

ENGINEERING PRACTICE STUDY
TITLE: RE-NAMING THE COMMERCIAL HYDRAULIC FLUID FOR
MIL-DTL-83528D
PROJECT NUMBER 5945-2012-001

17 April 2012

STUDY PROJECT

FINAL REPORT

Study Conducted by Erika Baker

Prepared by:

Erika Baker

ENGINEERING PRACTICE STUDY

Investigation of modifying the requirements for the commercial hydraulic fluid, for MIL-DTL-83528D

- I. **OBJECTIVES:** Survey the manufacturers and document custodians/reviewers to determine the acceptability of modifying MIL-DTL-83538D commercial hydraulic test fluids from M2-V Chevron oil ST0145LB0001 or equivalent oil to Exxon Coolanol OS-59 or equivalent oil.
- II. **BACKGROUND:** At this time, MIL-DTL-83528D requires M2-V chevron oil ST0145LB0001 or equivalent as the commercial hydraulic fluid. However, the Chevron oil ST0145LB0001 is no longer available. Allowing the replacement of Exxon Coolanol OS-59 or equivalent oil would allow an obtainable fluid.
- III. **RESULTS:** A survey letter was sent to all QPL manufacturers and document custodians/reviewers. The response identified some manufactures only have access to M2-V Chevron oil ST0145LB0001 while other manufacturers only have access to Exxon Coolanol OS-59 or equivalent oil. As a result, the commercial hydraulic test fluid will support M2-V Chevron oil ST0145LB0001 or equivalent and Exxon Coolanol OS-59 or equivalent oil.
- IV. **CONCLUSION:** It was determined that DLA Land and Maritime will update MIL-DTL-83528 to support the use of M2-V Chevron oil ST0145LB0001 or equivalent and Exxon Coolanol OS-59 or equivalent oil to fulfill the requirements of the commercial hydraulic test fluid.
- V. **RECOMMENDATION:** If there is a specific need to further modify MIL-DTL-83528D please notify Erika Baker (614) 692-4481 or Email Erika.Baker@dla.mil. I will be glad to work with the manufacturers and document custodians/reviewers to find a solution.

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