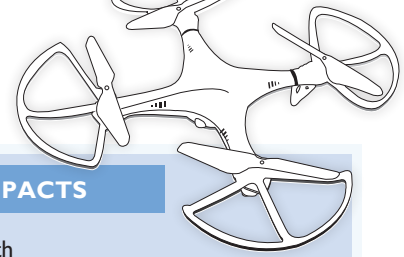
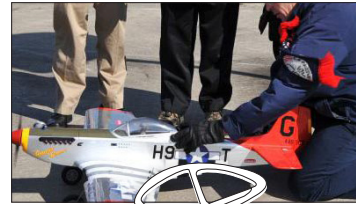




## Model Aircraft Reference Aid

Model Aircraft are custom built or commercially produced unmanned aircraft systems (UAS) that meet the statutory definition of Model Aircraft and operate in accordance with the statutory requirements for Model Aircraft. These are sometimes referred to as radio controlled airplanes or aircraft and usually require one individual for operational control. Some Model Aircraft are capable of sustained flight for approximately 2 hours or less depending on the type of Model Aircraft (Rotary or Fixed Wing) and power source (e.g. nitromethane, lithium ion, and lithium polymer batteries). Model Aircraft must be flown within visual line of sight of the operator; however, there is an increasing use of first person view technology that allows operation to occur beyond line of sight and at altitudes in excess of several hundred feet.



### POTENTIAL ILLICIT USES

- Surveillance and Reconnaissance
- Air Traffic Disruption
- Smuggling or Pre-Positioning Supplies
- Chemical, biological, or radiological agent dispersal
- Harassment or Diversionary device
- Kinetic Attack (small arm or explosives)

### POTENTIAL IMPACTS

- Injury or death
- Damage to infrastructure
- Theft or disclosure of private information
- Disruption of air traffic
- Hindering activity of first responders
- Circumvention of ground-based security



The growing recreational use of UAS may create difficulties in distinguishing malicious from non-malicious activity. Unintentional actions from UAS hobbyists may further complicate the identification of illicit activity—flying in restricted airspace and over secure facilities, distracting or disrupting first responders, and crashing into bystanders or infrastructure.

### POTENTIAL INDICATORS OF MALICIOUS ACTIVITY

Although some of these potential indicators may be benign, when several are observed, or when conducted in concert with other indicators, they may suggest an attempt to acquire or employ Model Aircraft for illicit purposes.

#### ACQUISITION

- Novice primarily interested in high performance and technically advanced models (e.g. payload, range, and flight time) at the point of purchase
- Novice inquiries about exceeding manufacturer specifications

#### RESEARCH

- Eliciting information on hobbyist forums concerning payload and weaponization
- Explosives and biological/chemical agent research

#### OPERATIONS

- Flying near restricted spaces
- Flying near first responders
- GPS measurements in unusual locations

#### MODIFICATIONS

- Attempts to incorporate non-standard equipment
- Attempts to exceed manufacturer specifications

(U) This fact sheet was produced in cooperation with the Interagency UAS / RCMA Threat Working Group. For more information contact: OCIA@hq.dhs.gov To report suspicious activity, law enforcement, Fire-EMS, private security personnel, and emergency managers should follow established protocols; all other personnel should call 911 or contact local law enforcement. Suspicious activity reports (SARs) will be forwarded to the appropriate fusion center and FBI Joint Terrorism Task Force for further action. For more information on the Nationwide SAR Initiative, visit <http://nsi.ncirc.gov>



## Model Aircraft Reference Aid (continued)

9bZfWUUY fY[i `Uhjcbg`gUhi tYgZ`LbX`cfX]bLbWgVbWfb]b[ `I` 5GUFY`bchi`b] YfgU`La`cb[gh`  
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 gLbXU]Xs`Zf`fVWU]h]cbU`c`W]h]g]A`cXY`5]fVWU]h]Z`[`h`



### FAA-ISSUED NOTICE TO AIRMEN

A cXY`5]fVWU]h]YfY`V]bg]XYFYX`U]fVWU]h]Z`f`hY`di`fdcg`cZ]Z`[`hYI`W`g]cb`LfyL]bX`55!`gg`YX`B`ch]W`rc`5]fa`Yb`  
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**OUTDOOR STADIUMS OR SPORTING EVENTS: NOTAM 4/3621** restricts use of aircraft (including RCMA) within 3 miles around and 3,000 feet in altitude above events at stadiums with a capacity of more than 30,000 persons. Restriction commences 1 hour prior to the scheduled time of the event until 1 hour after the end of the event. This specifically includes all National Football League, Major League Baseball, National Collegiate Athletic Association Division I events, and National Association for Stock Car Auto Racing and Indy Car races.

**POWER PLANTS, DAMS, REFINERIES, MILITARY, AND SIMILAR FACILITIES: NOTAM 4/0811** advises pilots to avoid loitering, circling, or entering airspace above, or in close proximity to sites such as nuclear, hydro-electric, or coal-fired power plants, dams, refineries, industrial complexes, military facilities, and other similar locations.

### RESTRICTED AIRSPACE

FAA has strict requirements about aircraft operations in the Washington, DC area which were established for national security reasons. There are two kinds of special restrictions in the area:

- The Washington, DC Metropolitan Area Flight Restricted Zone (FRZ) covers all airspace extending within an approximate 17 miles radius around the Washington National Airport, and includes all buildings, facilities and spaces in this zone. Any and all UAS and model aircraft operations within this area are strictly prohibited.
- The Washington, DC Metropolitan Area Special Flight Rules Area (SFRA) covers a large-tract of airspace over the region that includes Dulles, Baltimore Washington International, and Washington National airports and Andrews Air Force Base.

### SYNOPSIS OF STATUTORY REQUIREMENT FOR MODEL AIRCRAFT

- Must be flown strictly for hobby or recreational purposes
- Airport operator and control tower must be notified if model aircraft is flown within 5 miles of an airport
- Must yield to manned aircraft
- Must be flown within visual line of sight of operator
- Must weigh 55 pounds or less at the time of operation with full payload, unless otherwise certified
- Must not endanger the safety of the National Airspace System, including persons and property on the ground
- Failure to obey FAA flight exclusion areas and NOTAMs may endanger the National Airspace System.

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