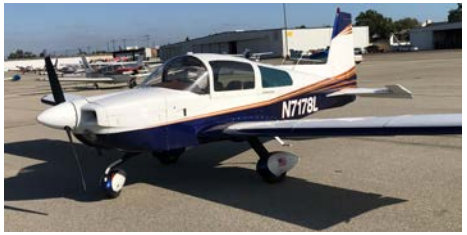
RIFC
1975 Grumman Traveler
AA5

CHECKLISTS

N7178L



NOTE: All airspeeds are expressed in MPH CAS
For IAS, subtract 1 MPH

WARNING: This is only meant as a guide. You should not rely upon it for safe flight operations and should always consult the official Pilot Operating Handbook (POH) and a qualified CFI prior to attempting flight. Should there be any discrepancy with the POH, the POH should always take precedence.

10/17/2018

BEFORE STARTING ENGINE

1. Preflight Inspection ..... COMPLETE
2. Passenger Briefing..... COMPLETE
3. Seats, Seat Belts, Shoulder Harnesses ..... ADJUST & LOCK
4. Brakes (incl. Parking Brake) ..... TEST & SET
5. Controls ..... FREE
6. Fuel Selector Valve ..... FULLEST TANK

STARTING ENGINE

1. Primer ..... AS REQUIRED
2. Mixture ..... RICH
3. Throttle ..... OPEN 1/8”
4. Carburetor Heat ..... OFF
5. Master Switch..... ON
6. Aux. Pump..... ON, CHECK 0.5 to 8 PSI, OFF
7. Prop Clear..... CHECK
8. Ignition Switch ..... ON BOTH
9. Starter Engine ..... PRESS
10. Oil Pressure ..... CHECK

TAXI

1. Transponder..... STANDBY
2. Avionics Power Switch ..... ON
3. Radios..... ON - SET Frequencies
4. Flaps ..... UP
5. Parking Brake ..... RELEASE
6. Brakes, Steering, Gyros and turn coordinator ..... CHECK
7. Control Yoke ..... POSITION for Wind Direction/Velocity

RUNUP

1. Parking Brake ..... SET
2. Seats, Seat Belt, Shoulder Harnesses..... CHECK SECURE
3. Flight Controls..... FREE & CORRECT
4. Trim Tab..... SET
5. Flaps ..... CHECK
6. Flight Instruments..... CHECK and SET
   a. Clock..... SET
   b. Airspeed Indicator..... CHECK
   c. Attitude Indicator..... SET
   d. Altimeter ..... SET
   e. Turn Coordinator ..... CHECK for POWER ON
   g. Heading Indicator & Wet Compass ..... CHECK
   h. Vertical Speed Indicator ..... CHECK
7. Fuel Quantity..... AGREES WITH VISUAL
8. Fuel Selector Valve ..... BOTH
9. Engine Gauges..... CHECK (2 in the green)
10. Mixture ..... SET for Altitude
11. Throttle ..... 1800 RPM
    a. Magnetos..CHECK (Max. drop 175 RPM, diff. 50 RPM)
    b. Carb Heat ..... TEST
    d. Suction Gauge..... CHECK (4.6 to 5.6 Inches of Hg)
    e. Engine Instr. and Ammeter ..... CHECK
    f. Throttle..... IDLE & C/H ON Briefly
    g. Throttle & Friction Lock..... 1000 RPM
12. Beacon, Navigation Lights, & Strobes ..... ON (as required)
13. Canopy..... CHECK
14. Radios and Avionics..... SET
15. Brakes..... RELEASE

BEFORE TAKE-OFF

1. Takeoff Procedure ..... REVIEW
2. BEFORE getting on the runway ..... **FLOW**
   Tanks, Trim, Flaps, Mixture, C/H, Mags
3. AFTER Takeoff Clearance ..... **CATLiTRC**
   Compass ..... CHECK and ADJUST Directional Gyro
   Altimeter ..... CHECK and ADJUST
   Transponder ..... SET to ALT
   Lights ..... ON (As required)
   Timer ..... START
   Rich ..... SET Mixture
   Canopy ..... CHECK

NORMAL TAKEOFF

1. Wing Flaps ..... UP
2. Carburetor Heat ..... COLD
3. Aux. Pump ..... ON
4. Mixture ..... RICH or SET to Altitude
5. Throttle ..... Smoothly to FULL OPEN
6. Elevator Control ..... Vr (50-60 MPH)
7. Climb Speed ..... Vy (100 MPH)

Note: ***Rudder effective above approx. 20 MPH***

SHORT FIELD TAKEOFF with OBSTACLES

1. Wing Flaps ..... 0°
2. Carburetor Heat ..... COLD
3. Mixture ..... RICH or SET to Altitude
4. Brakes ..... APPLY
5. Throttle ..... FULL OPEN
6. Brakes ..... RELEASE
7. Elevator Control ..... Apply light pressure - Vr (55 MPH)
8. Initial Climb Speed ..... 73 MPH
9. Best Angle Speed ..... Vx (78 MPH)
10. Climb Speed (after clearing obstacles) ..... Vy (100 MPH)

Note: ***Rudder effective above approx. 20 MPH***

SOFT FIELD TAKEOFF

1. Wing Flaps ..... 0°
2. Mixture ..... RICH or SET to Altitude
3. Throttle ..... Smoothly to full OPEN
4. Elevator Control ..... FULL AFT (until nosewheel lifts off)
5. Nose wheel ..... Liftoff occurs when A/S is sufficient
6. Attitude ..... Nose - LOWER after liftoff
7. Airspeed ..... 55 MPH
8. Hold in ground effect then 73 MPH until clear of obstacles ...
9. Best Angle Speed ..... Vx (78 MPH)
10. Climb Speed (after clearing obstacles) ..... Vy (100 MPH)

Note: ***Rudder effective above approx. 20 MPH***

NORMAL CLIMB

1. Best Angle Vx ..... 78 MPH
2. Best Rate Vy..... 91 MPH
3. Enroute Climb ..... 100 MPH
4. Fuel Selector Valve ..... BOTH
5. Mixture ..... RICH

DESCENT

1. Aux. Pump..... ON
2. Fuel Selector Valve .....FULLEST TANK
3. Power..... REDUCE
4. Airspeed..... 75-80 MPH
5. Fuel Selector Valve ..... BOTH
6. Mixture .....Rich or ADJUST for smooth operation
7. Carburetor Heat ..... ON if required
8. Flaps .....AS NEEDED (below 120 MPH)

BEFORE LANDING

CGUMP

a. **C**ARB HEAT..... APPLY before closing throttle
b. **G**AS, AUX PUMP..... FULLEST, ON
c. **U**NDERCARRIAGE ..... N/A
d. **MI**XTURE ..... RICH
e. **P**ROP. CONTROL ..... N/A

NORMAL LANDING

1. Airspeed..... 75-80 MPH
2. 'T'ouchdown..... 70 MPH - MAIN WHEELS FIRST
3. Landing Roll..... LOWER NOSE WHEEL GENTLY
4. Braking .....MINIMUM REQUIRED

Note: ***Rudder effective above approx. 20 MPH***

SHORT FIELD LANDING

1. Wing Flaps ..... FULL DOWN below 120 MPH
2. Airspeed..... 70 MPH (until flare)
3. Power.....REDUCE to Idle after clearing obstacles
4. Touchdown..... MAIN WHEELS FIRST
5. Brakes.....APPLY HEAVILY
6. Wing Flaps .....RETRACT

Note: ***Rudder effective above approx. 20 MPH***

SOFT FIELD LANDING

1. Wing Flaps .....FULL DOWN
2. Airspeed..... 70 KIAS (until flare)
3. Power.....REDUCE as required to reduce "floating"
4. Throttle ..... ADD as required to soften touchdown
5. Touchdown..... MAIN WHEELS FIRST
6. Control Yoke .....TOWARD FULL AFT as speed decays (keep the nose wheel off the ground as long as possible)
7. Utilize Aerodynamic braking as long as possible, then apply normal braking

Note: ***Rudder effective above approx. 20 MPH***

BALKED LANDING (go around)

1. Pitch..... UP to level attitude to stop the descent
2. Throttle & Carburetor Heat ..... FULL OPEN & OFF
3. Pitch.....UP to climb attitude
4. Airspeed.....55 KIAS
6. Wing Flaps . RETRACT SLOWLY once climb is established
7. Best Angle Vx ..... 78 MPH
8. Best Rate Vy..... 91 MPH

AFTER LANDING

1. Wing Flaps ..... RETRACT
2. Carburetor Heat ..... OFF
3. Mixture ..... LEAN for Taxi
4. Transponder ..... STANDBY
5. Aux. Fuel Pump ..... OFF
6. Electrical Equipment ..... Non-Essential Items OFF

SECURE AIRPLANE

1. Clear Power Plant ..... 1000 RPM, LEAN
2. ELT ..... CHECK
3. Avionics Power Switch ..... OFF
4. Mixture ..... IDLE CUTOFF
5. Ignition ..... OFF
6. Master Switch ..... OFF
7. Lights & Electrical Equip. ..... OFF
8. Control Wheel ..... SECURE with control locking device
9. Hobbs and Tach time ..... RECORD TIME

***Note:* remember; if you have a G&T after; you need A LIME:**

***A**vionics Off*
***L**ean the mixture*
***I**gnition Off*
***M**aster Switch Off*
***E**lectrical Switches (check)*

Rotation Speed (Vr)	60 MPH
Best Climb Angle (V_X)	78 MPH
Best Climb Rate (V_Y)	91 MPH
Cruise Climb (SL)	100 MPH
Never Exceed (V_{NE})	190 MPH
Maneuvering	122 MPH

Best Glide ..... 83 MPH

	Ground	Air
Steady green 	**Cleared for takeoff**	**Cleared to land**
Flashing green 	**Cleared for taxi**	**Return for landing (to be followed by steady green at proper time)**
Steady red 	**STOP**	**Give way to other aircraft and continue circling.**
Flashing red 	**Taxi clear of the runway in use.**	**Airport unsafe do not land.**
Flashing white _X_X_X_	**Return to starting point on airport**	**Not applicable**
Alternating R/G 	**Exercise extreme caution**	**Exercise extreme caution.**

ENGINE FAILURE DURING TAKEOFF ROLL

1. Throttle ..... IDLE
2. Brakes ..... APPLY
3. Wing Flaps ..... RETRACT
4. Mixture ..... IDLE CUTOFF
5. Ignition ..... OFF
6. Master Switch ..... OFF

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. Airspeed ..... 83 MPH
2. Mixture ..... IDLE CUTOFF
3. Fuel Selector ..... OFF
4. Ignition ..... OFF
5. Wing Flaps ..... AS REQUIRED
6. Master Switch ..... OFF

ENGINE FAILURE DURING FLIGHT

1. Airspeed ..... 83 MPH
2. Carburetor Heat ..... ON
3. Aux. Fuel Pump ..... ON
4. Mixture ..... RICH
5. Ignition ..... ON
6. Primer ..... IN and LOCKED
7. Ignition ..... BOTH (START if propeller is stopped)
8. Engine Gauges ..... CHECK for indication of power loss
9. **NAVIGATE** ..... FIND SUITABLE LANDING AREA
10. **COMMUNICATE** ..... Radio/Transponder

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed..... 75 MPH
2. Mixture ..... IDLE CUT-OFF
3. Fuel Selector.....OFF
4. Ignition .....OFF
5. Wing Flaps .....AS REQUIRED
6. Master Switch.....OFF
7. Canopy..... AJAR prior to Touchdown
8. Seatbelts and harness..... TIGHT
9. Touchdown..... SLIGHTLY TAIL LOW
10. Brakes.....APPLY HEAVILY

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Airspeed.....60 KIAS
2. Wing Flaps ..... 20°
3. Selected Field ..... FLY OVER, noting terrain, obstructions, wind, then retract flaps at safe altitude and airspeed
4. Radios and accessories .....OFF
5. Wing Flaps .....40° (on final approach)
6. Airspeed.....60 KIAS
7. Master Switch.....OFF
8. Canopy..... AJAR prior to Touchdown
9. Touchdown..... SLIGHTLY TAIL LOW
10. Ignition .....OFF
11. Brakes.....APPLY HEAVILY

DITCHING

1. Radio ..... **MAYDAY** on **121.5 MHz**, **squawk 7700**
2. Heavy Objects ..... SECURE or JETTISON
3. Approach High Winds, Heavy Seas - INTO THE WIND
   Light Winds, Heavy Swells - PARALLEL TO SWELLS
4. Wing Flaps ..... AS DESIRED
5. Power..... 300 FT/MIN. DESCENT AT 55 KIAS
6. Canopy..... AJAR

Note: *If no power available, approach at minimal practical A/S*

7. Touchdown.....LEVEL ATTITUDE
   AT BEST ESTABLISHED RATE OF DESCENT
8. Face .....CUSHION at touchdown with folded coat
9. Airplane.....EVACUATE through cabin doors
   If necessary, open window and flood cabin
   to equalize pressure so doors can be opened
10. Life Vests and Raft..... INFLATE

FIRES DURING START ON GROUND

1. Starter .....CONTINUE CRANKING

If engine starts:

2. Power.....1700 RPM for a few minutes
3. Engine.....SHUTDOWN inspect for damage

If engine fails to start:

4. Mixture ..... IDLE CUT-OFF
5. Throttle .....FULL OPEN
6. Fuel Selector Valve .....OFF
7. Cranking .....CONTINUE
8. Fire Extinguisher .....OBTAIN
9. Engine.....SECURE
   a. Master Switch .....OFF
   b. Ignition .....OFF
10. Fire.....EXTINGUISH

Warning: *After discharging a fire extinguisher within a closed cabin, ventilate the cabin.*

CABIN FIRE

1. Master Switch.....OFF
2. Vents / Cabin Air / Heat .....CLOSED (to avoid drafts)
3. Fire Extinguisher ..... Activate (if available)
4. Land the airplane as soon as possible to inspect for damage

WING FIRE

1. Landing / Taxi Light Switches .....OFF
2. Pitot Heat Switch.....OFF
3. Navigation Light Switch.....OFF
4. Strobe Light.....OFF

ENGINE FIRE IN FLIGHT

1. Fuel Selector Valve ..... OFF
2. Mixture ..... IDLE CUT-OFF
3. Throttle ..... CLOSED
4. Master Switch ..... OFF
5. Heater and Air ..... OFF
6. Airspeed ..... 100 KIAS
   If fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture .....
7. Forced Landing ..... EXECUTE without Engine Power

Note: *Perform sideslip to keep the flames away from the fuel tank and cabin, land as soon as possible using flaps only as required for final approach and touchdown.*

ELECTRICAL FIRE IN FLIGHT

1. Master Switch ..... OFF
2. Vents / Cabin Air / Heat ..... CLOSED
3. Fire Extinguisher ..... ACTIVATE
4. Vents / Cabin Air / Heat ..... OPEN
   (when it is ascertained that fire is completely extinguished.)
5. Avionics Power Switch ..... OFF
6. All Other Switches (except Ignition) ..... OFF

If fire appears to be out and electrical power is necessary for continuance of flight:

7. Master Switch ..... ON
8. Circuit Breakers ..... CHECK for faulty circuit, do not reset
9. Radio Switches ..... OFF
10. Avionics Power Switch ..... ON
11. Radio / Electrical Switches ..... ON one at a time with delay after each until short circuit is located

INADVERTENT ICING ENCOUNTER

1. Turn Pitot Heat Switch ..... ON
2. Turn back or change altitude (air temp less conducive to icing)
3. Pull cabin heat control full out, open defroster outlets to obtain maximum windshield defroster airflow. Adjust cabin air control to get maximum defroster heat and airflow
4. Open throttle to increase engine speed
5. Watch for signs of engine ice ..... Carb. Heat as required
6. Land at nearest suitable airport
7. Be prepared for significantly higher stall speed
8. Leave wing flaps retracted - Use of flaps could result in loss of elevator control
9. Open canopy and scrape ice from a portion of the windshield for visibility during the landing approach
10. Perform a landing using a forward slip, if necessary, for improved visibility
11. Approach at 65-75 MPH
12. Perform a landing in a level attitude

ELECTRICAL MALFUNCTIONS

Overvoltage Light Illuminates

1. Master Switch (both sides) .....OFF
2. Master Switch (both sides) ..... ON

If overvoltage light still on:

3. Nonessential Electrical Equipment.....OFF
4. Flight .....LAND as soon as practical
   ANTICIPATE complete electrical failure

Ammeter shows discharge

1. ALT switch of Master .....OFF
2. Nonessential Electrical Equipment.....OFF
3. Flight .....LAND as soon as practical
   ANTICIPATE complete electrical failure

Note: *Due to increased system voltage and radio frequency noise, operation with ALT switch ON and BATT switch OFF should be made only when required by an electrical failure.*

ENGINE ROUGHNESS

1. Carburetor Heat ..... ON

If roughness continues for 1 minute:

2. Carburetor Heat .....OFF
3. Mixture ..... ADJUST for max. smoothness
4. Fuel Selector..... SWITCH Tanks
5. Engine Gauges..... CHECK
6. Magneto Switch..... "L" then "R" then "BOTH"

If operation is satisfactory on either magneto, continue on that one at reduced power and full "RICH" to first airport.

HIGH OIL TEMPERATURE

1. Land at nearest airport and investigate the problem
2. Prepare for power off landing

SPIN RECOVERY

1. Throttle .....IDLE
2. Ailerons ..... NEUTRAL
3. Rudder ..... FULL OPPOSITE to direction of rotation
4. Control Wheel ..... FORWARD (enough to break the stall)
5. Rudder ..... NEUTRAL when rotation stops
6. Control wheel .....AS REQUIRED to smoothly regain level flight attitude