

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

N JO 7930.107

Effective Date:
October 1, 2016

Cancellation Date:
April 27, 2017

SUBJ: Field Condition (FICON) Reporting

- 1. Purpose of This Notice.** The purpose of this notice is to prescribe direction used to format and distribute information regarding unanticipated or temporary changes to services, components of, or hazards in, the National Airspace System (NAS) pertaining to runway environment/conditions using Takeoff and Landing Performance Assessment (TALPA) standards.
- 2. Audience.** This notice applies to the Air Traffic Organization (ATO) service units: Air Traffic Services, Mission Support Services, and System Operations; Department of Defense (DOD) air traffic facilities, and all associated Terminal, En Route, and Federal Contracted air traffic control facilities.
- 3. Where Can I Find This Notice?** This notice is available on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications Web site at http://www.faa.gov/air_traffic/publications/.
- 4. Procedures.** Amend FAA Order JO 7930.2R, paragraph 5-1-4, Reporting Field Conditions, to read as follows:

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

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 HELIPORT FICON 4IN DRY SN OBSERVED AT XX12051621...

...AD HELIPORT FICON 2IN DRY SN PLOWED 50FT WID 4FT SNOWBANKS OBSERVED AT XX12070959...

Runway

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

...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...

...TWY A NORTH 500FT FICON 1IN DRY 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...

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

a. Airport operators use the Runway Condition Assessment Matrix (RCAM - See Table 5-1-5) 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 NOTAM System 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 a1-4 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%.
- 4.** Condition. Report the contaminants per Table 5-1-3, including the percentage of coverage for runways, in thirds.

(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 dry 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-

... FICON 10 PRCT 1IN WET SN, 10 PRCT 1/8IN DRY SN OVER ICE AND 10 PRCT 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 wet 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-

...FICON 4/4/4 75 PRCT 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.

- 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 treated area. Ridges include snowbanks, berms, windrows, snow piles and drifts.

(1) Use the term “DRIFTS” after any treatments to describe one or more drifts. When the drifts are variable in depth, report the greater depth.

(2) Use the terms “SNOWBANKS,” “BERMS,” “SN PILES” or “WINDROWS” after the surface condition. Snowbanks must be assumed to be at the edge of a movement surface or, when plow/sweeper is used, at the edge of the plowed/swept area.

EXAMPLE-

...FICON 5IN DRIFTS...

(f) Includes “Remainder” 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.

EXAMPLE-

...FICON 4/4/4 50 PRCT COMPACTED SN PLOWED 75FT WID REMAINDER 1/2IN DRY SN...

...FICON 3/3/6 25 PRCT COMPACTED SN AND 10 PRCT ICE, 25 PRCT 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; or poor, 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.

(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.

EXAMPLE-

...TWY A FICON BA GOOD TO MEDIUM...

...TWY A FICON 75 PRCT 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

“CONDITIONS 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 “CONDITIONS NOT MNT.”

c. Rubber as a contaminant/Slippery When Wet.

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

EXAMPLE-

...TWY A RUBBER...

2. Slippery When Wet is a stand-alone NOTAM, used only on runways, when describing a rubber accumulation. This is the only FICON that is described using both runway ends.

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 5-1-2
Reportable Depth Measurements**

Use Value	To Report
1/8IN	1/8 inch or less
1/4IN	>1/8 inch to and including 1/4 inch
1/2IN	>1/4 inch to and including 1/2 inch
3/4IN	>1/2 inch to and including 3/4 inch
1IN	>3/4 inch to and including 1 inch

**TBL 5-1-3
Reportable Contaminants**

Wet (includes damp and 1/8 inch depth or less of water)	Compacted snow
Water* (greater than 1/8 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)

REFERENCE -
AC 150/5200-28, Notices to Airmen for Airport Operators

Those contaminants marked by an asterisk “*” are to be accompanied by a depth. Part 139/Federally obligated airports are required to report depth on taxiways and aprons. It is optional for other airports to report depths on taxiways and aprons.

**TBL 5-1-4
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%

**TBL 5-1-5
Runway Condition Assessment Matrix (RCAM)**

Runway Condition Assessment Matrix (RCAM)				
Assessment Criteria		Downgrade Assessment Criteria		
Runway Condition Description	Code	Mu (μ)	Deceleration Or Directional Control Observation	Pilot Reported Braking Action
<ul style="list-style-type: none"> Dry 	6	40 or Higher	---	---
<ul style="list-style-type: none"> Frost Wet (Includes Damp and 1/8" depth or less of Water) <p>1/8" (3 mm) depth or less of:</p> <ul style="list-style-type: none"> Slush Dry Snow Wet Snow 	5		Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
<p>5° F (-15°C) and Colder outside air temperature:</p> <ul style="list-style-type: none"> Compacted Snow 	4	39	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
<ul style="list-style-type: none"> Slippery When Wet (wet runway) Dry Snow or Wet Snow (Any depth) over Compacted Snow <p>Greater than 1/8" (3 mm) depth of:</p> <ul style="list-style-type: none"> Dry Snow Wet Snow <p>Warmer than 5° F (-15°C) outside air temperature:</p> <ul style="list-style-type: none"> Compacted Snow 	3	to 30	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
<p>Greater than 1/8" (3 mm) depth of:</p> <ul style="list-style-type: none"> Water Slush 	2	29 to	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
<ul style="list-style-type: none"> Ice 	1	21	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
<ul style="list-style-type: none"> 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

EXAMPLES-

ILGA LGA RWY 13 FICON 1/1/1 100 PRCT WET ICE OBSERVED AT 1701040230. CONDITIONS NOT MNT
1701040300-1701061045. 1701040253-1701061115

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 "OBSERVED AT" and effective/expiration times but not all have "CONDITIONS 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.

a. Snow and Ice Contaminants

...RWY 31 FICON 25 PRCT 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.

...RWY 10 FICON 1/1/1 100 PRCT 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.

...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.

...RWY 16 FICON 1/1/1 75 PRCT ICE...

NOTE-

Runway 16 is the landing runway and is 71% covered in ice. The depth of the ice is not reported.

...RWY 29 FICON 10 PRCT COMPACTED SN...

NOTE-

Runway 29 is the landing runway and is 5% covered by compacted snow. The depth of the compacted snow is not reported. The RwyCC is not displayed because there is $\leq 25\%$ total surface coverage by the contaminant.

...RWY 08 FICON 5/5/5 100 PRCT 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.

...RWY 28 FICON 3/3/3 100 PRCT 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.

...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.

...APRON AIR CARGO APN FICON 1IN WET SN...

NOTE-

The Air Cargo apron has one inch of wet snow.

RWY 34 FICON 5/5/5 100 PRCT 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.

...RWY 01 FICON 4/4/3 25 PRCT COMPACTED SN, 25 PRCT COMPACTED SN, 100 PRCT 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 of 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.

...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 dry snow.

...RWY 16 FICON 4/4/4 100 PRCT 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.

b. Snowbanks, Berms

...RWY 16 FICON 3/3/3 100 PRCT 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.

...RWY 33 FICON 4/4/4 100 PRCT 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.

...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.

c. Ice Contaminants

...RWY 01 FICON 1/2/2 100 PRCT ICE, 100 PRCT 1IN SLUSH, 100 PRCT 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.

...APRON FEDEX FEEDER RAMP FICON ICE...

NOTE-

The FedEx Feeder Ramp is covered with ice. The depth of ice is not reported.

...RWY 25 FICON 5/5/5 75 PRCT WET AND 25 PRCT ICE, 100 PRCT WET, 100 PRCT WET...

NOTE–

Runway 25 is the landing runway and the first third of the runway is seventy percent wet and 21% ice covered. The remaining two thirds of the runway are completely covered by visible moisture, described as “WET.”

d. Wet

...RWY 10 FICON 5/5/5 100 PRCT 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.

e. Frost

...TWY ALL FICON FROST...

NOTE–

Frost is observed completely covering all taxiways.

f. Slush Contaminants

...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 39 or not federally obligated.

g. Drift

...RWY 03R FICON 3/3/3 100 PRCT 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.

...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.

h. Sanded, as a treatment of the surface

...RWY 36 FICON 1/1/1 100 PRCT 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.

...RWY 11 FICON 5/5/5 100 PRCT 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.

i. Deiced, as a treatment of the surface

...RWY 30 FICON 5/5/5 100 PRCT WET DEICED LIQUID...

NOTE–

Runway 30 is the landing runway and is 91% wet and has also been treated with a liquid deicing chemical.

j. Miscellaneous (ash, mud, rubber, sand)

...RWY 01R FICON 50 PRCT 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.

...RWY 01L FICON 100 PRCT ASH...

NOTE-

Runway 01L is the landing runway and is 100% covered with volcanic ash.

k. Slippery When Wet

...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.

l. Braking Action

...RWY 09/27 FICON BA MEDIUM TO POOR...

...TWY AA FICON BA GOOD TO MEDIUM...

...APRON MAIN APN FICON BA POOR...

5. Distribution. This notice is distributed to the following ATO service units: Air Traffic Services, Mission Support Services, and System Operations, and Safety and Technical Training; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center, and all Department of Defense air traffic control facilities.

6. Background. In December 2005, a Boeing 737-700 experienced a runway excursion (overrun) while attempting to land at Chicago Midway (MDW) during winter conditions. As a result of this runway excursion, the FAA established an internal team to review related FAA regulations, policies, and industry practices in an effort to develop mitigation strategies designed to reduce/eliminate these occurrences. This resulted in the creation of a workgroup to develop Takeoff and Landing Performance Assessment (TALPA).

The TALPA workgroup found deficiencies in multiple areas, most notably in the lack of a standardized method to assess landing performance during arrival, and particularly when airport conditions had changed while en route. The FAA is proposing operators to conduct a landing performance assessment, while en route, and with this decision, the terms associated with this assessment and the methods used to transmit these conditions requires updating. The goal of TALPA is to standardize runway contamination reporting throughout the NAS and to harmonize with ICAO procedures.

The implementation of TALPA has mandated changes be made to how the United States NOTAM Office (USNOF) standardizes NOTAM format, and ensures NOTAMs are issued consistent with NOTAM policy and complies with USNOF personnel directions.

Original signed by Steven Villanueva

Steven Villanueva
Director of Flight Services
Air Traffic Organization

9/21/2016

Date Signed