Royal Netherlands Air Force

Frisian Flag 2012

a near miss between an F-15C and civilian Fokker 70 during an international exercise

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Introduction

Info is unclassified, public info from internet

Goal:

1. How do we do (safety) investigations in NL
2. Sharing experiences in mil/civ international environment
3. What have we learned?

Casus:

The Fokker 70 with 45 people onboard, en route from Amsterdam Airport Schiphol in the Netherlands to Sandefjord Airport in Norway, flew over the North Sea southwest of the island Sylt in Germany at FL350.[3] A F-15C fighter aircraft came in close proximity of the Fokker 70. There was danger of a collision. The Traffic alert and Collision Avoidance System (TCAS)[4] in the cockpit of the Fokker 70 generated a resolution advisory to climb, whereupon the crew performed a climb to avoid a possible collision. The pilot of the F-15C took avoiding action as well. The F-15C participated in the international air force exercise Frisian Flag which took place from Leeuwarden Air Base in the Netherlands. Both aircraft continued their flight uneventfully. The minimum lateral distance between both aircraft was 0,39 NM (722 metre) with a difference in altitude of 512 feet (156 metre).

Casus: Players / Rules

Players in the incident in German airspace

1. RNLAF exercise organization (Frisian Flag, FF 2012, 72 a/c, 9 countries participated)
2. USAF(E) F-15 part of near miss
3. KLM Civilian NL operator of near miss
4. with German Mil Controller (Lippe Radar) for mil traffic
5. with German Civ Controller (MUAC radar) for civ air way traffic Fokker 70 actual location
6. with Danish civ controller (ACC Kopenhagen) for civ air way traffic Fokker 70 actual controller,although still in GE airspace.

Rules:

1. NATO: Operator is default in the lead, country of occurrence has the rights to do it (STANAG 3531)
2. ICAO: Country of occurrence (Annex 13)

Casus: Investigation done by?? (3)

1. And who would does the investigation in your country in this case?
2. Who is releasing what report to whom?
3. How is that arranged?
4. Prior or after it happened?

Answer on last slide how it was done, what do you do?

Organization of NL investigations (1)

After serious incident or accident 3 types of investigations

1. Legal
   a. Prosecutor (OM): civilian responsibility with military 1/3 mil judge.
   b. Mil legal accident investigation by Mil Police with (technical) help of Civ Air Police.

2. Independent national civilian safety investigation bureau (www.onderzoeksraad.nl, OVV) like US NTSB
   a. Regulated by law, only murder and terrorists to OM.
   b. They decide what they investigate, both civ as mil accidents
   c. Currently 2 military personnel permanently added

3. MOD internal safety investigation, for the RNLAF always myself as lead investigator

Organization of NL investigations (2)

- Mostly all 3 in case of accidents

- Protocols signed by Ministers between
  - OVV and OM
  - OM and Min Def
  - Min Def and OVV

- Protocols describe
  - Priorities of investigation / investigators
  - Exchange of factual info
  - NO exchange of interviews
  - Cooperation in case of (non) destructive material investigations
  - Use and ownership of data recorders.
  - How to deal with classified info

Organization of NL investigations, MOD internal (3)

- Safety investigations within Ministry of Defense
  - 4 categories incident / accidents (light =1 to serious = 4)
  - Based on damage, injury/death, environmental impact / public health risks

- Cat 4,
  - Investigation ordered by Chief of Defense (CHOD)
  - Executed by Army, Air Force, Navy or joined

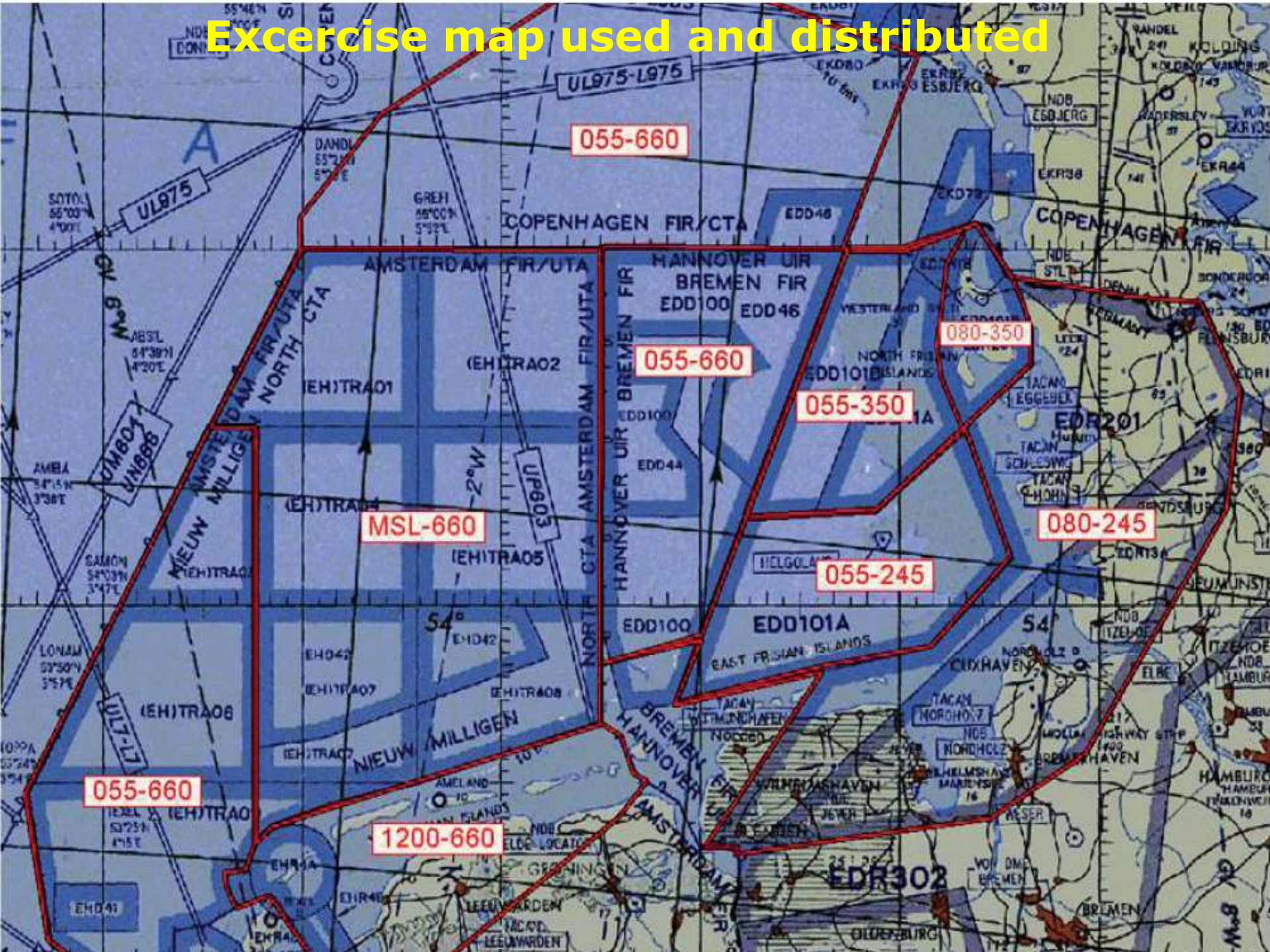
- Cat 1-3 within own Command

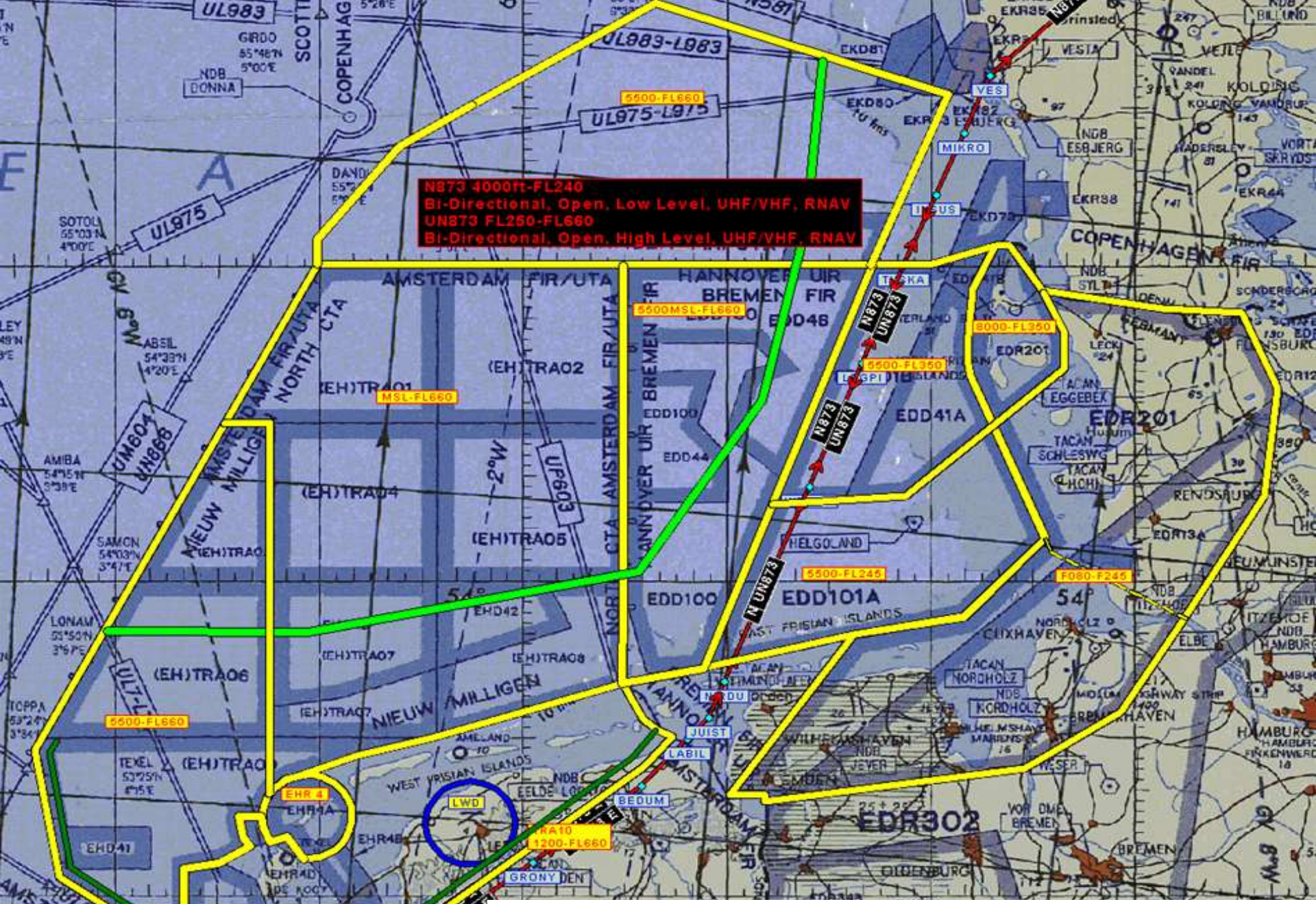
- In RNLAF
  - cat 1 and 2 by safety branch / sqn of Air Base
  - Cat 3 and 4 by HQ RNLAF
  - All incident and accident in 1 database (since 1952)

Casus: Findings (1)

- Circumstances:
  - RNLAF organizing a large international exercise from Leeuwarden Air Base
  - Red, Blue and support Air players
  - Exercise larger than ever before
  - More international participants (72 a/c, 9 countries)
  - 1st time international air space, multiple agencies)
  - Civilian air way through the area, unknown by FF 2012 organization
  - Map next slide

Excercise map used and distributed





N873 4000ft-FL240 both bi directional open UHF/VHF RNAV

UN873 FL250-660

Casus: Findings (4)

Exercise preparations:

- No dedicated safety officer/red card holder
- Risk analyses
  - mid air: only mil/mil identified
  - less personnel/time for FF2012 org after budget cuts
- Existence of air way not mentioned / identified
- only emergency related other/civ traffic was mentioned
- In NL danger areas: no civ traffic allowed
- In GE Danger area ED-D101B: Civ air liner on route UN873 have priority over mil exercise
- Separation minima: 5 nm / 1000 (<Fl290)-2000’ (> FL290)
- Maps used without civ air routes

Casus: Findings (5)

Execution

- Notice of civ traffics days
- Feedback from ATC was **not** noticed/ actioned
- Red air FL340-360, Blue air 270-330
- Regen Airfield proximity UN 873
- “tactical radar support”
- To much traffic to be handle by 1 FCC
- Notam was incorrect (UN 873 was outside ex area)

Casus: Conclusions factors that played a role

- Impact analyses GE air space not enough (midair Civ/mil, regeneration airfield location, maps etc)
- After notification of civ traffic 1st 2 days, no adequate action was taken
- F15 did not adhere to FL 320 max
- FCC aggravated the situation due to overtasking

Casus: Recommendations and actions taken

- Non additional by OVV to RNLAF report

  - Review FF planning checklist and takeover from previous team
  - Time for personnel to organize next FF
  - Red card holder / dedicated safety person
  - Use of standard NATO terminology
  - Assurance of adequate training for participants for complex missions prior the FF exercise

What are the answers to the initial questions?

In 2012 formal report by:

1. RNLAF (coordinated with OVV), internal report
2. OVV (NLD civ safety investigation board) with representative of GE BFU (GE National Flight Safety Investigation Bureau), report published on internet

Full OVV report in English added to PPT

Questions to and from me

1. Now what do you do in this case, who does the investigation(s) and why?

2. Arranged prior mission abroad?

3. What info is shared with whom? Legal and safety?