

# NVG FIREFIGHTING

Aviation Specialties Unlimited, Inc.

POSITION PAPER 2019

## Attacking the fire when it is weakest

Fires that emerge in inaccessible terrain or are spotted late in the day can unnecessarily gain ground, threaten critical infrastructure, resources and lives. Night vision goggles (NVGs), a proven safety measure, can offer aerial firefighters an effective way to reach fires when they are most vulnerable and before they have a chance to grow. Night is the optimal time to suppress fires with typically lower winds, lower temperatures, and higher humidity. Night firebombing minimizes drift and evaporation which allows the most effective application of each run.

### NVG Benefits

- Extinguish when fires are most vulnerable
- Reach inaccessible terrain
- Clear access for ground troops
- Maximize use of aircraft



Photo of Australia NVG Trial

### NVGs 20+ yrs of Safety

Domestically NVGs are used by more than 90% of air medical services and are a commonly accepted safety measure for search and rescue, aviation law enforcement, utility and transport operators.

Military aviators have been using the current Generation III ANVIS -6 and ANVIS-9 NVGs since the early 1990s.

The night vision imaging technology is used by pilots and crews to improve situational awareness and effectiveness. Recently NVGs have gained adoption among aerial applications including agriculture, mosquito spraying and aerial firefighting.

### ASU—Pioneers in NVG Firefighting

In 2010, ASU worked with Coulson Aviation in a proof of concept evaluation in Canada as well as subsequent trials with Victoria Emergency Management in Australia.

ASU worked closely with Helicopter Express before and after they were awarded the first night firefighting contract by the USFS. ASU modified Helicopter Express aircraft for NVG operations, provided state of the art NVGs, and trained flight crews. Additionally, ASU provided experienced NVG pilots to sit left seat during the initial stand up of the night firefighting operations. ASU provided NVG qualification instruction to the USFS check pilots who then conducted flight checks of the Helicopter Express crews. ASU has also been providing NVG ground Operations familiarization instruction to the USFS crews who support the NVG Fire Fighting operations.

Over the last two year, ASU has worked with CO Fire to train and equip their pilots with NVGs as well as modify the CO Fire aircraft for night vision compatibility for nighttime firefighting capabilities.

Recently, Kachina Aviation, a long-time ASU customer based in Nampa, Idaho, was awarded the Colorado Canyon City three-year contract that entails a requirement of NVG.

# NVG FIREFIGHTING

Aviation Specialties Unlimited, Inc.

2019

## Join the NVG Conversation

ASU invites operators, regulators and vendors involved in firefighting to join the conversation to advance the NVG firefighting discussion regionally and globally. In early 2019, ASU sent technical experts to South Africa to discuss safely deploying aerial firefighting assets at night. At the same time, ASU is consulting with partners in Australia and building a coalition in the U.S. with operators, communities, and legislators.



Photo of Australia NVG Trial

### Currently flying NVG

- CO Fire
- Coulson Aviation
- Helicopter Express
- Kachina Aviation
- Los Angeles Fire Department
- US Forest Service

