Sheet classification: Secret				
5550	tional	·	Document Classification	
- KALAN -	ronautical boratory		Secret	
Title : LCA Loading-Critical Load Cases for Wing Design			Document No. PD CW 9202	
			Date of issue: May 1992	
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Division	; National Tear	m, C-Wing	No. of copies: 30	
External participation	:		NAL Project No.	
Sponsor	: Aeronautical Bangalore	Development Agency,	Sponsor's Project No. ID 6 105	
Approval	: Dr K N Raju,	Dr K N Raju, Programme Director, C-Wing		
Remarks	:			
Keywords		loading, mass case, flight point, load envelope, load factor, roll manoeuvre load, critical loads, optimisation		
Abstract	Loading is an important phase of the Structural analysis and design cycle. In this phase, various loads acting on the aircraft during its operation are simulated on the structural model, and the internal stresses evaluated. In this report, the procedure for structural loading of LCA using ELFINI is described. The mass cases, flight points and load envelopes used for loading are listed. The critical load cases selected for using structural optimisation are presented along with justification for the selection.			