

Unique
Aircraft Disinfection
Performance







### Who we are

**Jonas Scheld** 

- Licensed Aircraft Technician, EASA certifying staff B1 for airline and business aviation with 13 years well-founded experience
- Worked the last 7 years as self-employed flight engineer/certifying staff B1 on BBJ's + Global 6000, joined Ryanair (REGG) in April 2020 in Frankfurt
- State certified disinfector acc German infection protection act (IfsG) §17 Abs. 3
- Worldwide experience in aircraft maintenance, completion, refurbishment and operations



Dr. Heiner Börger

- Studied Social- and Business Communication at the HDK Berlin (Hochschule der Künste)
- Directed a corporate event production company
- (CCS Commercial Communication Studios GmbH) in Frankfurt for 15 years
- Aviation professional since 1999 as helicopter pilot



### **Motivation**

The past few months have shown how quickly a pandemic can spread globally. The dramatic consequences affect not only the economy, but all of us. Global air traffic spreads a virus across the world within days, possibly before an epidemic is even detected at the place of origin.

An Interruption of these global transmission chains is therefore a central task in order to effectively prevent future pandemics.

Today, new developed disinfection techniques allow highly effective and safe disinfection services for **aviation** & facility managment as well as pharma industry (origin) and healthcare – bringing the safety of us all a decisive step further. Meeting the extremely high requirements of aviation the disinfection service may also be used everywhere else.



### What we do

We are specialists for professional disinfection of commercial aircraft. According to the aircraft operators' specific requirements, we offer approved, customized disinfection solutions, starting with certified wipe on/off disinfections up to novel, highly efficient surface and cabin air disinfection technologies.

Since beginning of 2020 we are able to offer a unique highly effective and safe disinfection service for aviation that makes a significant difference to the safety for all of us.



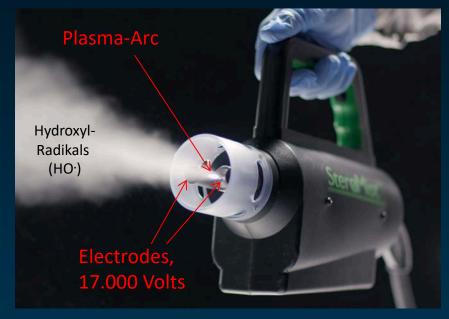
### **SteraMist®**

Developed by the U.S. Department of Defense against feared anthrax attacks after September 11<sup>th</sup> 2001



### The **SteraMist**® Disinfection System

- ➤ Hydrogen peroxide molecules are becoming ionized by being sprayed over a high-energy atmospheric cold plasma arc. During this process they convert into <a href="hydroxyl radicals">hydroxyl radicals</a>
- ➤ Particle size of the ionized mist: only 0.5 3 Micron
- ➤ Thereby the mist distributes like a gas under hand guided control



Radicals have single, unpaired electrons and are therefore very reactive



**Highest Efficacy** 

STERAMIST



 destroy pathogenic organisms by oxidizing proteins, carbohydrates and lipids

 kill or inactivate all bacteria, viruses and spores including SARS-CoV-2 in seconds

have a tremendous kill rate: Log <sup>-6</sup> = 99,9999%!

## SteraMist® Approved for Aircraft





- Not corrosive or harmful in any other way to the structure, electronics/avionics or the interior of the aircraft
- Approved by the EPA (Environmental Protection Agency, USA), explicit for use in airplanes.
- EASA conforms the use on aircraft, as the H<sub>2</sub>O<sub>2</sub> values are below the given limits by EASA in:
  SD Guidance on aircraft cleaning and disinfection Issue 2



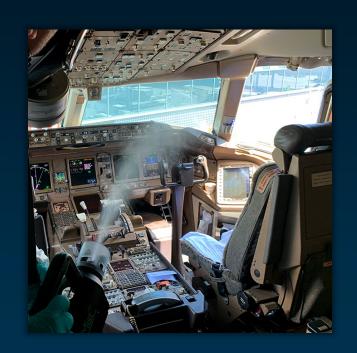




#### **SteraMist®**

#### The most Efficient Solution for Aviation

- ➤ Excellent gas-like distribution
- > Ultra low contact time
- ➤ Ultra high killing rate
- ➤ Not corrosive and harmless to any material
- ➤ Absolutely safe for humans and animals
- > Usable even for the cockpit
- ➤ Approved by authorities





# **SteraMist**<sup>®</sup> Benefits at a glance

> MAXIUM SAFETY for passengers & crew by 99,9999% kill rate

> SHORT DOWNTIMES through fast application and effectiveness

> COMPLIES WITH EASA regulations / recommendations

> WELL COMMUNICABLE evidence for responsible care



### Disinfection-Methods for Airplanes

Sterile SCHELD AVIATION SERVICE	BACOBAN DL FOR AVIATION	ALCOHOL ISOPROPYL 75%	STERAMIST Hydroxyl Radicals	ZEP IND. RTU DISINFECTANT	ZIP CHEM CALLA 1452
Method	Spray & Wipe	Spray & Wipe	iHP - Aerosol	Spray & Wipe	Spray & Wipe
Approved in Europe	✓	✓	✓	X	X
Compliant with EASA regulations	✓	✓	✓	✓	✓
Approved for all airplanes	✓	✓	✓	✓	✓
Tested by Airbus/Boeing	✓	✓	X	✓	✓
Recommended for use in cockpit	limited	limited	✓	limited	limited
Efficiency / Effectiveness (combined)	75%	80%	100%	75%	75%

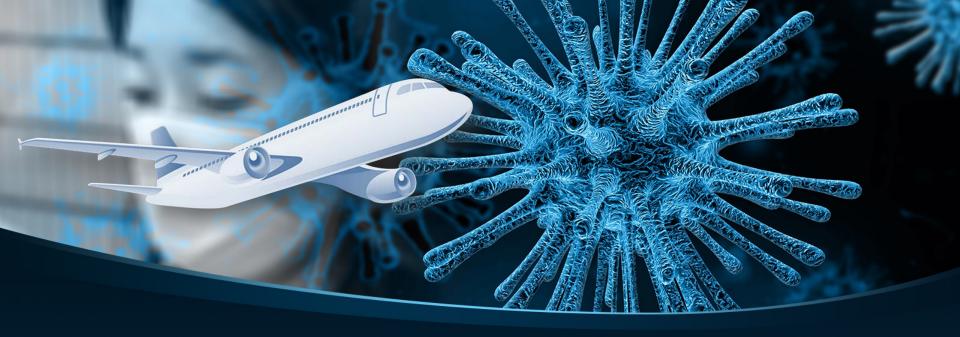
	Turn-Around Disinfection of High Touch Areas (up to Boeing 777 / A330):						
Duration:	75 min	65 min	55 min	90 min	90 min		
Costs:	990€	970€	950€	not available	not available		
	Disinfection / Sanitization of COCKPIT ONLY:						
Duration:	20 min	20 min	15 min	not available	not available		
Costs:	479 €	469€	449€	not available	not available		











Scheld Aviation Service Jonas Scheld CEO

**Address:** 

Cargo City Süd Gebäude 639 B

60549 Frankfurt am Main

Germany

Phone:

+49 160 55 68 862

Mail:

jonas@scheld-aviation.com

Website:

www.scheld-aviation.com

