BRIEFING GUIDE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

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1. PARAGRAPH NUMBER AND TITLE:

1–2–6. ABBREVIATIONS 2–9–3. CONTENT 3–3–1. LANDING AREA CONDITION 3–3–4. BRAKING ACTION 3–3–5. BRAKING ACTION ADVISORIES 3–9–1. DEPARTURE INFORMATION 3–10–1. LANDING INFORMATION 4–7–12. AIRPORT CONDITIONS

2. BACKGROUND: On October 1, 2016, the Takeoff and Landing Performance Assessment (TALPA) program commenced. This initiative changed how airport operators report/record runway assessments and how controllers advise pilots of field conditions by relaying Runway Condition Codes (RwyCC) either verbally or via ATIS broadcasts. These changes were issued via FAA Notice (N JO 7110.720) and were expected to expire on April 27, 2017; however, following the implementation of TALPA NAS–wide, it was determined that the location of RwyCC information did not belong in the braking action section of Chapter 3. For consistency, this information is added to Section 3, Airport Conditions; Section 9, Departure Procedures and Separation; and Section 10, Arrival Procedures and Separation. New information is added to Chapter 2, Section 9, Automatic Terminal Information Service Procedures. The intent of TALPA is to harmonize with current and proposed ICAO procedures.

3. CHANGE:

<u>OLD</u>

1-2-6. ABBREVIATIONS

As used in this <u>manual</u>, the <u>following</u> abbreviations have the following meanings indicated. (See TBL 1-2-1.)

Add	
Add	
Add	

<u>OLD</u>

2–9–3. CONTENT

Title through h2 EXAMPLE

i. Runway <u>braking action or friction reports</u> when provided. Include the time of the report <u>and a word</u> <u>describing the cause of the runway friction</u> <u>problem.</u>

PHRASEOLOGY-

RUNWAY (number) <u>MU</u> (first value, second value, third value) AT (time), (cause).

EXAMPLE-

"Runway Two Seven, <u>MU forty-two, forty-one, twen-</u> ty-eight at one zero one eight Zulu, ice."

REFERENCE-

FAAO JO 7110.65, Para 3-3-<u>5, Braking Action Advisories</u>.

Add

<u>NEW</u>

1-2-6. ABBREVIATIONS

As used in this <u>order</u>, the abbreviations <u>listed</u> <u>below</u> have the following meanings indicated. (See TBL 1-2-1.)

FICON – Field Condition

<u>RwyCC – Runway Condition Codes</u> RwyCR – Runway Condition Report

NEW

2–9–3. CONTENT

No Change

i. Runway <u>Condition Codes (RwyCC)</u> when provided. Include the time of the report.

PHRASEOLOGY-

RUNWAY (number) <u>condition codes</u> (first value, second value, third value) AT (time).

EXAMPLE-

"Runway Two Seven, <u>condition codes two, two, one</u> at one zero one eight Zulu."

REFERENCE-

FAA Order JO 7110.65, Para 3-3-<u>1, Landing Area Condition</u>.

j. <u>Runway Condition Codes "3/3/3" and the</u> <u>statement "Slippery When Wet."</u>

Add	<u>EXAMPLE-</u>
	<u>"Runway (number) condition codes three, three,</u>
	<u>three, Slippery When Wet at one two five five Zulu."</u>
Add	<u>NOTE-</u>
	<u>A Slippery When Wet FICON NOTAM indicates a run-</u>
	way has failed a friction survey due to excessive rubber
	build-up. Airport Operators will notify ATCT opera-
	tional personnel of this concern and issue a FICON
	<u>NOTAM prior to the expected arrival of rain. The FI-</u>
	<u>CON NOTAM will be cancelled when the rain has end-</u> ed and the runway environment is determined to be dry
	by the Airport Operator.
A 11	
Add	<u>k. Runway Condition codes "X/X/X." When a</u>
	FICON NOTAM indicates these values, the
	statement "Runway Condition Codes Missing"
	must be included on the ATIS broadcast.
Add	EXAMPLE-
	"Runway (number) condition codes missing at one
	<u>three four seven Zulu."</u>
Add	<u>NOTE-</u>
	<u>A FICON NOTAM may be generated with "X/X/X" in-</u>
	stead of Runway Condition Codes. This will occur when
	<u>NOTAM Manager is not functioning correctly; howev-</u>

j. Other optional information as local conditions dictate in coordination with ATC. This may include such items as VFR arrival frequencies, temporary airport conditions, LAHSO operations being conducted, or other perishable items that may appear only for a matter of hours or a few days on the ATIS message.

Add

<u>k</u> through <u>m</u>

<u>OLD</u> 3-3-1. LANDING AREA CONDITION

Title through d NOTE 2

Add Add
Add
Add

L Other optional information as local conditions dictate in coordination with ATC. This may include such items as VFR arrival frequencies, temporary airport conditions, LAHSO operations being conducted, or other perishable items that may appear only for a matter of hours or a few days on the ATIS message.

er, a FICON NOTAM is still present.

<u>m. When all 3 runway segments (touchdown, midpoint, and rollout) are reporting a code of 6, the Airport Operator will notify ATC that runway condition codes are no longer reportable.</u>

Re-letter <u>**n**</u> through <u>**p**</u>.

<u>NEW</u>

3-3-1. LANDING AREA CONDITION

No Change

e. Runway Condition Codes (RwyCC).

<u>1. Furnish RwyCC, as received from the</u> <u>Airport Operator, to aircraft via the ATIS.</u>

(a) Use the runway number, followed by the RwyCC, for each of the three runway segments, and include the time of the report.

<u>EXAMPLE</u>-

<u>"Runway Two-Seven, condition codes two, two, three</u> at one zero one eight zulu."

- - -- -- --

Add	(b) <u>When an update to the RwyCC</u> provided, verbally issue to all aircraft until t <u>ATIS broadcast can be updated.</u>
Add	<u>EXAMPLE–</u> "Runway (number) condition codes two, three, one
Add	<u>REFERENCE-</u> Advisory Circular AC 150/5200–30D, Airport Winter Safety (Operations
Add	<u>2. Issue FICON NOTAMs upon pilot reque</u>

e. Issue to aircraft only factual information, as reported by the airport management concerning the condition of the runway surface, describing the accumulation of precipitation.

EXAMPLE-

"ALL RUNWAYS COVERED BY COMPACTED SNOW SIX INCHES DEEP."

REFERENCE-FAAO JO 7110.65, Para 4-7-12, Airport Conditions.

OLD

3-3-4. BRAKING ACTION

Furnish quality of braking action, as received from pilots or the airport management, to all aircraft as follows:

a. Describe the quality of braking action using the terms "good," <u>"fair,"</u> "poor," "nil," <u>or a</u> <u>combination of these terms</u>. If the pilot <u>or airport</u> management reports braking action in other than the foregoing terms, ask him/her to categorize braking action in these terms.

NOTE-

The term "nil" is used to indicate bad or no braking action.

b. Include type of aircraft or vehicle from which the report is received.

EXAMPLE-

"Braking action fair to poor, reported by a heavy $\underline{D-C}$ <u>Ten.</u>"

"Braking action poor, reported by a Boeing Seven Twenty-Seven."

c. If the braking action report affects only a portion of a runway, obtain enough information from the pilot or airport management to describe the braking action in terms easily understood by the pilot.

C is the

and

est, workload permitting.

f. In the absence of RwyCC, issue to aircraft only factual information, as reported by the airport operator or pilots concerning the condition of the runway surface, describing the accumulation of precipitation.

EXAMPLE-

"All runways covered by compacted snow 6 inches <u>deep."</u>

REFERENCE-FAA Order JO 7110.65, Para 4-7-12, Airport Conditions.

NEW

3-3-4. BRAKING ACTION

Furnish quality of braking action, as received from pilots, to all aircraft as follows:

a. Describe the quality of braking action using the terms "good," "good to medium," "medium," "medium to poor," "poor," or "nil." If the pilot reports braking action in other than the approved terms, ask him/her to categorize braking action in these terms.

No Change

b. Include type of aircraft from which the report is received.

EXAMPLE-

"Braking action medium, reported by a heavy Boeing Seven Sixty-Seven."

"Braking action poor, reported by a Boeing Seven Thirty-Seven."

c. If the braking action report affects only a portion of a runway, obtain enough information from the pilot to describe the braking action in terms easily understood by other pilots.

EXAMPLE-

"Braking action poor first half of runway, reported by a *Lockheed Ten Eleven.*"

"Braking action <u>poor</u> beyond the intersection of <u>runway two seven</u>, reported by a <u>Boeing Seven Twen-</u> ty – Seven."

NOTE-

Descriptive terms, such as the first or the last half of the runway, should normally be used rather than landmark descriptions, such as opposite the fire station, south of a taxiway, etc. Landmarks extraneous to the landing runway are difficult to distinguish during low visibility, at night, or anytime a pilot is busy landing an aircraft.

d. Furnish runway friction measurement readings/ values as received from airport management to aircraft as follows:

1. Furnish information as received from the airport management to pilots on the ATIS at locations where friction measuring devices, such as MU–Meter, Saab Friction Tester (SFT), and Skiddometer are in use only when the MU values are 40 or less. Use the runway followed by the MU number for each of the three runway segments, time of report, and a word describing the cause of the runway friction problem. Do not issue MU values when all three segments of the runway have values reported greater than 40.

EXAMPLE-

<u>"Runway two seven, MU forty-two, forty-one, twentyeight at one zero one eight Zulu, ice."</u>

<u>2.</u> Issue the runway surface condition and/or the Runway Condition Reading (RCR), if provided, to all USAF and ANG aircraft. Issue the RCR to other aircraft upon pilot request.

EXAMPLE-

"Ice on runway, RCR zero five, patchy."

NOTE-

1. USAF has established RCR procedures for determining the average deceleration readings of runways under conditions of water, slush, ice, or snow. The use of the RCR code is dependent upon the pilot's having a "stopping capability chart" specifically applicable to his/her aircraft.

<u>2.</u> USAF offices furnish RCR information at airports serving USAF and ANG aircraft.

EXAMPLE-

"Braking action poor first half of runway, reported by a <u>Boeing Seven Fifty-Seven</u>."

"Braking action <u>good to medium</u> beyond the intersection of <u>R</u>unway <u>T</u>wo <u>S</u>even, reported by a<u>n Airbus</u> <u>Three Twenty-One</u>."

No Change

Delete

Delete

Delete

<u>**d.</u>** Issue the runway surface condition and/or the Runway Condition Reading (RCR), if provided, to all USAF and ANG aircraft. Issue the RCR to other aircraft upon pilot request.</u>

No Change

NOTE-

USAF offices furnish RCR information at airports serving USAF and ANG aircraft.

<u>OLD</u>

3-3-5. BRAKING ACTION ADVISORIES

a. When runway braking action reports are received from pilots or the airport management which include the terms <u>"fair,"</u> "poor," or "nil" or whenever weather conditions are conducive to deteriorating or rapidly changing runway conditions, include on the ATIS broadcast the statement "Braking Action Advisories are in effect."

REFERENCE-

FAAO JO 7210.3, Para 10–4–1, Automatic Terminal Information Service (ATIS).

b through b2 PHRASEOLOGY

3. Advise the <u>airport management</u> that runway braking action reports of <u>"fair,"</u> "poor," or "nil" have been received.

REFERENCE-

FAAO JO 7210.3, Para 4-3-1, Letters of Agreement.

4. Solicit PIREPs of runway braking action.

REFERENCE-

FAA Order JO 7110.65, Para 2–6–2, PIREP Solicitation and Dissemination.

c. Include runway friction measurement/values received from airport management on the ATIS. Furnish the information when requested by the pilot in accordance with para 3–3–4, Braking Action.

<u>OLD</u>

3-9-1. DEPARTURE INFORMATION

Title through f

g. Issue braking action for the runway in use as received from pilots or the airport management when <u>Braking Action Advisories are in effect</u>.

REFERENCE-

FAA Order JO 7110.65, Para 2–7–2, Altimeter Setting Issuance Below Lowest Usable FL. FAA Order JO 7110.65, Para 3–1–8, Low Level Wind Shear/Microburst Advisories. FAA Order JO 7110.65, Para 3–3–5, Braking Action Advisories. P/CG Term– Braking Action Advisories.

Add

<u>NEW</u>

3-3-5. BRAKING ACTION ADVISORIES

a. When runway braking action reports are received from pilots which include the terms <u>"medium,"</u> "poor," or "nil<u>a</u>" or whenever weather conditions are conducive to deteriorating or rapidly changing runway conditions, include on the ATIS broadcast the statement "Braking Action Advisories are in <u>Effect.</u>"

REFERENCE-

FAA O<u>rder</u> JO 7210.3, Para 10–4–1, Automatic Terminal Information Service (ATIS).

No Change

3. Advise the <u>Airport Operator</u> that runway braking action reports of <u>"good to medium,"</u> <u>"medium," "medium to poor,"</u> "poor," or "nil" have been received.

REFERENCE-

FAA O<u>rder</u> JO 7210.3, Para 4-3-1, Letters of Agreement.

No Change No Change

Delete

<u>NEW</u>

3–9–1. DEPARTURE INFORMATION

No Change

g. Issue braking action for the runway in use as received from pilots when braking action advisories are in effect.

No Change

<u>h. Runway Condition Codes. Furnish RwyCC,</u> <u>as received from the Airport Operator, to</u> <u>aircraft via the ATIS.</u>

i. For opposite direction departure operations, controllers may verbally issue the RwyCC, as identified in the FICON NOTAM, in reverse order. Controllers must not include reversed RwyCC on the ATIS broadcast.

Re-letter as j.

<u>OLD</u>

3-10-1. LANDING INFORMATION

Title through i *REFERENCE*

j. Issue braking action for the runway in use as received from pilots or the airport management when <u>Braking Action Advisories are in effect</u>.

REFERENCE-

FAAO JO 7110.65, Para 3-1-8, Low Level Wind Shear/Microburst Advisories

Add

Add

k

<u>OLD</u> 4–7–12. AIRPORT CONDITIONS

Title through b *REFERENCE*

c. <u>TERMINAL</u>. Where RCRs are provided, transmit this information to USAF and ANG aircraft in accordance with one of the following. Issue the RCR to other aircraft upon pilot request.

c1 and **c2**

3. Prior to departure.

4. As soon as possible after receipt of any subsequent changes in previously issued <u>RCR</u> information.

<u>NOTE-</u>

 USAF has established RCR procedures for determining the average deceleration readings of runways under conditions of water, slush, ice, or snow. The use of RCR code is dependent upon the pilot having a "stopping capability chart" specifically applicable to his/her aircraft.
USAF offices furnish RCR information at airports serving USAF and ANG aircraft.

REFERENCE-

_ _ _

FAA Order JO 7110.65, Para 3–3–1, Landing Area Condition.

Add

Add

<u>NEW</u>

3-10-1. LANDING INFORMATION

No Change

j. Issue braking action for the runway in use as received from pilots when braking action advisories are in effect.

REFERENCE-

FAA O<u>rder</u> JO 7110.65, Para 3–1–8, Low Level Wind Shear/Microburst Advisories

<u>k. Runway Condition Codes. Furnish RwyCC, as received from the Airport Operator, to aircraft via the ATIS.</u>

<u>I. For opposite direction arrival operations, controllers may verbally issue the RwyCC, as identified in the FICON NOTAM, in reverse order. Controllers must not include reversed RwyCC on the ATIS broadcast.</u>

Re-letter as m.

<u>NEW</u>

4-7-12. AIRPORT CONDITIONS

No Change

c. <u>Issue RwyCC contained in a FICON</u> <u>NOTAM to aircraft in accordance with one of</u> <u>the following:</u>

No Change

3. <u>TERMINAL</u>. Prior to departure.

4. As soon as possible after receipt of any subsequent changes in previously issued <u>**RwyCC**</u> information.

Delete

Delete

<u>d. RwyCC may be issued in lieu of the complete</u> <u>FICON NOTAM. Issue the complete FICON</u> <u>NOTAM upon pilot request, workload</u> <u>permitting.</u>

EXAMPLE-

"Boston Runway Two Seven, field condition, three, three, three, one hundred percent, two inches dry snow over compacted snow. Observed at one five three zero zulu."

Add	<u>NOTE–</u> <u>RwyCC may be transmitted via the ATIS as prescribed</u> in Paragraphs 2–9–3, Content; 3–3–1, Landing Area Condition; 3–9–1, Departure Information; and 3–10–1, Landing Information.
Add	<u>e.</u> <i>TERMINAL</i> . Where RCRs are provided, transmit this information to USAF and ANG aircraft. Issue the RCR to other aircraft upon pilot request.
Add	<u>NOTE–</u> USAF offices furnish RCR information at airports serving USAF and ANG aircraft.
Add	REFERENCE- FAA Order JO 7110.65, Para 2-9-3, Content. FAA Order JO 7110.65, Para 3-3-1, Landing Area Condition. FAA Order JO 7110.65, Para 3-9-1, Departure Information. FAA Order JO 7110.65, Para 3-10-1, Landing Information.

1. PARAGRAPH NUMBER AND TITLE: 2-1-4. OPERATIONAL PRIORITY

2. BACKGROUND: The National Hurricane Operations Plan (NHOP) Working Group (WG) considered adding National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC) to the note in paragraph 2-1-4 in an effort to list all the entities that may be involved with requesting priority handling for weather reconnaissance/research mission aircraft using the TEAL or NOAA call signs. However, the WG determined that it was irrelevant who requests priority handling for these aircraft as long as air traffic control (ATC) receives the request. Therefore, the decision was made to delete the note.

3. CHANGE:

<u>OLD</u>

2–1–4. OPERATIONAL PRIORITY

Title through j

k. When requested, provide priority handling to TEAL and NOAA mission aircraft.

<u>NOTE-</u>

Priority handling may be requested by the pilot, or via telephone from CARCAH or the 53rd Weather Reconnaissance Squadron (53WRS) operations center personnel, or in the remarks section of the flight plan.

REFERENCE-

FAAO JO 7110.65, Para 9–2–<u>19</u>, Weather Reconnaissance Flights.

NEW

2-1-4. OPERATIONAL PRIORITY

No Change

k. When requested, provide priority handling to TEAL and NOAA mission aircraft.

Delete

REFERENCE-

FAA O<u>rder</u> JO 7110.65, Para 9–2–<u>20</u>, Weather Reconnaissance Flights.

1. PARAGRAPH NUMBER AND TITLE: 2–1–20. WAKE TURBULENCE CAUTIONARY ADVISORIES

2. BACKGROUND: Wake turbulence encounters behind heavy and super aircraft while maintaining required separation appear to be increasing in volume. This concern was the topic of one of the FY 2016 Top 5, and a safety case was developed. One of the recommended mitigations was an addition to the note of FAA Order JO 7110.65, paragraph 2–1–20. This will alert controllers to a situation in which aircraft are vulnerable to an increase of a potential wake encounter. The current Air Traffic Control system is based primarily on distance–based separation tools, while wake decay is a function of time. The primary mitigation for wake encounters on approach and departure are wake decay and wake avoidance. In the En Route environment with higher aircraft speeds, "directly behind" separation is the primary mitigation for wake encounters avoidance. This primary mitigation is highly effective when two aircraft are operating at the same altitude or when the trailing aircraft is 2,000 feet below the flight path of the leader. Climb through and descend through operations, as well as operations 1,000 feet or less below the leading aircraft, decrease the effectiveness of in–trail separations in providing sufficient wake avoidance. The exposure time for wake encounters in trail on climb through and descend through is much higher than crossing situations.

3. CHANGE:

<u>OLD</u>

2–1–20. WAKE TURBULENCE CAUTIONARY ADVISORIES

Title through a3

b. Issue cautionary information to any aircraft if in your opinion, wake turbulence may have an adverse effect on it. When traffic is known to be a super aircraft, include the work *super* in the description. When traffic is known to be a heavy aircraft, include the work *heavy* in the description.

NOTE-

Wake turbulence may be encountered by aircraft in flight as well as when operating on the airport movement area. Because wake turbulence is unpredictable, the controller is not responsible for anticipating its existence or effect. Although not mandatory during ground operations, controllers may use the words jet blast, propwash, or rotorwash, <u>in lieu of wake turbulence</u>, when issuing a caution advisory.

<u>NEW</u> 2–1–20. WAKE TURBULENCE CAUTIONARY ADVISORIES

No Change No Change

NOTE-

Wake turbulence may be encountered by aircraft in flight as well as when operating on the airport movement area. Because wake turbulence is unpredictable, the controller is not responsible for anticipating its existence or effect. Wake generated by super/heavy aircraft while climbing or descending through another aircraft's projected flight path may increase the chance of a wake encounter. Although not mandatory during ground operations, controllers may use the words jet blast, propwash, or rotorwash, when issuing a caution advisory.

1. PARAGRAPH NUMBER AND TITLE: 2–1–22. UNMANNED AIRCRAFT SYSTEM (UAS) ACTIVITY INFORMATION

2. BACKGROUND: The Federal Aviation Administration (FAA) anticipates a dramatic rise in (UAS) activity in the National Airspace System (NAS). The predicted exponential growth of UAS in the NAS warrants the inclusion of additional words and/or phrases to inform other users of the presence of UAS activity.

3. CHANGE:

<u>OLD</u>	NEW
Add	<u>2–1–22. UNMANNED AIRCRAFT SYSTEM</u> (UAS) ACTIVITY INFORMATION
Add	a. Issue UAS advisory information for known UAS activity, when in your judgment their proximity warrants it. If known, include position, distance, course, type of unmanned aircraft (UA), and altitude.
Add	<u>EXAMPLE–</u> <u>"U–A–S activity, 12 o'clock, 1 mile, southbound,</u> <u>quad copter, 400 feet and below."</u> <u>"Unmanned aircraft system activity, 2 miles east of</u> <u>Brandywine Airport, 300 feet and below."</u>
Add	<u>b.</u> <u>Issue UAS advisory information for</u> <u>pilot-reported or tower-observed activity, when</u> <u>in your judgment, their proximity warrants it. If</u> <u>known, include position, altitude, course, and</u> <u>type. Continue to issue advisories to potentially</u> <u>impacted aircraft for at least 15 minutes</u> <u>following the last report.</u>
Add	EXAMPLE- "U-A-S activity reported, 12 o'clock, 1 mile, altitude reported one thousand two hundred." "Unmanned aircraft system activity observed, 1 mile east of Trenton Airport, altitude unknown."
Add	<u>REFERENCE–</u> FAA Order JO 7200.23A, Para. 2.C Advisory Information.
2–1– <u>22</u> through 2–1– <u>30</u>	Renumber 2–1– <u>23</u> through 2–1– <u>31.</u>

1. PARAGRAPH NUMBER AND TITLE: 2-2-6. IFR FLIGHT PROGRESS DATA

2. BACKGROUND: Paragraph 2–2–6, a12 requires the longitudinal separation being used between aircraft at the same altitude be forwarded to the receiving facility if it results in the aircraft having less than 10 minutes separation at the facilities' boundary. This requirement has existed since the initial publication of FAA Order JO 7110.65 and required updating to continue to have relevance in today's air traffic environment. The initial intent was to remove the subparagraph; however, after reexamination it was determined to update the requirement to specify the application to non-radar operations.

3. CHANGE:

<u>OLD</u>

2-2-6. IFR FLIGHT PROGRESS DATA

Title through a11 NOTE

12. Longitudinal separation being used between aircraft at the same altitude if it results in these aircraft having less than 10 minutes separation at the facilities' boundary.

<u>NEW</u>

2-2-6. IFR FLIGHT PROGRESS DATA

No Change

12. Longitudinal separation being used in non-radar operations between aircraft at the same altitude if it results in these aircraft having less than 10 minutes separation at the facilities' boundary, unless (otherwise) specified in a Letter of Agreement (LOA).

1. PARAGRAPH NUMBER AND TITLE: 2–2–11. FORWARDING AMENDED AND UTM DATA

2. BACKGROUND: Numerous Air Traffic Safety Action Program (ATSAP) reports were submitted and a Corrective Action Request (CAR) was created to address route and altitude amendments within 15 to 30 minutes from an aircraft's proposed departure time. FAA Order JO 7110.65, Air Traffic Control, paragraph 2–2–11c, requires coordination if the amendment is made within 15 minutes of the proposed departure time. The application of the current requirement falls short of the intended purpose. Therefore, the coordination requirement is increased to 30 minutes from an aircraft's proposed departure time.

3. CHANGE:

. .

<u>OLD</u>

2–2–11. FORWARDING AMENDED AND UTM DATA

Title through b NOTE 1&2

c. Forward any amended control information and record the action on the appropriate flight progress strip. Additionally, when a route or altitude in a previously issued clearance is amended within <u>15</u> minutes of an aircraft's proposed departure time, the facility that amended the clearance must coordinate the amendment with the receiving facility via verbal AND automated means to ensure timely passage of the information.

<u>NEW</u>

2–2–11. FORWARDING AMENDED AND UTM DATA

No Change

c. Forward any amended control information and record the action on the appropriate flight progress strip. Additionally, when a route or altitude in a previously issued clearance is amended within <u>30</u> minutes of an aircraft's proposed departure time, the facility that amended the clearance must coordinate the amendment with the receiving facility via verbal AND automated means to ensure timely passage of the information. <u>If the</u> <u>automated means of coordination are</u> <u>unavailable, then verbal coordination is</u> <u>sufficient.</u>

1. PARAGRAPH NUMBER AND TITLE: 2–6–4. ISSUING WEATHER AND CHAFF SERVICES

2. BACKGROUND: FAA Order JO 7110.65, paragraph 2–6–4 was originally amended on December 15, 2015, adding a new sub paragraph g2. This guidance instructed controllers to issue an altitude to maintain when clearing an aircraft to deviate after a crossing altitude had been issued, including climb via or descend via clearances. In the same year, a recommendation to rewrite FAA Order JO 7110.65, Chapter 2, Section 6, Weather Information, was identified as an ATO Top 5 for 2015. A collaborative workgroup was formed to review and restructure the entire section. In the lengthy process of reorganizing Section 6, the workgroup did not identify the upcoming addition of subparagraph g2 to the section. As a result, after its publication in December 2015, subparagraph g2 was inadvertently removed in the April 2017 publication.

3. CHANGE:

_ . .. _ ..

<u>OLD</u>	NEW
2–6–4. ISSUING WEATHER AND CHAFF SERVICES	2–6–4. ISSUING WEATHER AND CHAFF SERVICES
Title through g1	No Change
REFERENCE– AIM, Para 7–1–14b, 1.(a) ATC Inflight Weather Avoidance Assistance.	No Change
Add	2. When approving a weather deviation for an aircraft that had previously been issued a crossing altitude, including climb via or descend via clearances, issue an altitude to maintain along with the clearance to deviate. If you intend on clearing the aircraft to resume the procedure, advise the pilot.
Add	<u>PHRASEOLOGY–</u> <u>DEVIATION (restrictions, if necessary) APPROVED,</u> <u>MAINTAIN (altitude), (if applicable) EXPECT TO</u> <u>RESUME (SID/STAR, etc.) AT (NAVAID, fix/way- point).</u>
Add	<u>NOTE-</u> <u>After a climb via or descend via clearance has been is-</u> <u>sued, a vector/deviation off of a SID/STAR cancels the</u> <u>altitude restrictions on the procedure. The aircraft's</u> <u>Flight Management System (FMS) may be unable to</u> <u>process crossing altitude restrictions once the aircraft</u> <u>leaves the SID/STAR lateral path. Without an assigned</u> <u>altitude, the aircraft's FMS may revert to leveling off</u> <u>at the altitude set by the pilot, which may be the SID/</u> <u>STAR published top or bottom altitude.</u>
Add	REFERENCE– <u>FAA Order JO 7110.65, Para 4–2–5, Route or Altitude</u> <u>Amendments.</u> <u>FAA Order JO 7110.65, Para 5–6–2, Methods.</u>
g2 through g4	Renumber g3 through g5

1. PARAGRAPH NUMBER AND TITLE: 4-3-2. DEPARTURE CLEARANCES

2. BACKGROUND: Climb Via procedures were introduced in April 2014. Since introduction of these procedures, confusion and frustration within industry has been communicated. The premise of one-size-fits-all in the use of climb via clearances when departure procedures do not contain published crossing restrictions has not been successful. As a result, action is being taken to restore direction for use of "Maintain" when formulating departure clearances containing Standard Instrument Departure (SID) procedures that do not contain published crossing restrictions, radar vector SIDs, and those SIDs with a Radar Vector Segment.

3. CHANGE:

_ _ . .

OLD	NEW
4-3-2. DEPARTURE CLEARANCES	4-3-2. DEPARTURE CLEARANCES
Title through e3(b)	No Change
Add	4. Use one of the following when the SID contains published crossing restrictions:
Add	(a) Instruct aircraft to "Climb via SID."
Add	(b) Instruct the aircraft to "Climb via SID except maintain (altitude)" when a top altitude is not published or when it is necessary to issue an interim altitude.
Add	<u>EXAMPLE–</u> <u>"Cleared to Johnston Airport, Scott One departure,</u> Jonez transition, Q One Forty–five. Climb via SID."
	<u>"Cleared to Johnston Airport, Scott One departure, Jonez transition, Q One Forty-five, Climb via SID ex-</u> cept maintain flight level one eight zero."
	<u>"Cleared to Johnston Airport, Scott One departure, Jonez transition, Q One Forty-five, Climb Via SID except maintain flight level one eight zero, expect flight level three five zero one zero minutes after departure."</u>
Add	<u>NOTE-</u> <u>1. Use of "Climb via SID Except Maintain" to</u> <u>emphasize a published procedural constraint is an</u> <u>inappropriate use of this phraseology.</u> <u>2. Considering the principle that the last ATC clearance</u> <u>issued has precedence over the previous, the</u> <u>phraseology "maintain (altitude)" alone cancels</u> <u>previously issued altitude restrictions, including</u> <u>SID/STAR altitude restrictions, unless they are restated</u> <u>or modified.</u>
Add	<u>REFERENCE–</u> <u>FAA Order JO 7110.65, Para 4–2–5 Route or Altitude</u> <u>Amendments</u> <u>AIM 4–4–10 Adherence to Clearance.</u>

<u>4.</u> When a SID does not contain published crossing restrictions and/or is a SID with a Radar Vector segment or a Radar Vector SID; or a SID is constructed with a Radar Vector segment and contains published crossing restrictions after the vector segment, instruct aircraft to "MAINTAIN (altitude)."

NOTE through **REFERENCE**

5. <u>Use one of the following when the SID</u> contains published crossing restrictions:

(a) Instruct aircraft to "Climb via SID."

(b) Instruct the aircraft to "Climb via SID except maintain (altitude)" when a top altitude is not published or when it is necessary to issue an interim altitude.

EXAMPLE-

<u>"Cleared to Johnston Airport, Scott One departure,</u> Jonez transition, <u>Q</u>-One Forty-five. Climb via SID."

<u>"Cleared to Johnston Airport, Scott One departure,</u> Jonez transition, Q-One Forty-five, Climb via SID except maintain flight level one eight zero."</u>

<u>"Cleared to Johnston Airport, Scott One departure,</u> Jonez transition, Q-One Forty-five, Climb Via SID except maintain flight level one eight zero, expect flight level three five zero one zero minutes after departure."

NOTE-

<u>1. Use of "Climb via SID Except Maintain" to emphasize</u> <u>a published procedural constraint is an inappropriate</u> <u>use of this phraseology.</u>

2. Considering the principle that the last ATC clearance issued has precedence over the previous, the phraseology 'maintain (altitude)' alone cancels previously issued altitude restrictions, including SID/STAR altitude restrictions, unless they are restated or modified.

REFERENCE-

FAA JO 7110.65, Para 4–2–5, Route or Altitude Amendments. AIM, Para 4–4–10, Adherence to Clearance. 5. When a SID does not contain published crossing restrictions and/or is a SID with a Radar Vector segment or a Radar Vector SID; or a SID is constructed with a Radar Vector segment and contains published crossing restrictions after the vector segment, instruct aircraft to "MAINTAIN (altitude)."

h <i>reference</i>	No Change
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ng restrictions:	
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<u>)" when a top altitude is</u>	
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-	No Change
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1. PARAGRAPH NUMBER AND TITLE: 4–5–6. MINIMUM EN ROUTE ALTITUDES

2. BACKGROUND: Minimum En Route Altitudes (MEA) are based in part on ground–based navigational aid reception. The advent of satellite technology provides the opportunity for lower minimum altitudes along certain airways, allowing more altitudes to be useful for more aircraft.

3. CHANGE:

<u>OLD</u>

4–5–6. MINIMUM EN ROUTE ALTITUDES

Title through a

<u>NEW</u>

4–5–6. MINIMUM EN ROUTE ALTITUDES (MEA)

No Change

NOTE-

Controllers must be aware that in the event of radio communications failure, a pilot will climb to the MEA for the route segment being flown.

1. <u>Nonradar procedures are used only within 22</u> miles of a VOR, VORTAC, or TACAN.

2. <u>Radar</u> procedures are used <u>only when an</u> <u>operational advantage is realized and</u> the following actions are taken:

(a) <u>Radar navigational guidance is provided</u> <u>until the aircraft is within 22 miles of the NAVAID</u>, and

(b) Lost communications instructions are issued.

Add

NOTE-

Controllers must be aware that in the event of radio communications <u>or GNSS</u> failure, a pilot will climb to the MEA for the route segment being flown.

1. <u>For aircraft using VOR, VORTAC or</u> <u>TACAN for navigation, this applies only within</u> <u>22 miles of that NAVAID.</u>

2. <u>When</u> radar procedures are used, the following actions are taken:

(a) <u>In the absence of a published MOCA,</u> <u>assign altitudes at or above the MVA or MIA</u> <u>along the route of flight</u>, and

No Change

3. The aircraft is GNSS equipped.

1. PARAGRAPH NUMBER AND TITLE: 4-8-1. APPROACH CLEARANCE

2. BACKGROUND: The Flight Technologies and Procedures Division, Flight Operations Branch (AFS-410) requested the text describing the Enhanced Flight Vision System (EFVS) operations be more generic and aligned with both types of EFVS operations available to operators.

3. CHANGE:

<u>OLD</u>

4–8–1. APPROACH CLEARANCE Title through a6 *NOTE 10*

11. There are some systems, for example, Enhanced Flight Vision System (EFVS), which allow <u>aircraft</u> to <u>descend below published final approach minimums</u>.

<u>NEW</u>

4-8-1. APPROACH CLEARANCE

No Change

11. There are some systems, for example, Enhanced Flight Vision System (EFVS), which allow <u>pilots</u> to <u>conduct Instrument Approach Procedures (IAP) when</u> <u>the reported weather is below minimums prescribed on</u> <u>the IAP to be flown.</u>

1. PARAGRAPH NUMBER AND TITLE: 5–1–1. PRESENTATION AND EQUIPMENT PERFORMANCE

2. BACKGROUND: FAA Order JO 7110.65, Paragraph 5-1-1, Presentation and Equipment Performance, states "Provide radar service only if you are personally satisfied that the radar presentation and equipment performance is adequate for the service being provided." The note further states "The provisions of radar service is not limited to the distance and altitude parameters obtained during the commissioning flight check." However, it does not detail what is checked during the commissioning flight check.

3. CHANGE:

<u>OLD</u>

5-1-1. PRESENTATION AND EQUIPMENT PERFORMANCE

Provide radar service only if you are personally satisfied that the radar presentation and equipment performance is adequate for the service being provided.

NOTE-

The provision of radar service is not limited to the distance and altitude parameters obtained during the commissioning flight check.

NEW

5–1–1. PRESENTATION AND EQUIPMENT PERFORMANCE

No Change

NOTE-

The provision of radar service is not limited to the distance and altitude parameters obtained during the commissioning flight check. <u>FAA Order 8200.1, United</u> <u>States Standard Flight Inspection Manual, Chapter 14,</u> <u>Surveillance, describes the surveillance flight inspection procedures.</u>

1. PARAGRAPH NUMBER AND TITLE: 5-2-14. CODE MONITOR

2. BACKGROUND: The current paragraph only requires Code 4000 to be monitored when a position of operation contains a restricted area, warning area or VR route. However, there are other categories when Code 4000 is used, such as certain test aircraft, MTR missions, an aerial refueling operation requiring descent involving more than one stratum, ALTRVs where continuous monitoring of ATC communications facilities is not required and frequent altitude changes are approved, and other aircraft operating on flight plans requiring special handling by ATC.

3. CHANGE:

<u>OLD</u>

5-2-14. CODE MONITOR

Continuously monitor the Mode 3/A radar beacon codes assigned for use by aircraft operating within your area of responsibility when <u>nonautomated</u> beacon decoding equipment (e.g., 10-channel decoder) is used to display the target symbol.

REFERENCE-

FAA Order JO 7110.65, Para 5–2–6, Function Code Assignments. NOTE–

In addition to alphanumeric and control symbology processing enhancements, the MEARTS and STARS systems are equipped with automatic beacon decoders. Therefore, in facilities where the automatic beacon decoders are providing the control slash video, there is no requirement to have the non-automated decoding equipment operating simultaneously.

REFERENCE-

FAAOJO 7210.3, Para 3-7-4, Monitoring of Mode 3/A Radar Beacon Codes.

<u>NEW</u>

5-2-14. CODE MONITOR

Continuously monitor the Mode 3/A radar beacon codes assigned for use by aircraft operating within your area of responsibility when **<u>non-automated</u>** beacon decoding equipment (e.g., 10-channel decoder) is used to display the target symbol.

No Change

No Change

REFERENCE-

FAA <u>Order</u> JO 7210.3, Para 3–<u>6</u>–4, Monitoring of Mode 3/A Radar Beacon Codes.

No Change

b. Positions of operation which contain a restricted or warning area or VR route within or immediately adjacent to their area of jurisdiction must monitor **Code 4000** and any other code used in lieu of **4000** within the warning/restricted area or <u>VR route</u>. If by local coordination with the restricted/warning area or VR route user a code other than 4000 is to be exclusively used, then this code must be monitored.

Add

b. Positions of operation which contain <u>or are</u> <u>immediately adjacent to a restricted area,</u> <u>warning area, VR route, or other categories</u> <u>where Code 4000 can be assigned must monitor</u> Code 4000 and any other code used in lieu of 4000. If by local coordination with the restricted/warning area or VR route user a code other than 4000 is to be exclusively used, then this code must be monitored.

REFERENCE-

FAA Order JO 7110.65, Para 5-2-6, Function Code Assignments.

1. PARAGRAPH NUMBER AND TITLE: 5–5–4. MINIMA

2. BACKGROUND: FAA Order JO 7110.65U Change 2, Chapter 5, Section 5, Radar Separation, was changed to allow ASR-11 MSSR terminal facilities to utilize 3-mile separation to 60 NM from the sensor antenna after an analytical study was completed by the FAA Flight Systems Laboratory. The study concluded that the performance of the ASR-11 MSSR was equivalent to the performance of an ASR-9 with Mode S. ASR-9 with Mode S terminal facilities had previously been certified for operations to 60 NM from the sensor site. Currently, ERAM facilities have the option of utilizing a separation standard minima of 3 NM if certain criteria are first met, but only out to 40 NM from the sensor site. Since ERAM receives surveillance data directly from ASR-9 with Mode S and ASR-11 MSSR sensor sites, increasing the usability of the existing installed infrastructure by increasing the usable mileage from 40 NM to 60 NM will increase the efficiency of the NAS, with no impact on overall safety.

3. CHANGE:

<u>OLD</u>

5–5–4. MINIMA

Title through d3(a)

(**b**) Within 40 miles of the preferred sensor, and within the 3 NM separation area.

<u>NEW</u>

5-5-4. MINIMA

No Change

(b) Within 40 NM of the preferred sensor <u>or</u> <u>within 60 NM of the preferred sensor when using</u> <u>ASR-9 with Mode S or ASR-11 MSSR Beacon</u> and within the 3 NM separation area.

1. PARAGRAPH NUMBER AND TITLE: 5–14–3. COMPUTER ENTRY OF FLIGHT PLAN INFOR-MATION

2. BACKGROUND: Vertical Navigation (VNAV) use on Standard Terminal Arrivals (STAR) is expected to increase in the future. Currently, there is no way to reflect in the full data block or on the Aircraft List (ACL) of the En Route Decision Support Tool (EDST) that an aircraft is cleared for a procedure that includes VNAV. The procedure altitude displayed in the full data block (FDB) and on the ACL will help to ensure that all controllers are looking at accurate data. This will help reduce the possibility of creating a situation where different sectors are controlling traffic based on different expectations.

- - - -

3. CHANGE:

<u>OLD</u>	<u>NEW</u>
5–14–3. COMPUTER ENTRY OF FLIGHT PLAN INFORMATION	5–14–3. COMPUTER ENTRY OF FLIGHT PLAN INFORMATION
Title through a3(b)	No Change
Add	<u>ERAM</u>
Add	(c) <u>A procedure altitude if the aircraft is</u> <u>cleared to vertically navigate (VNAV) on a</u> <u>SID/STAR with published restrictions, or</u>
a3 <u>(c)</u>	Re-letter as a3<u>(d)</u> .

1. PARAGRAPH NUMBER AND TITLE: 9–2–10. WASHINGTON, DC, SPECIAL FLIGHT RULES AREA (DC SFRA)/ATC SECURITY SERVICES

2. BACKGROUND: 14 CFR Part 93 prescribes Special Air Traffic Rules (SATR) for aircraft operations in certain areas. The FAA, in FAA–S–ACS–6, Private Pilot–Airplane Airman, Certification Standards, Section I, Preflight Preparation, Task E, requires applicants to "Determine the requirements for flying in Special Use Airspace (SUA), and Special Flight Rules Areas (SFRA)." Applicants are also required to account for, among other things, "SFRA." Additionally, for controllers, FAA Order 7110.65W only mentions one SFRA. Paragraph 9–2–10 contains procedures for ATC use specifically in the Washington, DC, SFRA. The order does not contain information concerning the other SFRAs or SATR.

3.	CHANGE:

GE:	
<u>OLD</u>	NEW
Add	<u>9–2–10. SPECIAL AIR TRAFFIC RULES</u> (SATR) AND SPECIAL FLIGHT RULES AREA (SFRA)
Add	The Code of Federal Regulations prescribes special air traffic rules for aircraft operating within the boundaries of certain designated airspace. These areas are listed in 14 CFR Part 93 and can be found throughout the NAS. Procedures, nature of operations, configuration, size, and density of traffic vary among the identified areas.
Add	a. Special Flight Rules Areas are areas of airspace wherein the flight of aircraft is subject to special air traffic rules set forth in 14 CFR Part 93, unless otherwise authorized by air traffic control. Not all areas listed in 14 CFR Part 93 are Special Flight Rules Areas, but special air traffic rules apply to all areas designated as SFRA.
Add	<u>REFERENCE–</u> <u>14 CFR Part 93, Special Air Traffic Rules.</u> P/CG, SPECIAL AIR TRAFFIC RULES (SATR) P/CG, SPECIAL FLIGHT RULES AREA (SFRA)

Add	b. Each person operating an aircraft to, from, or within airspace designated as a SATR area or SFRA must adhere to the special air traffic rules set forth in 14 CFR Part 93, as applicable, unless otherwise authorized or required by ATC.
9–2– <u>10. WASHINGTON, DC, SPECIAL</u>	9–2– <u>11. ATC SECURITY SERVICES FOR</u>
<u>FLIGHT RULES AREA (DC SFRA)/ATC</u>	<u>THE WASHINGTON, DC, SPECIAL</u>
<u>SECURITY SERVICES</u>	<u>FLIGHT RULES AREA (DC SFRA)</u>
9–2– <u>10</u> through 9–2– <u>22</u>	Renumber 9–2– <u>12</u> through 9–2– <u>23</u> .

1. PARAGRAPH NUMBER AND TITLE: Appendix A. Standard Operating Practice (SOP) for the Transfer of Position Responsibility

2. BACKGROUND: A request was received to include weather in the position relief briefing due to the fact that Center sectors cover such a wide area with varying terrain. It was determined that adding weather to the verbal briefing will enhance the relieving controller's awareness of any pertinent weather conditions, NOTAMs, or any other weather related situation in or around the sector. The request also recommended it is redundant to require ERAM facilities with Voice Communication Indicator (VCI) to verbally brief on the communication status of each aircraft since the use of VCI is mandatory.

3. CHANGE:

<u>OLD</u>

b. VERBAL BRIEFING

Relieving Specialist	Specialist Being Relieved
	1. Brief the relieving specialist on the abnormal status of items not listed on the Status Information Area(s) as well as on any items of special interest calling for verbal explanation or additional discussion.
	2. Brief on <u>traffic if applicable.</u>
	3. Brief communication status of all known aircraft.
<u>4.</u> Ask questions necessary to ensure a complete understanding of the operational situation.	
	5. Completely answer any questions asked.

<u>NEW</u>

b. VERBAL BRIEFING

Relieving Specialist	Specialist Being Relieved
	1. Brief the relieving specialist on the abnormal status of items not listed on the Status Information Area(s) as well as on any items of special interest calling for verbal explanation or additional discussion.
	2. Brief on <u>reported weather and other weather related</u> <u>information.</u>
	3. Brief on traffic if applicable.
	4. <u>Brief communication status of all known aircraft</u> <u>except for ERAM facilities using Voice Communica-</u> tion Indicator (VCI).
<u>5.</u> Ask questions necessary to ensure a complete understanding of the operational situation.	
	<u>6.</u> Completely answer any questions asked.