Electroless Nickel Plating on Stainless Steels and Aluminum

The problem:
To develop effective procedures for applying an adherent electroless nickel plating on 303SE, 304, and 17-7PH stainless steels, and 7075 aluminum alloy. Plating with electroless nickel (a chemical reduction process for depositing a coating of nickel-phosphorus alloys without the use of electric current) requires special cleaning of the parts and precise process control for each type of metal to be plated.

The solution:
Detailed procedures for plating these metals with electroless nickel may be obtained by writing to:

Technology Utilization Officer
Goddard Space Flight Center
Greenbelt, Maryland 20771
Reference: B66-10479

Notes:
1. When heat treated, the electroless nickel plating provides a hard surface coating on a high strength, corrosion resistant substrate. This coating provides the antigalling characteristics of the electroless nickel and enhances the solderability of the substrate stainless steel or aluminum alloys.

Patent status:
No patent action is contemplated by NASA.

Source: General Electric Company under contract to Goddard Space Flight Center (GSFC-533)