Notes re: R&D/Industry Relationships

1. Over the timeframe of DRB/CRAD/DRDC the approach to R&D has changed several times.

2. By the 1980's, it was a government directive that as much R&D as possible be contracted out as early as possible in the R&D cycle.

3. Note that there has always been a distinction between **R**esearch and **D**evelopment. Research has been almost exclusively the purvue of the research establishments and it was up to them to contract out as necessary. It is only recently that these research activities have become "transparent" to the DRDC HQ staff. On the other hand, the majority of development work was and is the responsibility of the HQ staff. This work may have been assigned to or suggested by the scientists in the labs (who in turn could have contracted to industry), or could have come in the form of a proposal from the naval engineering staff who would in turn manage the activity through industrial contracts.

4. For both research and development activities, there has always been a distinction between large/costly projects and small/inexpensive projects. Over time, these have had various designations, various hierarchical approval schemes and so on.

5. Since the formation of DRB post-WWII, there have been innumerable small contracts with industry. For example, in the late 1980's, there were about 80 extant naval minor development projects under way in industry. This number has decreased significantly in the past 10 years, but the overall total over time is very large. The question is "do we need to consider these?". The quick answer is "yes" and "no"! One has to sort the wheat from the chaff, so to speak and pick out those that were significant impact in industry in some form or another.

6. Large projects, of course, have been very much fewer and generally have had a greater impact on industry; they are also much easier to identify and winkle out data. These projects are now called Technology Demonstration Projects and at the moment there are about a half dozen underway that are navy related. I would hazard a guess (educated!!) that there have been about 75 of these projects since the mid to late 1960's. Not all of them carried through to fruition, however.

Barnhouse 17 Sep 03