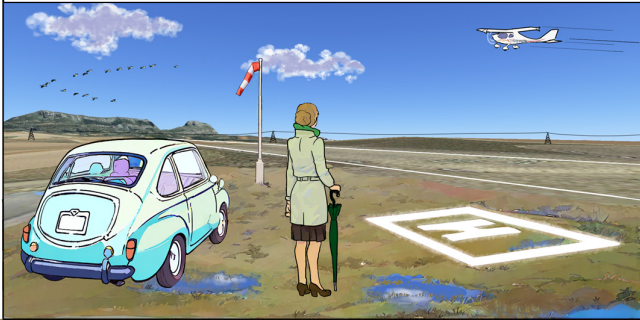




Sunny Swift

'TAKE-OFF & LANDING PERFORMANCE'

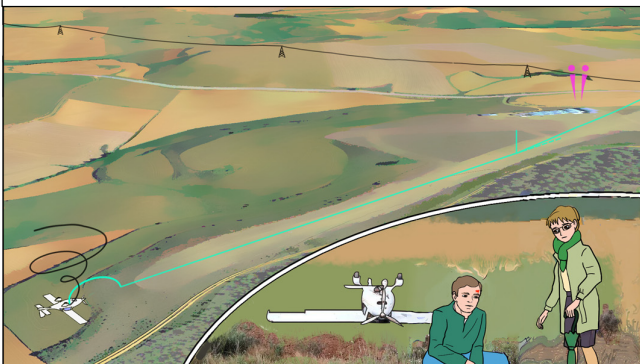
IT WAS A NICE SUNNY DAY AFTER A NIGHT OF RAIN. ROBERTO WAS GETTING READY TO LAND ON A SMALL AERODROME WITH A GRASS RUNWAY. HIS MUM WAS CLOSEBY, KEEPING AN EYE ON HIM.



ROBERTO WAS FLYING THE CIRCUIT PATTERN TO LAND IN THE OPPOSITE DIRECTION FROM WHAT HE WAS USED TO. THE APPROACH WENT OVER POWER LINES, SO HE NEEDED TO COME IN A BIT STEEPER AND FASTER THAN USUAL.



HE TOUCHED DOWN A BIT FARTHER ALONG THE RUNWAY AND FASTER THAN HE WAS USED TO. HE HIT THE BRAKES, BUT TO HIS SURPRISE AND DISMAY, THEY DIDN'T SEEM TO BITE MUCH. BEFORE HE KNEW IT, HE WAS AT THE END OF THE STRIP AND TIPPED OVER.



WHEN HE FINALLY MANAGED TO CRAWL OUT, BRUISED AND SHAKEN, HE REALISED THE GRASS WAS STILL WET.

SUNNY, I DIDN'T EXPECT THE RUNWAY TO BE THAT SLIPPERY...

SOME AFMs DON'T GIVE DEDICATED PERFORMANCE DATA FOR EVERY CONDITION.

WHAT I USUALLY DO IS RUN THE PERFORMANCE CALCULATIONS AND THEN JOT DOWN THE RESULTING COEFFICIENTS ALONGSIDE THE DATA FOR NOMINAL CONDITIONS.

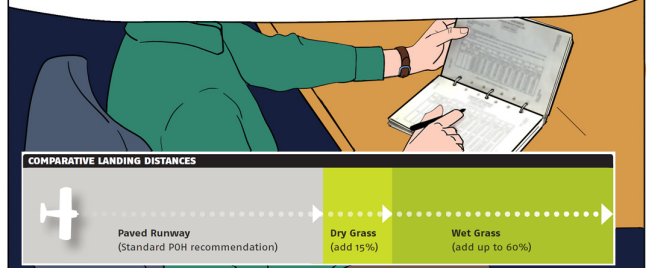


PERFORMANCE, LIKE LANDING DISTANCE, DEPENDS ON THINGS LIKE TEMPERATURE, WEIGHT, APPROACH ANGLE AND SPEED, WIND, RUNWAY SLOPE, RUNWAY CONDITION: WET SURFACE OR LONG GRASS, FOR EXAMPLE.

IT'S USUALLY A GOOD IDEA TO ADD A FACTOR OF 1.2 OR 1.3 TO YOUR TAKE-OFF AND LANDING DISTANCES TO COVER THE UNEXPECTED.



FIRST, CHECK THE AFM AND MAKE SURE YOU UNDERSTAND THE CONDITIONS IT APPLIES TO. IF YOU'RE NOT SURE, REACH OUT TO THE MANUFACTURER. THEN APPLY THE RIGHT FACTORS.



IN PARTICULAR, WE RECOMMEND INCREASING WET GRASS LANDING DISTANCES BY 60 PER CENT – PRETTY MUCH LIKE AN ICY SURFACE.

IF YOU KNOW ANY WEBSITES OR APPS WITH HANDY PERFORMANCE CALCULATIONS, PLEASE DROP US AN EMAIL AT THE ADDRESS BELOW!

IMAGE CREDIT: PHIL NORTON (SEE 'RELATED CONTENT')

You can find links to
— **related in-depth articles**
in the 'RELATED CONTENT' section.

Please, send your comments and ideas to:
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