NLGI Editorial Guidelines For Draft Papers Submitted for Publication in the NLGI Spokesman

1. Draft papers are to be written to conform to the draft paper template document separately provided. Note that the paper title should be bold Ariel 14 centered. Each of the authors and their company affiliations should be bold Ariel 11 centered under the title with at least one blank line between the title and the first listed author. At the discretion of the authors, the presenter(s) may have their names and company affiliations underlined. Main section headings as listed in the draft paper template document should be bold Calibri 12 in all caps. The entire text should be Calibri 12 (non-bold). The font style and size of all tables and figures are at the discretion of the authors. However, selections that readers will find clear and visually appealing are preferred. Also remember that the transfer of the final version of a draft paper to the Spokesman will preserve the exact appearance of both the text and all tables and figures. Therefore, tables and figures should be done in such a way as to be visually compatible with the appearance of the text font style and size (Calibri 12). Finally, all text, including all section headings and subsection headings (if any) are to be equally left justified. No paragraphs of text should be indented.

2. The total size of the paper should not exceed 10MB, including all tables and figures. See items 4 and 5 for additional information regarding tables and figures.

3. Regarding the listing of authors under the title of the paper, each author and his or her academic institution should be listed separately, centered on a given line of text. If there are multiple authors representing more than one company or academic institution, authors should be listed as described above with all the authors of any given company or academic institution listed before listing the authors of another company or academic institution. This order of listing of authors will also be the way it will appear in the Table of Contents in the Spokesman issue in which the final version of the paper is published. Note that for multiple author papers, the first listed author is considered the lead author. See item 23 for a responsibility directed to the lead author.

4. All tables and figures should appear within the draft paper text at their appropriate places. Tables and figures are not to be placed together as a separate group at the end of the paper. Do not wrap text around or to the sides of any table or figure. All tables and figures should appear below a line of text (at the appropriate place in the text of the paper). There should be at least one blank line between the text and both the top and bottom of each table and figure. The text of the paper should continue after the table or figure, but not to either side of the table or figure.

5. Figures may be numbered (Figure 1, Figure 2, etc) or alphabetized (Figure A, Figure B, etc.). The title of each figure should appear with its number or letter. This may occur either above or below each table and figure. However, it must be done consistently one way or the other for all Tables and Figures. Also, the titles of each Table and Figure along with its number or letter must be part of the Table or Figure that is cut and pasted into the paper. Labeling Tables and Figures as a line of text apart from the cut and pasted Table or Figure is not allowed.

6. Figures and tables must be input within the text as high resolution pictures, not as data files. The imbedding of data file figures and tables results in an extremely large file size for the resulting draft paper. Such a large file size will cause problems when sending the draft paper to peer-reviewers. The size of the paper with all tables and figures imbedded must be of a size that allows it to be attached to an email, then emailed to and received by the technical editor without any file compression, as well being able to be passed along to peer reviewers for the review process (i.e. 10MB or less).

7. Optionally, if tables and figures can be provided separately as jpeg files, those jpeg files can be sent to the NLGI Technical Editor once the draft paper has been peer-reviewed and the authors have revised their draft into the final version. Such jpeg files will typically be of higher resolution and may enhance how they appear in the final published form in the Spokesman. Note that conversion of tables and figures to jpeg files should only be done once the final version of the draft paper is ready to be sent to the NLGI for publication. Also note that regardless of whether or not the tables and figures are provided as jpeg files, they still need to remain in their picture format imbedded within the text of the final revised version as described in item 4. This is so that the NLGI will know where to substitute the jpeg versions within the text of the paper during final transfer to the Spokesman format, assuming such jpeg versions are provided.

8. Papers must be original for the NLGI Spokesman to the extent that they have not been published or previously submitted for publication in their entirety elsewhere.

9. At least two references of papers previously published in the NLGI Spokesman are required. Authors are strongly encouraged to cite at least one issue patent (from any country) as a reference OR cite at least once the NLGI Lubricating Grease Guide, 7th Edition (including chapter and page number). Citation of other papers, articles, and books as appropriate are encouraged. One of the hallmarks of a well-written scientific paper is a reasonably adequate (although not necessarily exhaustive) review of the directly relevant prior literature. Every reasonable effort should be made to sufficiently cite the prior literature relating to the paper. If during the peer-review process the peer-reviewers comment that additional prior literature should have been cited, they may require such additional citing. If this occurs, the authors will have to comply with any such comments during their revision of the draft paper. Whenever any previous work is discussed, it must be appropriately cited as a reference. Documents found only on the internet are also allowed as cited references if their citations are adequately provided in the Reference section. Any information that is discussed within the draft paper that was provided to the authors by a specific private communication must be fully cited as a reference unless that private communication is proprietary. In such cases, the

private communication must still be cited as a reference but not fully, with the citation indicating that it is a proprietary communication.

10. References are not allowed in the ABSTRACT section or the CONCLUSIONS section. They are allowed in the any and all of the sections between the ABSTRACT and CONCLUSIONS sections.

11. All reference indicators must appear within the paper by in-line-of-text brackets, not parentheses. For instance, [1] is acceptable, while (1) is not. If the reference indicator appears at the end of a sentence, provide the bracketed reference indicator at the end of the sentence followed immediately by the period. Do not put bracketed reference indicators after periods. Note that superscripting of reference indicators within the text is not allowed. Such superscripting will cause problems with the software used to transfer the final version of the draft paper to the Spokesman format. Each reference should be listed as a separate numbered reference. Do not group multiple references together under one number.

12. Any figures or tables taken from external sources must be cited in the same way as any other reference, as previously described.

13. Do not use specific brand names for lubricants, greases, instruments, or stock chemicals used in your work.

14. Use scientific names for all reagent chemicals without mentioning the supplier company. Use generic chemical and raw material names for all additives and other components without reference to the supplier or their commercial brand names. For instance, the following are examples of acceptable usage: 2, 6-di-tertiary butyl phenol, high MW polymethacrylate, styrene-alkylene copolymer, sulfurized poly-isobutylene, barium di-nonyl naphthalene sulfonate, Group 1 paraffinic base oil, PAO, PAG, lithium 12-hydroxystearate.

15. Starting with the Introduction section, all abbreviated terms and acronyms must be fully spelled out with their first occurrence and with the abbreviated form or acronym appearing parenthetically after it. After this first occurrence, the abbreviation or acronym may be used without further explanation. Note that abbreviations and acronyms are not allowed in the Abstract section. The only exception to this is for abbreviations or acronyms that are extremely well-known – PAO for example.

16. Regarding scientific/technical content, sufficient detail for all experimental work must be disclosed so that any reader with ordinary skill and knowledge in lubricating grease science could reasonably repeat the reported work with reasonable likelihood of obtaining the same results.

17. If certain aspects of the reported work are proprietary, then the author(s) must openly and explicitly state as much. Under these circumstances, the authors must explicitly list all aspects that are proprietary.

18. However, it is not allowed to claim a detail of work to be proprietary when such a detail is clearly not so. For instance, if a lithium 12-hydroxystearate grease or a typical lithium complex grease (12-hydroxystearate/azelate or 12-hydroxystearate/sebecate) is made by typical procedures well documented in the open literature for 50 years, the authors are required to disclose the detailed composition and the detailed manufacturing process whereby that grease was made. To claim that such details are proprietary has no basis in fact. If such examples cannot be fully disclosed, then they must not be included in the draft paper. If the grease is of a well-established type, and if neither the composition nor the manufacturing process is a novel and central feature of the paper, the authors must disclose sufficient compositional and manufacturing process information so that the reader could duplicate the work with a reasonable chance of obtaining the same results.

19. If the authors used greases provided by an outside company (instead of making the greases themselves), the same restrictions as detailed above in item 18 apply. If such greases are base greases such as a lithium 12-hydroxystearate grease or a typical lithium complex grease (12-hydroxystearate/azelate or 12-hydroxystearate/sebecate), the company providing those greases must provide the same information as would be required if the authors had made the greases themselves.

20. With regard to items 18 and 19, full disclosure of composition and manufacturing process details that must be disclosed for clearly non-proprietary greases include the following:

    a. Base oil type. Unless a new and proprietary base oil is a novel and central feature of the paper, the base oil type must be disclosed. This is required for all such base oils used. Acceptable base oil descriptions include: Group I, Group II, Group III, Group III+, naphthenic, PAO, mPAO, di-ester, polyol ester, alkylated naphthalene, estolide, silicone fluid

    b. Base oil viscosity data. For each non-proprietary base oil used, the viscosity as measured for at least one specified temperature is required.

    c. Thickener type. Well established thickener types such as simple lithium soap, lithium complex, anhydrous calcium soap, simple aluminum soap, aluminum complex, polyurea, calcium sulfonate complex, organo-bentonite, organo-hectorite, etc. must be disclosed if used.

    d. Thickener concentration. For each grease where a non-proprietary thickener type is used, the concentration of the thickener, preferably in wt%, must be provided for each such grease.

    e. Unreacted thickener component concentration. For all greases where a non-proprietary thickener type is use by chemically forming it in-situ, and for which an unreacted excess residue of one of more of the thickener reactants is present in the final grease, the concentration of each such unreacted excess residue, preferably in wt%, must be provided for all such greases.

f. A general description of how each non-proprietary grease was made. Alternatively, if the grease (or greases) was made according to a previously published patent or paper, it is acceptable to cite that patent or paper as the method for making that grease (or greases).

g. What type of mill was used and the setting used for that mill.

21. Papers must not evaluate a specific aspect of lubricating grease science in a way that is contrary to the well-established pattern of actual usage or testing protocol without at least acknowledging that such a deviation was being done and providing an explanation as to why the deviation was done. For instance, if a base oil and/or additive is being evaluated in a grease for a very specific commercial application, and if a thickener type is chosen that is rarely used in that commercial application, the authors are required to acknowledge that they have chosen a rarely used thickener for the application covered in their paper instead of choosing the thickener(s) usually used, and they must provide a reason for doing this. If for whatever reason, the authors cannot do this, then such examples should not be included in the draft paper.

22. Evaluation of commercially available products are allowed in a draft paper. However, the commercial name of the product and/or the name of the manufacturer/marketer must not be named. Furthermore, any and all commercial products that are evaluated or in any way part of the material discussed in the draft paper must be treated in one of only two ways:

    a. Give sufficient compositional and manufacturing procedure information, at least in generic chemical and processing terms, so that the commercial product is not a "chemical black box". For instance, it is allowed to say that a commercial grease was made according to the scope of U.S. Patent ________. It is also allowed to say that a commercial product was made according to the composition and manufacturing details as described in a specific example of a specific paper, with the example number and paper citation plainly provided.

    b. Treat the commercial product explicitly as a chemical black box and *openly and explicitly* acknowledge that fact within the text of the draft paper. If this approach is used, then it is forbidden to make claims about the commercial product such as "used for many years with excellent results" or "made by the latest technology" or "made using the most recent advances in the chemistry of such products". If the commercial product is being treated as a chemical black box in the draft paper, then no such representations are allowed. However, treating a grease as a chemical black box is not allowed if it falls into the description provided in items 17 and 18.

23. Do not use first person. Instead, if the authors must be explicitly mentioned within the text, use third person. For instance, "We evaluated 15 greases spanning 5 different thickener systems" is not acceptable. Instead, "The authors evaluated 15 greases spanning 5 different thickener systems" is acceptable. Another acceptable way is to use the passive voice: "Fifteen greases spanning 5 different thickener systems were evaluated."

24. Use SI (metric) units for all measured properties for which such units exist. If a measured property does not have a recognized SI unit, then use the unit that is customary. For instance, penetration should be expressed as 0.1 mm.

25. Express all temperatures in Celsius or in Celsius and Fahrenheit. Do not express temperatures in only Fahrenheit. If both temperature measurements are provided, provide the Celsius value first, and provide the Fahrenheit value parenthetically immediately after it. Do not use the superscript "degree symbol". Instead, use only capital C and F after the numerical value. For instance: 100 C, or 100 C (212 F).

26. All papers must be written using correct English grammar and usage throughout the entire paper. If the author (for single author papers) or at least one of the authors (for multiple author papers) does not have excellent command of English language grammar/usage, then the author(s) must hire a professional technical writer with such English language skills to re-write the draft paper before it is submitted to the Technical Editor for peer-review.

27. If the author(s) do not know of or otherwise have access to such a professional technical writer, please contact the Technical Editor for a recommendation of such a person.

28. The use of active and passive voice are at the discretion of the authors. However, exclusive use of the passive voice is not recommended since such use tends to impart a pretentious air to the paper.

29. It is the responsibility of the author (for single author papers) or the lead named author (for multiple author papers) to verify that the draft paper fully complies with all these guideline requirements before submitting it to the Technical Editor.

30. Draft papers complying with the guidelines provided in this document and within the draft paper template document must be submitted to the NLGI Technical Editor by the deadline provided for such submission.

31. Once the draft paper has been submitted to the NLGI Technical Editor, it will be sent to at least two peer-reviewers.

32. If the peer-reviewers determine that the draft paper does not fully comply with the draft paper template and author guidelines, the draft paper will be returned to the authors for revision. No further peer-review will be done until full compliance is achieved. It should be noted that it is not the job of the peer-reviewers to correct non-compliances to the draft paper template and author guidelines.

33. Once the NLGI Technical Editor has received the comments from the peer-reviewers concerning the fully compliant draft paper, that information will be sent to the authors so that the draft paper can be accordingly revised.

34. If the peer-reviewers indicate that certain scientific/technological changes must be made, the authors are required to either make those changes or provide solid scientific reasons why the suggested changes are wrong. Those reasons, if provided, must be provided as an enumerated list in an email or in an attached Word document. They must not be provided as comments within a Track Change edited version of the draft paper. If the peer-reviewers make suggestions regarding writing style where no actual grammar problems are involved and where no scientific issues are involved, then the authors are free to either adopt or reject any such suggestions during their revision of the draft paper.

35. Once the authors have revised their paper in accordance with the comments of the peer-reviewers, the revised version must be sent back to the NLGI Technical Editor. Depending on the number and extent of revisions that were required by the peer-reviewers, a second round of peer-review may be required at the discretion of the Technical Editor. Once it is deemed that no further issues with the paper exist, it will be sent to the NLGI for publication in the NLGI Spokesman according to a schedule determined by the Technical Editor and the Executive Director. As indicated above, if jpeg versions of the finalized tables and figures are available, they should be sent to the Technical Editor at the same time the final revised paper is sent.