FLIGHT MANEUVER ANALYSIS SHEET (FMAS)

A. We have developed a method of analyzing and studying flight maneuvers that incorporates 10 variables:

1. Maneuver
2. Objective
3. Flight path
4. Power settings(s)
5. Altitude(s)
6. Airspeed(s)
7. Control forces
8. Time(s)
9. Traffic considerations
10. Completion standards

B. A copy of an FMAS (front and back) appears on the next pages for your convenience. When you reproduce the forms for your own use and later for your students, photocopy onto the front and back of a single sheet of paper to make the forms more convenient. The front side contains space for analysis of the above variables. The back side contains space for

1. Make- and model-specific information
   a. Weight
   b. Airspeeds
   c. Center of gravity
   d. Fuel
   e. Performance data
2. Flight instrument review of maneuver
   a. Airspeed indicator .....ASI
   b. Attitude indicator .....AI
   c. Altimeter .....ALT
   d. Turn coordinator ..... TC
   e. Heading indicator .....HI
   f. Vertical speed indicator ..... VSI
3. Common errors

C. You should prepare/study/review an FMAS for each maneuver you intend to perform before each flight lesson. Photocopy the form onto single sheets of paper (front and back). Changes, amplifications, and other notes should be added subsequently. Blank sheets of paper should be attached (stapled) to the FMAS, including self-evaluations, “to do” items, questions for your CFI, etc., for your home study during your flight instruction program. FMASs are also very useful to prepare for the practical test.

1. A major benefit of the FMAS is preflight lesson preparation. It serves as a means to discuss maneuvers with your CFI (as well as with your student) before and after each flight. It emphasizes preflight planning, airplane make and model knowledge, flight instruments, and common errors.
2. Also, the FMAS helps you, your future students, and pilots in general to focus on the operating characteristics of your/their airplane, including weight and balance. Weight and balance, which includes fuel, should be carefully reviewed prior to each flight.

CFI_____

Student_____

Date_____

GLEIM
FLIGHT MANEUVER ANALYSIS SHEET

1. MANEUVER _____

2. OBJECTIVES/PURPOSE _____

3. FLIGHT PATH (visual maneuvers)

4. POWER SETTINGS **5. ALT** **6. A/S**

MP	RPM	SEGMENT OF MANEUVER		
		a.		
		b.		
		c.		

Pencil in expected indication on each of 6 flight instruments on reverse side.

7. CONTROL FORCES

a. _____

b. _____

c. _____

8. TIME(S), TIMING _____

9. TRAFFIC CONSIDERATIONS **CLEARING TURNS REQUIRED** _____

10. COMPLETION STANDARDS/ATC CONSIDERATIONS _____

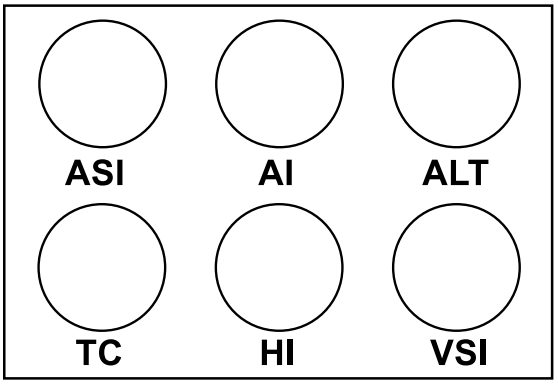
AIRPLANE MAKE/MODEL _____

WEIGHT

Gross _____
Empty _____
Pilot/Pasngrs _____
Baggage _____
Fuel (gal × 6) _____

AIRSPEEDS

V_{SO} _____
V_{S1} _____
V_X _____
V_Y _____
V_A _____
V_{NO} _____
V_{NE} _____
V_{FE} _____
V_{LO} _____
V_R _____



CENTER OF GRAVITY

Fore Limit _____
Aft Limit _____
Current CG _____

FUEL

Capacity L ____ gal R ____ gal
Current Estimate L ____ gal R ____ gal
Endurance (Hr.) _____
Fuel-Flow -- Cruise (GPH) _____

PRIMARY vs. SECONDARY INSTRUMENTS

(IFR maneuvers) -- instruments: ASI, AI, ALT, TC, HI, VSI, RPM and/or MP
(most relevant to instrument instruction)

	PITCH	BANK	POWER
ENTRY			
primary	_____	_____	_____
supporting	_____	_____	_____
ESTABLISHED			
primary	_____	_____	_____
supporting	_____	_____	_____

PERFORMANCE DATA	**Airspeed**	**Power*** **MP**	**RPM**
Takeoff Rotation	_____	_____	_____
Climbout	_____	_____	_____
Cruise Climb	_____	_____	_____
Cruise Level	_____	_____	_____
Cruise Descent	_____	_____	_____
Approach**	_____	_____	_____
Approach to Land (Visual)	_____	_____	_____
Landing Flare	_____	_____	_____

** If you do not have a constant-speed propeller, ignore manifold pressure (MP).*
***Approach speed is for holding and performing instrument approaches.*

COMMON ERRORS

_____

_____

_____

_____

_____