

TERMS AND CONDITIONS FOR PARTICIPATION IN ESA PARABOLIC FLIGHT CAMPAIGNS

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1 INTRODUCTION

ESA Parabolic Flight Campaigns are organized by the European Space Agency (ESA) at regular intervals several times per year to conduct microgravity research experiments and tests in various scientific and technology fields. ESA invites selected scientists and, on a case by case basis, other participants (media representatives, external observers, ...) to participate in ESA campaigns.

The Agency uses since 1997 the CNES/ESA Airbus A300 'Zero-G' managed and operated by the French company Novespace from the international airport of Bordeaux-Mérignac in France. Flight operations are conducted by the French '*Centre d'Essais en Vol*' (CEV, French Test Flight Centre).

Aircraft parabolic flights are not open to the public and are considered as test flights. Therefore, all flying participants on board must have a technical function in relation with an experiment or a test, either as operator or as subject or as observer.

Due to security and safety requirements of preparation and operations of experiments and tests in an airplane in parabolic flights from an international civilian airport, this document informs potential participants on the terms and conditions for their participation in ESA parabolic flight campaigns.

In the following text:

- the word "experiment" will indifferently refer to a scientific experiment or to a technical test or to any other approved in-flight activity requiring technical equipment;
- the words "he", "his", etc will indifferently refer to both genders.

2 SCOPE

The present document is issued to address the terms and conditions applicable to participate in parabolic flight campaigns organized by ESA. Each potential participant is requested to carefully read the present document and to signify his acceptance of these terms and conditions by signing the annexed form. The acceptance of the present terms and conditions is mandatory and a prerequisite condition to participate in an ESA campaign and conduct ground preparatory activities and in-flight operations.

3 APPLICABLE DOCUMENTS

3.1 *Applicable Documents*

All technical and safety requirements for preparation of experiment and for the safe conduct of ground and in-flight operations shall be found in the following two applicable documents:

- A.D.1 "Novespace A300 Zero-G Rules and Guidelines"
Novespace, ref. MU-2007-1-en, issue 1, rev. draft 5.
- A.D.2 "Novespace facilities description and working rules",
Novespace, ref. LRI-2007-1-en, issue draft.

3.2 Reference Documents

Additional information on the campaign preparation, on the experiment technical data to be provided, on the medical certification for flying participants and on the ground safety rules can be found in the following reference documents.

- R.D.1 “Campaign Information Document”
Novespace, ref. DI-2007-1-en, issue 1.
- R.D.2 “Media Information Document”
Novespace, ref. DIM-2007-1-en, issue 1.
- R.D.3 “Experiment Safety Data Package”
Novespace, ref. ESDP-2007-2-en, issue 2.
- R.D.4 “Medical Requirements for Parabolic Flights”
Novespace, ref. DM-2007-1-en, issue 1, date Mars 2007.
- R.D.5 “Risk Prevention Plan”
Novespace, ref. PP-2007-1-en, issue 1.

4 DEFINITIONS

4.1 Organizing Institutions and Companies

4.1.1 ESA

The European Space Agency (ESA), or in short the Agency, is the institution who invites selected research teams and other participants to participate to ESA parabolic flight campaigns organized regularly. The Agency is represented during the campaign by the ESA Technical Officer. The organization of ESA parabolic flight campaigns is made through a contractual relation with the French company Novespace.

4.1.2 NOVESPACE

Novespace is a French company, subsidiary of the French Space Agency CNES (*Centre National d'Etudes Spatiales*), based near the international airport of Bordeaux-Mérignac, in charge through a contractual relation with ESA of managing the ESA campaign practical, technical, safety and logistics organization.

Novespace has issued two document(s) (A.D.1 and A.D.2) that are applicable to all campaign participants with requirements for designing experiment equipment and conducting safe ground and in-flight operations.

During ESA campaigns, the Novespace Campaign Manager is the person responsible for all campaign preparation and performance aspects. The Novespace Safety Manager is the person responsible for all safety aspects on site.

Novespace's premises, where the ground preparation activities for ESA campaigns are taking place, comprises an entrance gate, a parking area, buildings with offices and a workshop area, an access gate to the airport apron, and the Airbus A300 'Zero-G' when on-ground and not in motion. Access to Novespace's premises is restricted to declared campaign participants whose names have been approved by ESA prior to their arrival. Novespace badges will be distributed to ESA campaign participants. The access to the airport apron and to the Airbus A300 when on-ground is restricted to Novespace badge holders.

4.1.3 CEV

The '*Centre d'Essais en Vol*' (CEV, French Test Flight Centre) is a French institution depending through the DGA (*Direction Générale de l'Armement*) on the French Ministry of Defence. The CEV is in charge of all flight operations of the Airbus A300 'Zero-G'. In particular, the CEV provides the flying cockpit crew (Commander, Pilots, Flight Engineers) and the flying cabin crew (Cabin Engineers, Cabin Safety Attendants, Flight Surgeon). The Airbus A300 'Zero-G' when in flight is under the responsibility of the CEV Commander.

4.1.4 SOGERMA

Sogerma Services, or Sogerma in short, is a French company based at the airport of Bordeaux-Mérignac. Sogerma provides for all technical support to the Airbus A300 aircraft. During the campaign, the Sogerma plant restaurant is used for lunch by parabolic flight participants at their discretion. Access to the Sogerma facility is restricted to Novespace badge holders.

4.1.5 MEDICAL INSTITUTIONS

4.1.5.1 *ESA Medical Board*

The ESA Medical Board is an ESA committee composed of aerospace biomedical experts and appointed by ESA, who review the submitted protocols for Life Science experiments with human subjects and approves or rejects such protocols, according to the ESA ethical and biomedical requirements for experimentation on human subjects.

Experiments with human subjects to be performed during ESA parabolic flight campaigns must be approved by the ESA Medical Board.

4.1.5.2 *CPP*

The CPP (*Comité pour la Protection des Personnes*, Committee for the Protection of Persons) is a French committee composed of various biomedical, social and law experts who review the submitted protocols for Life Science experiments with human subjects and approves or rejects such protocols, according to the French law requirements for experimentation on human subjects.

Experiments with human subjects to be performed during ESA parabolic flight campaigns must be approved by the CPP.

Several CPP committees exist in France. Approval of experiments with human subjects for ESA campaigns is requested by ESA and Novespace to one of the CPP committees.

4.1.5.3 MEDES

The MEDES is a French company, subsidiary of CNES, based in Toulouse and which, through a contractual relation with ESA via Novespace, supports the investigators to prepare their protocols for submission to the CPP for experiments with human subjects.

4.1.5.4 CEV Medical Office

The CEV Medical Office reviews and approves the medical certifications of all flying participants and provide for the CEV Flight Surgeon.

4.2 Parabolic Flight Campaign Participants

The Parabolic Flight Campaign Participants, or in short the Participants, are members of selected experiment teams and other individuals invited by ESA to take part in a specific parabolic flight campaign. All participants who will fly during ESA parabolic flight campaigns must undergo a medical examination and be declared suitable for to fly.

Participants are grouped in the following categories.

4.2.1 EXPERIMENT PRINCIPAL COORDINATOR

The Experiment Principal Coordinator is the person who has the overall responsibility of the selected experiment or test. He is usually the person who submitted the experiment proposal and received the ESA letter of acceptance of his proposal. In case of a joint experiment between several research institutions, he assumes the lead role in his contacts with ESA and Novespace.

He is requested to sign the first “ESA Terms and Conditions Acceptance” form (see Annex 1).

He may or may not be attending the experiment ground and in-flight operations at Novespace premises.

4.2.2 EXPERIMENT LOCAL COORDINATOR

The Experiment Local Coordinator is the responsible person in charge of a team of scientists and/or engineers who will conduct the experiment ground and in-flight operations. He may or may not be the same person as the Experiment Principal Coordinator.

He is requested to sign the second “ESA Terms and Conditions Acceptance” form (see Annex 2).

4.2.3 EXPERIMENT TEAM MEMBER

The experiment team member is the person belonging to an experiment team and reporting directly to the Experiment Local Coordinator. He is usually either a professional researcher, or a scientist, or a Ph.D. student or a technical expert such as his expertise is needed for successful ground and in-flight operations. He can operate the experiment hardware and equipment in an unsupervised mode.

Undergraduate students cannot perform experiments during ESA campaigns. In exceptional cases, experimenters may be assisted by undergraduate students affiliated to the institute of the Experiment Principal Coordinator. In this case, an undergraduate student shall never be allowed to operate the experiment hardware and equipment without supervision of the Experiment Local Coordinator or another qualified Experiment Team Member of the same team.

The Experiment Team Member is usually fully affiliated to the institution conducting the research or, in case of a joint experiment between several research institutions, to one of the institutions conducting the research. In case of being detached from his home institution or company, he may also be temporary affiliated to the institution conducting the research, for example as operator or subject participating to the proposed experiment.

He is requested to sign the second “ESA Terms and Conditions Acceptance” form (see Annex 2).

4.2.4 EXTERNAL OBSERVER

The Agency may invite at its discretion other participants to participate to parabolic flight campaigns, having recognized the importance of the participation of this person to the campaign, either in his position as media representative or as a political or managerial authority. The External observer can be associated to one of the experiments manifested for flight.

He is requested to sign the second “ESA Terms and Conditions Acceptance” form (see Annex 2).

4.2.5 ESA CADRE TEAM

During ESA campaigns, the Agency provides a cadre team to support and document the ground and in-flight operations. For ground operations, this ESA Cadre Team is composed of the ESA Technical Officer, an ESA provided Photographer and Cameraman, and possibly of other ESA managerial authorities and support. For in-flight operations, the ESA Cadre Team is composed of three persons: the ESA Technical Officer, an ESA Photographer and an ESA appointed Cameraman.

ESA Staff members and contractors are also requested to sign the second “ESA Terms and Conditions Acceptance” form (see Annex 2) as appropriate.

4.3 *Campaign Organisation and Operations*

4.3.1 EXPERIMENT SELECTION AND CAMPAIGN ORGANISATION

Once an experiment proposal has been received, it is sent for review and evaluation for scientific merits by external peers. After review and evaluation, the external peers recommend (or not) the experiment with a certain priority rating (in decreasing order: outstanding, excellent, very good, good, satisfactory, not recommended).

The technical feasibility of recommended experiments is then assessed, and if judged technically feasible, the experiments are placed on a preliminary waiting list in view of a future campaign.

Depending on the priority rating and on resource availability on board the Airbus A300 ‘Zero-G’ aircraft and in Novespace ground facilities, experiments from the waiting list are manifested for a coming ESA campaign and the Experiment Principal Coordinators are invited to confirm their

participation to the coming ESA campaign. In doing so, the Experiment Principal Coordinators are requested to verify that :

- the proposed campaign dates, flight schedule and gravity levels are adequate to guarantee a successful performance of the experiment;
- the experiment equipment would be ready and available in time for the foreseen campaign;
- adequate funding is available in time to support the preparation and the performance of the experiment during the campaign^(*);
- all co-investigators are made aware and agree to the selected experiment participation to the ESA campaign;
- there is no confusion on which experiment is selected for the coming ESA campaign.

Once the confirmation has been received by the ESA Technical Officer, the experiment proposals are forwarded to the Novespace company and the technical preparation activities for the coming ESA campaign are initiated.

Novespace representatives then review the proposals, request additional technical and safety details, and visit the experimenters at their home institution in order to review the experiment equipment in preparation and to provide additional guidelines and recommendations for the proper technical and safe preparation of the experiment.

Novespace representatives help the Experiment Principal Coordinators of all experiments to prepare an Experiment Safety Data Package, which will be integrated by Novespace representatives in an Integrated Safety Data Package to be presented and defended in front of an ESA Safety Board and of a CEV Safety Board prior to the campaign.

4.3.2 CAMPAIGN SCHEDULE

ESA parabolic flight campaigns are usually taking place over two weeks.

The first week is devoted to the experiment ground preparation from the incoming reception at Novespace's premises to the uploading of the experiment equipment in the Airbus A300 aircraft.

The second week is devoted to flight operations with the following schedule:

- Monday morning: the Safety Visit in the Airbus A300 aircraft by CEV and Novespace experts;
- Monday afternoon 14h: the Flight Briefing, mandatory for all flying participants, during which the parabolic flight manoeuvres, the flight emergency and evacuation procedures, the medical aspects and prevention are explained and during which the manifested experiments are presented by the experimenters;
- Monday afternoon 16h: a separate Flight Operation Briefing for media representatives during which the working conditions and the support of the ESA provided photographer and cameraman are explained;
- Tuesday morning: first flight of 30 parabolas
- Tuesday afternoon: first flight debriefing

^(*) In this context, it has to be noted that ESA will financially cover for the parabolic flights and for some limited technical support through the Novespace company but ESA will not participate in the costs of the experiment preparation and transport, and of the mission, travel and accommodation of campaign participants; funding to cover these costs must be obtained separately, either privately or through a national institution funding space experiments.

- Wednesday morning: second flight of 30 parabolas
- Wednesday afternoon: second flight debriefing
- Thursday morning: third flight of 30 parabolas
- Thursday afternoon: third flight debriefing and downloading of experiment equipment;
- Friday: back-up day in case of postponement of a previous flight due to weather conditions or aircraft technical conditions.

4.3.3 GROUND OPERATIONS

During ESA campaigns, ground operations includes sequentially:

- the reception by Novespace of the incoming experiment equipment on Novespace's premises,
- the verification by Novespace of conformity of the experiment equipment to the configuration agreed prior the campaign with the Experiment Principal Coordinator,
- the set-up of the experiment equipment,
- the on-ground first power-up of the experiment equipment,
- the demonstration of the proper and safe functioning of the experiment equipment to the Novespace Campaign Manager,
- the loading of the experiment equipment on board the Airbus A300 'Zero-G' aircraft after authorization by the Novespace Campaign Manager,
- the on-board Safety Visit by CEV and Novespace experts, that may include at the discretion of CEV experts a demonstration of the experiment proper functioning for some experiments,
- the Flight briefing prior to the first flight,
- the post-flight debriefings,
- the experiment equipment down-loading after the last flight.

The on-ground first power-up of the experiment equipment shall be authorized by the Novespace Campaign Manager after verification of the experiment equipment appropriate configuration.

The loading of the experiment equipment on board the Airbus A300 'Zero-G' aircraft shall be authorized by the Novespace Campaign Manager after verification of the experiment equipment proper and safe functioning.

The experiment team members will be authorized to work on the experiment equipment on ground before the first flight and between the flights according to the ground safety rules and procedures of Novespace (see A.D.2).

4.3.4 IN-FLIGHT OPERATIONS

During ESA campaigns, in-flight operations are placed under the authority of the CEV Commander. Experiment in-flight operations in the Airbus A300 'Zero-G' cabin are placed under the authority of the CEV personnel. The Novespace Campaign Manager and the ESA Technical Officer will assume the role of mediators toward the CEV personnel.

All flying participants invited by ESA shall wear ESA flight suits. Prior to each flight, anti-motion sickness medication is distributed to flying participants at their discretion.

Usually an ESA campaign includes three flights of 30 parabolas each. However, a flight can be postponed or, during a flight, a parabola can be postponed or a flight can be terminated at any time by the CEV Commander due to air traffic control, weather conditions, aircraft technical conditions,

or safety concerns regarding experiment equipment or flying participants. As far as possible, a flight which was postponed or which was not completed will be repeated in a best effort approach within the timeframe of the campaign flight week.

4.3.5 ESA LIABILITY RELEASE AND INSURANCE COVERAGE

Safety in all ESA campaign preparatory activities and operations is of paramount importance to ESA, Novespace, CEV, Sogerma and all other institutions involved in ESA campaigns. Due to the fact that parabolic flights are always considered as test flights and due to the very nature of the experimental work conducted during ESA campaigns, ground and in-flight operations during ESA campaigns involve always a certain part of risk. To cover this risk in general, all campaign participants must be covered by an adequate insurance.

Firstly, all Experiment Principal Coordinators must verify with their employer or home institution their insurance coverage first, for civil liability for the performance of their experiment outside the home institution, and second, for individual insurance to cover their experiment team members during all phases of ground and in-flight operations of their experiment. All Experiment Principal Coordinators, or the authorized legal responsible of their home institutions, must obtain from the insurance institution of their employer or home institution a waiver of subrogation rights against ESA and all companies and institutions involved in the preparation and operations of the ESA campaign.

Secondly, all campaign participants must verify their individual insurance coverage with their employer or their home institution and must obtain from the insurance institution of their employer or home institution a waiver of subrogation rights against ESA and all companies and institutions involved in the preparation and operations of the ESA campaign.

In case of participation to another experiment during the campaign, the campaign participant must also verify with the Experiment Coordinator the specific insurance coverage for the experiment in which he will participate.

Thirdly, all campaign participants are informed that ESA takes in addition an individual insurance coverage to cover all campaign participants during flight only, excluding ground operations, with a limit of coverage of 150 000 Euros per participant. All campaign participants are also invited to consider taking an additional personal individual insurance coverage to cover themselves and their heirs from any accident that could happen during ESA campaigns, whether on ground or during flights. The ESA Technical Coordinator and the Novespace's Campaign Manager can assist in finding appropriate insurance companies who are willing to cover individuals participating in parabolic flights.

All campaign participants are requested to sign the second "ESA Terms and Conditions Acceptance" form in annex 2 before being authorized to participate in an ESA campaign. In signing this second "ESA Terms and Conditions Acceptance" form, the campaign participant declares explicitly that :

- he releases the liability of ESA, of all other companies and institutions and of all other participants involved in the preparation and operations of ESA campaigns and that he will not

make any claim against any of the above in case of injury, accident or damage to his equipment resulting from his participation to the ESA campaign;

- he has verified his insurance coverage, taken note of the ESA insurance coverage for flight and been invited to take an additional insurance coverage.

The participants shall not claim against ESA in case his experiment has not been flown or has not been successful.

Campaign participants must be aware of the fact that refusing to agree to and sign the second “ESA Terms and Conditions Acceptance” form in annex 2 would not allow them to participate to the ESA campaign.

4.3.6 IMAGE RIGHTS

The present paragraph is a summary of what is contained in the French law on Image Rights and under no circumstance can be constructed as a specific agreement between the parties.

As ESA campaigns are conducted usually from the Bordeaux-Mérignac airport, the French law on Image Rights or Right of Publicity (*Droits à l’Image*) is applicable. In summary, this law is meant to protect the rights of individuals appearing without their consents in photography, videos or films taken by other persons. To avoid any confusion during campaign on ground and in flight operations, all campaign participants must be informed about this fact and are requested to agree to appear in photography, videos and films taken by ESA and by other participants as long as these photography, videos and films are taken in the context and for the purposes of parabolic flight activities. This includes documenting of and/or reporting on activities and/or operations of the ESA campaign, the experiments, and/or other participants.

However, by courtesy to other participants and experimenters, a campaign participant should ask them before taking their photography or filming them whether they would agree.

All participants should also be remembered that it is not deontological and courteous to photograph or film another participant while being sick.

In case there is any reservation concerning photographing and/or filming an experiment or a specific scene or a participant, the responsible Experiment Coordinator must inform the ESA Technical Coordinator and the Novespace’s Campaign Manager about this reservation.

All participants must also be informed and reminded of the fact that some areas in Novespace’s facilities and on the airport apron and that some equipment and facilities in the Airbus A300 ‘Zero-G’ cannot be photographed and/or filmed. These will be outlined during the ground briefing upon arrival in Novespace’s facilities.

In signing the second “ESA Terms and Conditions Acceptance” form in annex 2, the campaign participant declares implicitly having being informed about the Image Rights, given his explicit consent to appear in photography, videos and films taken by ESA and other campaign participants for the purposes and in the context of parabolic flight activities, and that therefore he will not make any claim towards ESA, other institutions and other campaign participants related to his Image Rights.

5 ROLE OF ORGANIZING INSTITUTIONS AND COMPANIES

5.1 *ESA*

5.1.1 BEFORE THE CAMPAIGN

Prior to a campaign, the prime role of ESA in a best effort approach is:

- to solicit from the scientific community experiment proposals through a permanently open Announcement of Opportunity (see <http://spaceflight.esa.int/users/index.htm>);
- to organize for the review by peers of submitted experiment proposals for their scientific or technical research merits and to inform the selected submitters of the acceptance or rejection of their proposal;
- to invite the Experiment Principal Coordinators of selected experiments to confirm their participation in the foreseen campaign;
- to provide for aircraft parabolic flight opportunities for selected experiments;
- to organize parabolic flight campaigns through the company Novespace;
- to prepare the list of experiments manifested for a specific campaign and to transmit this list to Novespace;
- to supervise and monitor the organization and technical preparation work of Novespace in view of a coming ESA campaign;
- to organize a Safety Review to assess the safety of all proposed experiments and the overall campaign safety..

5.1.2 DURING THE CAMPAIGN

During an ESA campaign, the prime role of ESA is:

- to nominate an ESA Technical Officer who will :
 - o supervise the campaign preparation and execution;
 - o provide some limited support during ground preparation and in-flight operations;
 - o support the flight briefing and lead the post-flight debriefings;
 - o be the contact point for all campaign participants having requests to ESA.
- to document the ground and in-flight operations through ESA appointed photographer and cameraman.

5.1.3 AFTER THE CAMPAIGN

After an ESA campaign, the prime role of ESA is:

- to collect experiment reports and to ensure that experiment abstracts are placed in the Erasmus Experiment Archive database.
- to distribute all photographic and video materials recorded during the campaign.

5.2 *NOVSPACE*

During an ESA campaign preparation, Novespace interfaces with four groups or institutions:

- the parabolic flight participants to ensure proper preparation of experiments;
- ESA for the overall campaign organisation;
- the CEV to prepare and provide for the appropriate flight operations;
- the French Sogerma company to provide for the technical support and maintenance of the Airbus A300 'Zero-G' aircraft.

This paragraph addresses the role of Novespace vis-à-vis the campaign participants.

5.2.1 BEFORE THE CAMPAIGN

Prior to an ESA parabolic flight campaign, the role of Novespace is:

- to review the scientific and technical data provided in the selected experiment proposals and to contact the selected scientific teams to obtain from them additional experiment technical and safety details in order to have the experiment safety data package correctly prepared;
- to contact the selected scientific teams and other participants to obtain from them personal data and medical certifications in order to prepare the lists of all ground and flying participants;
- to provide a limited technical support in the definition and preparation of the experiment equipment, through regular contacts by mail and visit to the scientists' premises and in providing technical advices and safety recommendations on experiment equipment set-up and procedures;
- to collect all technical and safety documentation (list of equipment, list of potentially hazardous products, Material Safety Data Sheets (MSDS), ...) from all Experiment Local Coordinators;
- to check with respect to French law that the needed authorisations/licences to handle and store the materials listed in the MSDS are in its possession.

5.2.2 DURING THE CAMPAIGN

During an ESA parabolic flight campaign, the role of Novespace is:

- to nominate a Novespace Campaign Manager;
- to liaise with the ESA Technical Officer and all Experiment Local Coordinators for all matters pertaining to the ESA campaign organisation and operations;
- to deliver the Novespace's badges to all arriving participants in exchange of the signed copy of the ESA Terms and Conditions Acceptance form;
- to accept after review and inspection with the Experiment Local Coordinator all incoming experiment equipment in Novespace's premises for ground preparation activities;
- to verify with the Experiment Local Coordinator that the work area and storage facilities put at his disposal complies with the experiment equipment, the type and quantity of products and the experiment activities that will be conducted during the campaign;
- to deliver the ground safety briefing, including the restrictions regarding photographing and filming on the airport apron and in the Airbus A300 'Zero-G' aircraft, to all arriving participants and to verify with the ESA Technical Officer that all Experiment Team Members have the adequate expertise to conduct the required ground preparatory activities;
- to provide the adequate ground facilities in terms of technical, logistics and safety aspects for participants to prepare their experiments;

- to support experimenters and participants in the ground experiment preparation and in the in-flight experiment operation as far as technically possible;
- to deliver after satisfactory inspection of the set-up and assembled experiment equipment the authorization for the on-ground first power-up of the experiment equipments;
- to deliver after satisfactory and successful demonstration of the proper and safe functioning on ground of the experiment equipments the authorization for the uploading and installation of the experiment equipments in the Airbus A300 aircraft;
- to supervise, participate and provide for the support of Sogerma's experts of all experiment equipment uploading and installation in, and downloading from, the Airbus A300 aircraft;
- to review, and if acceptable, eventually approve or propose to the ESA Technical Officer, requests of modifications or deviations to the agreed equipment working configuration, procedures, and/or product use prior to modifications or deviations implementation by Experiment Team Members;
- to review with Experiment Local Coordinators the list of potential flying participants among their team members and the status of their medical documentation submission;
- to conduct with CEV experts the Safety Visit of experiment equipments in the Airbus A300 'Zero-G' aircraft prior to the first flight;
- to conduct and participate in the flight safety briefing;
- to deliver prior to each flight and collect after each flight ESA flight suits to flying participants;
- to collect from all Experiment Local Coordinators the evening before each flight day the list of flying participants for experiments performance during parabolic flights for every flight day;
- to participate and take the minutes of each post-flight debriefing and ensure that recommendations from the CEV personnel are forwarded to experimenters and participants and that requests from experimenters and participants are forwarded to the CEV personnel;
- to arrange for accessing the Sogerma's restaurant for lunch.

5.2.3 AFTER THE CAMPAIGN

After an ESA parabolic flight campaign, the role of Novespace is:

- to distribute all flight data of interest to all campaign participants.

5.3 *CEV*

5.3.1 BEFORE THE CAMPAIGN

Prior to an ESA campaign, the role of CEV with respect to the campaign participants is:

- to review and eventually accept all experiment equipments during a Safety Review prior the ESA campaign.

5.3.2 DURING THE CAMPAIGN

During an ESA campaign, the role of CEV with respect to the campaign participants is:

- to review and eventually accept all experiment equipments after the Safety Visit in the aircraft where last technical and safety details are reviewed;
- to conduct and participate in the flight briefing for all flying participants;
- to provide the flying cockpit and cabin crews;
- to ensure that all flight conditions are available for safe flying;
- to ensure for the safety and well-being of all flying participants during flights.

5.4 SOGERMA

During an ESA campaign, the role of Sogerma with respect to the campaign participants is:

- to provide for the in-time technical support and maintenance of the Airbus A300 'Zero-G' aircraft;
- to support and participate in the experiment equipments uploading and installation in, and downloading from, the Airbus A300 'Zero-G' aircraft.

6 ROLES AND RESPONSIBILITIES OF PARABOLIC FLIGHT CAMPAIGN PARTICIPANTS

6.1 Experiment Principal Coordinator

In general, the Experiment Principal Coordinator shall solely be and stay responsible at all time before, during and after the ESA campaign for the safety of his experiment, including ground preparatory activities and in-flight operations and for all potential experiment equipment configurations. In case no Experiment Local Coordinator is named, the Experiment Principal Coordinator shall fulfil the Experiment Local Coordinator obligations.

6.1.1 BEFORE THE CAMPAIGN

Prior to the ESA campaign, the Experiment Principal Coordinator shall :

- be the contact person with ESA and Novespace during all the experiment preparation period prior to arrive at Novespace premises;
- nominate during his absence a deputy and inform ESA and Novespace accordingly;
- nominate, if needed, an Experiment Local Coordinator and inform ESA and Novespace accordingly;
- receive, read, approve, comply with, and ensure that his team members have received, read, approved and will comply with the present "Terms and Conditions for Participation in ESA Parabolic Flight Campaigns" document;
- be responsible to design, develop, manufacture, assemble, test, pack and transport to and from the ESA campaign location his experiment equipment according to applicable national laws and regulations and following requirements in Novespace's User Manual and recommendations of Novespace's experts;
- submit in time all necessary technical and safety documentation requested by ESA and Novespace for the proper preparation of his experiment;

- submit in time all necessary personnel data and medical documentation requested by ESA and Novespace to request in time the adequate Novespace and CEV clearance to access the Novespace's premises and to prepare the list of flying participants;
- verify, and if necessary subscribe, the insurance coverage for civil liability of his home institution for all his team members, and in case of a joint experiment, the insurance coverage by the other participating institutions for team members affiliated to these other institutions, for his and their participation to the ESA parabolic flight campaign, including travel of personnel to and from the campaign location, transport of his experiment equipment to and from the campaign location, on site ground preparatory activities and in-flight experiment operations;
- be informed and ensure that his team members are informed of the fact that the Agency takes an individual insurance coverage to cover all campaign participants for the flights only and, if deemed necessary, take an additional insurance coverage and inform his team members of the possibility of taking an additional insurance coverage, as explained in section 4.3.5;
- be informed on, agree to and ensure that his team members are informed on and agree to the dispositions of the French law on the Image Rights (*Droits à l'image*) as explained in section 4.3.6;
- read, approve and sign the first "ESA Terms and Conditions Acceptance" form in annex 1 for the participation of his experiment as a whole to the ESA parabolic flight campaign and, in case of a joint experiment, to have it reviewed and co-signed by co-investigators and contracted companies if any.

6.1.2 AFTER THE CAMPAIGN

After the ESA campaign, the Experiment Principal Coordinator shall :

- make all efforts to analyze and process the data obtained during the ESA parabolic flight campaign in order to obtain good results in due time;
- submit an abstract of the research conducted and of preliminary results to ESA for inclusion in the Erasmus Experiment Archive database one to two months after the ESA campaign;
- in case of publication, send a copy of the publication to the ESA Technical Officer.

6.2 *Experiment Local Coordinator*

In general, the Experiment Local Coordinator shall jointly with the Experiment Principal Coordinator be and stay responsible at all time during the campaign for the safety of his experiment, including ground preparatory activities and in-flight operations and for all potential experiment equipment configurations.

6.2.1 BEFORE THE CAMPAIGN

Prior to the ESA campaign, the Experiment Local Coordinator shall :

- receive, read, approve, comply with, and ensure that his team members have received, read, approved and will comply with the present “Terms and Conditions for Participation in ESA Parabolic Flight Campaigns” document;
- verify, and if necessary subscribe, the insurance coverage for civil liability of his home institution and ensure that his team members have verified, and if necessary subscribed, their insurance coverage for civil liability by their home institution, for his and their participation to the ESA parabolic flight campaign, including travel of personnel to and from the campaign location, transport of his experiment equipment to and from the campaign location, on site ground preparatory activities and in-flight experiment operations;
- be informed and ensure that his team members are informed of the fact that the Agency takes an individual insurance coverage to cover all campaign participants for the flights only and, if deemed necessary, take an additional insurance coverage and inform his team members of the possibility of taking an additional insurance coverage, as explained in section 4.3.5;
- be informed on, agree to and ensure that his team members are informed on and agree to the dispositions of the French law on the Image Rights (*Droits à l’image*) as explained in section 4.3.6;
- read, approve, sign, and ensure that his team member have read, approved and signed the second “ESA Terms and Conditions Acceptance” form in annex 2 for his and their participation to the ESA parabolic flight campaign;
- ensure that all technical and safety documentation (list of equipment, list of potentially hazardous products, Material Safety Data Sheets (MSDS), ...) are delivered to the Novespace Campaign Manager.

6.2.2 DURING THE CAMPAIGN

During the ESA campaign, the Experiment Local Coordinator shall :

- be responsible to pack and transport his experiment equipment according to applicable national laws and regulations to and from the ESA campaign location;
- be the contact person with ESA and Novespace during all the experiment ground and in-flight operations at Novespace premises;
- nominate during his (temporary) absence a deputy and inform ESA and Novespace accordingly;
- liaise upon arrival with the ESA Technical Officer, the Novespace Campaign Manager and the Novespace Safety Manager and ensure that members of his team are informed of who these contact persons are;
- receive upon arrival his Novespace badge, and ensure that members of his team receive their badge, in exchange of the signed “ESA Terms and Condition Acceptance” form, and wear the badges visibly at all times when in Novespace or Sogerma’s premises;
- ensure upon arrival that all technical and safety documentation (list of equipment, list of potentially hazardous products, Material Safety Data Sheets (MSDS), ...) were delivered to the Novespace Campaign Manager;
- review upon arrival with the Novespace Campaign Manager all his equipment and products introduced on Novespace’s premises;

- verify with, and confirm to, the Novespace Campaign Manager that the work area and storage facilities put at his disposal complies with his experiment equipment, the type and quantity of products and the activities that he and his team members will conduct during the campaign;
- receive upon arrival the Novespace's ground safety briefing and ensure that all members of his team have received and understood the ground safety briefing;
- be informed and ensure that his team members are informed on the restrictions regarding photographing and filming on the airport apron and in the Airbus A300 'Zero-G' aircraft;
- ensure that all members of his team have the adequate expertise to conduct the various experiment preparatory tasks on ground and the experiment in-flight operations in a safe way; in case of doubt on expertise of team members, he shall refer to the Novespace Campaign Manager and/or the ESA Technical Officer and seek for his/their approval;
- supervise all on-ground preparatory activities of his experiment at Novespace's premises;
- ensure that his experiment is always attended by at least one team member with adequate expertise and that no under-graduate student are left unattended or unsupervised for ground operations of his experiment;
- request and obtain the authorization of the Novespace Campaign Manager for the on-ground first power-up of the experiment equipment;
- request and obtain the authorization of the Novespace Campaign Manager for uploading and installation of his experiment equipment in the Airbus A300 aircraft after successful demonstration of the proper and safe functioning on ground of the experiment equipment;
- participate with his team members in his experiment equipment uploading and installation in, and downloading from, the Airbus A300 aircraft under the supervision and with the support of Novespace and Sogerma experts;
- inform the Novespace Campaign Manager about any intended modifications or deviations to the agreed equipment working configuration, procedures, and/or product use and obtain the Novespace Campaign Manager's approval prior to proceed with the modifications or deviations;
- inform immediately the Novespace Campaign Manager and/or the ESA Technical Officer of any potential risks, hazards or danger that he may have knowledge of and report all issues, anomalies and/or incidents, whether on ground or during in-flight operations;
- review with the Novespace Campaign Manager the list of potential flying participants among his team members and the status of their medical documentation submission;
- participate in and support, or nominate a member of his team with sufficient expertise to participate in and support the Safety Visit in the Airbus A300 'Zero-G' aircraft of his experiment by CEV and Novespace experts prior to the first flight;
- receive the flight safety briefing and ensure that all members of his team have received and understood the flight safety briefing;
- receive prior to each flight and return after each flight his ESA flight suit and ensure that his team members have received prior to each flight and returned after each flight their ESA flight suit;
- nominate the flying participants for his experiment performance during parabolic flights for every flight day and forward this information to the Novespace Campaign Manager at the latest the evening before each flight day;

- participate in each post-flight debriefing or nominate at least one of his team members with sufficient expertise to represent him at the post-flight debriefing;
- comply and ensure that his team members comply with instructions and recommendations of the Novespace Campaign Manager and the ESA Technical Officer for ground and in-flight operations and, in addition, of the CEV Commander and other CEV personnel for in-flight operations;
- be responsible in general for the safe and proper conduct of his team members at the ESA campaign location and on Novespace's and Sogerma's premises;
- be informed and ensure that his team members are informed that his participation or the participation of his team members to the ESA campaign can be ended by the ESA Technical Officer, possibly upon recommendation of the Novespace Campaign Manager, in case of infringement to applicable Safety and Security regulations made known to him and his team members;
- be informed and ensure that his team members are informed that his experiment can be withdrawn from the ESA campaign by the ESA Technical Officer, possibly upon recommendation of the Novespace Campaign Manager, in case of safety issues with his experiment during ground or in-flight operations.

6.3 Experiment Team Member / External Observer

6.3.1 BEFORE THE CAMPAIGN

Prior to the ESA campaign, the Experiment Team Member shall :

- receive, read, approve and comply with the present "Terms and Conditions for Participation in ESA Parabolic Flight Campaigns" document;
- verify, and if necessary subscribe, the insurance coverage for civil liability of his home institution for his participation to the ESA parabolic flight campaign, including his travel to and from the campaign location, transport of experiment equipment to and from the campaign location, on site ground preparatory activities and in-flight experiment operations;
- be informed of the fact that the Agency takes an individual insurance coverage to cover all campaign participants for the flights only and, if deemed necessary, take an additional insurance coverage, as explained in section 4.3.5;
- be informed on, and agree to, the dispositions of the French law on the Image Rights (*Droits à l'image*) as explained in section 4.3.6;
- read, approve and sign the second "ESA Terms and Conditions Acceptance" form in annex 2 for his participation to the ESA parabolic flight campaign.

6.3.2 DURING THE CAMPAIGN

During the ESA campaign, the Experiment Team Member shall :

- be placed under the authority of his Experiment Local Coordinator, support him for, and participate in all ground activities for his experiment preparation;

- be informed upon arrival at Novespace's premises of who are the ESA Technical Officer, the Novespace Campaign Manager and the Novespace Safety Manager;
- receive upon arrival his Novespace badge, in exchange of the signed "ESA Terms and Condition Acceptance" form, and wear his badge visibly at all times when in Novespace or Sogerma's premises;
- receive upon arrival the Novespace's ground safety briefing;
- be informed on the restrictions regarding photographing and filming on the airport apron and in the Airbus A300 'Zero-G' aircraft;
- request, if he is an under-graduate student, to be supervised by his Experiment Local Coordinator or by another team member with adequate expertise;
- participate in his experiment equipment uploading and installation in, and downloading from, the Airbus A300 aircraft under the supervision and with the support of Novespace and Sogerma experts;
- inform his Experiment Local Coordinator about any intended modifications or deviations to the agreed equipment working configuration, procedures, and/or product use and obtain the Novespace Campaign Manager's approval via his Experiment Local Coordinator prior to proceed with the modifications or deviations;
- receive the flight safety briefing;
- receive prior to each flight and return after each flight his ESA flight suit;
- comply with instructions and recommendations of the Novespace Campaign Manager and the ESA Technical Officer for ground operations and in addition of the CEV Commander and other CEV personnel for in-flight operations;
- be informed that his participation to the ESA campaign can be ended by the ESA Technical Officer, possibly upon recommendation of the Novespace Campaign Manager, in case of infringement to applicable Safety and Security regulations made known to him;
- be informed that his experiment can be withdrawn from the ESA campaign by the ESA Technical Officer, possibly upon recommendation of the Novespace Campaign Manager, in case of safety issues with his experiment during ground or in-flight operations.

6.3.3 NOTES FOR EXTERNAL OBSERVERS AND ESA STAFF

The External Observer shall follow the same rules as for the Experiment Team Member, under the authority of the ESA Technical Officer instead of the Experiment Local Coordinator.

The ESA Staff Members and ESA Contractors who are participating in an ESA Parabolic Flight Campaign shall follow the same rules as for the Experiment Local Coordinator or the Experiment Team Member, depending on the case. They shall sign the second "ESA Terms and Conditions Acceptance" form in annex 2 as appropriate.

7 EXPERIMENT WITHDRAWAL AND PARTICIPANT EXCLUSION CONDITIONS

7.1 *Experiment Withdrawal Conditions*

Although ESA will undertake all reasonable efforts to provide for the performance of selected experiments in parabolic flights during an ESA campaign, all campaign participants shall be aware of the fact that ESA and Novespace can withdraw the participation of an experiment or of experimenters from an ESA campaign at any time before or during the campaign.

7.1.1 BEFORE THE CAMPAIGN

The ESA Technical Officer may decide, possibly upon recommendation of the Novespace's Campaign Manager, to withdraw or postpone the participation of an experiment foreseen for a specific ESA campaign for one or several of the following reasons:

- the experiment participation to the foreseen campaign is not confirmed in time after the ESA invitation has been sent to the Experiment Principal Coordinator;
- the technical and safety detailed data are not provided in time, as requested by ESA and/or Novespace;
- the technical and/or safety aspects of the experiment do not guarantee its safe operation;
- the experiment would not be ready in time at the foreseen date of the campaign;
- the ESA Terms and Conditions are not agreed to and/or the first "ESA Terms and Conditions Acceptance" form is not signed by the Experiment Principal Coordinator;
- the conditions for participation are not complied with in terms of adequate insurance coverage and/or compliance with the various conditions listed in the first "ESA Terms and Conditions Acceptance" form;

until the above withdrawal or postponement condition(s) have been fulfilled by the Experiment Principal Coordinator.

In addition and although it rarely happened in the past, the ESA Technical Coordinator may decide to withdraw an experiment for programmatic reasons, even after the participation confirmation has been received, in favour of other experiments having higher priorities.

As far as possible and depending on availability and on schedule, ESA will undertake in a best effort approach to re-introduce the withdrawn or postponed experiment after the specific conditions have been fulfilled in the ESA coming campaign, or in a future ESA campaign, or to find another flight opportunity on a different campaign.

The ESA Technical Officer shall withdraw or postpone the participation of an experiment foreseen for a specific ESA campaign in the following cases:

- the ESA Safety Board and/or the CEV Safety Board concludes at the ESA and CEV Campaign Safety Reviews that a particular experiment is not found safe for ground and/or in-flight operations during an ESA campaign. The experiment shall then be modified to render it safe according to the standards laid down in the two applicable documents (A.D.1 and A.D.2) and shall be presented again to and accepted by the ESA and the CEV Safety Boards before it can be cleared for ground and in-flight operations during an ESA campaign.

- the ESA Medical Board and/or the CPP do not approve the protocol of Life Science experiments with human subjects. The protocol shall then be modified to comply with the specific requirements laid down by the ESA Medical Board and/or the CPP and shall be presented again to, and accepted by, the ESA Medical Board and/or the CPP before it can be cleared for ground and in-flight operations during an ESA campaign.

7.1.2 DURING THE CAMPAIGN

The ESA Technical Officer may decide, possibly upon recommendation of the Novespace's Campaign Manager, to withdraw or postpone at any time during the campaign the participation of an experiment from the ESA campaign if the experiment does not comply with the applicable technical and safety standards laid down in the two applicable documents (A.D.1 and A.D.2) or if any technical and/or safety issue arise during ground or in-flight operations of the experiment that would create a potential danger to or be potentially harmful for any experimenters, any other campaign participants, any other experiment equipment, any ground facilities or the Airbus A300 'Zero-G' aircraft itself.

7.2 *Participant Exclusion Conditions*

The ESA Technical Officer, possibly upon recommendation of the Novespace's Campaign Manager, shall end at any time during the campaign the participation of a participant to the ESA campaign in case of infringement to any conditions laid down in the present ESA Terms and Conditions document and, in general, if the behaviour of the participant is not appropriate and compatible with a safe and proper conduct of the campaign on ground and in-flight operations.

Depending on the circumstances, the excluded participant shall not be authorized to participate to the campaign ground and/or in-flight operations or shall not be authorized to access the ESA campaign location and/or the Novespace's facilities.

ANNEX 1

FIRST “ESA TERMS AND CONDITIONS ACCEPTANCE” FORM TO BE SIGNED BY ALL EXPERIMENT PRINCIPAL COORDINATORS

NOTE:

In order to be allowed to participate to an ESA campaign, the ESA Parabolic Flight Participants shall sign the latest approved version of the present form.

FIRST “ESA TERMS AND CONDITIONS ACCEPTANCE” FORM

I, the undersigned,
(*Name, title and affiliation*), hereinafter designated the “Experiment Principal Coordinator”, do give my informed consent to have my experiment “.....” (*Title of the experiment*) participating and performed in the ESA Parabolic Flight Campaign organised by ESA through Novespace on board the Airbus A300 ‘Zero-G’ taking place at Bordeaux-Mérignac, from to (*campaign dates*).

Referring to the document “Terms and Conditions for Participation in ESA Parabolic Flight Campaigns” (ref. PF-ESA-TN-001, iss. 1, rev. 0), I do understand and fully agree on all of the following points.

1. ESA Terms and Conditions

The Experiment Principal Coordinator :

- has verified that he has the authority to fill in, sign and approve this form or that he has seek and obtain from a legally responsible person within his home institution the authorization to fill in, sign and approve this form;
- has read, understood, approved and will comply with the content of the document “Terms and Conditions for Participation in ESA Parabolic Flight Campaigns”, in particular sections 6 and 7;
- in case of a joint experiment with other institutions or with industrial contractors, has obtained from the legally responsible persons of these other institutions and/or industrial contractors their approval to have the experiment participating and performed in the ESA Campaign.

2. ESA Liability Release (*Not applicable to ESA Staff members*)

The Experiment Principal Coordinator:

- consents to release ESA and its parties from any liability, which may arise from his the participation of his experiment in the ESA Parabolic Flight Campaign, its preparatory activities, on ground and in-flight operations and post-flight activities;
- shall not make any claim against ESA and/or its parties for damage to, or loss of his or his parties' property, or for injury to his parties' personnel involved in the ESA Parabolic Flight Campaign activities, which is caused by ESA and/or its parties, whether such damage or injury arises through negligence or otherwise;

ESA shall not make any claim against the Experiment Principal Coordinator and/or its parties for damages to, or loss of his or his parties' property, or for injury to him or his parties' personnel involved in the ESA Parabolic Flight Campaign activities, which is caused by the Experiment Principal Coordinator’s experiment and/or the Experiment Principal Coordinator’s parties, whether such damage or injury arises through negligence or otherwise.

"ESA and its parties" shall mean the European Space Agency (ESA), Novespace, other Participants, all contractors and/or sub-Contractor at every tier of all of the aforementioned (including experiment developers and owners), as well as all the employees of all of the aforementioned. "The Experiment Principal Coordinator and its parties" shall mean the Experiment Principal Coordinator, all contractors and/or sub-Contractor at every tier of all of the aforementioned, as well as all the employees of all of the aforementioned. Damage shall not only

mean bodily injuries to or death of any person, damage to or loss of any property, but also loss of revenue or profits or other direct or indirect consequential damages arising thereof.

3. Insurance Coverage (*Not applicable to ESA Staff members*)

The Experiment Principal Coordinator declares that :

3.1 he has verified with his employer's insurance policy or private (life) insurance policy, that his team members, their heirs, and their social security are adequately covered against risk of injury or death which may be caused by the participation of his experiment to the ESA Parabolic Flight Campaign, and that he has obtained from the above insurer his waiver of subrogation rights against ESA and/or its parties.

(*Reference of insurance policy:.....*)

3.2 he is informed of the insurance subscribed by ESA through Novespace to cover his team members during flights only for them, their heirs' and their social security's benefit with a Limit of Coverage of 150.000 Euros and of the possibility to subscribe a complementary insurance coverage at his own cost.

3.3 he has / has not (*delete as applicable*) subscribed a complementary insurance coverage, and in case he has subscribed a complementary insurance coverage, he has obtained from the insurer his waiver of subrogation rights against the Agency and/or its parties.

4. Image Rights

The Experiment Principal Coordinator agrees:

- that he has been informed about the French law related to the '*Droits à l'Image*' (Image Rights or Right of Publicity), its applicability to the parabolic flight activities, and the purpose, coverage, and his related responsibility;
- to indemnify and hold ESA and/or its parties harmless from any action, claims of any nature whatsoever arising out of, or in any way relating to the photographs or videos or films made;
- to give his consent to ESA and its parties, to use, without any prior authorisation or compensation, any photographs and/or videos and/or films, where his experiment would appear, as far as they remain for the purposes and in the context of the parabolic flight activities;
- to keep ESA and its parties harmless from any claim arising out of or in any way related to the photographs and/or videos and/or films, where his experiment would appear as far as they remain for the purposes and in the context of the parabolic flight activities.

ESA shall endeavour to keep the Experiment Principal Coordinator and/or his parties harmless from any claim arising out of or in any way related to the photographs and/or videos and/or films, where an ESA personnel would appear, as far as they remain for the purposes and in the context of the parabolic flight activities. The application of this provision does not extend however to photographs and/or videos of property items, persons, situations as have been outlined to the Experiment Principal Coordinator.

5. Applicable law and Dispute Settlement

5.1 It is agreed that all the provisions of the present ESA Terms and Conditions form shall be given the widest application permissible under the laws of France.

5.2 Any dispute, controversy or claim arising out of or in connection with this form, or the breach, termination or invalidity thereof shall be finally settled by arbitration in accordance with the Arbitration Rules of International Chamber of Commerce. The Arbitral tribunal shall be composed of three arbitrators. The Arbitration Tribunal shall sit in Paris (France). The language to be used in the arbitral proceedings shall be English.

Read and Agreed

Experiment Principal Coordinator's signature:

Place, date

ANNEX 2

SECOND “ESA TERMS AND CONDITIONS ACCEPTANCE” FORM

TO BE SIGNED BY ALL CAMPAIGN PARTICIPANTS

PRESENT AT THE ESA CAMPAIGN LOCATION

WHETHER FLYING OR NOT

NOTE:

In order to be allowed to participate to an ESA campaign, the ESA Parabolic Flight Participants shall sign the latest approved version of the present form.

SECOND “ESA TERMS AND CONDITIONS ACCEPTANCE” FORM

I, the undersigned,
(Name, title and affiliation), hereinafter designated the “Participant”, do give my informed consent to participate in the ESA Parabolic Flight Campaign organised by ESA through Novespace on board the Airbus A300 ‘Zero-G’ taking place at Bordeaux-Mérignac, from to (campaign dates).

Referring to the document “Terms and Conditions for Participation in ESA Parabolic Flight Campaigns” (ref. PF-ESA-TN-001, iss. 1, rev. 0), I do understand and fully agree on all of the following points.

1. ESA Terms and Conditions

The Participant has read, understood, approved and will comply with the content of the document “Terms and Conditions for Participation in ESA Parabolic Flight Campaigns”, in particular sections 6 and 7.

2. ESA Liability Release (Not applicable to ESA Staff members)

The Participant:

- consents to release ESA and its parties from any liability, which may arise from his participation in the ESA Parabolic Flight Campaign, its preparatory activities, on ground and in-flight operations and post-flight activities;
- shall not make any claim against ESA and/or its parties for damage to, or loss of his or his parties' property, or for injury to him or his parties' personnel involved in the ESA Parabolic Flight Campaign activities, which is caused by ESA and/or its parties, whether such damage or injury arises through negligence or otherwise.

ESA shall not make any claim against the Participant and/or its parties for damages to, or loss of his or his parties' property, or for injury to him or his parties' personnel involved in the ESA Parabolic Flight Campaign activities, which is caused by the Participant and/or its parties, whether such damage or injury arises through negligence or otherwise.

"ESA and its parties" shall mean the European Space Agency (ESA), Novespace, other Participants, all contractors and/or sub-Contractor at every tier of all of the aforementioned (including experiment developers and owners), as well as all the employees of all of the aforementioned. "The Participant and its parties" shall mean the Participant, all contractors and/or sub-Contractor at every tier of all of the aforementioned, as well as all the employees of all of the aforementioned. Damage shall not only mean bodily injuries to or death of any person, damage to or loss of any property, but also loss of revenue or profits or other direct or indirect consequential damages arising thereof.

3. Insurance Coverage (Not applicable to ESA Staff members)

The Participant declares that :

- 3.1 he has verified with his employer’s insurance policy or private (life) insurance policy, that he, his heirs, and his social security are adequately covered against risk of injury or death which may be caused by his participation to the ESA Parabolic Flight Campaign, and that he has obtained from the above insurer his waiver of subrogation rights against ESA and/or its parties.
(Reference of insurance policy:.....)

3.2 he is informed of the insurance subscribed by ESA through Novespace to cover him during flights for his own, his heirs' and his social security's benefit with a Limit of Coverage of 150.000 Euros and of the possibility to subscribe a complementary insurance coverage at his own cost.

3.3 he has / has not (*delete as applicable*) subscribed a complementary insurance coverage, and in case he has subscribed a complementary insurance coverage, he has obtained from the insurer his waiver of subrogation rights against the Agency and/or its parties.

4. Image Rights

The Participant agrees:

- that he has been informed about the French law related to the '*Droits à l'Image*' (Image Rights or Right of Publicity), its applicability to the parabolic flight activities, and the purpose, coverage, and his related responsibility;
- to indemnify and hold ESA and/or its parties harmless from any action, claims of any nature whatsoever arising out of, or on any way relating to the photographs or videos or films he made;
- to give his consent to ESA and its parties, to use, without any prior authorisation or compensation, any photographs and/or videos and/or films, where he would appear, as far as they remain for the purposes and in the context of the parabolic flight activities;
- to keep ESA and its parties harmless from any claim arising out of or in any way related to the photographs and/or videos and/or films, where he would appear as far as they remain for the purposes and in the context of the parabolic flight activities.

ESA shall endeavour to keep the Participant and/or his parties harmless from any claim arising out of or in any way related to the photographs and/or videos and/or films, where an ESA personnel would appear, as far as they remain for the purposes and in the context of the parabolic flight activities. The application of this provision does not extend however to photographs and/or videos of property items, persons, situations as have been outlined to the Participant.

5. Applicable law and Dispute Settlement

5.1 It is agreed that all the provisions of the present ESA Terms and Conditions form shall be given the widest application permissible under the laws of France.

5.3 Any dispute, controversy or claim arising out of or in connection with this form, or the breach, termination or invalidity thereof shall be finally settled by arbitration in accordance with the Arbitration Rules of International Chamber of Commerce. The Arbitral tribunal shall be composed of three arbitrators. The Arbitration Tribunal shall sit in Paris (France). The language to be used in the arbitral proceedings shall be English.

Read and Agreed

Participant's signature:

Place, date