



OSCC.RC/13/10

2 June 2010

ENGLISH only

Open Skies Consultative Commission

US Chair of the OSCC Review Conference

SECOND OPEN SKIES REVIEW CONFERENCE (OSRC) 2010

7 to 9 June 2010

Working Session 2
Exploring the next generation of Treaty implementation

FUTURE OPEN SKIES PLATFORM
P-3N ORION
WITH DIGITAL SENSORS
NORWAY

Major Dag Steen Bakken

**FUTURE OPEN SKIES PLATFORM
P-3N ORION
WITH DIGITAL SENSORS
NORWAY**



**SECOND REVIEW CONFERENCE ON THE IMPLEMENTATION OF THE
TREATY ON OPEN SKIES**

Convened between 7 to 9 June 2010 in Vienna

Major Dag Steen Bakken

**Lockheed Martin P-3N ORION
(Norwegian Model)**



Technical Data:



Dimensions External:

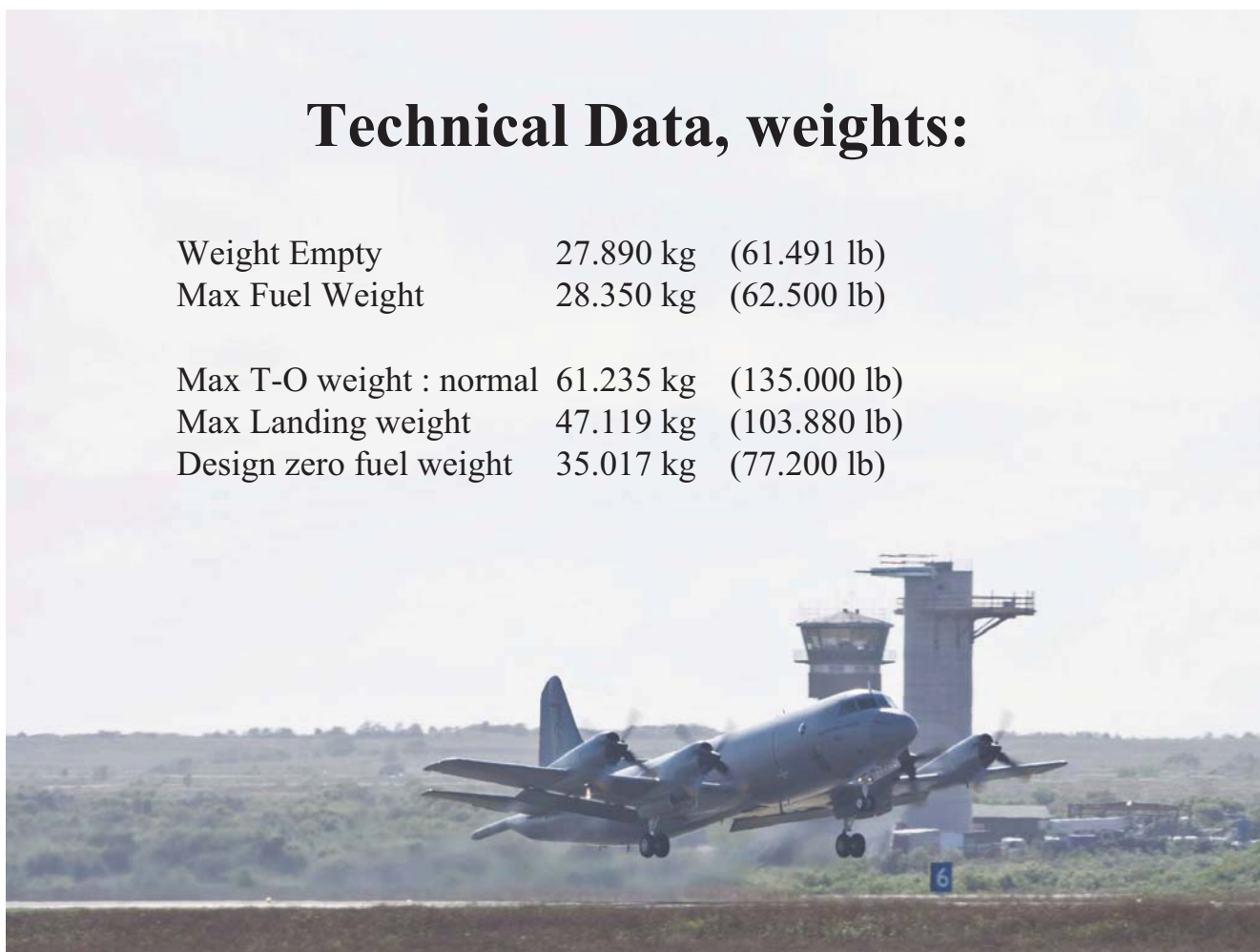
Wing Span Normal	30,37 m	(99 ft 8 in)
Length Overall	35,61 m	(116 ft 10 in)
Height Overall	10,27 m	(33 ft 8 ½ in)

Dimensions Internal:

Cabin Exl flight deck and electrical load center		
Length	21,06 m	(69 ft 1 in)
Max width	3,30 m	(10 ft 10 in)
Max height	2,29 m	(7 ft 6 in)

Technical Data, weights:

Weight Empty	27.890 kg	(61.491 lb)
Max Fuel Weight	28.350 kg	(62.500 lb)
Max T-O weight : normal	61.235 kg	(135.000 lb)
Max Landing weight	47.119 kg	(103.880 lb)
Design zero fuel weight	35.017 kg	(77.200 lb)



Technical Data, takeoff and landing:

Performance (at max normal T-O weight):

T-O run to 15 m (50 ft) 1.673 m (5.490 ft)

Landing from 15 m (50 ft),
at design landing weight 845 m (2.770 ft)



Technical Data, range ...:

Operating Speed at 457 m (1500 ft) 381 km/hr (206 kt)

Time to 7.620 m (25.000 ft) 30 min

Max mission Radius at 61.235 kg (135.000 lb) 3.834 km (2.070 Nm)

Ferry Range 8.945 km (4.830 Nm)



Range 8.945 km (4.830 Nm)



IWGS

DIGITAL



Faster – Better – Cheaper

Possible sensors

RolleiMetric
roll on mapping

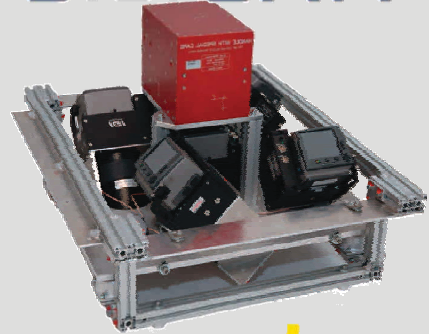


MIDAS
(Multi-cameras Integrated Digital Acquisition System)

DiMACLiGHT



DIGICAM™



applanix
A TRIMBLE COMPANY



Choice of Sensor?



RolleiMetric AICx2

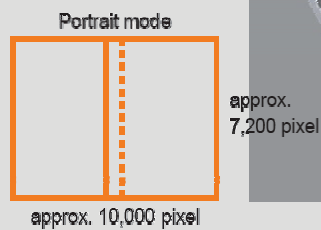
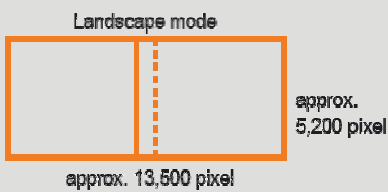
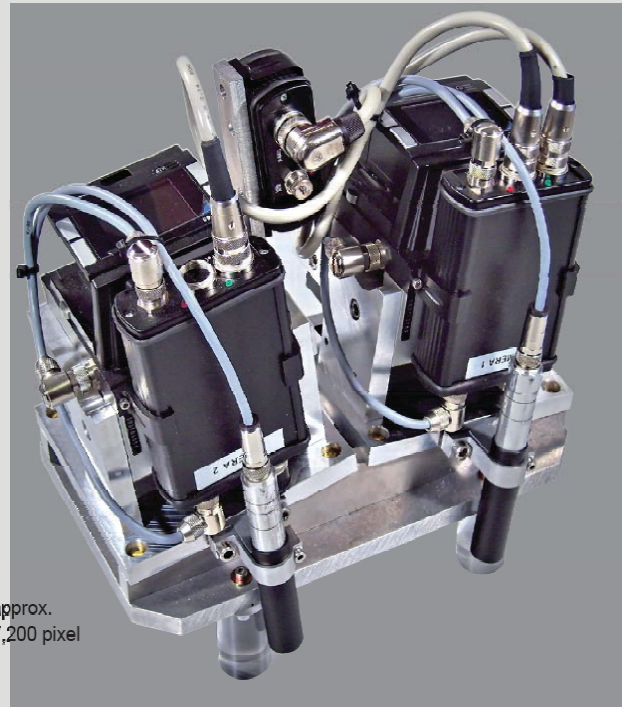
RolleiMetric
roll on mapping



Choice of Sensor?

RolleiMetric AIC x2 – Digital mapping camera

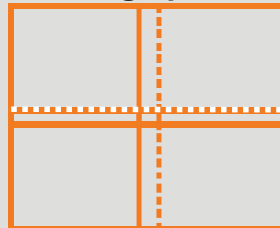
- Combination of two camera systems with approx. 75 megapixel image size or simultaneous capture of RGB and (C)IR images.
- Wide range of the RolleiMetric AIC Pro lenses with optimized leaf shutter.
- Robust housing, less mechanical parts, high reliability and stability.
- Customized configuration of the camera heads in portrait or landscape mode.



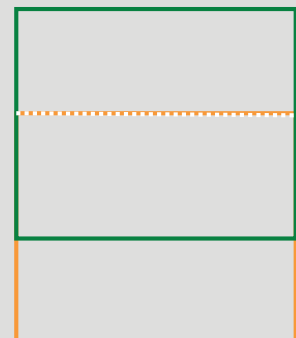
Choice of Sensor?



4 individual camera pictures
Stitched together as
one large picture

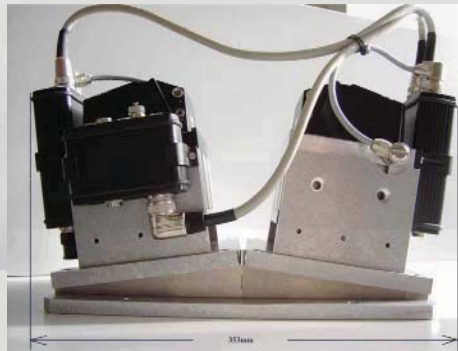


Overlapping pictures
In flight direction



- New concepts in digital aerial survey cameras
RolleiMetric AIC x4 (multi head system)

Sensor mounts



Schematic overview

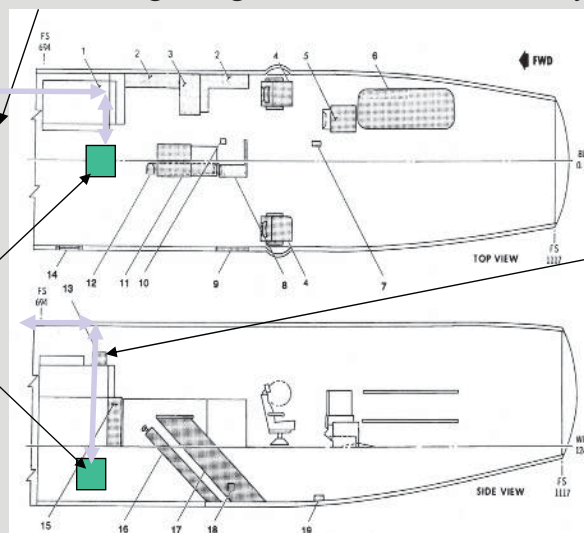
Internal communication and Open Skies personnel

Workstation with control of cameras / sensors
Including navigation data from aircraft system

Navigation-data From aircraft system

Camera - / Sensor - location

Independent cabling to/from Camera / sensor



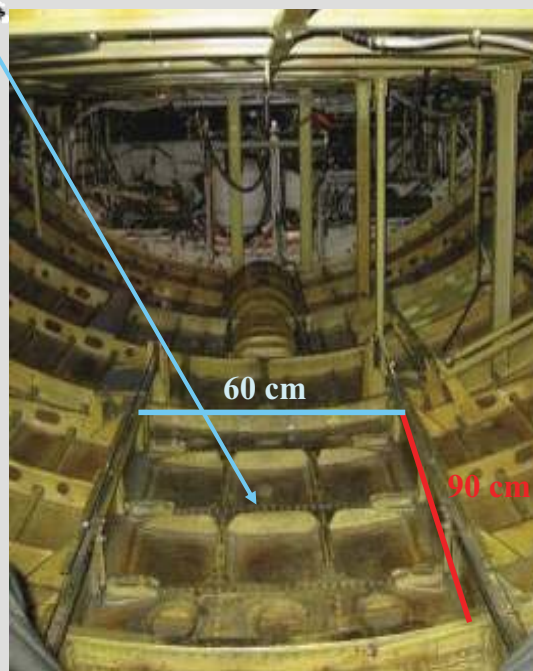
Access down to possible camera -/ Sensor location



Sonar-door / FS806-844



60 x 90 cm



Possible camera - / sensor position



P-3C vs. P-3N



Integrated solution to support:

- Open Skies
- Environment
- Coast guard
- Exercises
- "Digital" imagery



Faster – Better – Cheaper

22 Jul 2002 - Statement by the German Delegation to the Open Skies Consultative Commission, also on behalf of the Delegations of the:

United States of America,
Belarus,
Belgium,
Bulgaria,
Denmark,
Spain,
Finland,
Hungary,
Luxembourg,
Norway,

Netherlands,
Poland,
Portugal,
Russian Federation,
Slovakia,
Sweden,
Czech Republic,
Turkey and
Ukraine

**ON CALCULATING COSTS ARISING FROM DATA SHARING
IN ACCORDANCE WITH THE TREATY ON OPEN SKIES.**

- **This agreement shall be open to all States Parties to the Treaty on Open Skies and, if agreed by all, may lead to an amendment of Decision No. 1 to the Treaty on Open Skies.**

QUESTIONS ?

