

## About This Standard

**Current Status** *Mandated*

**Standard Identifier** MISB STD 0601.2

### **Title of Standard**

UAS Datalink Local Metadata Set, October 29, 2008

### **Standards History**

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/Retired
2009-07-30	n/a	2009-07-30	2009-07-30	2009-07-30	n/a

**Replaced** [MISB EG 0601.1](#)

### **Standards Body**

[MISB](#)

[Broken Link?](#)

### **URL to Access or Acquire**

<http://www.gwg.nga.mil/misb/stdpubs.html>

### **Working Group**

**Primary Owner** Geospatial Intelligence (GWG)  
**Secondary Interest** No Secondary Interest

**Service Area** GEOINT: Motion Imagery

**KIPs** No KIP Found

### **Standard Applicability**

#### **2009-07-30**

This MISB Standard details the Unmanned Air System (UAS) Datalink Local Data Set (LDS) for UAS platforms. The UAS Datalink LDS is a bandwidth- efficient, extensible SMPTE (Society of Motion Picture Television Engineers) Key-Length-Value (KLV) Local Metadata Set designed for transmission through a wireless communications link (Datalink). This Standard provides direction on the creation of a standard Local Data Set for a reliable, bandwidth-efficient exchange of metadata among digital motion imagery systems on UAV platforms. This Standard also provides a mapping to/ from Predator Exploitation Support Data found in MISB EG 0104, an existing higher-bandwidth metadata system which has since been deprecated.

### **Standard Abstract**

#### **2009-07-30**

This Standard provides direction on the creation of a Local Data Set for a reliable, bandwidth-efficient exchange of metadata among digital motion imagery systems on UAV platforms. The UAS Local Data Set metadata is intended to be produced locally within a UAS airborne platform and included in an MPEG2 Transport Stream (or equivalent transport mechanism). The MPEG2 Transport Stream (or equivalent) also contains compressed motion imagery from sensors such as an Electro-Optical / Infrared (EO/IR). Synchronization between the metadata and the appropriate video packet is also required for ensuring the validity of the metadata. The MPEG2 Transport Stream (or equivalent) embedded with UAS LDS metadata is then transmitted over a medium bandwidth (e.g. 1 to 5Mb/s) wireless Datalink and then disseminated. The scope of this document is to provide a framework for an extensible bandwidth-efficient Local Data Set which enhances sensor captured imagery with relevant metadata. This Standard also provides a

mapping between UAS Datalink Local Data Set items, ESD items, and Universal Data Set (UDS) items defined in the latest SMPTE KLV dictionary (RP-210) as well as in the MISB-managed Department of Defense (DoD) keyspace.

### **Profiling Questions**

- GEOINT: Motion Imagery**
- Will your system send metadata with a full motion video (FMV) file from a UAV, or will your system need to carry user metadata with the FMV end to end through a system or will you build a fully network-based, metadata-enabled motion imagery system?

### **Products Incorporating This Standard**

General Atomics, Delta Information Systems, and others have implemented this standard.

### **Relevant Information**

This citation was authored by the GWG Motion Imagery Standards Board.

### **Implementation Guidance**

Guidance for using/implementing this standard is available from the Motion Imagery Standards Board (MISB) [<http://www.gwg.nga.mil/misb/>].

### **Standard Selection Criteria**

#### **Interoperability/Supportability**

The DoD/ IC Motion Imagery Standards Board adopted Engineering Guideline (EG) 0601 in January 2006 for operation in Unmanned Aerial Systems (UAS). Standard 0601 is the cornerstone of Ratification Draft Edition 3 of STANAG 4609 on digital motion imagery and is used by STANAG 4586 on UAS. This bandwidth-efficient metadata system is ideally suited for source, posting, production, exploitation and dissemination processes.

#### **Technical Maturity**

Standard 0601 is mature. It was first standardized in January 2006 by the MISB, demonstrated in airborne vehicles that year. It has been adopted by NATO standards committees, by the US Army for air and ground applications, and by the US Navy.

#### **Public Availability**

<http://www.gwg.nga.mil/misb/stdpubs.html>

#### **Implementability**

General Atomics and Delta Information Systems built prototypes and demonstrated systems utilizing 0601 in early 2006. It has since been adopted in the DoD Unmanned Systems Interoperability Profile (USIP 1.0). It has been adopted by NATO STANAG 4586 on UAS and is in Ratification Draft Edition 3 of STANAG 4609 on digital motion imagery.

#### **Authority**

The Motion Imagery Standards Board, a DoD and Intelligence Community standards organization, maintains Standard 0601. Edition 3 of NATO STANAG 4609 on Digital Motion Imagery utilizes Standard 0601 and STANAG 4586 on UAS will point to Standard 0601. The Motion Imagery Standards board has an open process for maintaining and developing this standard.

**Standard Type**

Military

**Standard Classification**

Unclassified

**Keywords for Search**

KLX, MISB, MISP, MPEG2, Metadata, STANAG 4586, STANAG 4609, UAS, UAV, datalink, exploitation support data, full motion video, local set, transport stream