

**Leidos Flight Service:** 

How to Co-Exist with Weather & Online Capabilities

SAWS X 4/22/2023

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Director of Innovation & Outreach

# **Topics**

- Aviation Accidents Due to Weather & Stats
- Pop Quiz Weather Briefing Myths
- Why do pilots call Flight Service?
- □ AC 91-92: Pilot's Guide to a Preflight Briefing
  - Added Value Briefings
  - Strategies to Transition
- ☐ SMS & Mobile Devices
- Priority Services
- Useful Online Resources





# What this presentation WON'T give you...

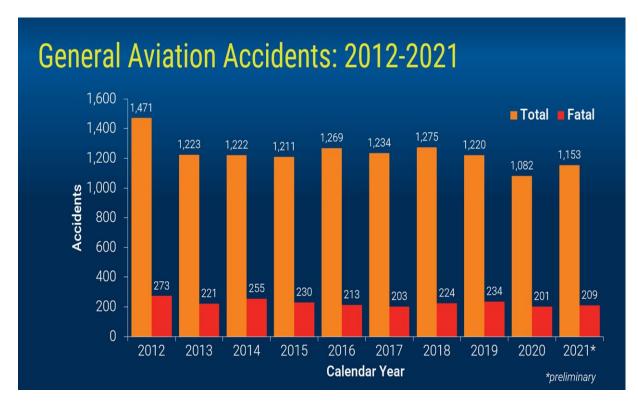
- Solicit/Convert pilots from the product or vendor they routinely use: (Foreflight, Garmin, etc.)
- Teach weather & weather interpretation

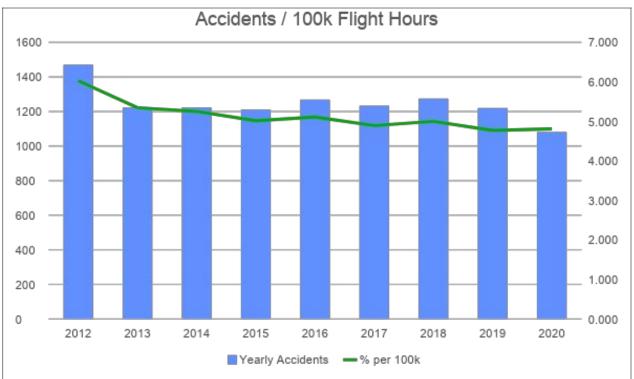
# What this presentation WILL give you...

- Insight on why self-briefing isn't as bad of an idea as it (initially) sounds
- How "self-briefing" is just another word for "learning WX"
- How you (& your family) can keep from becoming accident statistics
- How to be regulatory compliant w/FAR §91.103
- Transition tips for pilots starting or learning to self brief
- Information about our (free) services, changes to our system, and resources available to you



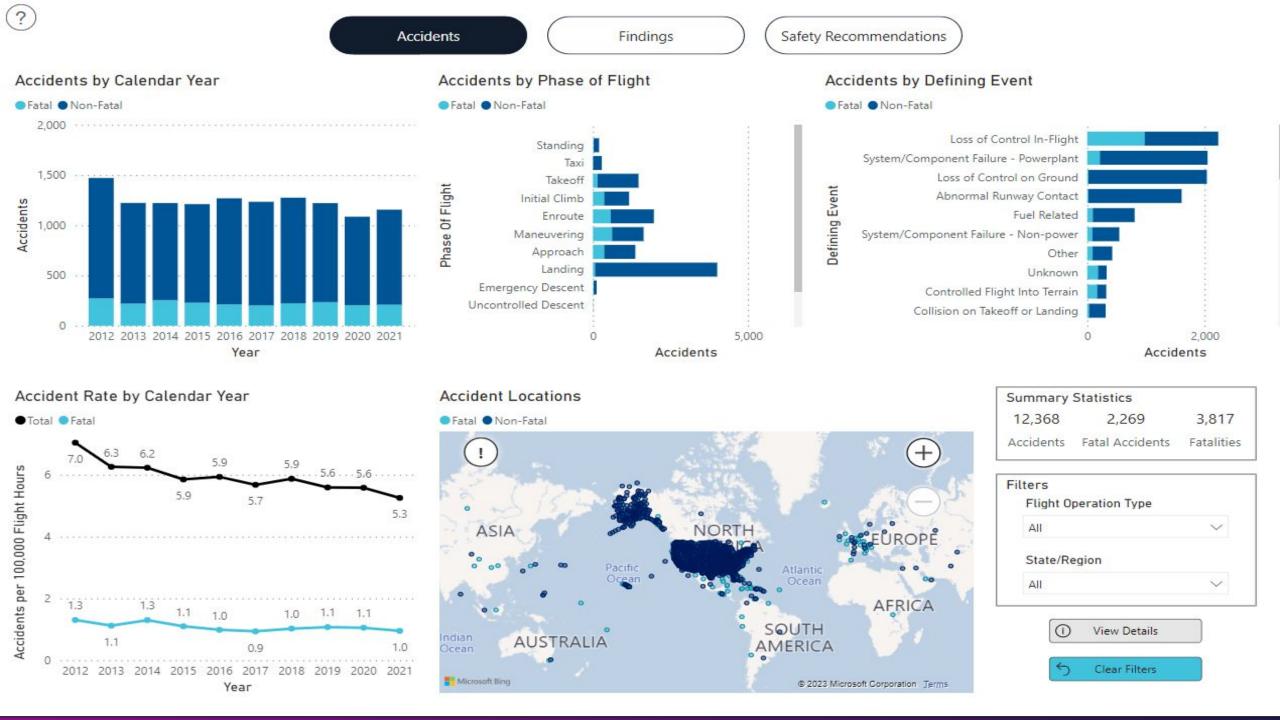
#### **Weather Driven Aviation Accidents**



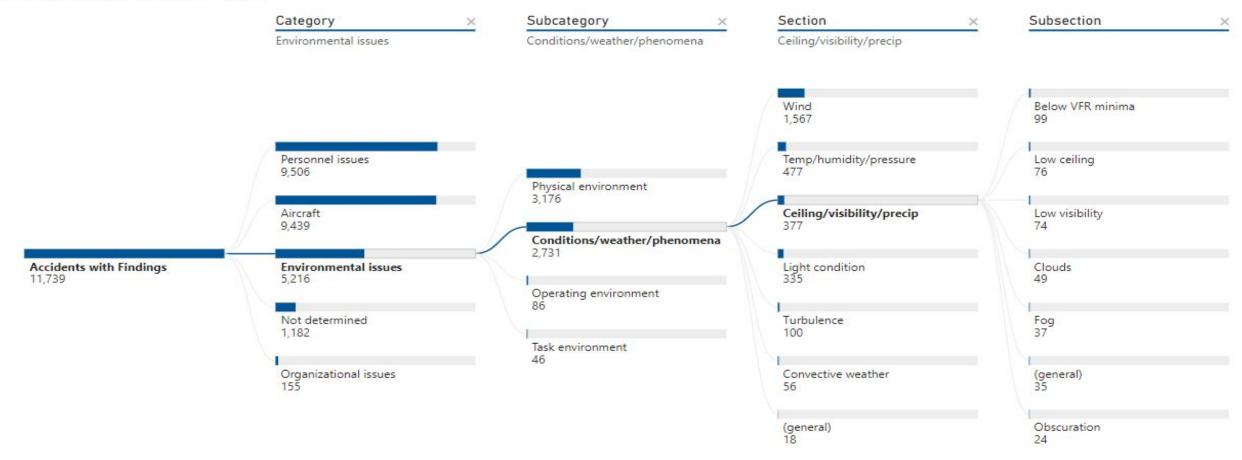


- Primarily in the General Aviation; Personal Flight category
- ▶ VFR into IMC conditions continues to be the #1 cause of WX related fatalities
- ▶ "Weather is often cited as a cause or contributing factor, accounting for roughly 25% of the accidents occurring in general aviation operations."
- ▶ Andrew J. Fultz & Walker S. Ashley (2016): Fatal weather-related general aviation accidents in the United States, Physical Geography, DOI: 10.1080/02723646.2016.1211854

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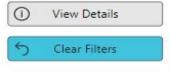


#### Accidents by Investigative Findings









# Pop Quiz

The Concept of a "legal briefing" or "certified briefing" is real and defined by the FAA.

#### **False**

A pilot needs to call Flight Service to be compliant with FAR 91.103 for preflight planning.

#### **False**

The FAA requires a self-briefing to be recorded or digitally logged as proof that the briefing was conducted.

#### **False**

The FAA has described how a pilot may be compliant with FAR 91.103 while conducting a preflight self-briefing.

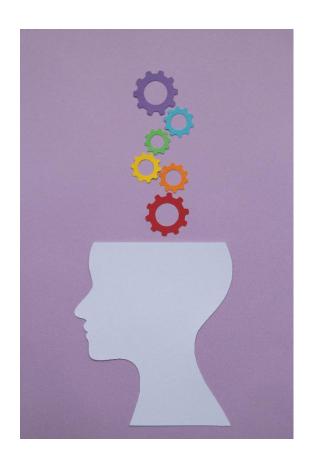
#### True

As part of its modernization, Flight Service will no longer provide phone services.

#### **False**



# Why Do Pilots Call Leidos Flight Service?



- 14 CFR part 91, § 91.103 Preflight Action
  - Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight
- FAA Document References
  - Pilots encouraged to call Flight Service before every flight and for every aviation related question by CFI's
- Last minute check for TFRs and NOTAMs
  - Has anything changed since my briefing?
- Local Area Knowledge
  - Unable to obtain anywhere else
- Validation of a Self-briefing or 2<sup>nd</sup> Opinion
  - Have I come to the right conclusion about the weather?



# AC 91-92: Pilot's Guide to a Preflight Briefing

Educational roadmap for the development and implementation of preflight self-briefings

- Flight Planning
- Weather Interpretation
- Risk Identification/Mitigation Skills

Adhering to the guidelines better prepares pilots to interpret and use real-time weather information

- Before departure
- En-route (in the cockpit using ADS-B)



Provides *guidance* for required preflight actions under Title 14 of the Code of Federal Regulations (14 CFR) part 91, § 91.103

Encourages pilots to use Flight Service (via phone) in a consultative capacity, when needed



#### **AC 91-92 Self-Briefing Checklist**

As you proceed through your training, you may find the need to add, subtract, or otherwise customize this checklist to fit your specific needs.

15/2	1	AC 91-92 Appendix E			
		APPENDIX B. SAMPLE PREFLIGHT CHECKLIST			
		AFFENDIA B. SAMPLE PREFEIGHT CHECKLIST			
B.1	Outlook Briefing Elements (more than 6 hours until departure). Check for reported or forecast meteorological or aeronautical conditions that might influence or alter the proposed flight.				
		Weather advisories (SIGMET, AIRMET, convective SIGMETs, CWAs, and Aviation Watch Notification Messages)			
		Synopsis (type, location, and movement of weather systems and/or air masses)			
		En route and destination forecast (alternate if needed)			
		NOTAMs (e.g., airport/runway closures, air traffic delays, and TFRs)			
B.2	Standard Briefing Elements.				
		Adverse conditions (e.g., weather advisories, low-level wind shear, thunderstorms, icing, and frontal zones)			
		Synopsis			
		Current weather			
		En route, destination, and alternate forecasts			
		Winds aloft			
		NOTAMs, TFRs, and PIREPs			
		P40 (Camp David) and P56 (Washington DC); Washington, DC SFRA (if applicable)			
		ATC delays			
B.3	Abbreviated Briefing Elements (update on changes, up to 2 hours prior to flight).				
		Check updates to adverse conditions (reported or forecast) along the route of flight			
		Check for any changes in meteorological and aeronautical conditions			
B.4	Non-Weather-Related Checklist Items.				
		IMSAFE			
		PAVE			
		Personal minimums			
		Fuel requirements			
		Alternate airports			
		Traffic delays			
		Takeoff and landing distance information for airports			
		Aircraft performance items (e.g., airport elevation, runway slope and conditions, and Weight and Balance)			
		RAIM check			



# "How do I increase my comfort with weather?"

- Practice
  - Daily 5 Minute Dry Run
- Process
  - Use a Self Brief Checklist
- Participate
  - Work with your resources:
     CFIs, Flight School Support, Flying
     Community, Online Resources, Ask
     Questions and Verify with Flight Service
- Proficiency
  - Continue learning using educational resources: VFR & IFR Wings Courses
- Precaution
  - •When in doubt... sit it out!

Practice

Precautio n



Process

Self-Briefing
Transition Strategies

Proficiency

Participate



### Self-Briefing: *CFI Teaching* Strategies

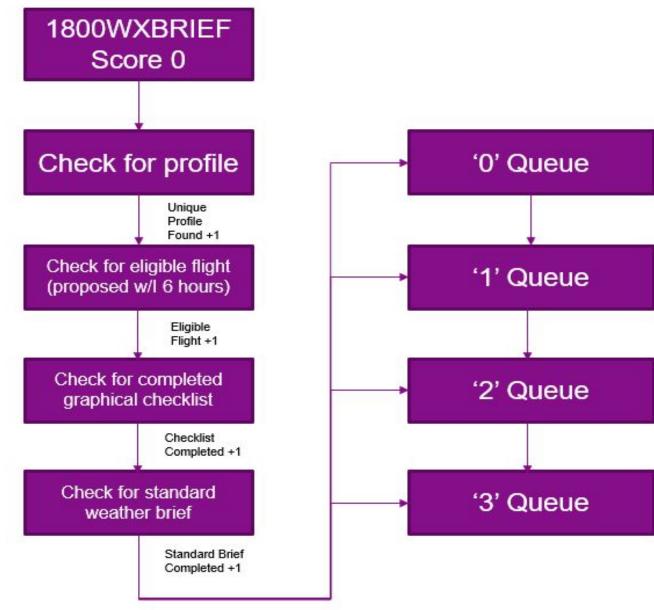
3/15/21	AC 91-92 Appendix B APPENDIX B. SAMPLE PREFLIGHT CHECKLIST		"How do I teach my <u>students</u> to be comfortable with weather?"
or for			Provide structure Resources available Self-briefing Checklist
			Demonstrate by doing
B.2 Stan	dard Briefing Elements.	. I	□ Demonstrate a successful briefing & go/no-go process
	Adverse conditions (e.g., weather advisories, low-level wind shear, thunderstorms, icing, and frontal zones)		2 omenetiate a caccecial anoming at gome go process
			Observe & Evaluate
			Diserve & Evaluate
	En route, destination, and alternate forecasts		☐ Provide instructional oversight and adjustments where needed during instructor
	Winds aloft		Provide instructional oversight and adjustments where needed during instructor
	NOTAMs, TFRs, and PIREPs P40 (Camp David) and P56 (Washington DC); Washington, DC SFRA (if		guided briefing(s)
	applicable)		garaga siremig(e)
B.3 Abbi	reviated Briefing Elements (update on changes, up to 2 hours prior to flight).		Take the Training Wheels Off
	Check updates to adverse conditions (reported or forecast) along the route of flight		■ Encourage your student(s) to start the self-briefing process as soon as practical
B.4 Non-	-Weather-Related Checklist Items.		You are your student's primary learning resource; encourage questions from day 1!
	IMSAFE		day 1:
	PAVE		
	Personal minimums		
	•	<b>     </b>	nsist on consistency
	Alternate airports	1	•
	Traffic delays		Just one skipped preflight briefing sends a clear message:
	Takeoff and landing distance information for airports  Aircraft performance items (e.g., airport elevation, runway slope and conditions,		
Ц	and Weight and Balance)		_
			"My flight turned out just fine without a briefing"
			, ,
			"You can check the WX, but we're still going!"



# **Priority Service**

Callers who are not identified or have not performed self service actions will wait longer to speak with a specialist.

Those who are identified & have more actions accomplished will receive the highest priority.

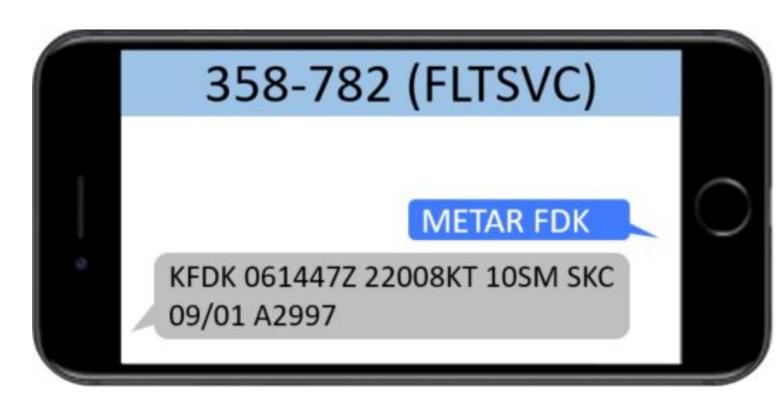




#### **SMS/Text Services**

The following capabilities are available by messaging them to **358-782** (FLTSVC):

- METARs and TAFs at an airport- Request current weather and forecast information for any airport.
- Adverse Condition Updates- Text "ACU" and you will receive a summary of any new conditions detected for your upcoming flight or you will get a positive indication there are no new conditions reported. This service allows you to check if there are any new Adverse Conditions or TFRs since you filed your flight plan. This content is recorded and can be used to provide confirmation that you received the most up-to-date adverse conditions for your flight.
- <u>Help-</u> To request information about the text message options text"*Help*" to 358-782 (FLTSVC)

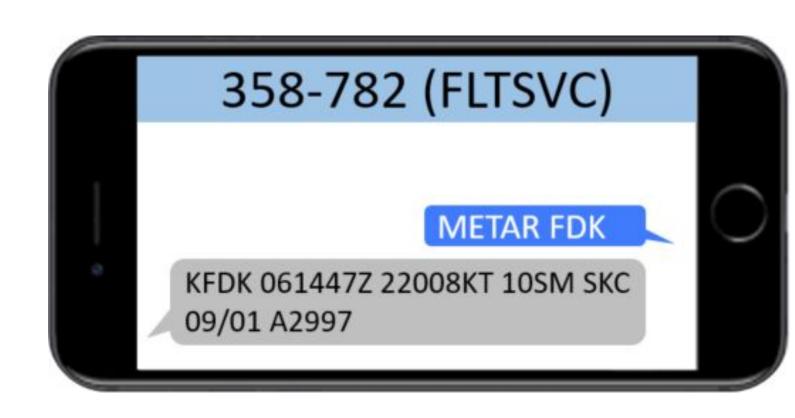




#### **SMS/Text Services**

- Text "METAR FDK" and you will receive the latest METAR for Frederick Airport.
- Text "METAR FDK PT" and you will receive the latest METAR for Frederick Airport in plain text.
- Text "TAF FDK" and you will receive the latest TAF for Frederick Airport.
- Text "MT FDK PT" and you will receive the latest METAR and TAF for Frederick Airport in plain text.

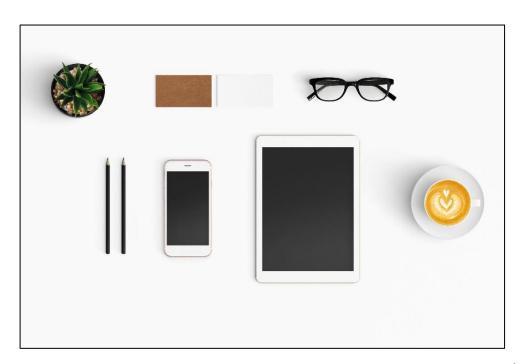
Note: the requests are case independent.





#### **Mobile Devices**

- Use the same desktop/laptop web address
  - www.1800wxbrief.com
  - Auto-redirect to the smart phone, tablet, etc.

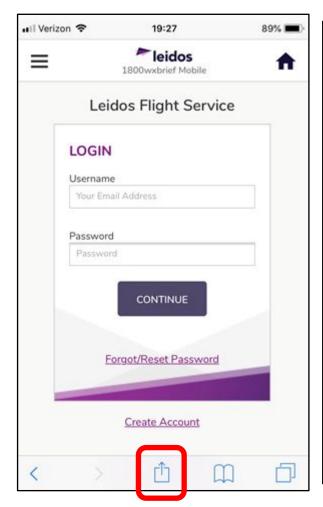


- Automatically determines your device screen size and display
- Designed for use on:
  - iPhone
  - iPad
  - Samsung Galaxy
  - LG Nexus
  - Google Pixel
  - Android



### **Creating a Home Screen Shortcut**

Access the Mobile Web using www.1800wxbrief.com







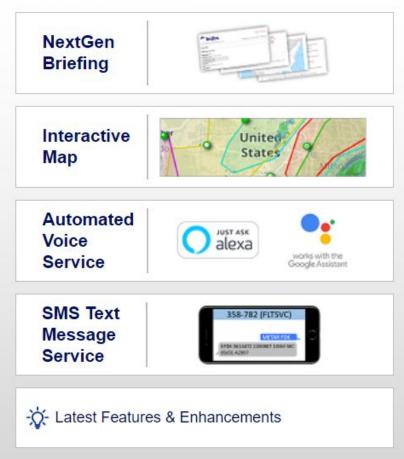


# 1800wxbrief.com Online Capabilities

- ICAO Flight Planning
- Route/Area Briefings and NavLog
- Interactive Map
- Easy access to TAFs, METARs, and NOTAMs
- Weather Charts CONUS, Hawaii, Alaska
- Favorite/Recent Flight Plans and Saved Aircraft
- Account and Aircraft Management
- Advanced Services
  - ACAS, EasyActivate<sub>©</sub>, EasyClose<sub>©</sub>, Close Reminder, SE SAR, Preflight Summaries, ATC Notices, EasyAmend, Alexa & Google Assistant, Priority Services
- Pilot History



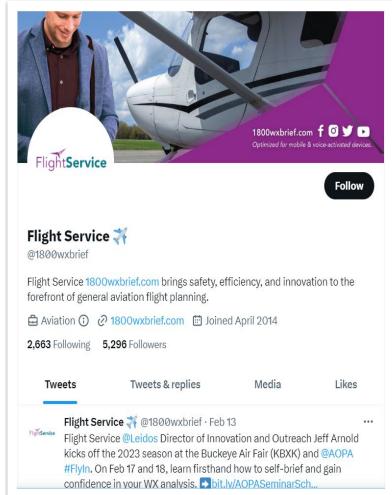
#### **Featured Capabilities**

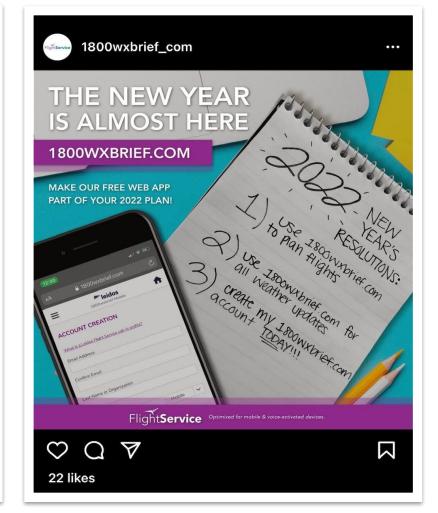




#### **Connect with us on Social Media!**







Facebook: <a href="https://www.facebook.com/1800wxbrief">https://www.facebook.com/1800wxbrief</a>

Instagram: https://www.Instagram.com/1800wxbrief com

Twitter: <a href="https://www.twitter.com/1800wxbrief">https://www.twitter.com/1800wxbrief</a>



#### **Useful Online Resources**

<u>VFR WINGS Course – How to Conduct Preflight</u> <u>Self-Briefings for Student and VFR Pilots</u>

<u>IFR WINGS Course – Conducting Preflight</u> <u>Self-Briefings for IFR Pilots</u>

AC 91-92 - Pilot's Guide to a Preflight Briefing

AC 91-92 - Live FAA YouTube Panel

(Great for offering extra credit to students!)



# Scan to take a quick 3-minute feedback survey!



# Thank you from all of us at Leidos Flight Service

www.1800wxbrief.com

Jeffery.C.Arnold@leidos.com



# Leidos On-Line Live Demonstration



Contact:

Jeff Arnold

jeffery.c.Arnold@leidos.com



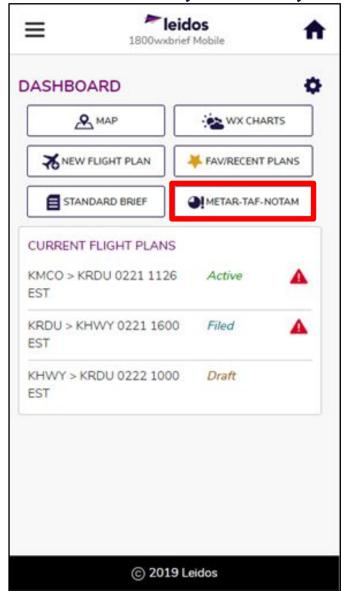
# **Support Slides**

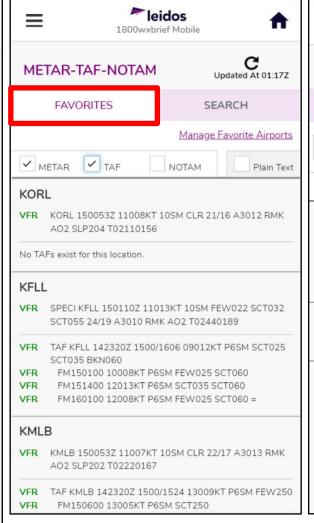


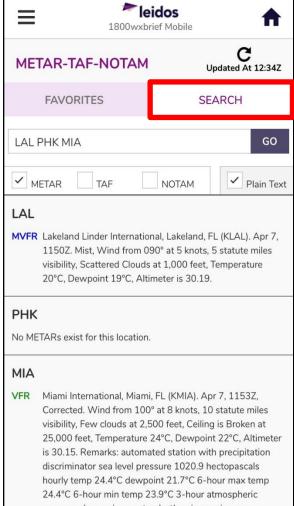
# **Pilot Services**



# **METARs, TAFs, and NOTAMs**

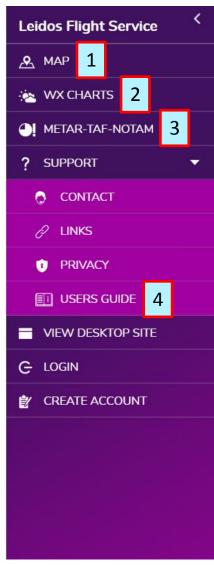








# Features Accessible without Logging In



# 1. Interactive Map

- Route Display
- Current/forecast Wx products
- Adverse conditions & Aeronautical information
- Variety of background maps

#### 2. Weather Charts

Static weather charts

#### 3. METAR-TAF-NOTAM Viewer

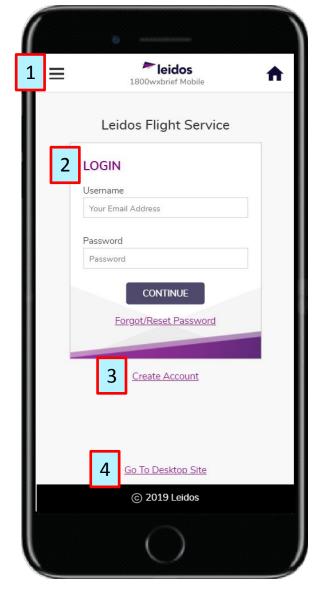
- On demand for an airport or several airports
- Display encoded (raw text)
- Display decoded (plain text)

#### 4. Mobile Web Users Guide

Provides a detailed description of all features



#### Mobile Web Home Screen



Access the Mobile Web using your existing <a href="https://www.1800wxbrief.com">www.1800wxbrief.com</a> account

# Navigation Menu

Access all features when logged in

# 2. Login Dialog

Use existing 1800wxbrief.com credentials

#### 3. Create New Account

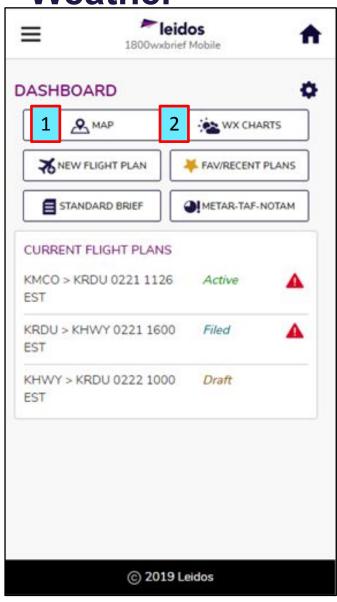
For pilots that do not have an existing 1800wxbrief.com account

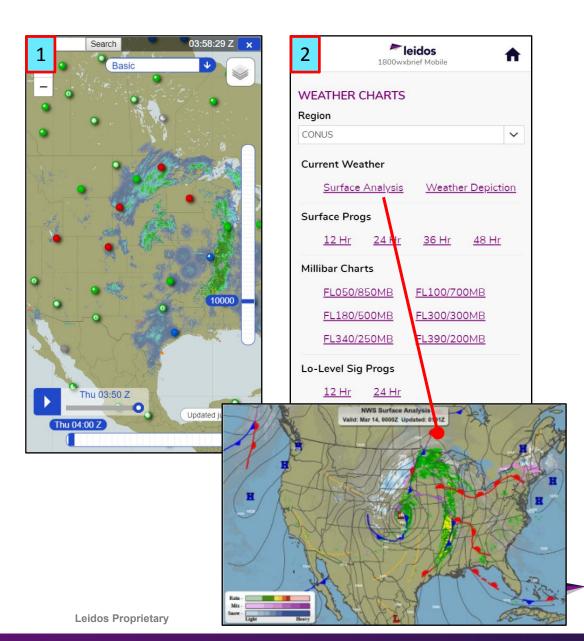
# 4. Go To Desktop Site

- Full desktop capability
- Access to domestic flight plan form



Weather





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New, Favorite, and Recent Flight Plans

RECENT (2)

Touch to

Edit

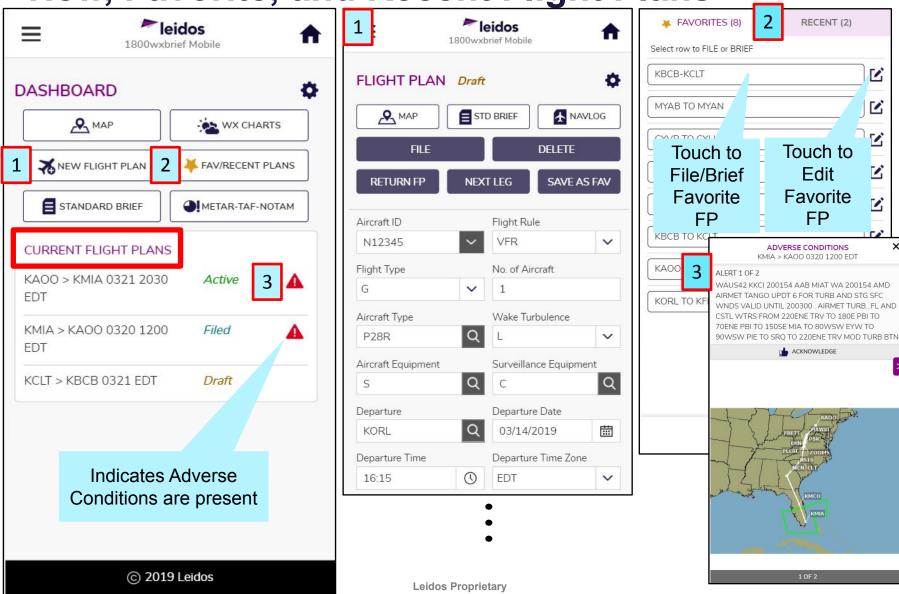
Favorite

FP

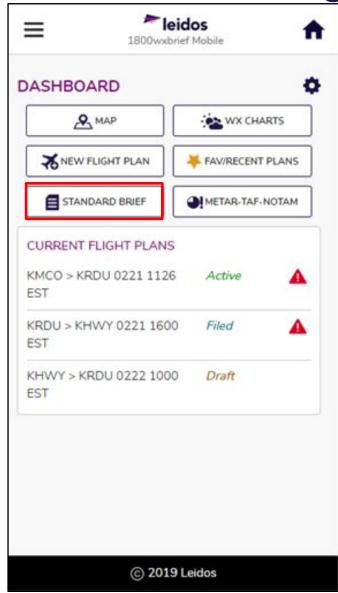
ADVERSE CONDITIONS KMIA > KAOO 0320 1200 EDT

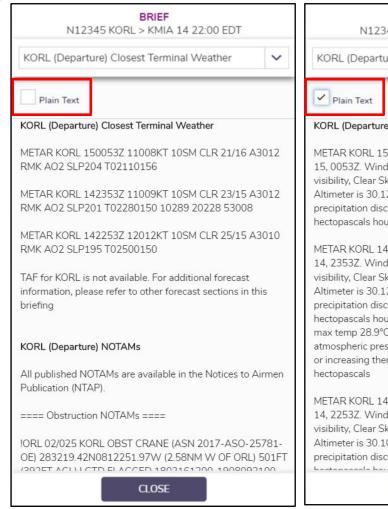
ACKNOWLEDGE

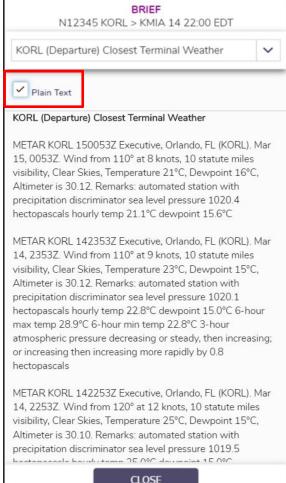
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### **Standard Briefings**

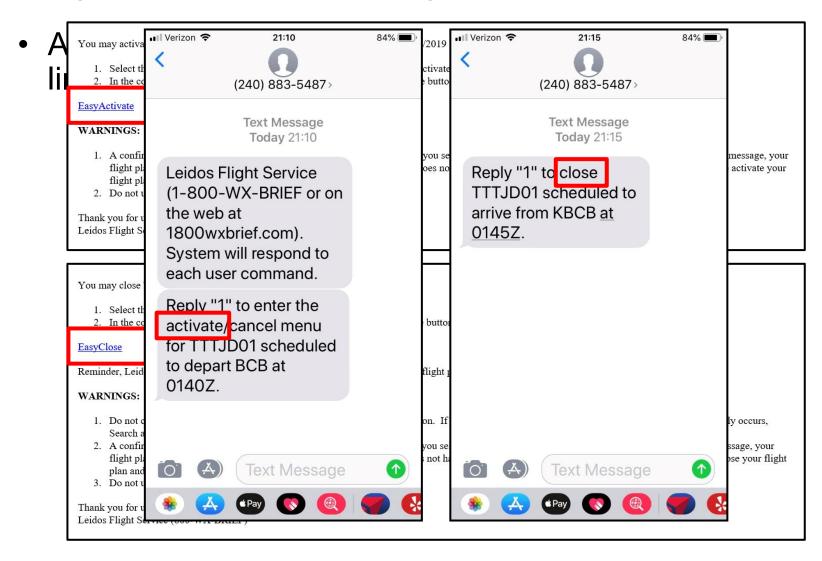






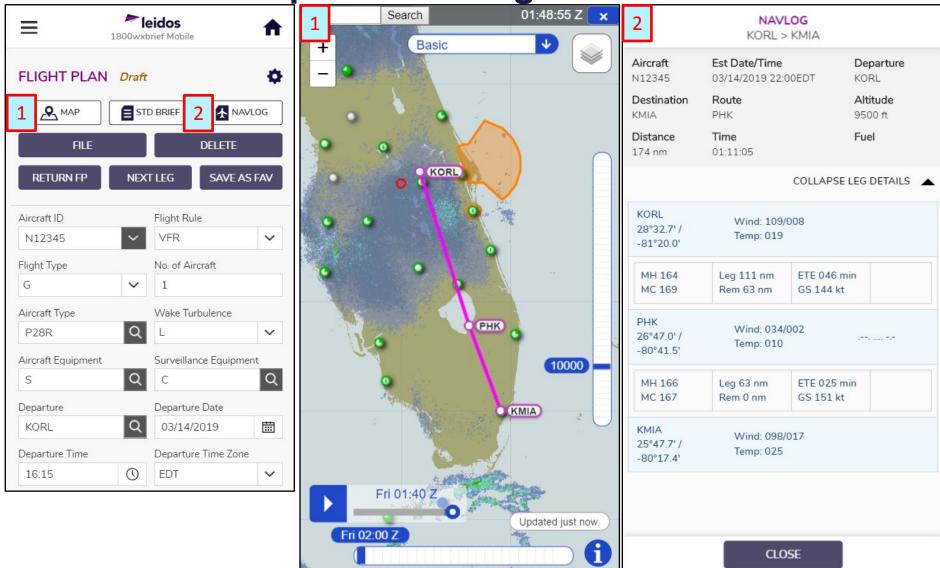


# EasyActivate<sup>™</sup> and EasyClose<sup>™</sup>





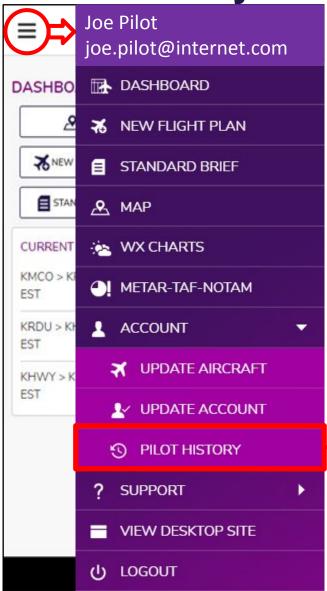
Interactive Map and NavLog



**Leidos Proprietary** 

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**Pilot History** 



=	leidos 1800wxbrief Mobile
Mar 15, 0112Z	N12345 KORL > KMIA
Route Standard Briefi	ing
Mar 15, 0110Z	N12345 KORL > KMIA
Route Standard Briefi	ing
Mar 12, 1734Z	TTTJD01 BCB > ROA
Route Standard Briefi	ng
Mar 12, 0150Z	N12345 KAOO > KMCN
Route Standard Briefi	ng
Mar 11, 0023Z	N12345 KMCO > KRDU
Route Standard Briefi	ng
Mar 11, 0020Z	TTTJD01 KMC0 > KRDU
Route Standard Briefi	ng
Mar 8, 1637Z	TTTJD01 W42 > MCN
Route Standard Briefi	ng
Mar 8, 1629Z	DEMO11 KAOO > KMCN
Cancel Flight Plan	
Mar 8, 1628Z	DEMO11 KAOO > KMCN
File Flight Plan	■ VIEW DETAILS
Mar 8, 1614Z	DEMO11 KAOO > KMCN
File Flight Plan	II VIEW DETAILS
Mar 6, 0332Z	DEMO11 KAOO > KMCN
Cancel Flight Plan	

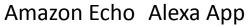
	8 8, 1628Z X KAOO > KMCN
Aircraft ID	Event Time
DEMO11	Mar 8, 1628Z
Flight Plan Type	Flight Rules Flight Type
ICAO	V
Number of Aircraft	Aircraft Type
1	P28R
Wake Turbulence Category	
Aircraft Equipment	Surveillance Equipment
SDGR	SB1
Departure Aerodrome	Proposed Departure Time
KA00	Mar 8, 2000Z
Cruising Speed	Level
N0160	A095
Estimated Time of Arrival	Route of Flight
Mar 9, 0130Z	EKN V37 PSK CLT S19
Destination Aerodrome	
KMCN	
Estimated Elapsed Time (HH 0530	MM)
Alternate Aerodrome 1	Alternate Aerodrome 2
KEZM	KOPN



# **Devices and Apps**

- Smart speaker device
- Alexa or Google Assistant App
- iPhone or Android

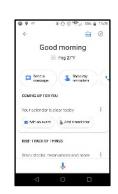








Google Home Google Assistant App



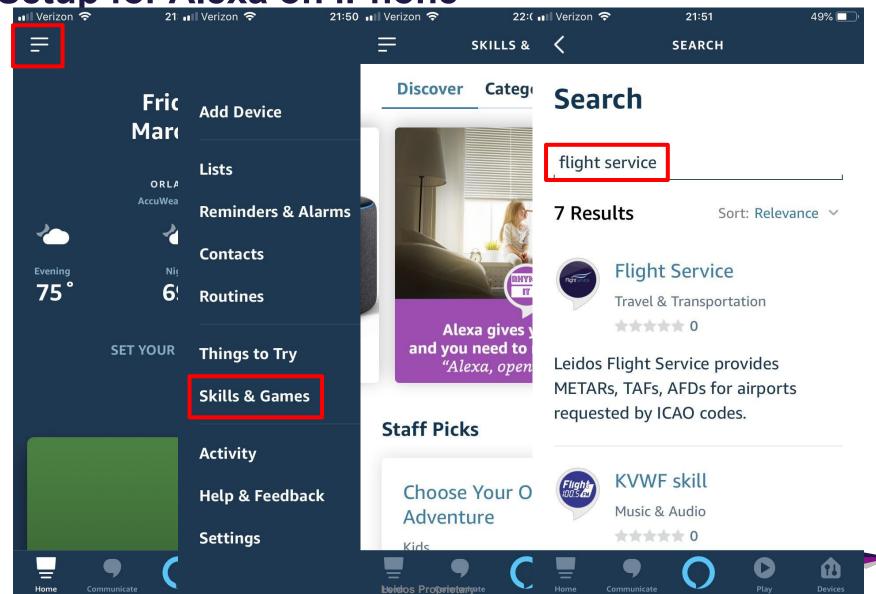


#### **Voice Commands**

- METAR
  - Give me the METAR for Hotel Echo Foxtrot
- TAF
  - What is the TAF for Hotel Echo Foxtrot
- Adverse Conditions Update
  - Give me my Adverse Conditions Update
  - I need an Adverse Conditions Update
- Aviation Forecast Discussion
  - I would like an aviation forecast discussion for Hotel Echo Foxtrot
- Help
  - What services do you provide
  - How do I get started
  - How do I use flight service on Alexa



**Setup for Alexa on iPhone** 



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Setup for Alexa on iPhone

