

# ***CTIF – News from Germany***

***K. – Chr. Hahn  
Head of ARFF, Frankfurt Airport  
Linz, 15.06.2011***



# ***Overview***

- 1. Direct radio-communication between Aircraft and ARFF**
- 2. Discussions about AFFF-Foam and environment protection**
- 3. „Bio-kerosene“**
- 4. Blimp crashed at Reichelsheim airfield (12.06.2011)**
- 5. Fears about radioactive contamination by aircraft arriving from Japan**
- 6. Exercise “Mass casualty 500” – successful R & D for catastrophic incidents**

# ***1. Direct radio-communication between Aircraft and ARFF***

- ***5 airports started project in 2009, communication since spring 2010***
- ***Supported by German Air Navigation (DFS)***
- ***... but with strong restrictions by “Bundesnetzagentur” (owner and rule-maker for all radio-frequencies in Germany):***
  - 123,100 MHz, in German language, without normal license for this frequency, for 12 month only
  - ARFF have to write a report after each use of radio-communication
  - DFS has to collect all reports and a project group (by DFS, ARFF and pilots) has to evaluation all reports
- ***Result: direct communication is very successful and wide accepted (min. 4 uncommented evacuation were stopped just before start)***

# Direct radio-communication between Aircraft and ARFF

lfnd. Nr.	Datum	Flughafen	Uhrzeit	Art des Notfalles	Probleme	Projekt- Aktenzeichen
1	08.04.2010	MUC		Testanrufe nach Absprache	keine	MUC-080410-1
2	08.04.2010	CGN		Testanrufe nach Absprache	Kommunikatin negativ CGN kann wegen Technik/ Briefing Feuerwehr noch nicht teilnehmen	CGN-080410-2
3	10.04.2010	MUC		Bereitstellung Fahrwerksproblem	Feuerwehr - DFS: gut Feuerwehr- Lfz: gut, Präzise Information beschleunigt Ablauf	MUC-100410-3
3	14.04.2010	HAM	09:53	Vogelschlag im Triebwerk beim Start Rückkehr zum Airport	gute Verständigungsqualität	HAM-140410-4
5	14.04.2010	MUC	15:22	Rauch in der Kabine	Feuwehr -DFS gut Feuwehr -A/C: kein Kontakt Pilot kannte Verfahren nicht durch Feuerwehr gebrieft	MUC-140410-5
6	02.05.2010	MUC	17:14	Fahrwerksbrand	Feuerwehr- DFS kein Kontakt wegen kurzer Anfahrzeit (A/C bereits an Parkposition) Pilot kann zweimal Feuerwehr nicht erreichen wegen Lärm bei Feuerwehr Headset Kontakt ok, Technische Änderung bei Feuerwehr empfohlen	MUC-020510-6
7	08.05.2010	HAM	09:09	Bremsenproblem bei Landung erwartet	Erstkontakt Pilot ruft : Hamburg Feuerwehr Sprachqualität ok	HAM-080510-7
8	08.05.2010	HAM	13:03	siehe oben	siehe oben	HAM-080510-8
9	10.05.2010	MUC	10:31	Fahrwerksproblem	Feuerwehr DFS- gut Feuerwehr- Lfz: präzise beschleunigte Ein- satzabarbeitung/ Lautstärke im Feuerwehrfahrzeug störend	MUC-100510-9
10	12. Mai 10	FRA		starker Treibstoffverlust	gutes Gesamfeedback obwohl zunächst kein Funkkontakt. Tägliche Überprüfung der Funkgeräte als Standard aufgenommen	FRA-120510-10
11	11.06.2010	HAM	08:23	Hydraulik- Bugrad	klarer reibungsloser Funkverkehr	HAM-110610-11
12	10.06.2010	HAM	21:42	Fahrwerksanzeige	klarer reibungsloser Funkverkehr	HAM-100610-12
13	10.06.2010	MUC	17:03	Fahrwerksbrand	Evakuierung konnte durch Kommunikation vermieden werden	MUC-100610-13
14	05.06.2010	MUC		Triebwerk	Evakuierung konnte durch Kommunikation vermieden werden	MUC-0506.10-14

# ***Direct radio-communication between Aircraft and ARFF***

## ***Results:***

- ***“Bundesnetzagentur” is now convinced, to allow the use of 123,100 MHz by ARFF, in German (and later in English) without special license***

## ***Next steps:***

- ***Direct radio-communication is required for all German airports (from 01.07.2012 for mayor airports, 01.01.2013 for all airports)***
- ***Tailored „ARFF-English course“ is in preparation***

## ***2. Discussions about AFFF-Foam and environment protection***

- ***AFFF-Foam with more than 0,005 % of PFOS is not longer allowed to use in Europe from 27th June 2011***
- ***Unsuccessful discussions with German environment protection agency; several fire tests, lot of money wasted to laboratories, fire tests and travel costs...***
- ***Results:***
- ***Most ARFF in Germany bought new AFFF-foam, still containing PFOS, but below 0,005%***
- ***Few change to „clean“ or „bio“ or „PFOS-free“ – foam agent, BUT: they are not FREE of PFOS, also only below 0,005 % and most of them have less extinguishing capacity!***

### **3. „Bio-Kerosene“**

**Question: will „Bio-Kerosene“ have alcohol inside?**

**Answer: no, this is not true, so alcoholresitend aff-foam is not required**

**Bio-kerosene is „biomass to (kerosene-)liquid“ (btl)**

**MSDS for bio-kerosene is identity to today s (oil-)kerosene**

***4. Blimp crashed at Reichelsheim airfield  
(12.06.2011)***





***Heavy landing may have destroyed kerosene-pipe and fuel ignited; 3 paxe jumped at 2 m off; blimp climped up again (loss of 250 kg) - burning***



***Pilot tried to land again, but blimp crash down;***



## *fire was quickly extinguished, but pilot died*

... for more pictures and video use [www.google.de](http://www.google.de) and search for:  
„Reichelsheim +Zeppelin“



## ***5. Fears about radioactive contamination by aircraft arriving from Japan***

- 11.03.2011 Earthquake and tsunami in Japan destroyed nuclear power station in Japan
- Fears in Germany about radioactive contaminated aircraft arriving from Japan activated Airport-Crisis management since 12.03.2011
- Many discussions with different authorities about „responsibility“ , “contamination level” , “decontamination of an aircraft” and so on
- at the End = at FRA and MUC aircraft, staff and passengers have to be checked

-

FRA: (done by ARFF):

- 251 aircraft
- 30 persons

Result (FRA):

All aircraft and persons without any contamination...

# Results

Number	Number	Date	Aircraft	flight	cps	cps	contamination	IC	remarks
1	035830	13.03.2011	MD11, D-ALCJ	LH 8385	7,0	6,0	No	D.	-
2	035392	13.03.2011	MD11, D-ALCK	LH 8383	6,0	6,0	No	S.	-
3	035398	13.03.2011	A380, D-AIMD	LH 711	5,0	5,0	No	S.	-
4	036077	14.03.2011	A346, D-AIHT	LH 711	6,5	4,5	No	T.	-
5	036233	15.03.2011	B744, D-ABTE	LH 741	6,0	4,8	No	T.	-
6	036252	14.03.2011	B744, D-ABVL	LH 471	4,4	5,5	No	S.	-
7	036691	15.03.2011	B77W, JA734J	JL 407	4,6	4,8	No	S.	-
8	036692	15.03.2011	B77W, JA785A	NH 209	5,2	4,7	No	S.	-
74	043349	28.03.2011	B77W JA788A	JL 407	7,5	7,0	No	D.	-
75	043346	28.03.2011	A-340, D-AIHH	LH 713	5,5	5,5	No	S.	-
76	043482	28.03.2011	B-747/VQ-BFX	ABW 165	5,1	4,6	No	K.	-
77	043345	28.03.2011	A-340, D-AIGF	LH 711	5,3	5,3	No	S.	-
78	044230	29.03.2011	A 340,DAIHK	LH 737	4,3	4,9	No	D.	-
79	044232	29.03.2011	B777, JA789A	NH 209	5,0	5,4	No	D.	-
80	044231	29.03.2011	B777, JA735J	JL 407	5,0	5,2	No	D.	-
251	061836	01.05.2011	B77W, JA735J	JL 407	5,1	4,8	No	S.	-

## ***Exercise Mass casualty 500 Frankfurt Airport, 09.10.2010***

- Fraport is involved in a national research project to develop better and quicker handling in mass casualty incidents
- 09.10.2010: final test with 500 persons
- 1.500 persons in rescue operation
- 500 “behind the curtain”
- In total: 2.500 persons, 150 cars/trucks/busses
  - 10:30 local time: start exercise
  - 11:12 local time: first person with ambulance to clinic
  - 12:09 local time: all persons rescued and in medical treatment
  - 13:49 local time: last person in ambulance car to clinic
  - 14:15 local time: end of exercise
- Total project costs about 3 mio €
- Exercise costs about 350.000 €
  
- Details see video and ppt at [www.sogro.de](http://www.sogro.de)

Frankfurt Airport

