Synthesis of advanced infrared sub-systems (search, track, terminal and direct) of Infrared Systems Group involved in: (1) Studies with competitors' proposals are investigated. Such as handling payload (i.e., cargo, passengers) and comparison of performance, etc.). In addition to configuration, special features of vehicles based on general parameters of missions (payload, propulsion, etc.) are examined. (2) Definition of models and parametric relationships, and (3) Development of the device and correlation of simulation studies, error analysis, and simulations. Studies cover wing and tail design as well as detailed control systems, equipment used in the guidance and control system, and the computers and the external organization of the associated military and space programs, involving internal logic design of the equipment and its associated testing. (4) Experience to design and integrate digital computers in advanced equipment. Engineers with advanced E.E. degree or particularly applicable experience to design and integrate digital computers in advanced equipment. (5) Maintenance of weld equipment, design tools, develop techniques and establish processes for all types of welds used in the unit, including weld settings for maintenance of equipment, maintenance of weld equipment, design tools, develop techniques, and establish processes for all types of welds used in the unit, including weld settings for maintenance of weld equipment. (6) Support of telemetry systems integration. This requires ability to represent the company in meetings with customers and associates, and systems providing inputs to telemetry systems, telecommunication, and data processing. (7) Support of telemetry systems integration. This requires ability to represent the company in meetings with customers and associates, and systems providing inputs to telemetry systems, telecommunication, and data processing. (8) Support of telemetry systems integration. This requires ability to represent the company in meetings with customers and associates, and systems providing inputs to telemetry systems, telecommunication, and data processing.