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Dear Paul,

Thank you for your instruction to survey the yacht. The survey is now complete and I attach it below.

In our conversation before the survey, you said that you were looking for a yacht to sail and use in the Mediterranean in the summer, taking it via the French canals. In summary, this boat can be used for this purpose although you may want to carry out some modifications for extra water and better cooking arrangements. It is a very good vessel for its age although standing rigging and sails are original or close to. You should budget around £5000 on top of the purchase price to replace sails, some rigging, improve the cooking arrangements and carry out the recommendations in the survey. Although the list of recommendations appears long, many are very small tasks. My valuation is at the end of the survey and I also enclose a review of this model of yacht from an American publication I have found on the internet for you for your interest.

If you would like to discuss anything further I would be happy to go through them with you. If you would like me to oversee any of the work or source any parts, equipment or arrange for the work I would be pleased to give you a quote for this.

Yours faithfully

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Marine Surveys UK

Yacht and Small Craft Surveyors

“Pragmatic Surveys in plain English”

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Survey Report no: 10652

Type of Vessel: Jeanneau Arcadia

This survey was carried out in 2010 at Marina, United Kingdom. The above named being a prospective purchaser of the vessel.

Limitations:

- ✚ Where access is restricted by fixed panels, linings etc. it was not possible to examine and I cannot say those areas are free from defects.
- ✚ At the request of the owner the anti-foul was not able to be scraped
- ✚ This Report has been prepared for the use of Commissioning Client and no liability is extended to others who may see it.
- ✚ In some cases it is not possible to detect latent and hidden defects without destructive testing which is not possible without the Owner's consent.

Scope of Survey:

- ✚ This is a Pre-Purchase Survey and its purpose is to establish the structural and general condition of the vessel. Where items of equipment have been tested this will be stated in the text.
- ✚ Camera and Snake Endoscope electronic equipment was used in places to view normally inaccessible areas and the pictures analysed to identify any issues.
- ✚ A general inspection of the engine and installation will be made, but this is a visual inspection only without running the engine. It should be appreciated that some components may appear serviceable but found to be defective when the engine is run.

Recommendations:

- ✚ These will not be made concerning cosmetic or other minor defects, although relevant suggestions may be made in the text.
- ✚ Recommendations will be restricted to those defects which should be rectified before vessel is used, (or within a given time span if specified), and items which may affect Insurability
- ✚ *Recommendations will be printed in red italics for quick reference.*
- ✚ *The recommendations are contained in the body of report in order that they may be read in context, and are also listed as part of the Conclusions at the end of this Report.*

Conditions of Survey:

Vessel was examined on hard standing in a metal cradle at the premises, having been ashore for the winter.

We had no permission to scrape the anti-fouling cover, apart from this no special conditions affected the survey other than as described in the text.

Information is reported in the Sections below, followed by Recommendations and Conclusions and valuation

Hull, Deck and Structure.

1. Details of Subject Vessel, (General Description, Dimensions, Registration etc.).
2. Keel.
3. Hull below Waterline.
4. Topsides above Waterline including Rubbing Strake etc.
5. Deck Moulding.
6. Coachroof.
7. Cockpit.
8. Hull/Deck Join.
9. Bulkheads and Structural Stiffening including Internal Mouldings.

Steering, Stern Gear, and Skin Fittings etc.

10. Rudder and Steering.
11. Stern Gear.
12. Cathodic Protection.
13. Skin Fittings and other through Hull Apertures.

On Deck.

14. Main Companionway and other Accesses to Accommodation.
15. Ports Windows etc.
16. Pulpit, Stanchions, Pushpit, Lifelines and Jackstays.
17. Rigging Attachment Points.
18. Ground Tackle and Mooring Arrangements.
19. Other Deck Gear and Fittings.
20. Davits and Boarding Ladders.

Rig.

21. Spars.
22. Standing Rigging.
23. Running Rigging.
24. Sails and Covers etc.

Safety.

25. Navigation Lights.
26. Bilge Pumping Arrangements.
27. Fire fighting Equipment.
28. Lifesaving and Emergency Equipment.

Engine.

29. Engine and Installation.
30. Fuel System.

Accommodation and on Board Systems.

31. Accommodation General.
32. Gas Installation.
33. Fresh Water Tanks and Delivery.
34. Heads.
35. Electrical Installation.
36. Electronic and Navigation Equipment.
37. Heating & Refrigeration

1.Details of subject vessel:

Jeanneau Arcadia is reportedly a comfortable and fast cruiser. Built by Jeanneau SA, 85500, Les Herbiers, France in 1985. The vessel is an aft cockpit, 3 cabin, single head, Bermudian sloop, with a good strong double spreader rig and most controls led back to the cockpit. She is tiller steered, a roomy family cruiser racer designed by Tony Castro and popular with charter companies in the mid 1980's. Information from the internet claims has been in the same ownership but was laid up ashore for five years but even since then has been very lightly used, mostly as a day sailer. She had a new engine fitted in 2004/5 which has only done approx 30 hrs since then.

Manufacturers information (not verified by measurement)

Length Overall:	9.00m
Length Hull	8.56m
Length Waterline:	7.45m
Beam:	3.15m
Draft:	1.64m
Displacement:	2800KG
Registered tonnage	7.8 Ton

Boat specific information

Registration	SSR15480
Hull #	0725085-028292
Approbation #	2252
French Marine Standard	Class 2
Year of build	1985 (pre- dates RCD code and does not need to comply to that standard)



2. Keel

The fin keel is of cast iron, through bolted to the hull moulding with studs. These are fully encapsulated in glass fibre laminate. They were not checked in tension. The surface of the iron is heavily anti-fouled, but in places where anti-foul has come off the surface has a light coating of corrosion as would be expected. There is no evidence of grounding and was tested all over with a magnet for filler of which there is no evidence. The keel was hammer tested for voids and the joint spike tested for gaps. There is a locating area in the top centre which is filled as per manufacturer design.

- There is a 5mm gap towards the forward end, where the keel is not flush with the moulding. It is possible to insert a spike in 25mm. This is common to find on the further most keel stud on many yachts
- There is large amount of sealant at the joint.

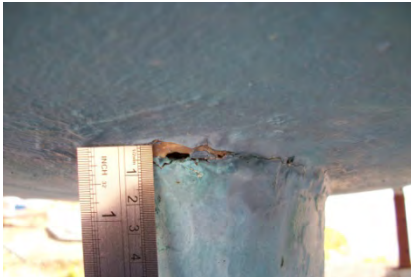


Fig 1 5mm gap at forward end keel



Fig 2 Sealant at keel joint

Suggestion for both is rake out sealant at keel joint and refill with a good mastic like Sikaflex 291.

Inside the boat, as mentioned the nuts are encapsulated with no evidence of corrosion or leakage except on aft nut but this comes from the grounding attachment.

3. Hull below Waterline:

- a) The hull below the waterline is of solid resin GRP construction utilising chopped strand matt and woven rovings, the final layer being woven roving. The hull is supported in a cradle sitting on its keel with 4 pads to support. There is no sign of deflection at the pads. There is a slight deflection in the hull at the aft end, measuring 400mm with max deflection of 4mm.



Fig 3 Area of hull deflection



Fig 4 Detail of hull deflection

The inside of the boat was checked and there is visual evidence of dry laminate at the aft end of the keel under the top laminate, when hammer tested it sounds "hollow".



Fig 5 Aft keel bolt is seen to right



Fig 6 Lighter area is suspected damaged laminate

Recommendation – support boat under floors and gentle jack up aft end of yacht to take the weight off the aft end of the keel. Check inside for movement. If hull goes back to shape, laminate addition floor and longitudinal support in area affected to give additional strength in case of further grounding.

- b) There are no further signs of impact or repair on the under-body which is found in good condition. As far as can be ascertained there is no stress crazing evident around root of keel or skeg. Light hammer sounding (not heavy enough to damage anti-foul) did not suggest any delaminating or voids except in port amidships which sounded slightly dull but I put this down to the location of the full bag type water tank immediately inside at this point.
- c) Vessel was found with thorough coating of anti-foul, although this anti-foul will be classed as “dead” now and will need re- antifouling. Suggest that nothing more aggressive than a scraper and sand paper is used to key the existing anti-foul. Grit and slurry blasting can damage the gel coat. As mentioned, anti-foul could not be removed but in areas where it is and from viewing the hull through various light conditions as far as far as can be ascertained there are no signs of wicking or osmotic blistering.
- d) Moisture readings were taken across the underwater area using a capacitance type moisture meter of Sovereign Quantum type, operating in both shallow and deep reading modes. (Anti-foul can retain moisture and the readings may therefore be higher than on clean gel coat). The meter was first checked for correct calibration.
The readings recorded below are from the meter operating in the shallow and also deep mode on the relative scale 0-100.
The readings are relative and **do not** express moisture content as a percentage of dry weight. High moisture content is not generally a structural defect, and is to be expected in older boats. However where some moisture has been absorbed the likelihood of moisture related problems occurring is higher, and the actual state of the laminate cannot be completely guaranteed without destructive testing followed by chemical analysis. The opinion given in this survey is based on all the evidence available at the time but without destructive testing.

The conditions prevailing when the readings were taken were as follows:

Air Temperature:	16°C
Surface temperature:	17.3°C
Relative Humidity:	42.3%
Time ashore	Over 3 months
In summary the weather conditions for obtaining moisture readings were very good and the drying out period available prior to survey was ideal.	

Readings were as follows:

Meter	Range below waterline.	Range above waterline.
Sovereign Quantum, Scale A, 0-100 Shallow mode	9 – 17	5 - 9
Deep Mode	14 – 21	5 - 9

The values recorded below the waterline show there is some moisture present at low levels but of no concern. The values above the waterline can be considered dry.

4. Topsides above Waterline including Rubbing Strake:

- a) Top side moulding found very fair and finished in original gel coat. The gel coat surface is in very good condition with little UV degrading although dull in places and stained around the waterline. This can be “cut” out with marine gel coat cleaner and polished to a good shine.
- b) There is no sign of major impact or repair evident. No stress crazing or cracking noted in way of bulkheads or other internal reinforcing members. No abrasion damage present other than very minor cosmetic damage commensurate with age.
- c) There is one small (12mm Ø) impact damage to the gel coat on the transom.



Fig 7 Gel coat damage on transom

Suggest that a simple gel coat repair is made to avoid water ingress and future deterioration.

- d) The water line has been over painted and is dull with brush marks.
- e) The hull pinstripe styling lines are faded and worn amidships.
- f) Topsides in sound structural condition and good cosmetic condition.

5. Deck moulding:

- a) The deck is of GRP with some areas of sandwich construction with end grain balsa core stiffening. Plywood is incorporated into the laminate in way of load bearing fittings and areas of high stress. The whole deck was carefully tested underfoot and no sign of delaminating or other structural defect.

- b) The original moulded non slip areas are in very good condition. The gel coat is off white, almost cream, there are no signs of pitting caused by UV or aggressive cleaning agents. This will clean up and polish with a good marine cleaner and polish.
- c) No significant stress crazing present in entire deck.
- d) No distortion or stress crazing noted around rigging attachment points and other load bearing fittings.
- e) Slight depression in deck at aft end of starboard forward cleat. On checking below this is bolted through solid GRP laminate with a substantial stainless steel plates fitted below. No signs of rust or movement when tested with large lever. No action required.
- f) It was noted at port side amidships deck area, higher moisture readings (20) than average (10), around the water filler and at the genoa tracks (18). It was noted that the water filler was a replacement and was not lying flush to the deck and could be allowing water into the balsa core.

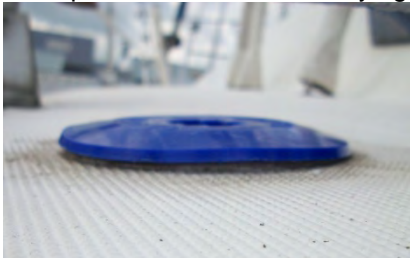


Fig 8 Water filler no flush

It is suggested that the water filler be removed, check for correct size, the bare balsa sealed and the filler refitted. The genoa track readings are commensurate with the age of vessel.

6. Coachroof:

- a) Integral with deck moulding and constructed in the same way. The whole area was carefully tested underfoot and no sign of delaminating or other structural defect.
- b) No distortion noted in way of mast step when shrouds tested with body weight.
- c) All handrails secure, screw heads were hammer tested and found sound and in secure condition.
- d) Pinstripes are missing.

7. Cockpit:

- a) Integral with deck moulding and of direct self draining type through transom.
- b) Deep locker located to starboard, lid securely hinged with positive method of closure and locking.
- c) Transom end of cockpit has GRP removable seat, normally for life raft stowage although none present.
- d) Open stowage for gas bottle is moulded into cockpit at aft end.
- e) All seating area has teak slated overlay. This is bonded to onto GRP with no screw fixing. This is in fair condition for age although starting to separate and crack in some areas.



Fig 9 Mastic de-bonding

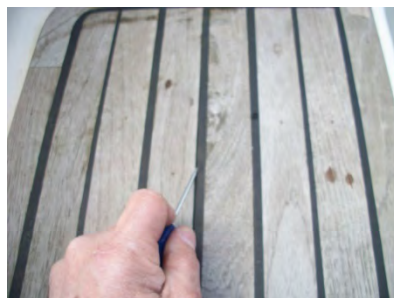


Fig 10 Mastic de-bonding



Fig 10a Crack in teak

It is a personal choice if this is to be replaced or just cleaned.

- f) The cockpit sole grating is coming apart on the underside. Suggest this is glued back together.



Fig 11 Underside of cockpit

- g) Engine control panel moulding in cockpit has Gel coat crazing. Suggest simple gel coat repair or replacement.



Fig 12 Crazing on engine panel moulding

Those areas of the above mouldings comprising deck, coach-roof and cockpit that are of sandwich construction were tested with deep reading moisture meter to identify any moisture ingress to the core material and except where noted above no high readings were noted.

8. Hull/Deck Join:

- a) This is of mechanical type. The hull moulding has an inward turning flange with the deck moulding lying on top. Stainless bolts are set through an aluminium toe rail on 100mm centres vertically through the deck and the hull flange as well as horizontally every 180mm through the hull. The whole joint is then heavily bonded with FRP laminated. This is visible in the anchor locker, fore cabin, cockpit locker and aft cabin. There are no stains in any area either material linings or wood linings indicating a very secure bond.



Fig 13 Hull deck bond from inside



Fig 14 Toe rail fixings external

- b) Toe rail of aluminium extrusion, lying fair and secure except where noted.
c) Starboard Toe rail amidships, evidence of slight crushing causing rail to lift slightly. Checked with moisture meter, no evidence of water ingress.



Fig 15 Slight area of lift stb side

- d) Port Toe rail amidships, minor bending, no lift in rail.

Suggest both c & d are acceptable as removal will be expensive and probably damage the currently secure bond. Toe rail can be polished to make more acceptable.

9. Bulkheads and Structural Stiffening including Internal Mouldings:

A number of components contribute to the overall structure.

- a) The shell mouldings are robust in the first place.
- b) There are a number of floors well bonded to the hull throughout the length of the hull. (Floors are heavy transverse frames across the centreline but not continuing full height to deck level).
- c) The forward and aft bulkheads are well bonded on all sides, the teak having been removed at the edges to give a good bond.
- d) All locker sides are bonded to each other and so perform a part structural role.
- e) 3 knees where chain plates attach on either side of the hull are bonded to hull and deck.
- f) The cabin soles were lifted, all floors visually checked and hammer tested, all lockers opened and bonding checked. No stress cracks, fractures or failure of bonding was noted.
- g) The mast compression loadings are transferred from the coach roof to hull via a steel compression post, which sits directly onto the hull at the top of the keel. There is slight brown staining at the top of the laminate at the base of the compression post. The area was spike tested and hammer tested, no fault noted.
- h) The starboard saloon under berth locker front at its lower aft inboard end is showing visual signs of water ingress from the bilge area. A spike can be pushed through the veneer. As this area is below the cabin sole, suggest dry out, clean off and seal and at the same time seal the edge of the hole cut for bilge pipe in same panel.



Fig 16 Floors facing

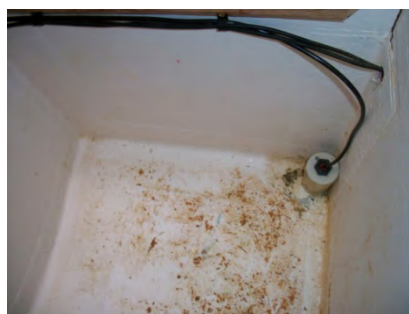


Fig 17 Good quality of bonding in lockers



Fig 18 starboard saloon under berth locker front and floor laminate

No deterioration noted to structure, which can be considered well constructed and robust. These earlier Jeanneaus are of known good quality and well constructed.

10. Rudder and Steering:

- a) The rudder consists of two moulded halves, bonded together around a stainless steel stock and stainless steel frame. It is skeg supported one third of the way down its depth and semi balanced below the skeg.
- b) The stock was confirmed stainless steel marine quality by checking with a magnet.
- c) There are no splits or weeps noted at the edges, top or bottom. There is a 90mm split on the port side, still showing signs of weeping. Moisture reading on the port side around it are very high (47) while on Stb side low in the same area. Hammer testing sounded a localised area of delaminating or hollow area.



Recommendation – Due to localisation of damage, lack of any splits, a professional local repair can be made. Grind out area around split from port side until dry area found. Re-laminate and bond to frame and seal with epoxy. Fair in finish.

Fig 17 Rudder from port side clearly showing a line of weeping

- d) The rudder is supported on a shoe constructed of a nylon type material bush supported by two stainless steel plates with stainless steel nuts and bolts. All found in good condition.
- e) Slight play was found in the lower bush and none in the upper bush. This is at an acceptable level.
- f) No movement was detectable between the blade and stock where it emerges from the top of the blade when the strength of one man was applied to the trailing edge of the blade with the tiller locked in position.
- g) The tiller is of solid teak in good condition, mounted on a yellow metal knuckle joint. This is slightly loose on the stock the play is exaggerated at the outboard end of the tiller. Suggest that the pin is removed, the knuckle removed and a new pin fitted to take up the play.



Fig 18 Tiller knuckle and fixing pin.

- h) The stainless steel rudder tube is seen to be well bonded to the hull. There is no seal at the upper end which is open and some 600mm above the water line as per the manufacturers design. There was no sign of corrosion stains at the base; on closer inspection and spike tested these are surface under the flow coat where no oxygen could get to the stainless steel.



Fig 19 Signs of surface rust on rudder tube



Fig 19a Rudder tube with open top above water line.

11. Stern Gear:

- a) Two bladed yellow metal propeller on stainless steel shaft. The prop was hammer sounded and edge checked and is in good condition with no damage or corrosion evident.
- b) Yellow metal Prop nut is castellated with split pin correctly fitted.
- c) Test with magnet confirms shaft to be of good grade stainless steel. Shaft rotated by hand, appears true with no binding of bearings present.
- d) Shaft is supported by yellow metal P Bracket, found secure and in good condition with no sign of dezincification. Inside the boat the bonding can be seen and is supported at a floor, it is fully encapsulated. No signs of movement.
- e) There is excessive play in cutlass bearing in P bracket which will cause knocking and can lead to wear in other components.
Recommendation – Rubber cutlass bearing is replaced.
- f) Stern gland and seal. This is an aftermarket PSS seal, attached to the stern tube which is bonded into the hull. The security of the stern tube could not be checked due to attachment of bellows. Fixing clips were all hammer tested and viewed underside with a mirror. The bellows were checked for splits and as far as can be ascertained are in good condition.



Fig 20 PSS Stern Gland and seal



Fig 21 Detail of shaft in coupling has spun in the past in the Fenwick

- g) This age of Jeanneau yachts fitted with Yanmar engines had French made Fenwick couplings and while looking like a genuine Yanmar coupling did not grip the shaft as well. The shafts were known to come out of the boat and through the stern gland causing yachts to sink. You will note two jubilee clips fitted forward of the gland on the shaft, these are a safety feature in case the coupling were to give way again, although I would suggest the PSS fitting will prevent the shaft dropping out again. I suggest a genuine Yanmar coupling is purchased and fitted if there is any further spinning.

12. Cathodic Protection:

- a) The conventional stud mounted anode was checked to be electrically bonded to the shaft and propeller but not to P Bracket, which is manufacturer spec.
- b) Anode is not in need of replacement. Inside new studs can be seen to have been fitted with new bonding cables to engine. Suggest that the inboard nuts are laminated to hull which is good practice.



Fig 21 New anode studs and cables, note lower nuts should be laminated to hull

13. Skin Fittings and other through Hull Apertures:

No skin fittings or valves were dismantled as part of this survey but the following routine tests were carried out:

- ✚ Examination from outside and inside the boat.
- ✚ All valves open and closed to their full extent where possible.
- ✚ Any fixing bolts hammer tested where accessible.
- ✚ Bodies of metal valves or seacocks tested with a hammer inside the boat and external parts hammer tested outside the boat.
- ✚ Fittings aggressively tested inside the boat for security in the hull.
- ✚ Hose clips inspected and hoses aggressively tested for security.

Below Waterline:

- a) Engine intake: access in engine bay. Consisting of yellow metal thru hull fitting, with DZR ball valve and pipe connection, all in satisfactory condition. 2 clips on fitting. It should be noted that the thru fitting has been replaced and the yellow metal used cannot be determined. It should only be bronze and not brass. If no receipts are available the purchaser should check condition often when in the water as brass is not suitable for underwater fittings.
- b) Toilet outlet: Bronze thru hull with DZR ball valve. Inboard fitting showing a lot of green corrosion which could indicate a brass outlet Tailpipe has been fitted. 2 clips on pipe. **Recommend removing pipe connection and check condition of Tailpipe.**
- c) Heads Sink drain, yellow metal thru hull and DZR. Recently serviced as evidenced by the grease. 2 clips on pipe. As this is below waterline and sink outlet is only 300mm higher this valve must always be closed when under way at sea.
- d) Heads water inlet. Bronze thru hull, new ball valve in yellow metal. New pipe fitted, badly kinked. 2 clips on pipe. See heads section.
- e) Galley sink drain, Bronze thru hull, with DZR ball valve. Some sign of flow coat cracking around sealant. No issue. 2 clips on pipe.



Fig 22 Engine intake. Suggest laminate nut to hull.
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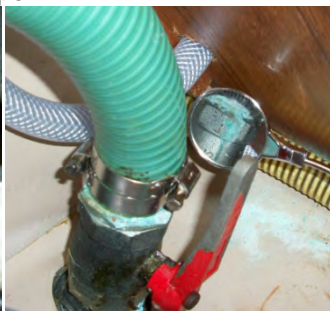


Fig 23 Toilet outlet. Note corrosion reflected in mirror.



Fig 24 Head sink outlet and toilet outlet



Fig 25 Toilet water intake



Fig 26 Galley sinks drain

- f) Log and depth thru hulls. Raytheon Plastic thru hulls. Depth is fair to hull, log is not fair to hull. Inside yacht log nut is not tight to hull at forward end. *Recommendation – remove log thru hull and refit flush and tighten nut securely.*



Fig 27 Log thru hull not tight to hull inside yacht.



Fig 28 Log thru hull not tight to hull.

Above Waterline:

- g) Electric and manual bilge pump thru hulls, plastic and located just under toe rail. Each secured with 2 clips. Mounted high in cockpit locker protected by fuel tank from damage.
- h) Exhaust thru hull is stainless steel tube laminated into hull above water line. Exhaust securely fitted.
- i) Cockpit drains. 2 stainless steel tubes laminated between back of cockpit and transom at both ends.
- j) Fuel tank breather plastic thru hull just below toe rail. 2 clips and high in cockpit locker.

14. Main Companionway and other Access to Accommodation:

- a) Main companionway access hatch is of Perspex / Plexi-glass material, in good condition and secure in its runner. 2 Perspex / Plexi-glass wash boards in good condition. Lower wash board locks in place. Main wash board relies on hatch being closed to stay in position, an arrangement that will need to be addressed if sailing offshore.
- b) Aluminium trim frame around companionway bent and screws broken allowing water into aft cabin and onto engine. Suggest laminate is built up and new frame fitted.
- c) Fore hatch of aluminium framed Perspex type, securely hinged with positive method of closure. Hinge is at aft end meaning it opens forward. Good for ventilation, not good for heavy weather sailing. Size is adequate to use as emergency exit. Hatch frame is distorted and while able to

close and lock, it will not be water tight and I suggest will leak with water over the decks. Suggest that due to the use you will doing the hatches are replaced

- d) Saloon hatch, same comments and suggestions as forehatch.



15. Ports, Windows etc.:

- a) Port light into aft cabin is in cockpit side. Aluminium frame with aluminium framed Perspex opening with two good clamp closures'. All screws tight and secure.
- b) 4 Saloon windows are Perspex thru bolted onto coach roof with stainless steel fixings. All fixings hammer tested, check with magnet for material, confirmed as stainless steel and checked for cracks. Seals visually checked and carefully spike tested. All found to be in good condition.
- c) Wood veneer inside windows is showing signs of UV degradation. Cosmetic only.

16. Pulpit, Stanchions, Pushpit, Lifelines and Jackstays:

- a) Pulpit. Bolted to deck with stainless steel nuts and bolts with washers underneath. All tested with full body weight and visually checked. In good condition and secure.
- b) Pushpit. Bolted to deck with stainless steel nuts and bolts with washers underneath. All tested with full body weight and visually checked. In good condition and secure.
- c) Stanchions. In stainless steel set in alloy bases. The bases are designed so stanchions are slightly loose to avoid corrosion and easy draining. All tested with full body weight and visually checked. In good condition and secure.
- d) Life lines. Of stainless steel wire. Plastic coating is completely degraded and should be removed to stop water entrapment and for cosmetic look. Wires secure and correctly terminated with swaged fittings.

17. Rigging Attachment Points:

- a) Main cap and lower shrouds. These consist of stainless steel U bolts which pass through the deck and attach to Knees. Access to underside of fittings was not possible. No distortion noted in way of deck plates or in topsides in way of bonding knees. The deck plates were lying tight to the deck. They were tested with a substantial crowbar on wood block and no movement found. All linings and fittings in way of above dry with no sign of seepage via deck fittings.
- b) Main forestay. Stainless steel fitting runs down stem head and is attached with 4 stainless steel bolts in sheer. These were hammer tested outside and inside chain locker.
- c) Baby stay, as above except u bolt fits through deck onto substantial backing plate.
- d) Standing backstay. This consists of stainless plate bolted through transom with 3 stainless bolts in sheer with substantial stainless backing plate. Simple and strong.

18. Ground Tackle and Mooring Arrangements:

- a) Main bower anchor. This is a plough CQR, 25lbs with a long length of 12mm chain and 22mm multiplat warp. Chain not laid out and examined link by link and bitter end attachment not checked. The shackle attaching the anchor to the chain is corroded and not wired. Suggest replace shackle and wire in place.
- b) No other anchors found.
- c) Stemhead fitting is alloy secured through deck with s/s bolts. Hammer tested and no sign of damage. Two bower rollers and has pin to prevent the chain jumping in rough conditions.
- d) Vessel has aluminium cleats fore and aft of adequate size through bolted the laminate with stainless steel backing plates. Apart from noted in section 5,a all hammers tested and found secure.
- e) Stern anchor and chain will need to be purchased. 15lb Brittany anchor with 10m 6mm chain would be suitable.

19. Other Deck Gear and Fittings:

- a) All found of adequate size and securely through bolted, although inspection from under limited by linings. Where accessible found with adequate additional reinforcing within the laminate and penny washers.
- b) The following winches fitted were all tested as far as possible but not under load.
 - a. Primaries 2 x Barbarossa 40. Standard 2 speed winches. No signs of wear.
 - b. For sail controls led aft 1 x Barbarossa 15 halyard winch. No signs of wear.
 - c. On mast Gibb reef winch. No signs of wear.
- c) Genoa tracks secure and cars in working order.
- d) Mainsheet traveller and jammer cleat secure and in working order.
- e) Deck hardware all of good quality and specification, and all are serviceable.

20. Davits and Boarding Ladders:

Vessel fitted with double folding stainless steel boarding ladder with 4 steps extending below water line for easy boarding from water. No signs of wear and secure when pulled and climbed on.

21. Spars:

Mast

The mast was stepped so inspection is restricted to fittings and area to head height. Z Spar mast, silver anodised no signs of corrosion around base or fittings. No damage or distortion to the extrusion was noted. All fittings at this level secure and in good condition.

Boom

- a) Silver anodised in similar condition to mast.
- b) Main sheet and kicking strap attachment points secure.
- c) Goose neck bushes worn. Suggest they are replaced before they damage the fittings.
- d) Slab reefing hooks in good order.



Fig 29 Gooseneck bushes

Booming outspar

Examined on deck, end fittings secure. Spring clips a little slow. Suggest flush out and use will free up.

22. Standing Rigging:

- a) Brokers details state original 1x 19 standing rigging. Only the fittings at deck could be visually checked. The shrouds all have plastic covers fitted to the deck which when lifted, dirt and water came out. This means water is constantly sitting in the swages. Suggest removal or replacement with larger diameter to allow full drainage.
- b) The rigging screws are all closed body type, all have pins and screws fitted correctly. No visual signs of damages of these deck level fittings.
- c) Back stay has manual adjuster fitted which is working freely.
- d) Plastimo headsail furling gear was not unrolled but moves freely. The fittings articulate in all directions as they do on all the bottle screw

Suggest finding out from owner when the mast and rigging was last checked completely and if not in last 5 years, suggest that mast is dropped and given thorough inspection of all terminals and fittings by rigger.

23. Running Rigging:

The running rigging is stated replaced in 2009 with Terylene braided of various sizes. All found in good clean condition with no visible frayed ends.

24. Sails and Covers etc:

Brokers details give ages of sails as

- a) 1990/1 Genoa by Seateach
- b) 1985 mainsail
- c) 1990/1 cruising chute by Seateach – This is in forecabin.
- d) 1985 storm trisail
- e) Blue mainsail cover

Examined on board but while furled due to wind conditions. No visible signs of tears and when tested in places for degrading none found.

Suggest that sails over 20 and 25 years old should be checked by sail loft and budget to require replacement.

25. Navigation Lights:

Vessel fitted with

- a) Separate Port and starboard Bow lights
- b) Stern light
- c) No steaming light fitted.
- d) Mast head lights could not be seen

Lights could not be made to work, however battery condition was low. Bow lights were secure and clean, stern light was secure but has condensation inside.

26. Bilge Pumping Arrangements:

- a) A manual cylinder pump of unknown capacity is fitted under the chart table with pick up point under inspection hatch in saloon cabin sole. No strum box fitted. All clips found secure. Not tested.
- b) An electric submersible pump Rule 360 is securely fitted in compartment by stern gland. This was heard running but not tested.

I suggest that a manual bilge pump is fitted in the cock pit locker so that it can be operated from outside the yacht.

27. Fire-fighting Equipment:

- a) There were no fire-fighting appliances found onboard.
- b) There was no access point in the engine compartment to discharge an extinguisher without removing the steps.

Recommendation. At least 4 new fire extinguishers to BS5423 fire rating 5A34B (most 1kg dry powder type meet these criteria) should be carried and fitted near cabin entrance points. Suggest 1 in forecabin, 1 in aft cabin, 1 by companionway and one in cockpit locker. An aperture should be fitted giving access into the engine compartment for one of the portable extinguishers. A fire blanket should be fitted in the galley. (Source RYA safety hand book)

28. Lifesaving and Emergency Equipment:

- a) Horseshoe lifebuoy with light. Life buoy in good condition. Light has no batteries.

Recommendation – Lifebuoy light must be working

- b) All Flares are dated 12/97.

Recommendation – New flares suitable for area of operation should be carried on board.

- c) 2 x Baltic automatic inflation life jackets found and 1 child manual inflation found. The jackets look in good condition, the inflation cylinders are corroded.



Fig 30 Life jacket cylinder

Recommendation – There should be working life jackets for all persons aboard.

- d) Acoustic warning horn in working order
- e) There is a bagged inflatable dinghy in the saloon which was not unrolled or pumped up. The visible parts were clean and near new. Brokers details state 2003 Tohatsu.

The RNLI operate an excellent free inspection and advice service concerning levels of safety equipment (SEA Check) and can be contacted on 08003280600 or via the RNLI website, www.rnli.org.uk.

The RYA also publish a booklet, G16, "The Boat Safety Handbook" and this specifies levels of Safety Equipment for different categories of use and it is *Recommended this vessel be equipped to the level appropriate to proposed use.*

Booklet is obtainable from nautical bookshops or direct from the RYA, www.rya.org.uk.

29. Engine and Installation:

Engine is a Yanmar 2GM20, 13KW at 3600rpm. Fresh water cooled. The engine looks in very good condition. Brokers details say only 30 hours from new in 2004/5 and I have no reason to doubt this.

- a) No water or oil leaks found.
- b) Beds are of steel bolted to the forward engine compartment floor and aft brackets to the side panels of engine. The bolts being stainless steel, and in clean condition, hammer tested and sound. The starboard aft bearer has only 3 of the 4 bolts fitted from new probably due to the lack of access in the heads shower tray.
- c) Mounts are rubber and all in good condition. There are no lock nuts or spring washers fitted and the front mount nuts are loose.

Recommend – as there is no thread available to fit lock nuts, fit spring washers and retighten.

- d) Engine stop cable inboard end loose. *Recommend Tighten stop cable*
- e) Engine throttle inboard end loose. *Recommend Tighten engine cable*
- f) Cooling water levels correct and contains inhibitor
- g) Engine oil level correct and inspection under oil filler reveals no coolant contamination or condensation in oil.
- h) Clips at rear of exhaust silencer corroded. Hammer tested. Suggest replace.



Fig 31 Exhaust box clips

- i) Gearbox is KM2P Yanmar ratio 2.21. Oil is clean.
- j) Engine Morse control is jerky in operation, could be linked to loose control cable.

- k) The rear engine access panel does not fit securely in place due to the aftermarket fitting of the coolant header tank and has no means to lock in place. If a fire were to start in the engine compartment it would quickly spread and a fire extinguisher would be less effective when operated through a dedicated access hole. Suggest the header tank is moved forward to allow cover to fit.

Recommendation that engineer checks engine installation before launch and attends to all recommendations and suggestions in section 29 and 30.

30. Fuel System:

- a) Stainless steel tank stated 27 litre capacity is mounted high in Cockpit locker, no signs of leaks. Access good to 5 sides. Mirror check hidden base seams. All in good visible condition.
- b) Fuel shut off valve difficult to operate under tank. Probably full of water / sludge. *Recommend clean diesel tank and shut off valve.*
- c) Leak at secondary filter bleed screw, *Recommendation replace copper washer.*
- d) Primary filter Glass bowl type mounted in engine compartment and $\frac{3}{4}$ full of water /emulsified diesel. *Recommend drain and clean primary diesel filter.* Suggest relocate in cockpit locker by tank.
- e) Copper tubing in engine compartment by exhaust box is green and corroded. This was scrapped in places and found to be pitting. Suggest while other work is carried out fuel lines in engine compartment are replaced.



Fig 32 Fuel pipes in engine

31. Accommodation General:

- a) Cushions all in good condition
- b) Headlining is down in forepeak and aft cabin. This needs to be reattached using suitable glue. There is evidence of work in progress as new headlining in locker. Apart from cabin sole and steps around companion way all wood is in good condition. Suggest clean and varnish of cabin sole and companionway and steps.



Fig 33 Forepeak headlining



Fig 34 aft cabin headlining

32. Gas Installation:

This vessel is not MCA coded or part of the Boat safety scheme and pre-dates RCD

Irrespective of the above **ALL** gas systems are subject to the checks listed below as part of this survey. Recommendations will be made where there is an obvious serious safety issue and these

must be carried out before use. Suggestions will also be made where appropriate to enhance safety criteria, particularly with systems where there is no mandatory requirement to conform to a standard. It must be understood however that some Insurance companies require a declaration from the assured that the gas system conforms to **current** standards and if that is the case here upgrading may be required as a condition of the insurance policy.

Sources of further information:

www.calormarineshop.co.uk/rules-regs-answer.htm Comprehensive information on standards and best practice.

www.boatsafetyscheme.com Even if your boat is not required to comply with this standard it contains much sensible advice and the manual can be downloaded.

Gas Observation and action table

Item	Result	Action required. <i>(R) Recommendation to be carried out before use.</i> (S) Suggestion only
Condition and efficiency of self draining bottle storage	Open gas locker for ½ size camping gaz canisters. Drains into cockpit drain. Copper pipe exits at top of locker into hull and is sealed with sealant.	(S) Suggest fitting either a grommet where copper pipe passes through bulkhead or fit a compression joint bulkhead fitting.
Age and condition of flexible hose	Hose is BS3212 dated 5/2008 and in good condition. Jubilee clips in good condition. Behind cooker it comes through cupboard top, with no protection and restricts cooker gimbal	(S) While it is acceptable to connect the hose with Jubilee clips you might consider pre-assembled lengths of gas hose with compression connections. (S) If hose continues to pass through cupboard, the hose should be protected by a grommet.
Age and condition of regulator	No date, clean and operates.	(S) Replace with new and keep as spare.
Condition of copper pipe where accessible	Clean and no signs of corrosion.	
Is pipework adequately supported and not under stress where accessible?	Is fitted behind lining in aft cabin securely except in transom area where 800mm length is not supported	(S) Secure in transom area with one clip.

Are all appliances fitted with flame failure devices on all burners, and did these work	No flame failure device fitted to ENO Plastimo	<i>(R) Keep gas turned off at bottle while not in use particularly if children aboard.</i>
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properly under test?	2 burner cooker.	You might consider upgrading to a new cooker with FF devices possibly with an oven and grill which will require modification to the cupboard.
Are any appliances requiring flues properly fitted with same?	n/a	
Is a gas alarm fitted?	No	(S) Consider fitting gas alarm
Is each appliance fitted with an isolating tap	Yes although at back of locker below cooker.	(S) Relocate to easily accessible location. <i>(R) Keep gas turned off at gas bottle when not in use.</i>
If fitted did leak bubble tester function?	No	(S) Consider fitting bubble tester in order to provide convenient regular leak testing

Additional Observations:

The installation is of an old standard and the gas hose while correct has been fitted through bulkheads. In view of the use planned I have suggested modifying the galley to take a new cooker with oven and grill which is a fairly easy installation and at this time install the LPG system as per Boat Safety Scheme best practice.

Please note this survey is not a gas safety certificate, that is only obtainable after comprehensive pressure testing and assessment by a qualified person listed on the Gas safe register (formally CORGI) www.gassaferegister.co.uk

33. Fresh Water Tanks and Delivery.

- a) One Plastimo flexible water tank stated 100 litres capacity located under Port berth, filled via deck filler.
- b) Water is delivered to the galley sink via a galley gusher footpump
- c) Second galley gusher foot pump in the heads.
- d) The tank and filler hose are relatively new. It is noted in section 5 that the filler is not lying flush to the deck and should be refitted.
- e) The water tank is currently full and both foot pumps were tested and working correctly. The water smells very bad and is brown coming out of the heads pump. Suggest sterilisation of tank and flush out. Products are readily available from the chandlery. A second and third tank could easily be added to the system.
- f) All Clips and hoses were checked and found secure.

34. Heads:

- a) Toilet is a Dutch Rajke & VD Meyde, similar to the Jabsco Twist and Lock type. The intake valve lever is badly corroded but operable. A new toilet, if desired is available for under £100 and easy to install.
- b) The swan necks for both inlet and outlet pipes of the heads could easily be 300mm higher but would require new lengths of hose fitted. I would suggest that these are lengthened and fitted to prevent the possibility of water coming back up the pipes if the valves are left open when sailing although the toilet has valves to prevent this too.
- c) The toilet intake pipe is new but has been poorly installed and is kinked in many places. The above would solve this.

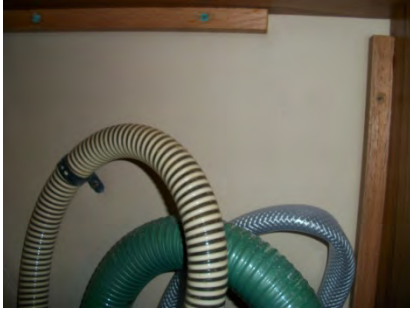


Fig 35 Room to raise swan necks and give better flow to inlet.

35. Electrical Installation:

- a) A Numax 85ah battery is fitted in-front of the engine, marked as fitted 06/2009, showing green on the indicator, is a dedicated engine cranking battery & securely strapped down. This battery does not have an isolator switch which is normal practice for a dedicated cranking battery.
- b) A Vetus 105ah battery has been fitted in a locker in the heads, this is an aftermarket installation. The battery indicator shows it as needing replacement. It is fitted in a plastic battery box with a lid and is wedged in place.
- c) A battery switch over (isolator) is fitted but as noted above does not isolate cranking battery positive. The switch is broken at its base.
- d) A splitting diode is located in the locker with the battery, the terminal connections on this are loose.
- e) There is a small distribution panel and some extra switches have been fitted, notably for the Garmin GPS and no fuse is visible although I would suspect that an inline fuse has been fitted, this should be checked to safe guard the equipment.
- f) A wire from the positive terminal of the cranking battery is loose and showing signs of burning.
- g) Various wires and equipment have been fitted, apparently not professionally and a loom is hanging in the engine compartment unsecured.

Recommendation – the DC circuits should be checked and attended to by a qualified marine electrician noting the points above.



Fig 36 Broken isolator switch



Fig 37 Cranking battery hot terminal



Fig 38 Distribution panel



Fig 39 Loose wiring in engine

36. Electronic and Navigation Equipment:

- a) There are two binnacle compasses fitted. The starboard one has a bubble in the top which will make it less accurate.
- b) Raymarine depth, log & Furuno GPS tested as far as possible with boat ashore and working within this limitation. No visible fuses as mentioned in section 36.
- c) All interior lights tested and work.
- d) A Recently fitted Minicom VHF radio fitted with latest DSC compatibility.
- e) A JVC CD/FM radio is installed under the chart table

37. Heating and refrigeration

- a) Ice box fitted, no refrigeration. Small drain in bottom which leads in to bilge and has shut off valve in line accessible through bilge inspection hatch.

RECOMMENDATIONS and CONCLUSIONS:

Maintenance Overview:

Cosmetic maintenance: The vessel has been kept clean and tidy although no varnishing or polishing has been carried out recently. The bilges were dry and no evidence of any significant water ingress. She has been kept locked while out of the water and remained clean.

Technical maintenance: The engine has been replaced and I suspect not had a tighten up and check since as noted in text. The electrical maintenance has probably been done by the owner and requires checking, again as noted. The gas and Diesel systems now require overhaul.

List of Recommendations:

The Recommendations made in the Report are listed below with their respective section numbers. **All Recommendations should be carried out before use of vessel.**

- ✚ Section 2 Keel - Support boat under stringers and gentle jack up aft end of yacht to take weight off aft end of keel. Check inside for movement. If hull goes back to shape, laminate addition floor and longitudinal support in area affected to give additional strength in case of further grounding.
- ✚ Section 10 Rudder. Grind out area around split from port side until dry area found. Re-laminate and bond to frame and seal with epoxy. Fair in finish.
- ✚ Section 11 - Stern Gear – Rubber cutlass bearing is replaced.
- ✚ Section 13 – Skin fittings & other thru hull apertures - remove toilet outlet pipe connection and check condition of tailpipe
 - Remove log thru hull and refit flush and tighten nut securely.
- ✚ Section 27 – Firefighting equipment –
 - At least 4 new fire extinguishers to BS5423 fire rating 5A34B (most 1kg dry powder type meet these criteria) should be carried and fitted near cabin entrance points. Suggest 1 in forecabin, 1 in aft cabin, 1 by companionway and one in cockpit locker. An aperture should be fitted giving access into the engine compartment for one of the portable extinguishers. A fire blanket should be fitted in the galley.
- ✚ Section 28. Lifesaving and emergency equipment –
 - Lifebuoylight must be working with new batteries.
 - New flares suitable for area of operation should be carried on board
 - There should be working life jackets for all persons aboard.
 - This vessel be equipped to the level appropriate to proposed use.
- ✚ Section 29 – Engine and installation -
 - Engineer checks engine installation before launch and attend to all recommendations and suggestions in section 29 and 30.
 - Engine mounts - as there is no thread available to fit lock nuts, fit spring washers and retighten.
 - Tighten stop cable inboard end
 - Tighten throttle inboard end
- ✚ Section 30 – Fuel system
 - Recommend clean diesel tank and shut off valve.
 - Leak at secondary filter bleed screw, Recommendation replace copper washer.
 - Recommend drain and clean primary diesel filter.
- ✚ Section 32 – Gas installation
 - (R) Keep gas turned off at bottle while not in use particularly if children aboard.
- ✚ Section 35 – Electrical installation
 - The DC circuits should be checked and attended to by a qualified marine electrician noting the points above.

Conclusions:

The vessel is a simply but strongly constructed vessel. She is reportedly a good sailing boat and has had a replacement engine and good navigation equipment fitted. The deflection of the hull should not put off a purchaser but it does require strengthening in this area. The gas, electrical and fuel systems, again while there are a number of recommendations, they are simple and relatively cheap to rectify. The hull and deck are in good condition and will polish up to greatly improve her appearance.

Valuation

Subject Jeanneau Arcadia 1985

This boat competes in the market place with Benteau First 305's & 30's , Jeanneau Sunlight 30's , Catalina C28's all of similar age. These are advertised in with various levels of replacement fixtures and fittings been made from between £10,000 for a "Project" Sunlight 30 to £32,000 for one with new rigging and sails along with Arcadias between £22K and £27K currently on google searches. In her present condition, with the equipment in the brokers details and the work required I would estimate the vessels current value at around £22,000.

Jeanneau Arcadia

A sleek, modern European-style cruiser from one of the world's largest boat builders.

A mixture of old and new, of reality and hype, seems to characterize the Jeanneau company and its boats. A bit of old-fashioned attention to detail; a bit of high-tech stamp-em-out production. A bit of old-fashioned engineering; a bit of "to hell with tradition, let's make this boat different."

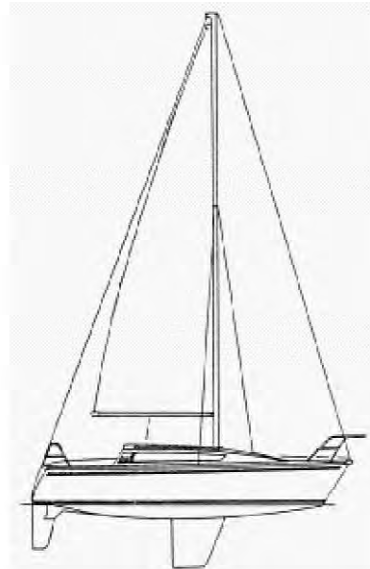
To most Americans, the Jeanneau boats seem to have appeared suddenly, but the company has been around since 1956. Aggressive entry into the American market resulted when Lear Siegler bought Jeanneau and the other Bangor Punta boat companies (Cal, O'Day, Ranger) in 1983.

Like most of the Jeanneaus, the Arcadia (pronounced "Are-caw-dee-yah") is rare in America—only a few were imported—but, also like most of the Jeanneaus, the total production run is incredible—the factory popped out 600 completed boats in the Arcadia's first two years. The only American company that could even aspire to such numbers in a 30-footer is Catalina, and they produce a miniscule number of models compared to Jeanneau.

A notable thing about Jeanneau is the diversity of designers—almost all "big names," at least in Europe, and almost all with grand-prix racing credentials: Guy Dumas, Doug Peterson, Philippe Briand, Jacques Fauroux, the Joubert/Nivellet team.

The designer of the Arcadia is Tony Castro, new to Americans but an established designer in Europe. Of Portuguese descent, Castro began his work with Ron Holland in Ireland, then set up his own shop in 1981 and achieved success designing successful IOR racing machines. Now a British citizen, he has two other designs in production at Jeanneau, and a third—an IOR half-tonner—scheduled for production soon.

The design of the Arcadia is not IOR. We would call it "moderate modern," of relatively light dis-



Specifications

LOA	29' 6"
LWL	24' 5"
Beam	10' 4"
Draft	4' 3"/5' 4" (cb/keel)
Displacement	6,175 lbs.
Ballast	2,360 lbs.
Sail area	332 sq. ft.

placement and shallow hull, with a high aspect ratio keel, separated spade rudder, and beamy hull.

Her appearance is, well, "European." The flat sheer, a doghouse that slopes forward into the foredeck, long black windows (you can't call them "ports"), and blunt ends make up that "European" look which is decidedly—almost blatantly—non-traditional. "Thoroughly modern" is a term that appears several times in Jeanneau's advertising blurbs.

Construction

In contrast to the boat's image, the construction of the Arcadia is anything but high-tech.

The hull is standard hand laid fiberglass mat and roving; the deck is standard hand laid fiberglass with

Jeanneau Arcadia

balsa core in spots. The balsa-core “spots” seemed to be less extensive than normal (we couldn’t examine much of the deck molding because of the interior ceiling liner), but the deck was stiff enough underfoot. The deck hardware we could examine was through-bolted with big washers, but there were no backing plates on anything.

The hull-to-deck joint typifies the construction of the boat. The joint appears to be a standard inward-turning flange on the hull, on which the deck molding rests. Then 1/4” stainless bolts are set through an aluminum toerail as well as the deck and the hull flange.

Pretty normal so far, but Jeanneau finishes off the joint on the inside by laying a thick layer of fiberglass over everything—from the hull, over the seam, covering the bolts, onto the deck. It looks strong—a good way to build a decent hull-to-deck joint on a fast-moving production line. The reservation we have about it is in repairs—if the joint is damaged, it will be tough to examine thoroughly and tough to fix. Similarly, the joint should never leak, but if it does, tracking down the source will be nearly impossible. Generally, the glasswork and gelcoat look good; the two hulls we examined were smooth and fair.

The boat’s strength and stiffness probably come from Jeanneau’s practice of bonding everything to everything else. Not only are the athwartship bulkheads bonded to the hull and deck with fiberglass tape, but cabinet fronts are bonded to hull and bulkheads, cabinet sides are bonded to fronts and bulkheads, the head door frame is bonded to the engine box frame which is bonded to the hull and to the cockpit, and so on. The whole interior is obviously prefabricated in typical production line fashion, but we’ve never seen another production boat in which the interior parts were so much fiberglassed to each other and to the hull. It seems like a good low-tech method of acquiring stiffness without skeleton framing or coring the hull.

Like many of the Jeanneaus, the Arcadia comes with either a centerboard or an external keel—about 70% having been keel models. The keel is unusual in two respects. First, rather than lead, it’s iron, coated with fiberglass to prevent corrosion. Second, the keelbolts are not vertical and on centerline in the normal fashion. Instead, they are set in pairs, angled from the sides of the keel inward so that, inside the hull, the bolts, were they long enough, would converge and touch. Further, once the keel is bolted on, a heavy layer of fiberglass is laid in the bilge to fully cover the bolts. As with the hull-to-deck joint, this looks strong and leak proof, but again we would be concerned about the difficulty of repairs and finding leaks following a hard grounding. The keel that we examined was fair and well finished. We did not inspect a centerboard model.

The spade rudder is supported by a small skeg; the one we saw was well finished except for a rough trailing edge. Tiller steering is standard on the Arcadia, but both boats we examined had the optional Plastimo wheel steering, with a “European size” wheel, about 24” diameter. Most Americans like a much bigger wheel; unfortunately a larger one could not be fitted without major modifications to the cockpit seats.

The rig generally looks to be pretty standard issue—masthead rigged sloop, with upper and aft-lower shrouds and a “baby stay” forward. The boat we examined had double spreaders, whereas the company literature and photos show a single-spreader mast. The company does advertise an optional tall “lake” rig, but this is designed only for European inland lakes and would be unsuitable for coastal, Great Lakes, or offshore sailing. None were imported into the U.S.

The upper shroud chainplates are anchored on a transverse overhead frame which begins at a settee bulkhead on the hull and then extends up over the cabin and down to the hull on the opposite side, with a compression post in the middle of the cabin under the mast. The frame is bonded to the hull and deck and should provide adequate strength and mast support. The lower shroud chainplates are anchored to a similar frame, bonded only to the hull and side decks.

A final note on the Jeanneau’s construction. We asked the dealer who was showing us one of the Arcadias to pick out one thing that made the Jeanneau different from the three American brands he also handles. “They are dry,” he said. “I don’t know how they do it, but they just don’t leak, either from the top of the deck downward or from the bottom of the hull upward.” From a dealer who has sponged out a lot of bilges before bringing customers on board, those are words of praise.

Handling Under Power

The two Arcadias that we looked at had two-banger diesels—one a Yanmar, the other a Volvo (production line changes, again). Sales literature lists an outboard version—thankfully no such monster is likely to be imported—and a version with either a one or a two cylinder Yanmar. For a 6000+ pound boat, we would consider the one cylinder very marginal and recommend the two cylinder, along with the optional folding prop.

The engine installation is well done (stringers and beds bonded to everything in sight) with sound-proofing on the compartment walls, a waterlift muffler, and a seven gallon fuel tank. There is good accessibility to the engine through the aft cabin and through the removable companionway, except that the dipstick on the Yanmar is hard to get at.

Two details impressed us. The engine compartment has a small electric bilge pump as standard equipment in the sump below the prop shaft's packing gland—one place that is likely to have water. And, in the front of the companionway steps that open onto the engine, there's a 2" hole with a plastic cover, the function of which baffled not only us but also the first person who showed us the boat. Finally, the dealer explained its purpose: in the event of an engine room fire, pull the plastic cover, insert the working end of a fire extinguisher, and discharge it. Eminently more practical than pulling off the companionway steps and feeding more oxygen to the flames.

Under power with the folding prop, the boat handled satisfactorily, backing where we wanted to back it, with adequate power in forward and reverse. Visibility from behind the wheel is decent, but there is no comfortable place to sit aft and the wheel is too small to reach from the sidedeck. The engine had no more vibration than you'd expect from a two-cylinder diesel and was a bit quieter than other boats, probably because of the insulation in the engine compartment.

Handling Under Sail

We were able to sail the Arcadia for only about an hour; unfortunately, we have too few reader responses to make many valid judgements about the Arcadia's performance under a variety of conditions (most of our owner's responses are based on a single season's sailing, or less).

In our limited experience, we found that she went to weather, reached, and ran very much like other contemporary racer-cruisers. She pounded a bit in a short chop, as you might expect from her shallow hull design, but we saw no other bad habits. (Her sails are from a small French loft, "Ton," and are adequate. Racers will want to get better.)

Her PHRF rating of 150 suggests that overall performance under sail is about midway between older racer-cruisers like the Pearson 30 or Tartan 30 and the newer racer-cruisers like the Santana 30/30 or the S2 9.1. We were hoping that—as a Tony Castro design—she might be a rocketship, but she's not. She will be a fast cruiser, and an owner will be able to race her under PHRF.

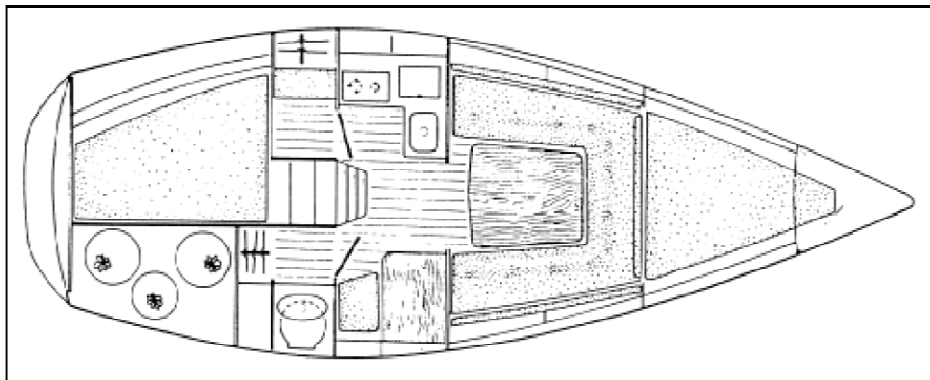
Deck Layout

With inboard shrouds, wide sidedecks, and the sloping cabin top, the Arcadia is easy to move around on and to work under sail. We only noted two problems: first, the foredeck becomes very narrow—an impediment to easy foresail and anchor handling that is all too common in modern designs. Second, the cockpit was uncomfortable—the seats a little too narrow, the backs too vertical, and the footwell maybe a little too deep. We also had trouble reaching the small wheel from either the windward or leeward sidedecks where you would normally sit while racing.

Deck fittings are generally good quality and adequately sized, with everything necessary to race the boat except spinnaker gear coming as standard equipment. We did feel that the designer had not quite thought through crew positions for working the boat—what should be done at the mast, what from the cockpit—surprising for a contemporary IOR designer who must attend to those details. Most owners will probably rearrange things after a season's experience.

The non-skid is average, but there are some nice details on deck such as the twin bow rollers for anchor handling, the sturdy latch on the anchor

The interior layout of the Arcadia is decidedly non-traditional. It has its drawbacks: the sloping deck house makes for poor headroom, the V-berth is too small, and there's little headroom over the settees.



Jeanneau Arcadia

locker, and the large mooring cleats. There's a space at the back of the cockpit for life raft stowage and for propane bottles, and a stowage bracket for a horse-shoe buoy built into the stern pulpit. The stern pulpit opens up to a folding stainless ladder.

Belowdecks

It is "downstairs" that Jeanneau really spits in the eye of tradition—not just in the Arcadia but in most of their models. Most obvious is the layout, with the Arcadia's head and the owner's double-berth cabin packed into the rear third of the boat, partly under the cockpit. Both head and owner's cabin are a little cramped, but for a smallish 30-footer, it's surprising they are possible at all.

The rest of the cabin is wide open, with a small galley and navigation table opposite each other, then settee berths on either side of a fold-up centerline table, then a crawl-in forward berth.

We noted three drawbacks. First, the forward V-berth is too short for adults. Second, anyone over 5' 8" or so cannot sit upright on the settee berths without banging the overhead. Third, the standing headroom at the aft end of the cabin disappears as you walk forward under the sloping deckhouse.

This last item we really find hard to understand, since headroom is something most people are looking for, and the only apparent reason not to have it in a 30-footer is to satisfy the "style" of the sloping deckhouse. (There is a bit of a weight saving that might be important in a racer but hardly valuable in the Arcadia.) Oddly, the same headroom problem exists even in the 34' Jeanneau Sunrise that we looked at.

The interior of the Arcadia is all woody and undoubtedly one of the strong selling points at boat shows. Teak-faced plywood is all over the place. We thought the veneer work was good for production line work, especially where the veneer covered the plywood edges—for example in the window cut-outs. The wood has a light coating of varnish, even inside lockers and drawers. The overhead has a soft vinyl covering that looks a little better than bare fiberglass. Inside hardware—like hinges and latches—is noticeably better than on the usual American production boat.

A strange detail is the manual bilge pump whose handle sticks out of the side of the chart table into the middle of the cabin.

Oddly, the boats we inspected were not "Americanized." Most owners would likely want shore power, but this is not a company option—it will have to be installed by the owner or dealer. The galley stove comes with hook-ups for butane which will have to be converted to propane. And many Americans looking at a 30-footer might expect a shower, which will be difficult to install on this boat.

Conclusions

Overall the Jeanneau Arcadia surprised us. We were expecting a boat comparable in quality to mid-line American production boats; we found the Jeanneau to be somewhat better in construction and in many details. Being fond of tradition, we have a problem with the style of most of the Jeanneaus, including the Arcadia, but ultimately style is a tenuous criticism of a boat, unless it is truly ugly. • PS

