NOTES TO INSTRUCTORS

- This presentation is intended for on-site emergency personnel (police, firefighters, ambulance, etc.) requesting or expecting a helicopter in the area.
- Review and change the presentation in order to fit your training needs.
- Please refer to the EHEST «Helicopter Mission Request Vade Mecum» document for explanations.
The trainer and the training organisation shall verify the included information and change them accordingly in order to comply with national and local rules and Regulations.
Today’s topics

MISSION REQUEST

- Typical scenario
- Request a mission
- Identifying the area
- Prepare the landing area
- Receiving the helicopter
- Helicopter on ground
- What pilots see
- The R.O.M.A. checklist
TYPICAL SCENARIO
Following an event, somebody will trigger the emergency dispatch centre. Information exchanged at this stage is extremely important.
HELICOPTER INVOLVEMENT

- If deemed appropriate, the dispatch centre will request the helicopter intervention
MISSION REQUEST
perspective...
DIFFERENT PERSPECTIVES

» Things seen from the ground and from the air can differ significantly
» Example: car accident...
On-site personnel perspective:
«The helicopter can see us from miles. They can’t miss!»
The pilot overflies the main road from Paternò to Adrano. Information was not accurate enough.
We are here!

REPORT

YOUR POSITION
AREA IDENTIFICATION

IDENTIFY AND REPORT THE PLACE BY:

- Geographical coordinates
- Social media (Google maps, Whatsapp, etc.)
- City, town
- Road/highway number and distance
- River, bridge, overpasses
- Power lines
- Horizontal, vertical landmarks
GEOGRAPHICAL COORDINATES

➤ It’s the most precise and easiest way for pilots
➤ Available in most smartphones (get acquainted!)
➤ KNOW HOW TO READ THEM!
AREA IDENTIFICATION

GEOGRAPHICAL COORDINATES

There could be 3 ways to display the coordinates:

- Degrees, minutes, seconds: \(37^\circ 37' 47.20'' \) N
- Degrees, decimal minutes: \(37^\circ 37.787'\) N
- Decimal degrees: \(37.629778^\circ\) N

It is important to read each single symbol (° degrees, ‘ minutes, “ seconds) and dots/commas in the exact order.
THESE COORDINATES INDICATE THE SAME PLACE:

Degrees, minutes, seconds:
37° 37' 47.20" N
14° 49' 54.86" E

Degrees, decimal minutes:
37° 37.787' N
14° 49.914' E

Decimal degrees:
37.629778° N
14.831906° E
Accident site:
37° 37' 47.20" N 14° 49' 54.86" E

THESE COORDINATES HAVE THE SAME FIGURES, BUT INDICATE WRONG PLACES:

Wrong coordinates 1:
37° 37.4720’ N 14° 49.5486’ E

Wrong coordinates 2:
37.374720° N 14.495486° E
Learn the social opportunities...
Some possible references...

- City park
- Bridge
- River tributary
- N, E, S, W of the city
- Village (name) south of city (name), along the left bank of the river
- Road along the river left side bank
- High voltage power line
Some possible references...

- N-S power line
- E-W power line
- House under construction
- Sport’s field
- Three stores red house
NEARBY ALTERNATE LANDING AREAS

- Hospital landing site, civilian heliports, military training sites, big flat fields, sport fields, empty car parking areas, etc.
- Guardian should be contacted for area availability
- Sandy, light soil area should be watered
- Fresh snow should be stepped
- Lights should be switched on well before
- Suitability: entrance width, connecting roads, etc.
AREA IDENTIFICATION

PILOTS NEED TO KNOW:

➤ Visibility
➤ Clouds (height and coverage)
➤ Strong wind
➤ Meteorological phenomena
Local clouds & visibility can be not so obvious...
ESTIMATE AND REPORT THE LOCAL VISIBILITY

- Below 1 km
- Between 1 and 3 km
- Around 5 km
- 10 or more km
ESTIMATE AND REPORT THE HEIGHT OF THE CLOUDS

- The clouds are just above the houses, trees, constructions
- I can definitely see the clouds moving above my head
- I can see the clouds below/touching/just above the mountain/hill peaks
- The clouds are well above the area/mountains
I can see clouds just above the light pole...
I can see clouds just below the mountain peaks...
I can see clouds above mountain peaks...
AREA IDENTIFICATION

ESTIMATE AND REPORT THE CLOUD COVERAGE

- I cannot see the sky
- I can barely see the sky
- There are several holes where I can see the sky
- The sky can be seen quite well
I cannot see the sky...
I can barely see the sky...
I can see most of the sky...
REPORT ANY METEOROLOGICAL PHENOMENA

➤ Rain, shower rain, hail, snow

➤ Tornado, waterspout

➤ Lightning
Report any meteorological phenomena you can see in the vicinity
AREA IDENTIFICATION

REPORT IF YOU OBSERVE STRONG OR GUSTING WIND
A gust of wind can push the helicopter away from the landing site

(Treasure Island – Fiji 23 Dec 2015)
AREA IDENTIFICATION

REPORT LANDING SITE CONDITIONS & OBSTACLES

➤ Power lines and major obstacles
➤ Any dangerous condition (fires, flammable substances, etc.)
Power lines can be invisible!... 

...report them!
PREPARE THE LANDING AREA
AREA PREPARATION

WHEN PREPARING THE SITE, PAY ATTENTION TO ALL POTENTIAL OBSTACLES

➤ A flat, obstacle free, 25 x 25 meters’ open area needed (sometimes 50 x 50 meters)

➤ Power lines

➤ No lose objects

➤ Protruding objects < 50 cm

➤ Persons

➤ Properties
PERSONNEL...
keep them away: rotor downwash can rise dangerous objects
STOP THE TRAFFIC in both directions

Keep vehicles and motorbikes at least 100 m away
Tents or tarpaulins can easily fly away
Ward off pets, cattle, wild animals and birds
RECEIVING THE HELICOPTER
MAKE YOURSELF VISIBLE
Report any fire in the area
Smoke can be seen well far away

20 NM
Use handheld flares (preferable)
Helicopter Mission Request Vade Mecum

Projectile pyrotechnics flares (try to avoid)
Use the vehicle flashing lights, but, remember...

vehicles under bridges or high vegetation are difficult to see from the air
If in contact, use the “clock position”

“We are at your 10 o’clock”
“LAND HERE...”
Signal the landing site
Lose material can be dangerous for the helicopter and for the nearby persons.
PROTECT YOURSELF

Eye protection must be worn

Wear ear protectors
If you are giving indications over a snowed surface...
...lean down on one knee and keep still, protecting your eyes.

You could be the only visible reference for the landing pilot.
MIND YOUR HAT!
WINCH OPERATIONS

- Keep your position
- Do not touch the hook
- Protect yourself
- Hold on a steady structure
- Let winched personnel come to you
HELICOPTER ON GROUND
NOTE

Even if familiar...

...do not consider yourself authorized to approach and work within the helicopter area, even when the rotor is stopped:

ALWAYS EXPECT AND FOLLOW THE CREW DIRECTIVES
HELICOPTER ON GROUND

APPROACH AND LEAVE THE HELICOPTER IN THIS SECTOR. THE PILOT CAN WATCH YOUR MOVEMENTS.

FORBIDDEN AREA!

THE PILOT CAN NOT WATCH YOU.

DO NOT ENTER THE AREA CLOSE TO THE TAIL ROTOR.
WHEN ENTER OR LEAVE THE AIRCRAFT BEND DOWN. BE AWARE OF: **LOW ROTOR!**
TAIL

ROTOR

IS

DANGEROUS
DANGER
APPROACH AND LEAVE THE AIRCRAFT AT THE LOWEST POINT OF THE TERRAIN
WHEN LOADING OR UNLOADING THE AIRCRAFT, DO NOT THROW OBJECTS CLOSE TO THE HELICOPTER

LONG OBJECTS, LIKE SKIS OR BACKBOARDS, MUST BE CARRIED HORIZONTALLY
Persons not involved should be kept away
Smoking is prohibited at any time in proximity of the helicopter.
WHAT PILOTS SEE
WHAT PILOTS SEE

FOLLOWING IS WHAT A PILOT SEE ARRIVING IN AN EMERGENCY SITE AND WHAT HIS CONSIDERATIONS ARE
Accident

LIGHT POLES: problems for landing and take-off
POWER LINE

Most suitable landing place
- front and back doors open free

AMBULANCES:
- free wheeled stretchers
- free sheets on stretchers

PERSONS NOT INVOLVED:
- walking free, close to landing site

TRAFFIC SIGN:
- close to the landing site

TRAFFIC IN OPPOSITE WAY:
- not stopped

- tree sheets on stretchers
ALTERNATE LANDING SITES

- Slopped surface
- Trees and bushes
- Obstacles
- Traffic
DID YOU SPOT ALL THESE ELEMENTS?
THE R.O.M.A. CHECKLIST
R.O.M.A. CHECKLIST

Dispatch centre passes information to pilot

Dispatch centre and on-site personnel exchange information

Helicopter flies faster and safer to the emergency site

On-site personnel verify and prepare the landing site
R. – Request
Pass all the important information

O. – Obstacles
Verify and report the potentially dangerous obstacles

M. – Meteorological
Report the metrological conditions in the area

A. – Area preparation
Prepare the area and verify safety
QUESTIONS?