUS OF XXXXXXXXXXXXX, AND 9NM RADIUS OF XXXXXXXXXXXXX SFC-UNL...

GG KDZZNAXX DDHHMM KZOAZRZX FNNNN/YY NOTAMN Q) KZOA/QWMLM/IV/NBO/ E/000/999/3411N12456W A) KZOA B) EFFECTIVE TIME C) EXPIRATION TIME E) AIRSPACE WATER OPS WI AN AREA DEFINED AS XXXXXXXXXXXW (Plain text) TO XXXXXXXXXXXXW (Plain text) TO XXXXXXNXXXXXW (Plain text) TO XXXXXXNXXXXXW (Plain text) TO XXXXXXNXXXXXW (Plain text) TO XXXXXXXXXW TO POINT OF ORIGIN NONPARTICIPATING PILOTS ARE STRONGLY ADZ TO AVOID THE ABOVE AREAS. IFR TFC UNDER ATC JURISDICTION SHOULD ANTICIPATE REROUTING IN VCY OF IMPACTS. F) SFC G) UNL

## 6-1-4. SPECIAL AERIAL REFUELING

#### EXAMPLE-

...AIRSPACE SPECIAL AERIAL REFUELING TRACK/ANCHOR WI AN AREA DEFINED AS 5NM EITHER SIDE OF A LINE FM MGM087050 TO MGM272065 ACT 7000FT–9000FT...

## 6-1-5. OTHER AIRSPACE NOTAMS

a. Airspace NOTAMs

#### EXAMPLES-

...AIRSPACE BALLOON LDG WI AN AREA DEFINED AS 100NM RADIUS OF ICT PAYLOAD FALLING FM 150000FT SFC-UNL...

...AIRSPACE HOT AIR BALLOON WI AN AREA DEFINED AS 2NM RADIUS OF 13M SFC-1500FT... ...AIRSPACE UAS WI AN AREA DEFINED AS 10NM RADIUS OF BGR130020 (6NM E BHB) SFC-10000FT AGL FREQ XXX.XX...

...AIRSPACE HIGH INTST FOUR–BEAM SEARCH LGT WI AN AREA DEFINED AS 2NM RADIUS OF DJB320015

...AIRSPACE UNMANNED ROCKET WI AN AREA DEFINED AS 4NM RADIUS OF ICT SFC-FL250 ...AIRSPACE PYROTECHNIC DEMONSTRATION WI AN AREA DEFINED AS 2NM RADIUS OF AML360001 SFC-1500FT...

...AIRSPACE LGT OUT TRG WI AN AREA DEFINED AS DMN307017 TO DMN052030.6 TO DMN071029.9 TO DMN212016 TO POINT OF ORIGIN 5000FT–12000FT AVOIDANCE ADZ ...AIRSPACE LGT OUT TRG WI CLASS D SFC AREA...

#### NOTE-

Activities that will prohibit the use of airspace will require the issuance of an FDC NOTAM by the USNOF.

#### NOTE-

NOTAMS specifying or changing the dates and times of a designated part time surface area must coincide with issuance of a corresponding Hours of Operation Services NOTAM and may be issued by the appropriate facility only after coordination with the regional/service area office.

#### EXAMPLES-

...AIRSPACE CLASS D SFC AREA HR CHANGED TO ACT MON–FRI 0615–2100, SAT 0830–1700, SUN 1000–1900 YYMMDDHHMM–PERM

...AIRSPACE CLASS E SFC AREA HR CHANGED TO ACT DLY 0430-0600 YYMMDDHHMM-PERM...

**b.** Unmanned Free Balloon

#### EXAMPLES-

...AIRSPACE UNMANNED FREE BALLOON DVV180030 (32NM S DEN) SFC-10000FT SB... ...AIRSPACE UNMANNED FREE BALLOON ABQ180020 SFC-UNL NEB TO 150000FT...

**c.** Authorizations and/or Air Traffic notifications are required by the proponent for the following activities; ensure the NOTAM Originator is aware of this. The information is not released in the NOTAM.

- 1. Airshows, Demonstrations, Aerobatic Areas.
  - (a) FAA authorization will consist of a waiver to 14 CFR Part 91.
  - (b) Obtain the following information from the requestor:
    - (1) Name, address, and telephone number of the person giving notice.
    - (2) Identification and type of the aircraft to be used.
- 2. Unmanned Aircraft Operations.

(a) FAA authorization will consist of a Certificate of Authorization or Waiver, Special Airworthiness, or similar document. When requested, put the COA in remarks. A COA exists of the year–Service Center (3 centers and AHQ)–serial number–the word COA (20YY–CSA–23–COA)

(b) Obtain the following information from the requestor:

- (1) Name, address, and telephone number of the person giving notice.
- (2) Identification and frequency to be used.
- 3. Parachute Jumping/Sky Diving
  - (a) Obtain the following information from the requestor:
    - (1) Name address, and telephone number of the person requesting authorization or giving notice.
    - (2) Identification of the aircraft to be used.

#### 7-1-3. IFR FLIGHT PROCEDURES

#### f. Chart correction NOTAMs.

EXAMPLES-

!FDC x/xxxx VLL CHART TROY/OAKLAND, TROY, MI.

VOR-A, ORIG... CORRECT FAF TO READ PERLS INT. VS PERSL INT. YYMMDDHHMM-PERM !FDC x/xxxx FDC CHART U.S. GOVERNMENT CHART NORTH ATLANTIC ROUTE CHART, EFFECTIVE 5 MAY 2011... CORRECT ROUTE IDENTIFIER A763 BETWEEN GRAND TURK ISLAND (GTK) VORTAC AND AGUADILLA (BQN) VORTAC TO READ R763. YYMMDDHHMM-PERM !FDC x/xxxx FDC CHART U.S. GOVERNMENT CHART IFR EN ROUTE LOW ALTITUDE CHART L-3, PANEL C, EFFECTIVE 23 SEPT 2010... CORRECT VICTOR AIRWAY V458 BTW JLI VORTAC (330825.651N/116 3509.365W) AND KUMBA INT (324543.180N/1160313.370W) MEA SHOULD READ 7700 VICE 7800. YYMMDDHHMM-PERM EXAMPLES-A DME antenna is unserviceable: !FDC x/xxxx PWK IAP CHICAGO EXECUTIVE, CHICAGO/PROSPECT HEIGHTS/WHEELING, IL. VOR RWY 16, ORIG-B... DME MINIMUMS NA EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS, ORD DME U/S. YYMMDDHHMM - YYMMDDHHMMEST REASON: ORD DME U/S A locator outer marker (LOM) used for procedure entry and/or missed approach clearance limit for an ILS approach is unserviceable: !FDC x/xxxx ASH IAP NASHUA/BOIRE FIELDS, NH. ILS OR LOC RWY 14, AMDT 5B... PROCEDURE NA EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS, CHERN LOM U/S. YYMMDDHHMM - YYMMDDHHMMEST REASON: CHERN LOM U/S. A VOR is used in a departure procedure (ODP or SID) is unserviceable: !FDC x/xxxx DUG ODP BISBEE-DOUGLAS INTL, DOUGLAS BISBEE, AZ. TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES... DEPARTURE PROCEDURE: NA EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS, DUG VOR U/S. YYMMDDHHMM - YYMMDDHHMMEST REASON: DUG VOR U/S.

#### EXAMPLES-

!FDC x/xxxx LAS SID MC CARRAN INTL, LAS VEGAS, NV. HOOVER THREE DEPARTURE... PROCEDURE NA EXCEPT FOR AIRCRAFT EQUIPPED WITH SUITABLE RNAV SYSTEM WITH GPS OR DME/DME/IRU, PGS VOR U/S. BLD AND DRK DME MUST BE OPERATIONAL FOR DME/DME/IRU ON PEACH SPRINGS TRANSITION. DRAKE TRANSITION NA FOR DME/DME/IRU. YYMMDDHHMM – YYMMDDHHMMEST REASON: PGS VOR U/S.

## h. Air Traffic Service NOTAMs.

#### EXAMPLES-

!FDC x/xxxx ZFW OK ROUTE ZFW ZKC. V140 SAYRE (SYO) VORTAC, OK TO TULSA (TUL) VORTAC, OK MEA 4300. YYMMDDHHMM – YYMMDDHHMMEST

!FDC x/xxxx ZKC OK ROUTE ZFW ZKC.
V140 SAYRE (SYO) VORTAC, OK TO TULSA (TUL) VORTAC, OK MEA 4300.
YYMMDDHHMM – YYMMDDHHMMEST
REASON: TEMPORARY NEW TOWER, 20 YY –ASW–0123–OE.

#### EXAMPLES-

*!FDC x/xxxx ZAB ROUTE ZAB ZKC.* 

V12–V280 PANHANDLE (PNH) VORTAC, TX TO GAGE (GAG) VORTAC, OK MOCA 5000. YYMMDDHHMM – YYMMDDHHMMEST

*!FDC x/xxxx ZKC ROUTE ZAB ZKC.* 

V12–V280 PANHANDLE (PNH) VORTAC, TX TO GAGE (GAG) VORTAC, OK MOCA 5000. YYMMDDHHMM – YYMMDDHHMMEST

*REASON: NEW CONTROLLING OBSTACLE: 352536.26N/1013119.72W, 389 AGL/3932 MSL. 20 YY -ASW-0369-OE.* 

### EXAMPLES-

!FDC x/xxxx FDC ROUTE ZBW ZNY ZDC ZJX. V1 HARTFORD (HFD) VORTAC, CT TO CRAIG (CRG) VORTAC, FL MEA 4000. YYMMDDHHMM – YYMMDDHHMMEST REASON: REDESIGNATION OF CONTROLLED AIRSPACE.

## i. DVA, IAP, ODP, SPECIAL, SID, and STAR FDC NOTAM EXAMPLES:

### EXAMPLES-

!FDC x/xxxx ORD IAP CHICAGO O'HARE INTL, CHICAGO, IL.
VOR RWY 22R AMDT 8B...
MDA 1400/HAT 750, VIS 1-1/2 ALL CATS. TEMPORARY CRANE 1100 MSL
1.2-NM SE OF RWY 23 (Note: Specify distances less than 1 NM in feet.).(2013-AGL-0689-OE) YYMMDDHHMM

- YYMMDDHHMMEST

REASON: TEMPORARY CRANE FOR 180 DAYS. 20 YY -AGL-0689-OE

!FDC x/xxxx MYF DVA MONTGOMERY FIELD, SAN DIEGO, CA. DIVERSE VECTOR AREA ORIG... RWY 5 REQUIRES MINIMUM CLIMB OF 338 FT PER NM TO 2200. ALL OTHER DATA REMAINS AS PUBLISHED. YYMMDDHHMM – YYMMDDHHMMEST REASON: TEMPORARY CRANE FOR 180 DAYS. 20 YY –AWP–1234–OE

!FDC x/xxxx GPT IAP GULFPORT-BILOXI INTL, GULFPORT, MS VOR RWY 31 AMDT 18...

S-31 MDA 720/HAT 693 ALL CATS. VIS CAT C 2, CAT D 2-1/2. CIRCLING MDA 720/HAA 692 ALL CATS. VIS CAT C 2, CAT D 2-1/2. TEMPORARY CRANE 410 MSL 375 FT SE OF RWY 31.

THIS IS VOR RWY 31 AMDT 18A. (ASN 2013–ASO–5–NRA) YYMMDDHHMM–PERM REASON: TEMPORARY CRANE FOR 1 YEAR. ASN 20 YY –ASO–5–NRA

!FDC x/xxxx LAN IAP CAPITAL CITY, LANSING, MI. ILS RWY 10R AMDT 8A... CIRCLING MDA 1420/HAA 559 ALL CATS. THIS IS ILS RWY 10R AMDT 8B. (2013-AGL-0123-OE) YYMMDDHHMM-PERM REASON: NEW BUILDING, 1115 MSL. 20 YY -AGL-0123-OE

!FDC x/xxxx AXH IAP HOUSTON–SOUTHWEST, HOUSTON, TX NDB RWY 28 AMDT 4...

CHANGE ALL REFERENCE TO RWY 10–28 TO RWY 9–27. THIS IS NDB RWY 27 AMDT 4A. YYMMDDHHMM – YYMMDDHHMMEST

REASON: RUNWAYS RENUMBERED FOR MAGNETIC VARIATION CHANGE.

!FDC x/xxxx HIE ODP MOUNT WASHINGTON REGIONAL, WHITEFIELD, NH TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES... TAKEOFF MINIMUMS: RWY 10, NA. RWY 28, 2700–3 WITH A MINIMUM CLIMB OF 340 FT PER NM TO 4400. DEPARTURE PROCEDURE: RWY 10, NA. RWY 28, CLIMB DIRECT GMA NDB, CLIMB IN HOLDING PATTERN (W, RIGHT TURNS, 104 INBOUND) TO 5300 BEFORE PROCEEDING ON COURSE. ALL OTHER DATA REMAINS AS PUBLISHED. YYMMDDHHMM – YYMMDDHHMMEST REASON: PERIODIC REVIEW. PROCEDURE UPDATED TO MEET CURRENT POLICY/CRITERIA.

*!FDC x/xxxx BCE ODP BRYCE CANYON, BRYCE CANYON, UT.* 

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES. BRYCE ONE DEPARTURE (RNAV): PROCEDURE NA. YYMMDDHHMM – YYMMDDHHMMEST REASON: AWAITING CONTROLLED AIRSPACE RULEMAKING

 !FDC x/xxxx PAJN SPECIAL JUNEAU INTERNATIONAL, JUNEAU, AK. LDA X RWY 8 AMDT 9...
 PROCEDURE TURN NA. YYMMDDHHMM – YYMMDDHHMMEST REASON: PROCEDURE TURN (PT) STEPDOWN FIX GREATER THAN 4-NM FROM PT FIX.

!FDC x/xxxx DFW SID DALLAS-FORT WORTH INTL, DALLAS-FORT WORTH, TX. PODDE THREE DEPARTURE... CHANGE NOTES TO READ: RWYS 17C/R, 18L/R: DO NOT EXCEED 240KT UNTIL LARRN. RWYS 35L/C, 36L/R: DO NOT EXCEED 240KT UNTIL KMART. YYMMDDHHMM – YYMMDDHHMMEST REASON: TO SEPARATE SID FROM THE CEOLA DEPARTURE AND CHANGE 240L TO READ 240 KT.

!FDC x/xxxx DCA STAR WASHINGTON/RONALD REGAN WASHINGTON NATIONAL, WASHINGTON, DC. WZRRD TWO ARRIVAL...

SHAAR TRANSITION: ROUTE FROM DRUZZ INT TO WZRRD INT NOT AUTHORIZED. AFTER DRUZZ INT EXPECT RADAR VECTORS TO ARMEL (AML) VORTAC. YYMMDDHHMM– YYMMDDHHMMEST REASON: ATC ROUTING RESTRICTION.

### **Snow Glideslope**

### EXAMPLE-

!FDC x/xxxx DLH IAP DULUTH INTL, DULUTH, MN
ILS OR LOC RWY 27 AMDT 10...
S-ILS 27 CAT D/E NA.
YYMMDDHHMM-YYMMDHHMMEST

## 7-1-4. HIGH BAROMETRIC PRESSURE WARNING

#### EXAMPLE-

...(ARTCC) AIRSPACE HIGH PRESSURE ALTIMETER SETTING PROC ARE IN EFFECT FOR THE MEMPHIS CENTER AREA. SEE AERONAUTICAL INFO MANUAL FOR PROC....

## 7-1-5. TEMPORARY FLIGHT RESTRICTIONS

**a.** 14 CFR Section 91.137

#### EXAMPLES-

!FDC y/nnnn (ARTCC id) (state code)..AIRSPACE (city/location, state)..TEMPORARY FLIGHT RESTRICTIONS PURSUANT TO TITLE 14 CFR SECTION 91.137(A)(1) WI AN AREA DEFINED AS 10NM RADIUS OF 292000N0902000W (FIX/RADIAL/DISTANCE) SFC-FL180 (schedule, if needed) (reason) ONLY RELIEF ACFT OPS UNDER DIRECTION OF (agency in charge) ARE AUTH IN THE AIRSPACE (Agency name and telephone number) OR (frequency) IS IN CHARGE OF THE OPERATION. (Agency name and telephone number) OR (frequency) IS IN CHARGE OF ON SCENE EMERG RESPONSE ACTIVITIES. (Coordination facility)...

!FDC y/nnnn ZLC MT.AIRSPACE MISSOULA, MT..TEMPORARY FLIGHT RESTRICTIONS PURSUANT TO TITLE 14 CFR SECTION 91.137(A)(2) WI AN AREA DEFINED AS 3NM RADIUS OF 465422N1135521W (MSO076008.6NM) SFC-10000FT MSL EFFECTIVE YY 02271900 UTC (1400 LOCAL 2/27/ YY) UNTIL YY 02280200 UTC (2100 LOCAL 2/27/14) FIRE FIGHTING AIRCRAFT OPS. MONTANA DNRC MISSOULA DISPATCH TELEPHONE 406-829-7070 OR FREQ 133.20/WEST RIVERSIDE FIRE IS IN CHARGE OF THE OPERATION. SALT LAKE/ZLC/ARTCC TELEPHONE 801-320-2560 IS THE FAA COORDINATION FACILITY...

*!FDC y/nnnn (ARTCC id) (state code)..AIRSPACE (city/location, state)...TEMPORARY FLIGHT RESTRICTIONS PURSUANT TO TITLE 14 CFR SECTION 91.137(A)(3) WI AN AREA DEFINED AS 5NM RADIUS OF* 

464996N1140000W (F/R/D) SFC-(upper limit) DLY SR-SS (reason) (Agency and telephone number) OR (frequency) IS IN CHARGE OF THE OPERATION.(coordination facility)...

b. 14 CFR Section 91.141 and Section 99.7

### EXAMPLE-

!FDC y/nnnn ZHU TX..AIRSPACE CORPUS CHRISTI, TX..TEMPORARY FLIGHT RESTRICTIONS APRIL 4–5, 20YY LOCAL. PURSUANT TO 49 USC 40103(B) (3)...(remainder of the clause). PURSUANT TO TITLE 14 CFR SECTION 99.7 (plain language text) WI AN AREA DEFINED AS 273437N0970631W (NGP117011.9) TO...(remainder of the description) TO POINT OF ORIGIN 2500FT MSL–17999FT MSL EFFECTIVE YY 04041800 UTC (1300 LOCAL 4/4/ YY) UNTIL YY04051000 UTC (0500 LOCAL 4/5/ YY). WI AN AREA DEFINED AS 15NM EITHER SIDE OF A LINE FM 274022N0971244W (NGP094004.5) TO... (remainder of the description) 1500FT–3500FT MSL EFFECTIVE YY 04041800 UTC (1300 LOCAL 4/4/ YY) UNTIL YY 04051000 UTC (0500 LOCAL 4/5/ YY). WI A 4.3NM RADIUS OF 274134N0971725W (NGP025000.4) SFC–3000FT MSL EFFECTIVE YY 04041800 UTC (1300 LOCAL 4/4/ YY) UNTIL YY 04051000 UTC (0500 LOCAL 4/5/ YY). HOUSTON CENTER, PHONE 281–230–5560, IS THE FAA COORDINATION FACILITY. EXCEPT AS SPECIFIED BELOW AND/OR UNLESS AUTH BY ATC: 1. ALL ACFT MUST BE ON AN ACTIVE IFR OR FILED VFR FLIGHT PLAN WITH A DISCRETE CODE ASSIGNED BY AN AIR TFC CONTROL (ATC) FACILITY. 2. ACFT MUST BE SQUAWKING THE DISCRETE CODE AT ALL TIMES WHILE IN THE TFR. 3. ALL ACFT ENTERING OR EXITING THE TFR MUST REMAIN IN TWO–WAY RADIO COMMUNICATIONS WITH ATC....

## 7-1-6. AIR DEFENSE EMERGENCY

### EXAMPLE-

!FDC y/nnnn FDC SECURITY AIR DEFENSE EMERGENCY DECLARED THROUGHOUT THE UNITED STATES AND POSSESSIONS. THE EMERGENCY SECURITY CONTROL OF AIR TFC (ESCAT) HAS BEEN IMPLMENTED. UNTIL FURTHER ADZ, NO ACFT WILL BE ALLOWED TO OPR WI THE AIRSPACE OVERLYING THE FOLLOWING AREAS: THE PACIFIC COASTAL ADIZ, THE SOUTHERN BORDER DOMESTIC ADIZ, THE GULF OF MEXICO COASTAL ADIZ, THE ATLANTIC COASTAL ADIZ, THE ALASKAN DOMESTIC ADIZ, THE ALASKAN DEWIZ, THE GUAM COASTAL ADIZ, AND THE HAWAIIAN COASTAL ADIZ UNLESS THE ACFT PROPOSING TO OPR WI THE ABOVE AREAS HAVE A PRIORITY ASSIGNMENT OF "ONE" OR "TWO" IN ACCORDANCE WITH THE WARTIME AIR TFC PRIORITY LIST FOR MOV OF ACFT CONTAINED IN SECTION FIVE OF THE ESCAT PLAN. ALL PILOTS, REGARDLESS OF PRIORITY, CIVIL OR MIL, CHECK WITH THE NEAREST FAA OR MIL OPS FACILITY TO DETERMINE CURRENT RESTRICTIONS AND OBTAIN AN AIR TFC CONTROL CLR FROM FAA...

## NOTE-

The example FDC NOTAM is for guidance purposes only. Although the information contained in this example could conceivably cover all facets of an emergency, it does not mean that the information contained covers all emergency actions that might be placed into effect by the military when the provisions of the ESCAT are implemented.

## 7-1-7. SPECIAL DATA

## EXAMPLE-

!FDC FDC ... NOTICE ... PILOTS ARE REMINDED...

## 7-1-8. LASER LIGHT ACTIVITY

#### EXAMPLES-

!FDC y/nnnn (ARTCC id) (state code)..AIRSPACE (city/state)..LASER LGT location identifier DEMONSTRATION WI AN AREA DEFINED AS (description of area) (alternate, if needed) SFC-5000FT (schedule, if needed) LASER LGT BEAM MAY BE INJURIOUS TO PILOT'S/PASSENGER'S EYES WI FT VERTICALLY AND FT LATERALLY OF THE LGT SOURCE. FLASH BLINDNESS OR COCKPIT ILLUMINATION MAY OCCUR BEYOND THESE DISTANCES. (Name of facility)/(id)(type of facility) (telephone number) IS THE FAA COORDINATION FACILITY...

!FDC y/nnnn (ARTCC id) (state code)... AIRSPACE (city/state)..LASER RESEARCH WI AN AREA DEFINED AS (description of area) (alternate location identifier, if needed) SFC-8000FT (schedule if needed) AT AN ANGLE OF DEG, FM THE SFC, PROJECTING UP TO FT AVOID AIRBORNE HAZARD BY 5NM. THIS BEAM IS INJURIOUS TO PILOT'S/AIRCREW'S AND PASSENGER'S EYES. (Name of facility)/(id)(type of facility) (telephone number) IS THE FAA COORDINATION FACILITY... !FDC y/nnnn (ARTCC id) (state code)..AIRSPACE (city/state)..AIRBORNE TO GND LASER ACT WI AN AREA DEFINED AS (latitude/longitude or fix/radial/distance) TO (latitude/longitude or fix/radial/distance) SFC-7000FT AVOID AIRBORNE HAZARD BY 5NM. THIS BEAM IS INJURIOUS TO PILOT'S/AIRCREW'S AND PASSENGER'S EYES. (Name of facility)/(id)(type of facility) (telephone number) IS THE FAA COORDINATION FACILITY (schedule, if needed)...

## 8-1-1. INTERNATIONAL NOTAMs

EXAMPLE-GG KSEAYFYX 041749 KDZZNAXX ) SVC RQ INT LOC=KZSE NT=A0007/YY 040105 KZSE (A0007/YY) NOTAMN Q) KZSE/QRRCA////// A) KZSE B) XX01042100 C) XX01050100 E) AIRSPACE W460B ACT F) SFC G) 2000FT

## NOTE-

This is an example of the reply after Seattle FSS requested an international NOTAM from the U.S. NOTAM System computer. The request was for Seattle Air Route Traffic Control Center (ARTCC) International NOTAM A0007/YY and received the data from the computer. The NOTAM was issued on January 4 at 0105 UTC. The affected location was Seattle ARTCC (KZSE) with an effective time of January 4 at 2100UTC (B) and good through January 5 at 0100 UTC (C). The condition was that Warning Area W460B will be active during those times stated and for an altitude of surface (F) to 2000 feet MSL (G). There was only one NOTAM found.

## Appendix B. International NOTAM (Q) Codes

This appendix is to be used to interpret the contents of coded international NOTAMs. A NOTAM code group contains five letters.

**g.** The first letter is always the letter "Q" to indicate a code abbreviation for use in the composition of NOTAMs.

**h.** The second and third letters identify the subject being reported. (See Second and Third Letter Decode Tables).

**i.** The fourth and fifth letters identify the status of operation of the subject being reported. (See Fourth and Fifth Letter Decode Tables).

## Second and Third Letter Decode Tables

	ATM Airspace Organization (A)			
Code	Signification	Uniform Abbreviated Phraseology		
AA	Minimum altitude (specify en route/crossing/safe)	mnm alt		
AC	Class B, C, D, or E Surface Area	ctr		
AD	Air defense identification zone	adiz		
AE	Control area	cta		
AF	Flight information region	fir		
AH	Upper control area	uta		
AL	Minimum usable flight level	mnm usable fl		
AN	Area navigation route	rnav rte		
AO	Oceanic control area	oca		
AP	Reporting point (specify name or coded designator)	rep		
AR	ATS route (specify)	ats route		
AT	Terminal control area	tma		
AU	Upper flight information region	uir		
AV	Upper advisory area	uda		
AX	Significant point	sig		
AZ	Aerodrome traffic zone	atz		

<b>CNS Communications and Surveillance Facilities (C)</b>		
Code	Signification	Uniform Abbreviated Phraseology
CA	Air/ground facility (specify service and frequency)	a/g fac
CB	Automatic dependent surveillance — broadcast (details)	ads-b
CC	Automatic dependent surveillance — contract (details)	ads-c
CD	Controller-pilot data link communications (details)	cpdlc
CE	En route surveillance radar	rsr
CG	Ground controlled approach system (GCA)	gca
CL	Selective calling system (SELCAL)	selcal
СМ	Surface movement radar	smr
СР	Precision approach radar (PAR) (specify runway)	par
CR	Surveillance radar element of precision approach radar system	sre
	(specify wavelength)	
CS	Secondary surveillance radar (SSR)	ssr
CT	Terminal area surveillance radar (TAR)	tar

AGA Facilities and Services (F)			
Code	Signification	Uniform Abbreviated Phraseology	
FA	Aerodrome	ad	
FB	Friction measuring device (specify type)	Friction measuring device	
FC	Ceiling measurement equipment	ceiling measurement eqpt	
FD	Docking system (specify AGNIS, BOLDS, etc.)	dckg system	
FE	Oxygen (specify type)	oxygen	
FF	Fire fighting and rescue	fire and rescue	
FG	Ground movement control	gnd mov ctl	
FH	Helicopter alighting area/platform	hel alighting area	
FI	Aircraft de-icing (specify)	acft de-ice	
FJ	Oils (specify type)	oil	
FL	Landing direction indicator	ldi	
FM	Meteorological service (specify type)	met	
FO	Fog dispersal system	fog dispersal	
FP	Heliport	heliport	
FS	Snow removal equipment	snow removal eqpt	
FT	Transmissometer (specify runway and, where applicable, designa-		
	tor(s) of transmissometer(s))		
FU	Fuel availability	fuel avbl	
FW	Wind direction indicator	wdi	
FZ	Customs/immigration	Cust/immigration	

CNS	GNSS	Services	(G)
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Code	Signification	Uniform Abbreviated Phraseology
GA	GNSS airfield-specific operations (specify operation)	gnss airfield
GW	GNSS area-wide operations (specify operation)	gnss area

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<b>CNS Instrument and Microwave</b>	i annino svstem (†	

Code	Signification	Uniform Abbreviated Phraseology
IC	Instrument landing system (specify runway)	ils
ID	DME associated with ILS	ils dme
IG	Glide path (ILS) (specify runway)	ils gp
II	Inner marker (ILS) (specify runway)	ils im
IL	Localizer (ILS) (specify runway)	ils loc
IM	Middle marker (ILS) (specify runway)	ils mm
IN	Localizer (not associated with ILS)	loc
IO	Outer marker (ILS) (specify runway)	ils om
IS	ILS Category I (specify runway)	ils cat I
IT	ILS Category II (specify runway)	ils cat II
IU	ILS Category III (specify runway)	ils cat III
IW	Microwave landing system (MLS) (specify runway)	mls
IX	Locator, outer (ILS) (specify runway)	ils lo
IY	Locator, middle (ILS) (specify runway)	ils lm

AGA Lighting Facilities (L)		
Code	Signification	Uniform Abbreviated Phraseology
LA	Approach lighting system (specify runway and type)	als
LB	Aerodrome beacon	abn
LC	Runway centre line lights (specify runway)	rcll
LD	Landing direction indicator lights	ldi lgt
LE	Runway edge lights (specify runway)	redl
LF	Sequenced flashing lights (specify runway)	sequenced flg lgt
LG	Pilot-controlled lighting	pcl
LH	High intensity runway lights (specify runway)	high intst rwy lgt
LI	Runway end identifier lights (specify runway)	rwy end id lgt
LJ	Runway alignment indicator lights (specify runway)	rai lgt
LK	Category II components of approach lighting system (specify runway)	category II components als
LL	Low intensity runway lights (specify runway)	low intst rwy lgt
LM	Medium intensity runway lights (specify runway)	medium intst rwy lgt
LP	Precision approach path indicator (specify runway)	papi
LR	All landing area lighting facilities	ldg area lgt fac
LS	Stopway lights (specify runway)	stwl
LT	Threshold lights (specify runway)	thr lgt
LU	Helicopter approach path indicator	hapi
LV	Visual approach slope indicator system (specify type and runway)	vasis
LW	Heliport lighting	heliport lgt
LX	Taxiway centre line lights (specify taxiway)	twy cl lgt
LY	Taxiway edge lights (specify taxiway)	twy edge lgt
LZ	Runway touchdown zone lights (specify runway)	rtzl

## AGA Movement and Landing Area (M)

Code	Signification	Uniform Abbreviated Phraseology
MA	Movement area	mov area
MB	Bearing strength (specify part of landing area or movement area)	bearing strength
MC	Clearway (specify runway)	cwy
MD	Declared distances (specify runway)	declared dist
MG	Taxiing guidance system	tgs
MH	Runway arresting gear (specify runway)	rag
MK	Parking area	prkg area
MM	Daylight markings (specify threshold, centre line, etc.)	day markings
MN	Apron	apron
MO	Stopbar (specify runway)	rag
MP	Aircraft stands (specify)	acft stand
MR	Runway (specify runway)	rwy
MS	Stopway (specify runway)	swy
MT	Threshold (specify runway)	thr
MU	Runway turning bay (specify runway)	rwy turning bay
MW	Strip/shoulder (specify runway)	Strip/shoulder
MX	Taxiway(s) (specify)	twy
MY	Rapid exit taxiway (specify)	Rapid exit twy

COM Terminal and En Route Navigation Facilities (N)		
Code	Signification	Uniform Abbreviated Phraseology
NA	All radio navigation facilities (except)	all rdo nav fac
NB	Nondirectional radio beacon	ndb
NC	DECCA	decca
ND	Distance measuring equipment (DME)	dme
NF	Fan marker	fan mkr
NL	Locator (specify identification)	1
NM	VOR/DME	vor/dme
NN	TACAN	tacan
NO	OMEGA	omega
NT	VORTAC	vortac
NV	VOR	vor

Other Information (O)		
Code	Signification	Uniform Abbreviated Phraseology
OA	Aeronautical information service	ais
OB	Obstacle (specify details)	obst
OE	Aircraft entry requirements	acft entry rqmnts
OL	Obstacle lights on (specify)	obst lgt
OR	Rescue coordination centre	rcc

ATM Air Traffic Procedures (P)			
Code	Signification	Uniform Abbreviated Phraseology	
PA	Standard instrument arrival (specify route designator)	star	
PB	Standard VFR arrival	stc vfr arr	
PC	Contingency procedures	contingency proc	
PD	Standard instrument departure (specify route designator)	sid	
PE	Standard VFR departure	stf vfr dep	
PF	Flow control procedure	flow ctl proc	
PH	Holding procedure	hldg proc	
PI	Instrument approach procedure (specify type and runway)	instr apch proc	
РК	VFR approach procedure	vfr apch proc	
PL	Flight plan processing (filing and related contingency)	fpl	
PM	Aerodrome operating minima (specify procedure and amended	opr minima	
	minimum)		
PN	Noise operating restriction	noise opr restrictions	
РО	Obstacle clearance altitude and height (specify procedure)	oca och	
PR	Radio failure procedure	rdo failure proc	
PT	Transition altitude or transition level (specify)	ta/trl	
PU	Missed approach procedure (specify runway)	missed apch proc	
PX	Minimum holding altitude (specify fix)	mnm hldg alt	
PZ	ADIZ procedure	adiz proc	

	Navigation Warnings: Airspace Restrictions (R)					
Code	Signification	Uniform Abbreviated Phraseology				
RA	Airspace reservation (specify)	airspace reservation				
RD	Danger area (specify)	d				
RM	Military operating area	moa				
RO	Overflying of (specify)	overflying				
RP	Prohibited area (specify)	p				
RR	Restricted area (specify)	<b>Г</b>				
RT	Temporary restricted area (specify area)	tempo restricted area				

	ATM Air Traffic and VOLMET Services (S)				
Code	Signification	Uniform Abbreviated Phraseology			
SA	Automatic terminal information service	atis			
SB	ATS reporting office	aro			
SC	Area control centre	acc			
SE	Flight information service	fis			
SF	Aerodrome flight information service	afis			
SL	Flow control centre	flow ctl centre			
SO	Oceanic area control centre	oac			
SP	Approach control service	app			
SS	Flight service station	fss			
ST	Aerodrome control tower	twr			
SU	Upper area control centre	uac			
SV	VOLMET broadcast	volmet			
SY	Upper advisory service (specify)	upper advisory ser			

## Navigation Warnings: Warnings (W)

Code	Signification	Uniform Abbreviated Phraseology
WA	Air display	air display
WB	Aerobatics	aerobatics
WC	Captive balloon or kite	captive balloon/kite
WD	Demolition of explosives	demolition of explosives
WE	Exercises (specify)	exer
WF	Air refueling	air refueling
WG	Glider flying	gld fly
WH	Blasting	blasting
WJ	Banner/target towing	banner/target towing
WL	Ascent of free balloon	ascent of free balloon
WM	Missile, gun or rocket firing	Missile/gun/rocket/frng
WP	Parachute jumping exercise, paragliding, or hang gliding	Pje/paragliding/hang gliding
WR	Radioactive materials or toxic chemicals (specify)	pje
WS	Burning or blowing gas	burning or blowing gas
WT	Mass movement of aircraft	mass mov of acft
WU	Unmanned aircraft	formation flt
WV	Formation flight	formation flt
WW	Significant volcanic activity	formation flt
WY	Aerial survey	model flying
WZ	Model flying	model flying

## Fourth and Fifth Letter Decode Tables

	Availability (A)					
Code	Signification	Uniform Abbreviated Phraseology				
AC	Withdrawn for maintenance	withdrawn maint				
AD	Available for daylight operation	avbl day ops				
AF	Flight checked and found reliable	fltck okay				
AG	Operating but ground checked only, awaiting flight check	opr but gnd ck only, awaiting fltck				
AH	Hours of service are now(specify)	hr ser				
AK	Resumed normal operations	okay				
AL	Operative (or reoperative) subject to previously published limitations/	Opr subj previous cond				
	conditions					
AM	Military operations only	mil ops only				
AN	Available for night operation	avbl night ops				
AO	Operational	opr				
AP	Available, prior permission required	avbl, ppr				
AR	Available on request	avbl o/r				
AS	Unserviceable	u/s				
AU	Not available (specify reason if appropriate)	not avbl				
AW	Completely withdrawn	withdrawn				
AX	Previously promulgated shutdown has been canceled	promulgated shutdown cnl				

	Changes (C)	
Code	Signification	Uniform Abbreviated Phraseology
CA	Activated	act
CC	Completed	cmpl
CD	Deactivated	deactivated
CE	Erected	erected
CF	Operating frequency(ies) changed to	opr freq changed to
CG	Downgraded to	downgraded to
СН	Changed	changed
CI	Identification or radio call sign changed to	Ident/rdo call sign changed to
CL	Realigned	realigned
СМ	Displaced	displaced
CN	Canceled	cnl
СО	Operating	opr
СР	Operating on reduced power	opr reduced pwr
CR	Temporarily replaced by	tempo rplcd by
CS	Installed	instl
СТ	On test, do not use	on test, do not use

## Fourth and Fifth Letter Decode Tables (continued)

	Hazard Conditions (H)	
Code	Signification	Uniform Abbreviated Phraseology
HA	Braking action is	ba is
1) Poor		
2) Medium/Poor		
3) Medium		
4) Medium/Good		
5) Good		
HB	Friction coefficient is (specify friction measurement device used)	friction coefficient is
HC	Covered by compacted snow to depth of	cov compacted snow depth
HD	Covered by dry snow to a depth of	cov dry snow depth
HE	Covered by water to a depth of	cov water depth
HF	Totally free of snow and ice	free of sn and ice
HG	Grass cutting in progress	grass cutting inpr
HH	Hazard due to (specify)	hazard due
HI	Covered by ice	cov ice
HJ	Launch planned (specify balloon flight identification or project	launch plan
	code name, launch site, planned period of launch(es)-date/ time,	
	expected climb direction, estimate time to pass 18 000 m (60 000 ft),	
	or reaching cruise level if at or below 18 000 m (60 000 ft), together	
	with estimated location)	
HK	Bird migration in progress	bird migration inpr
HL	Snow clearance completed	sn clr cmpl
HM	Marked by	marked by
HN	Covered by wet snow or slush to a depth of	cov wet sn/slush depth
НО	Obscured by snow	obscured by sn
HP	Snow clearance in progress	sn clr inpr
HQ	Operation canceled (specify balloon flight identification or project code name)	opr cnl
HR	Standing water	standing water
HS	Sanding in progress	sanding inpr
HT	Approach according to signal area only	apch according signal
HU	Launch in progress (specify balloon flight identification or project	launch inpr
	code name, launch site, date/time of launch(es), estimated time	
	passing 18 000 m (60 000 ft), or reaching cruising level if at or below	
	18 000 m (60 000 ft), together with estimated location, estimated	
	date/time of termination of the flight, and planned location of ground	
	contact when applicable)	
HV	Work completed	work cmpl
HW	Work in progress	wip
HX	Concentration of birds	bird concentration
HY	Snow banks exist (specify height)	sn banks hgt
HZ	Covered by frozen ruts and ridges	cov frozen ruts and ridges

## Fourth and Fifth Letter Decode Tables (continued)

Limitations (L)					
Code	Signification	Uniform Abbreviated Phraseology			
LA	Operating on auxiliary power supply	opr aux pwr			
LB	Reserved for aircraft based therein	reserved for acft based therein			
LC	Closed	clsd			
LD	Unsafe	unsafe			
LE	Operating without auxiliary power supply	opr wo aux pwr			
LF	Interference from	interference fm			
LG	Operating without identification	opr without ident			
LH	Unserviceable for aircraft heavier than	u/s acft heavier than			
LI	Closed to IFR operations	clsd ifr ops			
LK	Operating as a fixed light	opr as f lgt			
LL	Usable for length ofand width of	usable len/wid			
LN	Closed to all night operations	clsd to all ngt ops			
LP	Prohibited to	prohibited to			
LR	Aircraft restricted to runways and taxiways	acft restricted to rwy and twy			
LS	Subject to interruption	subj intrp			
LT	Limited to	ltd to			
LV	Closed to VFR operations	clsd vfr ops			
LW	Will take place	will take place			
LX	Operating but caution advised due to	opr but ctn adz due to			

	Other (XX)	
Code	Signification	Uniform Abbreviated Phraseology
XX	Where 4th and 5th letter Code does not cover the situation, use XX and	(plain language following the NO-
	supplement by plain language	TAM Code)

## Appendix C. ICAO Difference for the United States

Below is a listing (not all inclusive) of abbreviations that we use frequently in a domestic NOTAM, but are not recognized ICAO contractions.

- ARFF Airport Rescue and Fire Fighting
- ARINC A system name for CPDLC
- ARTCC Air Route Traffic Control Center
- ATCSCC Air Traffic Control System Command Center
- AUNICOM Automated UNICOM
- BC Back Course
- CTAF Common Traffic Advisory Frequency
- FDC Flight Data Center
- FICON Field Condition
- HIRL High Intensity Runway Light
- INFO Information
- LB-Pounds
- LIRL Low Intensity Runway Light
- LOM Compass locator at ILS outer marker
- MALSR Medium-Intensity Approach Lighting System with Runway Alignment Indicator Lights
- MIRL Medium Intensity Runway Lights
- MU Friction value representing runway surface conditions
- NA Not Authorized
- NTAP Notice to Airmen Publication
- ORIG Original
- PRN Pseudo Random Noise
- RVRM Runway Visual Range Midpoint
- RVRR Runway Visual Range Rollout
- RVRT Runway Visual Range Touchdown
- SAA Special Activity Airspace
- SITA A system name for CPDLC
- SSALR Short Approach Lighting System with Runway Alignment Indicator Lights
- TFR Temporary Flight Restriction
- VASI Visual Approach Slope Indicator
- VOR/DME Navigational aid
- UNICOM Universal Communication
- USPS United States Postal Service

## **Appendix D. Miscellaneous Functions**

**a.** Flight Services Functions

## 2-1-4. NOTICES TO AIRMEN PUBLICATION

**b.** The Notices to Airmen Publication is divided into four parts:

**1.** Notices in Part 1 are provided by ATC Products and Publications. This part contains selected FDC NOTAMs that are expected to be in effect on the effective date of the publication. This part is divided into three sections:

- (a) Section 1, Airway NOTAMs, reflecting airway changes that fall within an ARTCCs airspace.
- (b) Section 2, Procedural NOTAMs.

(c) Section 3, General NOTAMs, containing NOTAMs that are general in nature and not tied to a specific airport/facility (for example, flight advisories and restrictions, open duration Special Security Instructions and Special Flight Rules Area.

**2.** Part 2, provided by NFDC, contains Part 95 Revisions, Revisions to Minimum En Route IFR Altitudes and Changeover Points.

- **3.** Part 3, International NOTAMs, is divided into two sections.
  - (a) Section 1, International Flight Prohibitions, Potential Hostile Situations, and Foreign Notices.
  - (b) Section 2, International Oceanic Airspace Notices.

**4.** Part 4, Graphic Notices, compiled by ATC Products and Publications from data provided by FAA service area offices and other lines of business, contains special notices and graphics pertaining to almost every aspect of aviation; such as, military training areas, large scale sporting events, air show information, Special Traffic Management Programs (STMPs) and airport–specific information. This part is comprised of 6 sections:

- (a) Section 1, General.
- (b) Section 2, Special Operations.
- (c) Section 3, Airport and Facility Notices.
- (d) Section 4, Major Sporting and Entertainment Events.
- (e) Section 5, Airshows.
- (f) Section 6, Special Notices.

#### NOTE-

Notices in Parts 3 and 4 of the NTAP are submitted to and processed through ATC Products and Publications, not NFDC. Cutoff dates and requirements for notices in Parts 3 and 4 are in the NTAP.

## 3-1-1. TIE-IN STATIONS

**a.** Flight Service Program Office must designate an FSS as tie–in point for NOTAM purposes for all facilities in the NAS. The facilities assigned should normally be within the confines of the FSS's flight plan area.

**b.** Letters of agreement between facilities or other agencies and the FSS should be executed to assure proper handling of NOTAMs.

**c.** The tie–in FSS is responsible for forwarding the NOTAM data to the NFDC for publication in accordance with the procedures in this order.

# 3-1-2. FDC PRESIDENTIAL, SPECIAL SECURITY INSTRUCTIONS, OR EMERGENCY AIR TRAFFIC RULES TFRs

**b.** Upon receipt of these messages, the watch supervisor at each flight service station hub or parent facility must ensure that the NOTAM is received at each of their subordinate facilities. The hub or parent facility must send notification within 15 minutes by receipt message to "KDZZNAXX." The receipt message must include:

## 1. R or RGR.

**2.** The FDC number, including the letters FDC.

**3.** The initials of the watch supervisor.

## NOTE-

Only the hub or parent facility need to acknowledge the NOTAM. For automation processing, the receipt message must adhere to the following format: R FDC Y/1234 XX

c. The USNOF must make a record of all receipt messages received.

**d.** If no receipt message is received by the USNOF within 90 minutes of issuance of the FDC Presidential, Special Security Instructions, or Emergency Air Traffic Rules NOTAM, the USNOF will follow–up with a phone call to the facility watch supervisor.

e. The watch supervisor of the flight service station must be responsible for:

**1.** Logging the Presidential, Special Security Instructions, or Emergency Air Traffic Rules FDC NOTAM in the facility log.

**2.** Notifying the specialists on duty that a Presidential, Special Security Instructions, or Emergency Air Traffic Rules FDC NOTAM has been issued.

**3.** Putting the Presidential, Special Security Instructions, or Emergency Air Traffic Rules FDC NOTAM in the facility status information area.

**4.** As part of the FSS supervisor's watch checklist, the watch supervisor must check the FDC list that is issued by the USNOF to ensure that every Presidential, Special Security Instructions, or Emergency Air Traffic Rules FDC NOTAM has been received in the facility.

## NOTE-

*The purpose of this procedure is to ensure that:* 

**1.** All flight service specialists know about the Presidential, Special Security Instructions, or Emergency Air Traffic Rules TFRs so that pilots are briefed appropriately.

**2.** All affected air traffic facilities receive immediate notification when these TFRs are issued.

## 3-1-3. NOTAM LOG

FSS air traffic managers must ensure that NOTAMs originated by their facility and FDC NOTAMs received must be accounted for as follows:

**a.** Log all NOTAMs on a locally approved form containing at least the same data for each accountability (NOTAM file) location. Information to include on the form: Month, Facility, NOTAM Number, Condition Description, Transmitted by/DTG, and Canceled by/DTG.

**b.** Incoming FDC NOTAMs and cancellations must be logged on a locally approved form, containing at least the same data. Information to include on the form: FDC NOTAM Receipt Log, NOTAM Number, Sending Facility, Affected Facility, Number Canceled by, and Remarks. The Remarks section should contain enough information to identify the location and NAS component affected.

**c.** Electronic NOTAM logs are acceptable and can replace any paper log.

**d.** When you receive an FDC NOTAM and the previous number(s) have not been received, obtain the NOTAM on request–reply.

**REFERENCE**-FAA Order JO 7930.2, Para 7–2–3 Retrieving FDC NOTAMs

## 3-2-3. PASSING NOTAM DATA BY PART-TIME FSS FACILITIES

**1.** Before closing, part-time facilities must give the following NOTAM data to the FSS responsible for handling their NOTAMs during the period the facility is closed: Any known NOTAMs that will require dissemination during the hours the facility is closed.

**2.** All current NOTAMs.

**b.** Immediately upon resuming the daily operation, part–time facilities must obtain all the above data as well as pertinent FDC NOTAMs issued.

## 4-1-1. ACCEPTING NOTAM D INFORMATION

FSS facilities must accept and document all aeronautical information regardless of source, provided the occurrence is no more than 7 days in the future. Information from other-than-authorized authorities must be verified prior to NOTAM issuance.

## 4-3-1. PREPARATION FOR TRANSMISSION

In order to ensure that NOTAMs are processed and distributed properly, data for transmission must be coded as prescribed in this order.

## 4-3-2. AUTOMATIC DATA PROCESSING (ADP) CODES

The ADP equipment is programmed to accept and begin processing a NOTAM upon receipt of the ADP code, which is an exclamation point (!).

## 5-3-8. SATELLITE BASED SYSTEMS

Use standard request/reply procedures to obtain all current GPS NOTAMs.

EXAMPLE-GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ DOM LOC (or ACC)=GPS OR GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ INT LOC (or ACC)=KNMH

## 7–2–2. FDC NOTAM LIST

The NS transmits a list of FDC NOTAM numbers issued during the previous 24 hours, which is transmitted as a numbered FDC NOTAM between 1715 and 1745 UTC.

**b.** Military Functions

## **1. MILITARY FACILITIES**

NOTAMs pertaining to U.S. Air Force, Army, and Navy navigational aids that are part of the NAS must be disseminated.

## 2. SUBMISSION OF MILITARY DATA FOR PUBLICATION

Military aeronautical data affecting FAA publications must be submitted to the FAA through the responsible military authority.

## 3. MILITARY NOTAMs

Department of Defense (DOD) NOTAMs are stored in the FAA NOTAM database. Most of these facilities are assigned to a tie-in FSS for NOTAM purposes.

NOTE-

Some Army airfields are not assigned to a tie-in FSS. Army aeronautical data and NOTAMs are not necessarily published in FAA publications. Publication of NOTAM data in the DOD FLIP is justification for NOTAM cancellation.

## 4. ALASKAN MILITARY NOTAMS

Select Alaskan military facility NOTAMs may be disseminated in the FAA NOTAM system via the tie-in FSS. The military base operations must transmit NOTAM data into the Defense Internet NOTAM Service and, at a minimum, coordinate with tie-in FSS.

## 5. MILITARY NOTAM AVAILABILITY

(a) All military NOTAMs are stored in the NS data base. While current, they may be retrieved by both AFTN subscribers and FAA facilities via request/reply.

(b) Refer to the DOD Flight Information Publication (En Route), IFR, or VFR Supplements to determine whether NOTAM service is provided for a facility.

(c) Military NOTAMs are entered in the military system using the following NOTAM format:

EXAMPLE-GG KDZZNAXX 281131 KLTS NOTAMN M0719/ YY Q) ZFW/QMXLC/IV/NBO/A/000/999/3439N09916W005 A) KLTS B) YY 08071256 C) YY 10302359 E) TWY C BTN TWY G AND TWY B CLSD

NOTE-

Refer to ICAO 8126 Amdt 2 for international Q codes. The DOD may supplement ICAO Q codes based on military necessity.

## **Appendix E. Computer Functions**

a. Flight Services Computer Functions

## 4-3-5. CONFIRMING ACCEPTANCE BY THE NOTAM SYSTEM

**a.** When a new NOTAM is accepted into the NOTAM file, a copy of the NOTAM with the NOTAM number will be returned back to the originating facility.

**b.** If the NOTAM is rejected, an NS–generated service message will be relayed back to the facility of origin indicating the reason for rejection as shown in Paragraph 4–5–2, NOTAM Service Messages.

## 4-3-6. TRANSMISSION BY ANOTHER FACILITY

When unable to transmit a NOTAM directly into the system due to equipment failure or other situation, relay the information to an FSS and request that the data be transmitted into the system.

## 4-4-2. CANCELLATION OF NOTAMS

**c.** To cancel a NOTAM, use the same NOTAM/serial number assigned to the original NOTAM by the NS computer, preceded by the letter "C." If the serial number of a NOTAM cancellation is invalid (number not in a master file), no action is taken within the NOTAM system. A cancellation must receive the same dissemination as the NOTAM it cancels. Do not carry the NOTAM text in the cancellation.

*EXAMPLE– !ABC C05/005* 

## 4–5–1. MONITORING

**g.** All input transmissions from a facility are monitored by the NS computer for the presence of an ADP code. The validity of the station identifier, format, and times are also checked before the NS computer assigns a number and updates the NOTAM master file.

**h.** Errors in the station identifier or the format will result in a computer–generated service message being sent to the facility of origin. (See paragraph 4-5-2 for examples). The service message will identify the NOTAM parameter which was in error. A rejection (R) requires corrective action as soon as possible.

## 4-5-2. NOTAM SERVICE MESSAGES

If data is entered incorrectly, it will be rejected. Each rejection will be preceded with a service message (SVC) explaining the cause for the rejection.

## 7-2-3. RETRIEVING FDC NOTAMS

**a.** Upon issuance, all FDC NOTAMs are given all circuit distribution and are stored in the NS. FDC NOTAMs remain in the NS for the duration of their validity. FDC NOTAM cancellations remain in the NS for 72–hours after transmission.

**b.** FDC NOTAMs may be retrieved via request/reply. To minimize response delays, each FDC NOTAM and FDC NOTAM cancellation to be retrieved should be requested individually.

1. To retrieve an individual FDC NOTAM by number:

(a) When the location identifier and number are known:

EXAMPLE-AIS: *GG KDZZNAXX DDHHMM KFODYFYX )SVC RQ FDC LOC=CID NT=Y/2735* 

(b) When only the number is known:

EXAMPLE-GG KDZZNAXX DDHHMM KFODYFYX )SVC RQ FDC NT=Y/2735

2. To request all FDC NOTAMs for a given location:

EXAMPLE-GG KDZZNAXX DDHHMM KCOUYFYX )SVC RQ FDC LOC=MCI

NOTE-

All facilities must use their particular equipment's keyboard equivalent of the closed parenthesis or equal symbol as appropriate.

### 8-3-2. RETRIEVING MILITARY NOTAMS

Formats for retrieving military NOTAMS via NADIN are as follows:

**a.** A request for a single NOTAM for a given location:

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ MIL ACC=KADW NT= M0134/YY

**b.** A request for all military NOTAMs for a given location:

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KSJTYFYX )SVC RQ MIL LOC=KNGP

c. A request for all military NOTAMs for multiple locations (maximum of eight):

EXAMPLE-

SVC B: GG KDZZNAXX DDHHMM KEKNYFYX )SVC RQ MIL LOC= KADW,KDAA,KNGP,KNGU,KNUW,KHST,KHIF

NOTE-

All facilities must use their particular equipment's keyboard equivalent of the closed parenthesis or equal symbol as appropriate.

**d.** To review all NOTAMs for a joint-use airport (for example, CHS), both civil (CHS) and military (KCHS) NOTAMs must be retrieved.

**e.** To request all NOTAMs for a given location from all files (domestic, FDC, international, and military) that meets the military NOTAM criteria:

#### EXAMPLE-

SVC B: GG KDZZNAXX DDHHMM KEKNYFYX )SVC RQ MIL LOC= KADW

## 8-3-3. SERVICE MESSAGES

**a.** Receipt of the NS generated service message "NOTAMS FOUND 0" indicates that there are no military NOTAMs on file for the number or location requested.

**b.** The following is an example of a receipt of the NS cancellation of a military NOTAM.

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KADW MYYYY/YY NOTAMC M0142/YY B) KADW

b. Formats for retrieving international NOTAMs via NADIN are as follows:

1. A request for a single NOTAM for a given accountability identifier:

EXAMPLE-SVC B: GG KDZZNAXX 042100 KDCAYFYX )SVC RQ INT ACC= MYNNYNYX NT=A0211/YY Reply: GG KDCAYFYX 042105 KDZZNAXX )SVC RQ INT ACC= MYNNYNYX NT=A0211/YY 181906 MYNNYNYX A0211/YY NOTAMN Q) MYNA/QMRLC/IV/NBO/A/000/999/ 2502N07728W005 A) MYNN B) YY 11181730 C) PERM E) RWY 05 CLSD TO BOTH LDG AND DEP ACFT BUT MAY BE USED FOR TAX.

#### NOTE-

The Bahamas International NOTAM office issued a new NOTAM numbered A0211 and it was the 211th NOTAM issued for 2013. This NOTAM affected Nassau International Airport (MYNN) with a start time of November 18, 2013, at 1730 UTC and will be permanent. The condition is that Runway 5 is closed to both landing and departing aircraft but may be used for taxiing.

2. A request for all international NOTAMs for a given location:

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ INT LOC=CYUL

3. A request for a single international NOTAM issued in the KFDC series:

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ INT ACC=KFDC NT=A0174/YY

4. A request for a single oceanic airspace NOTAM for a given domestic ARTCC:

#### EXAMPLE-

SVC B: GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ INT ACC=KZNY NT=A0135/YY 5. A request for all oceanic airspace NOTAMs for a given domestic ARTCC:

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ INT LOC=KZNY

6. A request for multiple international locations: (separated by a comma with no spaces)

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KDCAYFYX )SVC RQ INT LOC=EGGN,EDDF,LIIA,EGPX,SBRJ,MYNN,MKJ

## 9-1-3. NS-GENERATED SERVICE MESSAGES

**a.** Receipt of the message "NOTAMS FOUND 0" indicates that there are no international NOTAMs on file for the number or location requested.

**b.** The following is an example of a receipt of the NS cancellation of an international NOTAM.

EXAMPLE-SVC B: GG KDZZNAXX DDHHMM KDEN FNNNN/YY NOTAMC ANNNN/YY A) KDEN B) YYMMDDHHMM C) F) ILS RWY 34R U/S CANCELLED

## 9-2-1. REQUEST FOR CANADIAN NOTAMS FROM THE CANADIAN NOTAM SYSTEM

a. The following is the format for the request/reply message to the Canadian system:

EXAMPLE-Request: GG CYZZQQNI 151245 KDCAYFYX NOTAMQ CYXS Reply: GG KDCAYFYX 151248 CYHQYNYN RE NOTAMQ 151245 KDCAYFYX

- SUMMARY CYXS 01151248 -

000019 NOTAMN CYXS PRINCE GEORGE CYXS NDB X 260 U/S TIL YY01151845 000022 NOTAMN CYXS PRINCE GEORGE CYXS ILS U/S YY01182100 TIL YY01192100 000023 NOTAMN CYXS PRINCE GEORGE FUEL UNAVAILABLE – END OF SUMMARY –

NOTE-

The maximum number of locations that may be requested is 4; for example, NOTAMQ CYUL CYXE CYYT CYYC.

## Appendix F. Radiosonde/Unmanned Free Balloon Flights

## **B-1. NWS RADIOSONDE/UNMANNED FREE BALLOON FLIGHTS**

Use the procedures in this appendix for National Weather Service (NWS) radiosonde balloon releases.

## **B-2. NWS RADIOSONDE BALLOON RELEASES**

**a.** Issue as Aeronautical Information at least 30 minutes prior to the release of a NWS radiosonde balloon under the following conditions:

**1.** Delayed Release. A radiosonde balloon that will be released later than the scheduled times of 1130 or 2330 UTC.

**2.** Special Observations. A release that will be made at times other than those specified for the scheduled observations (1130 or 2330 UTC).

**b.** The Aeronautical Information must contain the following information:

**1.** The balloon release time.

**2.** The time the balloon is expected to reach 10,000 MSL, using an average rate of climb of 800 feet per minute.

c. The locations of radiosonde balloon release points are listed in the Chart Supplements.

## Appendix G. Technical Operations Reference Chart

NOTE-

For "\*", see Chapter 5 and Appendix A.

Facility Type	FSEP Name	NOTAM	NOTAM Examples Full outage (FL)	NOTAM Examples Reduced Equipment (RE)	NOTAM Examples Reduced Service (RS)
ALS	APPROACH LIGHTING SYSTEM	YES	RWY 18 ALS U/S	RWY 18 SEQUENCED FLG LGT OTS	N/A
				RWY 35 RTHL U/S	
				RWY 23 ALS U/S EXC MEDIUM INTST ON CONS	
ASDE	AIRPORT SURFACE DETECTION EQUIPMENT	YES	SVC SMR U/S	N/A	N/A
ASR	AIRPORT SURVEILLANCE RADAR	YES	SVC TAR U/S	N/A	N/A
ATCBI	AIR TRAFFIC CONTROL BEACON INTERROGATOR	YES	SVC SSR U/S	N/A	N/A
ATCRB	AIR TRAFFIC CONTROL RADAR BEACON	YES	SVC SSR U/S	N/A	N/A
ATIS	AUTOMATIC TERMINAL INFORMATION SYSTEM	YES	SVC ATIS NOT AVBL.	N/A	N/A
ATISS	AUTOMATIC TERMINAL INFORMATION SYSTEM SERVICE	YES	SVC ATIS NOT AVBL.	N/A	SVC ATIS 257.7 U/S
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM	YES	SVC AUTOMATED WX BCST SYSTEM U/S	SVC AUTOMATED WX BCST SYSTEM PRECIPITATION UNREL	N/A
				SVC AUTOMATED WX BCST SYSTEM ALTIMETER SETTING NOT AVBL	N/A
				SVC AUTOMATED WX BCST SYSTEM ALTIMETER SETTING UNREL	N/A
				SVC AUTOMATED WX BCST SYSTEM CEILING UNREL	N/A
				SVC AUTOMATED WX BCST SYSTEM WIND UNREL	N/A
				SVC AUTOMATED WX BCST SYSTEM T UNREL	N/A
CPDLC	CONTROLLER PILOT DATA LINK COMMUNICATION SERVICE	YES	MSY COM CPDLC NOT AVLB	MSY COM SITA CPDLC NOT AVLB	MSY COM SITA CPDLC NOT AVLB
DME (ILS)	DISTANCE MEASURE EQUIPMENT	YES	NAV ILS RWY 18 DME U/S	NAV ILS RWY 05 DME NOT MNT	N/A *
DME (VOR)	DISTANCE MEASURE EQUIPMENT	YES	NAV DME U/S	NAV DME NOT MNT	N/A *
DMER	DISTANCE MEASURE EQUIPMENT REMAINING	YES	NAV DME U/S	NAV DME NOT MNT	N/A

Facility Type	FSEP Name	NOTAM	NOTAM Examples Full outage (FL)	NOTAM Examples Reduced Equipment (RE)	NOTAM Examples Reduced Service (RS)
ECOM	EN ROUTE COMMUNICATIONS SERVICE	YES	COM REMOTE COM A/G U/S	N/A	N/A
FCOM	FLIGHT SERVICE STATIONS COMMUNICATIONS SERVICE	YES	COM REMOTE COM OUTLET 122.2 U/S	N/A	N/A
FISB	FLIGHT INFORMATION SERVICE-BROADCAST	YES	ZNY AIRSPACE FLT INFO SERVICE BCST SERVICES NOT AVBL	N/A	N/A
			AIRSPACE TFC INFO SERVICE BCST MAY NOT BE AVBL WI AN AREA DEFINED AS	N/A	N/A
			100 NM RADIUS OF 360728N0864041W SFC-UNL	N/A	N/A
FM	FAN MARKER	YES	NAV ILS RWY 30 FAN MKR U/S	N/A	N/A
GS	GLIDE SLOPE	YES	NAV ILS RWY 07R GP U/S	NAV ILS RWY 05 CAT III NA	N/A *
				NAV ILS RWY 05 CAT II/III NA	
				NAV ILS RWY 05 GP NOT MNT	N/A
IM	INNER MARKER	YES	NAV ILS RWY 11 IM U/S	NAV ILS RWY 05 IM NOT MNT	N/A
LLWAS	LOW LEVEL WIND SHEAR ALERT SYSTEM	YES	SVC MBST/WS DETECTION SYSTEM NOT AVBL	N/A	N/A
LOC	LOCALIZER	YES	NAV ILS RWY 06 LOC U/S	NAV ILS RWY 05 CAT II/III NA	N/A *
				NAV ILS RWY 05 LOC NOT MNT	N/A
				NAV ILS RWY 05 CAT II NA	N/A
				NAV ILS RWY 05 CAT III NA	N/A
LOM	LOCATOR OUTER MARKER	YES	NAV ILS RWY 31 GALEY LOM U/S	N/A	N/A
MALS	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM	YES	RWY 34 ALS U/S	N/A	N/A
MALSF	MEDIUM INTENSITY APPROACH LIGHT SYSTEM WITH SFL's	YES	RWY 34 ALS U/S	RWY 30R RTHL U/S RWY 11 SEQUENCED FLG LGT U/S	N/A
MALSR	MEDIUM INTENSITY APPROACH LIGHT SYSTEM WITH RAIL	YES	RWY 34 ALS U/S	RWY 26L RAI LGT U/S RWY 11 SEQUENCED FLG LGT U/S	N/A
MSEC	MODES SECONDARY RADAR SERVICE	YES	SVC SSR U/S	N/A	N/A
MDAT	MODES RADAR SERVICE	YES	SVC SSR U/S	N/A	N/A
MM	MIDDLE MARKER	YES	NAV ILS RWY 23R MM U/S	NAV ILS RWY 23 MM NOT MNT	N/A

Facility Type	FSEP Name	NOTAM	NOTAM Examples Full outage (FL)	NOTAM Examples Reduced Equipment (RE)	NOTAM Examples Reduced Service (RS)
NDB	NON DIRECTIONAL BEACON	YES	NAV LRT NDB U/S	NAV LRT NDB NOT MNT	N/A *
ОМ	OUTER MARKER	YES	NAV ILS RWY 03 OM U/S	NAV ILS RWY O3 OM NOT MNT	N/A
PAPI	PRECISION APPROACH PATH INDICATOR	YES	RWY 17R PAPI U/S	N/A	N/A *
PRM	PRECISION RUNWAY MONITOR	YES	SVC PRECISION RWY MNT U/S	N/A	N/A
RCAG	REMOTE COMMUNICATIONS AIR TO GROUND	YES	COM REMOTE COM A/G U/S	N/A	N/A
RCO	REMOTE COMMUNICATIONS OUTLET	YES	COM REMOTE COM OUTLET 122.2 U/S	N/A	N/A
REIL	RUNWAY END IDENTIFIER LIGHTS	YES	COM VOR VOICE 122.1 U/S RWY 06 RWY END ID LGT U/S	N/A	N/A
RTR	REMOTE TRANSMITTER/RECEIV ER	YES	COM REMOTE TRANS/REC 121.2 U/S	N/A	N/A
			COM CL DELIVERY 121.7 U/S	N/A	N/A
			COM COMMON TFC ADVISORY FREQ 122.8 U/S	N/A	N/A
			COM REMOTE AP ADVISORY 123.65 U/S	N/A	N/A
RVR	RUNWAY VISUAL RANGE	YES	AD AP RVR ALL U/S	RWY 10L RVRM U/S	N/A
				RWY 10LRVRT U/S	N/A
				RWY 10R RVRR U/S	N/A
RWSL	RUNWAY STATUS LIGHT SYSTEM	YES	AD AP RWY STATUS LGT SYSTEM U/S	RWY 01R/19L RWY STATUS LGT SYSTEM U/S	N/A
				TWY K5, K6, T RWY ENTRANCE LGT FOR RWY 09L U/S	
				RWY 28 TKOF HOLD LGT U/S	
SSO	SELF SUSTAINING OUTLET	YES	COM MENTASTA REMOTE COM OUTLET 121.4 U/S	N/A	N/A
SSOI	SELF SUSTAINING OUTLET INTERMEDIATE	YES	COM LAKE CLARK PASS EAST REMOTE COM OUTLET 122.1 U/S	N/A	N/A
TACAN	TACTICAL AIR NAVIGATION	YES	NAV TACAN U/S	N//A	* NAV TACAN AZM U/S
ТСОМ	TERMINAL COMMUNICATION SERVICE	YES	COM REMOTE TRANS/REC 121.2 U/S COM CL DELIVERY 121.7 U/S	N/A	N/A

Facility Type	FSEP Name	NOTAM	NOTAM Examples Full outage (FL)	NOTAM Examples Reduced Equipment (RE)	NOTAM Examples Reduced Service (RS)
TISB	TRAFFIC INFORMATION SERVICE-BROADCAST	YES	ISP ZNY AIRSPACE TFC INFO SERVICE BCST SERVICES NOT AVBL	N/A	N/A
			AIRSPACE TFC INFO SERVICE BCST MAY NOT BE AVBL WI AN AREA DEFINED AS	N/A	N/A
			100NM RADIUS OF 360728N0864041W SFC-UNL	N/A	N/A
TRAD	TERMINAL RADAR SERVICE	YES	SVC TAR U/S	N/A	N/A
TSEC	TERMINAL SECONDARY RADAR SERVICE	YES	SVC SSR U/S	N/A	N/A
TDWR	TERMINAL DOPPLER WEATHER RADAR	YES	SVC MBST/WS DETECTION SYSTEM NOT AVBL	N/A	N/A
VASI	VISUAL APPROACH SLOPE INDICATOR	YES	RWY 10L VASI U/S	RWY 28 VASI NOW 2 BOX	N/A *
VOR	VHF OMINIDIRECTIONAL RANGE	YES	NAV VOR U/S	N/A	* NAV VOR NOT MNT
VOT	VHF OMINIDIRECTIONAL RANGE TEST	YES	NAV VOT U/S	N/A	N/A

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