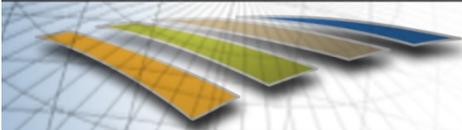


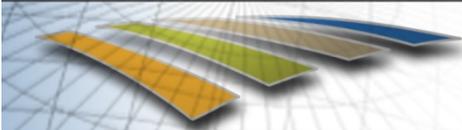
# Landsat Data Continuity Mission (LDCM) USGS Project Status Report

July 15, 2008

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 Topics**LDCM**

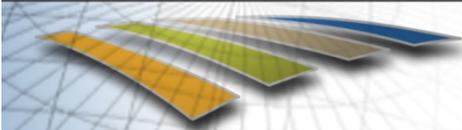
- ◆ Ground system development status
- ◆ USGS acquisition strategy status
- ◆ USGS LDCM Project Team update
- ◆ “High Volume User” survey results
- ◆ Long Term Acquisition Plan (LTAP) Development

A graphic showing several overlapping satellite images of Earth's surface, with colors ranging from green to blue, suggesting different spectral bands or data sets.

# Ground System Development Status

**LDCM**

- ◆ Participated in LDCM Mission Definition Review (MDR)
  - ◆ Ground System received 5 Requests for Action (RFAs) - all have been closed
- ◆ Preliminary design work for elements (except MOE) in work
  - ◆ Element PDR completed for the Collection Planning Activity Element (CAPE)
  - ◆ All others Element PDRs planned for this summer (next slide)
- ◆ Ground System Preliminary Design Review targeted for early Dec 2008
- ◆ Significant progress made on LTAP-8 definition and algorithm development for Automated Cloud Cover Assessment (ACCA)
  - ◆ Details will be covered in other presentations today



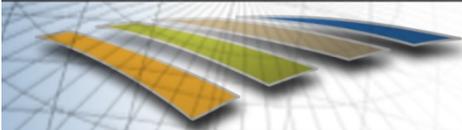
# Element PDR Plans

- ◆ Ground System PDR currently planned for December 2008
- ◆ Element PDR plans:

Flight Operations Segment (FOS)	Date
Collection Activity Planning Element (CAPE) PDR	✓ 4/08/2008
Mission Operations Element (MOE) SRR	7/25/2008
Ground Network Element (GNE) PDR	9/10/2008
Mission Operations Element (MOE) PDR	9/11/2008

Data Processing and Archive Segment	Date
Image Processing Element (IPE) PDR	9/30/2008
Infrastructure Element (IE) Spiral DR	7/29/2008
Storage and Archive Element (SAE) PDR	8/21/2008
User Portal Element (UPE) PDR	7/30/2008

*Actual dates are subject to concurrent mission activities or availability of panel members*



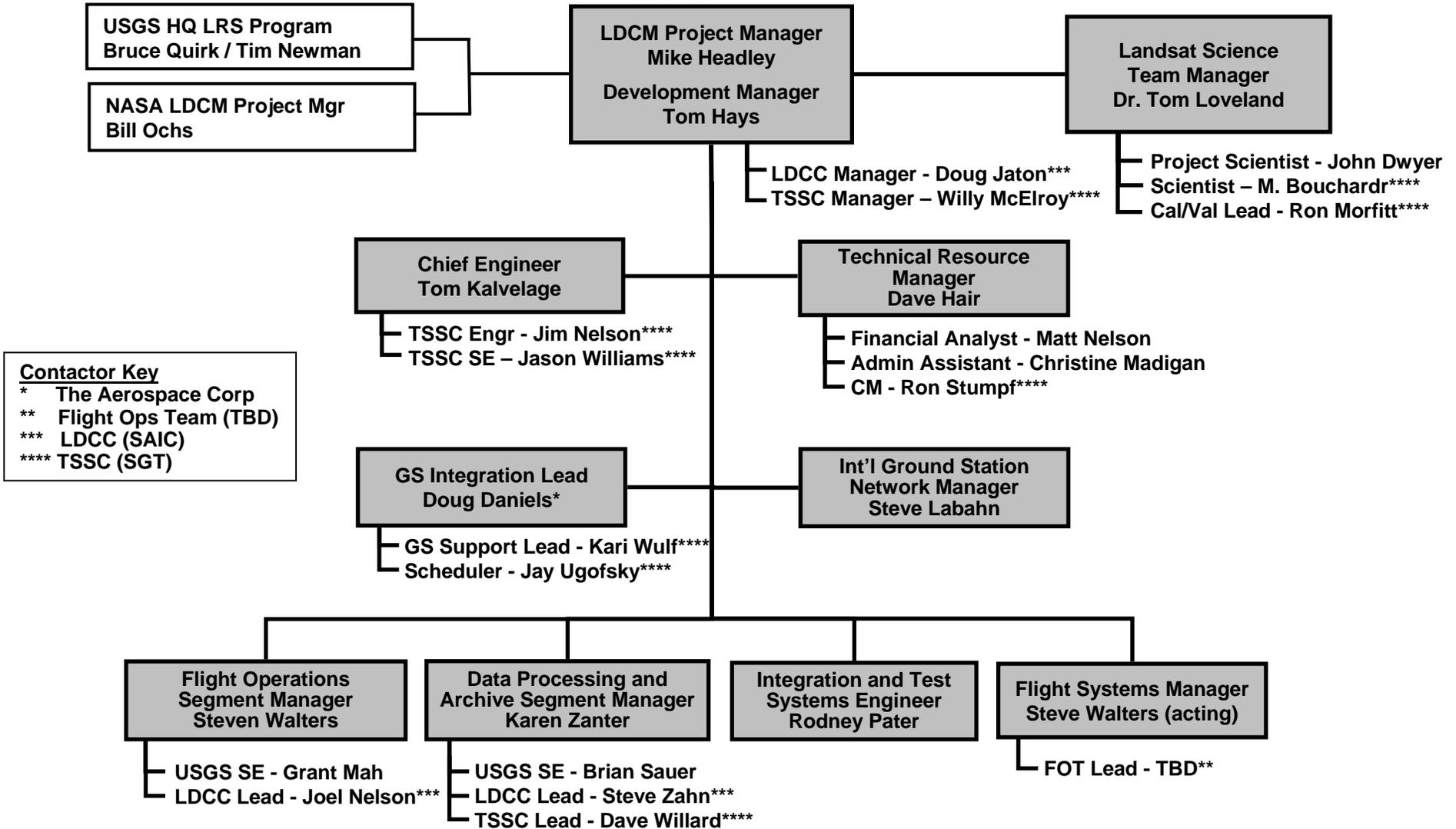
# USGS LDCM Procurement Status

## LDCM

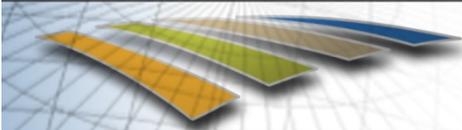
- ◆ Ground system development and engineering support services contracts were awarded in March 2008
  - ◆ Landsat Data Continuity Contract (LDCC) was awarded to SAIC
  - ◆ EROS Technical Support Services Contract (TSSC) was awarded to SGT
- ◆ Flight Ops Team (FOT) procurement: Source selection in process
- ◆ MOC Facility (at EROS): Facilities modification engineering and design work is in process and will complete by Oct 2008
  - ◆ Construction contract is planned for FY2009

# USGS LDCM Project Team

**LDCM**



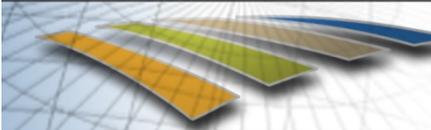
**Contactor Key**  
 \* The Aerospace Corp  
 \*\* Flight Ops Team (TBD)  
 \*\*\* LDCC (SAIC)  
 \*\*\*\* TSSC (SGT)

A graphic showing several overlapping, curved bands of color (yellow, green, blue) representing satellite data or orbits, set against a grid background.

# High Volume Data Distribution RFI

**LDCM**

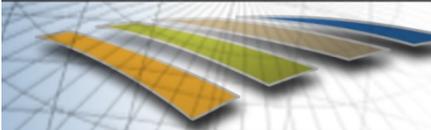
- ◆ Distributed through various email list servers
  - ◆ Landsat Newsletter subscribers (Business Partners), AmericaView members, International Cooperators, Approximately 585+ individual recipients
- ◆ Response rate was low – 11 thus far (~2%)
  - ◆ Google, Leica Geosystems, Sanborn, EGS Technologies
  - ◆ DLR, INPE, and South Africa (ICs)
  - ◆ US Fish & Wildlife Service (CA), NASA (WorldWind), U. Wyoming, TexasView
  - ◆ MDA Federal and NGA did not respond
- ◆ Responses were free-form and with varying levels of detail
- ◆ Current response rate too low to draw meaningful conclusions
  - ◆ Imply no issues or concerns? Too soon to get serious attention?



# Long Term Acquisition Plan (LTAP)

**LDCM**

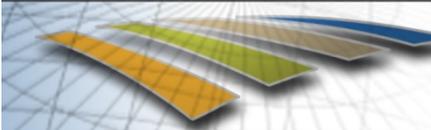
- ◆ A Request for Action (RFA) was issued at the CAPE SRR (January, 2008)
  - ◆ The requirements to produce the LTAP-8 and cloud fraction files do not currently have a home.
  - ◆ There are gaps in the Operations Concept Document where the inputs are assumed to originate from the USGS LDCM Science Office, but these have not been verified.
  - ◆ Other assumptions include an identified successful ACCA score for each path/row, a priority schema, others?
- ◆ Elevated to the Mission Risk Management Board
- ◆ An LTAP Working Group was established to work the issues



# LTAP Action Plan

**LDCM**

- ◆ An Action Plan was developed to close the RFA
  - ◆ Statement of the Problem
  - ◆ LTAP Working Group Charter
  - ◆ Roles and Responsibilities
    - USGS LDCM Science Office
    - Landsat Science Team
    - NASA Landsat Project Science Office
  - ◆ Technical Approach
    - Develop an algorithm description document (ADD) to define inputs, software components, decision rules and prioritization algorithm, and outputs
- ◆ Outcomes
  - ◆ Confirmed that scope of work is accounted for and within CAPE development schedule and budget



# LTAP Working Group

**LDCM**

- ◆ Members
  - ◆ John Dwyer, Tom Loveland, Lazaros Oraopoulos, Sam Goward, Darrel Williams, Rachel Headley, Jason Williams, Kevin Costinett, John Mahoney
- ◆ Convened via bi-weekly telecons late January – May
- ◆ Primary deliverables – algorithm description documents (ADDs)
  - ◆ LTAP-7 capabilities will be translated into CAPE architecture to satisfy at-launch and OIV requirements
  - ◆ LTAP-8 will consist of post-OIV enhancements based on Landsat 7 lessons learned and offline modeling scenarios
- ◆ Received LTAP-7 database and software from Landsat 7 MOC for analysis by CAPE developers and to assist with documenting current capabilities
- ◆ Sufficient progress has been made to remove LTAP issues from Mission RMB