

**International Civil Aviation Organization  
UNDP/ICAO REGIONAL PROJECT RLA/98/003  
Transition to the CNS/ATM Systems in the CAR and SAM Regions**

**ACTIONS ADOPTED FOR WGS-84 IMPLEMENTATION**

1. From 22 to 26 May 2000, the Seminar/Workshop on WGS-84 was developed in the Centro de Estudios Aeronáuticos of Colombia, oriented to directly support aeronautical technicians from CAR/SAM States in the practical interpretation of the main technical requirements of the WGS-84 System; as well as the practical use of the GPS geodetics equipment, for the field surveys phase, as well as for the post-process phase. 17 aeronautical specialists from five States and one international organization participated: Bolivia, Colombia, Ecuador, Panama, Paraguay and COCESNA.
2. Between the months of September and December 2002, technical support was directly provided to Bolivia, Colombia, Panama, Peru and Venezuela, developing field geodetics works in the main international airport of each State and technical assistance to counterpart aeronautical experts, formulating specific recommendations to each State in order to carry out the tasks pending of execution for the final implementation of the WGS-84.
3. Between the months of March and May 2001, technical support was directly provided to Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua developing field geodetics works in the main international airport of each State and technical assistance to counterpart aeronautical experts was provided, making the corresponding evaluations and recommendations.
4. Between 9 and 18 July 2001, the Second Seminar/Workshop on WGS-84 was developed, with eleven days duration, from which four were designated to field practical works with the use of geodetics GPS receivers of one frequency and double frequency, as well as for calculations of the field data through practical data post-process phase with the utilization of specific software packages for such purposes. The seminar was oriented to reinforce the technical knowledge of States' specialists related to the joint WGS-84 System.
5. In relation to recommendations formulated by the WGS-84 Consultant during the missions carried out in the South American and Central American Regions, the implementation of follow-up technical missions by the corresponding ICAO Regional Officers and mainly intended to achieve the required data publication in the respective AIP documents of States of both Regions is foreseen.
6. As a result of the assistance provided, an evident progress in the implementation level of the WGS-84 System requirements in the CAR/SAM Regions is expected as product of the actions adopted in respect of project recommendations and the follow-up actions carried out by the corresponding ICAO Regional Offices. Finally, it should also be mentioned that additional efforts will be necessary in the aeronautical community of the Region in order to have available, in a near future, reliable data on the "WGS-84 Geoidal Ondulation" in the runway thresholds of international airports of the CAR/SAM Regions; as well, the need to publish or not the "Elipsoidal Altitudes" requirements for runway thresholds should be determined.