Military Aircraft Wake Turbulence Awareness

As all pilots know, every aircraft generates a wake. This disturbance is caused by a pair of counter-rotating vortices trailing from the wing-tips which can impose rolling moments exceeding the control authority of smaller encountering aircraft. All pilots must learn to envision and avoid the location of the vortex wake generated by larger aircraft. We highly recommend all pilots review FAA Advisory Circular 90-23F, Aircraft Wake Turbulence.

The C-17 and C-130 are of particular concern because of their weight / large size (i.e. stronger vortices) and because they often conduct low level training in Mat-Su Valley and Knik Arm areas. After a flight through these areas, C-130s/C-17s commonly will use R-2203 as a drop zone. R-2203 is a restricted area established on the Fort Richardson complex that contains the Malamute Drop Zone. Run-ins are normally flown from the north, starting west of the New Wasilla airport southbound into R-2203. Occasionally, a westerly run-in into R2203 is flown. Aircraft operating in the Malamute Drop Zone will normally exit the area to the west toward Goose Bay, setting up for landings at Elmendorf AFB or Anchorage International. C-17s may spend an hour or more conducting multiple drops via oval “racetrack” patterns. Current activity can be obtained from Elmendorf Tower (127.2), ATIS (124.3), or Anchorage Approach (118.6/119.1). More information on pertinent military operations can be obtained at:
http://www.jber.af.mil/11af/alaskaairspaceinfo/
**GENERAL C-17 OPS**

**Cruise Speed**
200 - 250 knots indicated
(20 knots more than C-130)

**Low Level Altitude**
300 – 2,000ft AGL
(higher on SKE routes and in mountains)

**Formation size**
Single ship or 2-ship
Wingman 2,000ft to 12,000ft behind Lead

**Flight times**
Normally 0900L – 0100L
2 sorties per morning, 2 sorties per evening

**NVG Operations**
Navigation lights ON
Anti-collision lights ON
Landing lights usually pointed to side

**Radios / Transponder**
Mode 3C, S (TCAS)
VHF (ATC/UNICOM)
UHF (R-2203)

**Ops into Allen Army Airfield**
Pattern Altitude: 3,300 Feet MSL
Will use left traffic landing Runway 7
Right traffic landing Runway 25

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Current as of Jan 11
Developed by 3 WG and 611 AOC/CODK

**General C-17/C-130 Low Levels (North)**

- FAIRBANKS
- NENANA
- EIELSON AFB
- IR919
- ALLEN AAF

**NOT FOR NAVIGATIONAL USE**
Cruise Speed
200 - 250 knots indicated
(20 knots more than C-130)

Low Level Altitude
300 – 2,000ft AGL
(higher on SKE routes and in mountains)

Formation size
Single ship or 2-ship
Wingman 2,000ft to 12,000ft behind Lead

Flight times
Normally 0900L – 0100L
2 sorties per morning, 2 sorties per evening

NVG Operations
Navigation lights ON
Anti-collision lights ON
Landing lights usually pointed to side

Ops in vicinity of Wasilla/Big Lake
usually 1,500 – 2,000ft MSL

Radios / Transponder
Mode 3C, S (TCAS)
VHF (ATC/UNICOM)
UHF (R-2203)

Ops into R-2203
Usually 2,000ft MSL in Willow/Wasilla area
VFR Ops: 500 – 2000ft from North Shore of Knik Arm to R-2203
IFR Air Drops: 1500ft from North Shore of Knik Arm to R-2203) when weather less than
2500ft & 3 miles; NOTAM 6hrs prior to ops
Allen Army Airfield
Overhead Pattern

Pattern Altitudes:
Jet and Turbo-prop: 3,300 Feet MSL
Piston Engine Prop: 2,800 Feet MSL
Rotary Wing Day and Unaided Night: 2,100 Feet MSL

Tower: 119.8 / 235.775
Ground: 118.225 / 251.050
CTAF: 122.9
ATIS: 132.075