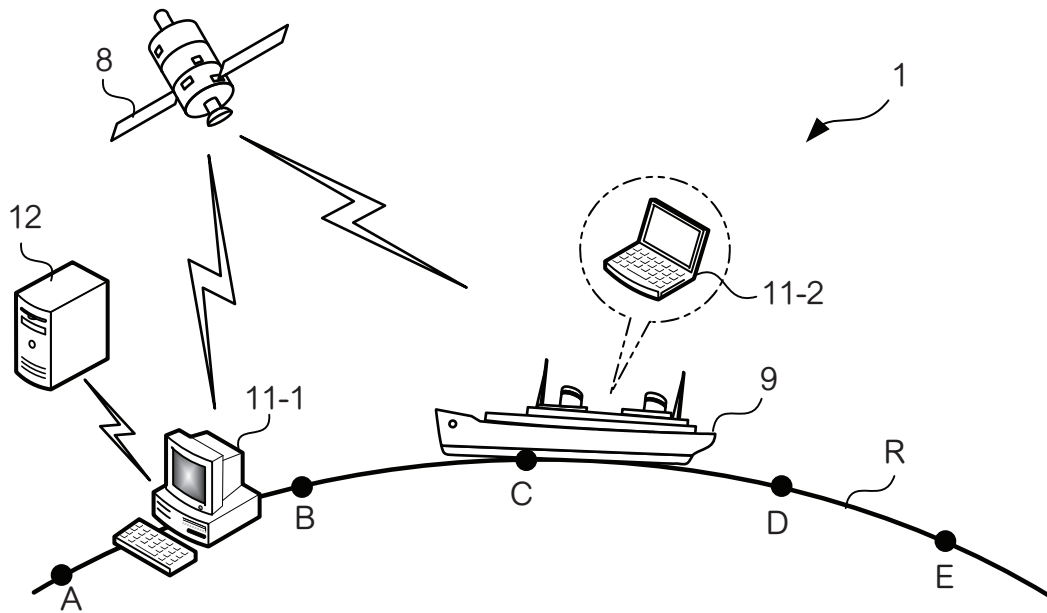
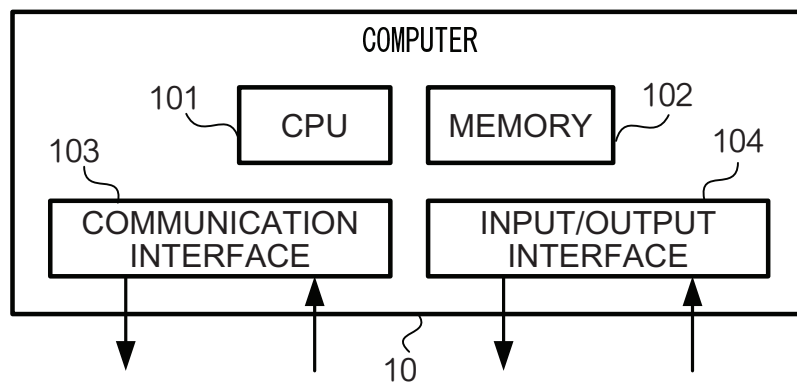


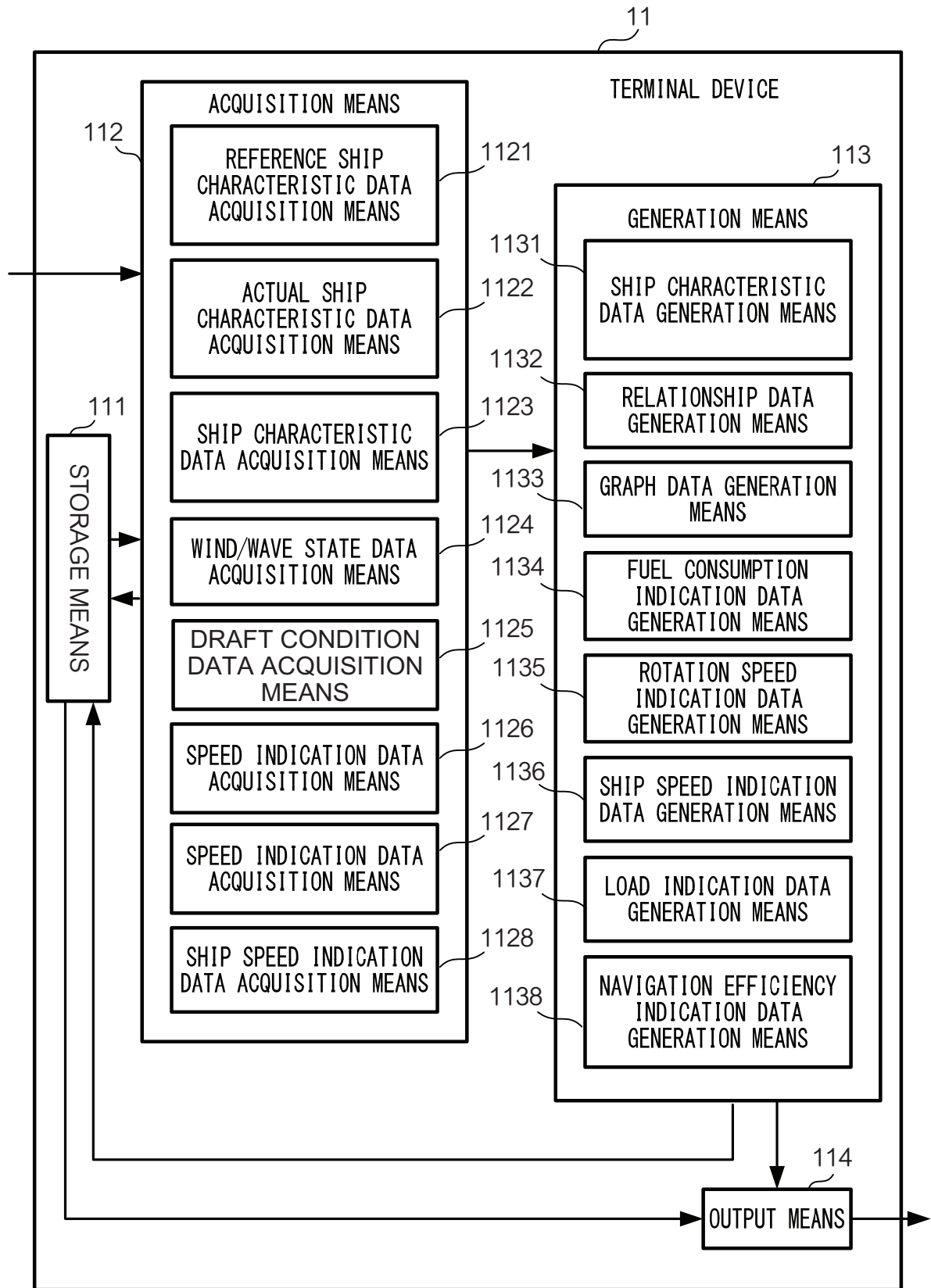
[FIG.1]



[FIG.2]



[FIG.3]



[FIG.4]

SHIP ID:XXXX

FORWARD DRAFT (m)	AFTER DRAFT (m)	WIND DIRECTION (deg.)	WIND SPEED (m/sec)	WAVE DIRECTION (deg.)	WAVE HEIGHT (m)	WAVE PERIOD (sec)
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...

ROTATION SPEED (rpm)	SHIP SPEED (knot)	FUEL CONSUMPTION (ton/day)	FUEL CONSUMPTION (ton/mile)	MAIN ENGINE LOAD (%)	SLIP (%)
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

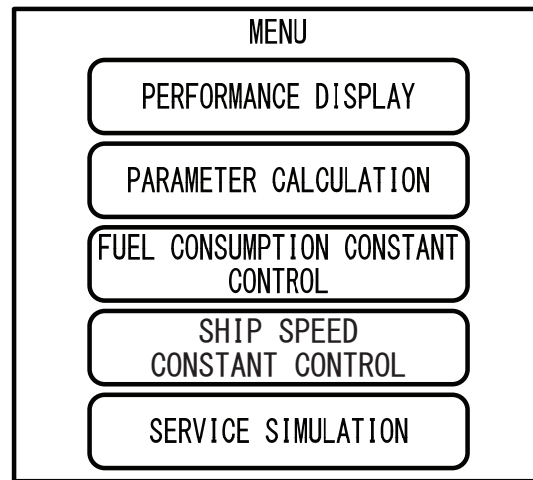
[FIG.5]

SHIP ID:XXXX

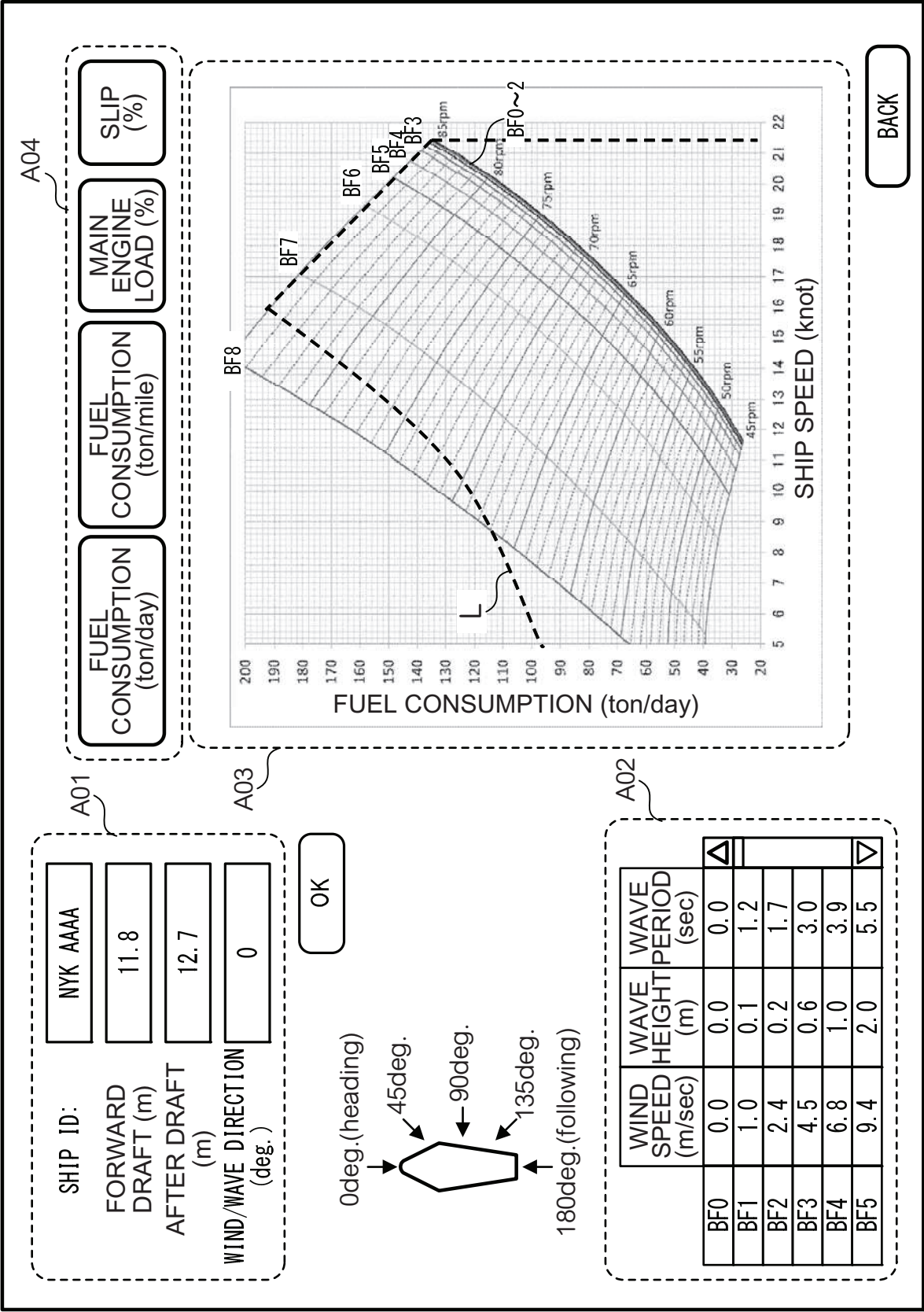
DATE AND TIME	FORWARD DRAFT (m)	AFTER DRAFT (m)	WIND DIRECTION (deg.)	WIND SPEED (m/sec)	WAVE DIRECTION (deg.)	WAVE HEIGHT (m)	WAVE PERIOD (sec)
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...

ROTATION SPEED (rpm)	SHIP SPEED (knot)	FUEL CONSUMPTION (ton/day)	FUEL CONSUMPTION (ton/mile)	MAIN ENGINE LOAD (%)	SLIP (%)
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

[FIG.6]



[FIG.7]



[FIG.8]

SHIP ID:
.....

FORWARD DRAFT
(m)
.....

AFTER DRAFT (m)
.....

WIND DIRECTION
(deg.)
.....

WIND SPEED
(m/sec)
.....

WAVE DIRECTION
(deg.)
.....

WAVE HEIGHT (m)
.....

WAVE PERIOD
(sec)
.....

NAVIGATION
DISTANCE (mile)
.....

GRAPH DISPALY

SHIP SPEED

ROTATION SPEED

FUEL CONSUMPTION

ROTATION SPEED

ROTATION SPEED
(rpm)
.....

FUEL CONSUMPTION
(ton/day)
.....

SHIP SPEED (knot)
.....

NAVIGATION TIME (day)
.....

AMOUNT OF FUEL
CONSUMED (ton)
.....

BACK

A11

A12

A13

[FIG.9]

SHIP ID:
.....

TARGET FUEL
CONSUMPTION
(ton/day)
.....

OK

A21

TARGET
ROTATION SPEED
(rpm)
.....

A24

ACTUAL MEASURED DATA

FORWARD DRAFT
(m)
.....

AFTER DRAFT (m)
.....

WIND DIRECTION
(deg.)
.....

WIND SPEED
(m/sec)
.....

WAVE DIRECTION
(deg.)
.....

WAVE HEIGHT (m)
.....

WAVE PERIOD
(sec)
.....

SHIP SPEED (knot)
.....

FUEL
CONSUMPTION
(ton/day)
.....

A22

FUEL CONSUMPTION

ROTATION SPEED

YYY

XXX

A23

BACK

[FIG.10]

SHIP ID:
.....

TARGET FUEL
CONSUMPTION
(ton/day)
.....

A31

↑

TARGET
ROTATION SPEED
(rpm)
.....

A34

OK

FORWARD DRAFT
(m)
.....

AFTER DRAFT (m)
.....

WIND DIRECTION
(deg.)
.....

WIND SPEED
(m/sec)
.....

WAVE DIRECTION
(deg.)
.....

WAVE HEIGHT (m)
.....

WAVE PERIOD
(sec)
.....

A32

SHIP SPEED (knot)
.....

FUEL
CONSUMPTION
(ton/day)
.....

SHIP SPEED

YYY

XXX

ROTATION SPEED

A33

BACK

[FIG.11]

SHIP ID:

...

PORT NAME	DATA / TIME	DIST. (mile)	FWD. DRAFT (m)	AFTER DRAFT (m)	WIND DIR. (deg.)	WIND SPD. (m/sec)	WAVE DIR. (deg.)	WAVE HGT. (m)	WAVE PERIOD (sec)	SHIP SPD. (knot)	ROT. SPD. (rpm)	FUEL CONS. (ton/day)
A	DPT.	...	...	...	...	...	...	...	...	...	...	...
	ARR.	...	...	...	...	...	...	...	...	...	...	...
B	DPT.	...	...	...	...	...	...	...	...	...	...	...
	ARR.	...	...	...	...	...	...	...	...	...	...	...
C	DPT.	...	...	...	...	...	...	...	...	...	...	...
	ARR.	...	...	...	...	...	...	...	...	...	...	...
D	DPT.	...	...	...	...	...	...	...	...	...	...	...
	ARR.	...	...	...	...	...	...	...	...	...	...	...
E	DPT.	...	...	...	...	...	...	...	...	...	...	...
	ARR.	...	...	...	...	...	...	...	...	...	...	...

OK

AMOUNT OF FUEL CONSUMED (ton)

...

BACK

A41

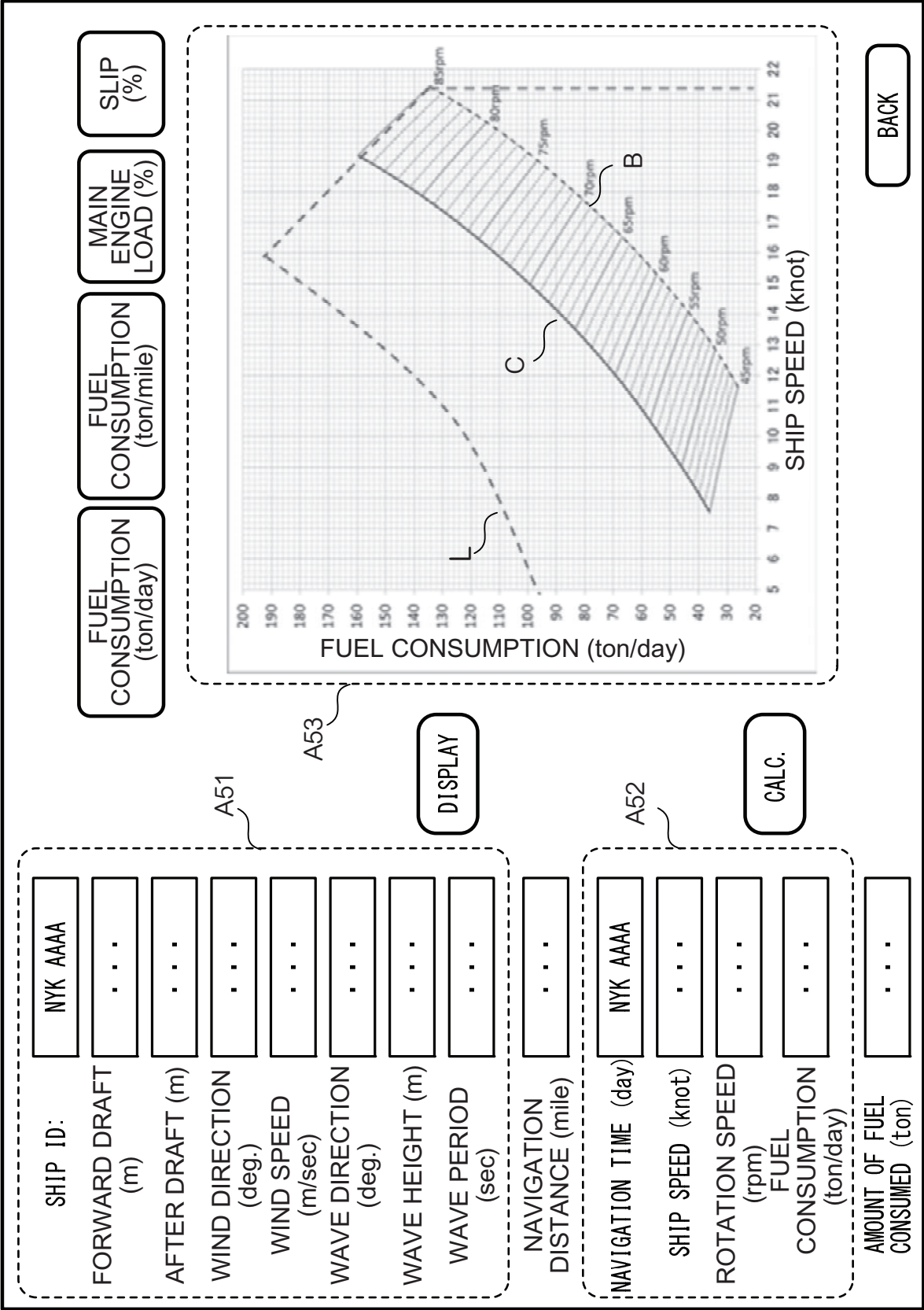
A42

A43

A44

A45

[FIG.12]



[FIG.13]

SHIP ID:

NYK AAAA

FORWARD DRAFT (m)

.....

AFTER DRAFT (m)

.....

PERIOD

xxxx/xx/xx xx:xx

•

xxxx/xx/xx xx:xx

PORT NAME	DIST. (mile)	SHIP SPD. (knot)	ROTATION SPD. (rpm)	FUEL CONS. (ton/day)
A	...	...	...	...
B	...	...	...	...
C	...	...	...	...
D	...	...	...	...
E	...	...	...	...

WAVE HEIGHT

▽

40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%

0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5 8

WAVE HEIGHT (m)

SHIP SPD.
(knot) (avg.)

...

ROTATION SPD.
(rpm) (avg.)

...

FUEL CONS.
(ton/day) (avg.)

...

NAVIGATION TIME
(hour)(avg.)

...

AMOUNT OF FUEL
CONS. (ton)(avg.)

...

CALC.

BACK

[FIG.14]

DATE AND TIME	SEA AREA	WIND DIRECTION (deg.)	WIND SPEED (m/sec)	WAVE DIRECTION (deg.)	WAVE HEIGHT (m)	WAVE PERIOD (sec)
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...