

09/08/06

The recent Near Mid Air Collision between two helicopters working a large fire has resulted in an Incident with Serious Potential (For reference it is SAFECOM # 06-1118). I have reformatted the narrative so that it can be provided to our Unit Aviation Officers, Incident Management Teams, Air Attacks and Helicopter Base Managers for a safety briefing.

The narrative is compelling and should be read by all who fly..... There are many factors identified - fatigue, communication, shortage of staff that contributed to this dangerous situation. The Forest Aviation Officer has asked that we use this SAFECOM as an educational opportunity.

**Near mid air collision between NXXX and NYYY  
Narrative and Response  
Sept 4, 2006**

At 1255 Air Attack was working with NYYY describing a new area to do bucket work in. Air Attack was also talking to Red Mountain Operations and Division Q in regards to holding the fire near Bruce Meadows, as well as doing a recon of the Greyhound Mine area on the Boundary Fire approximately 20 miles north of the Red Mountain Fire for the Safety Officer. NXXX Pilot was new to this fire and was working in Division Tango.

Prior to this date the dip site that had been used for Division Tango was located approximately 1.5 miles south of the lake that NXXX ultimately used and 3 miles south of Bull Trout Lake. The Air Attack had not the opportunity to observe which dip site NXXX was using. Air Attack was directing NYYY from 10 miles out describing the location to work. Bull Trout Lake was used as a reference point. Air Attack failed to relay the proximity of NXXX to the new site.

The site where NXXX was working is 8 miles south and the dip site that had been used was 1.5 miles south of the dip site that was actually being used. Air Attack had vacated the rotor wing victor to address the other two conversations on air to ground and on command.

Upon returning to the Rotor wing victor the Air Attack heard NXXX swearing at NYYY about announcing when at the dip. The pilot of NXXX further stated that the bucket had come within 20 feet of his rotor system. The pilot of NYYY explained that he had not been told of NXXX's whereabouts. Which is true. Air Attack had come on shift at approximately 1230, NXXX came out at about the same time.

For the previous 8 days the dip site had remained the same. NXXX had been given directions to Division Tango but had not been directed to the closest dipsite. The Helicopter that had been working prior to NXXX's arrival had returned to the helibase for fuel and did not have the opportunity to show NXXX where to dip from. Air Attack was not on Division Tango due to the needs of other resources. Radio Traffic was heavy at the

time of this occurrence.

### **CORRECTIVE ACTION**

The Air Attack at that time did come on the air, established separation for the two helicopters to work. NYYY agreed to announce when at the dip. A possible solution would be to use a helicopter coordinator whose sole focus is the helicopter operations. This would allow the Air Attack to accommodate the needs of the ground forces, provide for aerial safety, and maintain control of the TFR which is very large.

**RASM Remarks:** I agree with the recommendation for the HELCO. Please continue to brief the importance of relaying position reports.

**FAO remarks:** HELCOs were ordered for this fire 2 teams ago. Still have not been filled (probably UTFed). Can't say for sure if having a qualified HELCO would have prevented this problem but having one (more than one) sure couldn't hurt. These fires are getting so big that the atgs"s are talking to aircraft they can't see .....need to stay on top of the briefings, relaying position reports and identifying common check points so everyone has a clear picture in they're head of where everyone else is.

Please see the following investigation and mitigation procedures by the AOBD: The following information was provided to me from the AOBD. **Please use this as a training opportunity!** (RASM, Note: I left name out and retained positions)

#### **As sent to me from the AOBD: Statement of Facts and Actions Concerning the Close-call Near Mid-Air, Red Mountain Fire, Boise National Forest, Idaho, 09-04-06**

I found out about the incident quite some time after it occurred. I called in to ICP to notify the Incident Commander of the incident (I left message with Plans Chief and that everybody concerned was OK. My understanding after talking to various persons, is that NYYY and Helicopter NXXX nearly contacted each other while either entering or leaving the dip site (a lake/pond 1-1/2 miles SW of Bull Trout Lake) while engaged in water dropping missions in Division T and S on the red Mountain Fire.

When both aircraft were back on the ground and shut down, I talked with the pilots of both aircraft to make sure they were both OK and was told that 1) neither was aware that another aircraft was or would be working in the same area and 2) that both somehow missed communications that would have indicated other aircraft might be working in the same area. Air attack was up and operating over the fire at the time.

At the time of the incident the fire was "blowing up" in other areas and air attack was understandably busy and somewhat removed from the area of Bull Trout Lake and Divisions S & T (was in fact over the Boundary Fire engaged in radio conversation with SOF1 and was not in visual contact with the two helicopters. ABRO overheard radio traffic that indicated that something had happened and called air attack and was

informed that he “misinterpreted” what was said and left it at that.

Communication procedures in place at the time were for the helicopters leaving the helibase for mission work over the fire(s) to call the ABRO on the TOLC frequency and get “clearance” to depart. Their area of work and type of work has already been communicated to the pilot via the helicopter manager. All aircraft were working on the assigned helicopter VHF air to air frequency (122.425) and Red Mountain air to ground frequency (164.850).

Upon leaving the helibase, the pilots switch to air to air VHF and contact air attack stating their intended area of work and type of work, if in fact that request did not pass through air attack.

When doing water drops the pilots call in the blind “off the drop” and “off the dip”. When departing the fire area pilots notify air attack they are returning to helibase to 1) fuel and return or 2) hold or 3) switch to another mission, then they notify helibase they are “X” minutes out for landing and what their instructions are.

In The case of NYYY, the pilot stated he called air attack when he crossed over the ridge but was not informed either by helibase or air attack that there was another aircraft working in the same area. When descending into Bull Trout Lake to fill his bucket, watching out his left side, the pilot heard an engine noise that make him think that he was having engine trouble in his aircraft, then he saw NXXX fly underneath his bucket.

Both pilots got on the radio (VHF) and discussed what just happened but both continued their mission. Both pilots were understandable shaken but decided to continue to the end of their fuel cycle. When both aircraft returned to the helibase for fuel, they shut down and the pilots met face to face on the ground in a “friendly conversation”. After refueling, both aircraft returned to work.

When I talked to both pilots separately they both said that management and communication procedures the IMT has in place are just fine and nothing needs to be changed based on the close call. I didn’t accept that as I felt that communication procedures at least needed to be visited to confirm that changes were or were not needed.

On 9-5-06, the morning briefing was conducted at the helibase as normal. After the briefing was concluded I held a meeting (AAR) with all pilots and managers to reinforce and/or change communication procedures.

Communications would go as follows:

- Pilot calls ABRO on the TOLC and indicates readiness to depart
- 2) ABRO gives “clearance” to lift and depart; mission and the area of work has already been given to the pilot by the manager via ABRO. ABRO informs pilot of other aircraft also working in the same area, if known
- 3) Pilot departs helibase and contacts air attack on “Victor” to notify him/her of their departure and destination and nature of work

- 4) Pilot further calls air attack to notify him/her when crossing the high ridge separating the helibase from the fire area
- 5) Pilots call in the blind “off the drop” and “off the dip”
- 6) Pilots returning from the fire to the helibase close out flight following with air attack when crossing the ridge then switch to TOLC for “clearance” to land.

Air attack had communicated with NYYY and knew that it was headed to work in either Division S or Q, and knew NXXX was working Division T and there should be adequate separation between the two helicopters.

Unknown to air attack was the fact that NXXX had relief pilots on board and appears that they were using a different dip site than their predecessors had been previously using.

**Factors considered:** Missed or not made communications; unsure, cannot confirm Weather; work area was clear, not too smoky Fatigue; did not appear to be a factor as one crew was on day one Procedures; all interviewed indicated communications procedures were adequate.

Relief pilots on NXXX not briefed, they were assigned an area to work alone. Work area not allowing for adequate separation; a mountain in the area would have provided separation over a nautical mile.

Air attack not keeping track of aircraft; air attack was over another area and did not have visual contact with the two helicopters, but felt the assigned areas of work provided adequate separation Inadequate information on maps; the dip site(s) in question is (are) not named lake/pond and not indicated on our pilot maps as we did not know the particular dip site that was being used by helicopters in that particular area.

Division T is no longer staffed.

Persons interviewed: NXXX crew, NYYY crew, Air attack, ABRO Signed: AOBD Red Mountain Fire