WELCOME
To
The First International Conjunction Assessment Workshop

May 19-20, 2015
CNES HQ
2 place Maurice Quentin
Paris, France

PROGRAM COMMITTEE
of the workshop
First International Conjunction Assessment Workshop – CNES HQ - 2015

- European Satellites End of Life Operations Workshop
  every 2 years since 2006 at CNES HQ
  point of contact: Pierre Omaly
  (pierre.omaly@cnes.fr)

- European Space Debris Modelling and Remediation Workshop
  every 2 years since 2010 at CNES HQ
  point of contact: Christophe Bonnal
  (christophe.bonnal@cnes.fr)

- International Conjunction Assessment Workshop
  first edition May 2015
  dedicated to in-orbit Conjunction Assessment
  point of contact: Monique Moury
  (monique.moury@cnes.fr)

**SPACE DEBRIS RELATED WORKSHOPS**

*organized by CNES*

- To bring together operational actors directly involved in the management of on-orbit collision risks

- To provide opportunities for networking and technical discussions

- To share practices and feedback on CA risk assessment

- To identify difficulties and possible remediation

115 registered participants
20 countries
60 entities

**OBJECTIVES of the workshop**
1. SMARTnet: First Results (DLR GSOC)
2. GMV'S conjunction analysis tool CLOSEAP (GMV)
3. Middle Man, CAESAR and CARA examples (CNES, NASA)
4. PREEMPT and PREEMPT-Manager: Web Tools for Visualizing and Managing Conjunctions Events (CGI)
5. Comparison of Collision Avoidance Activities based on TLE or CSM information (DEIMOS)
6. Web-based CA collaboration (SpaceNav)
7. ASAL's experience with management of collision risks and debris mitigation (ASAL)
8. SpOC: a Web collaborative work environment dedicated to conjunctions analysis (CNES)
9. Orbit determination and maneuvering for propulsionless cubesats in LEO (PLANET)

14:00 DATA SESSION - Chair: BERTHIAS Jean-Paul, CNES, France
1. JSpOC process
2. Conjunction assessment for GEO satellites: ISON experience of using orbital data produced from own measurements
3. Improved CA via the Commercial Space Operations Center (ComSpOC)
4. CDM Overview - the JSpOC Implementation
   Discussion
15:40 - 16:10 Coffee – Posters

16:10 TOOLS SESSION - Chair: NEWMAN Lauri, NASA GSFC, USA
1. Constrained optimal collision avoidance strategies for multiple conjunction events
2. Collision risk assessment and avoidance maneuver strategies for satellites: CORAM tool
3. CSA On-Orbit Collision Risk Management Tools, Procedures & Experience
4. Improvement of the KARISMA for the commercialization
5. JAC, conjunction assessment
   Discussion
18:10 - 20:00 Networking Buffet Dinner
8:45 - 9:10 Coffee - Posters

9:10 LEO FEEDBACK SESSION - Chair: HEJDUK Matt, Astrorum Consulting, USA
1. Collision management & SPOT 6-7 operational assessment
2. Radarsat2 conjunction analysis and mitigation operations
3. Operational collision avoidance at ESOC
4. Operational Collision Risk Management for the S-NPP spacecraft
5. IRIDIUM’s Maneuver Pre-Screening Process to Minimize the Aggregate Probability of Collision

10:50 - 11:20 Coffee – Posters
6. 10-Years of EOS Operational Collision Avoidance
7. EUMETSAT’s LEO Conjunction Risk Forecast Operations and Avoidance Strategy Revisit
8. Collision Avoidance in LEO: from general concept to individual realities
9. Conjunction Assessment for DigitalGlobe’s Commercial Imaging Satellite Constellation
10. Operation Results of Conjunction Assessment and Mitigation for the GSOC Satellites

Discussion

PROGRAM
Wednesday, May 20 (morning)

13:10 - 14:20 Lunch at the restaurant “Au Chien Qui Fume”

14:20 – 14:40 coffee - Posters

14 :40 SYSTEM SESSION - Chair : DECOUST Camille, MDA GSI, Canada
1. Recent Upgrades of ESA’s Collision Avoidance Tools and Processes
2. CAESAR
3. Conjunction Assessment for JAXA satellites
4. CARA Overview and Screening Volume Analysis
Discussion

16:20 - 16:50 Coffee – Posters

16:50 GEO FEEDBACK SESSION - Chair: ZAMORA David, EUTELSAT, France
1. Conjunctions handling for the geosynchronous fleet at EUMETSAT, with support of optical data
2. How to avoid large debris in geostationary orbit: Yahsat’s Encounter Process
Discussion

18:00 - 18:20 Goodbye

PROGRAM
Wednesday, May 20 (afternoon)
On Wednesday, Lunch at 13:10, restaurant “Au Chien Qui Fume”

Back to CNES at 14:20 for coffee

PRACTICAL INFORMATION
lunch on Wednesday

Thanks a lot to all who helped and especially:
- in the idea: many international partners
- in the decision: Bernard Cabrières and CNES management
- in the organization: Fernand Alby and Christophe Bonnal who shared their experience organizing workshops, all the Program Committee members for their support (link with Space-Track etc...) and successively Aurélie Barril, Sabine Chazalmartin and Vérane Buisson.

Timing is tight
- Chairs and presenters: 20 minutes including short introduction by chairs
- Long coffee breaks and the networking buffet dinner the first day to favor discussions
- Dedicated time at the end of each session for questions and discussions. Please wait for microphones.
Presentation materials (pdf) and the list of participants will be made available to participants after the workshop (link to download the files sent by email).

All oral presentations and posters can be made available on Space-Track Operator’s Panel (pdf) thanks to Diana McKissock:
• Let us know if this is OK (for those who did not already say)
• Add contact information in your pdf file if you are OK to allow operators to contact you regarding your presentations
• Send your pdf file to jspoc@space-track.org