AERONAUTICAL CHARTING MEETING Charting Group Meeting 23-02 – October 24-26, 2023

RECOMMENDATION DOCUMENT

FAA Control #23-02-381

Subject: Chart Supplement Legend

Background/Discussion:

Previous Charting Forum meetings have discussed simplifying remarks to make information more readable. It has been previously agreed that airport remarks would be in bullet points format to ease readability.

With that in mind, the following is proposed to increase readability of the fuel types in the Chart Supplement legend:

Recommendations: Replace the current Chart Supplement Fuel Type Legend:

CODE	FUEL	CODE	FUEL
100	Grade 100 gasoline (Green)	J5 (JP5)	(JP-5 military specification) Kerosene with
100LL	100LL gasoline (low lead) (Blue)		FS-II, FP** minus 46°C.
A	Jet A, Kerosene, without FS-II*, FP** minus 40° C.	J8 (JP8)	(JP-8 military specification) Jet A-1, Kerosene
4+	Jet A, Kerosene, with FS-II*, FP** minus 40°C.		with FS-II*, CI/LI#, SDA##, FP** minus 47°C.
A++	Jet A, Kerosene, with FS-II*, CI/LI#, SDA##,	J8+100	(JP-8 military specification) Jet A-1, Kerosene
	FP** minus 40°C.		with FS-II*, CI/LI#, SDA##,FP** minus 47°C,
A++100	Jet A, Kerosene, with FS-II*, CI/LI#, SDA##,		with $+100$ fuel additive that improves thermal stability
	FP** minus 40°C, with +100 fuel additive		characteristics of kerosene jet fuels.
	that improves thermal stability characteristics	J	(Jet Fuel Type Unknown)
	of kerosene jet fuels.	MOGAS	Automobile gasoline which is to be used as aircraft fuel.
A1	Jet A-1, Kerosene, without FS-II*, FP**	UL91	Unleaded Grade 91 gasoline
	minus 47°C.	UL94	Unleaded Grade 94 gasoline
A1+	Jet A-1, Kerosene with FS-II*, FP** minus 47° C.	UL100	Unleaded Grade 100 gasoline

With this:

FUEL

For fuels that are available for sale to the general public.

Code	Fuel
100	Grade 100 Gasoline (green)
100LL	Grade 100 Low-Lead Gasoline (blue)
A++	Jet A, Kerosene, with FS–II, CI/LI, SDA, FP − 40° C.
A++10	Jet A, Kerosene, with FS–II, CI/LI, SDA, FP − 40° C, w/+100
A1	Jet A–1, Kerosene, without FS–II, FP – 47° C.
A1+	Jet A–1, Kerosene with FS–II, FP – 47° C.

	Α		Jet A, Kerosene, without FS–II, FP – 40° C.
	A+		Jet A Kerosene with Icing Inhibitor
	J		Jet Fuel Type Unknown
	J5		JP5 (JP–5 mil spec) Kerosene with FS–II, FP – 46° C.
	J8		JP8(JP–8 mil spec) Jet A–1, Kerosene with FS–II, CI/LI, SDA, FP – 47° C.
	J8+10		J8+100 (JP-8 mil spec) Jet A-1, Kerosene with FS-II, CI/LI, SDA, FP - 47° C, w/+100.
	MOGAS		Automobile gasoline which is to be used as aircraft fuel.
	UL91		Unleaded Grade 91 Gasoline
	UL94		Unleaded Grade 94 Gasoline
_	UL100		Unleaded 100 Grade Gasoline
			Abbreviations
	FS-IH	=	Fuel System–Icing Inhibitor
	FP	=	Freeze Point
	CI/LI	=	Corrosion Inhibitors/Lubricity Improvers
	SDA	=	Static Dissipator Additive
	+ 100	=	Fuel additive that improves thermal stability characteristics of kerosene jet fuel

or this:

		FUEL
For fuels that are available for sale to the general public.		
Code		Fuel
100		Grade 100 Gasoline (green)
100LL		Grade 100 Low-Lead Gasoline (blue)
A++		Jet A, Kerosene, with FS–II, CI/LI, SDA, FP – 40° C.
A++10		Jet A, Kerosene, with FS-II, CI/LI, SDA, FP - 40°C, w/+100
A1		Jet A–1, Kerosene, without FS–II, FP = 47° C.
A1+		Jet A–1, Kerosene with FS–II, FP – 47° C.
Α		Jet A, Kerosene, without FS–II, FP = 40° C.
A+		Jet A Kerosene with Icing Inhibitor
J		Jet Fuel Type Unknown
J5		JP5 (JP–5 mil spec) Kerosene with FS–II, FP – 46° C.
J8		JP8(JP–8 mil spec) Jet A–1, Kerosene with FS–II, CI/LI, SDA, FP – 47° C.
J8+10		J8+100 (JP-8 mil spec) Jet A-1, Kerosene with FS-II, CI/LI, SDA, FP - 47° C, w/+100.
MOGAS		Automobile gasoline which is to be used as aircraft fuel.
UL91		Unleaded Grade 91 Gasoline
UL94		Unleaded Grade 94 Gasoline
UL100		Unleaded 100 Grade Gasoline
		Abbreviations
FS-IH	=	Fuel System–Icing Inhibitor
FP	=	Freeze Point
CI/LI	=	Corrosion Inhibitors/Lubricity Improvers
SDA	=	Static Dissipator Additive
+ 100	=	Fuel additive that improves thermal stability characteristics of kerosene jet fuel

Benefits:

1) Would adoption of the recommendation prevent or reduce the likelihood of occurrence of accidents or incidents?

Simplification of chart will improve readability and understanding of the various types of fuel. Eliminate the symbols * ** # and ## that are difficult to decipher.

2) Would adoption of the recommendation mitigate a known or potential safety hazard?

Yes. Mis-fueling. What is the difference between Jet A and Jet A+ and Jet A1?

To properly report the correct fuel types, this Chart Supplement Legend is referred to frequently. Making it easier to read will facilitate accurate reporting.

Often, airport managers or FBO managers are not aware of the many types of fuel available or what their airport has available. This format will make it easier for them to understand.

- 3) Would adoption of the recommendation resolve a known or potential issue creating operator or Air Traffic Control system errors.
- 4) Would adoption of the recommendation increase operational or system efficiencies?
- 5) Would any additional benefits be recognized by adoption of the recommendation?

Comments:

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Date: June 23. 2023

Please send completed form and any attachments to: 9-AMC-AVS-ACM-Info@faa.gov

MEETING 23-02

Jennifer Hendi, FAA/AJV-A250, presented this new recommendation on behalf of the proponent Randy Coller, Aerologic. She explained this proposal is a request to update the fuel type legend in the Chart Supplement to improve readability. Randy recommended two options for modifying the table (see Recommendation Document). Jennifer said she sent the proposal to the Chart Supplement Team, and they are prepared to respond.

Jeff Lamphier, FAA/AJV-A240, reported that implementing these changes would take about nine months due to the large-scale changes to the legend that would be needed. He said he sees the value in the recommendation; however, his team does not have the time or resources to work on it at this time. He will add this recommendation to their list of items to work after the Chart Supplement Modernization initiative is complete.

Rich Boll, NBAA, asked what determines the fuel types that are listed in the legend. Bob Carlson, FAA/AJV-A241, said their source is the National Airspace System Resource (NASR). Rich asked whether there is a standardized list of fuel types. Jennifer said the fuel types that are published in the legend are those that have been coordinated and added to the Interagency Air Committee (IAC) specifications. If a new fuel type is added, it needs to be staffed through the IAC first. Rich said NBAA would like to see synthetic aviation fuel (SAF) added to the list. Jennifer asked Rich to send that request to her via email. Michael Stromberg, UPS-IPA, said the FAA should also consider adding G100 UL to the chart. Jennifer said she will follow up with Rich and Mike.

John Johnson, FAA/AJV-A313, added that the last time a new fuel type was added, it was coordinated though an FAA office that deals with aviation fuels and aircraft certification. He will provide the name to Jennifer. He also said new fuels would require a NASR enhancement.

Jennifer summarized the discussion and said that the Chart Supplement team will track the recommended changes to the fuel table for a future change. Jennifer recommended closing this issue; however, since the proponent was not in attendance, she will reach out to him to discuss the outcome of this item.

STATUS: CLOSED