POPA Spring 2009

How would you have accomplished this trip?

The topic of this article is *your* decision making for this particular "mission". Would you have done anything differently? Be honest with yourself! Consider all possible factors.

This story starts from Naples, Florida to Ft Huachuca, Ariz. (KFHU). Departed Naples with three passengers and a crew of two. Stopped for fuel in Gainesville, TX (KGLE), then proceeded to Eagle County, CO (KEGE-Vail) to pick-up two more passengers (and additional fuel), then on to KFHU. The reason for the trip was to attend a military funeral being conducted the following morning at Ft. Huachuca.

Weather: 2nd week of February, fair/mild out of Florida with a light headwind at FL 240 of 15-20 knots.

Large "U" shaped Jet Stream/trough dipping north-to-south from Idaho through eastern Nevada, turning eastward through southern Arizona and then northward from western New Mexico over the Rockies before turning eastward near Wyoming. Winds aloft to FL300 averaged 85kts. The only significant weather system for the southwestern US was a low-pressure area centered near southwestern Arizona moving east/northeast at 20-35mph, with the entire Jet/Low area generally moving eastward at the same speed as the low-pressure area. The low was creating scattered showers and isolated thunderstorms and drawing in unseasonably cold air into southern Arizona. The Jet Stream helped to move additional moisture into the upper levels in the form of cloud cover up to FL280 and cold air aloft (-35°C to 15000') in southern Arizona. Continuous light to occasional moderate turbulence was forecast/encountered from 10,000' at the Front Range of the Rockies to FL 350 throughout the western US from Nevada to Texas.

The forecast for Fort Huachuca, AZ (FHU) called for rain/snow, low temperatures near 30°F with winds increasing from 10-15kts to 20-35kts and conditions generally remaining the same for 2-3 days.

The forecast for (EGE) was for chance of rain/snow showers, temperatures in the upper 30's-low 40's with increasing probabilities for rain/snow for that evening and the next day. Winds were generally less than 10kts.

Cloudy/light rain and 10-15 knot winds out of the south (most likely generated by the system to the west) were encountered when approaching GLE requiring the RNAV approach to the un-controlled field with breakout occurring 300' above MDA.

So you may, or may not, have surmised that this was a long day/night of flying. Due to the length of this trip along with two of the three destinations being in high country, the owner-operator requested my presence as co-pilot.

Start of day: Departed Naples at 8:40am EDT (both pilots awake by 6:00am). The first leg took 4:15. One hour later, with fuel top-off, on to EGE.

Second leg took 2:40, encountering light turbulence and IMC conditions until descending into EGE. After waiting for additional passengers (family members from different parts of country on long weekend ski trip) and adding enough fuel for maximum gross weight, departure occurred 1:15 later (3:55pm MDT).

Third leg is of course where the story really begins. First, as can happen on days like this, we apparently picked up a third passenger out of Eagle even though the plane only had 2 passenger seats available. The rider's name was Murphy, so no seat needed. Also, neither the pilot nor myself had ever been to the Tucson/Ft Huachuca area prior to this flight, and based on the flight planned headwinds, this leg was going to be 2:45, actual 3:00. Total flight time for the day - 9:55. Hoping to make FHU in daylight but…

Takeoff/climb out of Eagle was not eventful due to VMC conditions for the first 3000’ (plus the SID for Rwy7 climb gradient, which the PC12 easily made at gross weight using Ice Mode speeds*The SID for Rwy25 would have been iffy at MTOW, if IMC). Filed for FL240 to reduce headwind but started to encounter continuous light/moderate turbulence while also IMC. Climbing to get out of moderate turbulence we ended up at FL280, with a headwind of 85kts and still IMC. After thirty minutes the (light) turbulence subsided and one-hour into the leg the cloud cover became scattered. Starting to feel a little tired and even though it was 5:00pm MDT the sun was already hiding behind the low-pressure system to the southwest. Checking the Nexrad/Metars reports from the MFD showed the forecast for FHU holding. When about 110 miles out we started picking up the ATIS. Interestingly the ATIS was only broadcasting the hours of tower operation (closed, since it was a weekend), use of ASOS for weather and the CTAF frequency for the lighting. Great, another uncontrolled airport approach, ILS 26.

A little closer to the destination and it was time to set up for the approach. The pilot reviewed/set up the necessary items and I then cross-checked the approach and set up. With the passengers on board and the expected turbulence during the descent it was decided to descend earlier at a 150 KIAS for rough air. In this part of Arizona, and on weekends, radar control is from Albuquerque Center.

During our initial descent the clouds were scattered layers until 17000’ and the on board radar was showing scattered light rain over FHU with some patches of “yellow” to the east and north of the airport. [Note: As noted with the weather for the day we were indicating -35°C to 15000’]. As we continued our descent the clouds were no longer layering with more coverage ahead and occasional breaks with some city light contact (nightfall). When approximately 45 miles out of FHU, on a southwest heading direct and at 11000’, the controller cleared us for a visual approach and to report the field in-sight. I then informed the controller that based

on present conditions, including the radar picture, unless we descended to a lower altitude visual was not possible (I believe the controller was looking at the Nexrad image, which as previously discussed, is not that reliable due to time delay and in mountainous areas). The controller then stated that in order to approve the ILS approach we would have to maintain 11000' for radar coverage until established (see approach plate). I informed the controller that it was agreeable to maintain our current altitude until established. I then requested MICCO for our initial fix since I was showing some moderate rain over CAYLA. The controller agreed but asked if we could make the turn to final since our present position direct to MICCO was going to be at least a 90° turn to final. I informed him that it was possible and we were cleared to MICCO and the ILS 26.

It should be obvious that with the cloud cover and temperature we were operating in Pusher Ice Mode. During this phase we were night/IMC with no apparent rain or ice. Since we had long established the 150 KIAS we were in a good set up for passage of MICCO and intercepting the Localizer. Also, starting the approach nearly 3000' above the minimum should not create a problem with the distance out and our initial airspeed. Once we passed MICCO and were established, the landing gear would be lowered for additional drag with flaps 15° to follow shortly after.

Passing MICCO and intercepting the Localizer the landing gear was lowered, I contacted Center and was cleared to change to advisory since he would lose radar contact shortly. Went to advisory, made initial call and additional clicks of the PTT for the airport lighting. Next selected flaps to 15° and immediately received a CAWS Flaps caution. Perfect. Continue the approach with a now planned 0° flap approach, Pusher Ice Mode probable. Good news, 12000' runway.

Using power and IAS mode we made a good rate of descent and made contact with the glideslope inside of SERRA. Broke out of cloud cover at about 1500' AGL. Light rain and SW winds of about 10 Kts with the city lights to the sides and below and a big

dark hole in front of us! Hit the PTT to activate the lights (again) and nothing. MURPHY, you bastard! Turns out the Unicom frequency was set, not the CTAF frequency. Continued the approach, had the frequency changed by 500'AGL, landed, end of story. Or is it?

As usual, had plenty of fuel reserve to deviate if things had not worked out. Circling was quickly ruled out due to the very dark area in front of us (the base housing and city are east of the airport) along with the non-familiar terrain, the rain, which we had not encountered until near the airport. During the landing rollout and taxi to the GA ramp the rain / winds picked up for several minutes. Once parked at the ramp, not a soul around and waiting for the rain to subside, I found that the Flap circuit breaker had opened and reset it with no further problems with the flap system. While unloading the aircraft I noticed approximately 3/8" sheet of clear ice across the top inboard half of the wing. The Deice boots were clear leading me to suspect that the cold soaked fuel plus the surface temperature and rain caused this *fast* formation after landing.

As for the frequency mix-up both the pilot and I were not happy about what had happened but it was a classic case of a small error, compounded by a long day of flying/being on duty (if you will), trying to become a big one. That error was two fold, first was listening (but not registering) to the ATIS about using the CTAF frequency for the airport lighting control but then later setting the Unicom frequency prior to the approach. Second, was not catching it on the pre-approach brief [Note the symbol next to the Libby Tower (CTAF)-L for pilot control lighting]. To be fair I cannot recall if I ever have had an encounter with this type of operation involving a CTAF *and* Unicom for night operations, along with an ATIS/ASOS and I expressed this to the pilot that night and the next day since we discussed this at length during our flight back to Florida. I have had experiences of dialing in the wrong Unicom frequency, an improper digit, for PCL operations but this is something <u>definitely</u> re-learned.

So, that's the story. Mostly a happy ending. Having any excitement like the last part never makes me happy but I learn.

Ok, you probably already have an opinion on how you would have done this differently. Give yourself a little more time and then again, really ask yourself how you would have done this "mission". This is a personal challenge. Don't forget the approach and the bonus Flap malfunction (or think of some other real system or navigation/communication possibility). Then if you wish to discuss this article on the POPA website, my website www.acftservices.com, or both, please do so. I will post my after action thoughts on my website along with this article after the issue is in the mail.

"A Safe Pilot is Always Learning"

John Morris
ACFT Services
www.acftservices.com

FORT HUACHUCA-SIERRA-VISTA, ARIZONA AL-5081 (FAA)

ILS or LOC RWY 26

FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

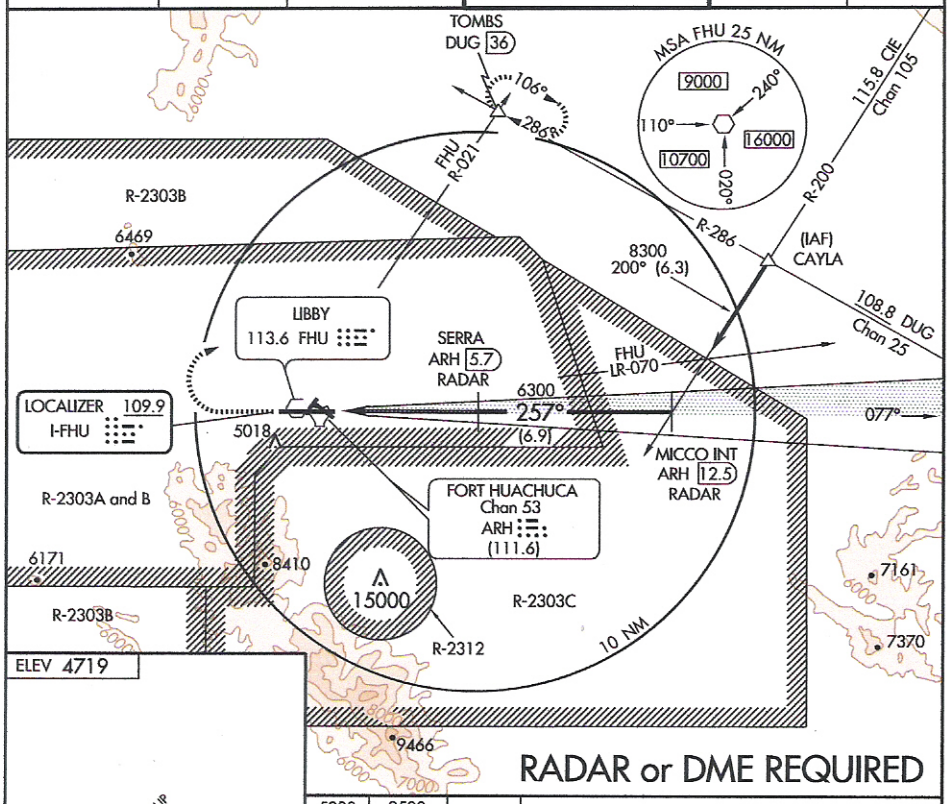
LOC I-FHU	APP CRS	Rwy Idg	12001
109.9	257°	TDZE	4629
		Apt Elev	4719

Circling not authorized south of Rwys 8 and 30.

ASR/PAR

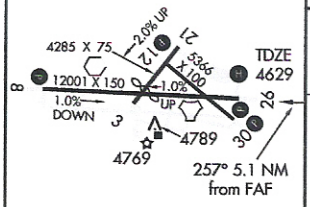
MISSED APPROACH: Climb to 5300, then climbing right turn to 9500 via FHU R-021 to TOMBS and hold.

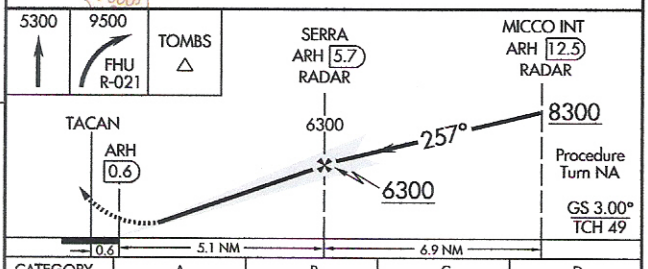
ATIS	ASOS	LIBBY AAF GCA*	LIBBY TOWER*	GND CON	UNICOM
134.75 265.7	119.675	127.05 254.35	124.95 (CTAF) 284.75	121.7 268.7	122.95



ELEV 4719

RADAR or DME REQUIRED





HIRL Rwy 8-26

MIRL Rwys 3-21 and 12-30

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-ILS 26	4829-¾ 200 (200-¾)			
S-LOC 26	4920-1 291 (300-1)			
CIRCLING	5160-1 441 (500-1)	5180-1 461 (500-1)	5180-1½ 461 (500-1½)	5280-2 561 (600-2)

FORT HUACHUCA-SIERRA-VISTA, ARIZONA

Amdt 3 09015

FORT HUACHUCA-SIERRA VISTA/ SIERRA VISTA MUNI-LIBBY AAF (FHU)

31°35'N-110°21'W

ILS or LOC RWY 26

SW-4, 12 FEB 2009 to 12 MAR 2009

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