

ARTICLE 3 - UNIVERSITY OBLIGATIONS

The University will use its best efforts to organize, direct, and administer the research activities of the VIV Program in accordance with the terms of this Member Agreement. The University will, to the extent possible, take Members' suggestions into account in selecting research topics, adopting research methodology, and directing research in an effort to maximize use of membership fees. The University intends to:

- Focus recent breakthroughs in Computational Fluid Dynamics (CFD), nonlinear dynamics and control, generation of design models using nonlinear identification techniques, and structural dynamics to understand and quantify VIV problems
- Execute the project in phases that are dependent on Members' technical input and funding levels
- Encourage VIV experts to participate and share knowledge in an effort to stimulate worldwide research

ARTICLE 4 – ORGANIZATION

4.1 Program Director. The VIV Program will be under the direction of a Program Director appointed by the University. The Program Director will manage the overall activities of the VIV Program, including coordinating research activities and establishing the operating and research budget.

4.2 Advisory Board.

- 4.2.1 An Advisory Board shall be established to review research, provide advice and make recommendations to the Program Director in developing strategic plans, directions, and policy for the VIV Program. The Advisory Board shall recommend research priorities in view of international, national, and regional needs.
- 4.2.2 Each Member shall be entitled to have one representative on the Advisory Board. These representatives may be replaced at any time at the election of the respective Member. The Program Director and two additional representatives from the University shall be on the Advisory Board.
- 4.2.3 The Advisory Board shall meet at least annually and at such other times as requested by the Program Director. Meetings may be held in person or by conference call. To the extent possible, thirty (30) days notice will be provided prior to the meeting.
- 4.2.4 The Program Director shall be the Chair of the Advisory Board and will preside over the board meetings and be responsible for maintaining communications with board members.

ARTICLE 5 – MEMBER BENEFITS

All Members shall be entitled to the following benefits that accrue during their membership period:

- 5.1 Information access. Members will be provided early access to research results from membership sponsored research through interactions with faculty and students and Member participation in the VIV Program activities. Copies of the final reports, papers, theses, and dissertations produced as a result of the VIV Program will be distributed to all requesting Members free of charge.

5.2 Visiting engineering program. Members will be offered access to University facilities to work with VIV Program faculty, staff, and students.

5.3 Access to students and faculty. Members will have the opportunity to interact with students in the VIV Program for purposes of research activities and recruitment. Faculty members will be available to discuss project results and industry needs.

5.4 Seminars and Short Courses. Professional seminars and short courses in the general area of VIV Program will be offered to members free of charge.

5.5 Deliverables. Members will have access to technical reports and data resulting from VIV Program research. It is anticipated that software modules will be developed to calculate and simulate VIV on marine slender structures.

5.7 Intellectual Property.

5.7.1 Access to information. Members will have access to potentially patentable early-stage concepts and other confidential research information prior to public disclosure to better enable Members to do early product planning and guide internal research direction in an effective manner. Members are also entitled to attend confidential briefings that may be scheduled from time to time as part of VIV Program meetings or special events.

5.7.2 Intellectual Property. The University will retain ownership of intellectual property generated by the University under research sponsored by membership fees and provide Members with the following rights to such intellectual property created during their membership.

5.7.2.1 Software deliverables. Members will have the option to obtain a nonexclusive, worldwide, nontransferable, royalty-free license to use, and to permit its outside contractors to use on its behalf, subject to the same confidentiality required of Members, in the area of vortex induced vibrations, those software programs designated as project deliverables and developed under projects sponsored by Members' fees.

5.7.2.2 Inventions. Subject to defraying patent costs, Members will have the option to obtain a nonexclusive, royalty-free, non-transferable (except to Member's subsidiaries) license to University inventions created or first reduced to practice under VIV Program research sponsored by Members' fees.

5.7.2.3 Option period. Members shall have three (3) months after they have been notified of an invention disclosure to evaluate their interest in exercising their options for a license and to provide notice if the option is to be exercised. By exercising their option on inventions, they will be agreeing to pay patenting costs, equally sharing them with all other Members who have exercised their option on the disclosure. If the option for license to an invention is exercised, the University will not issue or start negotiating licenses to others for a period of two (2) years from the date of the invention disclosure to the University. Following

the three (3) month election period, if no Member has exercised its option, the University shall be free, in its sole discretion, to issue license rights to third parties, as it deems appropriate.

ARTICLE 6 – COSTS AND PAYMENT

The Member agrees to pay the annual fee as indicated for the membership selected under this Member Agreement. Payments shall be made to Virginia Tech Foundation and mailed to Dr. Ali H. Nayfeh, ESM, MC 0219, Virginia Tech, Blacksburg, VA, 24061-0111.

All membership fees will be maintained in a separate account and shall be expended for wages, supplies, equipment, travel, and other expenses in connection with the VIV Program. The title to all equipment purchased for the VIV Program with membership fees shall vest in the University.

The University will keep complete and systematic written financial records related to the VIV Program. All such records will be available for inspection by a designated representative on the Advisory Board, and copies of all or any part of such records shall be furnished to the Advisory Board upon request.

ARTICLE 7– TERM AND TERMINATION

The term of this Member Agreement is for the one (1) year period as designated in Article 1, and will automatically renew for successive one-year periods unless terminated by written notice from either Member or University. Members may be admitted during the year upon the recommendation of the Advisory Board and agreement of the Program Director. Partial year Member benefits (such as IP rights and access to information) will be determined on a case-by-case basis by the Program Director based upon the membership dues and the status of the research projects.

This Member Agreement may be terminated by the mutual consent of the parties or 30 days after written notice from the Member. In the event that either party commits a material breach or default in any of the terms or conditions of this Member Agreement, and that party fails to remedy that default or breach within sixty (60) days after receipt of notice from the other party, the party giving notice may, at its option, terminate this Member Agreement effective within another sixty (60)-day period. Except in the case of default by the University, early withdrawal will not entitle Member for refund on a pro-rata basis.

ARTICLE 8- CONFIDENTIAL INFORMATION

During the performance of activities under the VIV Program, it may be necessary for Members and University to make confidential technical or business information available. Any such confidential information shall be disclosed in writing and labeled with an appropriate proprietary legend. When verbally or electronically disclosed, the confidential information shall be designated as confidential at the time of such disclosure, with subsequent confirmation provided in writing within thirty (30) calendar days following such disclosure, referencing the date and description of the confidential information disclosed with an appropriate proprietary legend affixed thereto.

The Members and University agree to use all such information solely for purposes of the VIV Program, to hold all such information in confidence, to disclose it only to those with a need to

know for purposes of the VIV Program, and not to copy or disclose same to any third party who is not under these same obligations.

There shall be no obligation for any Party to safeguard such confidential information if it can show that such confidential information:

1. is or becomes publicly available through no fault of the Party;
2. was known by Party or its affiliates prior to receipt or development of such confidential information pursuant to this Member Agreement;
3. is independently developed by or for Party or its affiliates without use of the relevant confidential information, as evidenced by written documentation;
4. is disclosed to Party or its affiliates on a non-restrictive basis without misappropriation of any trade secrets and without any direct or indirect breach of confidentiality; or
5. is required by law to be disclosed.

ARTICLE 9- WARRANTY AND LIABILITY

9.1 University represents that it has adequate liability self-insurance, such protection being applicable to officers, employees, and agents while acting within the scope of their employment. University has no liability insurance policy as such that can extend protection to any other person.

9.2 Member agrees to be responsible and assume responsibility for its own wrongful or negligent acts or omissions, if any, pertaining to its participation hereunder, or those of its own officers, agents, or employees to the full extent required by law.

9.3 Member hereby agrees to defend, indemnify and hold University harmless against all claims, demands, losses, damages, causes of action, and other liabilities of every kind (whether based in contract, tort, or other legal theory) by all parties for personal injury, death, or property damage or loss which arises out of or results from any use of the VIV Program results by Member, its affiliates, or any third party to which Member may extend the right to use the VIV Program results, even if such claims, demands, losses, damages, causes of action, and other liabilities result, in whole or in part, from the negligence of any other VIV Member.

9.4 No Member will be liable to any other party, or any of their Affiliates, or any contractor or third party operators for any damages to any well, platform, equipment, or other property, or for injury to any person as a result of any use by the Party or their affiliates of the data and information obtained from the VIV Program. In no event shall any party be liable to any other party for any consequential, indirect, incidental or special damages, including loss of profit or business interruption arising out of the use, inability to use, or from any other claim arising from this Member Agreement.

9.5 EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, UNIVERSITY DISCLAIMS ANY AND ALL OTHER WARRANTIES; EXPRESS AND IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE 10- MISCELLANEOUS

- 10.1 No Member shall use the name of another Member in any advertising or publication relating to the subject matter of this Member Agreement without that other Member’s prior written consent.
- 10.2 The validity and interpretation of this Member Agreement will be governed by the laws of the Commonwealth of Virginia, without regard to the conflicts of laws provisions thereof.
- 10.3 This Member Agreement may be assigned by either party to any of its Affiliates, but may not otherwise be assigned without the party’s prior written consent, which will not be unreasonably withheld.
- 10.4 The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Member Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition or any other term or condition by the other party
- 10.5 Each clause of this Member Agreement is a distinct and severable clause, and if any clause is deemed illegal, void or unenforceable, the validity, legality or enforceability of any other clause or portion of this Member Agreement will not be affected thereby. This Member Agreement states the entire understanding between University and Member and supersedes, cancels and merges all prior representations, understandings, covenants, or agreements, whether oral or written with respect to VIV Program. No change, alteration, or modification to this Member Agreement will be effective unless it is in writing and signed by the authorized representatives of both University and Member.

In consideration of the foregoing terms and conditions, the parties through duly authorized representatives have executed this Member Agreement.

MEMBER: _____

**VIRGINIA POLYTECHNIC
INSTITUTE AND STATE UNIVERSITY**

By: _____

By: _____

Typed Name: _____

Typed Name: Dr. Ali H. Nayfeh

Title: _____

Title: VIV Director

Date: _____

Date: _____

