

ΕΚΘΕΣΗ

Θέμα: Καταγραφή πλοίων του τουρκικού στόλου – περιγραφή εξοπλισμού πλοίων, άλλες πληροφορίες - 2014

- I. ΦΡΕΓΑΤΕΣ
- II. ΚΟΡΒΕΤΕΣ
- III. ΠΛΟΙΑ ΕΠΙΤΗΡΗΣΗΣ ΚΑΙ ΣΚΑΦΗ ΕΙΔΙΚΩΝ ΑΠΟΣΤΟΛΩΝ
- IV. ΑΜΦΙΒΙΑ ΠΛΟΙΑ
- V. ΑΚΤΟΦΥΛΑΚΗ
- VI. ΥΠΟΒΡΥΧΙΑ
και
- VII. ΠΛΟΙΑ ΥΠΟΣΤΗΡΙΞΗΣ ΥΒ
- VIII. ΑΕΡΟΠΟΡΙΚΗ ΥΠΟΣΤΗΡΙΞΗ ΤΟΥΡΚΙΚΟΥ ΣΤΟΛΟΥ.

Συνιστάται π ρ ο σ ο χ ή ως προς τον βαθμό εγκυρότητας των δεδομένων για τον λόγο ότι έχουν δοθεί από τρίτες πηγές σε συνδυασμό, με κύρια βάση δεδομένων από Τουρκία, τα οποία μεγάλο μέρος έχουν συμπεριληφθεί στην παρούσα έκθεση.

Οκτώβριος 2014

I. ΦΡΕΓΑΤΕΣ

✦ YAVUZ CLASS (MEKO 200 Track I)

NUMBER	NAME	LAUNCHED	COMMISSIONED
F-240	YAVUZ	30 May 1985	11 Oct 1987
F-241	TURGUTREİS	17 July 1987	4 Feb 1988
F-242	FATİH	24 Apr 1987	12 Oct 1988
F-243	YILDIRIM	22 July 1988	17 Nov 1989

Characteristics

Displacement:	2.919 tons full load
Dimensions:	110.5 x 14.2 x 4.1 metres
Speed, Range:	27 knots, 4100 miles at 18 kts.
Crew:	180 (24 officers)
Weapons:	
Guns:	1 x 127 mm/54; 3 x 25 mm Sea Zenith (quad)
Missiles:	8 x Harpoon SSM; Mk 29 Mod4 launcher: 16 x Sea Sparrow SAM
Torpedoes:	2 x 324 mm Mk 32 triple launcher for Mk 46 Mod 5; anti-submarine torpedoes.
Helicopters:	1 x AB 212 ASW
Sensors:	
Radars:	DA 08, air search; AWS 6 Dolphin, air/surface search; STIR, fire control; WM 25, fire control; 2 x Seaguard, fire control; TM 1226, navigation; URN 25, Tacan
Sonars:	SQS-56

This class of ships are first modern frigates of Turkish Navy. The first was built in Germany the last two in Turkey. They are all diesel configuration.

There is an ongoing el-EP project for implantation of an Electronic Warfare Suite for Yavuz class ships. There will be locally produced ECM, ECCM systems, active decoys, LWR's, IRST and the necessary user interface systems.

These ships are nearing to the end of their service life. When the next generation of general proposes frigates enter into Turkish Navy this class may be phased out.

✦ BARBAROS CLASS (MEKO 200 Track IIA/B)

NUMBER	NAME	LAUNCHED	COMMISSIONED
F-244	BARBAROS	29 Sep 1993	23 May 1997
F-245	ORUÇREİS	28 Jul 1994	23 May 1997
F-246	SALİHREİS	26 Sep 1997	22 Jul 1998
F-247	KEMALREİS	24 Jul 1998	8 June 2000

Characteristics

Displacement:	3.380 tons full load
Dimensions:	116.7 x 14.8 x 4.3 metres

Speed, Range:	32 knots, 4100 miles at 18 kts.
Crew:	220 (24 officers)
Weapons:	
Guns:	1 x 127 mm/54; 3 x 25 mm Sea Zenith (quad)
Missiles:	8 x Harpoon SSM Mk 29 Mod4 launcher: 16 x Sea Sparrow SAM (on TCG Barbaros and TCG Oruçreis) Mk41 Mod 2 launcher: 16 x Sea Sparrow and/or 32 RIM-162 ESSM SAM (on TCG Salihreis and TCG Kemalreis)
Torpedoes:	2 x 324 mm Mk 32 triple launcher for Mk 46 Mod 5; anti-submarine torpedoes.
Helicopters:	1 x S-70-B2 Seahawk or 1 x AB 212 ASW
Sensors:	
Radars:	AWS 9, (3-D) air search; SMART-S Mk2 3D (on TCG Salihreis and TCG Kemalreis as November 2013), AWS 6 Dolphin, air/surface search; Dual STIR, fire control; TMX, fire control (on TCG Salihreis and TCG Kemalreis); 2 x Seaguard, fire control; Decca 2690BT ARPA, navigation; URN 25, Tacan
Sonars:	SQS-56

Improved versions of Yavuz class. The improvements such as CODOG machinery for higher top speed, are results of the lessons learned from operating Yavuz class. All vital areas of the machinery are protected with Halon 1301 fire fighting system. Most of the ship is protected against NBC by a citadel. The ships have a pre-wash capability against fallout.

The first pair has the standard Mk29 Sea Sparrow launcher whereas the second pair was Mk41 Mod8 VLS for Sea Sparrow. It was planned that the VLS system would be retrofitted to the first pair but this has not yet materialized. The British made AWS 9 3D air search radar is being replaced by Dutch made SMART-S Mk2 3D radar. TCG Salihreis is the first ship of this class to receive this new radar in 2012.

They have very modern command, communication, control and information (C3I) systems. The integration of ASIST helicopter landing aid system enables this class to operate Seahawk helicopters.

❶ GABYA CLASS (O. H. Perry)

NUMBER	NAME	LAUNCHED	COMMISSIONED
F-490	GAZİANTEP	16 Feb 1980	24 July 1998
F-491	GİRESUN	27 Mar 1979	24 July 1998
F-492	GEMLİK	15 May 1980	24 July 1998
F-493	GELİBOLU	27 June 1981	22 July 1999
F-494	GÖKÇEADA	7 Feb 1981	27 Sep 1999
F-495	GEDİZ	20 Oct 1979	1 Sep 2000
F-496	GÖKOVA	4 Dec 1978	11 Apr 2002
F-497	GÖKSU	3 Nov 1979	4 Apr 2003

NOTE

TCG Gediz She has new Smart Mk2 3D radar

TCG Gediz She has new SMART-S MK2 3D radar.

Characteristics

Displacement:	4.100 tons full load
Dimensions:	135.6 x 13.7 x 4.5; 7.5 (sonar) metres
Speed, Range:	30 knots, 4500 miles at 20 kts.
Crew:	222 (19 officers)
Weapons:	
Guns:	1 x 76 mm/62; 1 x Mk 15 Phalanx; 4 x 12.7 mm MG
Missiles:	Mk 13 Mod 4 launcher, 4 x Harpoon SSM; 36 x Standart SM-1MR SAM; Mk41 Mod 2 launcher, 32 Raytheon RIM-162 ESSM (on TCG Gökusu, TCG Gediz, TCG Gökova as September 2013)
Torpedoes:	2 x 324 mm Mk 32 triple launcher for Mk 46 Mod 5; anti-submarine torpedoes.
Helicopters:	1 x S-70-B2 Seahawk or 1 x AB 212 ASW
Sensors:	
Radars:	SPS-49(V)4, air search; SMART-S MK2 3D (on TCG Gökusu, TCG Gediz, TCG Gökova as September 2013); SPS-55, surface search; STIR, fire control; Mk 92, fire control Furuno, navigation; URN 25, Tacan
Sonars:	SQS-53B

The first batch of three ships was handed over to the Turkish Navy on 12 January 1998. The first ship sailed to Turkey and arrived in March 1998. Since then these ships have received a number of major upgrades and changes.

First, these ships were the short hull version prior their transfer as they were operating SH-2 Seasprite helicopters in USN service. The flight decks were extended and ASIST Helicopter landing aid was integrated by Istanbul Naval Shipyard so that these ships can operate the S-70-B2 Seahawk helicopters. Second, with the implementation of GENESIS combat management system modernization program, these ships received a fully integrated weapons control capability featuring enhanced tracking capacity, automatic threat detection and improved tactical data links.

Last, four ships of this class F-491 TCG Giresun, F-495 TCG Gediz, F-496 TCG Gökova, F-497 TCG Gökusu, are going to receive 8 cell Mk41 vertical launcher system in addition the existing Mk13 launcher and a new Thales SMART-S Mk2 3D radar instead of the AN/SPS-49(V)4 radar. The Mk92 STIR Mod2 fire control system of these four ships will be upgraded to Mod12 level.

Since their commissioning in Turkish Navy the Gabya class frigates have become the workhorse of the force. All of them were send at least for one period to the Gulf of Aden to combat piracy off the coast of Somalia.

II. KOPBETES

✚ BURAK CLASS (Type A 69)

NUMBER	NAME	LAUNCHED	COMMISSIONED
F- 500	BOZCAADA	30 November 1974	25 July 2001
F- 501	BODRUM	7 August 1976	25 July 2002
F- 502	BANDIRMA	7 August 1976	25 July 2002
F- 503	BEYKOZ	1 June 1973	25 July 2002
F- 504	BARTIN	30 November 1974	25 July 2002
F- 505	BAFRA	13 August 1977	24 July 2003

Characteristics

Displacement:	1.250 tons, full load
Dimensions:	80 x 10.3 x 3.2 metres
Speed, Range:	23 knots, 4500 miles at 15 knots
Crew:	90 (7 officers)
Weapons:	
Guns:	1 x 100mm/55, 2 x 20mm
Missiles:	4 x MM38 Exocet SSM
Torpedoes:	4 x 324 mm single launcher for L5 anti-submarine torpedoes
ASW A/S Mortars:	1 x MK 54 375mm; 6 barrel
Sensors:	
Radars:	1226, navigation; DRBV 51A air/surface search; DRBC 32E fire control
Sonars:	DUBA 25 search/attack

Purchased from French Navy in 2000 and transferred to Turkish Navy in 2001-2002. 10 ships of this class are still operating in French Navy. Designed for coastal ASW missions, these ships are very economical and seaworthy.

Besides ASW missions these ships are also used for patrolling, escorting, search and rescue missions. The Exocet anti-ship missile has entered in to service with the commissioning of these ships.

Turkish Navy classified these ships as corvettes.

Former Names:

- BOZCAADA: Commaqdant de Pimodan F-787
- BODRUM: Drogou F-783
- BANDIRMA: Quartier Maitre Anquetil F-786
- BEYKOZ: d'Estienne d'Orves F-781
- BARTIN: Amyot d'Inville F-782
- BAFRA: Second Maitre Le Bihan F-788

✚ ADA CLASS (Milgem)

NUMBER	NAME	LAUNCHED	COMMISSIONED
F-511	HEYBELİADA	27 Sep 2008	27 Sep 2011
F-512	BÜYÜKADA	27 Sep 2011	27 Sep 2013
F-513	BURGAZADA		

Characteristics

Displacement:	2.300 tons, full load
Dimensions:	99 x 14.4 x 3.75 metres
Speed, Range:	15 knots economical, 29+ knots maximum, 3500 miles at 15 knots.
Crew:	93
Weapons:	
Guns:	1 x 76mm, 2 x 12,7mm
Missiles:	8 x Harpoon SSM; Mk-144 Guided Missile Launcher: 21 x RAM SAM

Torpedoes:	2 x 324 mm Mk 32 triple launcher for Mk 46 Mod 5; anti-submarine torpedoes.
Helicopters:	1 x S-70-B2 Seahawk
Sensors:	
Radars:	SMART-S Mk2 3D air/surface search; Sting fire control; ALPER navigation
Sonars:	Search/attack
Other:	ASELFLIR 300D, ARES-2N ESM system

MİLGEM is the first indigenous ship building project staged in Turkey. Turkish Navy is responsible for the initial design and for the determining technical specification of the weapon, sensor, machinery and other sub systems. UDI is responsible of purchasing these systems.

The missions of MİLGEM class are showing the «flag», search/rescue, patrol, and observation and anti submarine warfare.

The sonar of MİLGEM class is being produced in Turkey.

The 12,7mm machine guns on the aft are mounted of ASELSAN build STAMP (Stabilized Machine Gun Platform) and they are controlled remotely.

The keel of the first ships **TCG Heybeliada** was laid on 26th July 2005 in Istanbul Naval Ship Yard and she was launched on 27 September 2008. The sea trials for the first ship started in October 2010.

The second ship, **TCG Büyükada** was launched on 27th September 2011 and on the same day TCG Heybeliada was commissioned. On 27 September 2013, TCG Büyükada was commissioned into Turkish Navy and the keel for the third ship F-513 TCG Burgazada was laid.

III. ΠΛΟΙΑ ΕΠΙΤΗΡΗΣΗΣ ΚΑΙ ΣΚΑΦΗ ΕΙΔΙΚΩΝ ΑΠΟΣΤΟΛΩΝ

✚ TUZLA CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
P-1200	Tuzla	9 April 2010	9 January 2011
P-1201	Karaburun	2010	19 April 2011
P-1202	Köyceğiz	2010	2011
P-1203	Kumkale	2010	2012
P-1204	Tarsus	2011	2012
P-1205	Karabiga	2011	2012
P-1206	Karşıyaka	2011	
P-1207	Tekirdağ	2011	
P-1208	Kaş	2011	
P-1209	Kilimli	2011	
P-1210	Türkeli	2011	

Characteristics

Displacement:	400 tons
Dimensions:	55.8 x 8.85 x 2.5 metres
Speed, Range:	25 knots, 1000 miles @ 14 knots
Crew:	34
Weapons:	

Guns:	2 x 40mm/70; 2 x 12.7mm
A/S Mortars:	2 x ASW rocket
Depth charges:	4
Sensors:	
Radars:	X Band navigation
Sonar:	Low frequency

On 23 August 2007, a contract was signed between SSM and **Dearsan** Shipyard. This shipyard was chosen to build 16 New Class Patrol Boats for Turkish Navy. This class of patrol boats will conduct patrol, security and ASW duties in and around important harbors, bases and at their approaches.

Dearsan will build these boats in 4 batches. One of the important goals of this project is to have %69 of indigenous input. This is the largest project to day where Turkish Navy outsourced the construction of ships to private shipyards.

❖ KARTAL CLASS

NUMBER	NAME	COMMISIONED
P-326	PELİKAN	17 Dec 1984
P-327	ALBATROS	7 Feb 1986
P-328	ŞİMŞEK	22 Jul 1988
P-329	KASIRGA	23 Oct 1988

Characteristics

Displacement:	190 tons full load
Dimensions:	42.5 x 7 x 2.4 metres
Speed, Range:	42 knots, 500 miles at 40 kts.
Crew:	39 (4 officers)
Weapons:	
Guns:	2 x 40mm/90 Bofors
Missiles:	2 x Penguin Mk2 SSM
Torpedoes:	2 x 533mm single launcher for G-7A
Sensors:	
Radars:	1226, navigation

All build in Germany based on the Zobel class used by the German Navy. Can carry up to 4 mines. Their keel is made from light metal and have a wooden planking and aluminum superstructure. P-325 TCG Meltem was lost in a collision with the Russian training ship Khasan on 25th September 1985. She was later salvaged and scrapped.

Although these boats are getting old they are still in service because they very fast and very hard to detect.

Four of these boats TCG Denizkuşu, TCG Atmaca, TCG Şahin, TCG Kartal were deleted in 2013 and 2014.

❖ DOĞAN CLASS

NUMBER	NAME	LAUNCHED	COMMISIONED
P-340	DOĞAN	16 Jun 1976	23 Dec 1977

P-341	MARTI	28 Jul 1977	1 Aug 1978
P-342	TAYFUN	19 Jul 1979	10 Jul 1979
P-343	VOLKAN	11 Aug 1980	12 May 1981
P-344	RÜZGAR	17 Dec 1984	14 Feb 1986
P-345	POYRAZ	27 Jun 1987	?
P-346	GURBET	24 Jul 1987	25 Oct 1987
P-347	FIRTINA	31 May 1988	22 Jun 1988

Characteristics

Displacement:	436 tons full load
Dimensions:	58.1 x 7.6 x 2.7 metres
Speed, Range:	38 knots, 1050 miles at 30 kts.
Crew:	39 (4 officers)
Weapons:	
Guns:	1 x 76mm/62; 2 x 35mm/90 (twin)
Missiles:	8 x Harpoon SSM
Sensors:	
Radars:	1226, navigation; WM 28/41, search/fire control; Liod Mk2, fire control

P-340 TCG Doğan was built in Germany, the rest in Turkey.

First 4 ships of this class are fitted with LIOD Mk2 electro-optical fire control and TACTICOS command control systems during their mid-life modernization program in early 2000's.

The Harpoon anti ship missiles made their debut in Turkish Navy with this class in late 1970's.

✚ YILDIZ CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
P-348	YILDIZ	27 July 1994	23 May 1997
P-349	KARAYEL	1995	23 May 1997

Characteristics

Displacement:	433 tons full load
Dimensions:	57.8 x 7.6 x 2.7 metres
Speed, Range:	38 knots, 1050 miles at 30 kts.
Crew:	45 (6 officers)
Weapons:	
Guns:	1 x 76mm/62; 2 x 35mm/90 (twin)
Missiles:	8 x Harpoon SSM
Sensors:	
Radars:	AWS 6 Dolphin, surface search; TMX, fire control; Liod Mk2, fire control; KH1007, navigation

These ships have a very similar hull and machinery and almost the same weapons as the Doğan class. But originally the Yıldız class boats had better combat control systems (TACTICOS) than the Doğan class. However this combat management system has been retrofitted to some Doğan class boats.

Both were built in Turkey.

❖ KILIÇ CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
P-330	KILIÇ	15 July 1997	24 July 1998
P-331	KALKAN	22 Sep 1998	22 July 1999
P-332	MIZRAK	5 Apr 1999	8 June 2000
P-333	TUFAN	25 July 2001	26 July 2005
P-334	MELTEM	1 Sep 2004	26 July 2005
P-335	IMBAT	26 July 2005	March 2007
P-336	ZIPKIN	27 Sep 2006	17 Sep 2007
P-337	ATAK	4 Jan 2006	14 Jan 2009
P-338	BORA	2007	7 April 2010

Characteristics

Displacement:	552 tons full load
Dimensions:	62.4 x 8.5 x 2.5 metres
Speed, Range:	42 knots, 1050 miles at 30 kts.
Crew:	45 (7 officers)
Weapons:	
Guns:	1 x 76mm/62; 2 x 40mm/70
Missiles:	8 x Harpoon SSM
Sensors:	
Radars:	MW 08, surface search; STING, fire control; SCOUT/KH1007, navigation

This class of vessels was ordered in two batches. The first batch of three ships is called KILIÇ-I and the second batch of remaining 6 as KILIÇ-II.

P-330 TCG Kılıç and P-333 TCG Meltem were constructed in Germany, the remaining in Gölcük Naval Shipyard.

This class has a similar hull, machinery as the Doğan and Yıldız classes but is bigger and heavier.

The Kılıç class has a redesigned mast and superstructure for reduced radar cross-section.

They can make 24 knots in sea state 5.

❖ FELENK CLASS

NUMBER	NAME	COMMISSIONED
M-500	FOÇA	19 Apr 1968
M-501	FETHİYE	24 Apr 1968
M-502	FATSA	21 Mar 1968
M-503	FİNİKE	26 Apr 1968

Characteristics

Displacement:	235 tons full load
Dimensions:	34 x 7.1 x 2.4 metres

Speed, Range: 13 knots, 900 miles at 11 kts.
 Crew: 25 (3 officers)
 Weapons:
 Guns: 1 x 12,7mm MG
 Sensors:
 Radars: Decca 707 navigation

These ships are constructed in USA under Military Assistance Program. The hulls and superstructure is made of wood. All transferred in 1967.

✦ SEYDİ CLASS

NUMBER	NAME	COMMISSIONED
M-514	SİLİFKE	21 Mar 1966
M-515	SAROS	25 Oct 1966
M-516	SIGACIK	20 Dec 1965
M-517	SAPANCA	20 Dec 1965
M-518	SARIYER	7 Dec 1967

Characteristics

Displacement: 370 tons full load
 Dimensions: 43 x 8 x 2.6 metres
 Speed, Range: 14 knots, 2500 miles at 10 kts
 Crew: 35 (2 officers)
 Weapons:
 Guns: 1 x Oerlikon 20mm (twin)
 Sensors:
 Radars: Decca 1224, navigation
 Sonars: UQS-1D mine search

All are constructed in USA, from wood. Transferred in 60'ies

M-508 TCG Selçuk was converted to a scientific research ship (Y-90) in 1998.

M-511 TCG Sinop was deleted in 2004.

M-517 TCG Seddülbahir was sunk as target during exercise Deniz Yıldızı 2010.

✦ ENGİN CLASS (Circé)

NUMBER	NAME	COMMISSIONED
M-260	EDİNCİK	27 July 1998
M-261	EDREMİT	27 July 1998
M-262	ENEZ	27 July 1998
M-263	ERDEK	27 July 1998
M-264	ERDEMLİ	27 July 1998

Characteristics

Displacement: 510 tons full load
Dimensions: 50.6 x 8.9 x 3.4 metres
Speed, Range: 15 knots, 3000 miles at 12 kts.
Crew: 48 (5 officers)
Weapons:
Guns: 1 x 20mm
Sensors:
Radars: Navigation
Sonars: DUBM 20B

They are built of laminated wood and plastic for a low magnetic signature, and are specifically designed to counter seabed magnetic and/or acoustic mines.

Transferred from French Navy after a complete overhaul and modernization in 1999.

They are fitted with GPS, mine combat management system Minetac and PAP-104 mine hunting gear. Carries 5 divers.

✚ AYDIN CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
M-265	ALANYA	21 March 2003	26 July 2005
M-266	MASRA	10 May 2004	26 July 2005
M-267	AYVALIK	26 July 2005	22 June 2007
M-268	AKÇAKOCA	27 Sep 2006	17 Sep 2007
M-269	ANAMUR	17 Sep 2007	10 Oct 2008
M-270	AKÇAY	27 Sep 2008	15 Dec 2009

Characteristics

Displacement: 715 tons full load
Dimensions: 54.5 x 9.6 x 2.5 metres
Speed, Range: 14 knots, 2400 miles at 10 kts.
Crew: 59 (7 officers)
Weapons:
Guns: 1 x 30mm; 2 x 12,7mm MG
Sensors:
Radars: 1007, navigation
Sonars: Marconi, Type 2093 variable depth sonar

In 1999, the German shipyards Abeking & Rasmussen and Lürssen Werft were awarded with the contract about 630 million US Dollar, of building 6 mine hunters. The contract was signed on 30 July 1999. The design is very similar to Type 332 mine hunters in German Navy.

First ship was built in Germany; reminder in Istanbul Naval Yard. Contrary to the widely adopted use of GPR, these ships are made of non-magnetic steel. The design is very similar to Type 332 mine hunters in German Navy. Thus the Turkish Navy became the second navy using non-magnetic steel in NATO for mine hunters besides German Navy

Each ship will have 2 PAP-105 Mk5 mine counter system and Nautis-3M command and control system. The Type 2093 variable depth sonar is hull mounted and can operate up to 200m depth and up to 12 knots.

IV. ΑΜΦΙΒΙΑ ΠΛΟΙΑ

ΣΗΜ.: Η ANADOLU Shipyard ήταν το ναυπηγείο το οποίο έχει ολοκληρώσει με επιτυχία και παρέδωσε 8 LCTs (Landing Craft Tank) για το Τουρκικό Ναυτικό κατά τη διάρκεια του 2012 και είχε επίσης επιταχυνθεί το έργο της για το έργο LST κατά τις πρώτες εβδομάδες του έτους 2013. Η ANADOLU Shipyard ακόμα έχει υπογράψει συμβόλαιο με την τουρκική SSM (Υφυπουργό Άμυνας Αμυντικών προγραμμάτων και εξοπλισμού) για την κατασκευή δύο LSTs (Landing Ship Tank). Το Χρονοδιάγραμμα υλοποίησης του έργου δεν έχει γίνει ακόμα γνωστό καθώς προέκυψαν προβλήματα τα οποία δεν είχαν προβλεφθεί. Ωστόσο, η ANADOLU Shipyard έχει εντείνει τις εργασίες της για την προετοιμασία του έργου LST όπως διαπραγματεύσεων για τη σύμβαση με την ASELSAN και Havelsan, και οι δύο εταιρείες είναι του τουρκικού Ιδρύματος των Ενόπλων Δυνάμεων.

Ομοίως, διαπραγματεύσεις για τη σύμβαση με άλλη τουρκική Αμυντικής Βιομηχανίας εταιρεία την **ISBIR Elektrik Sanayi A.Ş** διεξήχθησαν και υλοποιήθηκαν κατά το δεύτερο δεκαπενθήμερο του Φεβρουαρίου 2013. Έτσι, η σύμβαση προμήθειας που υπογράφηκε μεταξύ ANADOLU Shipyard και ISBIR Elektrik Sanayi A.Ş για το προμήθεια των 3 κύριων γεννητριών και μία γεννήτρια έκτακτης ανάγκης για κάθε LST να κατασκευαστεί από ANADOLU Shipyard ολοκληρώθηκε.

Φ Ç-302 LCM CLASS

NUMBER

Ç-305
Ç-308
Ç-312
Ç-314
Ç-316
Ç-319
Ç-321
Ç-322
Ç-323
Ç-324
Ç-325
Ç-326
Ç 327
Ç-329
Ç-330
Ç-331

Characteristics

Displacement: 113 tons full load
Dimensions: 22.5 x 6.4 x 2.4 metres

Speed, Range: 9.5 knots ?
 Crew: 10
 Weapons:
 Guns: 2 x 12.7mm
 Sensors:
 Radars: Navigation
 Capacities
 Can carry 60 tons of cargo or 140 troops.
 Specifications may vary from unit to unit as they were built in different batches.

✚ EDIC TYPE LCT CLASS

NUMBER

Ç-120
 Ç-123
 Ç-125
 Ç-126
 Ç-127
 Ç-128
 Ç-129
 Ç-132
 Ç-133
 Ç-134
 Ç-135
 Ç-137

Characteristics

Displacement: 600 tons full load
 Dimensions: 57 x 12 x 1.4 metres
 Speed, Range: 8.5 knots, 600 miles at 10 kts.
 Crew: 17 (1 officer)
 Weapons:
 Guns: 2 x 20mm; 2 x 12.7mm
 Sensors:
 Radars: Navigation

All are built locally and have small alterations as they were built in different batches.

Capacities

They can carry 100 troops or 5 main battle tanks.

✚ NEW TYPE LCT CLASS

<u>NUMBER</u>	<u>LAUNCHED</u>	<u>COMMISIONED</u>
Ç-151	2010	2013
Ç-152	2010	2013
Ç-153	2011	2013

Ç-154	2011	2013
Ç-155	2011	2013
Ç-156	2011	2013
Ç-157	2012	2013
Ç-158	2012	2013

Characteristics

Displacement:	1.155 tons full load
Dimensions:	79,85 x 11.7 x 2.5 meters
Speed, Range:	20 knots, 400 miles at 16 kts.
Crew:	22
Weapons:	
Guns:	2 x 25mm; 2 x 12,7mm
Sensors:	
Radars:	Navigation
Other:	ASELFLIR 300D

Capacities

These LCT's can carry 250 troops, or 320 tons of cargo.

✚ NEW TYPE LST CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
NL-	BAYRAKTAR	?	?
NL-	SANCAKTAR	?	?

Characteristics

Displacement:	7/125 tons full load
Dimensions:	138,7 x 19 x 3 meters
Speed, Range:	18 knots, 6000 miles at 15 knots
Crew:	129
Weapons:	
Guns:	2 x 40mm; 2 x 20mm (twin) 2 x Mk 15 Phalanx. 2-12.7 mm MG
Helicopters:	Platform for one large
Sensors:	
Radars:	SMART-S MK2 3D, Navigation
Other:	ASELFLIR 300D, ARES-2N ESM system

The contract for the construction of a new LST's was signed between Ministry of Defence and ADIK-Furtrans shipyard on 11 May 2011.

The value of the contract 370 million Euros. The first ship will be delivered in February 2017.

Capacities

The ships will carry 350 persons, 20 MBT and between 24 – 60 vehicles. The closed parking area is 1100 square meters and the open deck parking area is 690 square meters.

The armament consists of 2 single barreled 40mm Oto Melara guns, 2 Mk15 Phalanx CIWS, 2 machine guns on a stabilized remote-controlled chassis.

The ships will have a Smart Mk2 3D air/surface search radar (*which not common for an amphibious ship*) 2 AselFLIR 300D EO director, torpedo counter measures systems, laser warning receiver and Link 16/22 system. All sensors and weapons will be controlled by a 5 consoles of GENESIS CMS.

✚ SARUCABEY CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
NL-123	SARUCABEY	30 Jul 1981	31 May 1985
NL-124	KARAMÜRSELBEY	26 Jul 1984	01 Aug 1986

Characteristics

Displacement:	2.600 tons (full load)
Dimensions:	92 x 14 x 2.3 meters
Speed, Range:	14 knots,
Crew:	107 (9 officers)
Weapons:	
Guns:	3 x 40mm/70; 2 x 20mm (twin)
Mines:	120 – 135 depending on the type
Helicopters:	Platform for one large
Sensors:	
Radars:	Decca 1226, navigation

Capacities

They can carry 600 troops, 11 tanks and 2 LCVP's.

oth were built in now closed Taşkızak Naval Shipyard, İstanbul. The Sarucabey class is an enlarged version of now deleted Çakabey class.

Like all large Turkish amphibious ships they have mine laying capability as a secondary role

⦿ OSMANGAZİ CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
NL-125	OSMAN GAZİ	20 Jul 1990	27 Jul 1994

Characteristics

Displacement:	3.773 t. (full load)
Dimensions:	105 x 16.1 x 2.3 metres
Speed, Range:	17 knots, 4000 miles at 15 kts.
Crew:	109 (9 officers)
Weapons:	
Guns:	2 x 35mm/90 (twin); 2 x 20 mm; 1 x Mk 15 Phalanx

Helicopters: Platform for one large
Sensors:
Radars: Decca navigation

Capabilities'

She can carry 900 troops, 15 tanks and 4 LCVP's.

Bow opening ramps but no dock. The two small openings at her stern is used for mine laying. She was built in Taşkızak Naval Shipyard which is a non operational unit today. She was launched in 1990 and commissioned in 1994. She is the third generation of indigenous designed large amphibious ships and has all the design characteristics of Turkish large landing ships. Her construction lasted longer than planned and the second ship was canceled. She spends long time at the yard after the commissioning. Between 2010 and 2011 she received an extensive overhaul in **Alaybey Shipyard, İzmir**. [38°27'51.24"N - 27° 7'58.88"E]

V. ΑΚΤΟΦΥΛΑΚΗ

❖ **SAR 35 CLASS**

NUMBER

SG-71

SG-72

SG-73

SG-74

SG71

Characteristics

Displacement: 210 tons full load

Dimensions: 36.6 x 8.6 x 1.9 meters

Speed, Range: 26 knots, 450 miles at 24 kts.

Crew: 24

Weapons:

Guns: 1 x 40mm/70; 2 x 12.7mm MG.

Sensors:

Radars: Decca, navigation

Enlarged version of SAR 33 class, all built in Turkey

❖ **SAR 33 CLASS**

NUMBER

SG-61

SG-62

SG-63

SG-64

SG-65
SG-66
SG-67
SG-68
SG-69
SG-70

Characteristics

Displacement: 180 tons full load
Dimensions: 34.6 x 8.6 x 3 meters
Speed, Range: 33 knots, 450 miles at 24 kts.
Crew: 24
Weapons:
Guns: 1 x 40mm; 2 x 12.7mm MG.
Sensors:
Radars: Decca, navigation

The prototype of this class was designed by Erbil Sertel, a renowned Turkish naval engineer and built by Abeking & Rasmussen. All other vessels built in Turkey. These boats were overhauled in Istanbul Shipyard.

❖ TYPE 80 CLASS

NUMBER

SG-80
SG-81
SG-82
SG-83
SG-84
SG-85
SG-86
SG-87
SG-88
SG-89
SG-90
SG-91
SG-92
SG-93
SG-94
SG-95
SG-96
SG-97

Characteristics

Displacement: 198 tons full load

Dimensions: 40.7 x 7.1 x 2.2 meters

Speed, Range: 27 knots.

Crew: 24

Weapons:

Guns: 1 x 40mm/70; 2 x 12.7mm MG.

Sensors:

Radars: Decca, navigation, two boats of this class received electro-optical sensor system.

Enlarged version of SAR 33 class, built in Turkey

✚ KAAN 33 CLASS

NUMBER

SG-301

SG-302

SG-303

SG-304

SG-305

SG-306

SG-307

SG-308

SG-309

SG-310

SG-311

SG-312

SG-313

Characteristics

Displacement: 125 tons full load

Dimensions: 35.60 x 6.7 x 1.40 metres

Speed, Range: 45 knots, 600 nm at 20 knots

Crew: 20

Weapons:

Guns: 1 x 20mm; 2 x 12.7mm MG.

Sensors:

Radars: Navigation

Enlarged version of Kaan 29 class, designed by the same shipyard. The deliveries have started in 2004 and ended in May 20011. Further 7 to be delivered.

Remote-controlled stabilized machine gun platform STAMP, developed by Turkish defense contractor ASELSAN is installed on TCSG-307, TCSG-308 and TCSG-312

✚ KAAN 29 CLASS

NUMBER

SG-101

SG-102

SG-103
SG-104
SG-105
SG-106
SG-107
SG-108
SG-109

Characteristics

Displacement: 95 tons full load
Dimensions: 29 x 6.7 x 1.4 meters
Speed, Range: 45 kts, 750 kts at 20 kts.
Crew: 13
Weapons:
Guns: 3 x 12.7mm
Sensors:
Radars: Navigation

Note the manual machine gun mount has been replaced by STAMP.

These boat are enlarged version of the Kaan 15 class interceptor boats. These boats are constructed to an indigenous design by the private Yonca/Onuk shipyard that built all the Kaan class boats used by Turkish Coast Guard and Navy. First boat entered service in December 2000 and the last one in 2004. The tenth boat of the original contract was enlarged to Kaan 33 class.

✦ KAAN 19 CLASS

NUMBER

SG-19
SG-20
SG-21
SG-22
SG-23
SG19
SG22
SG23

Characteristics

Displacement: 30 tons full load
Dimensions: 22.5 x 4.7 x 1.3 meters
Speed, Range: 60 kts, 350 kts at 35 kts.
Crew: 5
Sensors:
Radars: Navigation

These boats are slightly enlarging version of Kaan 15 class interceptor boats. Made of composite materials. The first Boat TCSG-19 was build according to a R&D contract signed between Turkish Coast Guard Command and Yonca-Onuk Shipyard. The prototype was tested in 2006 and final purchase order was be given after the successful termination of the tests.

✦ KAAN 15 CLASS

NUMBER

SG-1
SG-2
SG-3
SG-4
SG-5
SG-6
SG-7
SG-8
SG-9
SG-10
SG-11
SG-12
SG-13
SG-14:
SG-15
SG-16
SG-17
SG-18

Characteristics

Displacement: 19 tons full load

Dimensions: 15.4 x 4.04 x 0.9 metres

Speed, Range: 54 kts, 300

Crew: 4

Sensors:

Radars: Basic Navigation

These boats are built to an indigenous design by a private Turkish Yonca/Onuk shipyard. The prototype boat made 55,6 knots on trials. First boat was handed to the Coast Guard in September 1998 and the last one in 2002. Like all Kaan class boats these are made off advanced composite materials.

✦ DOST CLASS

<u>NUMBER</u>	<u>NAME</u>	<u>LAUNCHED</u>	<u>COMMISSIONED</u>
SG-701	DOST	9 June 2010	5 April 2013
SG-702	GÜVEN	17 Dec. 2010	22 Nov. 2013
SG-703	UMUT	31 May 2011	5 April 2013
SG-704	YAŞAM	12 Sept. 2012	13 May 2014

Characteristics:

Displacement: 1725 tons full load

Dimensions: 88.4 x 12.2 x 4.6 meters

Speed, Range: 22 knots, 3500 miles at 14 kts.

Crew: 60
 Weapons:
 Guns: 1 x 40mm; 2 x 12,7mm
 Helicopters: 1 x AB-412 EP
 Sensors:
 Radars: Search radar, fire control radar

The contract for the construction of 4 ships at RMK Marine Shipyard was signed on 16 January 2007. The construction and commissioning of this class took longer than expected. The designs of the ships are based on the Sirio class vessels produced by Italian Fincantieri. With the commissioning of these ships Coast Guard will be able to perform its duties mainly search and rescue in sea state 5 and higher. These ships are the first Turkish Coast Guard vessels that can support helicopter operations.

VI. ΥΠΟΒΡΥΧΙΑ

✚ ATILAY CLASS (209 Type 1200)

NUMBER	NAME	LAUNCHED	COMMISSIONED
S-347	ATILAY	23 Sep 1974	12 Mar 1976
S-348	SALDIRAY	14 Feb 1975	15 Jan 1977
S-349	BATIRAY	24 Sep 1977	7 Nov 1978
S-350	YILDIRAY	20 July 1979	20 June 1981
S-351	DOĞANAY	16 Nov 1983	16 Nov 1984
S-352	DOLUNAY	22 July 1988	29 July 1989

Γενικά χαρακτηριστικά

Εκτόπισμα: 1.185 t.
 Διαστάσεις: 55,9 x 6.2 x 5.5 m.
 Ταχύτητα, Αυτονομία: 11 knots, 7.500nm @ 8 kts
 Πλήρωμα: 38 (9 Αξιωματικοί)
 Οπλισμός:
 Τορπίλες: 14 x AEG SST 4; Mk-37; Mk-23 8 – 533mm tubes
 Αισθητήρες:
 Ραντάρ: S 63B, surface search
 Σονάρ: CSU-3 passive / active search and attack

Σχόλια:

Τα ΥΒ TCG Yildiray, TCG Doğanay, και TCG Dolunay είναι τα πρώτης γενιάς ΥΒα που έχουν κατασκευαστεί στην Τουρκία. Όλα τα άλλα είναι κατασκευασμένα στην Γερμανία. Όλα έχουν αναβαθμισμένα ηλεκτρονικά συστήματα.

Τον Μάρτιο του 2011 στην Τουρκία ξεκίνησε ένα πρόγραμμα αναβάθμισης των ΥΒων τους σε Ay class. Τα 2 πλέον νεόδμητα ΥΒ TCG Doğanay και TCG Dolunay συμπεριλαμβάνονται σε ένα ειδικό πρόγραμμα αναβάθμισης των συστημάτων τους που έχει να κάνει με τα periscope, ESM / ECM και communication system. Προς διατήρηση του κόστους έργου δεν συμπεριλήφθηκε η αναβάθμιση του νέου Underwater Command and Control System integration, προτιμήθηκε η αναβάθμιση των 4^{ων} τορπιλοσωλήνων για να φέρουν την ικανότητα χρήσης των Mk48 ADCAP Mod6 AT heavy weight τορπιλών.

✦ **PREVEZE CLASS (209 Type 1400)**

NUMBER	NAME	LAUNCHED	COMMISSIONED
S-353	PREVEZE	22 Oct 1993	28 July 1994
S-354	SAKARYA	28 Jul 1994	23 Sep 1995
S-355	18 MARTS	25 Aug 1997	24 June 1998
S-356	ANAFARTALAR	1 Sep 1998	22 July 1999

Γενικά χαρακτηριστικά

Εκτόπισμα σε κατάδυση:	1.586 tons
Διαστάσεις:	62 x 6.2 x 5.5 m.
Ταχύτητα, Αυτονομία:	15 knots, 8200 miles @ 8 kts.
Καταδυτική ικανότητα:	250 m.
Πλήρωμα:	30 (8 Αξιωματικοί)
Οπλισμός:	
Πύραυλοι:	Harpoon SSM
Τορπίλες:	Tigerfish Mk 24 Mod 2; STN Atlas DM2A4 14 Harpoons & Torpedoes; 8 - 533mm bow tubes
Αισθητήρες:	
Ραντάρ:	surface search
Σόναρ:	CSU-83 passive and active search and attack; TAS-3 towed array

Σχόλια

Πρόκειται για ένα μεγαλύτερο και βελτιωμένο ΥΒ της Atılay class, το οποίο έχει κατασκευαστεί με την παροχή γερμανικής τεχνολογικής υποστήριξης και βοήθειας και έχει επιβεβαιωμένα μεγάλη αντοχή.

Ως γνωστό μεταξύ 24 Οκτωβρίου 1997 και 3 Φεβρουαρίου 1998 το ΥΒ S-353 TCG Preveze ταξίδεψε από την Τουρκία στην Μαλαισία και επιστροφή προκειμένου να επιδείξει την σημαία του με σκοπό να προωθήσει τις τουρκικές δυνατότητες ναυπήγησης ΥΒων στην διεθνή έκθεση Defense LIMA 1997.

Το ΥΒ S-353 TCG Preveze το 2011 πραγματοποίησε το μακρύτερο σε παραμονή κατάδυση ταξίδι σε αθόρυβη υπηρεσία επί 32 ημέρες στην διάρκεια επιχείρησης με κωδικό Unified Protector.

Κάθε ένα ΥΒ είναι εξοπλισμένο με ένα Mark 76 Attack και ένα Mark 76 Search periscopes κατασκευασμένα από την εταιρεία Kollmorgen. Τον Απρίλιο του 1999 επιλέχθηκε η BAe (STN Atlas) για την προμήθεια των DM2A4 τύπου τορπίλη (40 + άγνωστο αριθμό τορπίλες εκπαίδευσης) με κόστος 40.000.000 δολαρίων.

✦ **GÜR CLASS (Mod 209 Type 1400)**

NUMBER	NAME	LAUNCHED	COMMISSIONED
S-357	GÜR	May 2002	24 July 2003
S-358	ÇANAKKALE	August 2002	26 July 2005
S-359	BURAKREİS	05 Sep 2005	15 Feb 2006
S-360	BİRİNCİ İNÖNÜ	May 2006	22 July 2007

Γενικά χαρακτηριστικά

Εκτόπισμα σε κατάδυση:	1.586 t.
Διαστάσεις:	62 x 6.2 x 5.5 m.
Ταχύτητα, Αυτονομία:	15 knots, 8200 miles @ 8 kts.
Πλήρωμα:	30 (8 Αξιωματικοί)
Οπλισμός	
Πύραυλοι:	Harpoon SSM
Τορπίλες:	Tigerfish Mk 24 Mod 2; STN Atlas DM2A4 14 Harpoons & Torpedoes; 8 – 533mm bow tubes
Αισθητήρες	
Ραντάρ:	Surface search
Σονάρ:	CSU-83 passive and active search and attack; TAS-3 towed array

Σχόλια:

Αν και τουρκικός ονομαζόμενος τύπος/κλάσης (*Gür class submarines) έχουν όμοια εμφάνιση και χαρακτηριστικά με αυτά των ΥΒ Preveze class submarines.

ΠΡΟΣΟΧΗ

Μετά την απόφαση του Τουρκικού Ναυτικού να σταματήσει να προσδιορίζει με αριθμούς τα ΥΒ του προς αύξηση της ικανότητας stealth είναι αδύνατον εξωτερικά να αναγνωριστούν και να προσδιοριστούν κατά πόσο πρόκειται για ένα από τα 8 ΥΒ κλάσης Preveze αντί των 4ρων ΥΒ Gür class. Τα S-357 TCG *Gür* κατά το Τουρκικό ναυτικό θεωρούνται ως νέα κλάση ΥΒων ένεκα των υψηλών τεχνολογικών εφαρμογών και των γενικών προηγμένων χαρακτηριστικών τους, ξεχωρίζουν από το νέο σύστημα ελέγχου πυρός το οποίο έχει ενσωματωθεί με το sonar, τις νέες συνδέσεις δεδομένων και τις βελτιωμένες δυνατότητες προσδιορισμού στόχων και τις δυνατότητες παρακολούθησης των στόχων.

Υπάρχει παλαιότερη σύμβαση (22 Ιουλίου 1998) για κατασκευή ενός δευτέρου αναβαθμισμένου batch των ΥΒ Preveze class μεταξύ του Τουρκικού ναυτικού και της HDW.

✚ CERBE CLASS (214 Type 1200)

NUMBER	NAME	LAUNCHED	COMMISSIONED
S-?	?	?	?
S-?	?	?	?
S-?	?	?	?
S-?	?	?	?

Γενικά χαρακτηριστικά

Εκτόπισμα σε κατάδυση:	1.800 t.
Διαστάσεις:	65 x 6.2 x 6.6 m
Ταχύτητα:	12 kts (επιφανείας); 20 kts (κατάδυσης)
Πλήρωμα:	27 (5 Αξιωματικοί)
Οπλισμός:	
Πύραυλοι:	Harpoon SSM
Τορπίλες:	Mk-48 14 Harpoons & Torpedoes;
Αισθητήρες:	
Ραντάρ:	Επιφανείας
Σονάρ:	Παθητικό, PFAS - flank, ενεργό έρευνας και επίθεσης

Σχόλια:

Τον Ιούλιο του 2009 το τουρκικό ναυτικό συνέπραξε με την εταιρεία Howaldtswerke-Deutsche Werft GmbH (HDW) με έδρα το Kiel, (ΣΗΜ.: Πρόκειται για θυγατρική εταιρεία της «γνωστής» μας ThyssenKrupp Technologies), και την Marine Force International LLP (MFI), London (ΣΗΜ.: εξίσου «γνωστής» εταιρεία, νεοσύστατη, ιδρύθηκε το 2004 και είναι ειδικού σκοπού εταιρεία συγκεκριμένα εξειδικεύεται στην πώληση ΥΒ και εξυπηρετεί στην απόκρυψη «αμοιβών» τρίτων ως γνωστό, κάποιος ANT300 έχει δώσει απόρρητη έκθεση στην Ελληνική Βουλή το 2011 και αλλού -σήμερα υπάρχει και στο www.scribd.com ειδικά με αυτό το κομμάτι δηλ. χρηματισμός πολιτικών προσώπων). Η Marine Force International LLP έχει ως μέτοχους την Ferrostaal την HDW μεταξύ άλλων, και είναι ένα από τα 3 συμβαλλόμενα μέρη (το 3^{ον} συμβαλλόμενο μέρος είναι η τουρκική TETICO) στον εκσυγχρονισμό των 6 ΥΒ Class 214 και την πλήρη κάλυψη του εξοπλιστικού πακέτου. Το συνολικό κόστος ήταν 2,50 Δις € και είχε συμφωνία %80 offset.

Οι εργασίες με μικρή υπεργολαβική συμμετοχή τουρκικών εταιρειών έλαβαν μέρος στο **Gölcük** [40°43'28.59"N - 29°48'53.12"E] γνωστό από την κατασκευή των 11 ΥΒ Class 209 τα οποία έχουν αποπερατώθηκαν-παραδόθηκαν στο τουρκικό πολεμικό ναυτικό σχεδόν στο σύνολο τους. Οι εγκαταστάσεις γειτνιάζουν με την αυτοκινητοβιομηχανία (μονάδα συναρμολόγησης των αυτοκινήτων FORD) ιδιοκτησίας της **Koç Holding**

Αν και η κατασκευή των ΥΒ Class 214 έγινε από γερμανικές εταιρείες χρησιμοποιήθηκαν πλήθος τουρκικών εταιρειών εξειδικευμένων στον αμυντικό τομέα όπως:

- HAVELSAN η οποία κατασκεύασε τα Command And Control Software των ΥΒων.
- **Koç Savuma Sistemleri** (η «γνωστή» μας εταιρεία με την ιδιοκτησία Ελληνικών μαρινών και άλλων εταιρειών στην ελληνική επικράτεια) είναι αυτή που ανέπτυξε την κατασκευή του συστήματος αντιμέτρων torpíλων.
- MİLSOFT με την παράδοση του LINK11/22 DATA TRANSFER SOFTWARE
- TÜBİTAK με την παράδοση του UNDERWATER TELEPHONY SYSTEM AND SELF-NOISE AND OTHER SIGNATURE MEASURING SYSTEMS

Και η

- STM με έργο SUBMARINE CONSTRUCTION & SYSTEM INTEGRATION.

VII. ΠΛΟΙΑ ΥΠΟΣΤΗΡΙΞΗΣ ΥΒ

✚ ALEMDAR CLASS

NUMBER	NAME	LAUNCHED	COMMISSIONED
A-601	ALEMDAR	29 April 2014	?

Characteristics

Displacement: XXX tons full load

Dimensions: 91 x 18.5 x 7,8 meters

Speed, Range: 18 knots, 4500 miles at 14 kts.

Crew: 131

Sensors:

Radars: Navigation

TCG *Alemdar* is a dedicated submarine rescue mother ship designed to perform subsea and surface search and rescue missions in various sea conditions. The main task will be rescue submarines that are unable to resurface themselves. She will be able to provide life support to the stranded crew of a distressed submarine up to 600 meters depth. She will carry ROV's, atmospheric diving suits and other necessary equipment.

VIII. ΑΕΡΟΠΟΡΙΚΗ ΥΠΟΣΤΗΡΙΞΗ ΤΟΥΡΚΙΚΟΥ ΣΤΟΛΟΥ.

Φ S-70B SEAHAWK

TAIL NUMBER

TCB-50
TCB-52
TCB-53
TCB-54
TCB-55
TCB-56
TCB-57
TCB-58
TCB-59
TCB-60
TCB-61
TCB-62
TCB-63
TCB-64
TCB-65
TCB-66
TCB-67
TCB-68
TCB-69
TCB-70
TCB-71
TCB-72
TCB-73
TCB-74

Characteristics

Length:	12.51 metres
Rotor Diameter:	16.36 metres
Height:	5.23 metres
Speed, Range:	250 km/h, 1100 km
Crew:	3
Weapons:	
Torpedoes:	2 x Mk 46/Mk 54
Missiles:	2 x Hellfire II or Penguin Mk 2 Mod. 7
Sensors:	

Radar: APS-143
Other: ASQ-811(V) MAD, FLIR, LLTV, Helras

First batch of 8 ordered in 1998, second batch of 17 ordered in 2005.

(TCB-51 has fatally crashed in 2003)

They can carry both Penguin Mk2 and AGM-114K Hellfire II missile with a newly developed Blast/Fragmentation warhead.

On 12 October 2014 Turkish Naval Aviation lost one of its S-70B Seahawk that fatally crashed. The helicopter took off from the CengizTopel Naval Aviation airbase and was heading to Konya as the helicopter collided with a hill killing all servicemen on board.

Lieutenant Commander DenizAkdeniz,

Sub Lieutenant Çağrı Ceyhan,

Chief Petty Officer Mehmet Karakaşoğlu

Chief Petty Officer ÖmerBurakÖğüt



CASA CN-235-100M MPA

TAIL NUMBER

TCSG-551

TCSG-552

TCSG-553

Characteristics

Length: 21.41 metres
 Wing span 25.82 metres
 Height: 8.22 metres
 Speed, Range: 440 km/h, 1575 km
 Crew: (?)
 Weapons: These planes are unarmed
 Sensors:
 Radar: Ocean Master 400
 Other: Side looking airborne radar, AselFLIR-200,

:

When it was decided to purchase new ASW planes for Turkish Navy these 3 maritime patrol planes for Turkish Coast Guard were added to the whole package.

These planes have the same AMACOS mission control system like the Turkish Navy planes but are not armed.

❖ CASA CN-235-100M ASW

TAIL NUMBER

TCB-651
 TCB-652
 TCB-653
 TCB-654
 TCB-655
 TCB-656

Characteristics

Length: 21.41 metres
 Wing span 25.82 metres
 Height: 8.22 metres
 Speed, Range: 340 km/h, 1390km
 Crew: 9
 Weapons:
 Torpedoes: 2 x Mk 46/Mk 54
 Missiles: (?)
 Sensors:
 Radar: Ocean Master
 Other: MAD, FLIR, LLTV

When the acquisition project of these planes started in 1998, CASA was still an independent company, the C-295 has just made its maiden flight and its ASW version did not exist even in the dreams of the CASA/EADS/Airbus Military engineers and the P-8 Poseidon was not even on the drawing board.

The planes have AMASCOS which ties together multiple sensors – radar, FLIR, ESM, acoustic system, AIS, MAD, SLAR radar, IR/UV scanner – to detect, identify and track threats, maintain real-time tactical

situation awareness, manage NATO and national tactical data links and deploy onboard weapon systems.

✚ **AB-412 EP**

TAIL NUMBER

TCSG-501
TCSG-502
TCSG-504
TCSG-505
TCSG-506
TCSG-507
TCSG-508
TCSG-509
TCSG-510
TCSG-511
TCSG-512
TCSG-513
TCSG-514
TCSG-515

Characteristics

Length: 12.92 metres
Rotor Diameter: 14.02 metres
Height: 4.32 metres
Speed, Range: 260 km/h, 745 km
Crew: 2 + 14 passengers

Weapons:

These helicopters are unarmed.

Sensors:

Radar: RDR-1500B
Other: FLIR

(TCSG-503 was lost with all hands on 30th July 2005, off Antalya coast.)

They are used for search and rescue operations and are unarmed.

✚ **AB-212 ASW**

TAIL NUMBER

TCB-29
TCB-30
TCB-37
TCB-38
TCB-39
TCB-41
TCB-42
TCB-44

TCB-45

TCB-46

TCB-47

Characteristics:

Length:	12.92 metres
Rotor Diameter:	14.60 metres
Height:	4.40 metres
Speed, Range:	196 km/h, 667km
Crew:	3
Weapons:	
Torpedoes:	2 x Mk 46/Mk 54
Missiles:	2 x Sea Skua
Sensors:	
Radar:	Sea Spray Mk 3
Sonar:	ASQ-18

TCB-29 and TCG-30 are general purpose helicopters transferred from Turkish Land Forces and they do not have any ASW or ASuW gear. As to the TCB-44, TCB-45 and TCB-46 have additional Italian Elettronica Colibri EW suite.