

DOWNTOWN MANHATTAN
 STATUE OF LIBERTY / ELLIS ISLAND
 SCALE 1 : 50,000

Air tour helicopters may descend from Class B airspace into the SFRA in the vicinity of the George Washington Bridge.

HIGH DENSITY OF UNCONTROLLED HELICOPTER AND FIXED WING TRAFFIC OPERATING ON THE HUDSON AND EAST RIVER CLASS B EXCLUSIONS. ALL AIRCRAFT SELF ANNOUNCE ON 123.075 FOR THE EAST RIVER AND 123.05 FOR THE HUDSON RIVER.

Heavy concentration of air tour operations at 500' AGL in the vicinity of the Statue of Liberty and Ellis Island. Air tour helicopters may initiate a climb to higher altitude in this vicinity. Pilots should avoid overflying these areas and maintain appropriate lateral distance.

SPECIAL FLIGHT RULES AREA
 C.F.R. PART 93
 NEW YORK CLASS B HUDSON & EAST RIVER EXCLUSIONS
 All aircraft self announce on 123.075 for the East River and 123.05 for the Hudson River. See chart panel for requirements. These requirements do not relieve pilots of compliance with applicable Federal Aviation Regulations, including regulations governing minimum safe altitudes.

SPECIAL FLIGHT RULES AREA (SFRA)

EXAMPLES OF CLASS B ALTITUDES

70 --- Ceiling in hundreds of feet MSL
 30 --- Floor in hundreds of feet MSL
 (Floors extending "upward from above" a certain altitude are preceded by a (+). Operations at and below these altitudes are outside of Class B Airspace.)

HELICOPTER ROUTES DEPICTED ALONG RIVER SHORELINES ARE INTENDED TO BE FLOW OVER WATER, NOT PIERS, BULKHEADS, OR LAND.

REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, AND U.S. FOREST SERVICE AREAS.

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service or U.S. Forest Service without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government. All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Parks, Monuments, Seashores, Lakeshores, Recreation Areas and Scenic Riverways administered by the National Park Service; National Wildlife Refuges, Big Game Refuges, Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service; and Wilderness and Primitive areas administered by the U.S. Forest Service. FAA Advisory Circular (AC) 91-36, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the upper-most rim of a canyon or valley. Federal regulations also prohibit airdrops by parachute or other means of persons, cargo, or objects from aircraft on lands administered by the three agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life, or 2) threat of serious property loss.

Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas, and U.S. Forest Service Wilderness and Primitive areas.

ROUTE DESCRIPTIONS
 NEWARK TERMINAL AREA

VERRAZANO ROUTE: Hudson Checkpoint direct via Hudson River to center of Verrazano Bridge to offshore east of Staten Island shoreline (maintain clearance east of Gateway National Recreation Area) to Raritan River.
NEWARK ROUTE: Hudson Checkpoint direct east end of Turnpike Bridge, direct EWR direct Galloping Hills Golf Course.
ROUTE 280: Essex County Country Club Golf Course via Route I-280 to power plant direct West Entrance of Holland Tunnel. Note: Power plant has 5 in-line stacks.

NEW YORK TERMINAL AREA

HUDSON RIVER ROUTE:
 Northbound - East Side of Verrazano Bridge to Governors Island direct to southwest tip of Manhattan Island then via east bank to Spuyten Duyvil.
 Southbound - Harlem River direct west bank of Hudson River southbound via west bank to western Holland Tunnel Ventilation Tower to Hudson Checkpoint.
EAST RIVER ROUTE:
 Northbound - Governors Island direct Williamsburg Bridge via east bank to Bowery Bay.
 Southbound - Bowery Bay to west bank via west bank to Battery Park.
PARK ROUTE: JFK direct south side of Aqueduct Racetrack direct Prospect Park direct Hudson Checkpoint.
BRONX ROUTE: North tip Roosevelt Island direct Triborough Bridge toll plaza via west side I-278 to point ALPHA (I-895-I-278 intersection) direct to BRAVO I-95 intersection SE of Bronx Zoo northbound via elevated railway to Wakefield switchyard.
THROGS ROUTE: Udall's Millpond direct south Stanchion Throgs Neck Bridge direct LGA control tower direct Bowery Bay direct Triborough Bridge direct north tip Roosevelt Island.
CENTRAL PARK ROUTE: North tip Roosevelt Island across Central Park Lake at 72nd Street direct Hudson River.

TRACK ROUTE: Intersection of Long Island Railroad and Meadowbrook State Parkway. West via Long Island Railroad to Ridgewood Reservoir direct to Lincoln Terrace Park. Note: Route may split at Ridgewood Reservoir.
WILLIAMSBURG ROUTE: East River direct Williamsburg Bridge, maintain 900' eastbound south of Twin White Tanks direct Ridgewood Reservoir as assigned, (see ** routes).
RESERVOIR ROUTE: East 34th Street Heliport direct Newtown Creek to Twin White Tanks direct Ridgewood Reservoir as assigned, (see ** routes).
HARLEM RIVER ROUTE: Triborough Bridge via Harlem River northbound to Spuyten Duyvil.
CREEK ROUTE: Lincoln Terrace Park direct Spring Creek Park direct to a point immediately adjacent to northwest end of runway 13R parallel taxiway. Note: Simultaneous fixed wing arrivals on JFK ILS runway 13L.

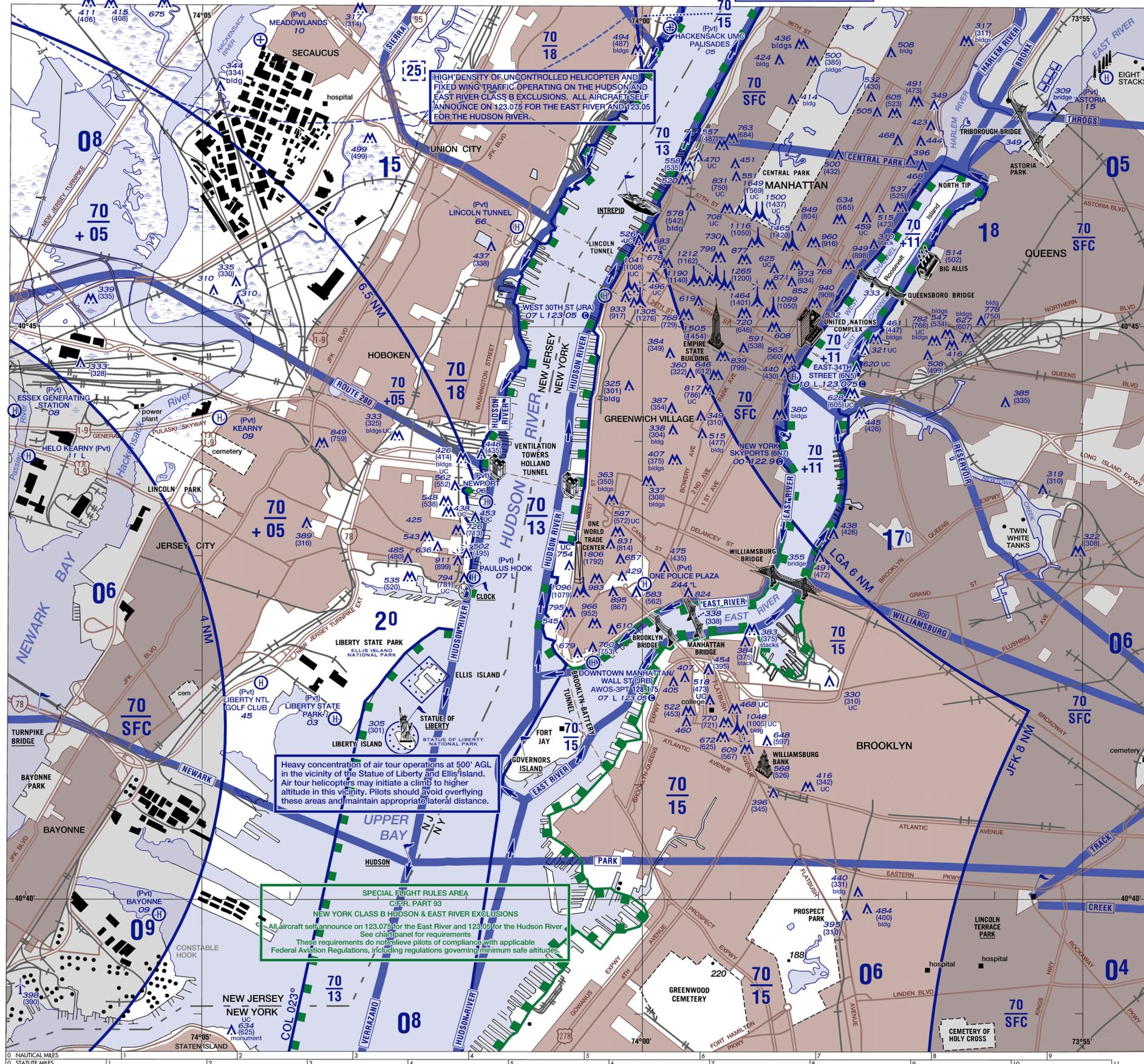
TETERBORO TERMINAL AREA

SIERRA ROUTE:
DEPARTURE - Direct to windsock at Coca Cola plant to stack at metal treatment plant direct to the Lombardi Service Area. REMAINING ON THE SOUTH SIDE OF EMPIRE BLVD. AT ALL TIMES, to the west entrance of the Lincoln Tunnel (via overhead N.J. Turnpike, I-95, - east extension and Route 3) or North Hudson Park.
ARRIVAL - Via the west entrance to the Lincoln Tunnel or via North Hudson Park to the Lombardi Service Area direct to stack at metal treatment plant direct to windsock at Coca Cola plant. REMAINING ON THE SOUTH SIDE OF EMPIRE BLVD. AT ALL TIMES, then direct to the airport REMAINING EAST OF THE EXTENDED CENTERLINE OF RUNWAY 01/19 and CLEAR ALL RESIDENTIAL AREAS.

NOTE: PILOTS ANNOUNCE INTENDED ROUTE ON INITIAL CONTACT

CAUTION: ROUTES DEPICTED AND ALTITUDES ASSIGNED DO NOT PROVIDE OBSTACLE CLEARANCE PROTECTION. PILOTS ARE RESPONSIBLE FOR SEEING AND AVOIDING TERRAIN AND OBSTACLES. THIS CHART DOES NOT DEPICT COMPLETE OBSTACLE INFORMATION DUE TO THE HIGH CONCENTRATION OF OBJECTS IN THE AREA. OBSTACLES AND OTHER FEATURES SUCH AS POWER TRANSMISSION LINES AND PROMINENT STRUCTURES ARE DEPICTED FOR LANDMARK VALUE ONLY.

NAME	LATITUDE	LONGITUDE
Clock	40-42.72N	074-02.03W
Governors Island	40-41.07N	074-01.56W
Hudson	40-40.34N	074-02.68W
Intrepid	40-45.88N	074-00.05W
Lincoln Terrace Park	40-40.01N	073-55.61W
Statue of Liberty	40-41.35N	074-02.67W
Turnpike Bridge	40-41.69N	074-07.03W



FOR OFFSHORE NAVIGATION ONLY

ROUTE DESCRIPTIONS
REPUBLIC TERMINAL AREA

SOUTHERN ROUTE:
ARRIVAL - Enter at Southern State Parkway and the Seaford Oyster Bay Expressway (Exit 27). Overly Southern State Parkway until Route 110 (Exit 32), then northbound to Route 109.
DEPARTURE - Southbound and parallel runway 01/19 until intersection of Route 109 & 110. Overly Southern State Parkway until Seaford Oyster Bay Expressway, then proceed on course.
RECOMMENDED ALTITUDE - 1100 FEET.

MICROWAVE ROUTE:
ARRIVAL - Enter at Plainview and I-495 (Exit 46) and proceed directly to Microwave Tower, then southeast bound to Huntington Hillon. Follow Route 110 until airport.
DEPARTURE - Northbound and parallel runway 01/19 until Multiplex Theater. Route 110 North until Huntington Hillon, then northwest bound to Microwave Tower. Intercept Long Island Expressway then proceed on course.
RECOMMENDED ALTITUDE - 1100 FEET.

NEW YORK TERMINAL AREA

REPUBLIC ROUTE: Intersection of Broad Hollow Road and Fulton Street. Westbound over Fulton Street to Hempstead Turnpike. Westbound over Hempstead Turnpike to intersection with Meadowbrook State Parkway. Northbound over Meadowbrook State Parkway to Northern Parkway to Long Island Expressway. Westbound over Long Island Expressway to Cross Island Parkway. Northbound over Cross Island Parkway to Little Neck Bay. Overly Little Neck Bay parallel to Cross Island Parkway to intersect THROGS ROUTE.

NORTH SHORE ROUTE: From VPR0K waypoint (Execution Rocks Lighthouse) eastbound via VPLYD waypoint (north of Lloyd Harbor) to the VPLJAY waypoint (northwest of Port Jefferson LPA plant smokestacks), then via and off the shoreline to Orient Point. Note: CAUTION rotary and fixed-wing aircraft, possible wake turbulence from FRF jet traffic as noted on the chart.

SOUTH SHORE ROUTE: Breezy Point Jetty then eastbound via and off the shoreline to Montauk. Note: CAUTION rotary and fixed wing aircraft, banner towing, possible wake turbulence from JFK heavy jet overflights.

NOTE: PILOTS ANNOUNCE INTENDED ROUTE ON INITIAL CONTACT
CAUTION: ROUTES DEPICTED AND ALTITUDES ASSIGNED DO NOT PROVIDE OBSTACLE CLEARANCE PROTECTION. PILOTS ARE RESPONSIBLE FOR SEEING AND AVOIDING TERRAIN AND OBSTACLES. THIS CHART DOES NOT DEPICT COMPLETE OBSTACLE INFORMATION DUE TO THE HIGH CONCENTRATION OF OBJECTS IN THE AREA. OBSTACLES AND OTHER FEATURES SUCH AS POWER TRANSMISSION LINES AND PROMINENT STRUCTURES ARE DEPICTED FOR LANDMARK VALUE ONLY.

CONTROL TOWER FREQUENCIES ON EASTERN LONG ISLAND INSET

Airports with control towers are indicated on the face of the chart by the letters CT followed by the primary VHF tower frequency (ies). Information for each tower is listed in the table below. Operational hours are local time. The primary VHF and UHF tower and ground control frequencies are listed.

Automatic Terminal Information Service (ATIS) frequencies shown on the face of the chart are arrival VHF/UHF frequencies. All ATIS frequencies are listed in the table below. ATIS operational hours may differ from tower operational hours.

ASR and/or PMS indicate Radar Instrument Approach available.
MON-FRI indicates Monday through Friday.
O/T indicates other times.

CONTROL TOWER	OPERATES	TOWER	GND CON	ATIS
EAST HAMPTON	0800-2000 SAT BEFORE MEM DAY-SUN AFTER LABOR DAY O/T BY NOTAM.	125.225	121.9	
GABRESKI	0700-2300	125.3 236.6	121.8 225.4	
IGOR I SIKORSKY MEML	0630-2200	120.9 257.8	121.75 257.8	119.15
LONG ISLAND MAC ARTHUR	0600-2400	119.3 335.5	135.3	120.725
REPUBLIC	0700-2300	118.6 279.65	121.6 269.6	126.65

CLASS B, CLASS C, TRSA, AND SELECTED APPROACH CONTROL FREQUENCIES

FACILITY	FREQUENCIES	SERVICE AVAILABILITY
LONG ISLAND CLASS C	120.05 343.75	0600-2400; CT CLASS E

SPECIAL USE AIRSPACE ON EASTERN LONG ISLAND INSET

Unless otherwise noted altitudes are MSL and in feet. Time is local.
"TO" an altitude means "to and including."
R - Right hand.
NO A/G - No air to ground communications.
Cont'd NOTAM system for information.

1 Other times by NOTAM.
NOIAM - Use of this term in Restricted Areas indicates FAA and DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.

U.S. P-PROHIBITED, R-RESTRICTED, W-WARNING, A-ALERT, MOA-MILITARY OPERATIONS AREA

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
W-105 A	TO FL 500	INTERMITTENT BY NOTAM	BOSTON CNTR	
W-106 A	TO 3000	INTERMITTENT BY NOTAM	BOSTON CNTR	
W-106 B	TO 8000	INTERMITTENT BY NOTAM	BOSTON CNTR	

The following practices are mandatory in the Hudson River Exclusion:

Fly along the west shoreline of the Hudson River when southbound, and along the east shoreline of the Hudson River when northbound while remaining within the boundaries of the Hudson River Exclusion. Aircraft overflying the area within the Hudson River Exclusion, but not landing or departing any of the Manhattan heliports or landing facilities, or conducting any local area operations, must transit the Hudson River Exclusion at or above an altitude of 1000 feet MSL up to, but not including, the floor of the overlying Class B airspace. Self-announce as described above under Communications.

The following practices are mandatory in the East River Exclusion:

VFR flight operations by fixed-wing aircraft (excluding seaplane fixed-wing aircraft landing or departing the New York Skyports Inc. Seaplane Base) in the East River Class B Exclusion from the southwestern tip of Governors Island to the northern tip of Roosevelt Island are prohibited unless authorized and being controlled by ATC. To obtain authorization, pilots must contact LaGuardia Airport Traffic Control Tower prior to Governors Island. Self-announce position on the appropriate CTAF.

REGULATORY NOTICES
NEW YORK CLASS B HUDSON RIVER AND EAST RIVER EXCLUSIONS
SPECIAL FLIGHT RULES AREA C.F.R. PART 93

Airspace
Special air traffic rules and communication requirements are in effect for persons operating aircraft under VFR, to, from, or in the vicinity of the New York Class B airspace. These procedures are in effect within the following boundaries:

Hudson River: That airspace below 1300 feet MSL between the east and west banks of, and overlying, the Hudson River within the area beginning north of LaGuardia Airport on the west bank of the Hudson River at lat. 40°57'45"N, long. 73°54'48"W. (near Alpine Tower) thence south along the west bank of the Hudson River to intersect the Colts Neck VOR-DME 023° (M) radial, thence southwest along the Colts Neck 023° (M) radial to the Hudson River shoreline, thence south along the shoreline to the Verrazano-Narrows Bridge, thence east along the bridge to the east bank of the Hudson River, thence north along the east bank of the Hudson River to lat. 40°38'39"N, long. 74°02'03"W, thence north along a line drawn direct to the southwesternmost point of Governors Island, thence north along a line drawn direct to the southwest tip of Manhattan Island, thence north along the east bank of the Hudson River to the LGA VOR-DME 11-mile arc, north of LaGuardia Airport, thence counterclockwise along the 11-mile arc to lat. 40°57'54"N, long. 73°54'23"W, thence to the point of beginning.

East River: That airspace below 1500 feet MSL between the east and west banks of, and overlying, the East River beginning at lat. 40°38'39"N, long. 74°02'03"W, to the southwestern tip of Governors Island to the southwestern tip of Manhattan Island, thence north along the west bank of the East River to the LGA VOR-DME 6-mile arc; thence counterclockwise along the 6-mile arc to the east bank of the East River, thence south along the east bank of the East River to the point of beginning at lat. 40°38'39"N, long. 74°02'03"W; and that airspace 1100 feet MSL and below between the east and west banks of, and overlying, the East River from the LGA VOR-DME 6-mile arc to the northern tip of Roosevelt Island.

Communications
No person may operate an aircraft within the airspace specified above unless that person continuously monitors and communicates, as appropriate, on the designated common traffic advisory frequency (CTAF). Pilots self-announce at the following charted mandatory reporting points:

- Alpine Tower
- GWB
- Intrepid
- Clock
- Status of Liberty
- VZ

Include the following information: aircraft type, current position, direction of flight and altitude.

Aircraft Operation

The following practices are mandatory in the Hudson River and East River Exclusions:

Maintain an indicated airspeed not to exceed 140 knots. Anti-collision lights and aircraft position/navigation lights shall be on. Use of landing lights is recommended. Pilots must have a current New York TAC and/or New York Helicopter Route Chart in the aircraft and familiarize themselves with the information contained therein.

The following practices are mandatory in the Hudson River Exclusion:

Fly along the west shoreline of the Hudson River when southbound, and along the east shoreline of the Hudson River when northbound while remaining within the boundaries of the Hudson River Exclusion. Aircraft overflying the area within the Hudson River Exclusion, but not landing or departing any of the Manhattan heliports or landing facilities, or conducting any local area operations, must transit the Hudson River Exclusion at or above an altitude of 1000 feet MSL up to, but not including, the floor of the overlying Class B airspace. Self-announce as described above under Communications.

The following practices are mandatory in the East River Exclusion:

VFR flight operations by fixed-wing aircraft (excluding seaplane fixed-wing aircraft landing or departing the New York Skyports Inc. Seaplane Base) in the East River Class B Exclusion from the southwestern tip of Governors Island to the northern tip of Roosevelt Island are prohibited unless authorized and being controlled by ATC. To obtain authorization, pilots must contact LaGuardia Airport Traffic Control Tower prior to Governors Island. Self-announce position on the appropriate CTAF.

