

## **Table of Contents**

Information Sharing	1
Letters	6
On the lighter side	9
Airward News	10
Mishap Update	12
Safety Alerts	12
SafeCom Summary	13

### **Attachments**

Attachment 1 – Try Not To Fry
Attachment 2 – In-Flight Intercept Procedures
Attachment 3 – West Nile Virus
Attachment 4 – Aviation Strategic Plan

# **Information Sharing**

#### "Try Not To Fry" from Jim Morrison, RASM, R-4

This article was published in the summer 2003 issue of "Flight Comment" and was reproduced by permission from Editor Capt. T.C. Newman. Please share this article with your pilots, flight crews on the importance of wearing your flight suit and its redeeming qualities of burn protection. Thanks for sharing!

Article – Printed Copy Attachment 1

#### Intercept Procedures from Jim Morrison, RASM, R-4

I pray you never have the need for this card! But, if you do, here are the intercept procedures. Enjoy, Jim

#### http://download.aopa.org/epilot/2003/intercept.pdf Printed Copy Attachment 2

#### West Nile Virus Info from Safety and Occupational Health

Greetings!!! The West Nile Virus has increased its prevalence in regions of the United States. Some areas are being affected that had no previous cases of the West Nile Virus. I thought it would be great for all of us to update and/or familiarize ourselves and other staff with the facts of this virus. Below you will find links to a brochure and a fact sheet that will give you some valuable information. The fact sheet may be printed and placed in a common area such as a break room or central bulletin board on your Forest for all to view.

Brochure:<a href="http://www.cdc.gov/ncidod/dvbid/westnile/brochure.htm">http://www.cdc.gov/ncidod/dvbid/westnile/brochure.htm</a>Fact Sheet:<a href="http://www.cdc.gov/ncidod/dvbid/westnile/wnv\_factSheet.htm">http://www.cdc.gov/ncidod/dvbid/westnile/brochure.htm</a>Printed Copy Attachment 3

Tiffany Gordon USDA, Forest Service, Business Operations Safety and Occupational Health, 2nd Floor, North West 201 14th Street, S.W., Washington, D.C. 20024 tiffanygordon@fs.fed.us 202-401-4471 office, 202-205-1181 fax





The Aviation Conference and Education (ACE) is a weeklong event that offers over 25 IAT training modules. The Orlando ACE will be December 1 - 5 at the

Radisson Hotel Orlando 5780 Major Blvd. Orlando, Florida Reservations: 1-800-351-1000

Registration for the Orlando ACE will be on the IAT website, <<u>http://iat.nifc.gov</u>>, by September 10, 2003. Hotel reservations must be made by October 31, 2003.

The Orlando ACE will be held in conjunction with the Southeast Area Helicopter Managers Workshop. Helicopter managers may contact Jack Finley (404-909-0248) or Meg Gallagher (770-458-2055) for more information.

The ACE is coordinated by the Office of Aircraft Services, U.S. Department of the Interior. For more information, contact Ruth Brueggemann (208-433-5091) or Judy Ragain (208-433-5076).

#### 2003-2004 ACE Schedule

Orlando, Florida Boise, Idaho

Orlando ACE

December 1-5, 2003 April 5-9, 2004



## **Tuition Free Training!**

All Interagency Aviation Training is tuition free including the ACE, online classes, and classroom sessions.



## Interagency Aviation Training Website http://iat.nifc.gov

The IAT website has been available to Department of the Interior and U.S. Forest Service employees since June 2001. It was developed and is maintained by the DOI Office of Aircraft Services. If you would like to see additional features on this site, please email Kris Damsgaard, OAS National Aviation Training Officer, at <kris\_damsgaard@oas.gov>. Currently offered are:

- Online Training. Fourteen training modules are available. See the list on page 3 for more information.
- Training Schedules/Registration for Classroom and ACE Training. View and register for training classes being presented in your area.
- Employee Training Records. Employees can view their individual training records and print certificates of completion for instructor-led and online training.
- Online Aviation Glossary. This comprehensive list includes commonly used aviation terms.
- Online Aircraft Library. This one-of a kind aviation library features 3-D images of aircraft most frequently used in DOI and USFS aviation programs.
- Commonly Asked Questions. The most commonly asked questions regarding the IAT program are answered.

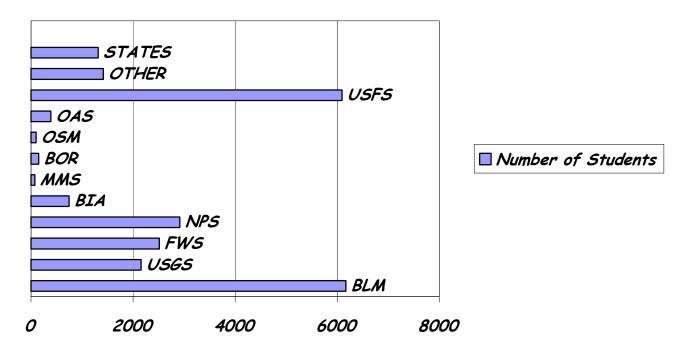


The Office of Aircraft Services will present the Interagency Train-the-Trainer course in San Diego from November 3 to 7, 2003. This 40-hour program trains Department of the Interior and U.S. Forest Service employees (with aviation and training backgrounds) to be Interagency Aviation Trainers who will present the IAT 100 level classes. Train-the-Trainer emphasizes program knowledge and enhancing presentation skills. For registration and hotel information, see the IAT website, <<u>http://iat.nifc.gov/</u>>, or call Ruth Brueggemann, at 208-433-5091.



Did You Know?

- Supervisors can access employee training records on the IAT website to ensure currency and determine needs for their individual units. Records are accessed through the use of a personal identification number. Contact your bureau/agency national aviation manager for more information.
- Instructors now have access to a list of their classes. This new feature on the IAT website allows instructors to view and edit the classes they've instructed and/or scheduled. In addition, it simplifies class roster completion and can be used for yearend planning and bureau training needs.
- The Office of Aircraft Services is working with the IQCS Project Team to incorporate student training records from the IAT program into the Incident Qualification and Certification System.
- Over 24,000 IAT class completions since 2001. The following data shows IAT class completions between June 2001 and August 2003.



### IAT TRAINING TOTALS 2001-2003

## Coming Soon:

M-3 Aviation Management Training for DOI Supervisors Soon To Be Available On-Line!

This class is a requirement for first- and second-line supervisors directly responsible for employees who utilize aircraft in performance of their duties. It meets the DOI requirements of 352 DM1.5B(10) and (3). Personnel from all DOI bureaus are currently evaluating the on-line version of the M-3. The final product will be available on the IAT website in December 2003.

Grand Canyon National Park Special Flight Rules Training

The Office of Aircraft Services has developed a new internet training module to train government and contract pilots on the special flight rules and airspace issues over Grand Canyon National Park. The new module will be available on-line in November 2003

Several On-line Modules are scheduled for development in 2004 including A-205 Risk Assessment and A-103 FAA NOTAM System. Currently fourteen online training modules are available on the IAT website:

- 1. A-101 Basic Aviation Safety
- 2. A-104 Overview of Aircraft Capabilities and Limitations
- 3. A-105 Aviation Life Support Equipment
- 4. A-106 Aviation Mishap Reporting
- 5. A-107 Aviation Policy and Regulations I
- 6. A-108 Preflight Briefing and Debriefing
- 7. A-109 Aviation Radio Use
- 8. A-110 Aviation Transport of Hazardous Materials
- 9. A-112 Mission Planning and Flight Request Process
- 10.A-111 Flight Payment Document
- 11.A-113 Crash Survival
- 12.A-201 Overview of Safety and Accident Prevention Programs
- 13. A-202 Interagency Aviation Organizations
- 14. A-204 Aircraft Capabilities and Limitations

## **Interagency Aviation Training Contacts**

For more information about the IAT program, contact Kris Damsgaard, OAS National Aviation Training Officer (208-433-5090); <<u>kris\_damsgaard@oas.gov</u>>) or Ron Hanks, USFS Aviation Safety and Training Manager (208-387-5607); <<u>rhanks@fs.fed.us</u>>.



File Code: 5700/6100 Route To: Date: July 18, 2003

Subject: Aviation Strategic Plan 2003-2008

To: Regional Foresters, Station Directors, Area Director, IITF Director, Job Corps, and WO Staff

As you are aware, our aviation program has been the focus of a great deal of attention over the past year, and I am very pleased to announce the completion of the Forest Service Aviation Strategic Plan 2003-2008, which is enclosed with this letter. This product responds in part to the findings of the Blue Ribbon Panel on Aviation and represents an investment of considerable time and energy from the Regional and Washington Office Fire and Aviation Staffs.

As with all plans, this document represents a starting point and a series of goals and objectives for improvement. While providing a roadmap for the future, it will still take hard work and new resources to bring the goals and objectives contained in this plan to fruition. The Strategic Plan will be updated annually and be supplemented by an annual report on progress. Please pass along my gratitude to your employees who assisted in the creation for this blueprint for the future.

If you need additional information, please contact Tony Kern at 202.205.1505 or via email tkern@fs.fed.us.

/s/ Jerry T. Williams JERRY T. WILLIAMS Director, Fire and Aviation Management

Enclosure

Strategic Plan - Printed Copy Attachment 4





Date: September 18, 2003

**Topic:** Helicopter Load Calculations

Issue: Pilot and Helicopter Manager Responsibility

**Background:** In 1974 the Forest Service conducted a National Helicopter Operations study in an attempt to enhance the safety of helicopters and reduce the significant number of helicopter accidents occurring prior to 1975. Through this study, the requirement to perform Helicopter Load Calculations emerged.

The FSM 5700 (5703.4) requires that all helicopter operations comply with the Interagency Helicopter Operations Guide (IHOG), Interagency Aerial Ignition Guide, and the Interagency Helicopter Rappel Guide.

It has become common procedure for the helicopter manager to perform the load calculations instead of the pilot-in-command. The justification has been that the IHOG states that the government representative *may participate* in the completion of load calculations. This practice is analogous to an Airtanker Base Manager performing weight and balance calculations for airtankers. Based on the references below, clarification is needed regarding pilot and helicopter manager responsibilities, as they relate to performance of load calculations.

### **Key Point:**

- The following references identify who is responsible for completing the Load Calculation.
  - Interagency Helicopter Operations Guide Chapter 7, II, Responsibility for Completion of the Load Calculations. "It is the Pilot's responsibility to complete the load calculation form correctly, using proper performance charts. <u>IMPORTANT NOTE:</u> The government representative MAY participate in the completion of load calculations."
  - Forest Service Contract Section C.27, (B), 1 (c). Pilot Authority and responsibility. "Pilots are responsible for weight and balance control. The Standard interagency Load Calculation shall be used for this purpose when passengers and/or cargo are/is being transported. Load calculation shall be computed on Form USFS 5700-17."
  - Helicopter Load Calculation Form/books FS 5700-17/OAS 67 General Instructions. <u>SPECIFIC INSTRUCTIONS ITEMS FS 5700-17 (1-11)</u> States: *"Pilot completes Item 1 through 11: Helicopter Foreman or Officer in charge completes the balance of the form."*

**Contact:** Terry Cullen, Deputy Regional Aviation Officer, Intermountain Region (801) 622-9144.

#### Response to Briefing Paper dated September 18, 2003 Topic: Helicopter Load Calculations Issue: Pilot and Manager Responsibility

First –It should be said that it has ALWAYS been the pilot's responsibility to complete the load calculation form for each flight the aircraft performs. The pilot's signature on the bottom of the form is evidence of final pilot approval that the load calculation is accurate and correct. There are situations that arise in the day to day routine of flying helicopters where it is advantageous for the helicopter manager to participate in the completion of the load calculation. This is clearly stated in the Interagency Helicopter Operations Guide, (agency policy) on page 7-2, bottom of page and is also referred to on page 7-8 6<sup>th</sup> paragraph, where it states that "It is imperative in these situations that supplemental load calculations be completed in the air while in route to the lower landing site". In this particular situation, when the pilot is flying the aircraft it is the helicopter manager verbally reviews the computation, the pilot gives a verbal approval and after off loading personnel and cargo the pilot signs the load calculations form to acknowledge formal approval.

The briefing paper states, "It has become common procedure for the helicopter manager to perform load calculations instead of the pilot in command". I am assured that this is not "common procedure". In reviewing field operations and in the course of multiple STAT team reviews of large fire operations, load calculations are routinely completed by the pilot and always signed by the pilot. Without a pilot's signature on a load calculation, the mission will not be performed.

It should also be noted that helicopter managers receive extensive training in how to correctly complete the load calculation, as it is their responsibility to review each load calculation for accuracy and completion. Their signature reflects completion of this responsibility, the pilots signature is final approval the load calculation is complete and a correct computation for the conditions the aircraft will be performing within. The final approval of any load calculations is the responsibility of the pilot in command.

Helicopter Operations Specialists should review this paper with helicopter managers at Biennial Helicopter Managers Workshops and Helicopter Manager Training sessions.

References:

Interagency Helicopter Operations Guide – Chapter 7, II. A., C. & Appendix A, III, I, 3 Helicopter Load Calculation – Specific Instructions Item 1-11 National Interagency Call When Needed Contract – Section C. 31,(2) USFS Operations and Safety Procedures Guide for Helicopter Pilots – Paragraph K.

Glenn Johnston National Helicopter Operations Specialist

# **On the Lighter Side**

#### There are teachers, and then there are educators...

According to a news report, a certain private school in Washington recently was faced with a unique problem. A number of 12-year-old girls were beginning to use lipstick and would put it on in the bathroom. That was fine, but after they put on their lipstick they would press their lips to the mirror, leaving dozens of little lip prints. Every night, the maintenance man would remove them and the next day, the girls would put them back.

Finally the principal decided that something had to be done. She called all the girls to the bathroom and met them there with the maintenance man. She explained that all these lip prints were causing a major problem for the custodian who had to clean the mirrors every night. To demonstrate how difficult it had been to clean the mirrors, she asked the maintenance man to show the girls how much effort was required. He took out a long-handled squeegee, dipped it in the toilet, and cleaned the mirror with it. Since then, there have been no lip prints on the mirror. There are teachers, and then there are educators...

#### Three Rough Landings..

**1.** An airline pilot wrote that on this particular flight he had hammered his ship into the runway really hard. The airline had a policy which required the first officer to stand at the door while the passengers exited, give a smile, and a "Thanks for flying XYZ airline." He said that in light of his bad landing, he had a hard time looking the passengers in the eye, thinking that someone would have a smart comment.

Finally everyone had gotten off except for this little old lady walking with a cane. She said, "Sonny, mind if I ask you a question?"

"Why no," said the pilot, Ma'am, what is it?"

The little old lady said, "Did we land or were we shot down?"

**2.** *United Airlines PA:* "Ladies and Gentlemen, as you are all now painfully aware, our Captain has landed in Seattle. From all of us at United Airlines we'd like to thank you for flying with us today and please be very careful as you open the overhead bins as you may be killed by falling luggage that shifted during our so called "touchdown."

**3.** About 9 or 10 years ago this happened on an American Airlines flight into Amarillo, Texas on a particularly windy and bumpy day:

You could tell during the final that the Captain was really having to fight it, and after an extremely hard landing, the Flight Attendant announced on the PA "Ladies and Gentlemen, welcome to Amarillo. Please remain in your seats with your seat belts fastened while the Captain taxis what's left of our airplane to the gate.."





In Recognition of Professional Performance during a Hazardous Aviation Event or Significant Contribution to Aviation Mishap Prevention

#### September 2003

## Dolan, Dolan, Dolan, Keep the Safety Rollin'



While approaching to land at the Spotted Bear Airstrip, trainee leadplane pilot Dolan McDonald discovered that the briefing he'd received did not include the fact that a helibase was co-located at the airstrip. The Spotted Bear Helibase located at the north end of the airstrip was not identified on the ICS-220 nor were frequencies for the helibase listed. Being unable to contact the helibase, he declined to land until all helicopters, unaware of his approach, had Upon landing Dolan exited the area. contacted the ASGS and AOBD informing them of the potential safety issues of operating the helicopters and fixed-wing aircraft from the same field without a common frequency. Having safely landed, Dolan could have easily ignored this situation leaving a potential safety problem

that could have led to disastrous consequences. Thanks to Dolan, several changes were made at the Spotted Bear airstrip and helibase ensuring a safe operation. Dolan is commended for his obvious commitment to safety. Thanks Dolan for speaking out. <u>USFS SAFECOM 03-822</u>

## What a Bright Idea!

Chris Niccoli, a McCall smokejumer, wanting to ensure safety for the smokejumper fleet, developed aircraft gust control lock indicators for the DC-3's and Otters. His superb workmanship and attention to detail in the choice of material and color will aid pilots in assuring that no control locks are missed during preflight. Thanks Chris for your professionalism and the right attitude, a "SAFE ATTITUDE". No SAFECOM submitted



## Eagle Eye John-Paul



During a phase inspection of a Forest Service Beech 58P, Jean-Paul Guidry, a Technician for Great Western Aviation, discovered the left crossover tube on the right engine chafing on the engine mount truss. The exhaust tube had been chafed approximately half way through the wall thickness and if gone undetected, could have caused serious in flight problems. Jean-Paul's commitment to detail enhanced safety for the pilots who fly the aircraft, the passengers that ride in them, and the people on the ground that depend on aviation for support. Thanks for being a professional, for doing the work right, by the book, and for making a significant contribution to aviation mishap prevention! USFS SAFECOM 03-634





**Aviation Safety Offices** 

http://www.fs.fed.us/fire/av\_safety/ - http://www.oas.gov/oassafty/





This is probably the best news we have, NO NEW ACCIDENTS TO REPORT!!! To date we have investigated three accidents, of which one was the Bell 407 involved in the Columbia Shuttle recovery, which resulted in two fatalities and three serious injuries. The other accidents were an Air Tractor which was substantially damaged after making a forced landing while spraying for gypsy moths and a Sikorsky 64E that experienced a tail rotor strike. Fortunately there were no injuries sustained in the last two accidents.

We've experienced 10 Incidents With Potential this year. We were very fortunate, as most of these could have had much more serious results. Three of these were fuel exhaustion/starvation incidents, results of inadequate preflight inspections.



No new safety Alerts have been issued since the last publication. Below is a list of all the Safety Alerts issued to date this year.

2003-01 Turbine Engine Compressor Stalls (pdf file)

2003-02 Over the Counter Medications (pdf file)

2003-03 Commercial Airline Security Information (pdf file)

2003-04 Helicopter Water Bucket Operations (pdf file)

2003-05 Aviation Resources Shortfall (pdf file)

2003-06 AS 350 Series Collective Locking Mechanism (pdf file)

2003-07 Helicopter Emergency Seating Position (pdf file)

2003-08 Bell 407 Helicopter Stand Down (pdf file)

2003-09 Look Out Conditions (pdf file)

2003-10 Eyes in the Sky (pdf file)

2003-11 Aircraft Pre-Flight Inspections (pdf file)

2003-12 AS 350 Series Hydraulic Accumulator Test (pdf)



## There have been 751 SAFECOM's filed this fiscal year (October 1, 2002 – August 31, 2003). Last year there were 872, 685 in 2001 and 876 in 2000.

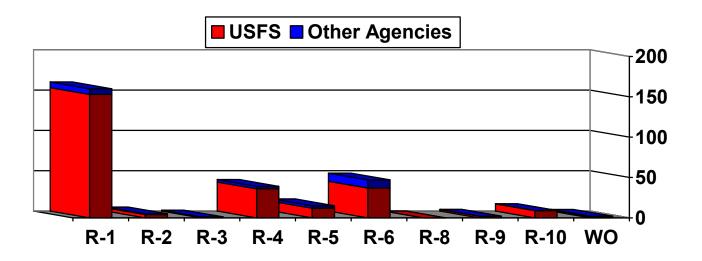
The following charts are based on SAFECOM's that occurred from August 1 through August 31. There were 280 (255 USFS and 25 other agency) SAFECOM's reported this August compared to 202 last August, 243 in August 2001 and 317 in August of 2000.

Included in this report are representative samplings of the SAFECOM's reported in August of this year. To view all the USFS SAFECOM's click on the link to SAFECOM's below. Pick the options you want to search for, then click on submit, the less fields you enter the better. If you simply click on submit at the bottom you will get a list of all the latest SAFECOM's, use the arrows at the bottom left of the screen to navigate backward and forward. http://www.aviation.fs.fed.us/safecom/psearch.asp

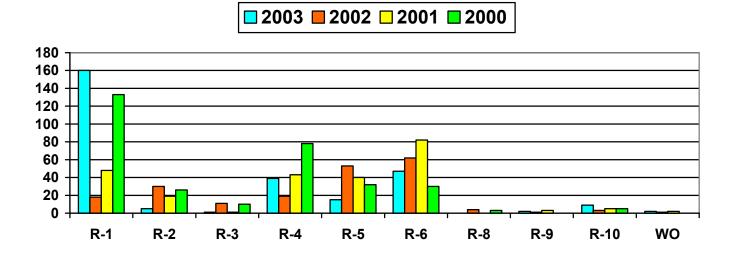
If you need assistance on searching contact Barb Hall at 208-387-5285 or email <u>bhall@fs.fed.us</u>.

## August SAFECOM's by Region

The chart below shows the number of SAFECOM's by region (FS and other agency) reported for August of this year.

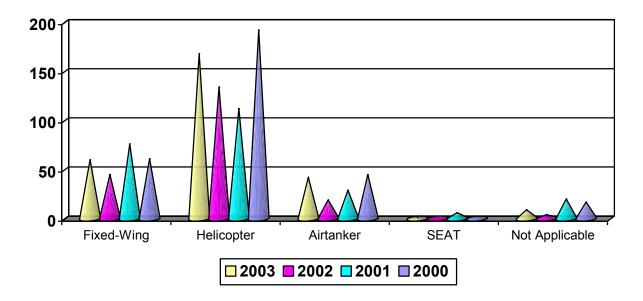


The following chart shows the total number of SAFECOM's reported by region for August of this year, last year, 2001 and 2000.



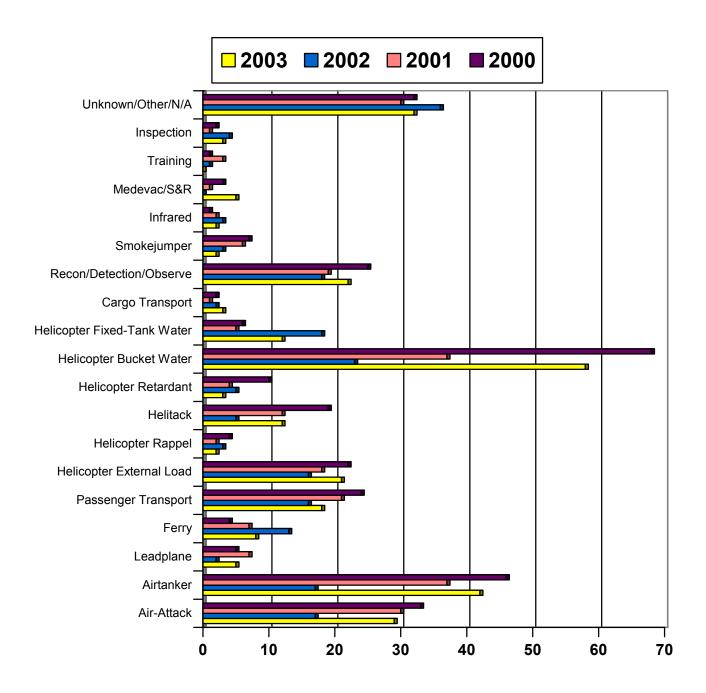
## SAFECOM's by Aircraft Type

In August helicopter SAFECOM's accounted for 61% of the SAFECOM's this year compared to 67% last year, 47% in 2001 and 61% in 2000. Fixed-wing SAFECOM's accounted for 21% this year, 22% last year, 31% in 2001 and 19% in 2000. The percent of Airtanker SAFECOM's were more than last year but comparable to the previous years. They accounted for 15% this year, 9% last year, 12% in 2001 and 14% in 2000. There was only one SEAT SafeCom this year, none last year, 6 in 2001 and 2 in 2000. The chart below shows the number of SAFECOM's reported in August of this year and the previous three years.



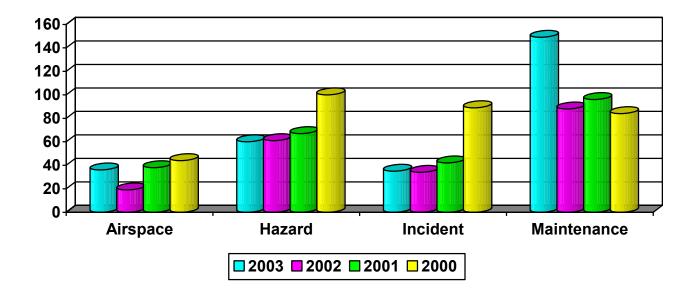
## SAFECOM's by Mission Type

Helicopter water bucket drops continue to be the one mission that consistently generates the most incident reports. Airtanker and Air-attack missions also continue to generate a high percentage of SAFECOM's. The chart below shows the number of SAFECOM's reported in August by mission for this year and the previous three years.



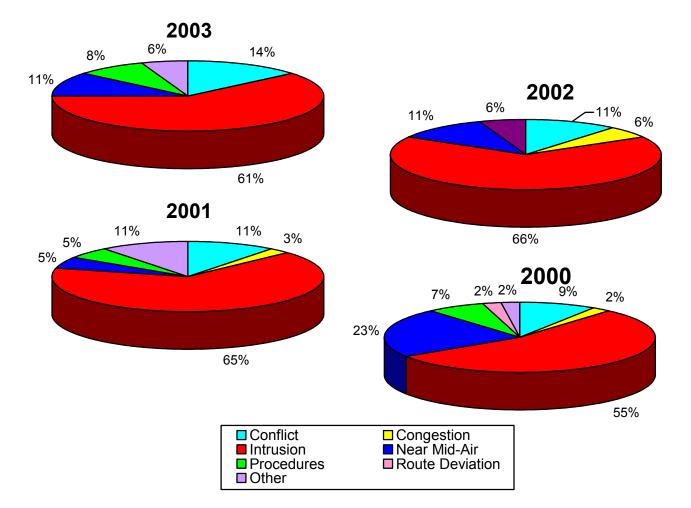
## SAFECOM's by Category

Maintenance SAFECOM's are generally the most reported, which rang true for this year where there was a significant increase. This year maintenance SAFECOM's accounted for 53% compared to 44% last year, 39% in 2001 and 26% in 2000. The anomaly was in 2000 when hazard SAFECOM's were the most reported. Airspace SAFECOM's accounted for 13% this year, which is above what was reported last year (9%) but comparable to last year (16%) and 2000 (14%). Hazard SAFECOM's were the second most reported, which is generally the case, although much lower than normal at 21% this year, comparable to 30% last year, 28% in 2001 and 32% in 2000. Incident SAFECOM's were also lower this year at 13% where they accounted for 17% in 2001 & 2002, and 28% in 2000. The chart below shows the number of SAFECOM's reported in August by category for this year and the previous three years.



## Airspace SAFECOM's

There were 36 SAFECOM's reported in this category in August of this year compared to 19 last year, 38 in 2001 and 44 in 2000. Although there were almost twice as many as last year, they are in the ballpark of the previous two years. Intrusions continue to the biggest airspace issue. There were 22 this year, 12 last year, 25 in 2001 and 24 in 2000. The most disturbing is that there was 4 Near Mid-Air collisions reported this year; there were 2 in 2001 and 2002 with a whopping 10 in 2000. The charts below show the percent of Airspace SAFECOM's by sub-category for August of this year and the previous three years.

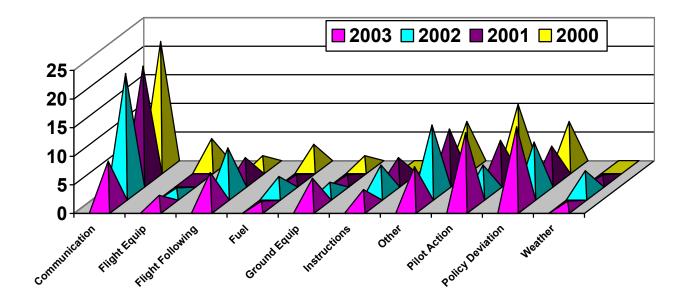


#### Select from the links below to view a sampling of the Airspace SAFECOM's.

http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4495 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4511 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4525 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4618 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4487 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4457 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4459 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4457

## Hazard SAFECOM's

There were 60 SAFECOM's reported in this category this year compared to 70 last year, 53 in 2001 and 62 in 2000. There were some unusual occurrences for August of this year in this category. SAFECOM's for communications have always been the most reported in this category until now. There were only 8 communication SAFECOM's reported this year compared to 21 last year, 20 in 2001 and 22 in 2002. Policy deviations and Pilot Action SAFECOM's have normally been a couple of the higher numbers reported in this category, but they increased significantly this year. The chart below shows the number of Hazard SAFECOM's reported by sub-category for August of this year and the three previous years.

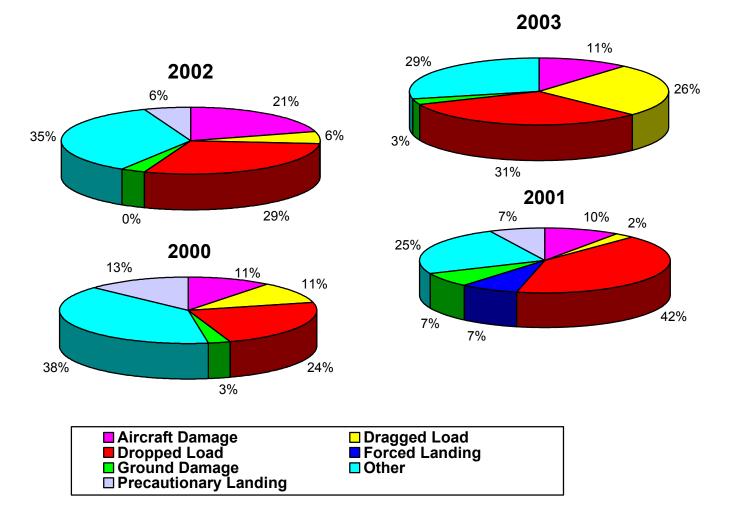


#### Select from the links below to view a sampling of the Hazard SAFECOM's.

http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4544 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4434 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4434 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4535 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4439 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4439 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4632 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4632 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4632 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4639 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4639 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4439 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4619 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4393 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4393

## Incident SAFECOM's

There were 35 incident SAFECOM's reported in August of this year which is similar to last years 34 which was lower than the two previous years, 41 in 2001 and 38 in 2000. Besides "Other", dropped loads continue to be the most reported in this category with 11 this year, 10 last year, 17 in 2001 and 9 in 2000. The number of dragged loads increased significantly this year over the past three years. In fact, dropped and dragged loads accounted for well over half of the SAFECOM's in this category this year. The charts below show the percent of Incident SAFECOM's by sub-category for August of this year and the previous three years.

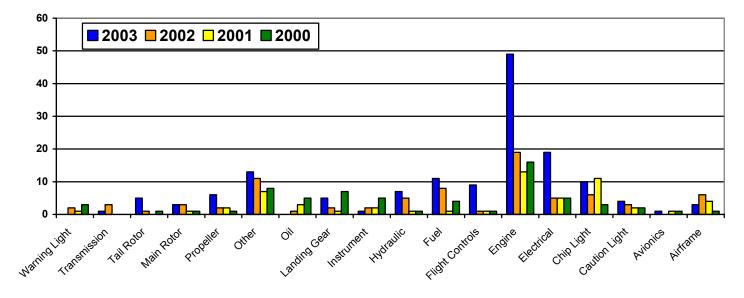


#### Select from the links below to view a sampling of the Incident SAFECOM's.

http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4578 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4627 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4775 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4453 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4662 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4491 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4497 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4497 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4534 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4445 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4453

## Maintenance SAFECOM's

There was a notable increase in maintenance SAFECOM's reported in August of this year than the past three years. There were 149 reported compared to 80 last year, 56 in 2001 and 65 in 2000. As you can see in the chart below, most significant are the number of SAFECOM's reported on engines, which was more than double the previous years. Several other sub-categories jumped out this year including electrical, which was twice as much as in the past and fuel, flight controls, propeller and tail rotor. The chart below shows the number of Maintenance SAFECOM's reported by sub-category for August of this year and the previous three years.



#### Select from the links below to view a sampling of the Maintenance SAFECOM's.

http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4644 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4540 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4571 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4450 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4665 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4666 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4493 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4663 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4767 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4429 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4702 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4442 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4466 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4695 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4555 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4553 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4684 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4588 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4435 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4707 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4669 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4693 http://www.aviation.fs.fed.us/safecom/psearchone.asp?ID=4556