Once the implementation plan was completed, effectiveness analysis was performed to ensure that mission effectiveness goals and criteria were met. This included determining the deployment schedule, creating the maintenance schedule, and adhering to the limited performance capabilities of all assets, both legacy and new. After defining the deployment schedule, simulation techniques evaluated mission performance over a year-long period. The measures of merit were the successfully completed missions. Mission success measures were compared to system specifications and, when necessary, returned to the design team for additional analysis and refinement.

By using conventional operations research techniques of statistical analysis to summarise information and evaluate missions, the IPTs developed optimisation methods for defining the force structure and scheduling the acquisition, modernisation, and retirement of legacy systems. Finally, simulations were used to evaluate the effectiveness of the force structure. Together, these methods comprised a system of systems analysis and synthesis approach to solving the USCG's force structure modernisation challenge. Subsequently, this system of systems approach has been applied to several other customer programs. The unique feature of this technique is its ability to use standard systems engineering methods in conjunction with operations research techniques to provide an analytical basis for defining a system of systems and to verify that the derived results actually meet all customer requirements.

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Erratum

A theoretical description of viscous flow along a flat plate

R. C. Hastings (retired)
formerly Royal Aircraft Establishment, UK

p 585, col 2, equations (1),
replace "$2\ (p-p_0)/p_0 u_0^2$" b y "$2(p-p_0)/\rho_0 u_0^2$"

p 586, col 1, 14th line,
replace "$\partial^2/\partial X^2+\partial^2/\partial X^2$" by "$\partial^2/\partial X^2+\partial^2/\partial Y^2$"

p 587, col 1, equation (23),
replace "$(X-t_2)$" by "$(X-t_1)$"
col 2, 3rd line,
replace "Equa tions (3)" by "Equation (3)"

p 589, col 1, bullet point 2,
append the se ntence "The first approximation consists of drag poles only."
col 1, bullet point 3,
delete the se ntence "The first approximation consists of drag poles on ly."
col 1, Reference 7,
replace "Z a gnew" by "Z. angew"
col 1, Equation (A2)
delete "(" before "Y/R_m^2" and ")" after "$K_1(R_m/2)$"

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