

NOTICE

U.S. Department of Transportation
Federal Aviation Administration

N 7110.171

7/6/97

Cancellation
Date: 7/6/98

SUBJ: WAKE TURBULENCE

1. **PURPOSE:** THIS IS A SAFETY NOTICE. The guidance contained herein supersedes the guidance provided in the current edition of Order 7110.65, Air Traffic Control, relating to selected wake turbulence separations and aircraft weight classifications. This Notice will work in conjunction with Order 7110.65J. Guidance contained in Order 7110.65J will continue to apply where not superseded by this Notice. With minor exception, the new classifications and separation standards are developed for application to IFR arrivals. The information contained in this notice will be incorporated into Order 7110.65L.

2. **DISTRIBUTION.** This directive is distributed to the division level in Washington and Regional Air Traffic and Flight Standards offices, the Air Traffic System Requirements Service, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, Air Traffic and Flight Standards field offices, selected DoD offices, and FAA contract towers.

3. **BACKGROUND.** Several safety recommendations have been made by the Associate Administrator for Regulation and Certification, (AVR-1), relating to wake turbulence. These recommendations included changes to aircraft weight classes in order to provide additional protection for aircraft weighing 41,000 pounds or less; increased separation for small aircraft following an arriving Boeing 757, and the cancellation of approval authority when a pilot requests to deviate from prescribed wake turbulence separation when departing behind a Boeing 757 or an aircraft weighing more than 255,000 lbs (Heavy).

4. **ACTION.** Apply wake turbulence procedures to aircraft operating behind heavy jets, Boeing 757's, and where indicated to small aircraft behind large aircraft. (Reference para. 2-1-19, Wake Turbulence, of Order 7110.65J).

a. For the purposes of Wake Turbulence Separation minima, the weight classification definitions of Heavy, Large, and Small are as follows:

(1) Heavy. Aircraft capable of takeoff weights of more than 255,000 pounds whether or not they are operating at this weight during a particular phase of flight.

(2) Large. Aircraft of more than 41,000 pounds maximum certificated takeoff weight, up to 255,000 pound.

(3) Small. Aircraft of 41,000 pounds or less maximum certificated takeoff weight. (Reference, Pilot/Controller Glossary, Aircraft Classes).

NOTE: The SF-340, ATR-42 and BA-41 will be exempt from the small category and will be classified as large aircraft for separation purposes. On-going studies by NASA may exempt other aircraft in the future.

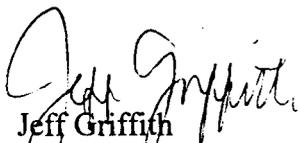
b. In addition to paragraph 5-5-3, Minima, separate a small aircraft landing behind a Boeing 757 aircraft landing on the same runway, or making a touch-and-go, stop-and-go, or low approach by ensuring a minimum of 5 miles will exist at the time the preceding aircraft is over the landing threshold.

c. In addition to paragraph 3-9-7, Wake Turbulence Separation for Intersection Departures, separate a small aircraft weighing 12,500 lbs or less taking off from an intersection on the same runway (same or opposite direction takeoff) behind a preceding small aircraft weighing more than 12,500 lbs by ensuring the following small aircraft does not start takeoff roll until at least 3 minutes after the preceding aircraft has taken off. Specific pilot initiated requests to deviate from the 3 minute wake turbulence interval may be approved.

d. Air traffic controllers shall not approve pilot requests to deviate from the required wake turbulence time interval/distance if the preceding departing aircraft is a Boeing 757 or an aircraft classified as Heavy.

NOTE: Aircraft listed in Order 7110.65, Appendix A, Aircraft Information, have changed to a new weight class as indicated in Appendix 1, New Weight Class, of this Notice.

5. The information contained in this notice will be incorporated into Order 7110.65L.



Jeff Griffith

Program Director for Air Traffic Operations

APPENDIX 1, NEW WEIGHT CLASS

Aircraft	Designator	New Weight Class
Aerospatiale NORD-262 Super Broussard	ND26	Small
Aerospatiale SN 601 Corv.	S601	Small
Aerospatiale Tampico	TB09	Small
Avions Cap 10/b	CP10	Small
BAe HS 125 Series 400A	HS25	Small
BAe HS 125 Series 600A	HS25	Small
BAe HS 125 Series 700A	HS25	Small
BAe HS 125 Series 800/1000	BA10	Small
BAe Jetstream 31	B31	Small
Beech Airliner 1900-C	BE02	Small
Beech Super King Air 300	BE30	Small
Beech Super King Air 350	BE3B	Small
Beech Starship, Model 2000	BEST	Small
Beechjet 400	BE40/BJ40	Small
Bushmaster Model 2000	BU20	Small
Casa C-212-200 Aviocar	CA21/CS12	Small
Cessna Citation II	C550	Small
Cessna Citation III	C650	Small
Cessna Citation V	C560	Small
Dassault FAL-10	DA01	Small
Dassault FAL-20	DA02	Small
Dassault FAL-200	DA20/HU25	Small
Dassault FAL-50	DA05	Small
Dehavilland Dash-8/DHC-8	DH-8	Small
DHC-4 Caribou	DH4	Small
Dornier Do 228-200 Series	DO82	Small
Dornier DO 328-100	D328	Small
Embraer EMB-120	E120	Small
Fairchild Merlin IVC	SW3	Small
Fairchild Metro III	SW3	Small
Gates Learjet 24	LR24	Small
Gates Learjet 25	LR25	Small
Gates Learjet 28/29	LR28/LR29	Small
Gates Learjet 31	LR31	Small
Gates Learjet 35A/36A	LR35/LR36	Small
Gates Learjet 54-55-56	LR55	Small
Gates Learjet 60	LR60	Small
Grumman Albatross	G64/U16	Small
Grumman Goose/Super Goose	G21	Small
Gulfstream I	G159	Small
Grumman Mallard	G73	Small
Grumman Widgeon/Super Widgeon	G44	Small
HFB-320 Hansa	HF32	Small
IAI 1123 Westwind	WW23	Small
IAI 1124 Westwind	WW24	Small
IAI Arava 201	RV01	Small
IAI Astra 1125 Westwind	AJ25	Small
Learfan 2100	LRF	Small
MDC Super DC-3	DC3S/C117	Small
MDC-DC-3	DC3	Small
Messer.-Bolkow-Blohm HFB 320	ME32	Small
Mitsubishi Diamond MU-300	MU3	Small

Appendix 1

Piaggio PD-808 Vespa Jet	P808	Small
Rockwell Jet Commander	AC21	Small
Rockwell Sabreliner	N265	Small
Shorts 330	SH33	Small
Shorts 360	SH36	Small