

OBSERVATIONS FROM THE FLIGHTDECK

- LIFE LESSONS LEARNED THROUGH AVIATION -

by Jerry Tobias

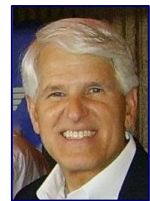
"I applied my heart to what I observed and learned a lesson from what I saw."

Proverbs 24:32



RADAR

...SEEING THINGS AS THEY REALLY ARE



RADAR ("RADio Detection And Ranging") is an apparatus that transmits a narrow beam of short pulses of radio energy from an antenna (usually in the nose of the aircraft) and listens for the echo produced when any of these energy pulses are bounced back by buildings, mountains, airborne precipitation (rain, hail, etc.), or other reflective surfaces. The radar unit then processes these echoes and shows the distance and relative bearing of the reflecting objects on displays in the cockpit.

Airborne radar's primary function is to aid in severe weather avoidance when forward visibility from the cockpit is restricted by cloud conditions or darkness. In these situations, the unit becomes the flight crew's "eyes," giving them a view of weather conditions up to 300 miles ahead of their aircraft.

The radar's pulse beam is aimed by an antenna that automatically sweeps back and forth horizontally 45° or more to either side of the nose of the aircraft. The antenna's vertical position, although sometimes also positioned automatically, is often *manually* controlled by use of a *tilt selection knob* located on a radar control panel in the cockpit.

When the antenna tilt is adjusted correctly, the radar unit gives pilots a very accurate picture of weather conditions ahead. This information is essential, because it is used to determine what, if any, course deviations are necessary to avoid hazardous weather.

If the antenna tilt is inadvertently set too low, however, ground reflections (cities, mountains, etc.) will also be shown on the radar displays. These images look very much like hazardous weather reflections, which - of course - can be very misleading.

For example, I talked to a crew several years ago who told me that they had been flying in heavy cirrus clouds (could not see ahead), and had deviated around what they had thought to be hazardous weather. Their radar antenna tilt had been set too low, though, and when they flew out of the cirrus, they discovered that they had actually - in their words - "safely circumnavigated" Indianapolis!



Proper radar antenna tilt management is crucial, therefore, because the images on the crew's radar displays *define what they believe to be true* concerning conditions ahead. And this belief - whether right or wrong - is what ultimately guides many of their decisions and actions.

The decisions that you and I make each day (and our actions, attitudes, thoughts, concepts, choices, responses, etc.) are also guided by *what we believe to be true* about our present situation and the situation ahead. Our perspectives are not defined by what we see on a radar display, of course, but by how we "see" life.

An accurate perspective of weather conditions comes from knowledge of the radar system. *An accurate perspective of life comes from knowledge of and a relationship with God.* This produces faith, which allows us to *trust* Him and His ever-present care, concern and guidance to navigate us safely through every day. However, just as with a radar antenna, we can set our "scan" too low, creating a perspective that is disturbing, confusing and misleading.

If, for example, our focus is on the number or size of our problems, the difficulty of our circumstances, the failures in our past, or the obstacles and tough times that we see ahead, the resulting images on the "displays" of our hearts can overwhelm us and cause us to experience anxiety, dread and discouragement.

But, if - instead - our focus is on who God is, and on all that He has already given to and provided for us, we will be reminded that - even though our problems may be huge and our challenges real - He is ALWAYS faithful to take us over, around or, yes, even *through* anything of any size that we will ever face.

How we live really is determined by our *view of life* and our view of the things we face. So, just as with the radar tilt knob in the cockpit, the "tilt knob" that controls our hearts must be continuously adjusted to ensure that we have an *accurate perspective of God's* incredible character, of His peace-producing presence, and of His never-ending faithfulness to us. The only options, after all, are to *look down and tremble* or to *look up and trust* the One who knows everything about everything, including *everything* about us...and *everything* in every mile and every minute ahead.

I sought the Lord (looked up), and He answered me and delivered me from all my fears.

Psalm 34:4. Also see Psalm 121 and Psalm 123:1.

Do not look around you in terror and be dismayed, for I am your God. Isaiah 41:10 (Amplified Bible)

WHEN I am afraid, I will trust in You . . . in God I trust. Psalm 56:3-4.

THE BOTTOM LINE? Life is not easy. The focus of my heart, though, has so much to do with my perspectives along the journey. I can have turmoil, or I can have trust. When I do find myself in turmoil because of circumstances, pain or concerns, I need to re-adjust my focus by remembering that NOTHING is outside of God. Neither do I live apart from Him. *Because of that relationship, WHATEVER I FACE* and whenever I face it, *I can always trust Him* to strengthen me, care for me, comfort me and guide me through every minute of every single day.

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