LANDING DISTANCE COMPUTATION

FOM 2.4.7 b.
(1) On FAR 135 flights, the 15% additional runway required for landing on a "wet or slippery" runway, and the 15% addition when visibility / RVR is less than 3/4 statues mile/4000 feet, are not cumulative.

FOM 2.4.7 i.
FAR 135 Flight: In accordance with FAR 135.385 (d) the landing distance that meets the 60% of effective runway length required by 135.385 (d), or the landing distance that meets the 80% effective runway length allowed by 135.385 (f) (i.e., when flight meets requirements for use of DAAP provisions in FOM 2.4.9), shall be in increased by a minimum of 15% for landing on a wet runway. This corrected landing distance is used to determine compliance with operating weight limits in FOM 2.4.8.

FAR 135.385 (d)
. . . **"would allow a full stop landing at the intended destination airport within 60 percent of the effective length . . .**

FOM 2.4.9 b.
Actual Landing Distance
The "unfactored" certified landing distance" for a given weight / temperature / altitude, that is corrected for the applicable factors of; reported meteorological and runway surface conditions; runway slope; airplane configuration; approach speed, and; other factors **required by the applicable AFM for normal operations**.

Factored Landing Distance
The "unfactored certified landing distance" increased by the preflight planning safety margin (i.e., 60% or 80%) and other factors required by the applicable operating rules (i.e., "135" or "91K")

FOM 2.4.9 e. 9.
If the surface of the planned landing runway is forecast or expected to be wet, the landing distance computed in accordance with the reduced planning requirement shall be increased by 15% minimum.

Note: Two landing distance computations are required to release a flight under the reduced landing distance planning requirement if the planned landing runway is forecast or expected to be "wet" (FOM 2.4.7)

(1) Determine the 80% "**Factored Landing Distance**" and increase by 15%.

(2) Then determine the "**Actual Landing Distance**" from the AFM (approved or advisory data, as appropriate) for a "wet" runway.

(3) Compare the two "planned" landing distances from (1) and (2); the longer of the distances shall be used to determine the planned maximum allowable takeoff weight for release of the flight.

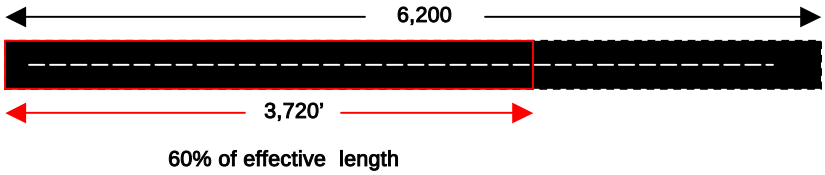
Calculating Required Runway / Landing Distance – FAR 91K / 135

Required landing distance must be within 60% or 80% of required runway length IAW flight manual.

- Calculate required landing distance IAW AFM for conditions
  (temp/weight/elevation/winds/aircraft configuration/runway condition)
- Multiply available runway landing length by either .60 or .80 = Adjusted Runway Length
- Calculated landing distance must be equal to or less than adjusted runway length

Example: Required Landing Distance
IAW AFM = 2,840'
Available Runway Length = 6,200'
Adjusted Runway Length = 3,720'
(6200 x .60)

Result: Required Landing Distance is within Adjusted Runway Length



WEIGHT = 16500 POUNDS
VREF = 111 KIAS VAPP = 117 KIAS

TEMP DEG C	TAILWIND 10 KTS	ZERO WIND	HEADWINDS 10 KTS	20 KTS	30 KTS
-25	3150	2620	2470	2320	2180
-20	3180	2660	2510	2360	2210
-15	3220	2690	2540	2390	2240
-10	3260	2730	2570	2420	2280
-5	3290	2760	2610	2460	2310
0	3330	2800	2650	2490	2340
5	3370	2840	2680	2530	2380
10	3410	2870	2720	2560	2410
15	3450	2910	2750	2600	2450
20	3490	2950	2790	2630	2480
25	3530	2990	2830	2670	2520
30	3570	3020	2860	2700	2550
35	3610	3060	2900	2740	2590
40	3650	3090	2930	2770	2620
45	3680	3130	2970	2810	2650
50	3720	3170	3000	2840	2690
54	3750	3190	3030	2870	2710

* **Note** On FAR 135 flights - 15% additional runway required for landing on a "wet or slippery" runway.

On FAR 135 Flights - 15% additional runway
When visibility / RVR is less than 3/4 SM or 4000 RVR

Wet Runway

Adjusted Runway Length 3,720' x .15 = 558
3,720 + 558 = 4,278' = Adjusted Runway Required

Result: Adjusted Runway Required (4,278')
is within Actual Available Runway (6,200')