

ICAO Heliport Seminar Dubai, 2015

Operational Safety Oversight of Helidecks.

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➤ Risk Based Approach (Video)

- ✓ Level of Risk - Context
- ✓ Conditions
- ✓ Acceptance
- ✓ Experience
- ✓ New Conditions
- ✓ Commercial Pressure
- ✓ Acceptance
- ✓ Pilot Risk Based Decision

➤ Risk Based Approach (Video)



Operational Safety Oversight of Helidecks.

From movie Rush, 2013

“Niki Lauda” Andreas Nikolaus
3 times F1 World Champion

Aviation:

Founded 2 airlines

Niki

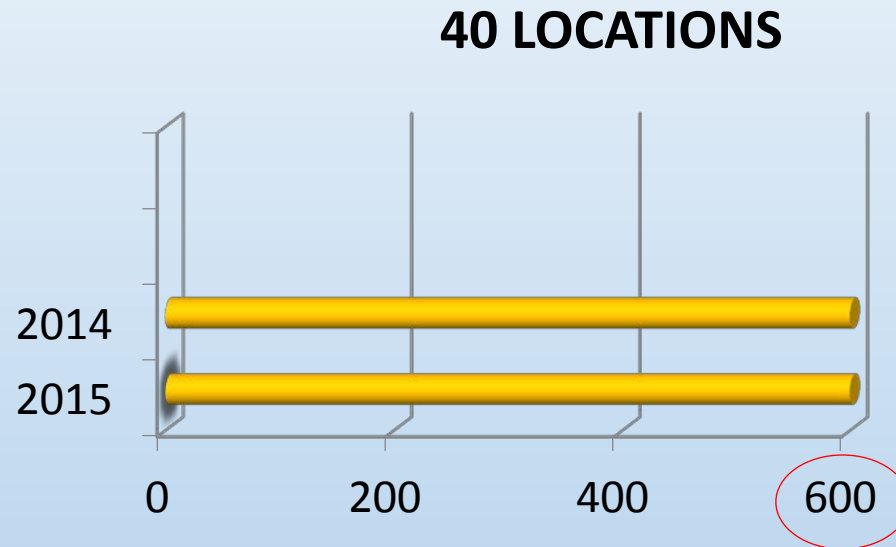
(Alliance: Etihad)



Operational Safety Oversight of Helidecks.

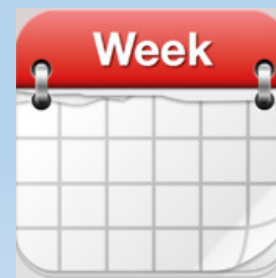
Challenge:

- . Inspections
- . Review
- . Risk Assessments



*Average 15 hours per location.

Some locations require over a



Operational Safety Oversight of Helidecks.

Over 400 locations.

Airports



Islands



Desert



Hospitals



Complex



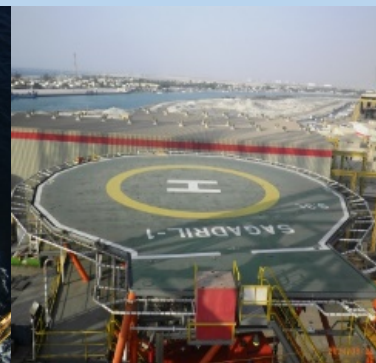
Wellhead Tower



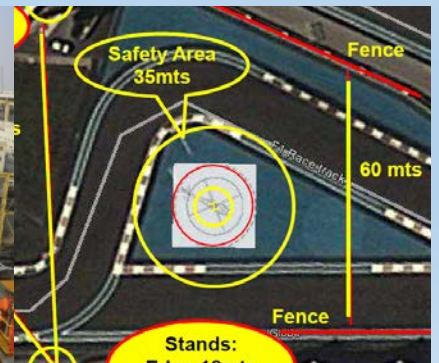
Boats



Rig / Barges



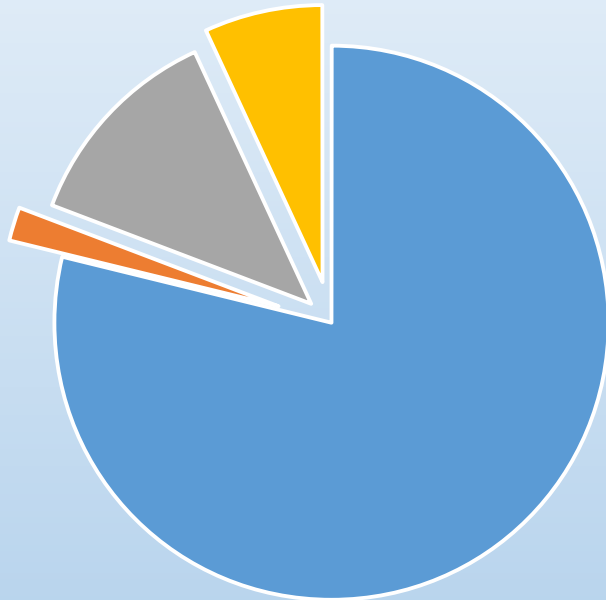
Special Ops



Operational Safety Oversight of Helidecks.

75% (+300) Helidecks

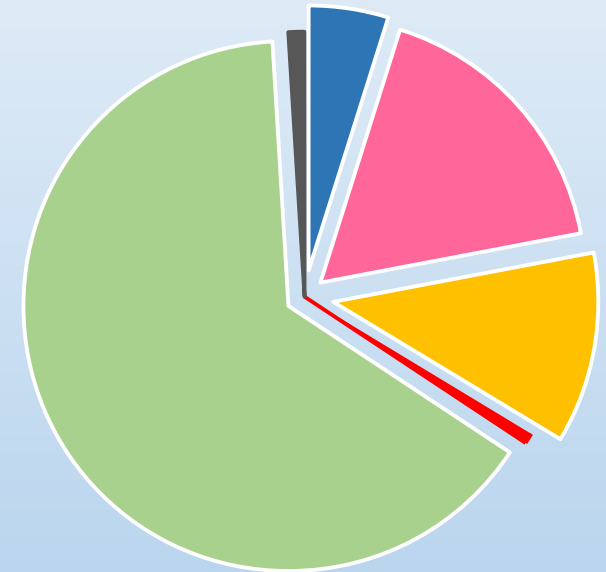
Locations (+400)



- Helidecks
- Airports
- Heliports
- HEMS

*50% (200) WHT

Helidecks (+300)



- Complex
- Barges
- Rigs
- Boats
- WHT
- Elevated

Operational Risks associated to Helidecks:

1. Standards
2. Conditions

Risk Management = KEY to Operational Safety

Operational Safety Oversight of Helidecks.

9 out of 10 safety issues encountered can be related to Helidecks

1. Standards:

- Documents: 1 out of 10 has proper and updated documents
 - SOP's: 2 out of 10 has proper Normal and Emergency Procedures
 - Training: 2 out of 10 has proper training, knowledge/experience.
 - Lights: 1 out of 10 are non compliant.
-
- Less than 20% of locations are fully compliant.

Risk Management = KEY to Operational Safety

Operational Safety Oversight of Helidecks.

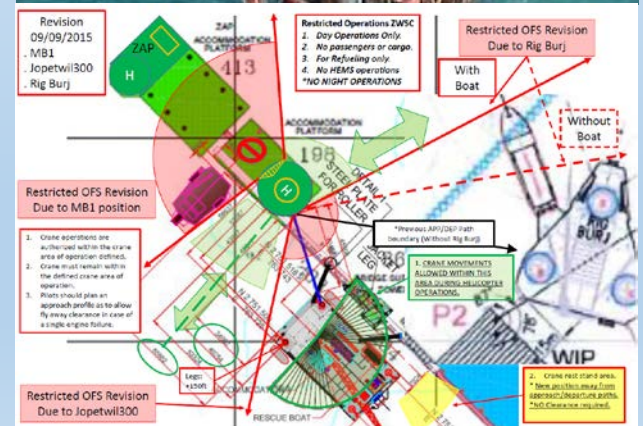
9 out of 10 safety related issues can be related to Helidecks.

2. Conditions:

- Surface: 2 out of 10 below standards.
- Obstacles: 2 out of 10 below standards.

* Pilot decision based on risks due conditions.
(Operational risk assessment: Pilot knowledge)

* Acceptance through Risk Assessments.



Risk Management = KEY to Operational Safety

Documents:

1. Helideck Certificate: Arrangement / T value (Structure)
2. Plans
3. Friction Test (Requirement – conditions – incidents)
4. Scale calibration (Procedures – incidents – samples)
5. Weather Equipment (Calibration – information)
6. Fire Protection (Information – inspection)
7. Complimentary Media (Location – inspection – ID)
8. SOP's (next)
9. Training

Normal and Emergency Procedures

- Many locations have no SOP's or poor SOP's.
- ✧ Our records show only 20% of helidecks have complete SOP's.
- ✧ Only 10% have proper Normal and Emergency SOP's.
- ✓ Ownership.

HLO / HLA Training

9 out of 10 locations:

➤ Do not have adequate knowledge and training.

- HLO's 1-2 day training including Dangerous Goods.
- Few personnel with no practical experience with helicopter.

➤ Cost related to training issues:

- Delays

Operational implications

- Incidents

Fire Team Training

9 out of 10 locations:

- Do not have adequate knowledge and training.
- Most Fire Team Members hold Advance Fire Fighting training
- Some members only have Basic Fire Fighting training.
- ✧ No proper Helideck or Helicopter Rescue training in most cases.
- ✓ Just a Few helidecks DO have Fire Team ready during operations.

Risk Assessments related to Helidecks

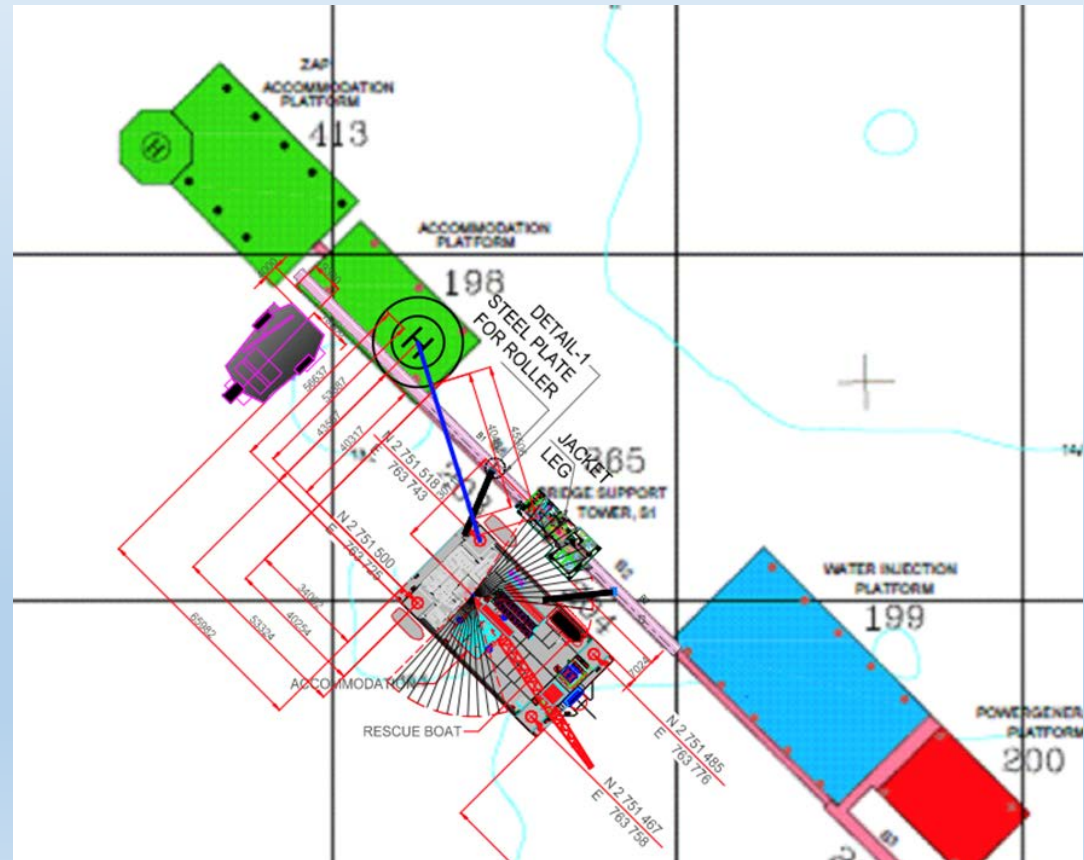
ZWSC

Operational impact:

- ✓ Main Complex.
- ✓ Refuel for Zakum Field
- ✓ Medevac

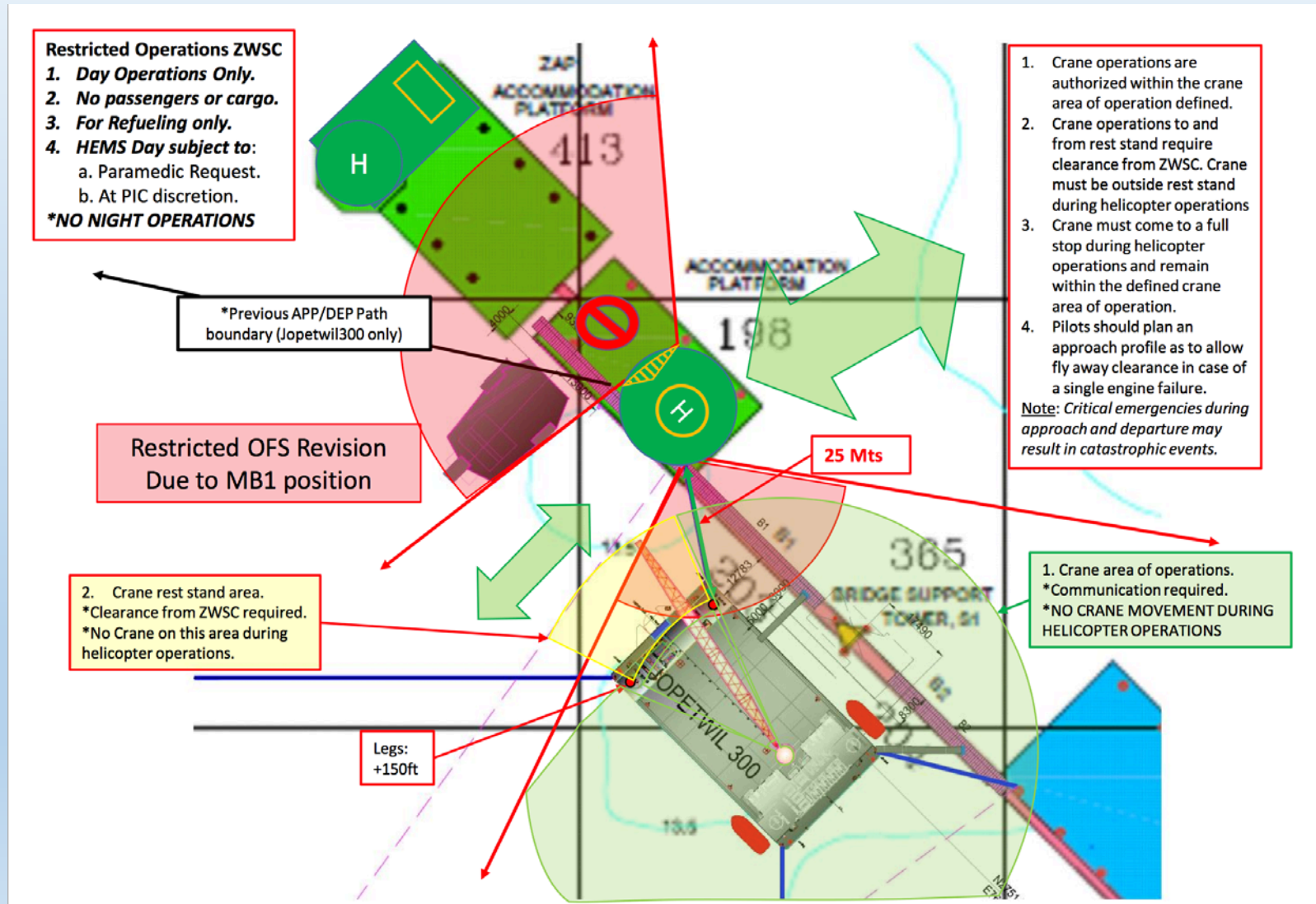
One Barge position scenario:

- Risk Assessment.
- ✧ Reduced OFS



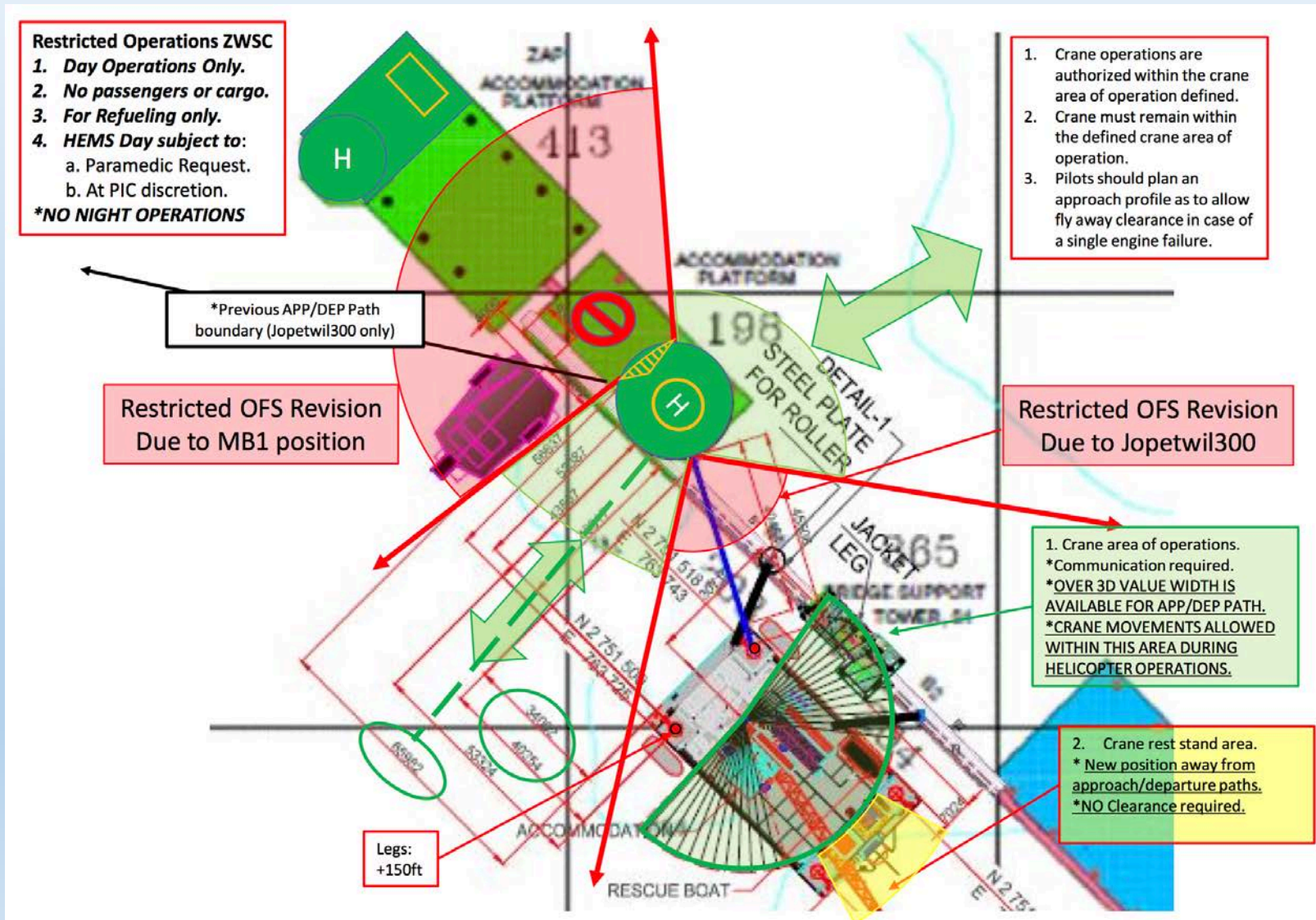
Risk Assessments related to Helidecks

ZWSC: Two barges position new scenario



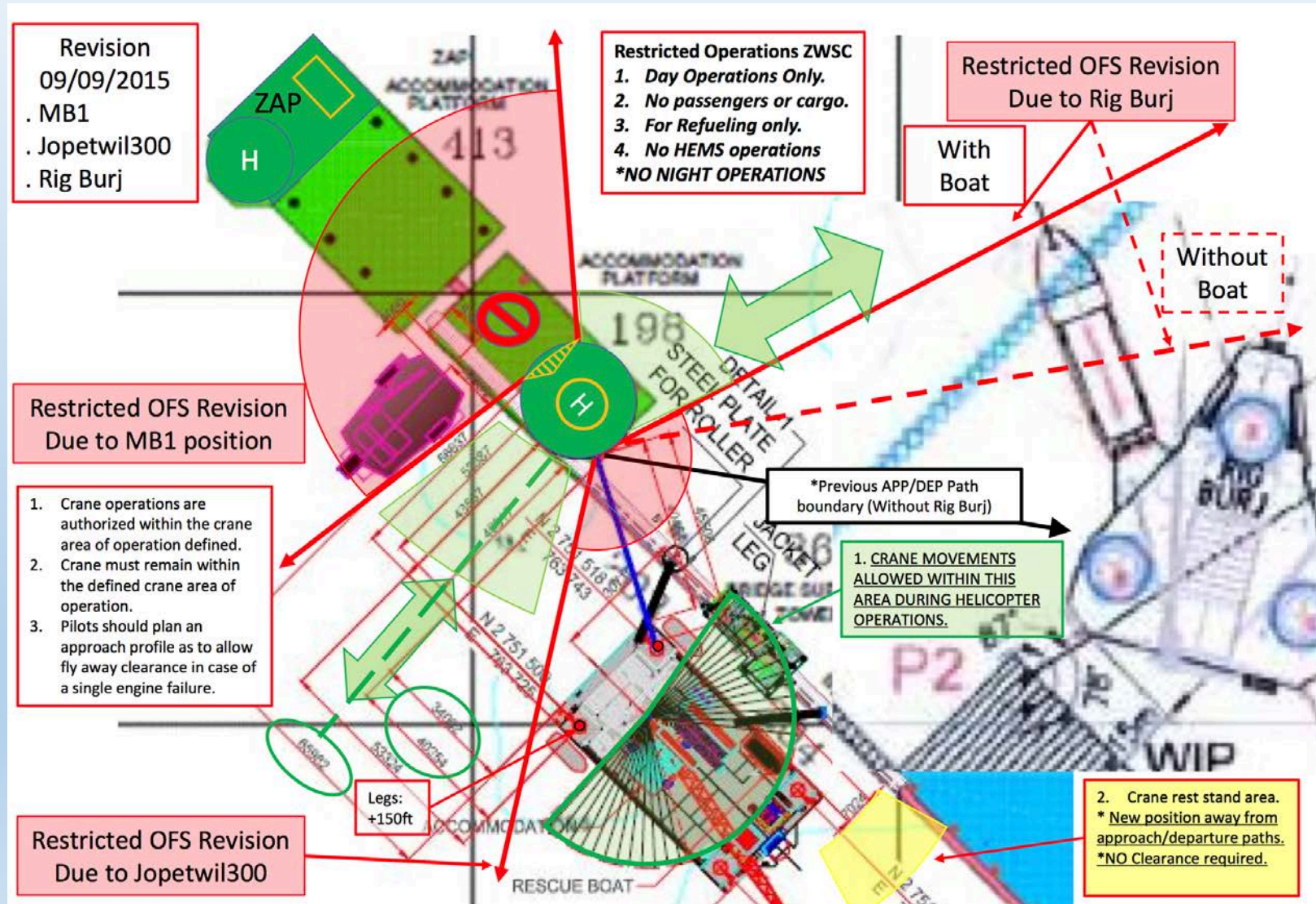
Risk Assessments related to Helidecks

ZWSC: Two barges new position due to crane



Risk Assessments related to Helidecks

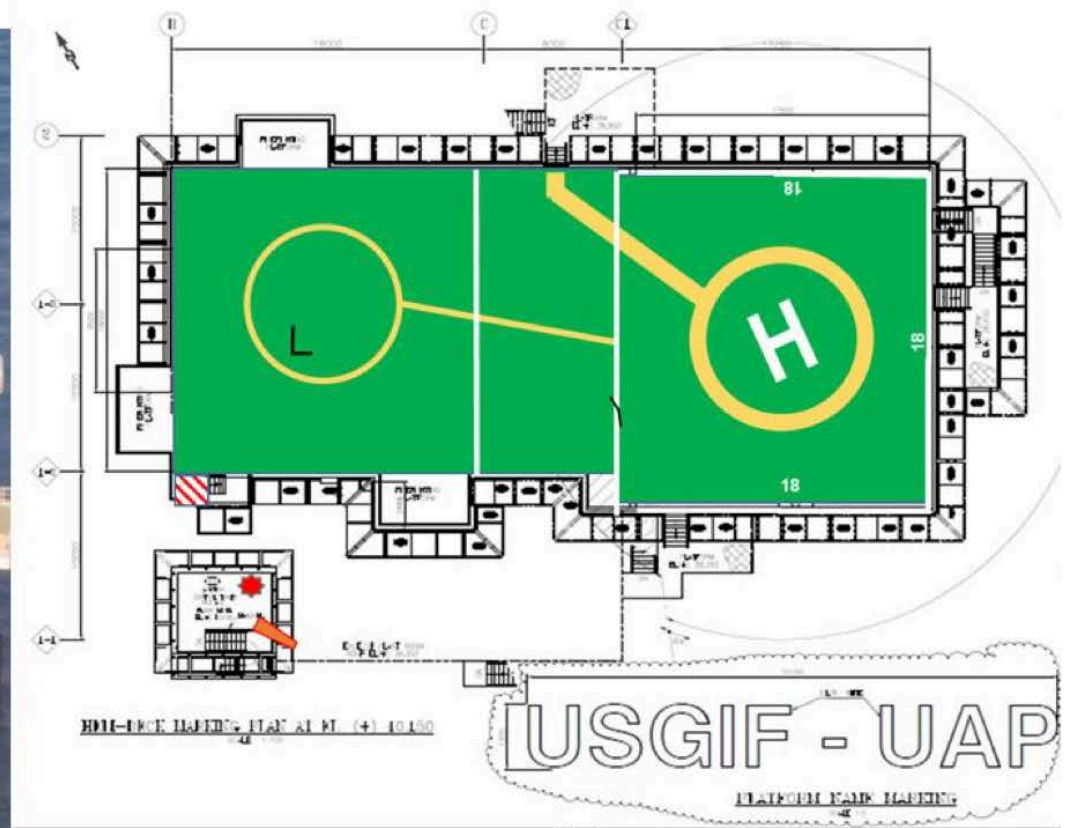
ZWSC: Three barges position (one additional) new scenario



Risk Assessments related to Helidecks

UAP Parking Requirement from Risk Assessment meeting.

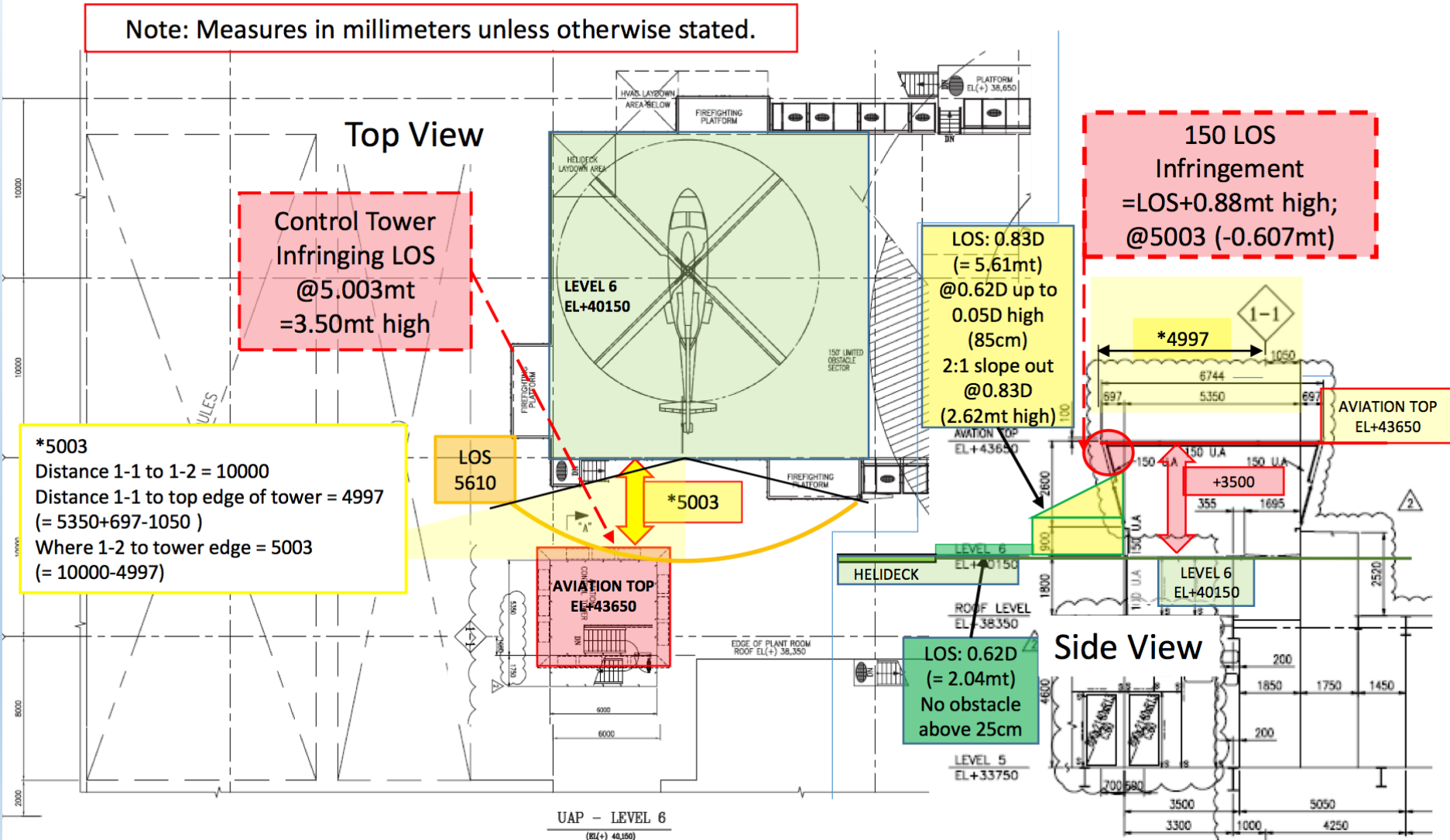
30 November 2015



Risk Assessments related to Helidecks

2.1. LOS 150 and Control Tower Information

Note: Measures in millimeters unless otherwise stated.



Risk Assessments related to Helidecks

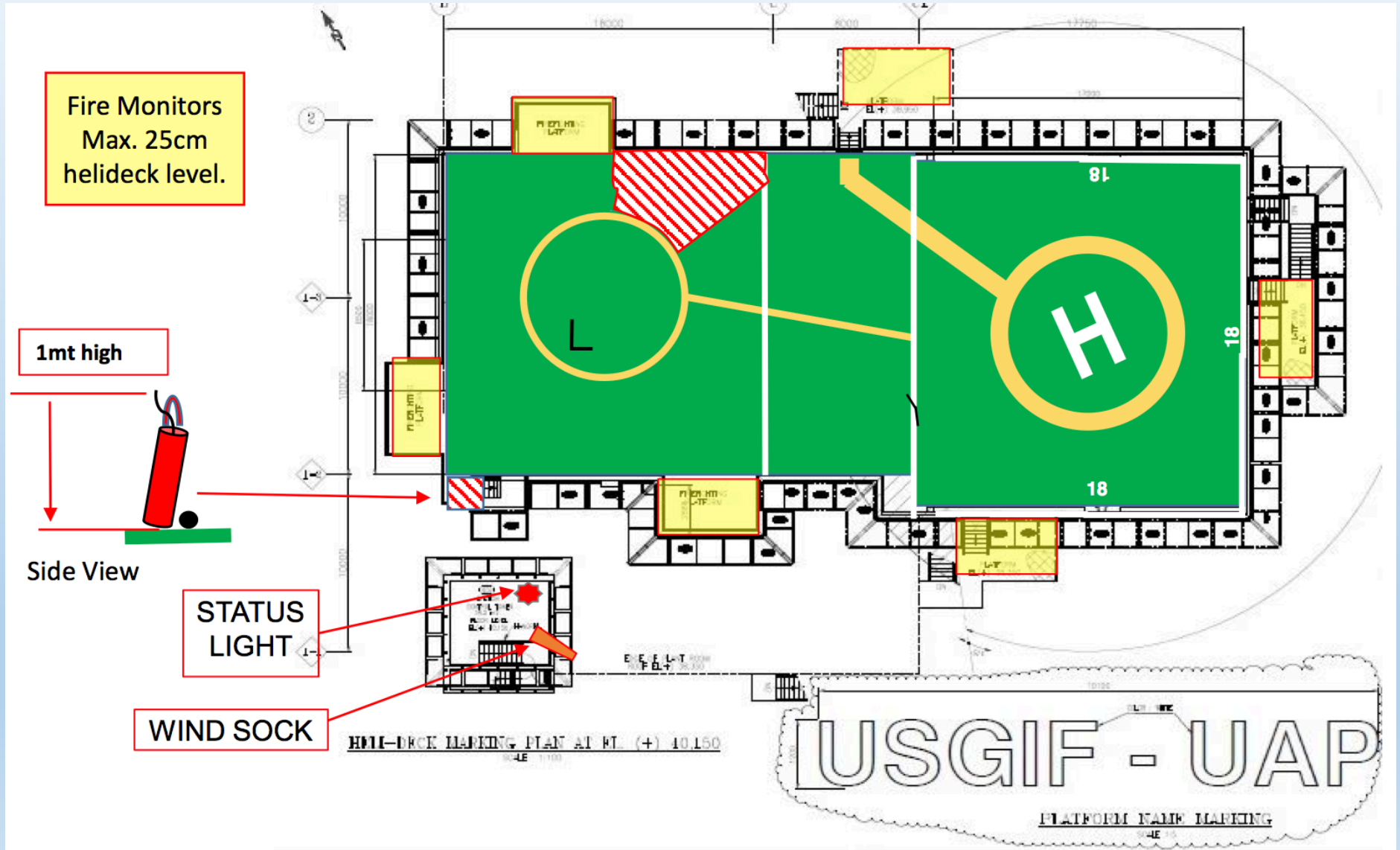


Helicopter Centered on TD/Pos marking after turning.

Helicopter on final position facing tower with tail on edge.
- Clearance from rotor tip to edge of helideck was 2 meters.



Risk Assessments related to Helidecks



Operational Safety Oversight of Helidecks

The best time to build the future is NOW

1. Responsibility needs to be assumed by facility owners/operators.
 2. Documents provide 80% of safety assurance. (A MUST)
 3. Knowledge and qualifications must be a priority. (At All Levels)
 4. Clear standard must be defined and followed. (Improvement)
 5. Personnel Knowledge is a must to manage risk. (Operational)
 6. Pilot discretion is directly related to knowledge, experience, and organizational culture.
- * All stakeholders should be aligned with acceptable standards.