

# ***INTO THE ABYSS***




*A FRONT ROW SEAT  
TO LOW IFR  
MINIMUMS*



# *Let's talk about LIFR....*



# ***LIFR is....***



*When the ceiling  
and/or  
visibility  
is less than  
500ft and 1 mile!*

**This is low ceilings –  
500ft or less**

**With good (??) visibility  
underneath!!**



# *ILS MINIMUMS*

**THIS IS WHAT AN  
INDEFINITE CEILING OF 200ft  
AND ONLY A ½ MILE  
LOOKS LIKE**



***BEFORE YOU START  
ANY APPROACH,  
YOU SHOULD KNOW  
WHAT TO EXPECT  
WEATHER-WISE...***

*ABOUT WHAT INDICATED  
ALTITUDE SHOULD I  
EXPECT TO BREAK OUT  
AT.....*





*AND ABOUT WHERE  
SHOULD I EXPECT TO SEE  
THE RUNWAY  
ENVIRONMENT.....*



***REMEMBER, MINIMUMS  
CONSIST OF BOTH  
CEILING and VISIBILITY  
VALUES***

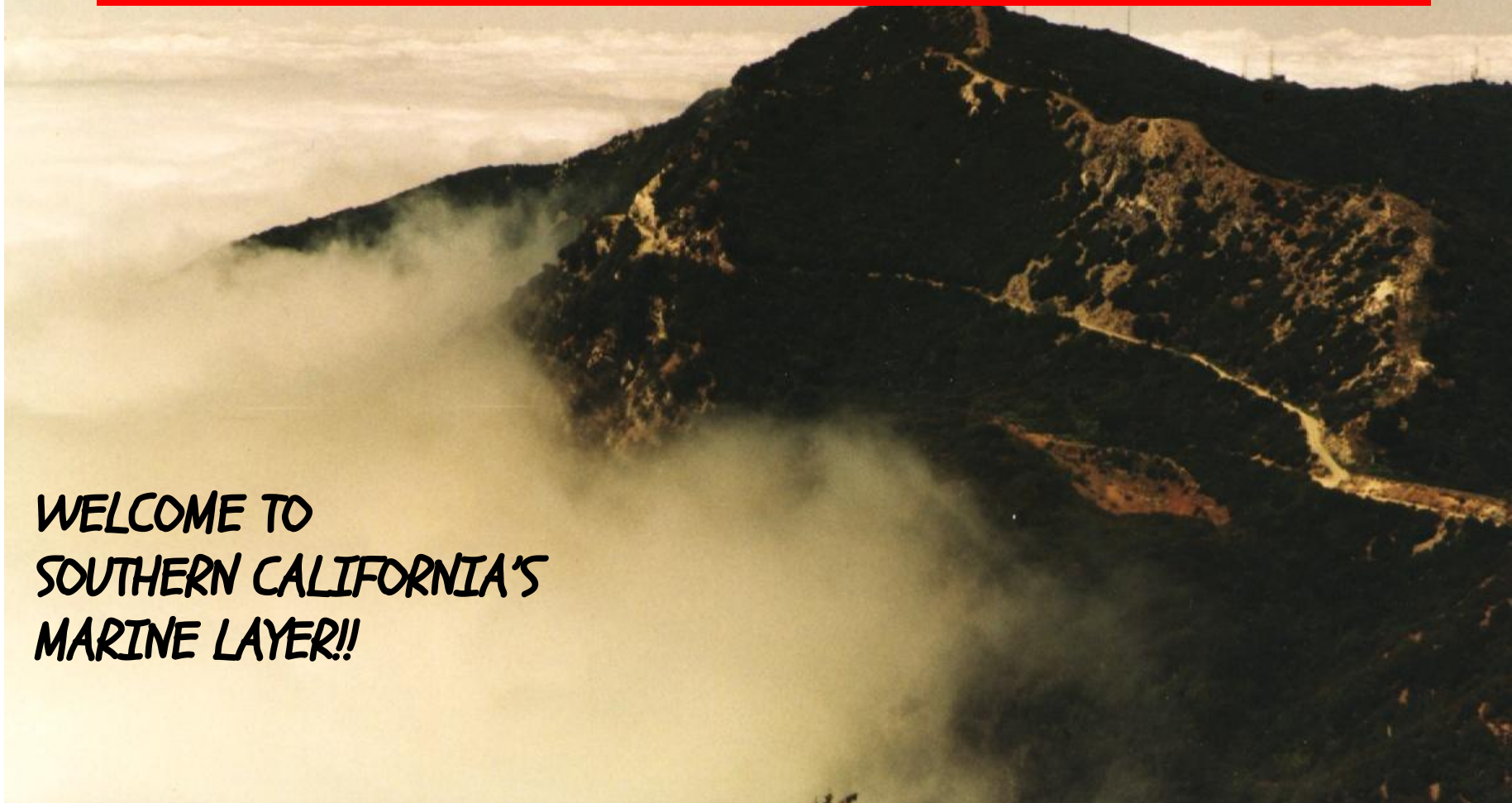


***YOU MAY HAVE GROUND  
CONTACT BELOW YOU WAY  
BEFORE YOU EVER SEE  
THE RUNWAY  
ENVIRONMENT...***



**AND SOMETIMES YOU ACTUALLY  
HAVE TO LET DOWN INTO THE  
LOW IFR CONDITIONS!!!**

**WELCOME TO  
SOUTHERN CALIFORNIA'S  
MARINE LAYER!!**



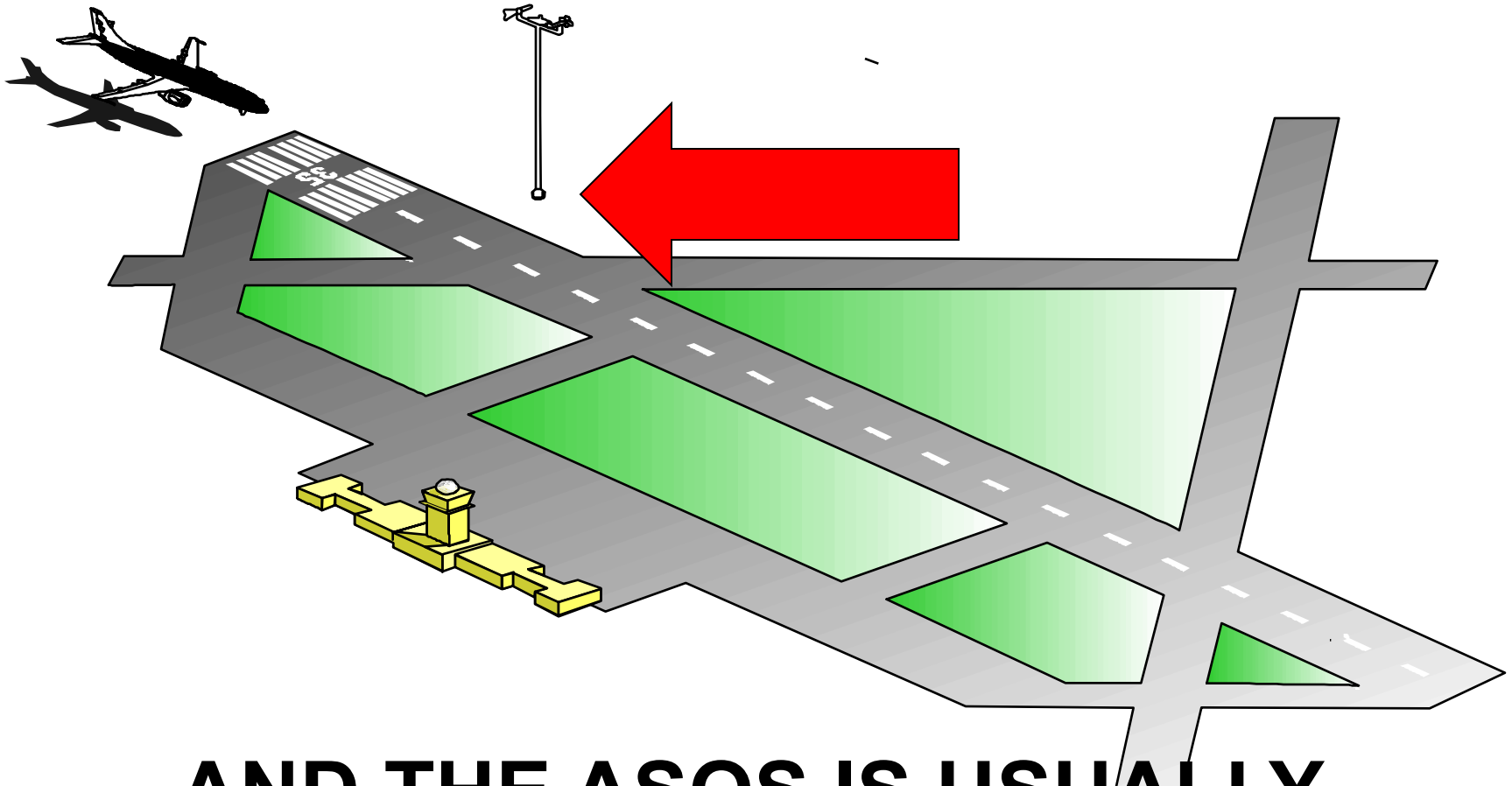
# HOW FAR OUT FROM THE RUNWAY



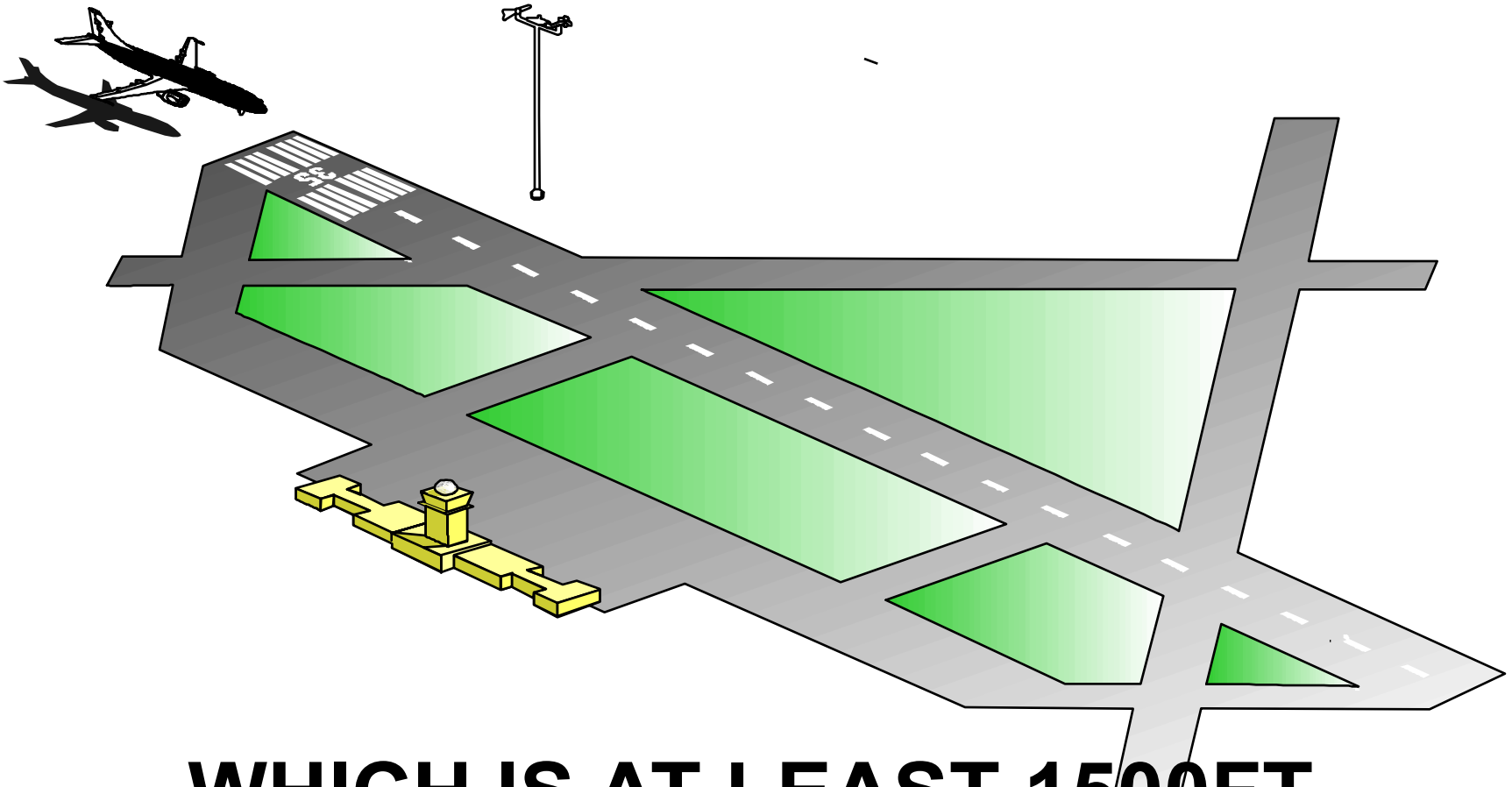
SHOULD I EXPECT TO  
ACTUALLY SEE IT.....

REMEMBER,  
THE VISIBILITY  
IS DETERMINED  
BY, AND AT, THE  
ASOS



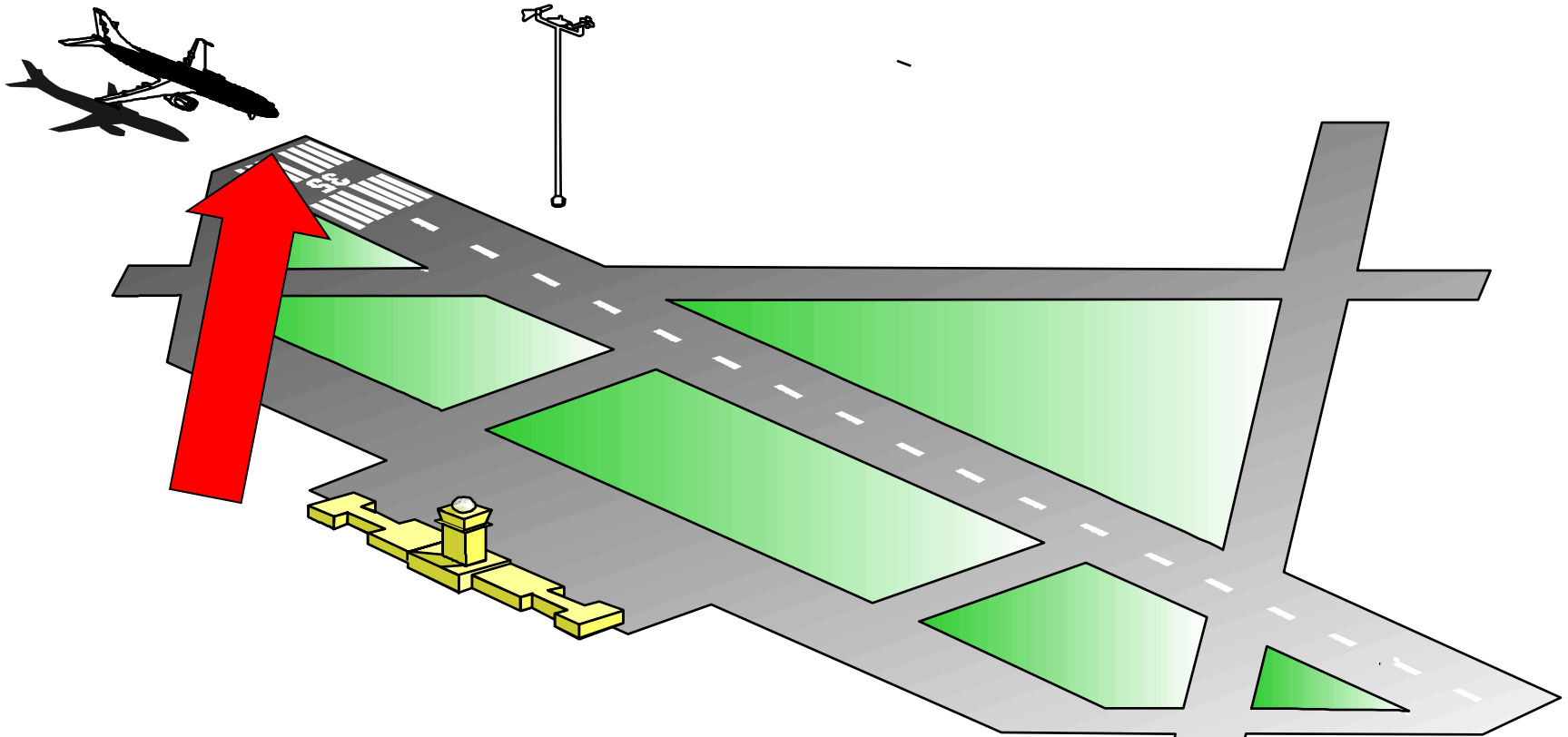


**AND THE ASOS IS USUALLY**  
**LOCATED ALONG SIDE THE**  
**ILS RUNWAY TOUCHDOWN**  
**AREA!**

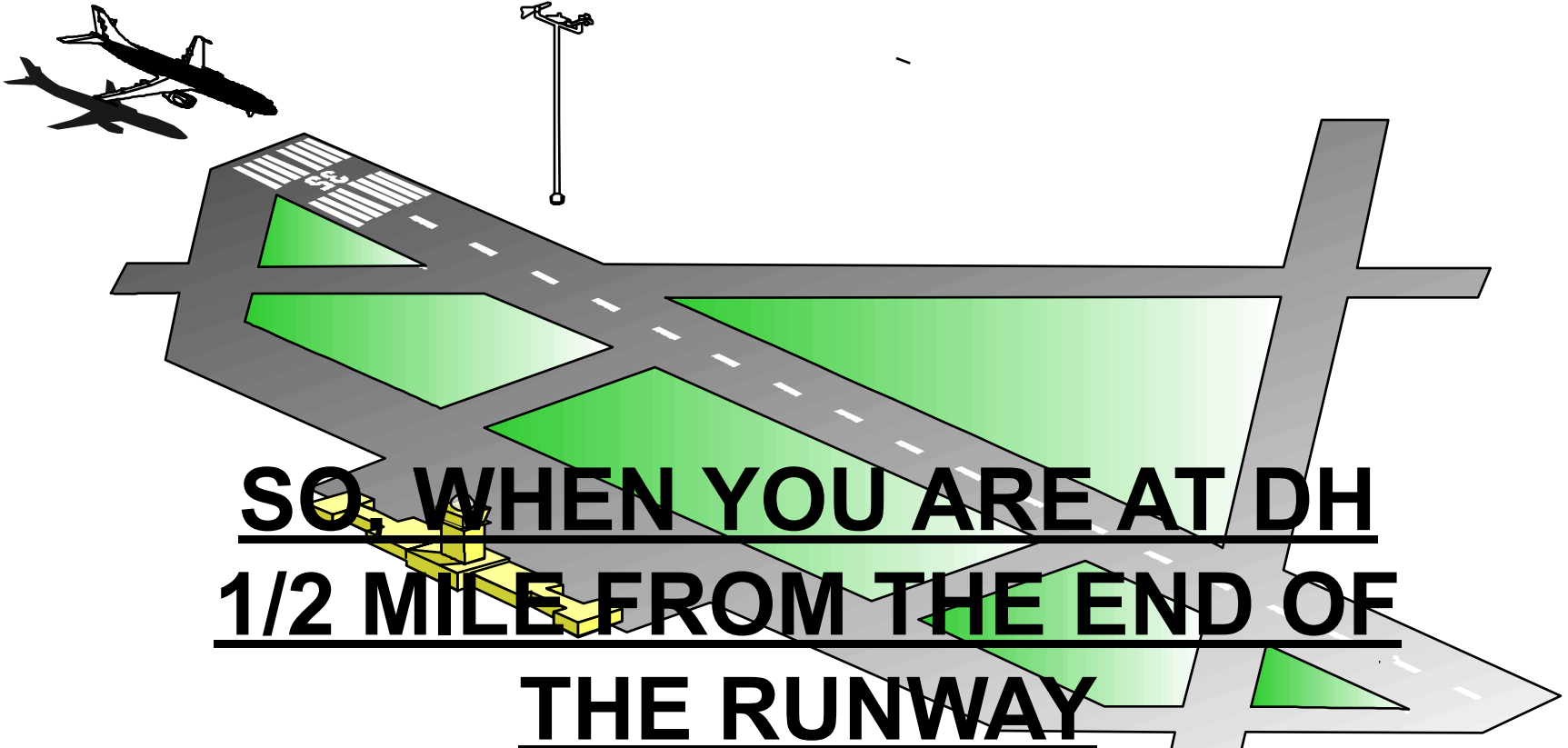


**WHICH IS AT LEAST 1500FT**  
**OR MORE DOWN THE**  
**RUNWAY**





**OR SAID ANOTHER WAY,**  
**ALMOST 2 TO 3/10<sup>th</sup> OF A**  
**MILE FROM THE END OF**  
**THE RUNWAY**



**SO, WHEN YOU ARE AT DH**  
**1/2 MILE FROM THE END OF**  
**THE RUNWAY**

**YOU ARE ALMOST**  
 **$\frac{3}{4}$ 's OF A MILE**  
**FROM THE ASOS!!**

WHICH IS WHY THE  
APPROACH LIGHTS EXTEND OUT  
ABOUT A HALF MILE!!



TO HELP YOU  
ACQUIRE THE  
RUNWAY ENVIRONMENT  
AT DH!



**THIS IS REALLY  
GOOD MINIMUMS!!**



*THIS IS WHAT  
200 AND A ½ MILE  
ILS MINIMUMS LOOK LIKE*





***FACT:  
ASOS VISIBILITY  
IS THE AVERAGE OF WHAT  
THE VISIBILITY HAS BEEN  
FOR THE LAST 10  
MINUTES!!***

**NOT  
WHAT IT IS  
RIGHT NOW  
ON THE APPROACH!!!**





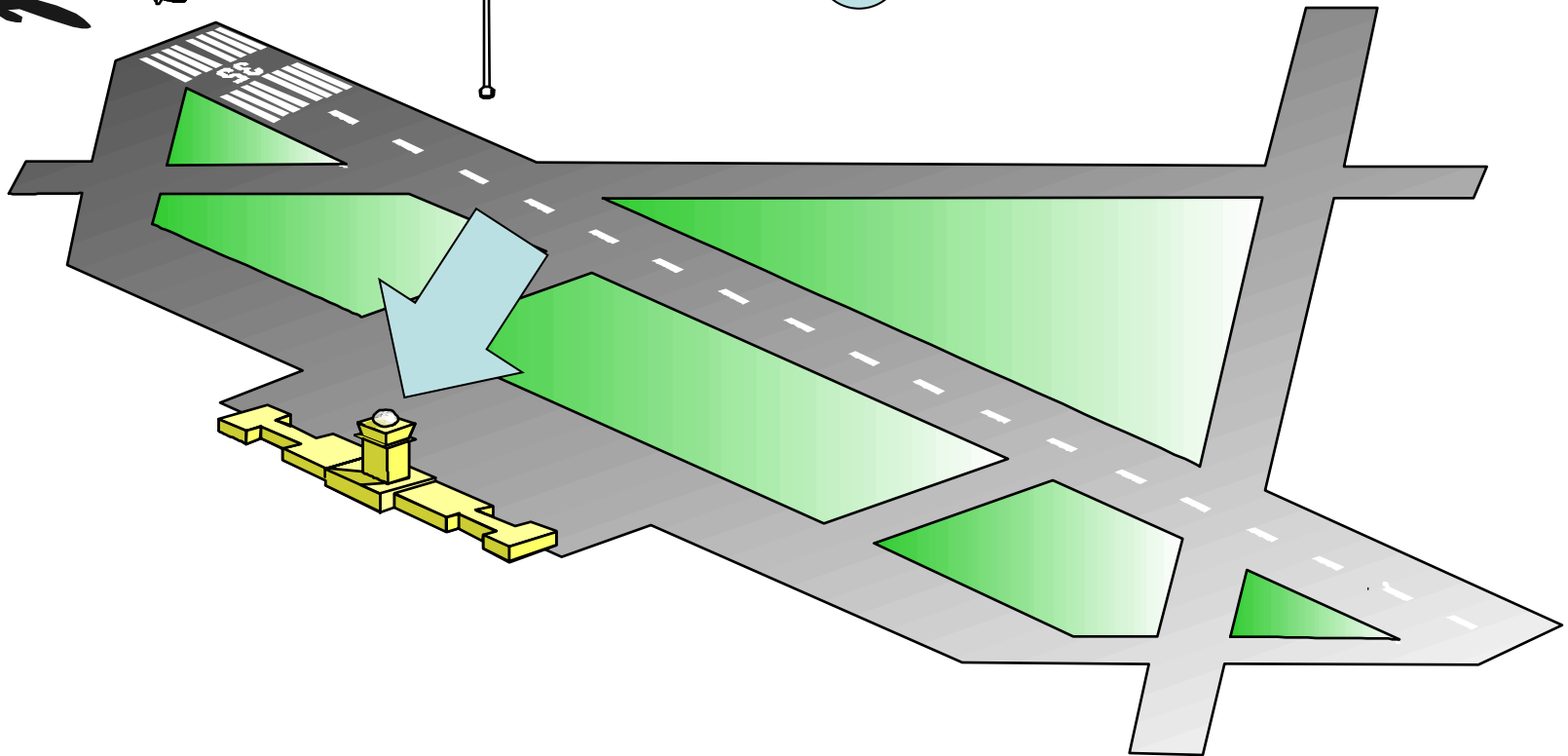
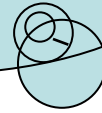
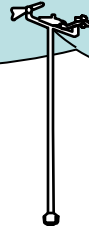
***REMEMBER,  
THE VISIBILITY  
IS DETERMINED  
BY, AND AT, THE  
ASOS***



**BY THIS SENSOR,  
OVER A 24 INCH SPAN!**



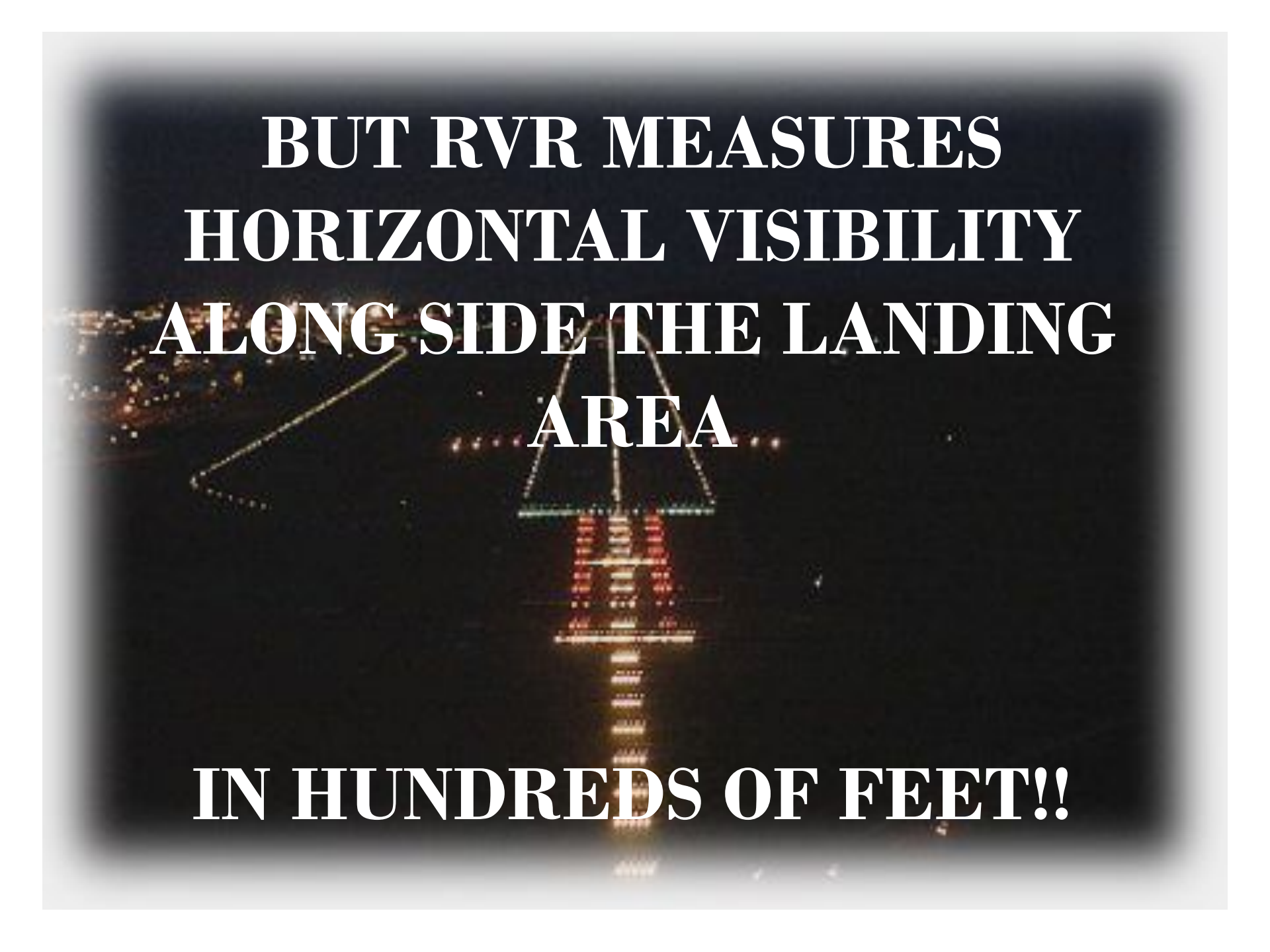
**BUT IS USUALLY MORE**  
**ACCURATE THAN THE OBSERVER**  
**SITTING OVER A MILE AWAY IN THE**  
**TERMINAL BUILDING!!!**



**IF RVR IS AVAILABLE –**



**IT IS MUCH MORE ACCURATE**

A night view of an airport runway. The runway is illuminated with a series of lights that recede into the distance. On the left side, there are lights for taxiways and other airport infrastructure. In the center, a runway sign is visible, showing the number '1' and '11' in a large, illuminated font. The background is dark, with some distant lights visible on the horizon.

**BUT RVR MEASURES  
HORIZONTAL VISIBILITY  
ALONG SIDE THE LANDING  
AREA**

**IN HUNDREDS OF FEET!!**

An aerial night photograph of an airport runway. The runway is illuminated with a central line of lights and side lights. A runway edge light system is visible on the left side. The background shows the airport's perimeter lights and some surrounding city lights.

**IT MAY NOT BE INDICATIVE OF  
THE VISIBILITY DOWN THE  
APPROACH**

**OR AT THE MISSED  
APPROACH POINT!**

***If your intentions  
are to shoot a  
LIFR  
Approach...***

***You need to have  
the missed approach  
Procedure loaded up  
And ready to execute...***



***You better have  
already planned  
For alternate  
airport(s)...***

***And have that plan  
ready to execute...***

*You do remember  
alternate minimums,  
right???*

*And you do remember  
alternate fuel  
requirements, right???*

# *IN CONCLUSION*



A dark cockpit interior at night. The windshield shows a view of a city with lights. The instrument panel is visible on the right side, and a small globe is on the center console. The text is overlaid in the center.

***LOW IFR APPROACHES  
DEMAND YOUR  
UNDIVIDED  
ATTENTION***



***YOU NEED TO BE  
TOTALLY AWARE OF THE  
WEATHER***



*AND WHERE YOU CAN  
EXPECT TO BREAK  
OUT AT...*





**Or not break out!!!**

***ON A STABILIZED  
APPROACH,  
HAVING ALREADY  
BRIEFED  
GO-AROUND  
PROCEDURES***

***YOU SHOULD BE  
SPRING LOADED  
TO EXECUTE THE  
MISSED APPROACH-***

***AND BE HAPPY WHEN  
YOU PICK UP THE  
APPROACH LIGHTS  
AT DH!!***



*AND DROPPING  
ANOTHER 50 OR SO  
FEET BELOW  
MINIMUMS IS NOT  
LEGAL, SAFE OR  
SMART!*

*AND DO YOU KNOW  
JUST HOW MUCH  
ERROR IS IN YOUR  
ALTIMETER??*

*AND DO YOU KNOW  
THE DH MINIMUMS  
ALLOW FOR ANOTHER  
50 FEET LOSS OF  
ALTITUDE TO  
TRANSITION TO A  
GO-AROUND??*

***SO THAT 50 FOOT  
BUFFER PLUS YOUR  
ALTIMETER ERROR  
MAY GET YOU A LOT  
CLOSER TO THE  
GROUND THAN TO  
THINK!!!***



*AND CIRCLING  
APPROACHES AT  
NIGHT AT MINIMUMS  
ARE ABOUT AS  
DANGEROUS AS IT  
GETS!!!*

# IF THIS IS YOUR VIEW OF THE RUNWAY ON A CIRCLING APPROACH -

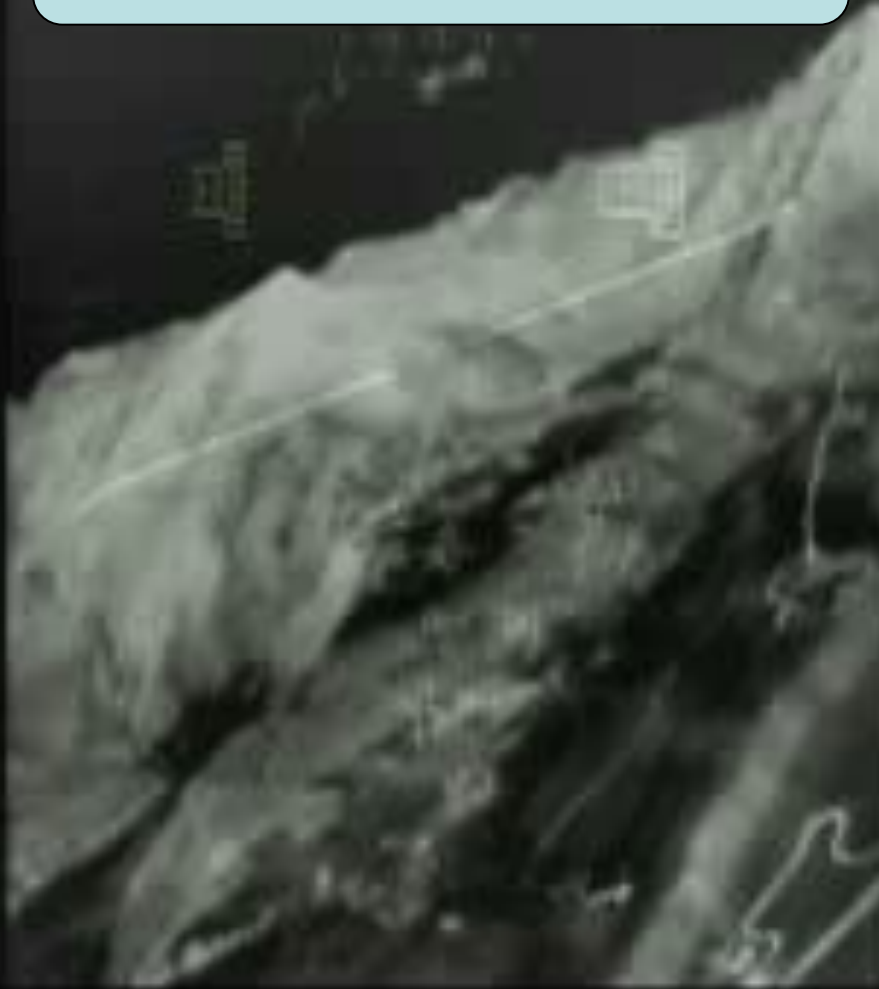


***YOU ARE IN BIG TROUBLE !!***



# How the pro's do it -

**Night vision system**



**Visual!!**



**FLY SAFE**

**ALWAYS GET A  
WEATHER  
BRIEFING  
SIDE UP!**



*Before i leave....*



***BRACE YOURSELF  
BEFORE LOOKING AT  
THE FOLLOWING  
IMAGE..***

- A pilot at a very low altitude lost control of his aircraft during an airshow.**
- It narrowly misses a horrified crowd gathered for the air show and slams into four buildings.**
- One can only imagine the horror of the occupants trapped inside those buildings.**





# *Freddie Gibbs, President*



NAFI MASTER CFII  
ATP CFII-SMEL *GOLD SEAL*  
CIRRUS TAILDRAGGERS

CHIEF FLIGHT INSTRUCTOR  
WISEMAN AVIATION  
FLAGSTAFF, AZ

The *ARC* Group  
Aviation Research and Consulting  
FLAGSTAFF, AZ 86005