FLYING THE MEATBALL

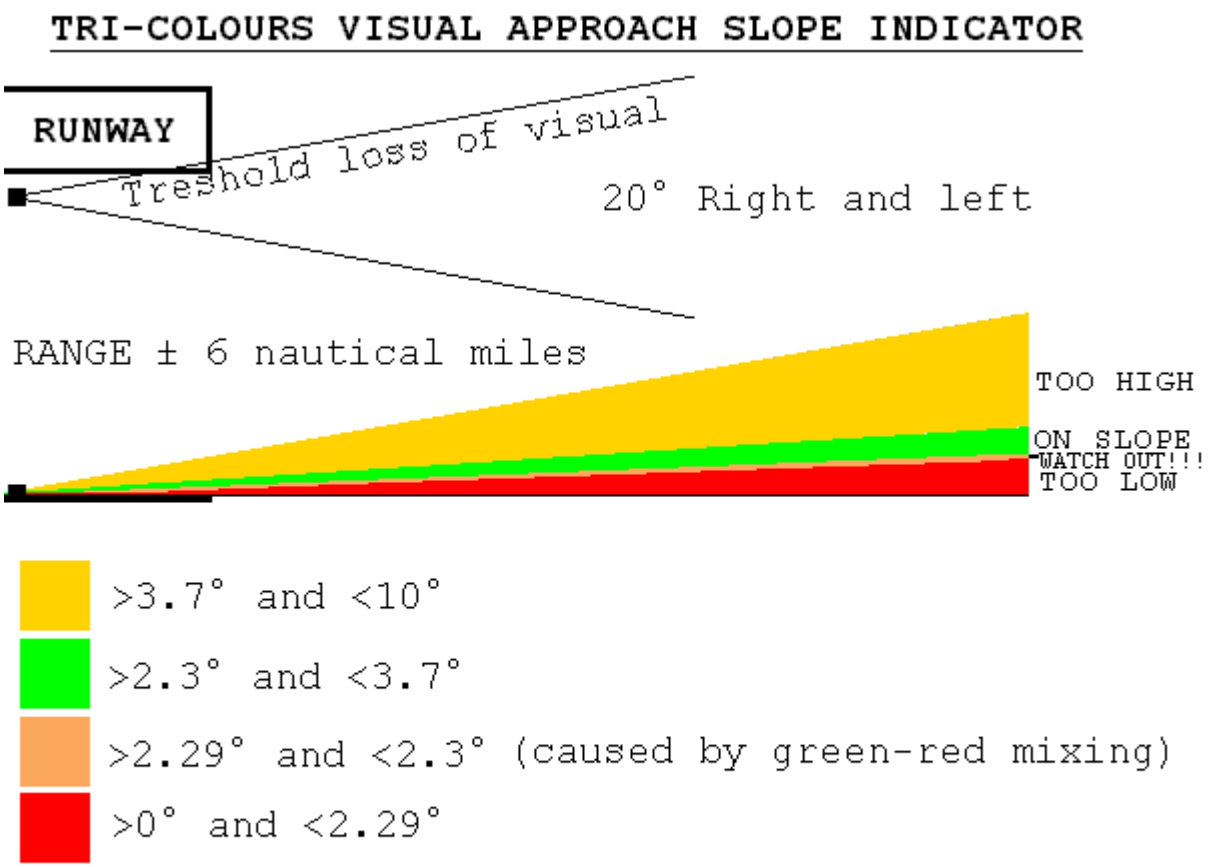
“Something else new to us was a glide slope indicator. This was a light at the end of the runway that was yellow if the plane were too high, red if too low, and green if "just right." I loved those "just right."” from “WWII STORY: THIS IS IT ! PART- II By:Bill Goodman” at http://aafo.com/library/history/B-17/b17part2.htm

This is all the information I had, corroborated by other sources, when I decided to add that feature to Ripe. I eventually discovered that it was most probably an early version of the tri-colors VASI (Visual Approach Slope Indicator), also called “the Meatball”, still being used in some airports, but I have no idea of what it looked like in 1943. If you have any photos of a vintage installation of this sort, please let me know!

HOW DOES IT WORK?

Using fresnel lenses, like those in use in lighthouses, three colored beams of light were projected, each at a different angle, from a single housing normally found on the left of the runway at the “touchdown” point. The amber light was beaming from 3.7° to 10° (at least in mine), green from 2.3° to 3.7°, and red from 2.3° and down. The trick is to stay in the green light beam until you are on the threshold and then land, simple, isn't it?

Well, no quite.



First, you must activate the system. This is done through NAV1 radio set exactly at 122.00 MHz for runway 180-360 or 122.10 for runway 043-223. Runway 133-313 has no tri-colors VASI installed, so don't bother.

The system works day or night.

Second, line-up your aircraft with the runway. The system goes 20°, 10° right and left, and is invisible past that. This is not intended as a localizer.

Third, don't fly too high. Past 10° up, you're out of range for the amber light.

To recapitulate the three points, if you don't see the Meatball, verify that you're on the right frequency, aligned with the runway and not too high.

WARNING!!!

During the transition between the green and the red light, the Meatball will turn… amber! This is due to the fact that, when mixed, green and red look that way, geesh!

SOME TIPS

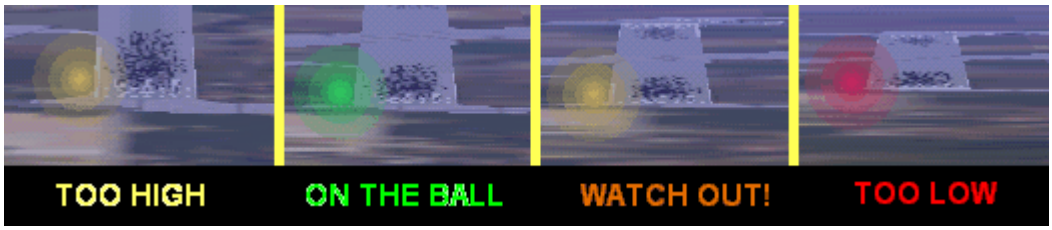
I'm not a licensed pilot, not even an unlicensed one! These tips I give are for what

they’re worth; experience of about two weeks working on that system for Ripe.

If the light is amber, don’t dive like a brick. First, make sure it’s not that “in-between red-green” amber, then go in a shallow dive while reducing speed, putting some flaps maybe.

If the light is red, don’t climb like a rocket. The only thing you will accomplish is a stall at low altitude. Not recommended at all! Instead, fly level until you’re back “in the green”, and maintain that bird well over stall speed.

Get in the green as soon as you can. The further out you get aligned and on the slope, the easier it is to stay on it. From the perimeter lights (± 5 nautical miles), you should be at 1,500 feet to achieve that goal.



When the light changes, make smooth adjustments, be gentle. Remember that the Meatball system is an indicator, not a vindicator. By that, I mean that the Meatball is there to help you come in on the right slope, not to punish you for not being on it.

The closer you get to the threshold, the tougher it gets to stay in the green. Rule of thumb here; if your approach was in the green most of the time and if you’re aligned correctly, chances are you’ll make it. Use common sense.

BTW– Don’t fly in the light! Fly towards the runway. At the threshold, you will be out of the Meatball beam anyway. You should concentrate on a good alignment first, checking with your peripheral vision that you’re “on the ball”.

Have fun and good landings!

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Corrections by AAC Lt-Col. smilo.