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ADVISORY GROUP FOR AEROSPACE RESEARCH & DEVELOPMENT

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AGARD REPORT 826

Aircraft Design Integration and Affordability

(l'Intégration de la conception aéronautique et le coût de possession acceptable)

by

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This Advisory Report has been prepared at the request of the Flight Vehicle Integration Panel.



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14. Abstract			
<p>This AGARD Advisory Report, was from the Flight Vehicle Integration Panel input to the AGARD study Aerospace "2020". This report examines the difficult questions of capability and affordability. The report focuses on the relevant trends in operational requirements and the technologies available to achieve these requirements. The report considers the affordability of forces as a main issue for the future.</p> <p>Topics include: a discussion in operational requirements, the technology available, advanced structures and materials, system integration, types of air vehicles, and the affordability of forces.</p> <p>Technologies are assessed from the viewpoints of both potential capabilities and threats. Recommendations and conclusions are presented.</p>			

Aircraft Design Integration and Affordability

(AGARD R-826)

Executive Summary

This report preserves the input to the study Aerospace 2020 as submitted by Professor Luis Manuel Braga da Costa Campos of the Flight Vehicle Integration Panel of AGARD. The topics covered progress from a review of trends in operational requirements, to technology requirements, advanced structures and materials, systems integration, a discussion of the various types of systems, and affordability of forces. The report ends with a set of recommendations for future systems, as well as conclusions concerning the near- mid- and far-term alternatives.

This report provides an excellent review of the possibilities and challenges for the design of NATO air forces of the future. The various discussions, options, recommendations, and alternatives for action presented are notable for their vision and their breadth of scope. The report offers a thorough review of the topic, and should be of use and interest to anyone involved with the development of combat aircraft for future NATO missions.

L'intégration de la conception aéronautique et le coût de possession acceptable

(AGARD R-826)

Synthèse

Ce rapport résume la contribution du Professeur Luis Manuel Braga da Costa Campos, du Panel Conception intégrée des véhicules aérospatiaux de l'AGARD, à l'étude "Aéronautique et espace à l'horizon 2020".

Le sujets examinés couvrent les grandes tendances en matière de besoins opérationnels, les spécifications technologiques, les structures et matériaux avancés, l'intégration des systèmes, les caractéristiques des différents systèmes, et l'acceptabilité des coûts de possession. Le rapport se termine par une série de recommandations concernant les systèmes futurs, ainsi que par des conclusions sur les options à court, à moyen et à long terme.

Ce rapport offre un excellent résumé des possibilités et des défis en ce qui concerne la structure des futures forces aériennes de l'OTAN. Les différentes discussions, options, recommandations et solutions pour action présentées sont remarquables par leur vision et leur envergure. Ce document, qui représente une véritable analyse en profondeur du sujet, intéressera tous ceux qui sont impliqués dans le développement des avions de combat destinés aux futures missions de l'OTAN.