Introduction: In disaster areas; the ability to move large numbers of casualties is the urgent need. To complete the Aeromedical Evacuation (AE) mission in moving patient safely, we have to set up shelter, to provide temporary medical care and to re-evaluate patients’ conditions for further airlift. Aeromedical Evacuation System (AES) with Mobile Aeromedical Staging Facility (MASF) of Institute of Aviation Medicine, Royal Thai Air Force (IAM;RTAF) increases capabilities of AE for Humanitarian Assistance and Disaster Relief (HADR) mission.

Background: Aeromedical Evacuation System (AES) consists of 4 components: 1. Aeromedical Evacuation Control Center (AECC): The AECC are coordinating airlift, validating patient requirements, aircrew management, ensuring adequate logistical support and coordinating all AE missions. 2. Mobile Aeromedical Staging Facility (MASF): A MASF is a deployable, tented asset used for temporary staging, casualty care, and administration support during contingency operations. It is located at an airfield capable of contracted aircraft. The MASF serves as an entryway to the AE system. The MASF team will prepare the patient, personnel, and medical equipment prior to the AE flight. 3. Aeromedical Evacuation Liaison Team (AELT): Establish liaison with originating medical facilities. So AELT is required to insure a smooth patients’ flow into AES. 4. Aeromedical Evacuation Crews (AE CREWs): Aeromedical evacuation crew members provide in-flight patient care on any aircraft using medical equipment that meets airworthiness testing certification standards.

Summary: The Aeromedical Evacuation system (AES), a part of Royal Thai Air Force, is a highly disciplined function capable of transporting casualties or patients via C-130. AES of RTAF plays an important role in HADR because the outstanding ability of the Aeromedical Evacuation is moving large numbers of patients or casualties to medical facilities outside the affected area in short period of time.