12-Step B55 VFR Landings

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Below are my techniques and the steps I have used since 2004 for over 2200 hrs of Baron flight which was taught to me by an excellent MEI when I transitioned from my Beech Sierra.

1. Pattern entry speed management is key, so I pull the throttles to about 17" MP a few miles from the pattern (assuming you are coming in from about 150-160KIAS). On my long x-country flights I'm asking ATC for lower from 10,000-11,000' at about 60-70 miles out to avoid the "slam dunk" speed management nightmare coming into the pattern. For me I disconnect the altitude hold and pull the power back about 4", which creates a descent all by itself and if in calm air will accept up to about 170-180 KIAS airspeed and up to about 750'/min descent rate.

2. I target pattern entry speed of about 140KIAS (which also happens to be a safe gear operating speed in my early B55). If possible mid-field downwind is my target for the 140KT IAS and 1st GUMPS or I will extend the downwind some to get that 140KT IAS. The 140KT IAS is typically achieved with about 17" MP. This is why I will typically be making this power reduction to 17" at about 5-10 miles from the field because Barons are slippery and don't slow down easily, especially if you are arriving from >1000' above pattern altitude. As Special Operators often say: "Slow is smooth and smooth is fast." Keep "FAST" for cruise operations, landing is a slow dance.

3. Upon reaching 140KIAS or lower on downwind, GUMPS. GAS ON MAINS, then GEAR FIRST (undercarriage) for me!!! Mixtures, slightly richer, not necessarily full rich, and props full forward. Trim as necessary.

4. Upon Reaching the white arc or ~120KIAS, I extend 15-20° of flaps. Trim as necessary.

5. Typically, a visual wingspan of distance from the runway on downwind at pattern altitude (1,000' AGL) will make for a decent spacing for your turn to base and final without banking more than 30°. Slightly more spacing is OK as well. You want to look out the pilot window and see the runway at or slightly beyond your wingtip.

6. Upon seeing the approach end of the runway over my left shoulder or at about a 45° angle to the trailing edge of the left wing, I begin the base turn while pointing the nose slightly pitch down. CHECK GEAR light again! Speed should not exceed 120KIAS and prepare to make a slight power reduction, possibly very slight to get to about 110KIAS. Typically, I will maintain pattern altitude or approximately 1000' AGL until beginning the downwind to base turn and having my 120KT IAS and flaps in because once you start the descent, she'll want to pick up speed which can push you above Vfe (top of white arc), so also a slight power reduction upon slightly pushing the nose down. Not an aggressive descent rate, I've never really looked at my VSI in this phase since this is all visual alignment cues outside the airplane, but I would say maybe 300-400 fpm or pretty close to an ILS Glide Slope.

7. I Continue my base turn to final (from downwind to final I do a continual banking arc as opposed to a squared off student pilot training exercise) while pitching down. You should in this phase be able to see PAPI glide slope lights (red over white, everything's all right) to make any pitch adjustments.

8. Once established on final I can now more fully focus on my touchdown point being in the lower third of the windscreen. I'll usually hear my Garmin devices announce "500" in the short final phase of landing. Not necessarily targeting an "altitude" per se, everything is visually focused outside at this point either using the PAPI indicators or my windscreen visual for touchdown. All the while on final confirming out loud "Speed is good", targeting the 100-110KT IAS while descending and making sure that I "Pavlov's Dog" the "I've got a GREEN" upon seeing the runway number (which is also confirming that I am landing on the intended runway).

9. Continue monitoring speed and glide path with the glide lights. For a visual glide path aim point I use the bottom THIRD of the windscreen as my touchdown point aiming mark. So, Brick #1 of the runway should be somewhere in the lower third of the windscreen for a rough guide if no glide path lighting is available. Begin targeting speed on final to about 100-110KIAS.

10. If below desired glide path on final, add slight amount of power (max 1") and the opposite (reduce power) if above glide path. Think of where your thumb is pointing as you are holding the throttles…..It is pointing to the altimeter and will control altitude.

11. Upon seeing the runway numbers in clear view I CHECK GEAR LIGHT AGAIN!!! At the point that landing is assured over the perimeter fence and speed of about 100-110KIAS, (full flaps if you desire, but I have found that the majority of my landings do not require a configuration change close to the ground) I will pull the power very nearly to idle and control the descent to the runway (targeting just after Brick #1 as my touchdown target point).

12. Manage the descent to a smooth round out for touchdown around <85KIAS or so (just an estimate), use elevator/aerodynamic braking to full back stick to avoid/minimize brake pad usage.

I do NOT retract flaps until I am clear of the active runway and my mind is clear of landing operations activities. I touch the flap handle while pausing to say "FLAPS CONFIRMED" and THEN move the flap switch.
This is essentially the technique I use for runways of about 3500' or greater.
For runways that I have done <3500' emphasis must be on precise speed control over the fence of 90-100KIAS and very nearly touchdown where my elevator is at Brick #1.

Upon pulling power with landing assured the Baron will slow very nicely because you are now beginning to arrest the descent with the nose pitching slightly up which gives huge amounts of drag to the airframe.

In fact, if I find myself with more speed than I want in a particular landing phase of flight (at the power setting that I want but still not slowed down), I will pitch up slightly and accept an altitude gain of about 200' to get my speed to my target value.