

# HUMOUS'10

c o n f e r e n c e

## Humans Operating Unmanned Systems

ISAE, Toulouse, France, April 26-27, 2010

### Call for Papers

Unmanned systems are having a growing part in space, air, sea and ground military or civilian missions while the trend is to reduce staffing. Consequently humans will have to operate and interact with more complex and numerous vehicles.

One of the main challenges in systems involving humans and unmanned vehicles is to ensure a coherent and efficient behaviour of the whole system while mixing the operators' control and the autonomy of the vehicles. Addressing this issue needs a global design of the system so as to balance embedded algorithms, human-machine interactions and the operators' needs and prerogatives.

The aim of the conference is to bring together researchers, people from the industry, operators of unmanned vehicles and civilian and military stakeholders so as to focus on the human(s) - unmanned vehicle(s) interaction issues.

We especially encourage presentations on the following topics:

- authority or control sharing among human operator (s) and unmanned vehicle(s)
- adaptive automation / autonomy
- mixed-initiative decision
- perceptual systems, situation awareness issues
- rights and duties of human operators vs "rights and duties" of unmanned vehicles
- conflicts between human operators and embedded algorithms, and hand-over issues
- human-centered design
- human - unmanned system interactions
- human factors: workload, stress, physiological measures (human behaviours and emotions)
- training for operators of unmanned vehicles
- adaptive MMIs
- natural interactions with no MMI
- multi-vehicle and multi-operator issues
- operation of unmanned systems colocated with humans or inhabited systems

### Deadlines

Oct. 31, 2009	Abstract submissions
Nov. 15, 2009	Demonstration, exhibition stands proposals
Dec. 15, 2009	Author notification
Mar. 15, 2010	Full paper due-date

### Scientific committee

#### Co-chairs

Frédéric Dehais	ISAE	FR
François Legras	Télécom Bretagne	FR
Catherine Tessier	ONERA	FR

#### Members

Rachid Alami	LAAS	FR
Françoise Anceaux	LAMIH	FR
Didier Bazalgette	DGA	FR
Jullien Bouchet	EADS	FR
Yves Boussemart	MIT/HAL	US
Gloria Calhoun	USAF Lab	US
Duncan Campbell	QUT	AUS
Laure Christophe	AIRBUS	FR
Nancy Cooke	ASU/CERI	US
Gilles Coppin	Télécom Bretagne	FR
Cyril Crocquesel	Télécom Bretagne	FR
Eva Crück	DGA	FR
Missy Cummings	MIT/HAL	US
Amandine Dessalles	DGA	FR
Jill Drury	MITRE	US
Aurélien Godin	DGA	FR
Olivier Grisvard	THALES	FR
Angélica Léal	BERTIN	FR
Patrick Le Blaye	ONERA	FR
Kees Nieuwenhuis	D-CIS lab	NL
Philippe Palanque	IRIT	FR
Jean-Christophe Sarrazin	ONERA	FR
Axel Schülte	U. BUNDESWEHR	GE
Olivier Simonin	LORIA	FR

### Contact

E-mail: [humous10@isae.fr](mailto:humous10@isae.fr)  
ISAE - Campus SUPAERO  
10 av. E. Belin  
31055 Toulouse Cedex 4  
France

