HAZARDS



Wake turbulence is produced to some degree by all airplanes. A wing's lift causes a vortex to form behind the tip of each wing. The intensity of these vortices depends on the amount of lift being generated. When an aircraft is heavy, slow and clean (flaps and gear up), it generates the most wake turbulence. Tests have shown wake turbulence can reach vortex velocities of over 130 Kts. The vortex sinks 400-500 FPM until leveling off about 800-1000 Ft below the airplane. The only safe way to combat wake turbulence is to know and avoid areas where it is likely to be encountered. You should, therefore, avoid the area directly behind and below the generating aircraft. Try to stay two or three minutes behind C-130's if you share the same traffic pattern and avoid the area 1 to 2 miles behind and 100 to 1500 feet below them.

DO YOUR PART TO AVOID MEETING BY ACCIDENT!

- Look Outside and listen on the radio!
- Keep your Windscreen clean
- Avoid High density Traffic areas when possible
- Use landing lights at lower altitudes near airports
- Always use your Mode C transponder!
- Practice appropriate clearing procedures before and during all climbs, descents and turns.
- Verbalize intentions on UNICOM, use standard traffic pattern procedures...Be predictable!
- Beware of Wake Turbulence!
- Avoid complacency. SEE AND BE SEEN!



NEVADA AIR NATIONAL GUARD

<u>High Rollers</u>



Lets Not Meet by Accident!

MID-AIR COLLISION AVOIDANCE (MACA)

152 AW Chief of Safety Nevada Air National Guard 775-788-9448

EVERYDAY OPERATIONS



The Nevada Air National Guard (NVANG) was born after World War II, and has participated in nearly every conflict the US has been involved in since. Originally formed as the 192^d Fighter Squadron, the Nevada Air National Guard in Reno, NV has operated the P-51D Mustang, F-86 Sabre, RB-57 Canberra, RF-101 Voodoo, RF-4C Phantom II, and now operates the C-130 Hercules. Most recently, the NVANG has participated in almost every Post 9/11 US Military Operation with distinction.

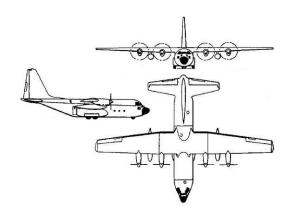
Part of our mission is training and maintaining currency, allowing us to provide tactical combat theater airlift in support of U.S. interests worldwide. We do this by flying VFR low-level (300-500 feet AGL) routes. This is necessary to keep our aircrews trained in the event we are called upon for combat operations. We fly low to minimize our radar signature and avoid unfriendly aircraft.

The NVANG is located on the West side of the Reno Tahoe International Airport. Because of the proximity to numerous small aircraft, taxi operations should be conducted with extreme caution. C-130 run-ups present a potential hazard to light aircraft. The diagram on the following pages indicates danger areas associated with the C-130 and the velocity of the prop blast associated with an aircraft under power. Occasionally, up to 6-9 aircraft will be taxiing in formation. The wake turbulence from this formation is hazardous and should be avoided.

ABOUT THE C-130



NVANG C-130's over Pointe du Hoc, Normandy France for the 70th Anniversary of D-Day



Wing Span: 132 Feet 7 Inches
Length: 97 feet 9 inches
Height: 38 feet 3 inches
Horizontal Stabilizer: 52 feet 8 inches
Engines: 4 x Allison T-56 Turboprops, 4,590 HP ea
Speed: Max 374 MPH (Mach 0.57) at 20,000 Feet
Ceiling: 33,000 feet Empty, or 23,000 feet with 42,000 lbs

of cargo

Max Takeoff Weight: 155,000 lbs

TACTICAL OPERATIONS



During Daylight hours, crews fly sorties under VFR conditions at altitudes ranging from 300 feet AGL to 500 feet AGL at speeds averaging 210 KIAS (Approximately 242 MPH).

During hours of darkness, crews train on Night Vision Goggle (NVG) procedures. This means aircraft may be flying with reduced external lighting. Please be vigilant looking outside your aircraft for other traffic, ESPECIALLY in the High Traffic Areas shown on the map.

The NVANG conducts tactical low level training regularly during the week, and on weekends. This training is conducted on low level routes in Nevada, and in Northern California. Aircraft depart Reno Tahoe International Airport generally to the South East at 9,500 Ft MSL and 210 KTS. The departure routing is either to WAGEE intersection (over Washoe Lake) then an eastbound turn to CHIME intersection (over the Silver Springs area), or to the North until 7200 feet MSL then a right turn to the west at which time the aircraft stay at 9,500 Ft MSL or descend to their enroute altitude and maintain approximately 210 KTS. The enroute altitude varies from 300 AGL to 9,500 Ft MSL. The route is continued until arriving at the Herlong Drop Zone at Amedee Army Airfield, Herlong, CA, at which time they will slow to approximately 130 KTS to complete air drops operations. After the drops are completed, the aircraft will either recover at Amedee Army Airfield using tactical recovery procedures or return to Reno Tahoe International Airport. Throughout these tactical VFR missions, C-130 aircraft will be monitoring 292.3 UHF or the appropriate CTAF advisory VHF frequency.