3° Department «Aerospace Plans and Policy»

SPACE WEATHER «ITAF Perspective»

Washington DC, 18/05/2017
AGENDA

✓ Duties & Responsibilities
✓ Mission priorities
✓ Space implications
✓ Space WX approach
✓ Conclusion

Italian Air Force
Armed Forces Duties

- defend national interest
- Air-space integrity
- safeguard collective NATO-EU interests
- contribute to international stability & crises’ management
- contribute to homeland security and disaster relief
MISSION PRIORITIES

PERSISTENT ISR & SITUATIONAL AWARENESS

INTEGRATED AIR & MISSILE DEFENCE

EFFICIENT AIR MOBILITY

C2

PRECISION ENGAGEMENT

Other Standing Missions

Search & Rescue

Air Traffic Control

Weather Service

Med/Strat EVAC

Aeronautica Militare
SPACE IMPLICATIONS

SPACE

Physical domain

Enabling

Intelligence

Operational domain

AEROSPACE 100 KM

BOTTLENECKS

regulatory framework

technology

knowledge

AEROSPACE

SATCOM

NAV

ISR

AEROSPACE power

THREATS

DEPENDENCY

and

VULNERABILITY

Air Staff 3° Dep.
SPACE IMPLICATIONS

1. Support and protect current and future enabling capabilities (observation, SATCOM, PNT) - access to space
2. Focus on emerging opportunities in
   • Suborbital
   • Space medicine
   • SST
   • Space WX

- ITAF is a user and Force Provider
- ITAF is the major stakeholder in MoD
- ITAF is part of National Space Endeavor with many P&P partners, academia other ministries
- ASI is the pivotal reference for Space
- Space governance culminates in the Premier Head Office

A day without SPACE...
mainly occurs due to the Sun's emissions

- can affect the Earth's space environment
- can hinder space and AF Operational Capabilities (threat as cyber & collisions)
- space planner experience in ISAF
- provide space WX limited products to JOHQ and IT AOC
REFERENCES

- FOUR-YEAR PLAN FOR WMO ACTIVITIES (2016-2019) - activities

- CONOPS FOR SPACE WEATHER INFORMATION IN SUPPORT OF INTERNATIONAL AIR NAVIGATION (2013) - requirements

- UPCOMING AMENDMENT (nr. 78) ANNEX 3 (ICAO) - will integrate standard wx with Space Weather
ITAF Personnel & SpWx

➢ Engineers, Physicists and Specialists
➢ “Introduction to Space Weather” Course at Offutt AFB
➢ “Annual Space Weather Workshop” at SWPC-NOAA

➢ Build know how
➢ Establish a cadre of experts
➢ Operate
The Italian Air Force, as part of a National system, is providing, with qualified personnel, competencies and knowledge, Space Weather forecast for military users.
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