Safety Procedures and Practices Manual

For

14 CFR Part 141 and CFR Part 61

Rotorcraft/Helicopter Training Courses

STAR-SPPM

Star Helicopters LLC

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Safety Procedures and Practices Manual

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Log of Revisions

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Initial	May 1, 2012	Original Issue	
001	June 1, 2013	Complete Revision number change. Removed Manual from Private Pilot Syllabus and made it a standalone manual. Changed Flight Instructor Hours to 200 hours Added Minimum Instructor Hour Requirements. Added Rated Pilot Weather Minimums Added Endorsements Page Added additional Advisory Circulars Added Rated Pilot Designated Practice Areas Added Rated Pilot Solo Policies Added Rated Pilot Cross Country Flights	

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About this Manual

This manual is a guide to assist the instructors and students to safely and efficiently conduct flight training at Star Helicopters, and meets all of the 14 CFR Part 141 and CFR Part 61 Rotorcraft/Helicopter Training Course Outline Safety Procedures and Practices requirements.

The flight training guidelines particularly for pre-private students are designed to instill confidence through repetition and familiarity. By using pre-selected practice airports and cross country routes

Failure to comply with this manual either intentionally or un-intentionally may be grounds for termination from the training program and possible termination of employment with Star Helicopters.

Any deviations from this manual must be approved in advance by the Chief Flight Instructor.

If in doubt about anything, ASK!

Safety Procedures
And Practices Manual

FLIGHT INSTRUCTOR REQUIREMENTS

Minimum Instructor Requirements

Holds Current – Commercial Pilot Certificate, Flight Instructors Certificate with appropriate category privileges, Second Class Medical Certificate.

To endorse a student for their CFI Certificate check ride, the flight instructor must have held their Flight Instructor Certificate with all aforementioned privileges for at least 24 months.

Has logged 200 hours total time in appropriate category.

Completed Robinson Safety Course

Minimum Instructor Hour Requirements

Training in R22
Requires 200 hours in Helicopters, 100 hours PIC in R22, R22 CFI Endorsement, Checkout with Chief Pilot
Robinson Helicopters Safety Course

Training in R22 Auto Rotations
Requires at least 500 hours in helicopters,200 Hours dual given, Checkout with Chief Pilot

Training in R22 Hover Auto Rotations
Requires at least 600 hours in helicopters, 300 hours dual given, Checkout with Chief Pilot

Training in R44
Requires at least 500 hours in heli, 100 hours in R44, 200 hours Dual Given Helicopters, R44 CFI Endorsement, Checkout with Chief Pilot
Robinson Helicopters Safety Course

Training in R44 Auto Rotations
Requires at least 500 hours in helicopters, 200 hours dual given, Checkout with Chief Pilot

Training in R44 Hover Auto Rotations
Requires at least 600 hours in helicopters, 300 hours dual given, Check out with Chief Pilot

Instructor Requirements to endorse CFI & CFII candidates for a Checkride are:

Part 61 – Instructor must have held Flight Instructor Certificate for 24 calendar months and have given 200 hours of dual given and 40 hours of ground instruction.

Part 141 - Instructor must have held Flight Instructor Certificate for 24 calendar months and have given 400 hours of dual given and 40 hours of ground instruction, and have endorsed at least 5 students for a practical test with a pass rate of at least 80%.

WEATHER MINIMUMS

Solo Weather Minimums – Student Pilot (Pre-Private)

- **Dual Flights:** The weather minimums for dual flights will be left to the discretion of the flight instructor. She/he will assure that the weather conditions do not violate any of the applicable Federal Aviation Regulations, any limitations stated in the Pilot's Operating Handbook or the Star Helicopters, LLC Company Policies, Procedures and Training Guidelines. The flight instructor **must** consider the benefit to, or adverse effect upon, the students training and learning ability when making a go/no-go decision based on the weather conditions.

- **Solo Flights:** The weather minimums for solo flights will be as shown in the following chart.

First Solo

	Ceiling	Visibility	Wind
Hovering	1000 feet	3 miles	10 knots or less, No Gusts
Traffic Pattern	1000 feet	3 miles	10 knots or less, No Gusts

Solo Advanced

	Ceiling	Visibility	Wind
Traffic Pattern	1000 feet	3 miles	10 knots or less, No Gusts
Local Flight	1000 feet	3 miles	10 knots or less, No Gusts
Airport to Airport	1500 feet	5 miles	10 knots or less, No Gusts
Cross Country	1500 feet	5 miles	10 knots or less, No Gusts

Cross Country Solo weather must be forecast to be VFR at time of departure and two (2) hours after the estimated time of arrival at final destination.

Maximum Operating Temperature 40 Degrees Celsius: The maximum outside air temperature at time of takeoff is 40 Degrees Celsius. No training flights may be conducted with outside air temperatures above 40 Degrees Celsius.

Any or all flights may be grounded when, at the discretion of the Chief Flight Instructor or Assistant Chief Flight Instructor, the weather conditions do not fall within the parameters set forth in this section, or are not conductive to effective flight training. It is always the student's responsibility to remain conservative and your personal minimums may be higher but flight is never permitted below these established minimums.

Weather Minimums – Rated Pilot

Weather Minimums

- **Dual Flights:** The weather minimums for dual flights will be left to the discretion of the flight instructor. She/he will assure that the weather conditions do not violate any of the applicable Federal Aviation Regulations, any limitations stated in the Pilot's Operating Handbook or the Star Helicopters, LLC Company Policies, Procedures and Training Guidelines. The flight instructor **must** consider the benefit to, or adverse effect upon, the students training and learning ability when making a go/no-go decision based on the weather conditions.

- **Solo Flights:** The weather minimums for solo flights will be as shown in the following chart.

Day Solo

	Ceiling	Visibility	Wind
Hovering	1000 feet	3 miles	20 knots or less, Gusts less 5 knots
Traffic Pattern	1000 feet	3 miles	20 knots or less, Gusts less 5 knots
Airport to Airport	1000 feet	3 miles	20 knots or less, Gusts less 5 knots
Cross Country	1000 feet	3 miles	20 knots or less, Gusts less 5 knots

Night Solo

	Ceiling	Visibility	Wind
Traffic Pattern	1500 feet	5 miles	10 knots or less, No Gusts
Local Flight	1500 feet	5 miles	10 knots or less, No Gusts
Airport to Airport	1500 feet	5 miles	10 knots or less, No Gusts

Cross Country Solo weather must be forecast to be VFR at time of departure and two (2) hours after the estimated time of arrival at final destination.

AIRCRAFT CHECKLISTS

Star Helicopters, LLC uses the Aircraft Pre-Flight and Startup/Shutdown Checklists prior to every flight and during Startup/Shutdown. (See the following Samples)

PRE-FLIGHT CHECKLISTS

R22 Beta II - Preflight Checklist

Star Helicopters, LLC

NORMAL PROCEDURES CHECKLIST

Refer to AFM for expanded, Emergency and Abnormal Procedures

The pilot is responsible for determining whether the helicopter is in condition for safe flight. Check maintenance records to be sure aircraft is airworthy and will not exceed any maintenance or inspection requirements. Verify hold-lamps show no unexplained temperature increases during prior flight. In cold weather, remove even small accumulations of frost, ice or snow. Check general condition of aircraft and verify no leaks, discoloration due to heat, dents, chafing, galling, nicks, corrosion, or cracks, verify no fretting at areas where parts are joined together. Fretting of aluminum parts produces a fine black powder, fretting of steel parts produces a reddish brown or black residue.

PRE-PREFLIGHT

- Weather-TFRs-W&B-Performance Limitations ..... Checked
- Flight Plan (If required) ..... Completed
- Hobbs Time ..... Checked to Flight Log
- Verify ..... That Flight Will Not Exceed Any Maintenance
- Covers ..... Removed/Stowed
- Main Rotor Tie Down ..... Removed/Stowed

1. CABIN INTERIOR RIGHT (PILOT SIDE)

- Aircraft Documents . AROW(Airworthiness Certificate Front
- Loose Articles,Baggage Compartment . Removed Stowed,Check
- Seat Belt ..... Check Condition and Fastened
- Instruments, Switches, and Controls ..... Check Condition
- Clock ..... Functioning
- Master switch ..... On
- Clutch Circuit Breaker & Clutch ..... Pulled/Engaged
- Navigation, Strobe, Landing Lights (Night Flights) ... On
- Position, Strobe, Landing Lights ..... Check Working
- Navigation, Strobe, Landing Lights ..... Off
- Clutch & Clutch Circuit Breaker..... Disengaged/Pushed
- Oil Pressure, Alternator ..... On
- Warning Light Test Switches ..... Push to Test
- Fuel Quantity ..... Check Gages
- Master Switch ..... Off

2. FUSELAGE RIGHT SIDE

- Door Hinge Safety Pin ..... Installed
- Landing gear and Position light ..... Check
- Ground Handling Wheel ..... Removed
- Fuselage Condition, Rivets, Screws ..... Check

3. COWL DOOR

- Gearbox Oil ..... Full, No leaks
- Gearbox Telatemp ..... Normal
- MR Chip Detector ..... Check Secure
- Rotor Brake (Check Movement in Cowl) ... Actuation Normal
- Rotor Brake ..... Off
- ELT ..... Check Secure
- Flex Coupling, Yoke Flange(FWD) ... No Cracks, Nuts Tight
- Static Source ..... Clear
- Control Rod Ends ..... Free Without Looseness
- Tail Rotor Control ..... No Interference
- Sprag Clutch ..... No Leaks
- Upper Bearing ..... No Leaks
- Telatemp - Upper Bearing ..... Normal
- V-belt Condition and Slack ..... Check
- Flex Coupling, Yoke Flange(AFT) ... No cracks, Nuts Tight
- Steel Tube Frame ..... No Cracks
- All Fasteners ..... Tight
- Sheet Metal Base ..... No cracks, Screws Tight
- Cowl Door ..... Latched

4. ENGINE RIGHT SIDE

- Air Intake ..... Free, No Obstructions
- Left Magneto ..... Secure, No Leakage
- Right Upper and Lower Engine Mounts ... Secure, No cracks
- Voltage Regulator ..... Secure, No Loose Wires
- Oil Cooler Door ..... Check
- Engine Sheet Metal ..... No cracks
- Electrical Terminals ..... Tight
- Fuel Lines and Oil Lines..... No Leaks or Chafing
- Carb Air Ducts & Carb Heat Scoop ..... Secure
- Carb Heat Control Line ..... No Fraying
- Starter Relay ..... Check, No Loose Wires
- Starter Motor and Ring Gear . Check Condition, Disengaged
- Flywheel ..... Check Teeth Condition
- Exhaust System ..... No Cracks
- Engine General Condition ..... Check
- Lower Sheave Groove Wear ..... Smooth & uniform
- Telatemps - Lower Bearing ..... Normal
- Lower Bearing ..... No Leaks
- Steel Tube Frame ..... No Cracks

5. ENGINE REAR

- Cooling Fan Nut ..... Pin in Line With Marks
- Cooling Fan ..... No Cracks
- Fan Scroll ..... No Cracks
- Fan Scroll Housing ..... Check
- Drain Hole ..... Clear

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R22 Beta II - Preflight Checklist Page 2

6. TAIL CONE

- Attachment Bolts ..... Tight
- Rivets ..... Tight
- Skins ..... No cracks or dents
- Drain Holes (Four) ..... Clear
- Inspection Ports ..... Secure, Tight
- Antenna & Strobe Light Condition ..... Check
- Tail Rotor Guard ..... Check

7. EMPENNAGE

- Tail Surfaces ..... No Cracks
- Fasteners ..... Tight
- Position Light ..... Check

8. TAIL ROTOR

- Gearbox ..... Oil Visible, No Leaks
- Control Bellcrank ..... Free Without Looseness
- Blades ..... Clean and No Damage/Cracks
- Pressure Drain Holes ..... Clear
- Pitch Change Bearing ..... Free Movement
- Rod Ends ..... Free Without Looseness
- Pitch Link Jam Nuts ..... Tight
- Teeter Bearings ..... Check Condition
- Teeter Bearing Bolt ..... Does Not Rotate Gearbox
- Telatemp ..... Normal
- Horizontal Cross Tube ..... Check Bend

9. ENGINE LEFT SIDE

- Tail Cone Attachment Bolts ..... Tight
- Steel Tube Frame ..... No Cracks
- Telatemps - Lower Bearing ..... Normal
- Lower Bearing ..... No Leaks
- Alternator Belt Tension ..... Check
- Engine Sheet Metal ..... No Cracks
- Fuel Lines and Oil Lines..... No Leaks or Chafing
- Exhaust System ..... No Cracks
- Engine General Condition ..... Check Engine
- Engine Left Upper and Lower Mounts ..... Check
- Right Magneto ..... Check Secure, No Leakage
- Oil Pressure and Telatemp ..... Check, No Loose Wires
- Battery and Relay (If Located Here) ..... Secure
- Oil Filter (If Installed) ..... Secure, No Leaks
- Oil (Only Fill If Below 4 qts) ..... 4-6 qt
- Throttle Linkage (Raise Collective) ..... Operable
- Correlater(Raise Collective-Throttle Into Detent)Operable

10. MAIN ROTOR (DO NOT PULL DOWN ON BLADES)

- Blades ..... Clean and No Damage/Cracks
- Blade Tip Weights ..... Check Secure
- Pressure Drain Holes ..... Not Blocked
- Pitch Change Boots ..... No Leaks
- Main Hinge Bolts ..... Cotter Pins Installed
- All Rod Ends ..... Free Without Looseness
- Pitch Link Jam Nuts ..... Tight
- Pitch Link Safety Wire ..... Secure
- All Fasteners ..... Tight
- Swashplate Scissors ..... No Excessive Looseness
- Blades ..... Level

11. FUSELAGE LEFT SIDE

- Door Hinge Safety Pin ..... Installed
- Landing Gear and Position Light ..... Check
- Ground Handling Wheel ..... Removed
- Condition Fuselage ..... All nuts secure

12. CABIN INTERIOR LEFT (PASSENGER SIDE)

- Baggage Compartment ..... Check
- Removable Controls ..... Secure if Installed
- Collective Control ..... Clear
- Seat Belt ..... Check Condition and Fastened
- Door ..... Unlocked and Latched

13. NOSE SECTION

- Pitot Tube ..... Clear
- Windshield Condition & Cleanliness ..... Check
- Fresh Air Vent and Landing Lights ..... Clear/Check

14. FUEL TANKS (Use Gas Disposal Can for Samples)

- Aux Fuel Tank Quantity (18.9-18.5 Usable) ..... Check
- Filler Cap ..... Tight
- Leakage ..... No Leaks
- Drain ..... Sample
- Main Fuel Tank Quantity (19.8-19.2 Usable) ..... Check
- Filler Cap ..... Tight
- Leakage ..... No Leaks
- Drain ..... Sample
- Gascolator Drain ..... Sample
- Area Around Helicopter ..... Clear

Caution

Removable controls should be removed if person in left seat is not a rated helicopter pilot and during mid flight. When flying solo, fill left baggage compartment to capacity before using right compartment. Avoid placing objects in compartments which could injure occupants if seat collapses during a hard landing. Shorter pilots may require cushion to obtain full travel of all controls. When using a cushion, verify all cyclic travel is not restricted.

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Robinson R22 Beta II – Pre-Flight Checklist (Sample)

R44 Clipper II – Startup/Shutdown

Star Helicopters, LLC

NORMAL PROCEDURES CHECKLIST

Refer to AFM for expanded, Emergency and Abnormal Procedures

Caution

Skid Clamps ..... Removed/Secured
Covers ..... Removed/Stowed
Main Rotor Tie Down ..... Removed/Stowed
Be sure rotor blades are approx. level to avoid possible tailcone strike

BEFORE STARTING ENGINE

Seat Belts ..... Fastened
Fuel Shut-Off Valve ..... On
Cyclic/Collective Friction ..... Off
Cyclic, Collective, Pedals ..... Full Travel Free
Throttle ..... Full Travel Free
Collective ..... Full Down, Friction On
Cyclic Neutral ..... Friction On
Pedals ..... Neutral
Landing Light ..... Off
HYD & Governor Switch ..... On
Circuit Breakers ..... In
Clutch ..... Disengaged
Altimeter ..... Set To Field Elevation
Rotor Brake ..... Disengaged

STARTING ENGINE AND RUN-UP

Throttle ..... Closed (INTO DETENT)
Master Switch ..... On
Area ..... Clear
Strobe Light ..... On
Mixture ..... Rich (Pushed In)
Ignition Switch ..... To Prime(4 Seconds), Then To Both
Mixture ..... Pull Off
Starter ..... Engaged Until Engine Starts
Mixture ..... Move Full Rich (Pushed In)
Mixture Guard ..... Installed
Starter-On Light ..... Out
Set Engine RPM ..... 50 to 60%
Clutch Switch ..... Engaged
Blades Turning ..... Less Than 5 Seconds
Alternator Switch ..... On
Oil Pressure In 30 Sec ..... 25 PSI Minimum
Clock ..... Start
Avionics, Headsets ..... On
Wait For Clutch Light ..... Out
Warm-up RPM ..... 60% to 70%
Engine Gages & Time ..... Gages Green & 2 Minutes
Mag drop at 75% RPM ..... 7% max in 2 sec
Sprag Clutch Check ..... Needles split
Doors ..... Closed and Latched
Limit MAP (Manifold Pressure) Chart ..... Check
Never Exceed Speed (Max V_{ne}) Chart ..... Check
Cyclic/Collective Friction ..... Off
Hydraulic System Check ..... HYD Switch Off
Cyclic X Pattern Check
Right Forward 1" to Left Aft 1"
Left Forward 1" to Right Aft 1"
Collective Lift Slightly 1"
Hydraulic Switch ..... On
Governor ..... On
Increase Throttle (Keeping MP < 15") ..... RPM 101-102%
Warning Lights ..... Out
Lift Collective Slightly, Reduce RPM..Horn/Light at 97%
Warning Lights Out, Gages In Green, Fuel Qty .... Check
Area ..... Clear

SHUTDOWN PROCEDURE

Collective Down, RPM 60-70% .....Friction On
Collective, Cyclic and Pedals Neutral ..... Friction On
Cool Down - 2 MINUTES & CHT TEMP 275 .. Throttle Closed
Clutch switch ..... Disengaged
Wait 30 seconds ..... Pull Mixture Idle Cut-Off
Wait 30 seconds ..... Apply Rotor Brake
Rotor Break ..... Leave Engaged
Clutch light .....Off
All Switches (Except HYD, Governor) ..... Off
Fuel Quantity ..... Note
Master Switch ..... Off
Fuel ..... Re-Fuel To 35 Gallons Indicated
Inflation Lever Safety ..... "Locked"

LAST FLIGHT OF DAY

Bubble Cover & Skid Clamps ..... Installed

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MAP – AIR SPEEDS - FUEL

R44 Clipper II

LIMIT MANIFOLD PRESSURE - IN. HG

MAXIMUM CONTINUOUS POWER

PRESS ALT-FT	OAT - °C -30	-20	-10	0	10	20	30	40
SL	21.5	21.8	22.1	22.4	22.6	22.9	23.1	23.3
2000	20.9	21.2	21.5	21.8	21.1	22.3	22.5	22.8
4000	20.4	20.7	21.0	21.3	21.5	21.8	22.0	22.2
6000	19.9	20.2	20.5	20.8	21.0	21.3	21.5	21.7
8000	19.5	19.8	20.1	20.3	20.6	20.8	21.0	21.3
10000	19.1	19.4	19.6	19.9	FULL THROTTLE			
12000								

FOR MAX TAKEOFF POWER (5 MIN) ADD 2.8 IN. HG

5 MINUTE MAX TAKEOFF POWER

PRESS ALT-FT	OAT - °C -30	-20	-10	0	10	20	30	40
SL	24.3	24.6	24.9	25.2	25.4	25.7	25.9	26.1
2000	23.7	24.0	24.3	24.6	23.9	25.1	25.3	25.6
4000	23.2	23.5	23.8	24.1	24.3	24.6	24.8	25.0
6000	22.7	23.0	23.3	23.6	23.8	24.1	24.3	24.5
8000	22.3	22.6	22.9	23.1	23.4	23.6	23.8	24.1
10000	21.9	22.2	22.4	22.7	FULL THROTTLE			
12000								

FOR MAXIMUM CONTINUOUS POWER SUBTRACT 2.8 IN. HG

NEVER EXCEED SPEED - KIAS

PRESS ALT-FT	OAT - °C -30	-20	-10	0	10	20	30	40
SL	130							
2000							127	123
4000					126	122	118	114
6000			126	122	117	113	108	103
8000	126	122	117	112	107	101	96	91
10000	117	112	106	101	95	90	85	
12000	107	101	95	89	NO FLIGHT			
14000	85	89						

AIRSPEEDS LIMITATIONS

Never-Exceed Airspeed (Vne) - Up to 3000 feet density altitude

2200 lb TOGW & Below	130	KIAS
Over 2200 lb TOGW	120	KIAS
Autorotation	100	KIAS
Any Doors Removed	100	KIAS
Floats Inflated (DO NOT INFLATE ABOVE 80 KIAS)	80	KIAS

AIRSPEEDS FOR SAFE OPERATIONS

Takeoff & Climbs	60	KIAS
Maximum Rate of Climb (Vy)	55	KIAS
Maximum Range	100	KIAS
Landing Approach	60	KIAS
Autorotation	70	KIAS

Autorotations Perform At Minimum Altitude of 800 AGL

Autorotation Airspeeds		
Recommended @ 100% RPM	70	KIAS
Maximum Glide(Above 500 AGL) @ 90% RPM	90	KIAS
Minimum Rate of Descent @ 90% RPM	55	KIAS

LOW ROTOR RPM BLADE STALL

60% rotor RPM plus 1% for every 1000 feet Density Altitude

Immediately roll on throttle and lower collective and apply aft cyclic

MAXIMUM WEIGHT FOR WATER OPERATIONS 2400lb.

INFLATION ABOVE 4000 ft AGL IS PROHIBITED

Fuel Gage Indications to Approximate Fuel Quantities

Main Tank		Aux Tank		Total Fuel
30.6	FULL	18.3	FULL	48.9
28.7		16.0		44.7
26.8	- 7/8 -	14.9		41.7
24.9		13.7	- 3/4 -	38.6
23.0	- 3/4 -	12.6		35.6
21.1		11.4		32.5
19.1	- 5/8 -	9.2	- 1/2 -	28.3
17.2		6.7		23.9
15.3	- 1/2 -	5.7		21.0
13.4		4.6	- 1/4 -	18.0
11.5	- 3/8 -	3.5		15.0
9.6		2.3		11.9
7.7	- 1/4 -	0.0	EMPTY	7.7
3.8	- 1/8 -	0.0		3.8
0.0	EMPTY	0.0		0.0

Low fuel light - indicates approx. 3 gallon usable fuel remaining.

The engine will run out of fuel after 10 minutes at cruise power.

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Robinson R44 Clipper II – Startup/Shutdown Checklist (Sample)

STARTING AND TAXIING

- Use of the Aircraft Startup Checklist will be used to start the aircraft.
- Hover taxi ground speed shall not exceed a brisk walk and an altitude of 3 to 5 feet shall be maintained. Low power, low speed and constant vigilance will be maintained when taxing.
- Air taxi is not permitted for pre-private pilots without a CFI on board.
- Pilots will read back all taxi clearances to ground control or air traffic control.
- Pilots will read back all ATC instructions to air traffic control.

FIRE PRECAUTIONS AND REFUELING PROCEDURES

When refueling, each aircraft must be grounded, additionally the following restrictions apply:

- All students will be instructed (before their first solo) on precautions against ground and inflight fires and the procedures to be taken if they should occur.
- All students will be instructed in the location and use of the fire extinguisher in the aircraft (If installed).
- Students must be familiar with the emergency procedures relating to fires in the Pilot's Operating Handbook for the particular aircraft being operated.
- Extreme care should be taken to avoid over-priming.
- No refueling with persons in the aircraft.
- No refueling inside the hanger.
- No fuel samples will be taken inside the hangar.
- No smoking within 50 feet of any aircraft.

PROCEDURES AFTER UNSCHEDULED LANDINGS

- On-airport: In the event of an unscheduled landing (a landing at an airport other than the airports indicated on the flight plan or authorized by the flight instructor in the solo cross country endorsement), the student will secure the helicopter by installing the blade tie-downs, locking the doors and securing the aircraft with whatever means available, and contact Star Helicopters, LLC (**Call collect if needed**) for instructions. **At <u>no time</u> will the student continue the flight without the specific authorization of either their primary flight instructor, the Chief Flight Instructor or the Assistant Chief Flight Instructor.**

- Off airport: The student will assess personal injury (**Contact 911 if injured**) and damage to the aircraft first, assure fuel is shut off and all fire potential has been eliminated. If possible, secure the aircraft and determine location. Immediately report to Star Helicopters, LLC (**Call Collect if need**) providing as much information as possible (injuries, damage, location, etc.). **At <u>no time</u> will the student attempt to take off from an unprepared landing area.**

AIRCRAFT DISPATCH PROCEDURES

NO AIRCRAFT MAY BE DISPATCHED WITH OPEN MAINTENANCE ITEMS.

Students will be dispatched by their primary instructor. Instructors may dispatch students other than their own **only** if they are a current Star Helicopters Part 141 certified instructor and they have flown with that student within the previous 30 days.

AIRCRAFT DISCREPANCIES AND SQUAWKS

Anytime the student or CFI discovers a discrepancy (squawk) with the aircraft it will be recorded on the aircraft discrepancy sheet (See Sample Below). The following procedure will be followed:

- The student will give as detailed a description as possible of the problem to their primary flight instructor or the Chief Flight Instructor or the Assistant Chief Flight Instructor.
- The aircraft will not be dispatched for flight until it has been inspected by Certified Flight Instructor or the Chief Flight Instructor or the Assistant Chief Flight Instructor or a certified mechanic, using FAR 91.213 and FAR 91.205 and the Aircraft POH it's airworthiness must be determined. An entry will be made in the aircraft discrepancy sheet stating either **NO FLIGHT - AIRCRAFT IS DOWN FOR MAINTENANCE** or **FLIGHT ALLOWED - DEFFERED TO NEXT SCHEDULED INSPECTION**.
- If the aircraft is determined to be un-airworthy it will not be dispatched for flight until signed off by a certified mechanic in the aircraft discrepancy sheet stating **RETURNED TO FLIGHT STATUS**.
- If the discrepancy is found to not affect the safety of flight in accordance with FAR 91.213, it will be deferred to next scheduled inspection and returned to flight status.

ALL SCHOOL MEMBERS READ AND SHOULD REFER TO THE CURRENT COPIES OF THE FOLLOWING FAA ADVISORY CIRCULARS AND OTHER DOCUMENTS

PILOTS ROLE IN COLLISION AVOIDANCE - AC 90-48

Pilots are required to be aware of the pilot's role in collision avoidance. AC 90-48 Alerts all pilots to the potential hazards of midair collision and near midair collision, and to emphasize those basic problem areas related to the human causal factors where improvements in pilot education, operating practices, procedures, and improved scanning techniques are needed to reduce midair conflicts. All school members must read **FAA Advisory Circular 90-48(current revision)** available online at www.faa.gov.

Prior to takeoff pilots will clear the area, both left, right, above and below (**A left 360 degree pedal turn is preferred if conditions permit)**. In flight pilots will clear, both left, right, above and below prior to making any turns or performing any maneuvers.

ROLE OF PREFLIGHT PREPARATION – AC 61-84

Pilots role in preflight preparation, one of the most often neglected acts of a pilot contemplating flight in an aircraft is that of proper preflight planning While the reasons remain obscure the facts are well supported by aircraft accident statistics. All school members must read **FAA Advisory Circular 61-84(current revision)** available online at www.faa.gov.

POSITIVE EXCHANGE OF FLIGHT CONTROLS – AC 61-115

All pilots and specifically student pilots, instructors and pilot examiners should use specific procedures to establish a positive exchange of flight controls. Using these procedures both pilots always know exactly *who* is flying the plane at all times.

For instance, if the flight instructor is giving the flight controls to the student the flight instructor says, ***"You have the flight controls."*** The student then takes the flight controls and says, ***"I have the flight controls."*** The flight instructor visually checks to make sure the student has the flight controls and then says ***"You have the flight controls."***

If the flight instructor needs to take the flight controls they start the process by saying: ***"I have the flight controls."*** Student: ***"You have the flight controls."*** Instructor: ***"I have the flight controls."*** All school members must read **FAA Advisory Circular 61-115(current revision)** available online at www.faa.gov.

WAKE TURBULENCE – AC 90-23

Pilots are required to be aware of the perils associated with wake turbulence and low-level wind shear. AC 90-23 Alerts pilots to the hazards of aircraft wake turbulence and recommends related operational procedures. All school members must read **FAA Advisory Circular 90-23(current revision)** available online at www.faa.gov.

TRAFFIC ADVISORY PRACTICES AT AIRPORTS WITHOUT OPERATING CONTROL TOWERS-AC 90-42

Contains good operating practices and procedures for use when approaching or departing airports without an operating control tower and airports that have control towers operating part time. Includes changes in radio frequencies and phraseology. All school members must read **FAA Advisory Circular 90-42(current revision)** available online at www.faa.gov.

Student Pilot (Pre-Private)

DESIGNATED TRAINING/PRACTICE AREAS

Star Helicopters, LLC utilizes practice areas defined by depiction in the included VFR Chart excerpts. If water is within the depicted area, at no time shall the aircraft fly beyond its power-off gliding range from shore. Aircraft should contact the appropriate helicopter frequency when operating in the practice areas that are not under Air Traffic Control. Aircraft operating within the inland portion (if applicable) of the practice area will maintain an altitude sufficient to ensure safe terrain clearance at all times.

Before a solo flight, the student will be briefed by his/her instructor in regard to the location and limits of the practice area. Except when on an authorized cross-country flight, students must remain within the designated practice area.

The following airports will be used for training flights:

Non Cross-Country
- HHR
- TOA
- LGB
- CPM
- EMT

Solo Hovering & Traffic Patterns
- TOA (North Pad)
  - No Traffic patterns during Robinson Safety Course
- LGB (Pads 1-4)
  - No Traffic Patterns from LGB Pad 5-6
- **Hovering & Traffic Pattern Solos are NOT PERMITED AT HHR**

Day Dual Cross-Country
- HHR
- AJO
- F70

Solo Airport to Airport
- HHR
- TOA
- LGB

Night Dual Cross-Country
- HHR
- AJO
- F70

Solo Cross-Country
- HHR
- AJO
- F70

The following training areas will be used for training flights:

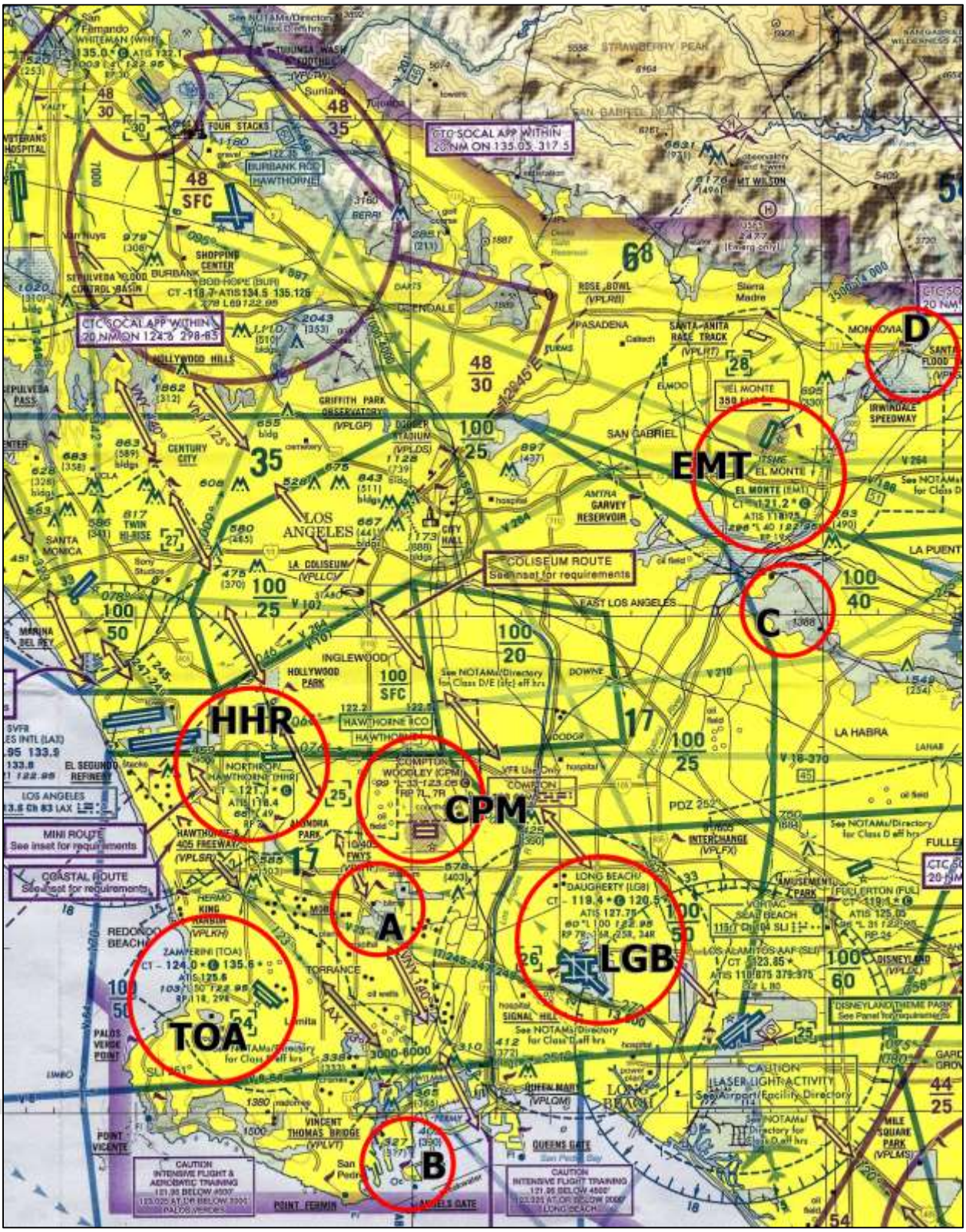
Area A
- Settling with Power

Area B
- Introduction to Autorotation's
- Simulated Engine Failures
- Pinnacles & Confined Areas

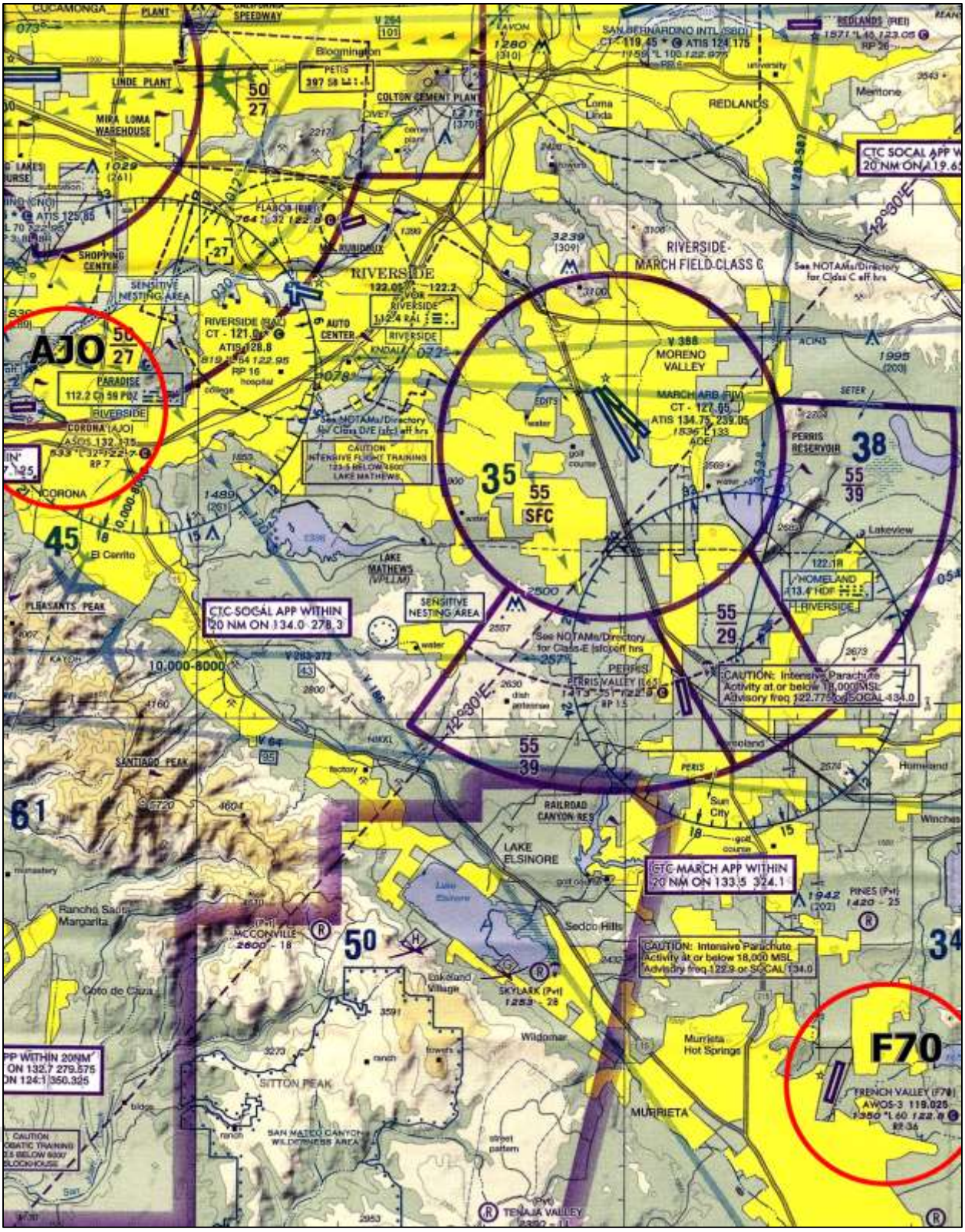
Area C
- Off Airport
- Pinnacles & Confined Areas

Area D
- Off Airport
- Pinnacles & Confined Areas

DESIGNATED TRAINING/PRACTICE AREAS - VFR CHART EXCERPT ILLUSTRATIONS



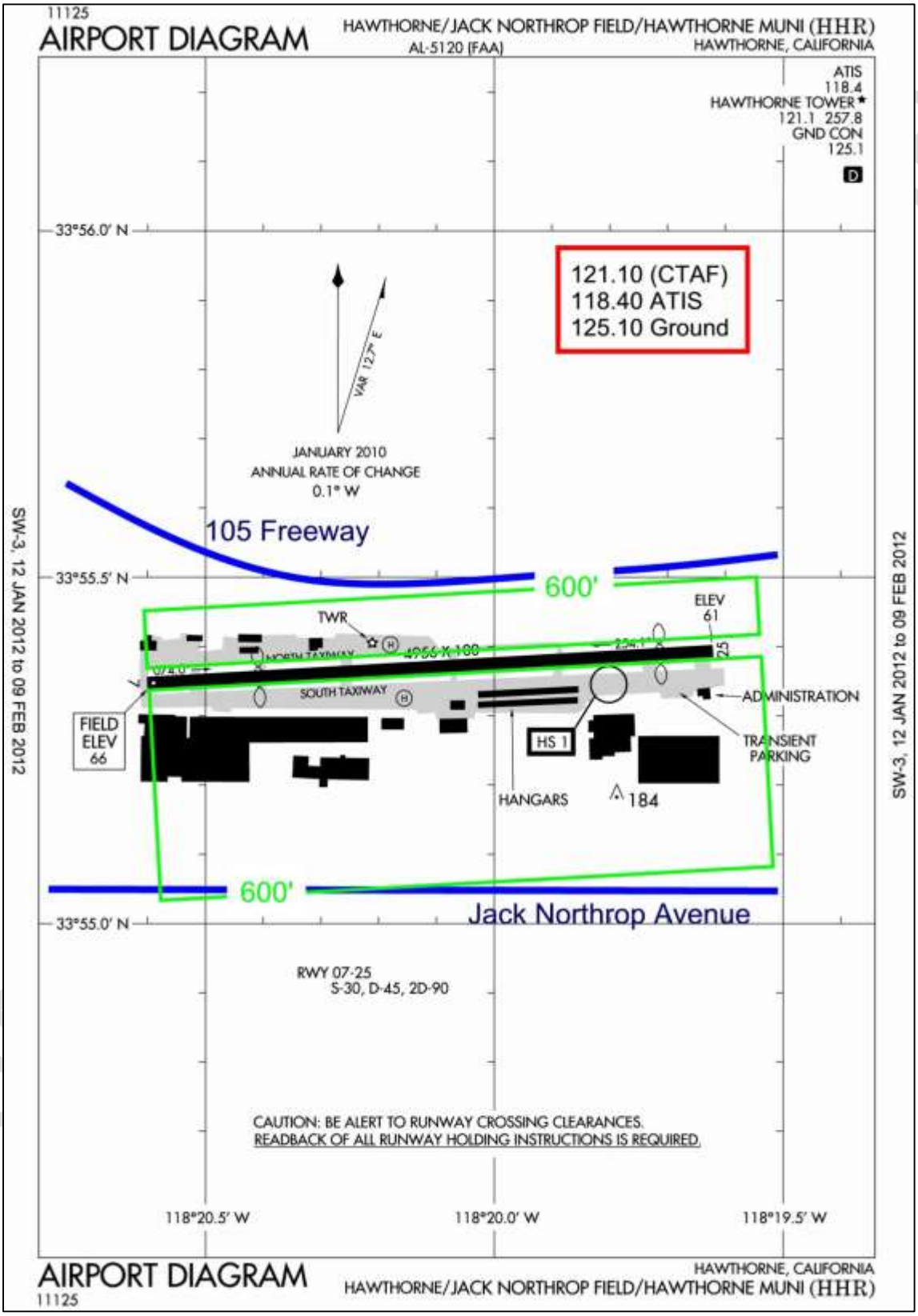
Training Area - Chart 1



Training Area - Chart 2

AIRPORTS – USED FOR TRAINING

Please refer to the following Airport Diagrams for Arrival/Departures routes and Traffic Pattern restrictions.



Jack Northrop Field/Hawthorne Airport (HHR)

Rated Pilot

DESIGNATED TRAINING/PRACTICE AREAS

Star Helicopters, LLC in addition to the Student Pilot Designated Training/Practice Areas list earlier in this manual, utilizes the Los Angeles Sectional Area chart as the practice area for Commercial, Instrument, Flight Instructor and Flight Instructor with Instrument Rating training courses. Aircraft should contact the appropriate helicopter frequency when operating in areas that are not under Air Traffic Control. If water is within the practice area, at no time shall the aircraft fly beyond its power-off gliding range from shore.

HAWTHORNE AIRPORT NOISE ABATEMENT

Traffic Patterns for Noise Abatement

Left and Right Traffic Patterns are authorized. Be aware of the Class B Boundaries.

Avoid operations outside of the above depicted Traffic Patterns.

Green - Traffic Patterns – No Restrictions.

Yellow – Traffic Patterns - Avoid Repetitive Patterns.

Blue – Traffic Patterns – Limit Operations in this area as much as possible.

RESPECT THE NO FLY ZONE's, they are for noise abatement.

Student Solo flights are not permitted at HHR, except for Arriving / Departing from Airport to Airport and Cross Country Solo flights.

Running Landing Practice is Not Permitted at HHR.

Full down Auto Practice is Not Permitted at HHR.

Student Pilot (Pre-Private)

SOLO FLIGHT POLICIES

The following Solo Cautions and Policies must be observed at all times during all Solo Flights. All solo flights are supervised, CFI to remain at heli pad for all Hover and Traffic pattern solo's and CFI to remain at Star Helicopters during Airport to Airport and Cross Country solo's.

Hover Solos are only permitted at TOA North Pad and LGB Pads 1 thru 4.

Traffic Pattern Solos are only permitted at TOA North Pad and LGB Pads 1 thru 4.

Cross Country Solos are only permitted at HHR, AJO and F70

- Passengers will not be carried on any student pilot solo flights.
- The student must complete a weight and balance calculation prior to each solo flight and must determine that the aircraft is within CG during all phases of flight.
- The student must check all performance charts to insure that the aircraft is within the performance limitations for all phase of flight (OGE Hover, IGE Hover, Manifold Pressure Limitation, Airspeed limitations).
- Solo Night flights will not be allowed. All solo flights must be back at Star Helicopters, LLC no later than one hour prior to official sunset.
- Solo flights are not allowed at Torrance during Robinson Safety Course week.
- DUAL CONTROLS MUST BE REMOVED for all Cross Country and Airport to Airport solo's.
- Check Weather & file flight plan before each cross country flight with FAA. CFI to review and initial.
- Day VFR, Wind < 10 knots 0 gusts, forecasted for 2 hours beyond arrival time back at HHR.
- No Emergency Procedure training is allowed (Auto's, Quickstops, Running Landings, Settling with Power, Slopes, Hover Auto's, Governor Off Training, Low Rotor RPM Training, etc.).
- No off airport landings are allowed except for emergencies.
- No LAX Transitions.
- No taking pictures during flight, keep your camera under your seat.
- No cell phone calls during flight, keep your cell phone under your seat.
- Watch for traffic!
- Maintain enough altitude from obstacles at all times. Stay at least 500 feet AGL.
- Return or land at a safe area if weather is bad. Do not continue the flight.
- Perform a preflight check before all engine startups.
- Never release right hand from cyclic in solo.
- Watch for tower on North Arrival/North Departure to/from TOA and Tower West of FUL.
- Stay clear of Disney TFR.
- No solo at TOA when RHC is having the safety course.
- Traffic pattern at TOA is allowed only at North pad.
- No landing at pads 5 or 6 at LGB on solo flights. No solo at LGB if runway active is other than 30.
- Do not remove left door.
- Local solo is prohibited for more than 2 hours per day

I Understand and agree to all of the above Solo Policies during all solo flights.

_____
Student Signature

_____
Printed Name

_____
Date

I have reviewed the above policies with the student. They understand the Solo and they are prepared to make their required solo flights.

_____
CFI Signature

_____
Printed Name

_____
Date

Rated Pilot

SOLO FLIGH POLICIES

The following Solo Cautions and Policies must be observed at all times during all Solo Flights. All solo flights in Stage 2 are supervised solo flights, including the night solos. The total supervised solo time is 10. CFI to remain at Star Helicopters during all supervised solo flights.

Hover Solos are only permitted at TOA North Pad and LGB Pads 1 thru 4.

Traffic Pattern Solos are not permitted at HHR.

HOVER AND TRAFFIC PATTERN SOLOS ARE NOT PERMITED AT HHR

Solo Cautions & Policies

- Passengers will not be carried on any student pilot solo flights.
- The student must complete a weight and balance calculation prior to each solo flight and must determine that the aircraft is within CG during all phases of flight.
- The student must check all performance charts to insure that the aircraft is within the performance limitations for all phase of flight (OGE Hover, IGE Hover, Manifold Pressure Limitation, Airspeed limitations).
- Solo Night flights will not be allowed. All solo flights must be back at Star Helicopters LLC no later than one hour prior to official sunset.
- Solo flights are not allowed at Torrance during Robinson Safety Course week.
- DUAL CONTROLS MUST BE REMOVED for all Cross Country and Airport to Airport solo's.
- Check Weather & file flight plan before each cross country flight with FAA. CFI to review and initial.
- Cross Country Flights - Day VFR, Wind < 20 knots gusts less than 5 knots, forecasted for 2 hours beyond arrival time back at HHR.
- No Emergency Procedure training is allowed (Auto's, Quickstops, Running Landings, Settling with Power, Slopes, Hover Auto's, Governor Off Training, Low Rotor RPM Training, etc.).
- No off airport landings are allowed except for emergencies.
- No LAX Transitions.
- No taking pictures during flight, keep your camera under your seat.
- No cell phone calls during flight, keep your cell phone under your seat.
- Watch for traffic!
- Maintain enough altitude from obstacles at all times. Stay at least 500 feet AGL.
- Return or land at a safe area if weather is bad. Do not continue the flight.
- Perform a preflight check before all engine startup's.
- Never release right hand from cyclic in solo.
- Watch for tower on North Arrival/North Departure to/from TOA and Tower West of FUL.
- Stay clear of Disney TFR.
- No solo at TOA when RHC is having the safety course.
- Traffic pattern at TOA is allowed only at North pad.
- No landing at pads 5 or 6 at LGB on solo flights. No solo at LGB if runway active is other than 30.
- Do not remove left door.
- Non-Cross Country solo practice is limited to a maximum of 2 hours per day, unless permission is given by the Chief Flight Instructor.

I Understand and agree to all of the above Solo Policies during all solo flights.

_____
Student Signature

_____
Printed Name

_____
Date

I have reviewed the above policies with the student. They understand the Solo and they are prepared to make their required solo flights.

_____
CFI Signature

_____
Printed Name

_____
Date

CROSS-COUNTRY FLIGHTS – STUDENT PILOT (Pre-Private)

Destination airports for all dual/solo cross-country flights are as follows:

1st Cross-Country Flight (Dual)

HHR-AJ0 (Using Dead Reckoning)
AJ0-HHR (Using Pilotage)

2nd Cross-Country Flight (Dual)

HHR-AJO-F70 (Using Dead Reckoning)
F70-HHR (Using Pilotage)

3rd Cross-Country Flight (Solo)

HHR-AJO-F70 (Using Dead Reckoning)
F70-HHR (Using Pilotage)

A new flight plan must be filled and activated for each solo cross-country flight and is recommended for student practice on all duel cross-country flights.

CROSS-COUNTRY FLIGHTS – RATED PILOTS

Any airport within the Los Angeles Sectional Chart may be used for Cross Country flights.

ADDITIONAL SAFETY PRACTICES

All flights will be conducted and accomplished in accordance with the Federal Aviation Regulations part 141.85(b).
All Part 141 flights will be conducted and accomplished in accordance with the FAA approved Star Helicopters, LLC Part 141 Training Course.
All flights will be conducted and accomplished in accordance with the Star Helicopters, LLC Safety Procedures and Practices Manual.
A Star Helicopters, LLC qualified Part 141 Flight Instructor is required to be at Star Helicopters, LLC prior to takeoff and remain at Star Helicopters, LLC until arrival on all Solo Flights.
An operable flash light must be carried by the student and their CFI for all night flights.

STAR HELICOPTERS SOLO/RENTAL INSURANCE AGREEMENT

The student must complete and sign the Star Helicopters Student Solo/Rental Insurance Agreement forms and pay for their solo Insurance prior to any solo flights.

I have been given a copy of the Star Helicopters LLC

Safety Procedures and Practices Manual

I have read and understand and agree to comply with the instructions, procedures, terms and conditions set forth in the Star Helicopters LLC

Safety Procedures and Practices Manual

_____

Student Signature

_____

Printed Name **Date**

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Safety Procedures and Practices Manual

This manual is a guide to assist the instructors and students to safely and efficiently conduct flight training at Star Helicopters.

This manual meets all of the 14 CFR Part 141 and CFR Part 61 Rotorcraft/Helicopter Training Course Outline Safety Procedures and Practices requirements.

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